CANARE 27E INTERNATIONAL EDITION

CANARE 27E

International Edition

CANARE,

offering value-added products to meet your needs for today and tomorrow.

Five-point Product Development Goal

1 **Responsive**

Fulfilling the needs of the industry through custom solutions.

2 **Unique**

Incorporating valuable features not offered by competitors.

3 **Cutting-edge**

Devoted to meeting the requirements for emerging technologies.

4 **Enduring**

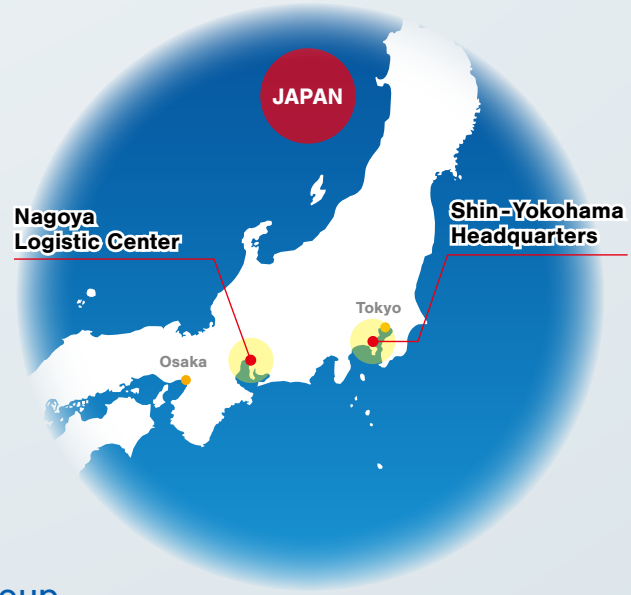
Concentrated on products with long-term value.

5 **Global**

Focused on niche markets as well as universal products.

Profile

- Name: Canare Electric Co., Ltd.
- Incorporated: February 1974 (commenced operation 1970)
- Capital: 1.04 billion yen
- Activities: Developing, manufacturing, and distributing cables, connectors, assemblies, panels, and accessories for ProAV, broadcasting, and data communication applications.



Locations

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Group

- Sales Subsidiaries in USA, Korea, Taiwan, China, Singapore, India, Germany, and UAE
- Canare Electric (Shanghai) Co., Ltd.: Factory in China
- Canare Harness Co., Ltd.: Canare products assembler
- Canare System Works Co., Ltd.: Developing AV furniture/accessories
- Canare Connected Products Co., Ltd.: Developing active products

HFO Camera Cables

SFP Optical Transceivers

12G-SDI CXP-12

75Ω Micro BNC Connectors

12G-SDI CXP-12

75Ω BNC

12G-SDI CXP-12

Ultra Coax

12G-SDI

75Ω Staggered Video Patchbays

4K

Hi-Fi

Phone Plugs

Contents

Technical Trend

12G-SDI

Cable and Connectors for UHDTV

Recent years, developments of Serial Digital Interface (SDI) require wider bandwidth and higher data rates. Cables and connectors are becoming a significant role in high definition video productions to work properly.
The table on the right shows comparison of high definition video formats which are standardized by SMPTE (Society of Motion Picture and Television Engineers). Canare, as a member of SMPTE, has provided the right products based on the requirements.

■ Typical Cable Lengths

The right table shows typical cable lengths according to cable loss at receiver specified in the standard. The results may be different (most likely longer) because it's really the matter of the performance of a chipset built in. Obviously any other coax cables will be accepted if an application does not require such long, like patch cords.

Video Formats

SMPTE	ST 292	ST 424	ST 2081-1	ST 2082-1
Format	HD-SDI	3G-SDI	6G-SDI	12G-SDI
So-called	HDTV	HDTV	UHDTV-1	UHDTV-1
Data Rate	1.485 Gbps	2.97 Gbps	5.94 Gbps	11.88 Gbps
Pixels	2K 1080i/720p	2K 1080p	4K 2160p30	4K 2160p60
Cable	75Ω Coax	75Ω Coax	75Ω Coax	75Ω Coax
Cable Loss at Receiver	20 dB @ 750 MHz	30 dB @ 1.5 GHz	40 dB @ 3 GHz	40 dB @ 6 GHz
Connector	75Ω BNC	75Ω BNC	75Ω BNC	75Ω BNC
Return Loss	15 dB @ 1.5 GHz	10 dB @ 3 GHz	7 dB @ 6 GHz	4 dB @ 12 GHz

Cable Lengths

SMPTE	ST 292	ST 424	ST 2081-1	ST 2082-1
Format	HD-SDI	3G-SDI	6G-SDI	12G-SDI
L-2.5CHD	66 m	69 m	64 m	43 m
L-4.5CHD	115 m	119 m	109 m	74 m
L-3.3CUHD	85 m	90 m	83 m	58 m
L-5.5CUHD	155 m	161 m	149 m	102 m

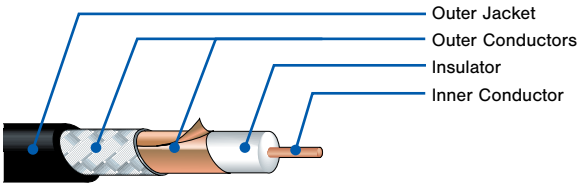
The lengths are based on SMPTE standards and will vary depending on receiving equipment.

12G-SDI Signal Integrity

Canare 12G-SDI products are developed by a huge investment of time and research. Our products are verified and approved by the TRUE 12 GHz test equipment in addition, collaborations with top brands of broadcast products.

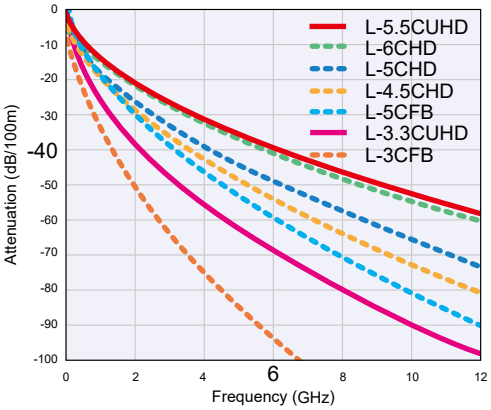
■ Coaxial Cables: L-UHD Series

L-5.5CUHD for any applications up to around 100 meters. L-3.3CUHD for intermediate distance around 60 meters. Both are evaluated with endurance reliabilities such as bending, impact, and accelerated test.



L-5.5CUHD (page 61)

Nominal Attenuation



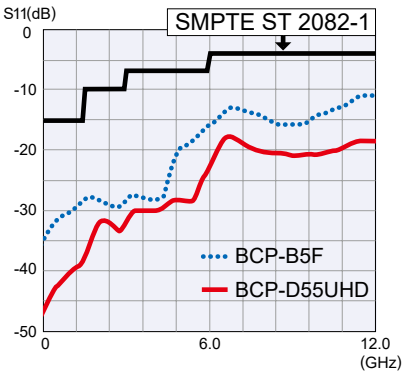
■ BNC Connectors and Patchbays

BNC connectors and video patchbays should be fully matched with 12G coax cables. Canare developed these products over the years of improvements in order to exceed SMPTE requirements.

BCJ-BPLHK (page 25)

MCVJKA-ST* (page 71)

Return Loss



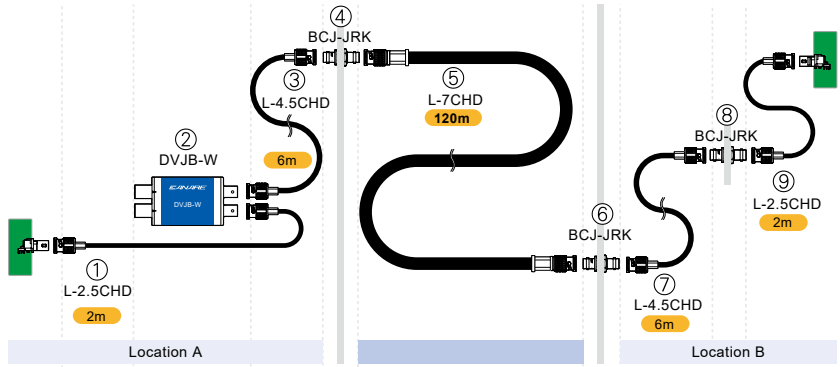
12G-SDI

12G-SDI badge featured in this catalog is based on the following criteria:

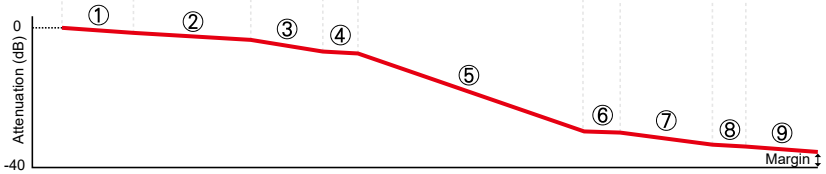
- **Coax Cables**: Performance verified up to 12 GHz for SMPTE ST 2082-1.
- **Video Connectors**: Designed for exceeding SMPTE ST 2082-1, which achieving return loss of -15dB (BCP) and -10dB (BCJ/Jacks) at 12GHz.
- **Assemblies**: Constructed with 12G-SDI compliant components.
- **Active Devices**: Meet SMPTE ST 2082-1 requirements.

Note: Exceptions may apply.

2K/4K: 3G-SDI Single-link or Multi-link



Attenuation Graph

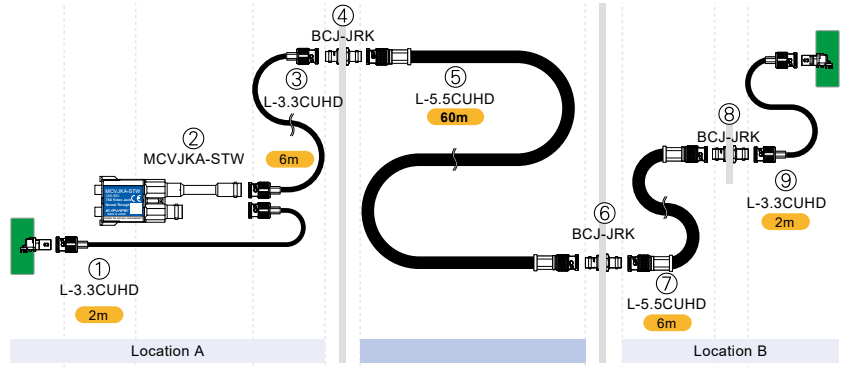


Typical Value

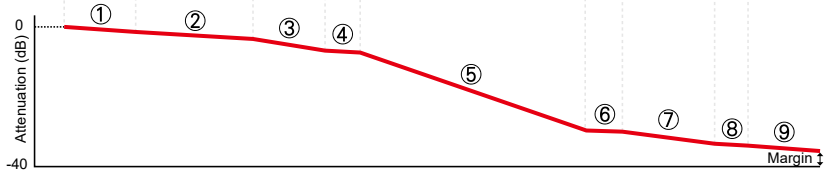
Factor	① L-2.5CHD	② DVJB-W	③ L-4.5CHD	④ BCJ-JRK	⑤ L-7CHD	⑥ BCJ-JRK	⑦ L-4.5CHD	⑧ BCJ-JRK	⑨ L-2.5CHD	BNC Plugs	Total (dB)	Limit (dB)	Margin (dB)
Q'ty	2	1	6	1	**120**	1	6	1	2	10			
Unit	m	pcs	m	pcs	m	pcs	m	pcs	m	pcs			
dB/unit	0.431	0.9	0.251	0.2	0.159	0.2	0.251	0.2	0.431	0.1			
dB	0.862	0.9	1.506	0.2	19.08	0.2	1.506	0.2	0.862	1	**26.3**	**30.0**	**3.7**

Standards referred to:
ST424: 3 Gb/s Signal/Data Serial Interface
ST425-1: Single Link 3 Gb/s SDI (2K)
ST425-2: Single Link 3 Gb/s SDI (Stereo)
ST425-3: Dual Link 3 Gb/s SD for Single Images w/ 6 Gb/s payload (2K/4K)
ST425-4: Dual Link 3 Gb/s SDI (Stereo)
ST425-5: Quad Link 3 Gb/s SD for Single Images w/ 12 Gb/s payload (4K)
ST425-6: Quad Link 3 Gb/s SDI for a Stereo Pair of 6 Gb/s (Stereo/2K/4K)

4K/8K: 12G-SDI Single-link or Multi-link



Attenuation Graph



Typical Value

Factor	① L-3.3CUHD	② MCVJKA-STW	③ L-3.3CUHD	④ BCJ-JRK	⑤ L-5.5CUHD	⑥ BCJ-JRK	⑦ L-5.5CUHD	⑧ BCJ-JRK	⑨ L-3.3CUHD	BNC Plugs	Total (dB)	Limit (dB)	Margin (dB)
Q'ty	2	1	6	1	**60**	1	6	1	2	10			
Unit	m	pcs	m	pcs	m	pcs	m	pcs	m	pcs			
dB/unit	0.685	2	0.685	0.2	0.391	0.2	0.391	0.2	0.685	0.1			
dB	1.37	2	4.11	0.2	25.415	0.2	2.346	0.2	1.37	1	**36.3**	**40.0**	**3.7**

Standards referred to:
ST2082-1: 12 Gb/s Signal/Data Serial Interface
ST2082-10: Single Link 12 Gb/s SDI (4K)
ST2082-11: Dual Link 12 Gb/s SDI for Single Images w/ 24 Gb/s Payload (4K/8K)
ST2082-12: Quad Link 12 Gb/s SDI for Single Images w/ 48 Gb/s Payload (4K/8K)

IP Connectivity Products

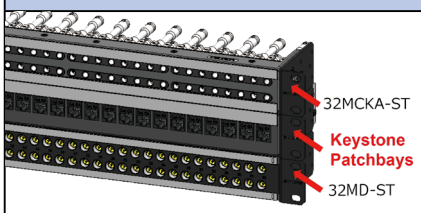
24-Port Keystone IP Patchbays, 24-Port Keystone Panel

Introduction

Canare has launched its own series of IP connectivity solutions. The new series includes patch panels, couplers, and looping plugs. By evaluating existing IP products, we re-engineered items and specialized them for IP broadcasting systems, IP OB-Vans, and other IP-based A/V applications.

Unique 7 Points

1 Unified Design



Canare IP panels are similar in appearance to our video patchbays.

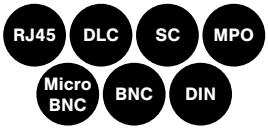
2 Mobile Truck Ready

Tested through heavy-duty vibration for live production applications.

3 Non-Splitted Designation Strip

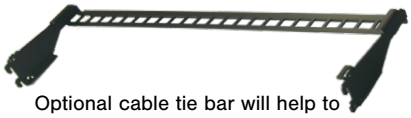
8.5 × 426mm free designation area to write on.

4 Wide Range of IP Interface



Choose from 19 types of IP couplers.

5 Cable Tie Bar

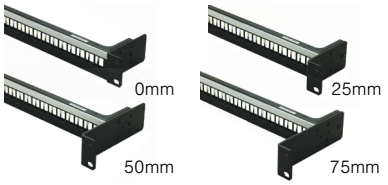


Optional cable tie bar will help to optimize wiring support.

6 No Special Tool

For interchanging couplers, just use a flathead screwdriver.

7 Depth Adjustable Front Mount

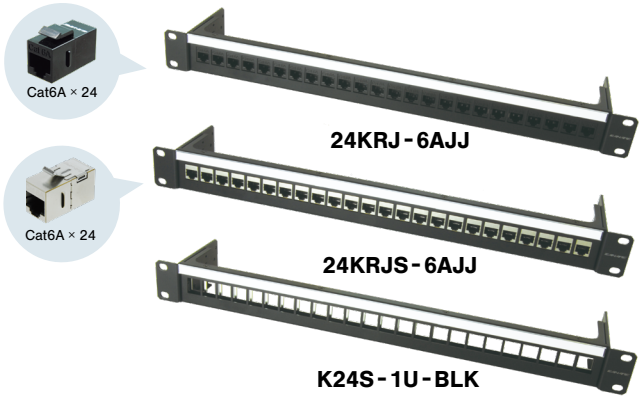


In case of space efficiency, patching surface can be recessed 25mm, 50mm or 75mm deeper.

24-Port Keystone IP Patchbays

Model	Panel Size	Description
24KRJ-6AJJ	1RU	24 × RJ45 Unshielded Cat6A Couplers
24KRJS-6AJJ	1RU	24 × RJ45 Shielded Cat6A Couplers

Standard panel color: Black.



24-Port Keystone Panel

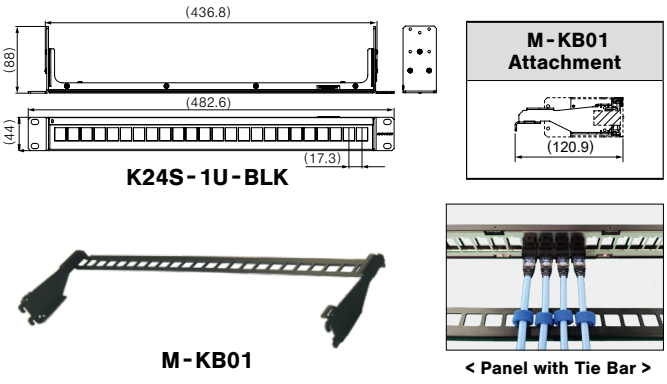
Model	Panel Size	Description
K24S-1U-BLK	1RU	24-Port, Unloaded Panel

Standard panel color: Black.

- Unified design
- Robust construction
- 8.5 × 426mm free designation area
- Can be recessed 25mm.
- Ground stickers attached

Note: 50 or 75mm recessed panel mount by M-MA1U02A (see page 81)

Website



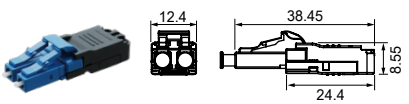
■ Accessories

Model	Description
M-KB01	Cable Tie Bar
SG032-T30	Grounding Cable 3.2m, Terminated with M3 Round Terminal (RT) one end, 1pc of M6 RT attached.
SG002-T36	Grounding Cable 0.2m, Terminated with M3 RT one end, and M6 RT another end.
BP-K(10)	Blank Plate (10 pcs.)
RJJ-DC New	Dust cap for RJ45 (25 pcs.)
RJJ-DC-CH New	Dust cap for RJ45 with string (20 pcs.) *Requires a screw mount.

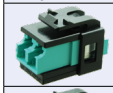
- Grounding cables are ideal for shielded Cat6A panels and a rack.
- RJJ-DC and RJJ-DC-CH can be mounted on all RJ45.
- RJJ-DC can be stacked for secure fastening and storage.

Model	Description	Couplers
FKDLP-SUL	DLC Loop-Back, U-link (SM)	FKDLJ-JS FKDLJ-JS-S

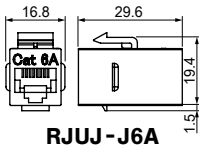
- Loop signal for maintenance



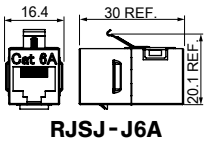
Keystone IP Couplers

Type	Appearance	Model	Description
RJ45 Cat 6A		**RJUJ-J6A**	RJ45 Coupler
		**RJSJ-J6A**	RJ45 Coupler (shield)
DLC		**FKDLJ-JS**	DLC Coupler (SM)
		**FKDLJ-JM**	DLC Coupler (MM)
		**FKDLJ-JS-S**	DLC Coupler with Shutters (SM)
		**FKDLJ-JM-S**	DLC Coupler with Shutters (MM)
SC		**FKSJ-JS**	SC Coupler (SM)
		**FKSJ-JM**	SC Coupler (MM)
		**FKSJ-JS-S**	SC Coupler with Shutter (SM)
		**FKSJ-JM-S**	SC Coupler with Shutter (MM)
MPO		**FKMPJ-JM**	MPO Coupler (MM)

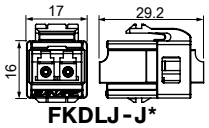
- Compatible with Keystone Panels.
- A wide array of different connection options.
- Fast and easy to install.
- Blank Plate: Protects unused ports from dirt and dust.



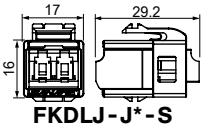
RJUJ-J6A



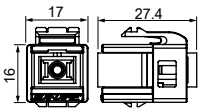
RJSJ-J6A



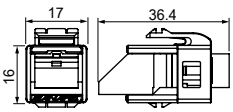
FKDLJ-J*



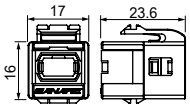
FKDLJ-J*-S



FKSJ-J*



FKSJ-J*-S



FKMPJ-JM

<Ordering Information>

F | K | SJ - J | S | - | S

Series

RJ	RJ45
F	Optical Fiber Connector

Keystone

K	With Keystone Attachment
Blank	No Keystone Attachment

Shutters

S	Shutters
Blank	No Shutters

Signal

6A	Cat6A
S	Single Mode
M	Multi Mode

Connector Type

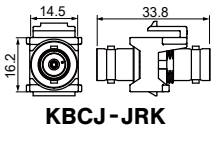
RJ	UJ-J	Unshielded Coupler
	SJ-J	Shielded Coupler
	DLJ-J	DLC Coupler
FK	SJ-J	SC Coupler
	MPJ-J	MPO Coupler

Keystone 75Ω Video Couplers

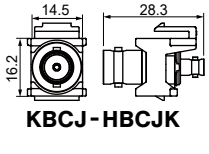
Type	Appearance	Model	Description
BNC		New 12G-SDI **KBCJ-JRK**	BNC Relay Adapter BNC(F)-BNC(F)
		New 12G-SDI **KBCJ-HBCJK**	Conversion Adapter BNC(F)-Micro BNC(F)
		New 12G-SDI **KBCJ-DCJ**	Conversion Adapter BNC(F)-DIN(F)
Micro BNC		New 12G-SDI **KHBCJ-JRK**	BNC Relay Adapter Micro BNC(F)-Micro BNC(F)
		New 12G-SDI **KHBCJ-JRK2P**	BNC Relay Adapter (Dual) Micro BNC(F)-Micro BNC(F)
DIN 1.0/2.3		New **KDCJ-JR**	BNC Relay Adapter DIN(F)-DIN(F)
		New **KDCJ-JR2P**	BNC Relay Adapter(Dual) DIN(F)-DIN(F)

- Uncompromised 12G-SDI Performance
- High-Density Space Efficiency
- Versatile Lineup: BNC, Micro BNC, and DIN
- Seamless AV/IT Integration

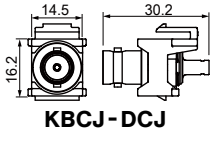
Website



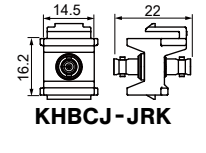
KBCJ-JRK



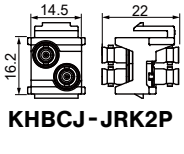
KBCJ-HBCJK



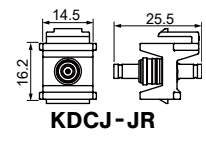
KBCJ-DCJ



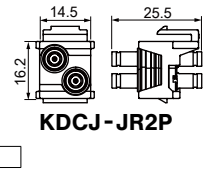
KHBCJ-JRK



KHBCJ-JRK2P



KDCJ-JR



KDCJ-JR2P

<Ordering Information>

K | BCJ-JRK | 2P

Keystone

K	With Keystone Attachment

Density

2P	Dual (Micro BNC or DIN only)
Blank	Single

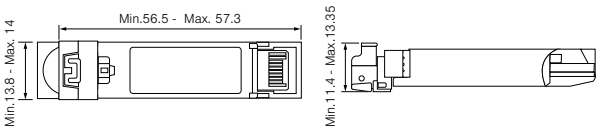
Connector Type

BCJ-JRK	BNC-BNC
BCJ-HBCJK	BNC-Micro BNC
BCJ-DCJ	BNC-DIN
HBCJ-JRK	Micro BNC-Micro BNC
DCJ-JR	DIN-DIN

SFP Optical Transceivers

Fiber Type	Model	Description
SMF DLC	**TRP-011-DC13**	1GbE SFP, 1000BASE-LX (10km)
SMF DLC	**TRP-101-DC13**	10GbE SFP+, 10GBASE-LR (10km)
SMF DLC	**TRP-251-DI13** New	25GbE SFP28, 25GBASE-LR (10km)
MMF DLC	**TRP-010-DC081** New	1GbE SFP, 1000BASE-SX (800m)
MMF DLC	**TRP-100-DC08** New	10GbE SFP+, 10GBASE-SR (300m)
MMF DLC	**TRP-250-DC08** New	25GbE SFP28, 25GBASE-SR (70m)
SMF 1 x SC	**TRP-011-DI13BS** New	1GbE Bidi SFP, 10km (Tx: 1310nm)
SMF 1 x SC	**TRP-011-DI15BS** New	1GbE Bidi SFP, 10km (Tx: 1550nm)

SMF: Single Mode Fiber MMF: Multi Mode Fiber DLC: Duplex LC

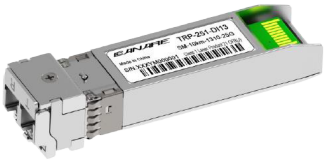


- Reliable and high-performance MSA-compliant optical transceivers.
- Ideal for broadcast IP systems, data centers, and telecommunications.
- Supports 1GbE, 10GbE, and 25GbE applications.
- 1-year product warranty included.

Note: TRP-011-DI13BS (1310nm) and TRP-011-DI15BS (1550nm) must be used together as a matching pair

TRP-011-DC13

TRP-101-DC13



TRP-251-DI13

TRP-010-DC081

TRP-100-DC08

TRP-250-DC08

TRP-011-DI13BS

TRP-011-DI15BS

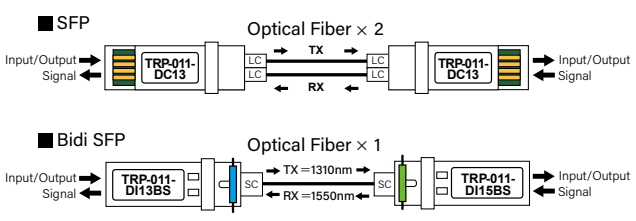
■ Specifications

Model	TRP-011-DC13	TRP-101-DC13	TRP-251-DI13	TRP-010-DC081	TRP-100-DC08	TRP-250-DC08	TRP-011-DI13BS	TRP-011-DI15BS
Optical Connector	2 × LC	2 × LC	2 × LC	2 × LC	2 × LC	2 × LC	1 × SC	1 × SC
Wavelength	1310nm	1310nm	1310nm	850nm	850nm	850nm	Tx: 1310nm Rx: 1550nm	Tx: 1550nm Rx: 1310nm
Fiber Type	SM 9/125	SM 9/125	SM 9/125	MM 50/125	MM 50/125	MM 50/125	SMF 9/125	SMF 9/125
Reach	10km	10km	10km	800m (OM3)	300m (OM3)	70m (OM3)	10km	10km
Standards	IEEE802.3z 1000BASE-LX	IEEE802.3ae 10GBASE-LR/LW	IEEE802.3cc 25GBASE-LR	IEEE802.3z 1000BASE-SX	IEEE802.3z 1000BASE-SX	IEEE802.by 25GBASE-SR	IEEE802.3z 1000BASE-Bidi	IEEE802.3z 1000BASE-Bidi
Tx Output Power	-9.5dBm to -3.0dBm	-8.2dBm to +0.5dBm	-7.0dBm to +2.0dBm	-9dBm to 0dBm	-7.1dBm to -1.0dBm	-8.4dBm to +2.4dBm	-9.0dBm to -3.0dBm	-9.0dBm to -3.0dBm
Rx Sensitivity	< -21dBm	< -14.4dBm	< -12.0dBm	< -18.0dBm	< -9.9dBm	< -10.3dBm	< - 21.0dBm	< - 21.0dBm
Operating Temperature	0 to 70 deg C	0 to 70 deg C	-40 to 85 deg C	0 to 70 deg C	0 to 70 deg C	0 to 70 deg C	- 40 to 85 deg C	- 40 to85 deg C
Dimensions (mm)	14(W) × 11.4(H) × 56.75(D)		14(W)× 12.45(H)× 57.3(D)	13.40(W)× 13.0(H)× 56.35(D)	13.8(W)×11.9(H)× 56.5(D)		14(W)×14.7(H)× 68.8(D)	
Weight	17g	18g	26g	15.8g	17g	18g	24g	24g
Data Rate (Gbps)	1.24 to 1.26	9.953 to 10.3125	24.33 to 25.78	1.0625 to 1.27	10.3125 to 10.7	25.3 to 25.78	1.0625	1.0625

Technical Note

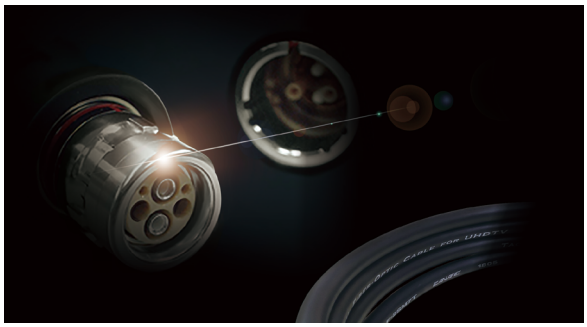
BiDi SFP (Bidirectional SFP)

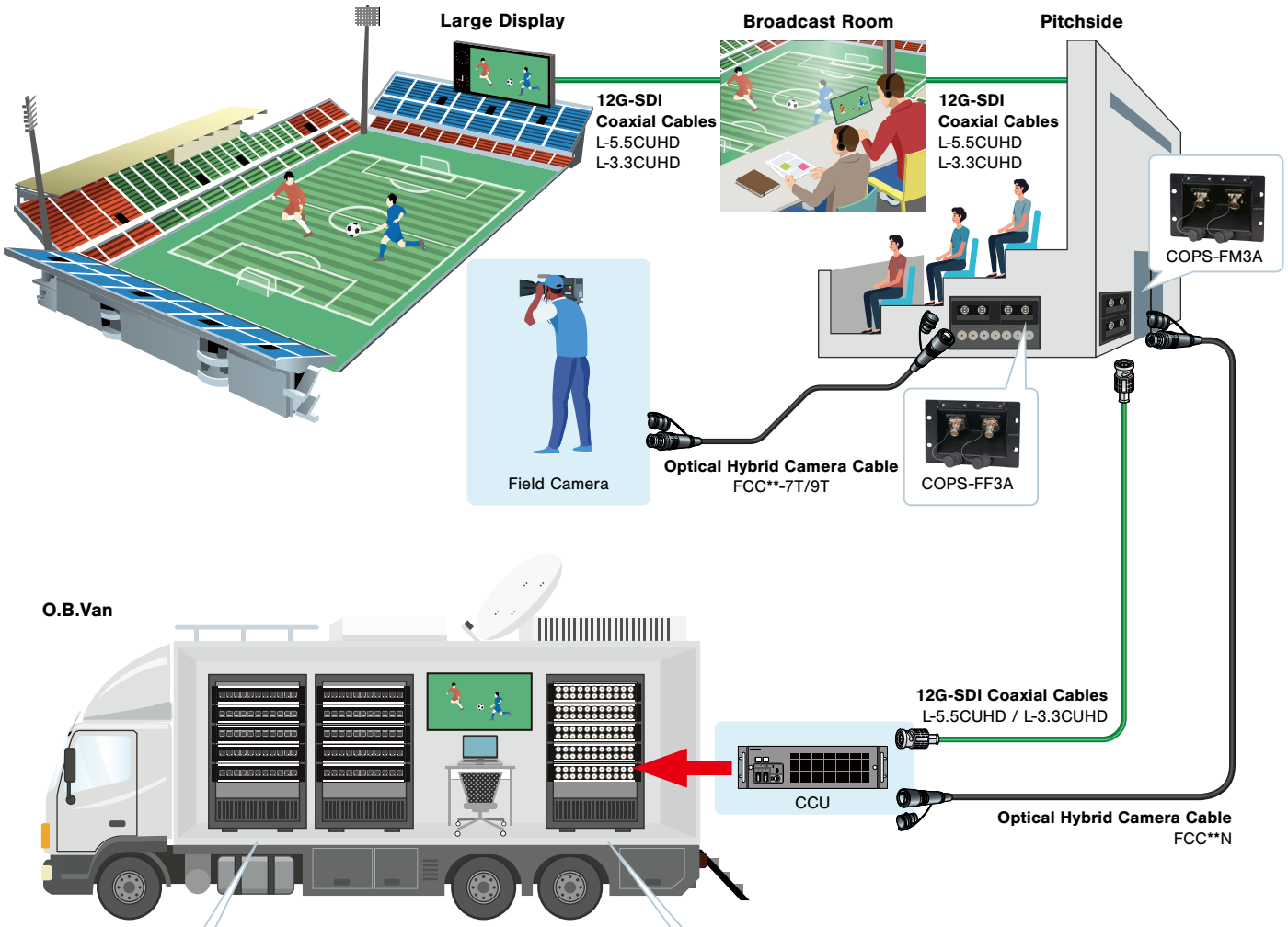
BIDI SFP transceivers facilitate data transmission and reception over a single fiber optic cable. Unlike standard SFPs, which require two fibers (one for transmission and one for reception), BIDI technology enables bidirectional communication using only one single-mode fiber.



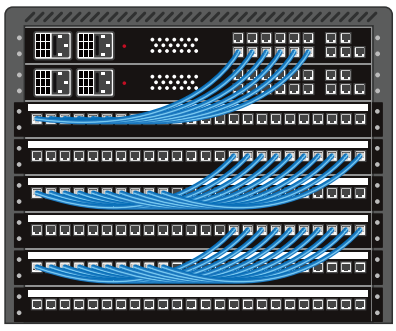
Canare Sports Venue Solutions

Canare's optical camera cables are used around the world. In the broadcast industry, where precise transmission performance is essential, a high level of stability is required. For decades, Canare has focused on these critical factors and has earned a strong reputation for reliability.
The following diagram shows typical Canare products used in stadiums to help you select the most suitable options.





IP Rack (ST 2110)



Network Switch
Coming Soon

Ethernet Cables
RJC6A-F4PH, etc

RJ45 Connector
RJSP-6AFT

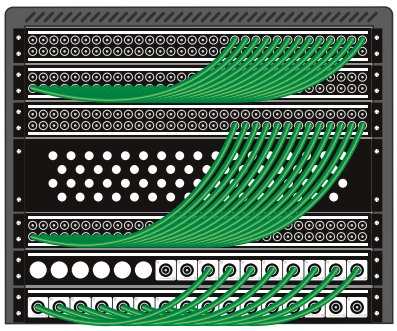
Keystone Panels
24KRJS-6AJJ, etc

Keystone IP Couplers
RJ45, DLC, MPO, etc

SFP Modules
TRP Series

Ethernet Cable & Keystone Panel

12G-SDI Rack (ST 424)



Video Patchbays
32MCKA-ST*

Video Patch Cord Canare Micro
MVPC**

BNC Connector Panel
161U-JRUK

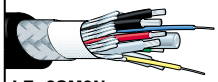
BNC Plugs
BCP-D33UHD, BCP-D55UHD

Coaxial Cables
L-3.3CUHD, L-5.5CUHD

BNC Receptacle
BCJ-JRUK, etc

12G-SDI Video Patchbay & Connector Panel

Hybrid Fiber-optic Camera Cables (SMPTE ST 311)

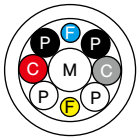
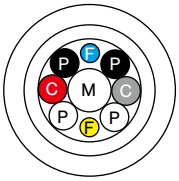
Type	Model	Sales Units (m)	Nom. O.D. (mm)	Weight kg/100m	Outer Jacket	Overall Shield	Tension Tolerance (N)	Strength Member O.D. (mm)	Min. Bend Radius	Temp. Range (deg C)	Channel Unit		
											Fiber	Aux. (Power)	Signal (Control)
 LF-2SM9N Jacket color: BLK	LF-2SM9N	Call	9.2	12.0	Abrasion-resistance PVC	9/24/ 0.10TA 91%	700	2.6	6 × Nom. O.D.	-40 to +75	2 × SM 9/125 (low-water-peak) Unit O.D. 0.9 mm	4 × 20 AWG 21 / 0.18TA Unit O.D. 1.7 mm	2 × 25 AWG 7 / 0.18TA Unit O.D. 1.2 mm
	LF-2SM16		16	29.0	Double PVC								

LF-2SM9N
- For general use.
- Abrasion-resistance Jacket enhance the adaptability to all studio and outside broadcast applications.
- Cost effective

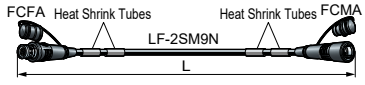
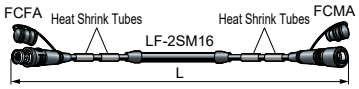
LF-2SM16
- For studio use.
- O.D. 16mm Double Jacket prevents the cable from being jammed under a camera pedestal dolly.

Website

Cross Section

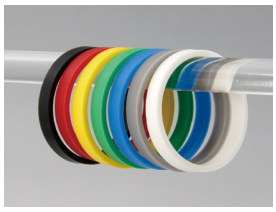
LF-2SM9N	LF-2SM16	
		Key: (F) (F) : Fiber (C) (C) : Signal (Control) (P) (P) : Aux (Power) (M) : Strength Member

■ Camera to CCU

Type	Model	Length (m)
 Jacket color: BLK	FCC10N	10
	FCC20N	20
	FCC25N	25
	FCC30N	30
	FCC50N	50
	FCC100N	100
	FCC150N	150
	FCC200N	200
 Jacket color: BLK	FCC30A-WJ	30
	FCC50A-WJ	50

FCFA

FCMA



Color Rings

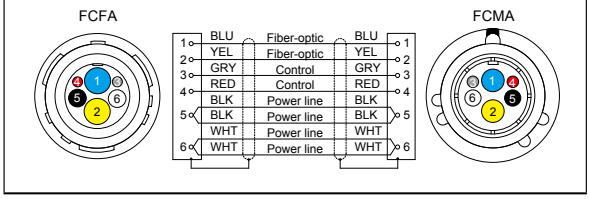
- Standard and widely-used models.
- Heat shrink tubes help in labeling.
- FCC**A- WJ prevents the cable from being jammed under a camera pedestal dolly by its O.D. 16mm double jacket.
- 7- color connector rings included.

Website FCC**-N

Website FCC**A-WJ

* Canare OC series (Hybrid-OPS profile) is also available. (see page 13)

FCCN, FCC**A-WJ**



Wiring Diagram

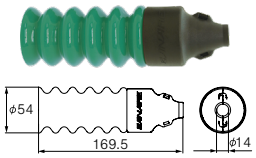
HFO Protective Covers

Any-time-fit-on protector for SMPTE connector - the new traditional

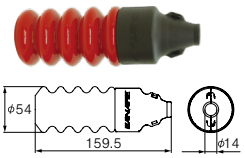
Model	Shape	Component	Color
FC-CV-F-SET-**	Female	1 × Boot 1 × Holder	RD: Red GR: Green YL: Yellow BK: Black
FC-CV-M-SET-**	Male		

Please specify the color such as FC-CV-F-SET-RD

Cover: PVC, Holder: PE



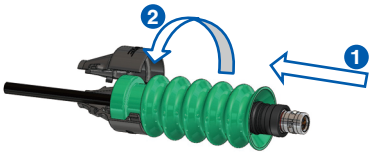
FC-CV-F-SET-GR



FC-CV-M-SET-RD

- Canare exclusive retrofittable construction (patent pending)
- Fit for Canare FC series and other SMPTE 304 plugs
- Heavy-duty and harsh environment applications
- Quality verified over shock resistance tests

Website



* Not available for Canare OC series
* The male and female are for FCMA and FCFA or equivalent respectively.

Slim Hybrid Fiber-optic Camera Cable

Type	Model	Sales Units (m)	Nom. O.D. (mm)	Weight kg/100m	Outer Jacket	Overall Shield	Tension Tolerance (N)	Strength Member O.D. (mm)	Min. Bend Radius	Temp. Range (deg C)	Channel Unit		
											Fiber	Aux. (Power)	Signal (Control)
 Jacket color: BLK	LF-2SM7N	Call	7.1	7.3	Abrasion-resistance PVC	8/24/0.10TA 91%	300	1.4	6 × Nom. O.D.	-40 to +75	2 × SM 9/125 (low-water-peak) Unit O.D. 0.9 mm	2 × 20 AWG 21 / 0.18TA Unit O.D. 1.7 mm	2 × 25 AWG 7 / 0.18A Unit O.D. 1.2 mm

LF-2SM7N

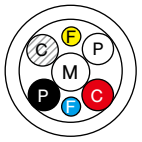
- O.D. 7 mm of slim profile and approx. 40% lighter than LF-2SM9N.
- Best fit for mobile applications.
- The power transmission distance is approx. twice as long as the previous model LF-2SM7R.

Note: The power transmission distance is shorter than typical HFO camera cables (approx. 50% of LF-2SM9N).
Please contact us for more information.

Website

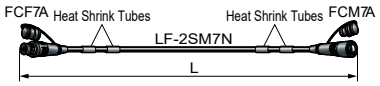
Cross Section

LF-2SM7N



Key: F F : Fiber
C C : Signal (Control)
P P : Aux (Power)
M : Strength Member

■ Camera to CCU

Type	Model	Length (m)
 Jacket color: BLK	FCC10-7N	10
	FCC20-7N	20
	FCC25-7N	25
	FCC30-7N	30
	FCC50-7N	50
	FCC100-7N	100

- Equipped with slim and lightweight cable.
- FCC100-7N is approx. 5 kg lighter than typical 100m HFO camera cable as FCC100N.
- Heat shrink tubes help in labeling.
- 7-color connector rings included.

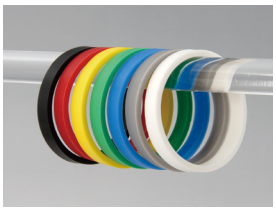
Website

Note: The power transmission distance of FCC**-7N is approx. half of that of the FCC**N.
* Canare OC series (Hybrid-OPS profile) is also available. (see page 13)

FCC-7N**

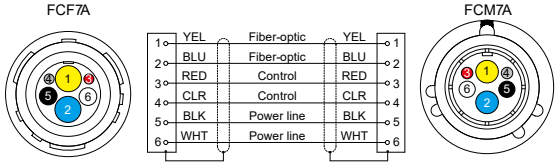
FCF7A

FCM7A



Color Rings

FCC-7N**



Wiring Diagram

END OF SALE

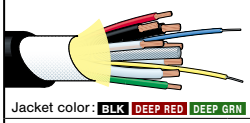
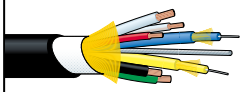
Hybrid Fiber-Optic Camera Cable Checker

The following products have reached their end of sale status. Nevertheless, Canare will promise our users that our dedicated support services will persist uninterrupted.

Kit Model	Individual Model	
	Measuring Unit	Loop-back Unit
FCT-FCKIT RED	FCT-FC RED	FCT-FCLB RED
FCT-OCKIT RED	FCT-OC RED	FCT-OCLB RED

Tough & Flexible HFO Camera Cables

Thermoplastic polyurethane type jacket offers amazing flexibility and superior mechanical properties; Crush Resistance, Impact Resistance and Cyclic Flexing exceed that of MIL.

Type	Model	Sales Units (m)	Nom. O.D. (mm)	Weight kg/100m	Outer Jacket	Overall Shield	Tension Tolerance (N)	Strength Member O.D.	Min. Bend Radius	Temp. Range (deg C)	Channel Unit		
											Fiber	Aux. (Power)	Signal (Control)
 Jacket color: BLK DEEP RED DEEP GRN	**LF-2SM9T**	Call	9.2	9.8	TPU + PVC	N/A	1500	1.8 mm + Tensile strength fiber	Equal to Nom. O.D.	-40 to +75	2 × SM 9/125 (low-water-peak) Unit O.D. 0.9 mm	4 × 20 AWG 102 / 0.08A Unit O.D. 1.75 mm	2 × 25 AWG 24 / 0.08A Unit O.D. 1.2mm
 Jacket color: BLK	**LF-2SM7T**	Call	7.1	5.5	TPU + PVC	N/A	1000	0.63 mm + Tensile strength fiber	Equal to Nom. O.D.	-40 to +75	2 × SM 9/125 (low-water-peak) Unit O.D. 1.7 mm	2 × 23 AWG 60 / 0.08A Unit O.D. 1.4 mm	2 × 26 AWG 30 / 0.08A Unit O.D. 1.1 mm

LF-2SM9T

- Heavy-duty yet Flexible.
- Ideal for remote broadcast applications.
- Minimum bend radius: 9.2 mm.

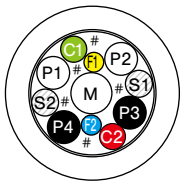
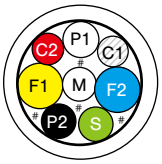
Website

LF-2SM7T

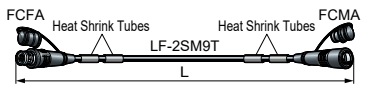
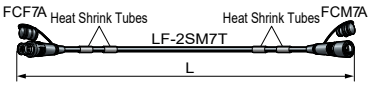
- Flexible, Slim, Lightweight, and moreover, Heavy-duty.
- Ideal for short-distance remote broadcast applications of up to 200 meters.
- O.D. 7.1 mm and weighing only 5.5 kg/100 m, it's so easy to carry around.
- Minimum bend radius: 7.1 mm.
- Fiber units include tensile strength fiber.

Note: The power supply distance of LF-2SM7T is shorter than other HFO camera cables. (approx. 30% of LF-2SM9N)
LF-2SM7T requires a special technique during a connector assembly, so you can buy the cable assemblies shown below.

Cross Section

LF-2SM9T	LF-2SM7T
	
Key: F1 F2 : Fiber C1 C2 : Signal (Control) P1 P2 : Aux (Power) P3 P4 S1 S2 : Ground M : Strength Member # : Tensile Strength Fiber	Key: F1 F2 : Fiber + Tensile Strength Fiber C1 C2 : Signal (Control) P1 P2 : Aux (Power) S : Ground M : Strength Member # : Tensile Strength Fiber

■ Camera to CCU

Type	Model	Length (m)
 Jacket color: BLK DEEP RED DEEP GRN	**FCC10-9T**	10
	FCC20-9T	20
	FCC25-9T	25
	FCC30-9T	30
	FCC50-9T	50
	FCC100-9T	100
	FCC150-9T	150
	FCC200-9T	200
 Jacket color: BLK	**FCC10-7T**	10
	FCC20-7T	20
	FCC25-7T	25
	FCC30-7T	30
	FCC50-7T	50
	FCC100-7T	100

- Tough & Flexible cable
- Fit for mobile applications in harsh environments.
- Heat shrink tubes help in labeling.
- 7-color connector rings included.

Website FCC**-9T

Website FCC**-7T

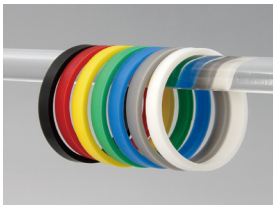
Note: The power transmission distance of FCC**-7T is quite shorter than typical HFO camera cables.

* Canare OC seires (Hybrid-OPS profile) is also available. Please contact us for more details.

FCC-7T**

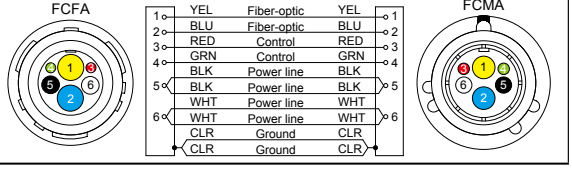
FCFA, FCF7A

FCMA, FCM7A



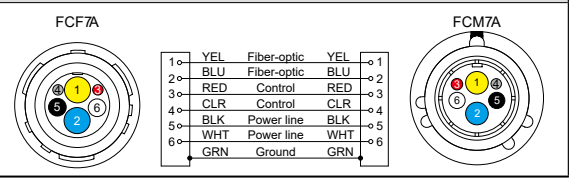
Color Rings

FCC-9T**



Wiring Diagram

FCC-7T**



Wiring Diagram

HFO Camera Cable Assemblies (Flanged Type)

■ Panel to CCU

Type	Model	Length (m)
 Jacket color: BLK IU-FCF-SET included	FCC05N-FRCM	5
	FCC10N-FRCM	10
 Jacket color: BLK IU-FCM-SET included	FCC05N-FMRC	5
	FCC10N-FMRC	10

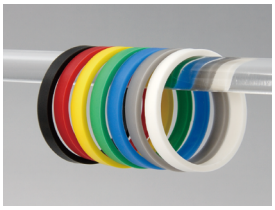
* Canare OC series (Hybrid-OPS profile) is also available. (see page 13)

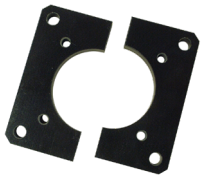
- HFO camera cable with the flange for panel mounting.
- SMPTE ST 304, ST 311, and ARIB BTA S-1005B compliant.
- Return loss: 45dB or greater (λ=1.3μm).
- Insertion loss: 0.5dB or less (λ=1.3μm).
- Connector body material is stainless steel.
- Color rings and insulation plates included.
- See below for the panel hole dimensions.

Website


FCFRCA

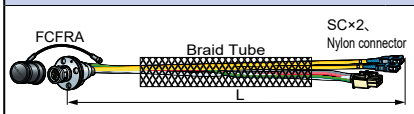
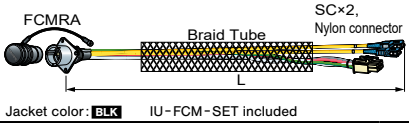

FCMRCA


Color Rings


IU-FC*-SET

HFO Camera Receptacle Cables

■ Pigtails

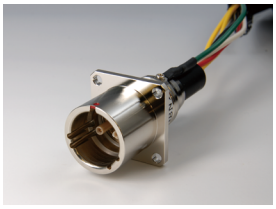
Type	Model	Length (m)
 Jacket color: BLK IU-FCF-SET included	FCS015A-FR	1.5
 Jacket color: BLK IU-FCM-SET included	FCS015A-MR	1.5

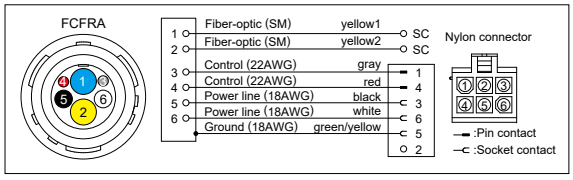
* Canare OC series (Hybrid-OPS profile) is also available. (see page 13)

- Ideal for connecting wall terminal panels to splice enclosures, etc.
- Return loss: 45dB or greater (λ=1.3μm).
- Insertion loss: 0.5dB or less (λ=1.3μm).
- Connector body material is stainless steel.
- Insulation plates included.
- See below for the panel hole dimensions.

Website


FCFRA


FCMRA



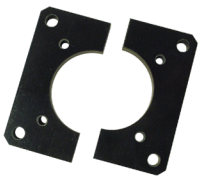
Wiring Diagram

Insulation Plate

Ideal for perfect insulation between individual connector and panel.

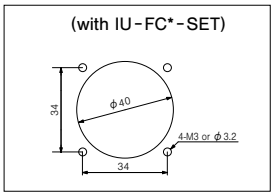
Model	Suitable Connector
IU-FCM-SET	FCMRA, FCMRCA
IU-FCF-SET	FCFRA, FCFRCA

- Material: Bakelite (phenolic resin)
- Mounting screws included.


IU-FC*-SET

Website

■ Hole Dimensions



Extraction Tool

Extraction tool helps easy to clean Canare HFO connectors.

Model	Suitable Connector
ASPT-1	FCFA, FCF7A, FCFRA, FCFRCA

- Tool to be used to release the alignment sleeve unit when cleaning HFO connectors.

* Use the CLETOP 2.5/2.0 (100) cleaning stick to clean fiber-optic camera connectors.


ASPT-1

Website


Quick-release
US Patent No.7241055B2

HFO Camera Cable Assemblies (Japanese Style)

Canare OC hybrid camera connectors are commonly used in Japan and Asian countries. It includes the same combination of SMPTE 304 but different pinouts. Improved reliabilities and advanced maintenance features.

OC connectors

Symmetric pinout
Finger detachable insulator
Better grip, proper connections
SMPTE 311 cable ready
Camera MFGs accepted
Hybrid-OPS profile

FC connectors

SMPTE and ARIB standard
Detachable insulator with tool
Widely used in the market
Hybrid-3K profile

Camera to CCU

O C C 1 0 0 - N

Website

Series name
Cable mount plugs
Male and female

Lengths
01 = 1 meters
100 = 100 meters
Call for stocked lengths.

Cable type
N : LF-2SM9N O.D. 9 mm PVC Jacket (most common)
7N : LF-2SM7N O.D. 7 mm PVC Jacket
9T : LF-2SM9T O.D. 9 mm TPU Jacket w/o Shield
7T : LF-2SM7T O.D. 7 mm TPU Jacket w/o Shield
TPU = Thermoplastic Polyurethane

OCFA

OCMA

Panel to CCU

O C C 0 5 N - F R C M

Website

Series name
PNL mount M to
cable mount F
and vice versa

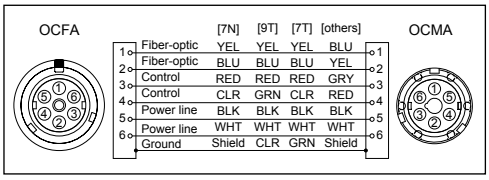
Lengths
05 = 5 meters
10 = 10 meters
Call for custom lengths.

Connector type
FRCM: OCFRCB-OCMA
FMRC: OCMRCA-OCFA

Cable type: LF-2SM9N

OCFRCB

OCMRCA



Wiring Diagram for OCC

Pigtails

O C S 0 1 5 - F R

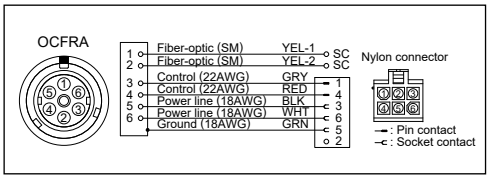
Website

Series name
OC breakout

Lengths
015 = 1.5 meters
Call for custom lengths.

Connector type
FR : OCFRA to 2 × SC, 1 × Nylon
MR: OCMRA to 2 × SC, 1 × Nylon

OCS015-FR



Wiring Diagram for OCS

SMPTE Conversion

F C M 0 2 N - O C F

Website

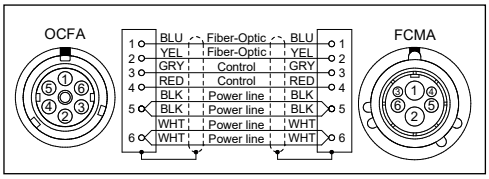
Connector A
FCM: FCMA
FCF: FCFA

Lengths
02 = 2meters
Call for custom lengths.

Connector B
OCF: OCFA
OCM: OCMA

Cable type: LF-2SM9N
Call for custom models.

FCF02N-OCM



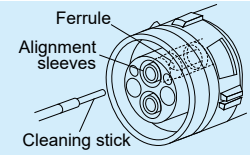
Wiring Diagram for Conversion

Technical Note

Maintaining Hybrid Fiber-Optic Camera Connectors

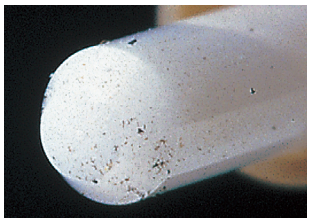
The connector sections to be cleaned are the key parts, including the tips and sides of ferrules, the interior walls of alignment sleeves and the interior and exterior of connector shells. Note that scratches and particles of foreign matter on the tip of the ferrule can have a disabling effect on fiber-optic transmission. The following procedures should be used when cleaning hybrid fiber-optic camera connectors.

- For Plugs, the interior surfaces of alignment sleeves and the tips of ferrules are to be cleaned with the non-alcohol treated cleaning stick using a gentle stroking action. Canare FCFA and FCFRA enhance easy cleaning procedure for its innovative alignment sleeve and insulator detachable design.

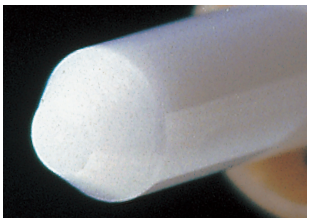


US Patent : No.7241055B2

- For Jacks, it is important to clean both the tips and sides of the completely protruding ferrules with the cleaning stick.
- Both the male and female connector shells tend to attract dust and metal particles, so it is important to clean both the insides and outsides using cotton gauze or similar material.



Before cleaning



After cleaning

Cleaning Stick
Model : CLETOP 2.5/2.0

- Compact and disposable
- Allows cleaning both the tips and sides of ferrules
- Manufactured by NTT-AT

IBC Brand Cleaner M-20
Model : 14347 CLEANER

- Easy “one-push” cleaner
- Allows cleaning the tips of ferrules without removing alignment sleeve
- Manufactured by US Conec

Cleaning guide for female connectors

1 Extract an insulator unit

For FC series, use a removal tool : ASPT-1.
OC series does not require special tool.
Minus driver or coin should be fine.

2 Clean up ferrules

Canare suggests using CLETOP(photo shown). This stick features ferrule guide for efficient cleaning. For monitoring, a fiber scope will be handy as it displays real time ferrule surface.

3 Dust away on alignment sleeves

Dust also remains on inner part of alignment sleeve. Another end of CLETOP is ideal for wiping inside of alignment sleeve.

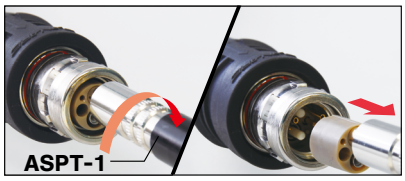
4 Put back the unit in place

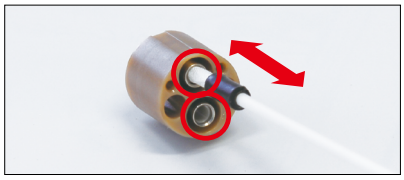
The right position marked on dots. Insert the unit to the end-click sound. Press again with your finger to make sure properly placed. Insufficient locking may cause an issue-unit remaining on male connector.

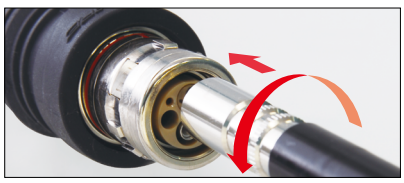
1 Put back the unit in place

The OM12 Series does not have a removable insulator unit. Please clean the ferrule directly. When using the CLETOP stick, use the non-tubed side for OM12JR and OM12J, and the tubed side for OM12PR and OM12P.

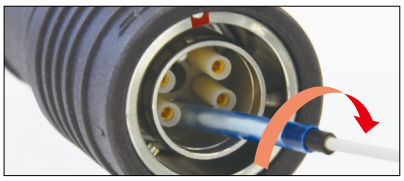
■ FC Series
FCFA / FCF7A / FCFRA / FCFRCA

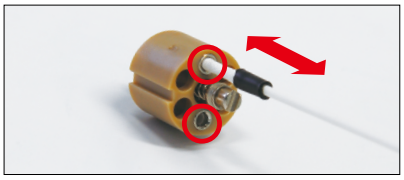


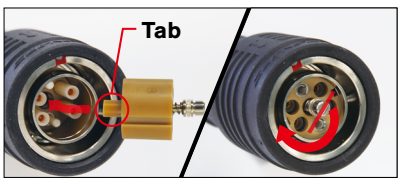




■ OC Series & OM6 Series
OCFA / OCF7A / OCFRA /OCFRCB / OM6PA / OM6PRA

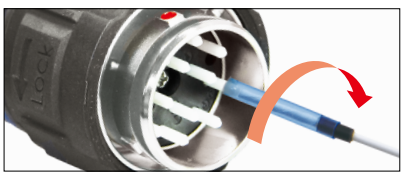






■ OM12 Series
OM12JR / OM12J

OM12PR / OM12P



Hybrid Fiber-optic Camera Connector Panels

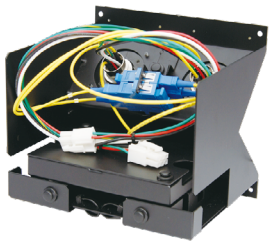
Pre-terminated HFO camera connector panel with built-in splice enclosure box provides easy and quick installation between HD camera system and terminal panel or rack. By combining the unit and frame, HFO camera connector panel enables a variety of layouts depending on the system design.

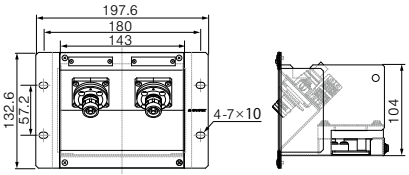
Website

■ COPS Series (SMPTE)

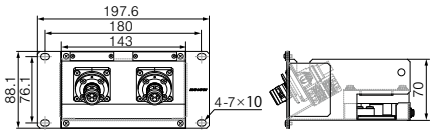
Model	Panel Size	HFO Connectors* (Assembly)
COPS-FF3A	Wall Mount Type 3RU Height, W:197.6mm	2 × FCFRA (FCS003A-FR)
COPS-FM3A		2 × FCMRA (FCS003A-MR)
COPS-FF2A	Wall Mount Type 2RU Height, W:197.6mm	2 × FCFRA (FCS003A-FR)
COPS-FM2A		2 × FCMRA (FCS003A-MR)
COPS3-FF3A	Rack Mount Type 3RU	6 × FCFRA (FCS003A-FR)
COPS3-FM3A		6 × FCMRA (FCS003A-MR)
COPS3-FF2A	Rack Mount Type 2RU	6 × FCFRA (FCS003A-FR)
COPS3-FM2A		6 × FCMRA (FCS003A-MR)

*HFO connectors are pre-terminated. (length: 0.3 m)
*Canare OC series (Hybrid-OPS profile) is also available. Please contact us for more details.





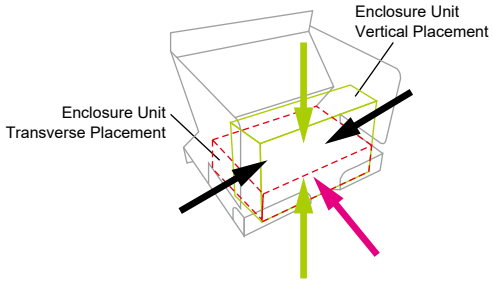
COPS-FF3A



COPS-FF2A

Key Features and Benefits

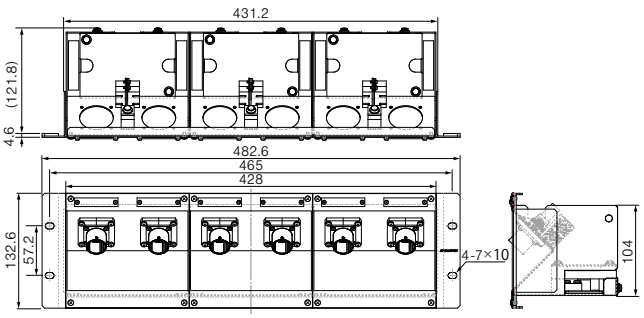
- Exclusive “5-directional Wiring”
- Convenient to build I/O interface between HD facilities and HD OB vans
- Variety of choice of 2RU/3RU and wall/rack mount
- Pre-terminated HFO connectors reduce installation time dramatically.
- Cost effective
- Lightweight aluminum chassis



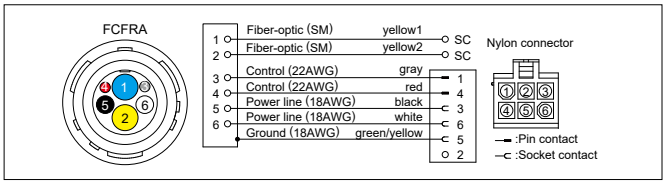
5 directions of cabling
as indicated by colored arrows

Vertical/Transverse placement
Transverse placement
Vertical placement

5-directional Wiring
JP Patent No.4388540



COPS3-FM3A



Wiring Diagram

Accessories:
Fiber-optic cable w/SC connector (2m), grounding cable, nylon connector, pin contact, socket contact, tie-band, fusion splice protection sleeve, splice holder, color-coded tube, mounting screw, laser warning label.

Note: Assembly tools for the nylon connectors are NOT include.
(AMP 91529-1: 26 to 22 AWG and AMP 91536-1: 20×2 to 16 AWG)

■ Individual Frame and Unit

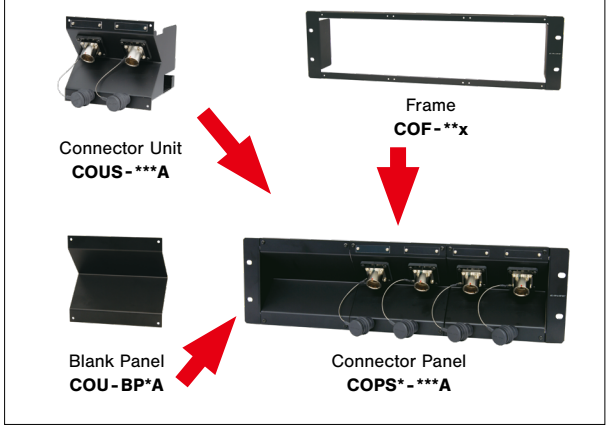
Model	Height	Description
COUS-FF3A	3RU	Connector Unit of COPS(3)-FF3A
COUS-FM3A		Connector Unit of COPS(3)-FM3A
COF-13C		Frame of COPS (for 1 unit)
COF-33B		Frame of COPS3 (for 3 units)
COUS-FF2A	2RU	Connector Unit of COPS(3)-FF2A
COUS-FM2A		Connector Unit of COPS(3)-FM2A
COF-12B		Frame of COPS (for 1 unit)
COF-32A		Frame of COPS3 (for 3 units)

*HFO connectors are pre-terminated. (length: 0.3 m)
*Canare OC series (Hybrid-OPS profile) is also available. Please contact us for more details.

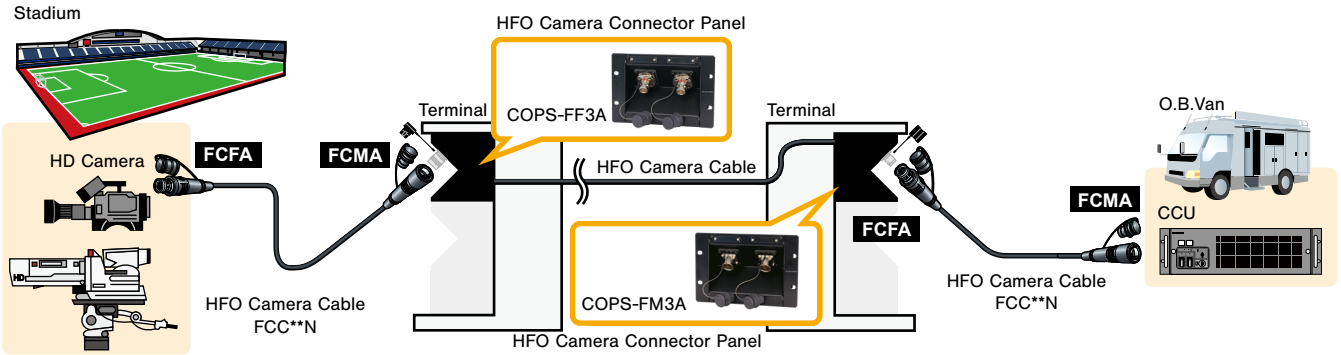
■ Optional Parts

Model	Type	Suitable Frame/Unit
COU-BP3A	Blank Panel	COF-13A, COF-33B (3RU frames)
COU-BP2A		COF-12A, COF-32A (2RU frames)
COU-CV3	Top Cover	COUS-FF3A, COUS-FM3A (3RU units)
COU-CV2		COUS-FF2A, COUS-FM2A (2RU units)

Configuration Example



<Example of Use>



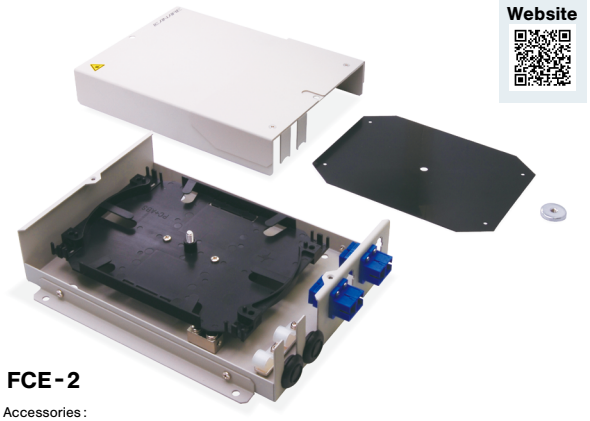
Hybrid Fiber-optic Splice Enclosures

The optimized fiber-optic splice enclosures for use with HFO camera cables.

Model	No. of cables (capacity)	No. of splice trays	No. of Adapters	
			SC	Nylon
FCE-2	2	1	4	2
FCE-4	4	2	8	4
FCE-6	6	3	12	6

- Used to protect fusion splice connection parts
- Designed for use with LF-2SM9N
- Easy cable installation
- Can be placed vertically or horizontally
- Detachable brackets and a connector protection cover
- Insulated tension member clamp

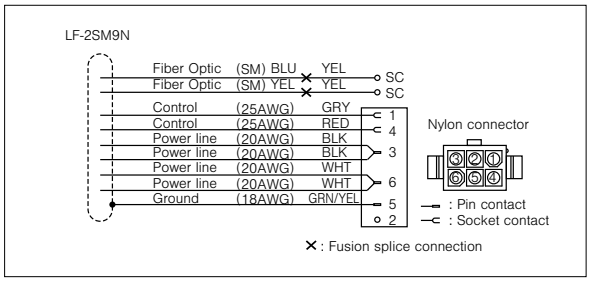
Website



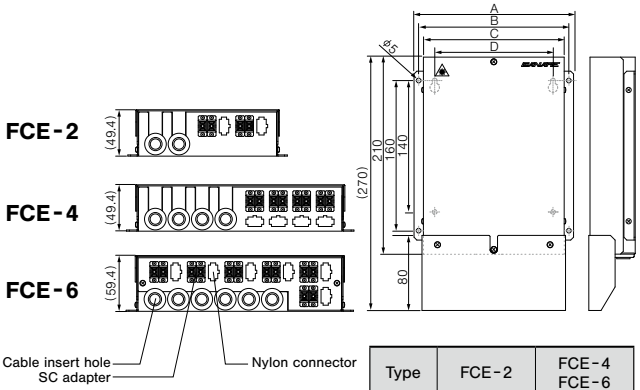
FCE-2

Accessories:
Fiber-optic cable w/SC connector (2m), splice holder, fusion splice protection sleeve, nylon connector, pin contact, socket contact, tie band, grounding cable, color-coded tube.

Note :
The following tools are required for installing the nylon connector.
AMP 91529-1 (26 to 22 AWG) and AMP 91536-1 (20 × 2 to 16 AWG)



Wiring Diagram



Type	FCE-2	FCE-4 FCE-6
A	170mm	240mm
B	160mm	230mm
C	150mm	220mm
D	126mm	196mm

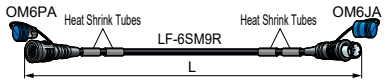
Multi-Channel Fiber Optic Cables

Canare fiber-optic snake products are developed by extending ideas of SMPTE HFO camera solution. Individual multiple ferrules and robust metal chassis are engineered for heavy duty applications such as sports events or live productions connecting OBVAN to FOH stage box or venues.

- Canare exclusive design
- Heavy-duty alternative to MTP/MPO connectors
- Abrasion-resistance cable jacket
- Single-mode, ITU-T G.657.A2 low bending loss and low water-peak fiber
- Tensile strength: 500 N or less
- RL: 45 dB or greater (λ= 1.3 µm)
- Open to any SM optical signal
- 2mm SMPTE Ferrules

■ OM6 Series

Trunk Cable: Plug - Jack

Type	Model	Length (m)
 Jacket color: BLK	OM6C10	10
	OM6C20	20
	OM6C25	25
	OM6C35	35
	OM6C50	50
	OM6C100	100
	OM6C150	150
	OM6C200	200

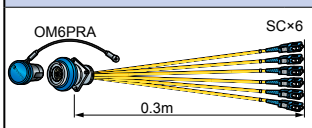
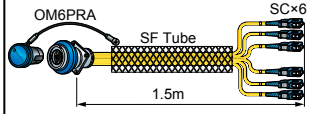
OM6PA

OM6JA

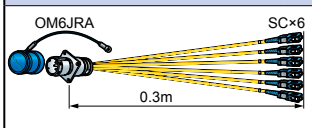
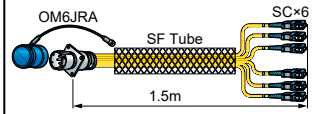
Website

Website

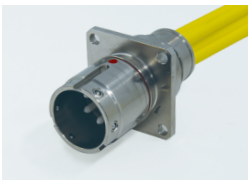
Fantail: P Receptacle to SC

Type	Model	Length (m)
 Jacket color: YEL IU-FCM-SET included	OM6S003-PR	0.3
 Jacket color: YEL IU-FCM-SET included	OM6S015-PR	1.5

Fantail: J Receptacle to SC

Type	Model	Length (m)
 Jacket color: YEL IU-FCM-SET included	OM6S003-JR	0.3
 Jacket color: YEL IU-FCM-SET included	OM6S015-JR	1.5

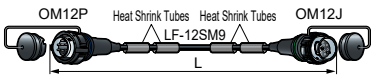
OM6PRA



OM6JRA

■ OM12 Series

Trunk Cable: Plug - Jack

Type	Model	Length (m)
 Jacket color: BLK	OM12C10	10
	OM12C20	20
	OM12C30	30
	OM12C40	40
	OM12C50	50
	OM12C100	100

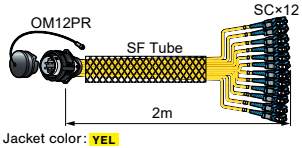
OM12P

OM12J

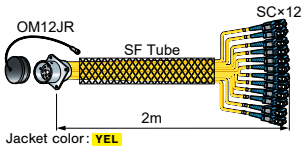
Website

Website

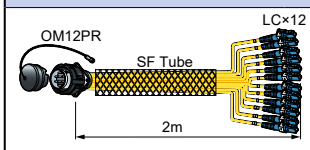
Fantail: P Receptacle to SC

Type	Model	Length (m)
 Jacket color: YEL	OM12S02-PR	2

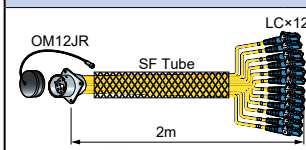
Fantail: J Receptacle to SC

Type	Model	Length (m)
 Jacket color: YEL	OM12S02-JR	2

Fantail: P Receptacle to LC

Type	Model	Length (m)
 Jacket color: YEL	OM12S02-PR-L	2

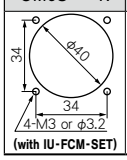
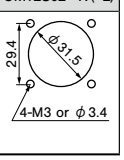
Fantail: J Receptacle to LC

Type	Model	Length (m)
 Jacket color: YEL	OM12S02-JR-L	2

OM12PR

OM12JR

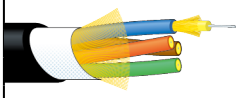
■ Hole Dimensions

OM6S**-*R	OM12S02-*R(-L)
	

Tactical Fiber-optic Cable

Particularly rugged multichannel fiber-optic cable designed for mobile applications.

Website

Type	Model	No. of Ch.	Sales Units (m)	Nom. O.D. (mm)	Weight kg/100m	Tension Tolerance (N)	Strength Member	Min. Bend Radius	Temp. Range (deg C)	Fiber-optic Unit		
										Fiber	Attenuation	Unit O.D.
 Jacket color: BLK	**LF-SM2T-4C**	4	100 200 500	7.8	4.9	1400	Aramid yarn	Equal to Nom. O.D.	-55 to +85	SM 9/125 (low-water-peak)	0.6 dB/km @1310 nm	2.0 mm including aramid yarn

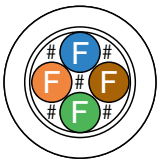
Jacket: TPU

LF-SM2T-4C

- Heavy-duty and high flexibility
  - * Crush resistance: 2,000 N/cm
  - * Impact resistance: 300 impacts
  - * Cycle flexing: 20,000 cycles
- Single-mode
- Color-coded breakout type unit
- Thermoplastic polyurethane jacket
- Aramid yarn strength member
- 4-channel cable best suited for Quad-link 3G-SDI signals.

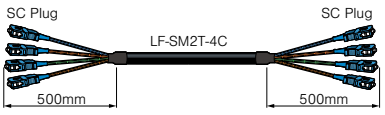
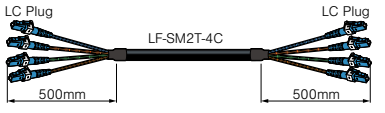
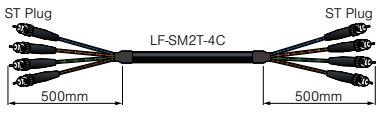
Cross Section

LF-SM2T-4C



Key: F : Fiber
+ Aramid Yarn
# : Aramid Yarn

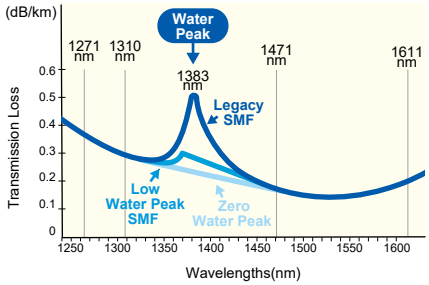
■ Cable Assemblies

Type	Model	Length (m)
 SC Plug SC Plug LF-SM2T-4C 500mm 500mm Jacket color: BLK	**4FS50T-SS**	50
	4FS100T-SS	100
	4FS150T-SS	150
	4FS200T-SS	200
 LC Plug LC Plug LF-SM2T-4C 500mm 500mm Jacket color: BLK	**4FS50T-LS**	50
	4FS100T-LS	100
	4FS150T-LS	150
	4FS200T-LS	200
 ST Plug ST Plug LF-SM2T-4C 500mm 500mm Jacket color: BLK	**4FS50T-ST**	50
	4FS100T-ST	100
	4FS150T-ST	150
	4FS200T-ST	200

Technical Note

Canare's Single-mode Fiber-optic Cables

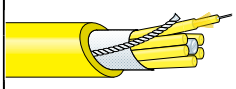
Canare's single mode fiber (SMF) cables are compliant with ITU-T G.652. D as well as ITU-T G.657.A2. Our SMF cables feature less water peak and excellent wavelength multiplexing capabilities in minimum 7.5mm bending radius per a unit, which gives you cabling even easier.



ITU-T	Category	Bend Radius	Number of Turns	Bending Loss(Max. at)	
				λ=1550nm	λ=1625nm
		(mm)	(times)	(dB)	(dB)
G.657	A1	15	10	0.25	1.0
		10	1	0.75	1.5
	A2	**15**	**10**	**0.03**	**0.1**
		10	**1**	**0.1**	**0.2**
		7.5	**1**	**0.5**	**1.0**
	B2	15	10	0.03	0.1
		10	1	0.1	0.2
		7.5	1	0.5	1.0
	B3	10	1	0.03	0.1
		7.5	1	0.08	0.25
		5	1	0.15	0.45

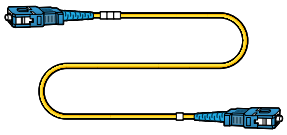
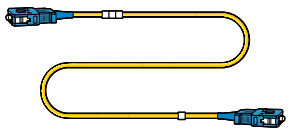
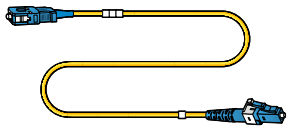
Website

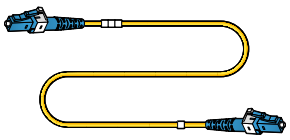
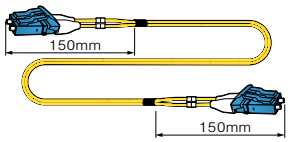
Single-mode Fiber-optic Cables (Multichannel)

Type	Model	No. of Ch.	Sales Units (m)	Nom. O.D. (mm)	Weight kg/100m	Outer Jacket	Tension Tolerance (N)	Min. Bend Radius	Temp. Range (deg C)	Fiber-optic Unit		
										Fiber	Attenuation	Unit O.D.
 **LF-SM2-6C** Jacket color: YEL	**LF-SM2-2C**	2	Call	7.4	5.4	PVC	290	10 × Nom. O.D.	-40 to +75	SM 9/125 + Aramid yarn + PVC jacket	0.5 dB/km @1310nm	2.0 mm including aramid yarn
	LF-SM2-4C	4		7.4	5.5		290					
	LF-SM2-6C	6		9.0	7.3		300					
	LF-SM2-8C	8		10.0	10.4		780					
	LF-SM2-12C	12		12.8	14.2		780					
	LF-SM2-16C	16		14.7	16.3		780					
	LF-SM2-24C	24		15.0	18.3		780					

- Smooth PVC Jacket
- Including a central strength member and a rip cord.

Single-mode Fiber Optic Patch Cables

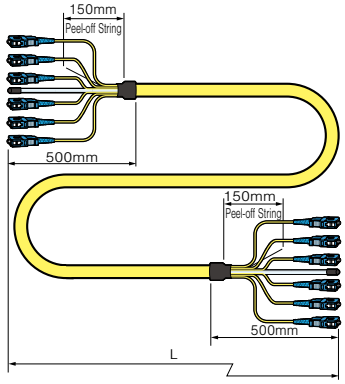
Type	Model	Length (m)
SC - SC  Jacket color: YEL Cable O.D.: 3 mm	**FS3C002A-S**	0.2
	FS3C003A-S	0.3
	FS3C005A-S	0.5
	FS3C007A-S	0.7
	FS3C01A-S	1
	FS3C02A-S	2
	FS3C03A-S	3
	FS3C04A-S	4
	FS3C05A-S	5
SC - SC  Jacket color: YEL Cable O.D.: 2 mm	**FS2C002A-SS**	0.2
	FS2C003A-SS	0.3
	FS2C005A-SS	0.5
	FS2C007A-SS	0.7
	FS2C01A-SS	1
	FS2C02A-SS	2
	FS2C03A-SS	3
	FS2C04A-SS	4
	FS2C05A-SS	5
SC - LC  Jacket color: YEL Cable O.D.: 2 mm	**FS2C002A-SS/LS**	0.2
	FS2C003A-SS/LS	0.3
	FS2C005A-SS/LS	0.5
	FS2C007A-SS/LS	0.7
	FS2C01A-SS/LS	1
	FS2C02A-SS/LS	2
	FS2C03A-SS/LS	3
	FS2C04A-SS/LS	4
	FS2C05A-SS/LS	5

Type	Model	Length (m)
LC - LC  Jacket color: YEL Cable O.D.: 2 mm	**FS2C002A-LS**	0.2
	FS2C003A-LS	0.3
	FS2C005A-LS	0.5
	FS2C007A-LS	0.7
	FS2C01A-LS	1
	FS2C02A-LS	2
	FS2C03A-LS	3
	FS2C04A-LS	4
	FS2C05A-LS	5
LC - LC Duplex  Jacket color: YEL Cable O.D.: 2 mm	**2FSZ2S005A-DLS**	0.5
	2FSZ2S007A-DLS	0.7
	2FSZ2S01A-DLS	1
	2FSZ2S02A-DLS	2
	2FSZ2S03A-DLS	3
	2FSZ2S04A-DLS	4
	2FSZ2S05A-DLS	5

- ITU-T G.652.D/G.657.A2
- Low-water-peak
- Minimum bend radius: 10 mm
- Insertion loss: 0.5 dB max.
- Return loss: 50 dB max. (UPC)
- UL type OFNR

Website

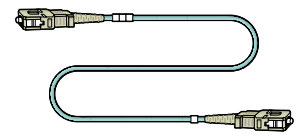
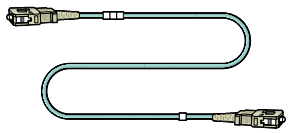
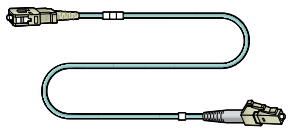
Single-mode Fiber Optic Fantails

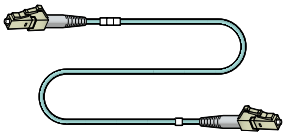
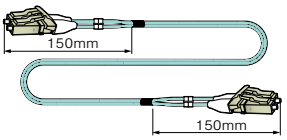
Type	Channel	Model	Length (m)	Fiber Optic Cable		
				Part Number	Unit O.D. (mm)	Nom. O.D. (mm)
SC - SC  Jacket color: YEL	2	**2FS10-S**	10	LF-SM2-2C	2	7.4
		2FS20-S	20			
		2FS50-S	50			
	4	**4FS10-S**	10	LF-SM2-4C		7.4
		4FS20-S	20			
		4FS50-S	50			
	6	**6FS10-S**	10	LF-SM2-6C		9.0
		6FS20-S	20			
		6FS50-S	50			
	8	**8FS10-S**	10	LF-SM2-8C		10.0
		8FS20-S	20			
		8FS50-S	50			
	12	**12FS10-S**	10	LF-SM2-12C		12.8
		12FS20-S	20			
		12FS50-S	50			
	16	**16FS10-S**	10	LF-SM2-16C		14.7
		16FS20-S	20			
		16FS50-S	50			
	24	**24FS10-S**	10	LF-SM2-24C		15.3
		24FS20-S	20			
		24FS50-S	50			

- Flexible cable with reliable bellcore boots
- Adjustable fantail length with peel-off string
- UPC polishing; Return loss ≥50dB for single mode
- Transmission loss 0.5dB at λ=1.31μm and 0.4dB at λ=1.55μm

Website

OM3 Multi-mode Fiber Optic Patch Cables

Type	Model	Length (m)
SC - SC  Jacket color: AQUA Cable O.D.: 3 mm	FM33C005-S	0.5
	FM33C01-S	1
	FM33C03-S	3
	FM33C05-S	5
SC - SC  Jacket color: AQUA Cable O.D.: 2 mm	FM32C005-SS	0.5
	FM32C01-SS	1
	FM32C03-SS	3
	FM32C05-SS	5
SC - LC  Jacket color: AQUA Cable O.D.: 2 mm	FM32C005-SS/LS	0.5
	FM32C01-SS/LS	1
	FM32C03-SS/LS	3
	FM32C05-SS/LS	5

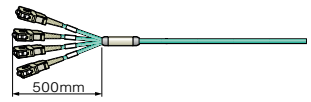
Type	Model	Length (m)
LC - LC  Jacket color: AQUA Cable O.D.: 2 mm	FM32C005-LS	0.5
	FM32C01-LS	1
	FM32C03-LS	3
	FM32C05-LS	5
LC - LC Duplex  Jacket color: AQUA Cable O.D.: 2 mm	2FM3Z2S005-DLS	0.5
	2FM3Z2S01-DLS	1
	2FM3Z2S03-DLS	3
	2FM3Z2S05-DLS	5

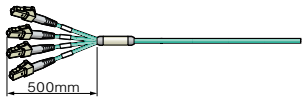
Website

- Fiber type: Multi-mode 50/125 OM3
- Typically used in 10 Gigabit Ethernet
- Minimum bend radius: 10 mm
- Insertion loss: 0.3 dB max.
- Return loss: 30 dB max. (PC)
- UL type OFNR

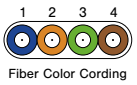
Website

OM3 Multi-mode Fiber Optic Fan-out Cables

Type	Model	Length (m)
SC - Open  Jacket color: AQUA	4FO-M3-015-SS	1.5
	4FO-M3-03-SS	3
	4FO-M3-05-SS	5

Type	Model	Length (m)
LC - Open  Jacket color: AQUA	4FO-M3-015-LS	1.5
	4FO-M3-03-LS	3
	4FO-M3-05-LS	5

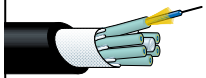
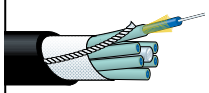
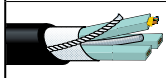
- 4-core Multimode 50/125 OM3 Ribbon Fiber
- Typically used in 10 Gigabit Ethernet
- Insertion loss: 0.3 dB max.
- Return loss: 30 dB max. (PC)
- Ribbon fiber cable: 2.1 × 3.5 mm outer dimensions
- Fan-out unit: 2 mm outer diameter, 500 mm length
- Fan-out tubing: 8 mm outer diameter
- UL type OFNR



Fiber Color Cording

Website

Multi-core OM3 Multi-mode Fiber Optic Cables

Type	Model	No. of Ch.	Sales Units (m)	Nom. O.D. (mm)	Weight kg/100m	Tension Tolerance (N)	Min. Bend Radius	Temp. Range (deg C)	Fiber-optic Unit		
									Fiber	Attenuation	Dim. (mm)
 Jacket color: BLK Unit color: AQUA	LF-M32T-6C New	6	Call	9.2	8.0	700	6 × Nom. O.D.	-40 to +75	MM 50/125	3 dB/km @850nm 1 dB/km @1300nm	2.0 (round)
 Jacket color: BLK Unit color: AQUA	LF-M32-4C-EM	4		7.4	5.6	290		-20 to +60			
	LF-M32-6C-EM	6		9.0	7.5	300					
	LF-M32-8C-EM	8		10.1	10.8	780					
 Jacket color: BLK Unit color: AQUA	LF-M3R4-12C-EM	12 (3×4 core)		7.4	5.6	300					1.5 × 2.5 (ribbon)

Jacket material: Flame retardant PE

- OM3 fiber; typically used in 10 Gigabit Ethernet.
- Including a central strength member and a rip cord.
- Each unit has aramid strength member.

75Ω BNC Crimp Plugs

Website

Canare added the new BCP-D series for 12G-SDI. SMPTE ST 2082-1 fully compliant connector makes UHD solutions as simple as existing SDI systems. The world's highest quality BNC includes BCP-B for 3G-SDI, BCP-A/C for up to HD.

■ BCP-D Series 12G-SDI

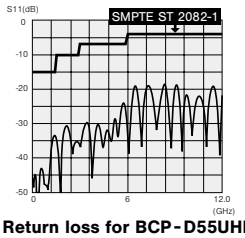
Return Loss: 20 dB @ 6 GHz, 15 dB @ 12 GHz

Model	Suitable Cable		Center Pin	Sleeve	Boot	Die Set
	Canare	Others				
BCP-D33UHD	L-3.3CUHD	—	BN1181	BN7003A	CB03	TCD-35CA
BCP-D33UHW	L-3.3CUHWS	—	BN1181	BN7015A	CB04	TCD-451CA
BCP-D55UHD	L-5.5CUHD	—	BN1175	B75004A	—	TCD-55UHD
BCP-D55UHW	L-5.5CUHWS	—	BN1192	BN7014	CB055W	TCD-57C
BCP-D57	—	4794R	BN1192	BN7002	—	TCD-57C
BCP-D8UHD	L-8CUHD, L-8CHD	—	BN1174	BN7147	—	TCD-8HD*

• Standard package (20pcs/100pcs)

*Crimp tool for TCD-8HD is TC-2

BCP-D55UHD



Return loss for BCP-D55UHD

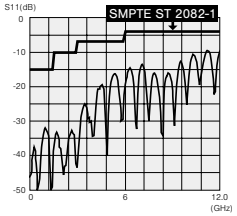
■ BCP-B Series

Return Loss: 26.4 dB @ 3 GHz

Model	Suitable Cable		Center Pin	Sleeve	Boot	Die Set
	Canare	Others				
BCP-B25HD	L-2.5CHD, L-2.5CHLT	VDM230	B11015E	BN7129	CB02	TCD-35CA
BCP-B25HW	L-2.5CHWS, V4-2.5CHW	—	B11015E	BN7143	CB02	TCD-35CA
BCP-B26	—	1855A, 1855P	B11014E	BN7029C	CB02	TCD-35CA
BCP-B28	—	1855ENH, HD PRO 0.6/2.8 AF	B11015E	BN7052A	CB02	TCD-35CA
BCP-B3F	L-3CFB, V*-3CFB	—	B11015E	BN7003A	CB03	TCD-35CA
BCP-B31F	L-3CFW, V*-3CFW	—	B11015E	BN7015A	CB04	TCD-4CA TCD-451CA
BCP-B4F	L-4CHD, L-4CFB, V*-4CFB	1505A, 1505ANH, VPM2000, HD PRO 0.8/3.7 AF	B11016E	BN7015A	CB04	TCD-4CA TCD-451CA
BCP-B45HW	L-4.5CHWS	1694F	B11020D	BN7016	CB05A	TCD-35CA
BCP-B53	L-4.5CHD	1694A	B11020D	BN7046	CB05A	TCD-35CA
BCP-B56	—	HD PRO 1.0/4.8 AF	B11020D	BN7046	CB05A	TCD-35CA
BCP-B5F	L-5CFB, V*-5CFB	—	B11020D	B75004A	CB05A	TCD-5CF TCD-55FA
BCP-B51F	L-5CFW, V*-5CFW	—	B11020D	B75004A	CB05A	TCD-5CF TCD-55FA

• Standard package (20pcs/100pcs)

BCP-B53



Return loss for BCP-B53

■ BCP-A Series

Return Loss: 26.4 dB @ 2 GHz, 20.8 dB @ 3 GHz (*1)

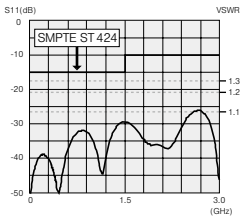
Model	Suitable Cable		Center Pin	Sleeve	Boot	Die Set
	Canare	Others				
BCP-A25	L-2.5C2V	—	BN1018A	BN7029C	CB02	TCD-35CA
BCP-A25F	L-2.5CFB	1855A, 8218, 1417B, 1418B	B11014E	BN7029C	CB02	TCD-35CA
BCP-A3	L-3C2VS, L-3C2V, V*-3C	—	B11014E	BN7003A	CB03	TCD-35CA
BCP-A31	L-3C2W	—	B11014E	BN7011	CB04	TCD-31C
BCP-A3AHD	L-3C-AHD	—	B11016E	BN7003A	CB03	TCD-35CA
BCP-A3F	L-3CFB, V*-3CFB	—	B11015E	BN7003A	CB03	TCD-35CA
BCP-A4	LV-61S	8241, 8279, RG-59B/U	B11015E	BN7015A	CB04	TCD-4CA TCD-451CA
BCP-A42	—	1505F	B11016E	BN7011	CB04	TCD-31C
BCP-A4F	L-4CHD, L-4CFB, V*-4CFB	1505A, 1505ANH, 8212, 8241F, 9167, 9259, 9659, VPM2000, HD PRO 0.8/3.7 AF	B11016E	BN7015A	CB04	TCD-4CA TCD-451CA
BCP-A5	L-5C2VS, L-5C2V, V*-5C	—	B11016E	BN7016	CB05A	TCD-35CA
BCP-A52	L-5C2W	—	B11016E	BN7014	—	TCD-451CA
BCP-A55	—	1695A, VSD2001TS	B11020D	BN7045A	CB04	TCD-35CA
BCP-A5F	L-5CFB, V*-5CFB	—	B11020D	B75004A	CB05A	TCD-35CA
BCP-A77	LV-77S	8281F	B11016E	B75004A	CB05A	TCD-5CF TCD-55FA
BCP-VA3	V*-3C	—	B11014E	BN7052A	CB03	TCD-35CA
BCP-VA5	V*-5C	—	B11016E	BN7045A	CB05A	TCD-35CA

• Standard package (20pcs/100pcs).

*1 Excluding BCP-A25, BCP-A25F and BCP-A4

Note: Suitable die set for BCP-A5F is TCD-35CA; do not use TCD-5CF/TCD-55FA for BCP-A5F.

BCP-A3



Return loss for BCP-A3

Be sure to use Canare Crimp Tool

- Canare crimp design ensures quick and reliable installation.
- Gold plated "snap locks" center pin and beryllium copper outer contact.
- Elongated body design for stable finger grip.
- Position mark on the body makes it easier to check if the connector is locked.

■ BCP-C Series

Return Loss: 26.4 dB @ 2 GHz (*2)

Model	Suitable Cable		Center Pin	Sleeve	Boot	Die Set
	Canare	Others				
BCP-C1	L-1.5C2VS, V*-1.5C	83264, 83267	Solder	BN7022	CB01	TCD-1DB
BCP-C5HD	L-5CHD	—	BN1139	B75004A	CB05A	TCD-5HD
BCP-C6HD	L-6CHD	—	BN1083A	BN7074A	—	TCD-67HD
BCP-C71A	—	7731A, 9064, 9292, 1617A, 9011	BN1043A	BN7021A	—	TCD-7CA
BCP-C7FA	L-7CFB	—	BN1012B	BN7021A	—	TCD-7CA
BCP-C7HD	L-7CHD	—	BN1082A	BN7021A	—	TCD-67HD

• Standard package (20pcs/100pcs).

*2: Excluding BCP-C1

BCP-C6HD

■ BCP-LD Series (Right Angle) 12G-SDI

Return Loss: 20 dB @ 6 GHz / 15 dB @ 12 GHz

Model	Suitable Cable		Center Pin	Sleeve	Boot	Die Set
	Canare	Others				
New **BCP-LD25HD**	L-2.5CHD	1855A	BN1223	BN7129	—	TCD-35CA
New **BCP-LD25HW**	L-2.5CHWS	—	BN1223	BN7143	—	TCD-35CA
New **BCP-LD33UHD**	L-3.3CUHD	—	BN1225	BN7003A	—	TCD-35CA
New **BCP-LD53**	L-4.5CHD	1694A	BN1226	BN7046	—	TCD-35CA

• Standard package (20pcs/100pcs)

BCP-LC3

■ BCP-LC Series (Right Angle)

Return Loss: 26.4 dB @ 2 GHz

Model	Suitable Cable		Center Pin	Sleeve	Boot	Die Set
	Canare	Others				
BCP-LC3	L-3C2VS, L-3C2V, V*-3C	—	B11014E	BN7003A	—	TCD-35CA
BCP-LC3F	L-3CFB, V*-3CFB	—	B11015E	BN7003A	—	TCD-35CA
BCP-LC5	L-5C2VS, L-5C2V, V*-5C	—	B11016E	BN7016	—	TCD-35CA
BCP-LC5F	L-5CFB, V*-5CFB	—	B11020D	B75004A	—	TCD-5CF TCD-55FA

• Standard package (20pcs/100pcs).

BCP-LD25HD

• Canare crimp design ensures quick and reliable installation.
• Gold plated “snap locks” center pin and beryllium copper outer contact.

Be sure to use Canare Crimp Tool

Website

75Ω Slim BNC Crimp Plugs

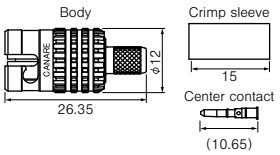
■ MBCP-C Series

Return Loss: 26.4 dB @ 1.5 GHz (*3)

Model	Suitable Cable		Center Pin	Sleeve	Boot	Die Set
	Canare	Others				
MBCP-C25F	L-2.5CFB	1855A, 8218, 1417B, 1418B	B11014E	BN7029C	—	TCD-35CA
MBCP-C3F	L-3CFB, V*-3CFB	—	B11015E	BN7003A	CB24	TCD-35CA
MBCP-C4	LV-61S	8241, 8279, RG-59B/U	B11015E	BN7015A	CB25	TCD-4CA TCD-451CA
MBCP-C4F	L-4CFB, V*-4CFB	1505A, 1505ANH, 8212, 8241F, 9167, 9259	B11016E	BN7015A	CB25	TCD-4CA TCD-451CA
MBCP-C53	L-4.5CHD	1694A, 9066, 9116, 9118, 9248	B11020D	BN7046	CB26	TCD-35CA
MBCP-C5F	L-5CFB, V*-5CFB	—	B11020D	B75004A	CB26	TCD-5CF TCD-55FA

• Standard package (20pcs)

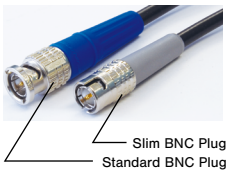
*3: Excluding MBCP-C25F



MBCP-C3F

• Slim design: O.D. 12 mm
• Compatible with 75Ω BNC receptacles.
• Canare crimp design ensures quick and reliable installation.
• Gold plated “snap locks” center pin and beryllium copper outer contact.

Be sure to use Canare Crimp Tool



Technical Note

Voltage Standing- wave Ratio (VSWR) and Return Loss

Terminating the receiving end of a limited length coaxial cable using a resistance value not equal to its characteristic impedance creates a reflected wave that returns back down the cable to the sending end. The result is interference developing between the travelling wave and the return wave which results in a standing wave that causes voltage levels to fluctuate. The degree to which terminating resistance matches the characteristic impedance is indicated using the VSWR or voltage standing-wave ratio standard shown in Fig. 1. Going hand in hand with the VSWR ratio is the return loss factor which measures the size of the reflected wave current in relation to the travelling wave current. (See Fig. 2)

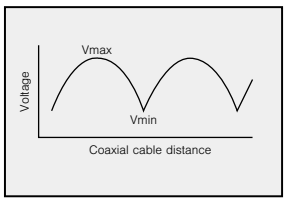


Fig. 1 Voltage Distribution Over Coaxial Cable

VSWR	Return Loss (dB)
2	9.54
1.5	13.98
1.2	20.83
1.1	26.44
1.05	32.26
1.02	40.09
1.01	46.06

Fig. 2 VSWR to Return Loss Conversion Table

Connectors

75Ω BNC Connectors

75Ω BNC Solder Plugs

■ BCP-H Series Return Loss: 26.4 dB @ 1 GHz

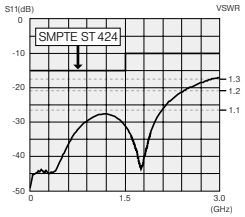
Model	Suitable Cable	
	Canare	Others
BCP-H3B	L-3C2VS, L-3C2V, L-3CFB	—
BCP-H31F	L-3CFW	—
BCP-H45HW	L-4.5CHWS	1694F
BCP-H5B	L-5C2VS, L-5C2V, L-5CFB	—
BCP-H51F	L-5CFW, L-5CFB	—
BCP-H5/1	L-3C2VS, L-3C2V, L-3CFB L-5C2VS, L-5C2V, L-5CFB	—

• Standard package (20pcs)

• The tubular (ferrule) section is silver plated to make soldering easier.
• Cable stripper TS100E can be used. (Excluding BCP-H31F, BCP-H51F)

Website

BCP-H3B



Return loss for BCP-H3B

75Ω BNC Jack Plug

Model	Suitable Cable	Center Pin	Sleeve	Boot	Die Set
BCJ-C4	RG-59 B/U, LV-61S, Belden 8241, 8279, 88241	Solder	V75001	CB25	TCD-4CA TCD-451CA
BCJ-D25HD	L-2.5CHD	BN1204	BN7159	—	TCD-D253F
BCJ-D25HW	L-2.5CHWS	BN1204	BN7158	—	TCD-D253F
BCJ-D33UHD	L-3.3CUHD	BN1205	BN7003A	—	TCD-D253F

• Standard package (20pcs)

• Return loss for BCJ-C: 26.4 dB @ 1.5 GHz, 20.8 dB @ 2.4 GHz
• Return loss for BCJ-D: 20 dB @ 3 GHz, 15 dB @ 6 GHz, 10 dB @ 12 GHz

Be sure to use Canare Crimp Tool

Website

BCJ-C4

BCJ-D25HW

12G-SDI

75Ω BNC Extension Adapter

Model	Description
BCJ-JK	Jack to Jack, for 12G-SDI

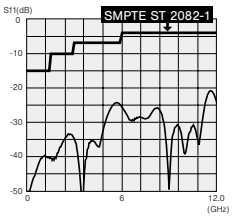
• Standard package (20pcs/100pcs)

• Return loss for BCJ-JK: 15 dB @ 12 GHz

Website

BCJ-JK

12G-SDI



Return loss for BCJ-JK

75Ω BNC Termination Plugs

Model	Description
BCP-TK	True 75Ω Termination, for 12G-SDI
BCP-TK-CH	BCP-TK with String

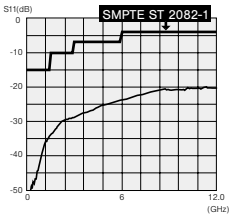
• Standard package (20pcs/100pcs)

• Includes 1/4 watt resistance.
• Return loss for BCP-TK: 26.4 dB @ 3 GHz, 15 dB @ 12 GHz

Website

BCP-TK

12G-SDI



Return loss for BCP-TK

Connector Boots

■ CB0* Series

Our best selling connector boots for Canare BNC, TNC crimp plugs.

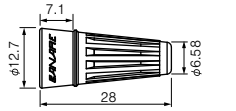
Model	Colors Available	BCP-**	BP-**	TNP-**
CB01	BLK BLU GRN RED YEL WHT	C1		
CB02		B25HD, B25HW, B26, B28, A25, A25F		
CB03	BLK BLU BRN GRN GRY	D33UHD, B3F, A3, A32, A3AHD, A3F, VA3	C3, C4	C3, C4
CB04	ORN PPL RED YEL WHT	D33UHW, B31F, B4F, A31, A4, A42, A4F, A55	C31	C31
CB05A		B53, B56, B5F, B51F, A5, A5F, A77, VA5, C5HD	C5, C5FA	C5
CB055W	BLK	D55UHW		

■ CB2* Series

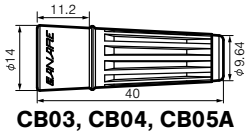
Thinner type of CB0* series. Best fit for Canare Slim BNC, RCA, and F crimp plugs.

Model	Colors Available	Typical Connectors		
		MBCP-**	RCAP-**	FP-**
CB24		C3F	C3A, C3F	C3, C3F
CB25	BLK BLU GRN RED YEL WHT	C4, C4F	C3GS, C4A, C4F	C31, C4, C4F
CB26		C5F	C53, C5A, C5F	C5, C53A, C5F

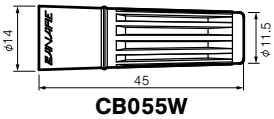
Website



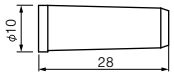
CB01, CB02



CB03, CB04, CB05A



CB055W



CB24, CB25, CB26

75Ω BNC Receptacles

■ Jack to Jack 12G-SDI

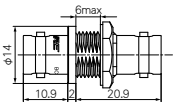
Return Loss: 15 dB @ 12 GHz

Model	Description	Flange
BCJ-JRK	Standoff	—
BCJ-JRUK	Flush-mount	ITT XLR-F77
BCJ-JRUDK		Neutrik D
BCJ-JRUDBK		Neutrik D (Black)

• Standard package (20 pcs)

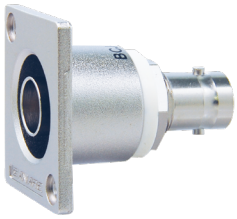
• Redesigned for 12G-SDI to minimize return loss.

BCJ-JRK

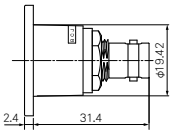


BCJ-JRK

Website



BCJ-JRUK



BCJ-JRUK

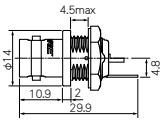
■ Jack to Solder

Return Loss: 26.4 dB @ 2 GHz

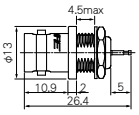
Model	Description	Flange
BCJ-R	Rear-mount	—
BCJ-R/1	Rear-mount, w/Ground Lug	—
BCJ-RU	Flush-mount	ITT XLR-F77
BCJ-RUD		Neutrik D
BCJ-RUDB		Neutrik D (Black)

• Standard package (20 pcs)

BCJ-R/1



BCJ-R/1



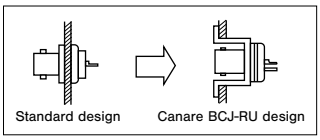
BCJ-R

■ Panel Jack (Jack to Solder and Crimp) Return Loss: 26.4 dB @ 1 GHz

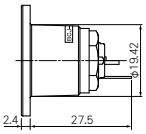
Model	Description	Flange	Suitable Cable	Die Set
BCJ-FC1	Front-mount, 1/2"	—	1.5C-2V	TCD-1DB
BCJ-FC1-7/16	Front-mount, 7/16"	—		
BCJ-RUC1	Flush-mount	ITT XLR-F77		

• Standard package (20 pcs)

• Panel Jack covers the rear wiring part with metal crimp sleeve.
• Flush-mount receptacle prevents damage on the jack.

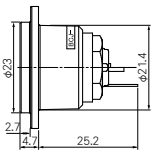


BCJ-RU



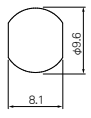
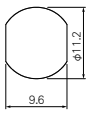
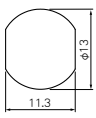
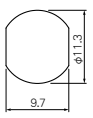
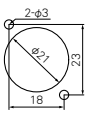
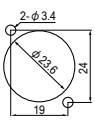
BCJ-RU

BCJ-RUD



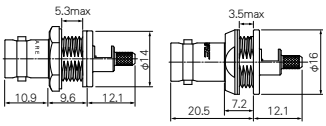
BCJ-RUD

■ Panel Hole Dimensions

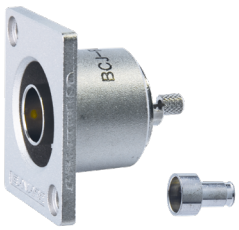
BCJ-R	★BCJ-R/1 ★BCJ-JRK	BCJ-FC1	★BCJ-FC1-7/16	BCJ-RUC1 BCJ-RU BCJ-JRUK	BCJ-RUD BCJ-RUDB BCJ-JRUDK BCJ-JRUDBK
					

★ marked models accept insulation bushing IU-7/16, and the panel hole for IU-7/16 should be adopted in this case. (see below)

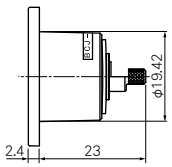
BCJ-FC1-7/16



BCJ-FC1-7/16 BCJ-FC1



BCJ-RUC1



BCJ-RUC1

Insulation Bushing

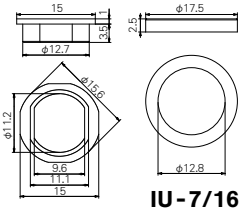
Model	Description
IU-7/16	ABS plastic

• Standard package (20 pcs)

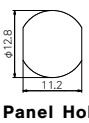
• Insulate a connector from a panel.
• 6 colors available (white, black, blue, green, red, or yellow)

Note: Please remove washers from a connector before using IU-7/16.

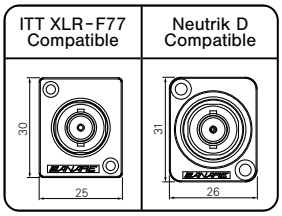
Website



IU-7/16



Panel Hole Dimensions



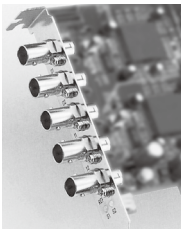
Panel Thickness:
1.2 to 1.5 mm: BCJ-DCJ, BCJ-FPLHA, BCJ-FPLV-12G, BCJ-FPLV-L, BCJ-FPLVA, BCJ-HBCJK, BCJ-R/1
1.2 to 3.0 mm: BCJ-FC1-7/16, BCJ-FPC, BCJ-FPC02, BCJ-FPLV01, BCJ-JRK, BJ-JR, FJ-JR, FJ-FPC, NCJ-BCJR, RJ-JR

75Ω BNC PCB Mount Receptacles (Screw Type)

■ Front Mount

Model	Description	Stud Position	Panel Mount	Standard Package
BCJ-BPLHK	Right Angle, for 12G-SDI	Horizontal	Front: M2.6 screw	20 pcs/100 pcs
BCJ-BPLHA	Right Angle			20 pcs/100 pcs
BCJ-BPLHK2P	Right Angle, Dual Jack, for 12G-SDI			10 pcs
BCJ-BPLH2PA	Right Angle, Dual Jack			10 pcs
BCJ-BPLH3PA	Right Angle, Triple Jack			10 pcs
BCJ-BPCK	Straight, for 12G-SDI	—		20 pcs
BCJ-BPC2P	Straight, Dual Jack			10 pcs/100 pcs

Screws not included



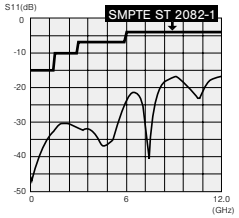
Key Features and Benefits

- True 75Ω PC board mount receptacle.
- Gold plated beryllium copper center contact.
- Right Angle types can be fixed on PC board with M2.6 screw.
- Space-saving design
- Eliminates wiring material and cost.

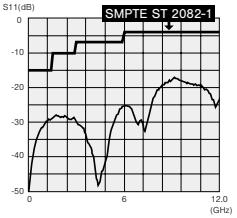
Note: Any cleaning solvents cannot be used. This leads to insulation problems.
Insulation material: m-PPO (m-PPE)

< Return loss >

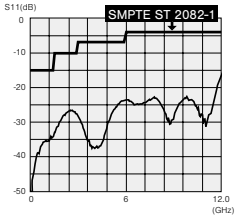
BCJ-BPLHK: 26 dB @ 1.5 GHz, 20 dB @ 3 GHz, 15 dB @ 6 GHz, 10 dB @ 12 GHz
BCJ-BPLHA: 26 dB @ 1.5 GHz, 20 dB @ 3 GHz
BCJ-BPCK: 26 dB @ 1.5 GHz, 20 dB @ 3 GHz, 15 dB @ 6 GHz, 10 dB @ 12 GHz
BCJ-BPC2P: 26 dB @ 1 GHz, 20 dB @ 2.5 GHz



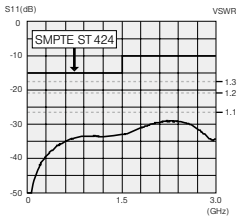
BCJ-BPLHK



BCJ-BPLHK2P



BCJ-BPCK



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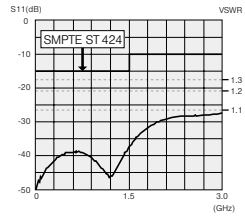
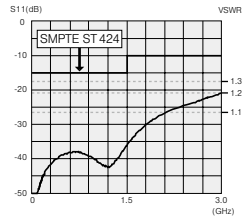


BCJ-BPLH2PA



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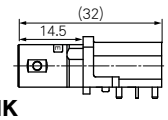
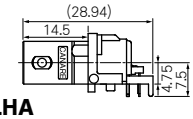


BCJ-BPLHK

12G-SDI

Website



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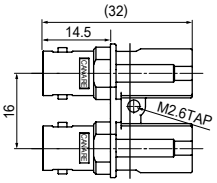
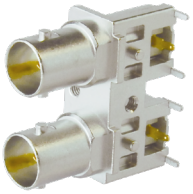
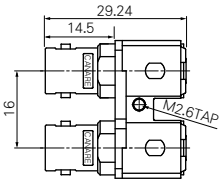


BCJ-BPLHK2P

12G-SDI





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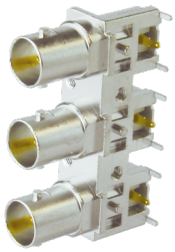
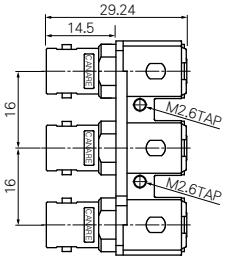
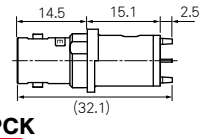


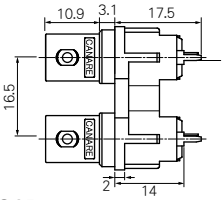


BCJ-BPLH3PA

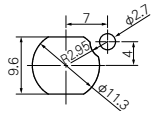
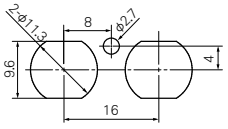
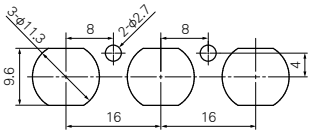
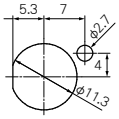
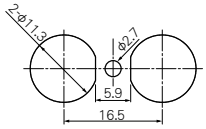


BCJ-BPCK

12G-SDI



BCJ-BPC2P

	BCJ-BPLHK	BCJ-BPLHA	BCJ-BPLHK2P BCJ-BPLH2PA	BCJ-BPLH3PA	BCJ-BPCK	BCJ-BPC2P
Panel Hole Dim.						
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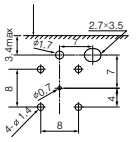
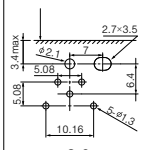
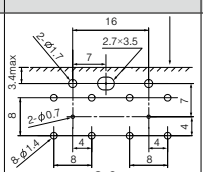
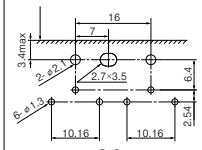
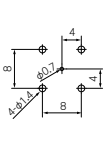
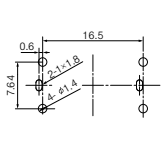
PCB Hole Dim.						
	t2.0 (BOTTOM VIEW)	t2.0 (BOTTOM VIEW)	t2.0 (BOTTOM VIEW)	t2.0 (BOTTOM VIEW)	t1.6 (BOTTOM VIEW)	t2.0 (BOTTOM VIEW)	t1.6 (BOTTOM VIEW)

75Ω BNC PCB Mount Receptacles (Hex Nut Type)

■ Front Mount

Model	Description	Stud Position	Panel Mount
BCJ-FPLV-12G	Right Angle, for 12G-SDI	Vertical	Front: Hex nut and lock washer
BCJ-FPLVA	Right Angle		
BCJ-FPLV01	Right Angle, Low Cost		
BCJ-FPLV-L	Right Angle, Long Neck		
BCJ-FPLHA	Right Angle	Horizontal	
BCJ-FPC	Straight	—	
BCJ-FPC02	Straight, Low Cost		

• Standard package: 20pcs/100pcs, except for BCJ-FPLV-L (10pcs).

■ Rear Mount

Model	Description	Stud Position	Panel Mount
BCJ-RPC	Straight, Through Hole Mount	—	Rear: Hex nut and lock washer
BCJ-RPC/1	Straight, Surface Mount		

• Standard package: 20pcs/100pcs.

• BCJ-FPLV-12G is specially designed to minimize the return loss for 12G-SDI.
• Return loss: BCJ-FPLV-12G: 15 dB @ 6 GHz, 10 dB @ 12 GHz,
BCJ-FPLV-L: 26.4 dB @ 3 GHz, Others: 26.4 dB @ 1 GHz.

Note: Any cleaning solvents cannot be used. This leads to insulation problems.
Insulation material: m-PPO (m-PPE)

Right Angle

BCJ-FPLV-12G

BCJ-FPLVA

BCJ-FPLV01

BCJ-FPLV-L

BCJ-FPLHA

Straight

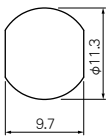
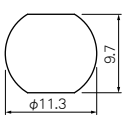
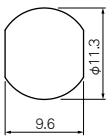
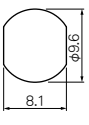
BCJ-FPC

BCJ-FPC02

BCJ-RPC

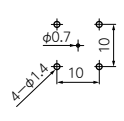
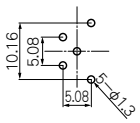
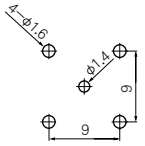
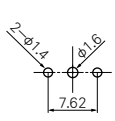
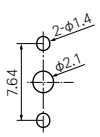
BCJ-RPC/1

<Panel Hole Dimensions>

BCJ-FPLV-12G* BCJ-FPLVA* BCJ-FPLV01* BCJ-FPLV-L*	BCJ-FPLHA*	BCJ-FPC* BCJ-FPC02*	BCJ-RPC/1 BCJ-RPC
			

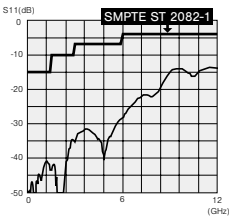
* BCP-FP series accept insulation bushing IU-7/16, and the panel hole for IU-7/16 should be adopted in this case. (see page 24)

<PC Board Hole Dimensions>

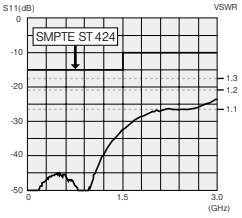
BCJ-FPLV-12G	BCJ-FPLVA BCJ-FPLV01 BCJ-FPLHA	BCJ-FPLV-L	BCJ-FPC BCJ-FPC02	BCJ-RPC
				
t 2.0	t 2.0	t 2.0	t 2.0	t 1.6

BCJ-FPLV-12G

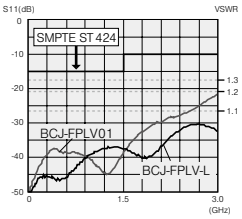
12G-SDI



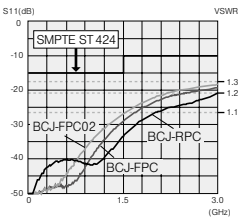
Return loss for BCJ-FPLV-12G



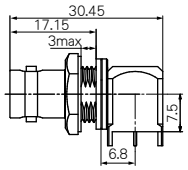
Return loss for BCJ-FPLVA



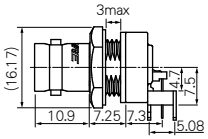
Return loss for BCJ-FPLV01, BCJ-FPLV-L



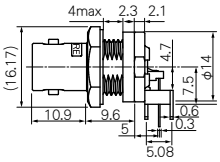
Return loss for BCJ-FPC, BCJ-FPC02, BCJ-RPC



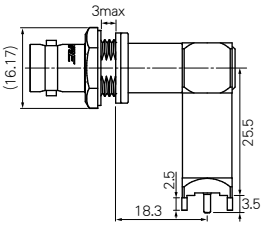
BCJ-FPLV-12G



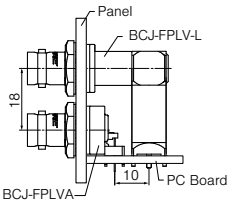
BCJ-FPLVA



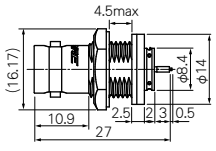
BCJ-FPLV01



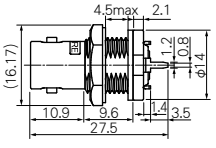
BCJ-FPLV-L



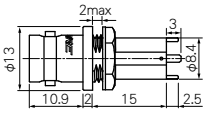
BCJ-FPLV-L can be stacked over BCJ-FPLVA on a PCB as shown.



BCJ-FPC



BCJ-FPC02



BCJ-RPC

12G-SDI Active BNC

12G-SDI Active BNC integrating I/O interface device inside. It frees you from struggling with PCB design coping with return loss and board space.

■ BCAK 12G-SDI

*Card Edge Connector NOT included

Model	Form	Type	Built-in IC
BCAK-TL	Right Angle	TX	Cable Driver
BCAK-RL		RX	Cable Equalizer
BCAK-BL		BiDi	Cable Driver & Equalizer
BCAK-TS	Straight	TX	Cable Driver
BCAK-RS		RX	Cable Equalizer
BCAK-BS		BiDi	Cable Driver & Equalizer

Sales unit: 5 pcs

- Assembled on a PC board with SMT Card Edge Connector.
  The pluggable 2-piece structure improves productivity and replaceability.

*Card Edge Connector sold separately

- Supports 12G/6G/3G/HD/SD-SDI
- Reduce entire development cost as well as development period.
- 16 mm: Minimum pitch between adjacent connectors
- Straight models can be mounted on the same board at the same height as 3G-SDI Active BNC.
- PIN control: status monitoring and mode change
- Command control for optimization and characterization
- Cable driver and equalizer with reclocker
- TX/RX/BiDi identification by insulation color

■ SMT Card Edge Connectors 12G-SDI

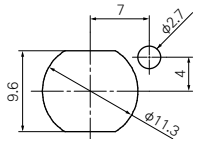
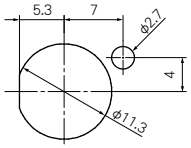
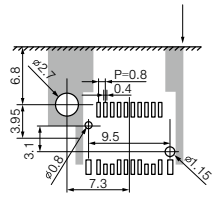
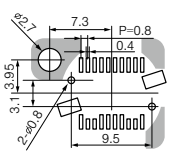
Model	Form	Suit for
AKU-20LFYG	Right Angle	BCAK-TL/RL/BL
AKU-20SFYG	Straight	BCAK-TS/RS/BS

Sales unit: 5pcs

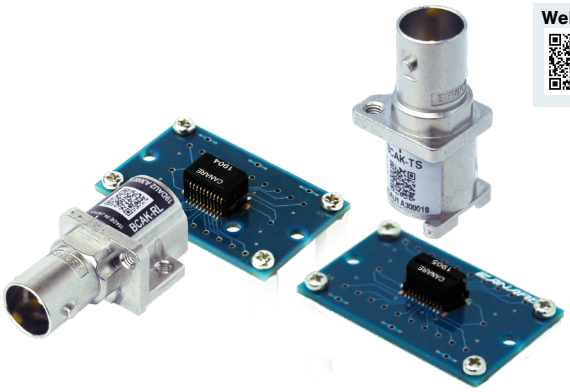
- Card Edge Connector for BCAK.
- Same footprint for TX, RX and BiDi.
- Applicable for reflow soldering.

■ Specifications

Type	TX	RX	BiDi TX mode	BiDi RX mode
Supply Voltage	DC 2.5 V			
Current Consumption	195 mA	120 mA	128 mA	115 mA
Operating Temperature	-40 deg C to +85 deg C			
Output Amplitude	800 mV	N/A	800 mV	N/A
Equalization	N/A	12G-SDI 100m over L-5.5CUHD	N/A	12G-SDI 100m over L-5.5CUHD
Standards	SMPTE ST 2082-1, 2081-1, 424, 292, 259 BTA S-004C, EN 50083-9			
Weight	Right Angle: 9 g, Straight: 10 g			

	Right Angle	Straight
Panel Hole Dim.	 t1.6 Screw: M2.6	 t1.6 Screw: M2.6
PCB Hole Dim.	 use a M2.6 screw to fix BCAK to PCB.	 use a M2.6 screw to fix BCAK to PCB.

The dark shaded areas come into contact with the connector body.



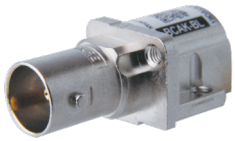
Website

BCAK-TL

BCAK-TS

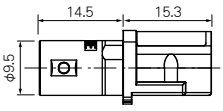
BCAK-RL

BCAK-RS

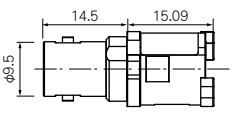


BCAK-BL

BCAK-BS



(Right Angle)



(Straight)

AKU-20LFYG

AKU-20SFYG

<Color Identifications>
Example) front view of Right Angle

TX
Insulation color
white

RX
Insulation color
black

BiDi
Insulation color
light gray

3G-SDI Active BNC

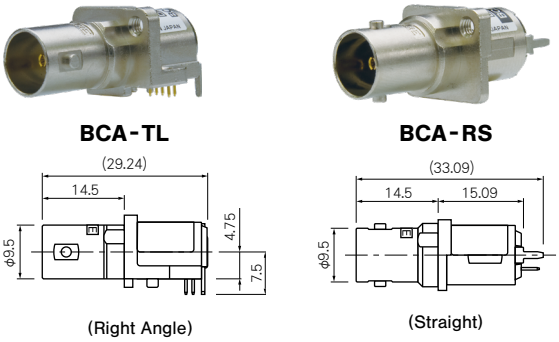
Website

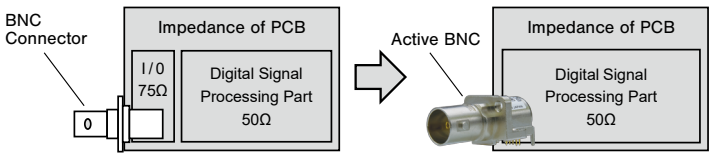
Small BNC connector incorporates either a cable equalizer or a cable driver. Active BNC makes innovation in your 3G-SDI PC board layout.

Model	Form	Type	Built-in IC
BCA-TL	Right Angle	TX	Cable Driver
BCA-RL		RX	Cable Equalizer
BCA-TS	Straight	TX	Cable Driver
BCA-RS		RX	Cable Equalizer

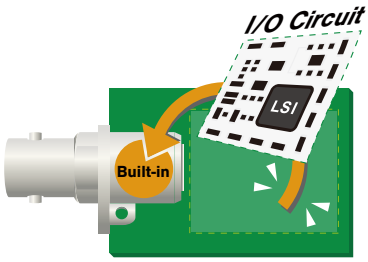
Sales unit : 5 pcs

- BNC connector integrated with a cable equalizer or a cable driver, and yet keep the connector size to a minimum.
- Support 3G/HD/SD-SDI
- Offers an excellent return loss performance without designing 75Ω I/O Circuit
- Simplifies PCB design process dramatically and will reduce entire development cost
- PCB space saving and help to downsize devices
- TX/RX identification by insulation color





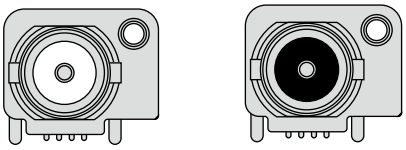
Simplify Your Circuit Design



Space-saving

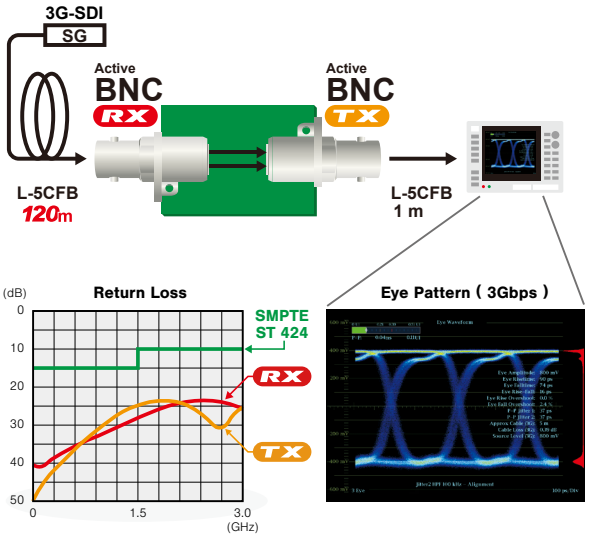
<Color Identifications>

Example) front view of Right Angle



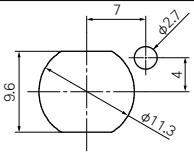
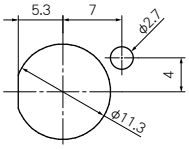
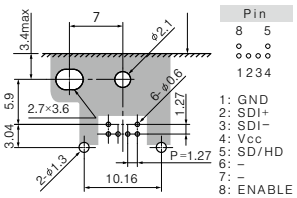
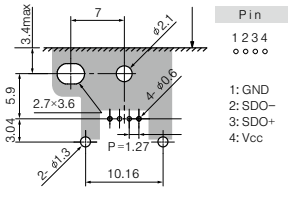
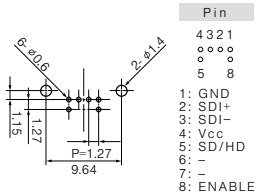
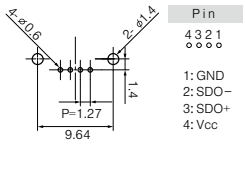
TX
Insulation color
white

RX
Insulation color
black



■ Specifications

Model	TX BCA-TL, BCA-TS	RX BCA-RL, BCA-RS
Supply Voltage	DC 3.3V	
Current Consumption	50 mA	70 mA
Operating Temperature	-25 deg C to +85 deg C	
Output Amplitude	800 mVpp	N/A
Equalization	N/A	3G-SDI 120m over L-5CFB
Standards	SMPTE ST 424, 292, 259, BTA S-004C, EN 50083-9	
Weight	9 g	

	BCA-TL	BCA-RL	BCA-TS	BCA-RS
Panel Hole Dim.	 t1.6 Screw : M2.6		 t1.6 Screw : M2.6	
PCB Hole Dim.	 t2.0 (TOP VIEW)	 t2.0 (TOP VIEW)	 t2.0 (TOP VIEW)	 t2.0 (TOP VIEW)

The dark shaded areas come into contact with the connector body.

75Ω Micro BNC Connectors

Website

All Canare micro BNC connectors are designed for SMPTE ST 2082-1 spec.
Ideal for cabling 12G-SDI routers, switchers, and SFP modules.
PCB connectors will allow greater flexibilities of the number of video interface.

■ Crimp Plugs 12G-SDI

Return loss : 26dB @ 3GHz, 20dB @ 6GHz, 15dB @ 12GHz

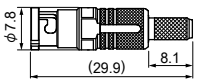
Model	Suitable Cable		Center Pin	Sleeve	Die Set	Extraction Tools
	Canare	Others				
HBCP-D25HDA	L-2.5CHD, L-2.5CHLT	1855A	BN1214	BN7136	TCD-D253F	BET-D/H, BET-HBNC, Common Tool
HBCP-D25HWA	L-2.5CHWS, V4-2.5CHW	—	BN1214	BN7141		
HBCP-D33UHDA	L-3.3CUHD	—	BN1215	BN7003A		
HBCP-D53A	L-4.5CHD	1694A	BN1218	BN7016	TCD-D534F	BET-D/H Common Tool
HBCP-D55UHD	L-5.5CUHD	—	BN1219	B75004A	TCD-55UHD	

• Standard package (20 pcs)

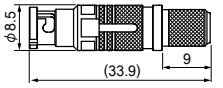
- SMPTE ST 2082-1 compliant.
- Canare crimp design ensures quick and reliable installation.
- Gold plated “snap locks” center pin.
- Beryllium copper outer contact.
- Come with a position mark on the body for better visibility mating.

Be sure to use Canare Crimp Tool

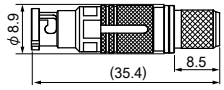
HBCP-D25HDA



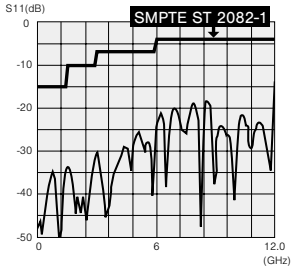
HBCP-D25HDA



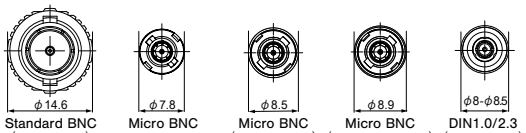
HBCP-D53A



HBCP-D55UHD



Return loss for HBCP-D25HDA

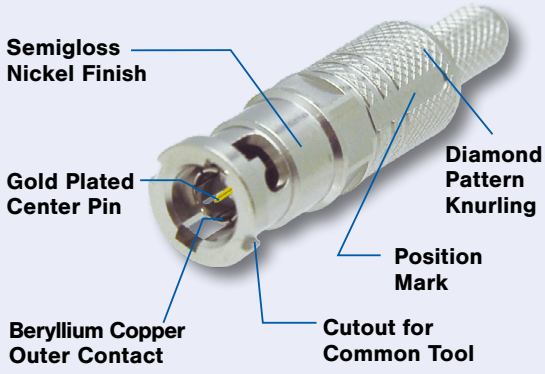


Standard BNC (BCP series) | Micro BNC (HBCP-D25HDA, HBCP-D25HWA, HBCP-D33UHDA) | Micro BNC (HBCP-D53A) | Micro BNC (HBCP-D55UHD) | DIN1.0/2.3 (DCP series)

Comparison of connector body diameter

* for reference only

The New Canare HBCP Series



Model	HBCP-D25HDA HBCP-D25HWA HBCP-D33UHDA	HBCP-D53A HBCP-D55UHD	Previous Models HBCP-D25HD HBCP-D25HW HBCP-D33UHD HBCP-D53
Return Loss	≥15dB@DC-12GHz	≥15dB@DC-12GHz	≥8dB@DC-12GHz
Connector OD	ϕ 7.8mm	ϕ 8.5-8.9mm	ϕ 7.82-8.5mm
Extraction Tools / Distance Between Center of Plugs			
BET-D/H: 12mm	Yes	Yes	Yes
BET-HBCP: 8mm	Yes	No	No
Common Tools: Min. 8mm	Yes	Yes	No
Application	Rack wiring, Extremely narrow space, Video SFP	50-100M distance range, 12G-SDI sensitive connection	Rack Wiring, Narrow space, 12G-SDI routers/ switchers

■ Tools

Model	Description	Suitable Connector
BET-HBNC	Extraction tool	HBCP-D25HDA, D25HWA, D33UHDA
BET-D/H	Extraction tool	DCP-C, HBCP-D series, HBCP-DA series

• Extraction tool BET-D/H is available for both Canare Micro BNC and DIN plugs.

BET-HBNC

BET-D/H

HBCP-D25HDA with BET-HBNC

12G Router / Switcher

12G SFP Module

■ PCB Mount Receptacles 12G-SDI

Return Loss: 20 dB @ 3 GHz, 10 dB @ 12 GHz

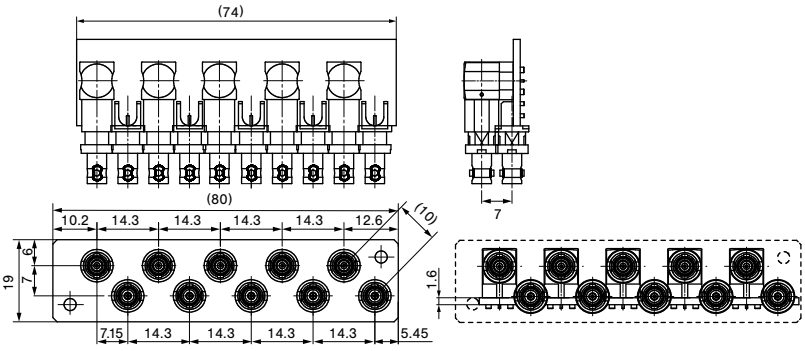
Model	Description	Nut Driver Bit
HBCJ-LRK	Right Angle	NDT-HBC
HBCJ-LRK/1	Right Angle, Long type	
HBCJ-FEMK	Edge Mount	

• Standard package (20 pcs)

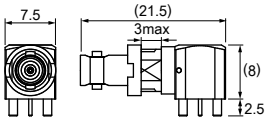
• SMPTE ST 2082-1 compliant

• Combination of HBCJ-LRK/1 and HBCJ-FEMK offers efficient PCB mount Solution.

Note: Nut driver bit NDT-HBC is required.

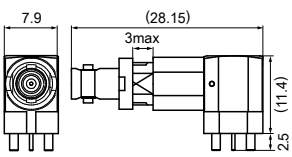


HBCJ-LRK



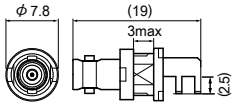
HBCJ-LRK

HBCJ-LRK/1



HBCJ-LRK/1

HBCJ-FEMK



HBCJ-FEMK

■ Adapters 12G-SDI

Return Loss: 20 dB @ 3 GHz, 10 dB @ 12 GHz

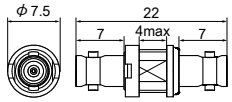
Model	Description	Nut Driver Bit
HBCJ-JRK	Jack to Jack	NDT-HBC (for panel mounting)
BCJ-HBCJK	BNC Jack to Micro BNC Jack	

• Standard package (20 pcs)

• SMPTE ST 2082-1 compliant

• Panel mountable

HBCJ-JRK

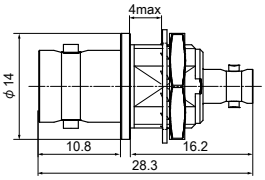


HBCJ-JRK

■ Tool

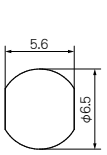
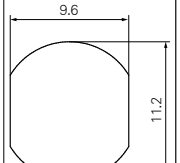
Model	Description	Suitable Connector
NDT-HBC	Nut driver bit, 6.35 mm (1/4") hex shank	HBCJ, BCJ-HBCJK

BCJ-HBCJK

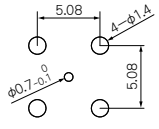
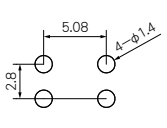


BCJ-HBCJK

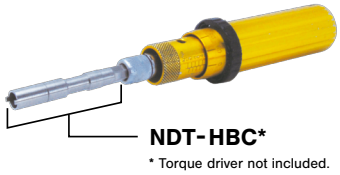
<Panel Hole Dim.>

HBCJ-LRK HBCJ-LRK/1 HBCJ-FEMK HBCJ-JRK	BCJ-HBCJK*
	
	t4.0

<PCB Hole Dim.>

HBCJ-LRK HBCJ-LRK/1	HBCJ-FEMK
	
t2.0	t2.0

* BCJ-HBCJK accept insulation bushing IU-7/16. See page 24 for the panel hole with IU-7/16.



NDT-HBC*

* Torque driver not included.

BNC Dust Caps

Model	Description
BCJ-DC	Polyethylene (Black)
BCJ-DC-CH	Polyethylene (Black) with string

• Standard package (20pcs/100pcs)

• Protects unused BNC receptacles from dirt and dust.

BCJ-DC

Website

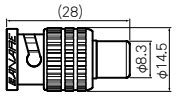
BNC - RCA Adapter

Model	Description
BCP-RCAJ	RCA Jack (F) to BNC Plug (M)
BCJ-RCAP	BNC Jack (F) to RCA Plug (M)

• Standard package (1pc)

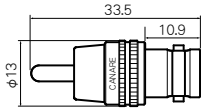
• Gold plated center contact
• Secure finger grip and reliable mating

BCP-RCAJ



Website

BCJ-RCAP



75Ω N Solder Plug

Return Loss: 26.4 dB @ 2 GHz

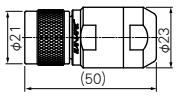
Model	Suitable Cable
NCP-H8HD	L-8CHD

• Standard package (1pc)

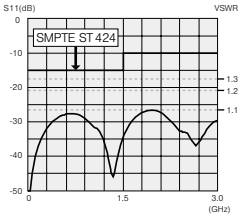
• Gold plating on the contact pin prevents deterioration, even after years of use.
• Return loss: 26.4 dB @ 2 GHz
• Solder type
Tools required: 17 mm and 21 mm wrenches

Caution: The connecting section of the N connector uses a shape that conforms to the IEC169-16's 75Ω impedance standard. Note that the 50Ω N and other connectors that do not conform to this specification cannot be connected.

NCP-H8HD



Website



Return loss for NCP-H8HD

75Ω N to BNC Adapter

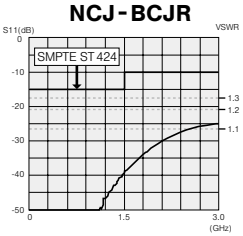
Return Loss: 26.4 dB @ 2 GHz

Model	Description
NCJ-BCJR	N (F) - BNC (F)

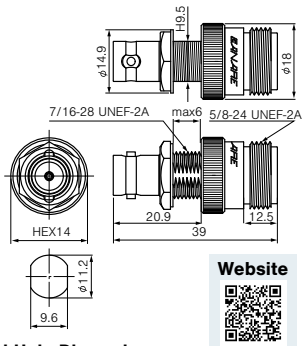
• Standard package (1pc)

• Beryllium copper (gold plated) is used on the center contact for its superior spring characteristics.
• Return loss: 26.4 dB @ 2 GHz
• Panel mountable as well. For isolation from the panel, use Canare isolation bushing IU-7/16.(see page 24)

NCJ-BCJR



Return loss for NCJ-BCJR



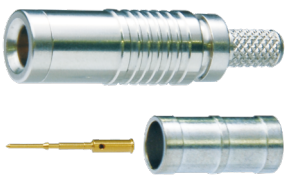
Panel Hole Dimensions

Website

75Ω DIN 1.0/2.3 Connectors

Mini coax connectors IEC61169-29 and DIN 47 297 compatible.

Website



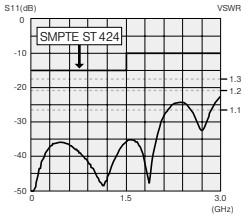
■ Crimp Plugs

Return Loss: 20.8 dB @ 3 GHz

Model	Suitable Cable		Center Pin	Sleeve	Die Set
	Canare	Others			
DCP-C25HD	L-2.5CHD, L-2.5CHLT	1855A, VDM230	BN1148	BN7136	TCD-D253F
DCP-C25HW	L-2.5CHWS, V4-2.5CHW	—	BN1148	BN7141	TCD-D253F
DCP-C3F	L-3CFB	—	BN1148	BN7003A	TCD-D253F
DCP-C4F	L-4CHD, L-4CFB	1505A, VPM2000	BN1158	BN7015A	TCD-D534F
DCP-C53	L-4.5CHD	1694A, VSD2001	BN1157	BN7138	TCD-D534F

• Standard package (20pcs/100pcs)

DCP-C25HD

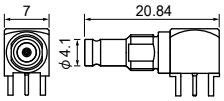


Rerun Loss for DCP-C25HD

- Our unique ball-locking mechanism offers smooth and reliable mating.
- Canare crimp design ensures quick and reliable installation.
- Elongated body design enables stable finger grip.
- Return loss: 20.8 dB or greater up to 3 GHz
- Extraction tool: BET-DIN or BET-D/H (see page 41)

US Patent No.: 8764473 B2

Be sure to use Canare Crimp Tool



DCJ-LR

■ PCB Mount Receptacles

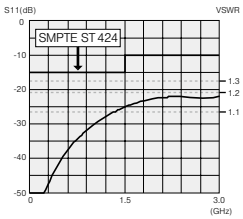
Return Loss: 20.8 dB @ 3 GHz

Model	Description	Nut Driver Bit
DCJ-LR	Right Angle	NDT-DIN
DCJ-LR/1	Right Angle, Long type	
DCJ-FEM	Edge Mount	

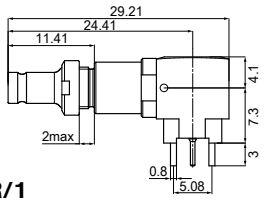
• Standard package (20 pcs)

- Compact design ideal for high density mounting and downsizing devices.
- Combination of DCJ-LR/1 and DCJ-FEM is effective for staggered arrangement.
- Return loss: 20.8 dB or greater up to 3 GHz.

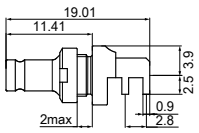
Note: Nut driver bit NDT-DIN is required.



Rerun Loss for DCJ-LR



DCJ-LR/1



DCJ-FEM

■ Adapters

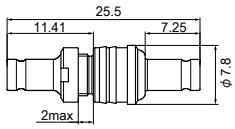
Return Loss: 26.4 dB @ 3 GHz

Model	Description	Panel Mount	Nut Driver Bit
DCJ-JR	Jack to Jack	Yes	NDT-DIN
BCJ-DCJ	BNC Jack to DIN1.0/2.3 Jack	Yes	N/A
BCP-DCJ	BNC Plug to DIN Jack	No	N/A

• Standard package (20 pcs)

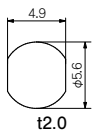
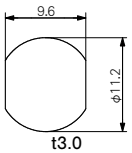
- Return loss: 26.4 dB or greater up to 3 GHz.

Note: Nut driver bit NDT-DIN is required for DCJ-JR

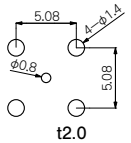
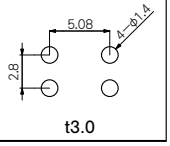


DCJ-JR

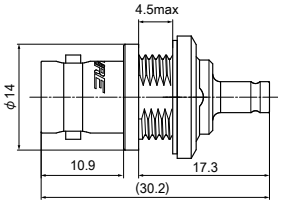
<Panel Hole Dim.>

DCJ-LR DCJ-LR/1 DCJ-FEM DCJ-JR	BCJ-DCJ*
	
t2.0	t3.0

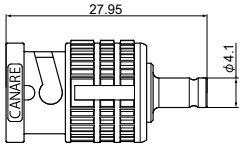
<PCB Hole Dim.>

DCJ-LR DCJ-LR/1	DCJ-FEM
	
t2.0	t3.0

*BCJ-DCJ accepts insulation bushing IU-7/16. See page 24 for the panel hole with IU-7/16.



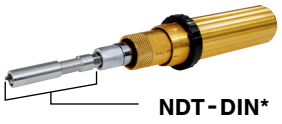
BCJ-DCJ



BCP-DCJ

■ Nut Driver Bit

Model	Description
NDT-DIN	6.35mm (1/4") hex shank



NDT-DIN*

* Torque driver not included

75Ω Micro-miniature Coaxial Connectors

Website

Canare's exclusive micro miniature connectors, KC series: specially designed for 4K/8K UHD equipment. Our PCB mount solutions provide flexible layout and reliable connectivity on 12G-SDI signal path. Products are 12GHz verified and guaranteed SMPTE ST2082-1.

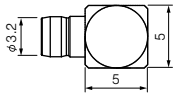
■ PCB Mount Receptacles 12G-SDI

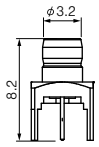
Model	Description
KCM-PC	Straight
KCM-LR	Right Angle

• Standard package (20 pcs)

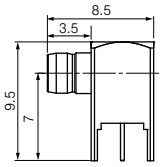
KCM-PC

KCM-LR





KCM-PC



KCM-LR

■ KC to BNC Conversion Adapter 12G-SDI

Model	Description	Nut Driver Bit
BCJ-KCM	Rear Mount, Hex Nut	—
BCJ-FKCM	Front Mount, Grooved Nut	NDT-7/16

• Standard package (20 pcs)

Note: BCJ-FKCM requires the nut driver bit NDT-7/16 for installation and removal. Contact for the details.

BCJ-KCM

BCJ-FKCM

■ Cable Assemblies 12G-SDI

Model	Description	
	Plug A	Plug B
KC1.2R-****-S	Straight	Straight
KC1.2R-****-L	Right Angle	Right Angle
KC1.2R-****-SL	Straight	Right Angle

Jacket: FEP (blue)
****: cable length (see below)

KC1.2R-****-S

KC1.2R-****-L

<Ordering Information>

KC1.2R - 0015 - S

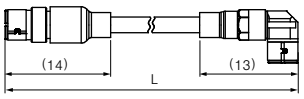
Length

0015	150 mm
0020	200 mm
0030	300 mm

Plug Type

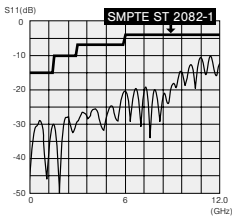
S	Straight
L	Right Angle
SL	Straight to Right Angle

Custom length available. Contact for the details.

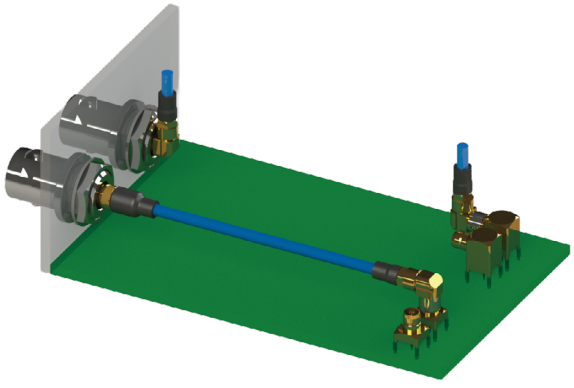


KC1.2R-***-SL

- DC to 12 GHz; meets the SMPTE 2082-1 return loss requirements.
  Return loss: 26 dB @ 1.5 GHz, 20 dB @ 3 GHz,
  15 dB @ 6 GHz, 10 dB @ 12 GHz
- Snap-on engaging
- Durable design; beneficial for maintenance.
- Temperature range: -25 to 85 degree C
- The best flexibility on PCB design



Return Loss
Interface to Termination
(reference)



<Example of Use>

4K-DIN Coax Connectors

Canare unique "4K-DIN" allows you to connect or disconnect 4 of 3G-SDI signals in one easy step.

■ Crimp Plugs

Return Loss: 20 dB @ 3 GHz

Model	Suitable Cable	Die Set	Description
MDM-V4C25HW	V4-2.5CHW	TCD-D253F	Male
MDF-V4C25HW	V4-2.5CHW	TCD-D253F	Female

■ Flush-mount Receptacle

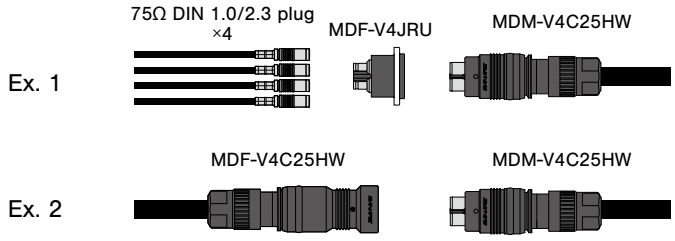
Return Loss: 20 dB @ 3 GHz

Model	Description
MDF-V4JRU	Jack to Jack

- 75Ω 4-channel coax connector with push-pull locking mechanism.
- Compact, solid, and lightweight nylon resin (PA 66) body
- Return loss: 20 dB @ 3 GHz
- MDF-V4JRU accepts MDM-V4C25HW and also DIN 1.0/2.3 plugs.

* Replacement crimp units also available:
DCP-C25HW-ML for MDM
DCJ-C25HW-ML for MDF

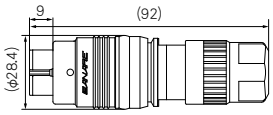
<Connection Example>



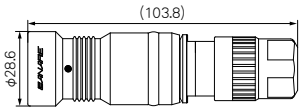
Be sure to use Canare Crimp Tool

Website

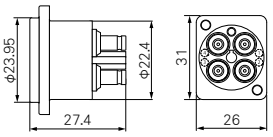
MDM-V4C25HW



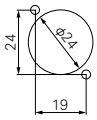
MDF-V4C25HW



MDF-V4JRU



Hole Dimensions



Min. 44 mm pitch
(recommended)

75Ω Multi-pin Coax Connectors

Handles five 75Ω coaxial connections.

Model	Suitable Cable	Die Set	Description
MCM-V5C3	V5-3C	TCD-35CA	Plug
MCF-V5C3	V5-3C, L-3C2V, L-3C2VS	TCD-35CA	Receptacle

Model	Description
DCM01	Dust Cap for MCM-V5C3
DCF01	Dust Cap for MCF-V5C3

- 1.2 or less VSWR up to 1.5 GHz.
- Crimp system ensures quick and reliable installation.

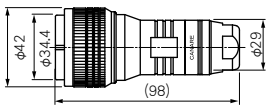
* Replacement unit also available. MCM-V5C3: BN9078A MCF-V5C3: BN9079B

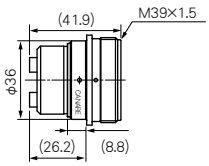
Be sure to use Canare Crimp Tool

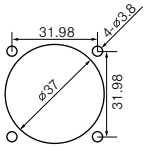
Website

MCM-V5C3

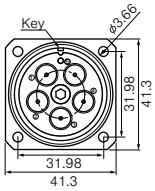
MCF-V5C3







Panel Hole Dimensions
(Mounting screw M3 × 4 pcs)



Replacement Unit **BN9078A**

Replacement Unit **BN9079B**

75Ω Triaxial Connectors

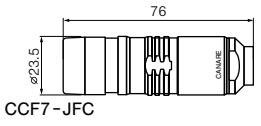
Website

Canare CC series cover global triaxial interconnection. CC-F series are ideal for interconnecting European triax system and CC-K series for American triax system.

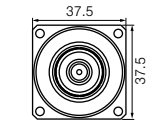
- True 75Ω, DC 1.5 GHz; ≥20 dB return loss (≤1.2 VSWR)
- Push-lock mechanism
- Reliable crimp system
- Rugged and durable construction

■ CC-F Series: European preferred type

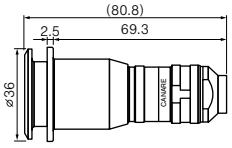
Model	Description	Suitable Cable		Boot/Cap	Center contact	Sleeve A	Sleeve B	Crimp Tool
		Canare	Others					
CCF5-JFC	Crimp type, Female cable mount	L-5CFTX	Belden: 7783A Klotz : TRIAX8 Fujikura: 4.8/1.0 EFTXF	CB31	BN9194	BN7120	BN7121	TC-1 + TCD-65C
CCM5-PFC	Crimp type, Male cable mount			CB32	BN1135			
CCF5-JFRC	Crimp type, Female panel mount			DCF02	BN9194			
CCM5-PFRC	Crimp type, Male panel mount			DCM02	BN1135			
CCF7-JFC	Crimp type, Female cable mount	L-7CFTX	Belden : 7784AS Klotz : TRIAX11 Fujikura: SUPERFLEX11	CB31	BN9182A	BN7113	BN7114	TC-2 + TCD-96C
CCM7-PFC	Crimp type, Male cable mount			CB32	BN1131			
CCF7-JFRC	Crimp type, Female panel mount			DCF02	BN9182A			
CCM7-PFRC	Crimp type, Male panel mount			DCM02	BN1131			

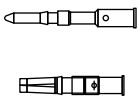


CCF7-JFC

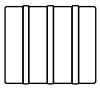


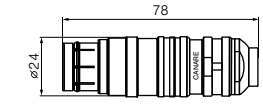
CCM7-PFRC




Center Contact


Sleeve A


Sleeve B



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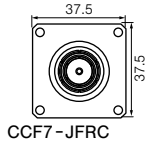
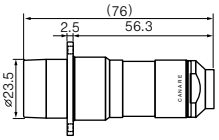
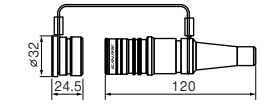
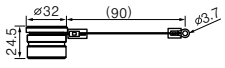


CCF7-JFRC

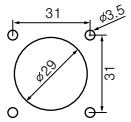




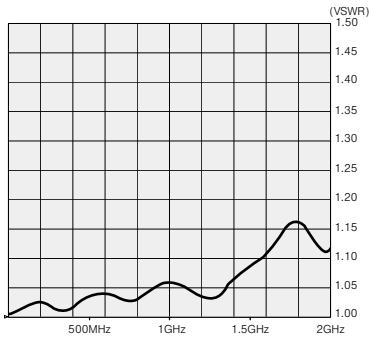
CB31



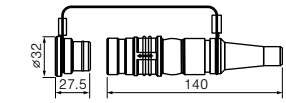
DCF02



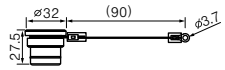
Panel Hole Dimensions



VSWR for CC*7-F



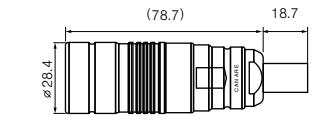
CB32



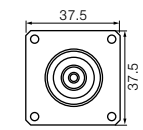
DCM02

■ CC-K Series: U.S. preferred type

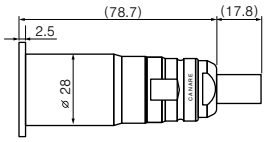
Model	Description	Suitable Cable		Retrofit Kit	Boot/Cap	Crimp Tool
		Canare	Others			
CCF4-JK	Crimp type, Female cable mount	L-4CFTX	Belden: 1856A, 1857A, 9267 Gepco: LVT61859, VT61859	BN9127B	CB23	TC-1 + TCD-316C
CCM4-PK	Crimp type, Male cable mount			BN9128C	CB22	
CCF4-JKR	Crimp type, Female panel mount			BN9127B	DCM02	
CCM4-PKR	Crimp type, Male panel mount			BN9128C	DCM03	

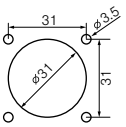


CCF4-JK

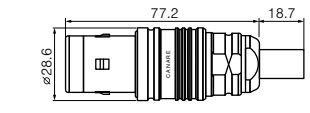


CCF4-JKR

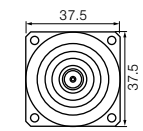




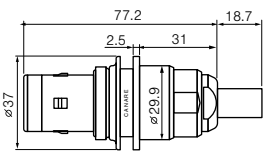
Panel Hole Dimensions

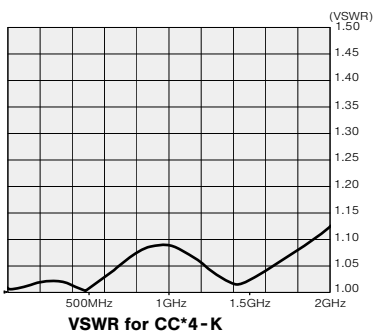


CCM4-PK



CCM4-PKR





VSWR for CC*4-K

RCA Pin Connectors

■ Crimp Plugs

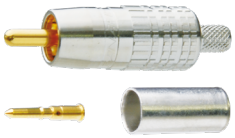
Model	Suitable Cable		Center Pin	Sleeve	Boot	Die Set
	Canare	Others				
RCAP-C25F	L-2.5CFB	1855A, 8218, 1417B, 1418B	B11014E	BN7029C	—	TCD-35CA
RCAP-C25HD	L-2.5CHD	—	B11015E	BN7129	—	TCD-35CA
RCAP-C3A	L-3C2VS, L-3C2V, V*-3C	—	B11014E	BN7003A	CB24	TCD-35CA
RCAP-C3GS	GS-6	—	BN1093	BN7079	CB25	TCD-35D
RCAP-C3F	L-3CFB, V*-3CFB	—	B11015E	BN7003A	CB24	TCD-35CA
RCAP-C42	—	1505F	B11016E	BN7011	—	TCD-31C
RCAP-C4A	LV-61S	8241, 8279, RG-59B/U	B11015E	BN7015A	CB25	TCD-4CA, TCD-451CA
RCAP-C4F	L-4CFB, V*-4CFB	1505A, 1505ANH, 8212, 8241F, 9167, 9259, 9659	B11016E	BN7015A	CB25	TCD-4CA, TCD-451CA
RCAP-C53	L-4.5CHD	1694A, 9066, 9116, 9118, 9248	B11020D	BN7016	CB26	TCD-35CA
RCAP-C5A	L-5C2VS, L-5C2V, V*-5C	—	B11016E	BN7016	CB26	TCD-35CA
RCAP-C5F	L-5CFB, V*-5CFB	—	B11020D	B75004A	CB26	TCD-5CF, TCD-55FA
RCAP-C77	LV-77S	8281F	B11016E	B75004A	CB26	TCD-5CF, TCD-55FA

• Standard package (20pcs/100pcs)

• Canare crimp design ensures quick and reliable installation.
• The crimp tool for the RCAP-C can be used for the Canare crimp BNC plugs as well, thus saving on extra equipment.

Be sure to use Canare Crimp Tool

Website



RCAP-C3A

■ Solder Plugs

Model	Description
F-09	Plug
F-10	Plug (long sleeve)

• Standard package (10 pcs)

• Robust metal shell
• Comfortable grip
• Cable O.D. up to 6.0 mm.

F-09

F-10

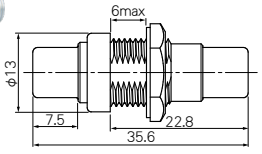
■ Standoff Receptacle

Model	Description
RJ-JR	Jack to Jack

• Standard package: 20 pcs by insulation color

• Insulation color is available in 5 colors (red, green, blue, yellow, white).
• VSWR 1.2 @ 100 MHz

RJ-JR



RJ-JR

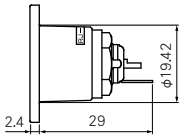
■ Flush-mount Receptacles

Model	Description	Flange Type	Insulator Color
RJ-RU	RCA - Solder	ITT XLR-F77	RED GRN BLU YEL WHT
RJ-RUD		Neutrik D	
RJ-RUDB		Neutrik D (Black)	
RJ-JRU	RCA - RCA	ITT XLR-F77	
RJ-JRUD		Neutrik D	RED BLU YEL WHT
RJ-JRUDB		Neutrik D (Black)	
RJ-BCJRU	RCA - BNC	ITT XLR-F77	RED GRN BLU YEL WHT
RJ-BCJRUD		Neutrik D	
RJ-BCJRUDB		Neutrik D (Black)	RED BLU YEL WHT

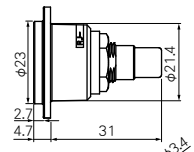
• Standard package: 20 pcs by insulation color

• Three types of flanges are available.
• Insulation color is available in 5 colors (red, green, blue, yellow, white). RJ-BCJRUDB, RJ-JRUD is 4 colors (red, blue, yellow, white)
• VSWR 1.2 @ 100 MHz

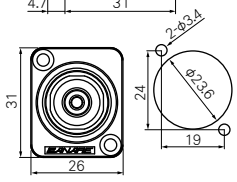
RJ-RU



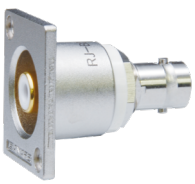
RJ-RU



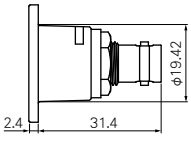
RJ-JRUD

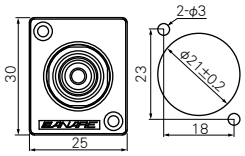


RJ-JRUD



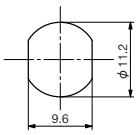
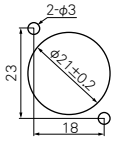
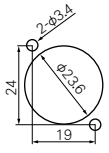
RJ-BCJRU





RJ-BCJRU

<Panel Hole Dimensions>

RJ-JR (*)	ITT XLR-F77 Flange	Neutrik D Flange
		

(*) RJ-JR accepts insulation bushing IU-7/16; in this case, panel hole for IU-7/16 should be adopted (see page 24)

F Connectors

Website

This type is used in such applications as home television receivers for cable television (CATV) systems.

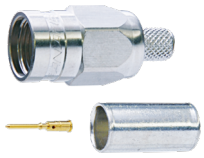
■ Crimp Plugs

Model	Suitable Cable		Center Pin	Sleeve	Boot	Die Set
	Canare	Others				
FP-C25HD	L-2.5CHD	—	BN1003B	BN7129	—	TCD-35CA
FP-C3	L-3C2VS, L-3C2V, V*-3C	—	BN1002B	BN7003A	CB24	TCD-35CA
FP-C31	L-3C2W	—	BN1002B	BN7011	CB25	TCD-31C
FP-C3F	L-3CFB, V*-3CFB	—	BN1003B	BN7003A	CB24	TCD-35CA
FP-C4	LV-61S	8241, 8279, RG-59B/U	BN1003B	BN7015A	CB25	TCD-4CA, TCD-451CA
FP-C4F	L-4CFB, V*-4CFB	1505A, 1505ANH, 8212, 8241F, 9167, 9259, 9659	BN1004B	BN7015A	CB25	TCD-4CA, TCD-451CA
FP-C5	L-5C2VS, L-5C2V, V*-5C	—	BN1004B	BN7016	CB26	TCD-35CA
FP-C52	L-5C2W	—	BN1004B	BN7014	—	TCD-451CA
FP-C53A	L-4.5CHD	1694A, 9066, 9116, 9118, 9248	BN1005B	BN7046	CB26	TCD-35CA
FP-C5F	L-5CFB, V*-5CFB	—	BN1005B	B75004A	CB26	TCD-5CF, TCD-55FA
FP-C71A	—	7731A, 9064, 9292, 1617A, 9011	BN1041A	BN7021A	—	TCD-7CA
FP-C7FA	L-7CFB	—	BN1030A	BN7021A	—	TCD-7CA

• Standard package (20pcs/100pcs)

- Lock mechanism improves reliability by preventing shifting or detaching of the center pin.
- The tools and cable stripper can be used for the Canare crimp BNC plugs as well, thus saving on extra equipment.
- VSWR of 1.1 or less up to 2 GHz.
- Designed for indoor use.

Be sure to use Canare Crimp Tool



FP-C4

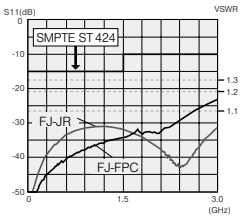


Fig.1 Return loss for FJ-FPC and FJ-JR

■ Standoff Receptacle

Model	Description
FJ-JR	Jack to Jack
FJ-FPC	PC Board Straight Mount

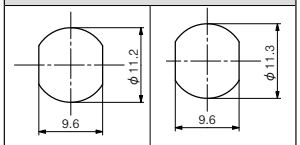
• Standard package (20pcs/100pcs)

- VSWR of 1.1 or less up to 2 GHz. <Fig. 1>
- Accept insulation bushing IU-7/16. See page 24 for more information.

FJ-JR

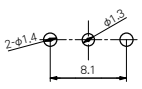
FJ-FPC

Panel Mount Hole Dimensions

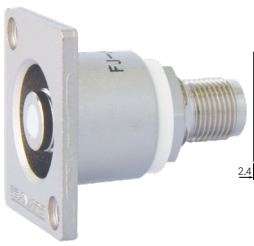


FJ-JR **FJ-FPC**

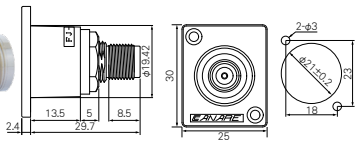
PC Hole Dimensions



FJ-FPC



FJ-JRU



FJ-JRU

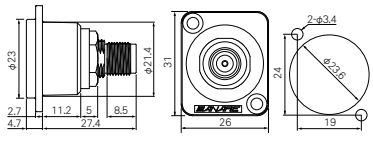
■ Flush-mount Receptacles

Model	Description	Flange Type
FJ-JRU	Jack to Jack	ITT XLR-F77
FJ-JRUD		Neutrik D
FJ-JRUDB		Neutrik D (Black)

• Standard package (20pcs)

- Three types of flanges are available.

FJ-JRUD



FJ-JRUD

Phone Plugs

Website

Featuring a properly cable cramp system ensures long life reliability.

■ 3.5mm Mini Phone Plug

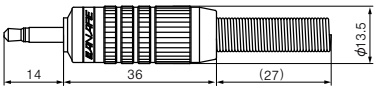
F-11	F-12	F-12SA
		
Description		
2 Conductor 3.5mm mini phone plug	3 Conductor 3.5mm mini phone plug	3 Conductor 3.5mm mini phone plug *Smaller shell version of F-12
Nickel contacts, Nickel shell ϕ 6.0 max (w/o spring : ϕ 7.5 max)	Nickel contacts, Nickel shell ϕ 6.0max (w/o spring : ϕ 7.5 max)	Nickel contacts, Nickel shell ϕ 5.0max (w/o spring : ϕ 6.7 max)

• Standard package (10pcs)

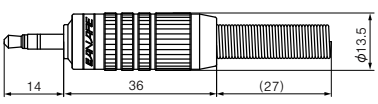
■ 1/4" Phone Plug

F-15	F-15L	F-16
		
Description		
2 Conductor 1/4" phone plug	2 Conductor 1/4" phone plug *Right-angle Type	3 Conductor 1/4" phone plug
Nickel contacts, Nickel shell ϕ 6.0max (w/o spring : ϕ 7.5 max)	Nickel contacts, Nickel shell ϕ 6.0max (w/o spring : ϕ 7.5 max)	Nickel contacts, Nickel shell ϕ 6.0max (w/o spring : ϕ 7.5 max)

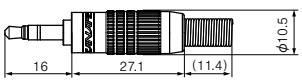
• Standard package (10pcs)



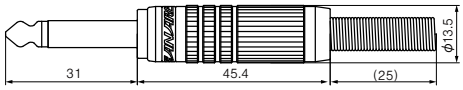
F-11



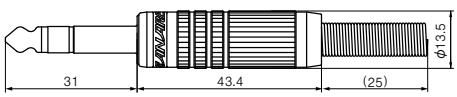
F-12



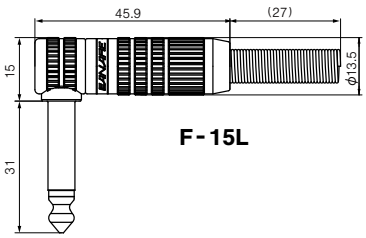
F-12SA



F-15

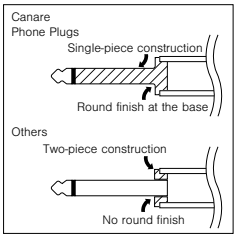


F-16



F-15L

Canare's durable design



50Ω BNC Crimp Plugs

VSWR of 1.1 or less up to 2 GHz, 1.2 or less up to 4 GHz.

■ Straight

Model	Suitable Cable	Center Pin	Sleeve	Boot	Die Set
BP-C3	L-3D2V, 3D-2V	BN1023A	BN7003A	CB03	TCD-35D
BP-C31	L-3D2W, 3D-2W	BN1023A	BN7011	CB04	TCD-3151D
BP-C4	RG-58C/U, RG-58A/U	BN1024A	BN7030A	CB03	TCD-35D
BP-C5	L-5D2V, 5D-2V	BN1025B	BN7016	CB05A	TCD-35D
BP-C51	L-5D2W, 5D-2W	BN1025B	BN7002	—	TCD-3151D
BP-C5FA	L-5DFB, 5D-FB	BN1016C	B75004A	CB05A	TCD-35DF TCD-55FA
BP-C51F	L-5DFBW-PE	BN1016C	BN7002	—	

• Standard package (20pcs)

BP-C5

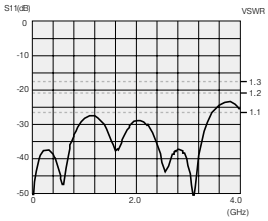
Website

■ Right Angle

Model	Suitable Cable	Center Pin	Sleeve	Die Set
BP-LC31	L-3D2W, 3D-2W	BN1023A	BN7011	TCD-3151D
BP-LC51	L-5D2W, 5D-2W	BN1025B	BN7002	

• Standard package (20pcs)

BP-LC31



Return loss for BP-C31

- Lock mechanism used on insulation improves reliability by preventing shifting or detaching of the contact pins.
- Elongated body design for straight type enables easy attachment and removal.
- Gold plating on the contact pin prevents deterioration, even after years of use.
- Use of crimping to attach the connectors ensures quick, reliable installation.

Be sure to use Canare Crimp Tool

50Ω BNC Receptacles

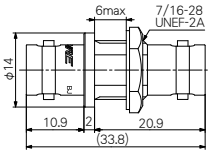
■ Standoff

Model	Description
BJ-JR	Jack to Jack

• Standard package (20pcs)

- Mounting hole size is same as that for BCJ-R/1 connector.

BJ-JR



BJ-JR

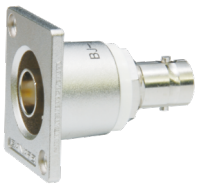
Website

■ Flush-mount Receptacles

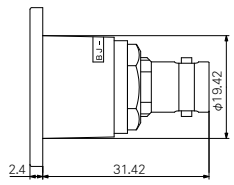
Model	Description	Flange Type
BJ-JRU	Jack to Jack	ITT XLR-F77
BJ-JRUD		Neutrik D

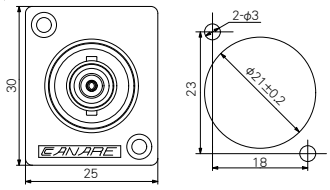
• Standard package (20pcs)

- Two types of flanges are available.
- Flush-mount receptacle prevents damage on the jack.



BJ-JRU





BJ-JRU

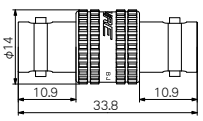
50Ω BNC Extension Adapter

Model	Description
BJ-J	Jack to Jack

• Standard package (20pcs)

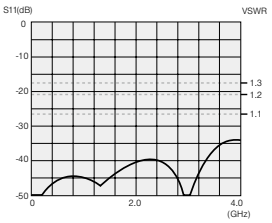
- VSWR of 1.1 or less up to 4 GHz.

BJ-J



BJ-J

Website



Return loss for BJ-J

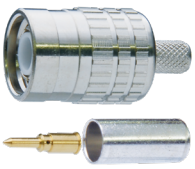
50Ω TNC Crimp Plugs

Website

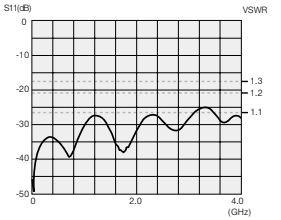
■ Straight

Model	Suitable Cable	Boot	Die Set
TNP-C3	L-3D2V, 3D-2V	CB03	TCD-35D
TNP-C31	L-3D2W, 3D-2W	CB04	TCD-3151D
TNP-C4	RG-58C/U, RG-58A/U	CB03	TCD-35D
TNP-C5	L-5D2V, 5D-2V	CB05A	
TNP-C51	L-5D2W, 5D-2W	—	TCD-3151D
TNP-C5F	L-5DFB, 5D-FB	CB05A	TCD-35DF TCD-55FA

• Standard package (20pcs)



TNP-C3



Return loss for TNP-C3

- VSWR of 1.1 or less up to 2 GHz, 1.2 or less up to 4 GHz.
- Canare crimp design ensures quick and reliable installation

Be sure to use Canare Crimp Tool

50Ω N Crimp Plugs

Website

■ Straight

Model	Suitable Cable	Boot	Die Set
NP-C31	L-3D2W, 3D-2W	CB04	TCD-3151D
NP-C51	L-5D2W, 5D-2W	—	
NP-C5F	L-5DFB, 5D-FB	CB05A	TCD-35DF TCD-55FA
NP-C51F	L-5DFBW-PE	—	

• Standard package (20pcs)

NP-C51

■ Straight Jack

Model	Suitable Cable	Boot	Die Set
NJ-C5F	L-5DFB, 5D-FB	CB05A	TCD-35DF TCD-55FA

• Standard package (20pcs)

- VSWR of 1.1 or less up to 2 GHz, 1.2 or less up to 4 GHz.
- Canare crimp design ensures quick and reliable installation

Be sure to use Canare Crimp Tool

50Ω SMA Crimp Plugs

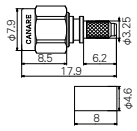
Website

■ Straight

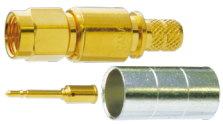
Model	Suitable Cable	Die Set
SMAP-C1	1.5D-QEW	TCD-1DB
SMAP-C31A	L-3D2W, 3D-2W	TCD-3151D
SMAP-C3F	L-3DFB	TCD-35DF
SMAP-C51	L-5D2W, 5D-2W	TCD-3151D
SMAP-C5F	L-5DFB, 5D-FB	TCD-35DF, TCD-55FA

• Standard package (20pcs)

SMAP-C1



SMAP-C1

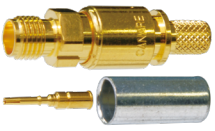


SMAP-C31A

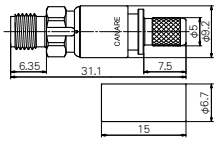
■ Straight Jack

Model	Suitable Cable	Die Set
SMAJ-C3F	L-3DFB	TCD-35DF
SMAJ-C51	L-5D2W, 5D-2W	TCD-3151D
SMAJ-C5F	L-5DFB, 5D-FB	TCD-35DF, TCD-55FA

• Standard package (20pcs)



SMAJ-C3F



SMAJ-C3F

- VSWR of 1.1 or less up to 2 GHz, 1.2 or less up to 4 GHz.
  (SMAP-C1: VSWR of 1.2 or less up to 2 GHz)
- Canare crimp design ensures quick and reliable installation
  (SMAP-C1 has solder center contact)

Be sure to use Canare Crimp Tool

Coaxial Cable Stripper

Three internal circular steel blades perform precise, extremely clean and easy stripping.

Model	Preset to
TS100E	LV-77S·L-5CFB, V*-5CFB, V*-5C, LV-61S·L-4CFB, V*-3C
TS100H	L-2.5CHD·L-2.5CHLT, L-3.3CUHD·L-3C-AHD, L-3CFB·L-3C2V·L-3C2VS, L-5CFB, L-4CFB
TS100U	L-2.5CHD, 1855A, 1505A, 1694A

- For most Canare BNC, DIN, RCA and F crimp plugs.
- Rotary knob to select 5 different cable setups.
- Make your own cable setting within cable O.D. 4mm~11mm
- Hex wrench is attached on the lid top for quick adjustment.
- One replacement blade included, and also sold separately.
  Replacement blade: TSC (1pc)

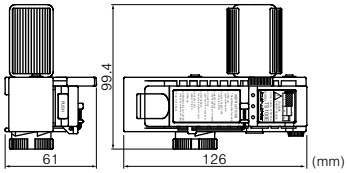
Note: The stripping quality of coaxial cables may be affected by their construction, particularly in the following cases:

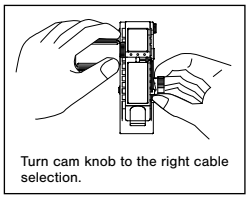
1. Harder jackets
2. Softer insulation
3. Multilayer shielding

These factors can result in suboptimal stripping conditions.

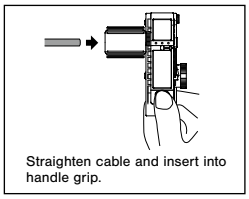
Website

TS100E

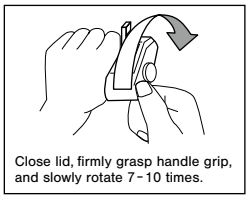




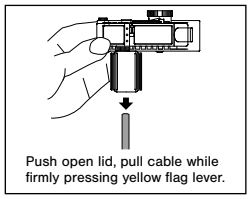
Turn cam knob to the right cable selection.



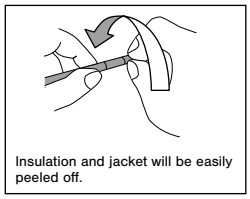
Straighten cable and insert into handle grip.



Close lid, firmly grasp handle grip, and slowly rotate 7-10 times.



Push open lid, pull cable while firmly pressing yellow flag lever.



Insulation and jacket will be easily peeled off.

Crimp Tools

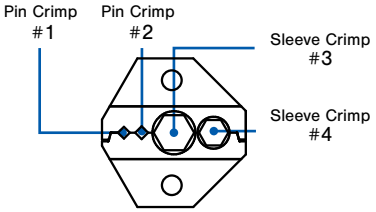
Canare crimp tool offers reliable high-quality crimping performance in an easy-to-use design.

■ Die Sets ■ Hand Crimp Tools

Model	Pin Crimp		Sleeve Crimp		Model
Die Sets	#1 (mm)	#2 (mm)	#3 (mm)	#4 (mm)	Hand Crimp Tools
TCD-1DB	—	—	3.94	—	**TC-1**
TCD-31C	1.37	—	6.75	—	**TC-1**
TCD-3151D	1.92	—	8.36	6.75	**TC-1**
TCD-316C	1.35	—	9.4	6.75	**TC-1**
TCD-35CA	1.35	—	7.6	5.85	**TC-1**
TCD-35D	1.92	—	7.6	5.85	**TC-1**
TCD-35DF	1.92	2.1	8.05	5.82	**TC-1**
TCD-4CA	1.35	—	6.48	—	**TC-1**
TCD-451CA	1.35	—	8.36	6.4	**TC-1**
TCD-5CF	1.31	—	8.05	—	**TC-1**
TCD-5HD	1.87	—	8.05	—	**TC-1**
TCD-55FA	1.35	2.1	8.05	—	**TC-1**
TCD-55UHD	1.62	—	8.05	—	**TC-1**
TCD-57C	1.62	—	8.5	—	**TC-1**

■ Die Sets ■ Hand Crimp Tools

Model	Pin Crimp		Sleeve Crimp		Model
Die Sets	#1 (mm)	#2 (mm)	#3 (mm)	#4 (mm)	Hand Crimp Tools
TCD-65C	1.92	—	9.4	7.6	**TC-1**
TCD-67HD	2.1	—	10.2	—	**TC-1**
TCD-7CA	1.87	—	10.2	—	**TC-1**
TCD-8HD	2.4	—	11.26	—	**TC-2**
TCD-96C	1.92	—	11.26	9.4	**TC-2**
TCD-D253F	1.1	—	5.1	5.85	**TC-1**
TCD-D534F	1.27	—	7.55	6.4	**TC-1**



Website Crimp Tools

Website Tool Case

■ Accessories

Model	Description	Length
TB-2A	Tool case	—
BET-BNC	Extraction tool for BNC straight plug	300 mm
BET-MBNC	Extraction tool for MBCP-C series	300 mm
BET-HBNC	Extraction tool for HBCP-D25HDA, D25HWA, D33UHDA (Narrow Pitch Ready: 8mm)	300 mm
BET-DIN	Extraction tool for DCP-C series	300 mm
BET-D/H	Extraction tool for DCP-C, HBCP-D series & HBCP-DA series Narrow Pitch Ready: DCP-C: 11mm HBCP-D25HDA, D25HWA, D33UHDA: 10mm HBCP-D53A, D55UHD: 12mm	300 mm

TB-2A
(tools and connectors not included)

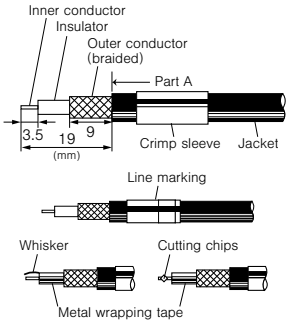
- Select the appropriate die set to suit the individual connector
- Hand crimp tool is required for die set, and sold separately
- Die set are interchangeable

TC-1

Website Extraction Tools

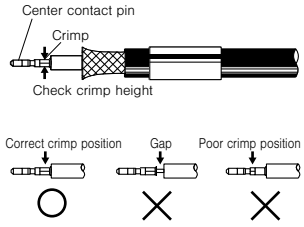
BET-BNC **BET-HBNC** **BET-MBNC** **BET-DIN** **BET-D/H**

Crimp Connector Assembly Instructions

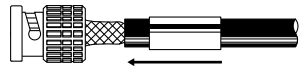


Confirm compatibility of the connector and cable prior to assembly.

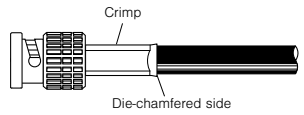
1. Slide the crimp sleeve over the cable and strip the jacket, braided shield, and insulation of the coaxial cable as shown at left.
   - For cables with stranded inner conductor, twist the strands in the same direction as plied after removing the insulation.
   - For a crimp sleeve with steps, slip it over the cable from the stepped end, as in the diagram.
   - If any metal foil shield is left on the cable, it may get stuck in the mouth of connector, making insertion impossible.
   - Remove all stray strands and offcuts of the metal foil shield to avoid possible short circuiting.
   - Make sure the inner conductor is free of all insulation debris and offcuts to ensure complete crimping.



2. Place the center contact pin of the connector on the inner conductor of the cable and crimp the center contact pin at the correct position (without remaining a gap) as shown at left, using the specified crimp tool and die set.
   - To confirm the crimping properly, measure the crimp height after removing burrs with a knife. If it is not within the ideal value range, adjust the crimp tool.
   - Do not crimp the center contact pin at the stepped root end.
   - Confirm the center contact pin is crimped straight to the inner conductor. If the center contact pin is slanted, align it gently.



3. Hold the cable and push it into the connector body until the center contact is locked in place. You may feel a click sound when the center contact is locked.
   - Pull the cable gently (less than 4.5 lbs or 19.6 N) to confirm that is locked.



4. Slide crimp sleeve up against connector body over the braided shield until it butts against the connector body. Center the die over the crimp sleeve and crimp in place, using the specified crimp tool and die set.
   - Do not pull the cable while crimping is executed.

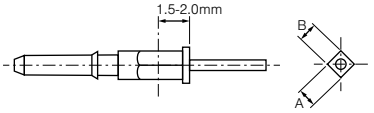
Adjusting Crimp Tool

1. Measuring Crimping height

Crimp height is measured after the crimp is made. As shown in the figure, the sum of the measured values for both directions is divided by two to arrive at the crimp height. The ideal value range for the BCP-A3 connector, for example, is 1.4 mm to 1.5 mm. When this value is lower (overcrimping occurs) than the recommended crimp height, the crimp becomes very hard. A value higher (undercrimping occurs) than the recommended value can result in increased electrical resistance and a physically weaker crimp. Either digital calipers or a micrometer should be used for measuring crimp height.

2. Measuring Frequency

Crimp height is measured prior to commencing use of the crimp tool and always when changing the crimping die. After this, the crimp height is regularly measured after about each 1, 000 crimps.



Crimp height value= (A+B) /2

Refer to the separately included manual for the appropriate crimp height values for individual connectors.

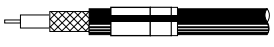
3. Tool Measuring Procedures

Crimp force increases and crimp height decreases when the tool's adjuster dial is turned in the direction of the 9. The dial is adjusted by first releasing it using a screw driver.

FAQ

Q Does it matter in which direction crimp sleeves are attached?

A For BCP-A3–use and other non-stepped (straight type) crimp sleeves, it does not matter in which direction the crimp sleeve is attached. The attachment direction also does not matter for BCP-A5F–use and other specific-use types that have a chamfer (groove) at one end of the crimp sleeve. However, stepped crimp sleeves such as those for BCP-C1, etc. are directional and must be attached in the direction shown in the diagram below, with the cable threaded through the sleeve starting from the end with the step (that is, the end with smaller-diameter hole).



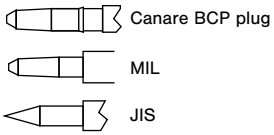
Q What should be done with a metal foil shield?

A Strip the metal foil shield to the root of the braided shield (to the edge of the jacket). If any metal foil shield is left on the cable, it may get stuck in the mouth of connector, making insertion impossible.

Q Why do some BNC plugs made by other companies have a sharp point at the tip of the central contact? Are these compatible with Canare's BNC receptacles?

A The central contact is pointed in conformance with the JIS standard for 50Ω BNC connectors. The central contacts on Canare's connectors conform to the MIL standard, and therefore are not pointed. These two different shapes simply offer different ways to guide the plug into the female receptacle and have no direct effect on contact quality.

The actual contact surfaces on Canare's BNC connectors are designed in conformance with JIS standards and therefore pose no compatibility problems.



Q Is it possible to use cables not listed in the connector compatibility table as long as they are close to the dimensions of those listed?

A No. While connection may be possible, performance may be adversely affected. Even if the connection appears to work, factors such as electrical instability, weak cable contact strength and others may cause problems during actual use. Therefore, it is necessary to test and evaluate whether it is actually possible to use the configuration in question. Particular caution should be used when crimping is involved.

Q What is meant by "cable contact strength"?

A Cable contact strength refers to the maximum load borne by the cable when exerting tensile force to remove it from the connector. For Canare products, "cable contact strength" refers to the contact strength of a cable's outer conductor, not including the pull-out strength of the central contact or the contact strength of the inner conductor.

Q What is the approximate insertion loss associated with connectors?

A The value varies depending on the connector, but for BNC plugs, the value is approximately 0.1 dB per plug (DC–2 GHz).

Cables to Connector Cross-Reference

See page 39-40, for 50Ω cables and connectors.
See page 42, for more information about the crimp height.
These tables include cables of other brands such as Belden, Draka, and Gepco.

■ BNC, Slim BNC, F, RCA

Cable	BNC			Slim BNC	F	RCA	Multi-pin	Suitable Die Set	Crimp Height
	BCP-D/B	BCP-A/C	BCP-L*	MBCP-C	FP-C	RCAP-C	MCM/MCF		
L-1.5C2VS/V*-1.5C		BCP-C1						TCD-1DB	N/A (solder pin)
1.5C-2V									
L-2.5C2V		BCP-A25						TCD-35CA	1.40 - 1.47
L-2.5CFB		BCP-A25F		MBCP-C25F		RCAP-C25F			1.40 - 1.50
1855A	BCP-B26		BCP-LD25HD						
1855P									
L-2.5CHD/L-2.5CHLT	BCP-B25HD		BCP-LD25HD		FP-C25HD	RCAP-C25HD			
VDM230									
1855ENH	BCP-B28								
HD PRO 0.6/2.8 AF									
L-2.5CHWS	BCP-B25HW		BCP-LD25HW					TCD-35CA	1.40 - 1.50
V4-2.5CHW									
L-3C2V/L-3C2VS		BCP-A3	BCP-LC3		FP-C3	RCAP-C3A	MC*-V5C3		
V3-3C/V4-3C		BCP-A3 BCP-VA3							
V5-3C							MC*-V5C3		
L-3CFB	BCP-B3F	BCP-A3F	BCP-LC3F	MBCP-C3F	FP-C3F	RCAP-C3F			
V*-3CFB									
L-3C-AHD		BCP-A3AHD							
L-3.3CUHD	BCP-D33UHD		BCP-LD33UHD						
L-3.3CUHWS	BCP-D33UHW							TCD-451CA	
1695A		BCP-A55						TCD-35CA	
VSD2001TS									
L-3C2W		BCP-A31			FP-C31			TCD-31C	
L-3CFW	BCP-B31F							TCD-4CA or TCD-451CA	
V*-3CFW									
LV-61S		BCP-A4		MBCP-C4	FP-C4	RCAP-C4A			
RG-59B/U									
L-4CFB/V*-4CFB	BCP-B4F	BCP-A4F		MBCP-C4F	FP-C4F	RCAP-C4F			
1505A, 1505ANH									
HD PRO 0.8/3.7 AF									
VPM2000									
L-4CHD									
1505F		BCP-A42				RCAP-C42		TCD-31C	
L-4.5CHD	BCP-B53		BCP-LD53	MBCP-C53	FP-C53A	RCAP-C53		TCD-35CA	
1694A									
HD PRO 1.0/4.8 AF	BCP-B56								
L-4.5CHWS	BCP-B45HW								
L-5C2V/L-5C2VS		BCP-A5	BCP-LC5		FP-C5	RCAP-C5A			
V*-5C		BCP-A5 BCP-VA5							
LV-77S		BCP-A77				RCAP-C77		TCD-5CF or TCD-55FA excluding BCP-A5F (*1)	
L-5CFB	BCP-B5F	BCP-A5F (*1)	BCP-LC5F	MBCP-C5F	FP-C5F	RCAP-C5F			
V*-5CFB									
L-5CFW	BCP-B51F								
V*-5CFW									
8281F		BCP-A77				RCAP-C77			
L-5C2W		BCP-A52			FP-C52			TCD-451CA	
L-5CHD		BCP-C5HD						TCD-5HD	1.90 - 2.00
L-5.5CUHD	BCP-D55UHD							TCD-55UHD	1.62 - 1.72
L-5.5CUHWS	BCP-D55UHW							TCD-57C	
4794R	BCP-D57								
L-6CHD		BCP-C6HD						TCD-67HD	2.15 - 2.25
L-7CHD		BCP-C7HD							
L-7CFB		BCP-C7FA			FP-C7FA			TCD-7CA	1.90 - 2.00
7731A		BCP-C71A							
9292					FP-C71A				
L-8CHD/L-8CUHD	BCP-D8UHD							TCD-8HD	2.44 - 2.54
GS-6						RCAP-C3GS		TCD-35D	2.01 - 2.20

*1: Suitable die set for BCP-A5F is TCD-35CA

■ Micro BNC, DIN1.0/2.3, 4K-DIN

Cable	Micro BNC	DIN	4K-DIN	Suitable Die Set	Crimp Height
	HBCP-D	DCP-C	MDM/MDF		
L-2.5CHD/L-2.5CHLT	HBCP-D25HDA	DCP-C25HD		TCD-D253F	1.08 - 1.16
1855A					
VDM230					
L-2.5CHWS	HBCP-D25HWA	DCP-C25HW			
V4-2.5CHW			MD*-V4C25HW		
L-3CFB		DCP-C3F			
L-3.3CUHD	HBCP-D33UHDA				
L-4CFB		DCP-C4F		TCD-D534F	1.25 - 1.33
1505A					
VPM2000					
L-4CHD					
L-4.5CHD	HBCP-D53A	DCP-C53			
1694A					
VSD2001					
L-5.5CUHD	HBCP-D55UHD			TCD-55UHD	1.62 - 1.72

■ Video Patch Plugs

Cable	Video Plug	Suitable Die Set	Crimp Height
L-2.5CHWS	VWP-C25HW MVP-C25HW	TCD-D253F	N/A (solder pin)
	MCVP-C25HW SVP-C25HW	TCD-D253F	1.08 - 1.16
LV-61S	VWP-C4A MVP-C4	TCD-4CA or TCD-451CA	N/A (solder pin)
RG-59B/U			

Be sure to use in the suitable combination of cable, connector, and die set

110Ω-75Ω Impedance Transformers

Website

Passively convert AES/EBU digital audio signals from 110Ω/XLR3 output to a 75Ω BNC coaxial cable and then back again to a 110Ω/XLR3 input.

■ Adapter Type

Model	Description
BCJ-XJ-TRC	XLR3 (F) - BNC Jack
BCJ-XP-TRC	XLR3 (M) - BNC Jack
BCJ-XJ-A10TRC	XLR3 (F) - BNC Jack, 10dB Attenuation Pad

BCJ-XJ-TRC

BCJ-XP-TRC

BCJ-XJ-A10TRC

■ Panel Mount Type

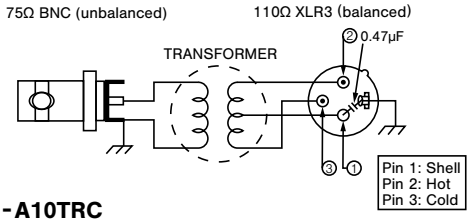
Model	Description (Front - Back)	Flange Type
XJ3F-TRC-BCJ	XLR3 (F) - BNC Jack	ITT XLR-F77
XJ3M-TRC-BCJ	XLR3 (M) - BNC Jack	
BCJ-TRC-XP3F	BNC Jack - XLR (F)	
BCJ-TRC-XP3M	BNC Jack - XLR (M)	
XJ3F-A10TRC-BCJ	XLR3 (F) - BNC Jack, 10dB Attenuation Pad	
BCJ-A10TRC-XP3F	BNC Jack - XLR3 (F), 10dB Attenuation Pad	

- SMPTE 276M and AES3 transmission standards
- Coaxial transmission of 2 channel digital audio
- Allows longer cable runs than 110Ω twisted pair
- AES/EBU signal distribution using Canare 75Ω video patchbays

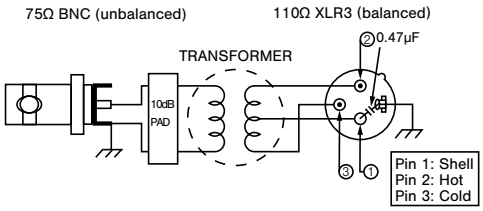
XJ3F-TRC-BCJ

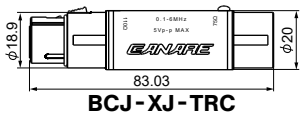
BCJ-TRC-XP3M

BCJ-XJ-TRC / BCJ-XP-TRC

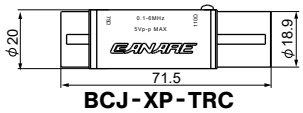


BCJ-XJ-A10TRC





BCJ-XJ-TRC



BCJ-XP-TRC

110Ω-75Ω Impedance Transformer: Input/Output Level Performance

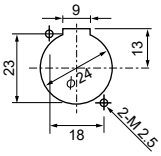
AES/EBU Transmitter (V)	Transformer Out (V)
2.0	1.60
3.0	2.39
4.0	3.18
4.5	3.60
5.0	3.98
6.0	4.78
7.0	5.58
8.0	6.38
9.0	7.18
10.0	7.98

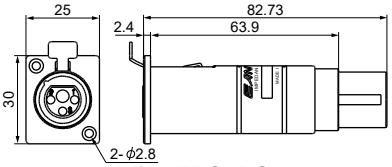
BCJ-XJ-TRC/BCJ-XP-TRC

AES/EBU Transmitter (V)	Transformer Out -10dB Pad (V)
2.0	0.50
3.0	0.75
4.0	1.01
4.5	1.13
5.0	1.26
6.0	1.51
7.0	1.76
8.0	2.02
9.0	2.27
10.0	2.52

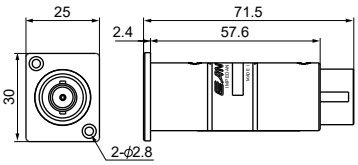
BCJ-XJ-A10TRC

Panel Hole Dimensions





XJ3F-TRC-BCJ



BCJ-TRC-XP3M

Considerations When Configuring and Selecting Cables for Microphone Systems

With the growing demand of recent years for both greater physical comfort and savings in energy consumption, systems incorporating digital control based on the latest advances in electronics are coming into wider use for air conditioning and lighting systems. As all these systems come on line, we cannot help but be reminded of the fact that the wiring used for these digital control systems generates pulse-based electromagnetic noise of the kind that affects the very delicate signals used in microphone lines.

Microphone cables are designed to carry a range of signals that span the spectrum from 1/100 of a volt (10 mV) to 1/1,000,000 (1 μV). One small error in wiring procedure or cable selection and the entire microphone system turns into an antenna collecting the surrounding noise.

The following section uses a question and answer format to cover a list of the essential points for configuring microphone systems.

Q1 Under what sort of conditions should a two-conductor microphone cable be used?

The two-conductor microphone cable is suited to environments where noise is not such a great factor and the audio signals are in the comparatively high -20 dB to 0 dB level range. In such cases, the two-conductor cable offers the advantages of smaller diameter and lower cost. Of course if microphone level, rather than line level, is the criterion being used, star quad cable should be used instead.

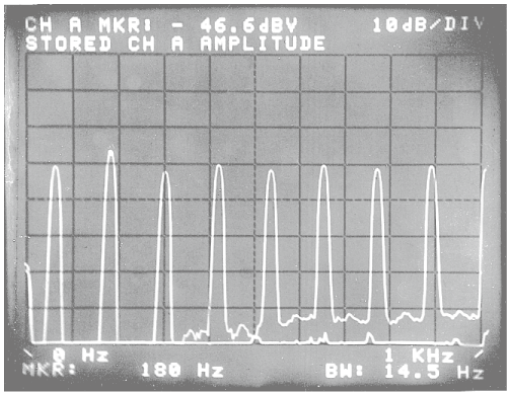


Fig. 1 Noise induced in two-conductor shielded cable (MVVS)

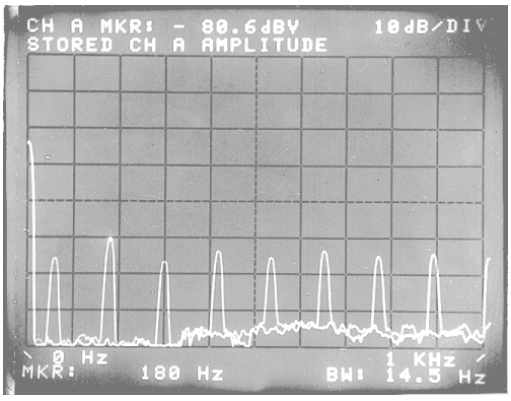


Fig. 2 Noise induced in star quad cable (Canare L-4E5AT)

Q2 Under what conditions should star quad microphone cable be used?

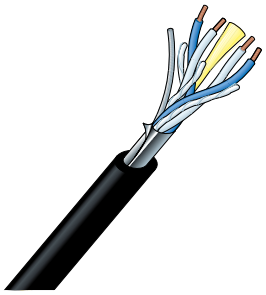
This type is used for environments with a higher noise factor and where audio signals are in the low -50 dB or less range. This type of cable performs well under noise conditions that exceed the capacity of the two-conductor shielded cable, effectively shielding out over ninety percent more noise. (See Figs. 1, 2)

However, should this type be routed alongside a power cable of any significant capacity it should probably be encased in metal conduit just to be safe.

<Test conditions>
1. Flush along power cables for 20 m distance
2. Power cable connected to lighting fixture dimmed to 50% capacity with load of 1 kW.
3. The noise induced in the audio cable was boosted by 50 dB in the head amplifier and viewed on a spectrum analyzer.

Q3 Isn't star quad cable expensive?

The cost for this type of cable has fallen significantly in recent years. Several decades ago, cost was so prohibitive a factor that only large musical auditoriums and broadcasting facilities could afford them. Canare succeeded in developing a low-cost star quad cable using aluminum foil in 1981. In addition to traditional professional facilities, this type gained wide use in such non-traditional areas as wedding halls and school lecture rooms.



Star quad cable with aluminum foil shield

Q4 When avoiding use of metal conduit, how far away should microphone cable be from power cables?

When foregoing the use of protective metal conduit, use the graph shown in Fig. 3 as a general guide for distancing cables. Note that ignoring basic guidelines for positioning cables can easily result in noise induction problems which are very difficult to deal with later. Encasing microphone cables in metal conduits is highly recommended for applications that utilize the delicate signal range.

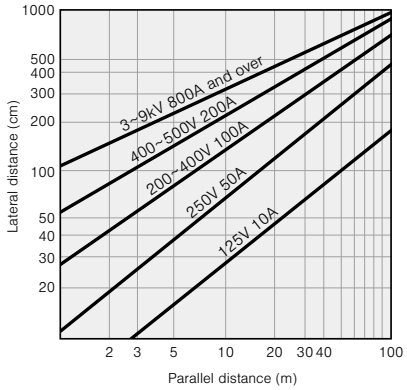


Fig. 3 Distances for positioning microphone and power cables

<Requisite conditions>
1. Cables are the star quad type.
2. Power cables are in the circular cab tire configuration.

Q5 What considerations are required when using a rack for strong electric current?

The same as for the preceding question when metal conduit is not used.

Q6 Would there be any problem with routing the cables through a flexible metal conduit?

The flexible conduit would certainly help to reduce noise but would not be as effective as a rigid metal conduit. Use the graph in Fig. 4 as a guide for distancing cables.

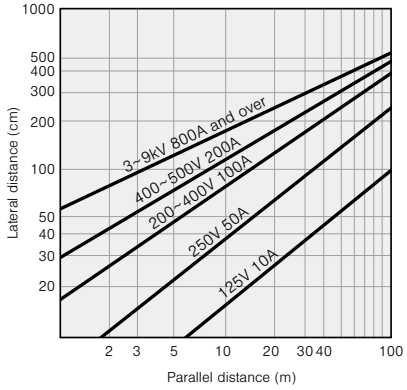


Fig. 4 Distances for positioning microphone and power cables when routing microphone cables via flexible metal conduit

<Requisite conditions>
1. Cables are the star quad type routed through flexible metal conduit.
2. Metal conduit is grounded using appropriate level of resistance.
3. Power cables are in the circular cab tire configuration.

Q7 What are the criteria for choosing between the many different types of microphone cables?

As all are designed to provide electromagnetic shielding there is not that much basic difference in shielding performance. However, they do differ in various specific characteristics. Cable type should be selected according to specific requirements. (See Fig. 5)

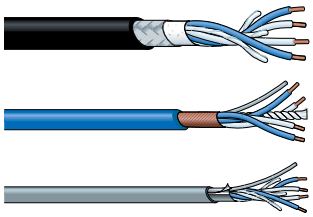


Fig. 5 Types of star quad microphone cables

• Braided Shield

The braided copper shield is designed to maintain effective shielding performance, regardless of how many times the cable is unwound, bent, twisted or rewound. It is ideal for use as handheld microphone cables or extension cables. This type is more expensive than other types as it is braided very finely to ensure a highly impenetrable shield. Cable termination requires seasoned expertise.

• Spiral Shield

The spiral shield consists of several copper wires wound tightly around the cable in a spiral wind. The shielding effect is heightened by winding the shield on twice, each time from different directions in what is referred to as the “double-spiral shield.” The cost range for the spiral shield cable lies roughly mid way between the braided shield and the aluminum foil shield cable. Although cable termination operations are comparatively simple, the spiral shield tends to deteriorate when flexed too frequently. It is designed for stationary installation.

• Aluminum Foil Shield

The aluminum foil shield cable consists of aluminum foil fused onto a polyester film and wound around the cable in the form of a tape. Cable termination involves a simple operation and the cable is relatively inexpensive. The aluminum foil cable is recommended for use as stationary cabling.

Aluminum foil cable with a Kevlar cable filler is highly recommended for areas where cables will be routed through metal conduit. The Kevlar filler protects the cable as it passes through the conduit, preventing cable breakage or shorting, even when intense stress is applied to the cable. The aluminum foil cable is currently widely used in function halls and multipurpose track and field stadiums.

AWG is for Indicating conductor size

AWG stands for American Wire Gauge. While it is primarily used in North America, it is widely recognized internationally. For solid conductors, the AWG number corresponds to the diameter, whereas for stranded conductors, it is determined by the cross-sectional area. Table 1 provides a list of typical AWG sizes for Canare cables. Complete AWG details can be found on each cable’s product page.

Type	Solid Conductor			Stranded Conductor		
	Diameter (mm)		Canare Model	Cross Sec Area (mm^2)		Canare Model
AWG	Nominal	Minimum		Nominal	Minimum	
25	0.455	0.450		0.162	0.159	MR202-AT, DA202
24	0.511	0.506		0.205	0.201	L-4E6S, LV-61S
23	0.574	0.569	L-2.5CHD	0.259	0.254	L-2T2S
22	0.643	0.635		0.324	0.318	DMX203, LV-77S, L-3.3CUHWS
21	0.724	0.716	L-3.3CUHD	0.412	0.404	
20	0.813	0.805		0.519	0.509	4S6, L-4.5CHWS
19	0.910	0.904		0.653	0.641	
18	1.020	1.016	L-4.5CHD	0.823	0.807	GS-6
17	1.150	1.140		1.040	1.020	
16	1.290	1.278	L-5.5CUHD	1.310	1.280	4S8, 2S7F, L-5.5CUHWS
15	1.450	1.435		1.650	1.620	
14	1.630	1.613		2.080	2.040	4S11, 2S9F
13	1.830	1.800	L-8CUHD	2.630	2.580	
12	2.050	2.030		3.310	3.240	2S11F

< Table 1 >

The Star Quad Story

Canare Star Quad obtains its name from the 4-conductor style construction that minimizes the "loop area" between twists of the conductors. This "double balanced" pairing, reduces susceptibility to electromagnetically induced noise. The improvement in noise rejection is so noticeable, that even SCR dimmer noise (stage lighting consoles), is reduced to less than 1/10 the level found in other 2-conductor microphone cables.

Canare Star Quad is designed for use with microphones but is also excellent for all line-level signals (e.g. mixer to power amps). The 4-conductor Star Quad arrangement, cancels electromagnetically induced noise from SCR dimmer packs, fluorescent lighting ballasts and AC power transformers. Handling noise is prevented by use of cotton filler material. Excellent frequency response is maintained due to special irradiated polyethylene insulation which provides a low capacitance dielectric.

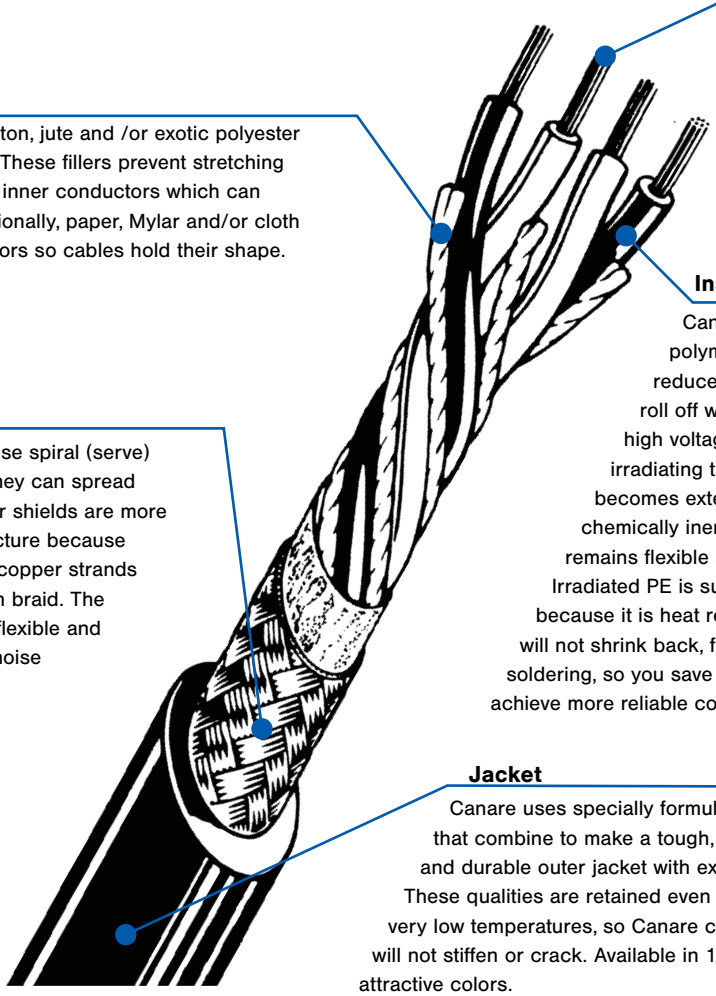
Canare Star Quad cable with braided shields is super flexible. We use large numbers of thin wire strands in the copper conductors and overall braided shield. We extrude a special compound PVC outer jacket that remains pliant at extremely low temperatures with no wait between cold shipping and installation.

Conductors

All Canare microphone cables utilize high-conductivity, annealed copper wires, stranded to form flexible conductors and shields.

Filler

Canare selects cotton, jute and /or exotic polyester fibers for packing. These fillers prevent stretching and twisting of the inner conductors which can cause noise. Additionally, paper, Mylar and/or cloth tape, bind conductors so cables hold their shape.



Insulation

Canare cables utilize special polymer compounds that reduce capacitive "R-C" filter roll off within the cable and prevent high voltage breakdown. By irradiating the material, the polymer becomes extensively cross-linked, chemically inert, water resistant, and remains flexible at very low temperatures. Irradiated PE is superior to ordinary polyethylene because it is heat resistant. Canare insulation will not shrink back, flow or char when soldering, so you save initial and rework time, and achieve more reliable connections.

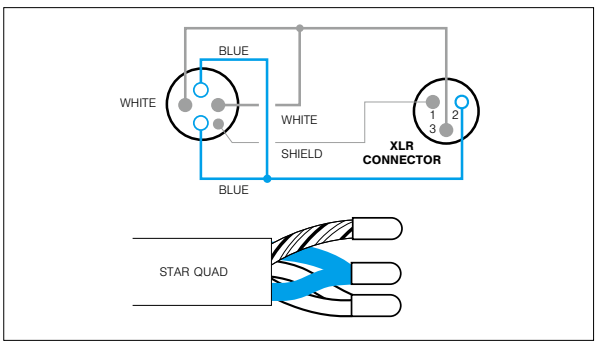
Shield

Canare does not use spiral (serve) shields because they can spread apart with use. Our shields are more difficult to manufacture because we use many thin copper strands in a densely woven braid. The shields are super flexible and offer outstanding noise rejection.

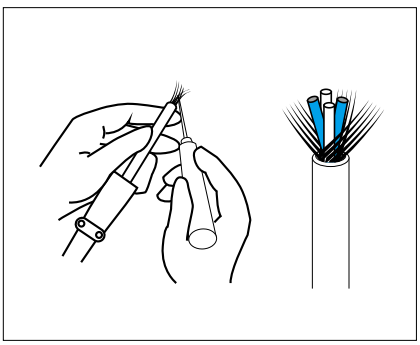
Jacket

Canare uses specially formulated PVC compounds that combine to make a tough, strong and durable outer jacket with excellent flexibility. These qualities are retained even at very low temperatures, so Canare cables will not stiffen or crack. Available in 10 attractive colors.

In order to maximize noise rejection, Star Quad must be properly wired to the XLR-3 connector (or terminal block).



Because the shield density on Canare Cable is very high, it is somewhat difficult to push back the braid and pull the inner conductors through. Instead, we strongly recommend unbraiding the shield by "combing" it out with a pointed tool, beginning at the end of the cable.

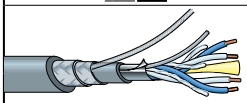


Star Quad Microphone Cables (Single)

Website

Effectively reduce noise levels to 1/10 that of general-purpose, 2-conductor shielded cables.

■ Aluminum Foil Shield

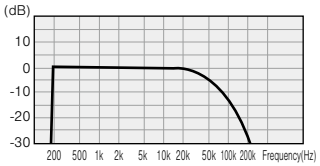
Type	Model	Sales units	Nom. O.D.	Weight	Composition				Electrical characteristics			
					No. of cond.	Cross sec. area (AWG) and cond. comp.	Twist pitch	Shield	Cond. DCR	Shield DCR	Nom. cap.*	Nom. cap.**
		m	mm	kg/100m		mm²/(AWG) Q'ty/mm	mm		Ω/100m	Ω/100m	pF/m	pF/m
 Jacket color: GRY	L-4E3AT	200 500	3.0	1.2	4	0.08(28) 7/0.12A	16	AL foil	24.6	—	—	—
 Jacket colors: GRY BLK	L-4E5AT	100 200 400	5.0	3.3	4	0.18(25) 16/0.12A	21	AL foil	10.7	—	164	222
	L-4E5ATG		5.0	3.3	4	0.18(25) OFC 1/0.18+30/0.08	21		11.1	—	164	222
	L-4E6AT		6.2	5.0	4	0.31(23) 12/0.18A	25		6.4	—	150	210
	L-4E6ATG		5.8	4.6	4	0.34(22) OFC 1/0.18+63/0.08	35		5.5	—	150	210
 Jacket color: GRY	L-4E5AT-WBS	100 200 400	6.8	8.9	4	0.18 (25) 16/0.12A	21	AL foil + double braid	10.7	—	164	222
	L-4E6AT-WBS		8.6	12.3	4	0.31 (23) 12/0.18A	25		6.4	—	150	210

Insulation: Cross-linked PE Jacket: PVC Dielectric strength: 500V AC/min.

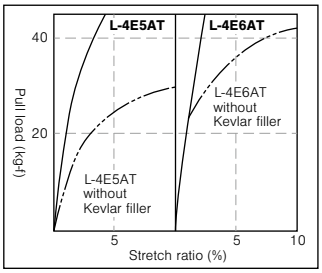
*Capacitance between conductors **Capacitance between conductor and shield.

L-4E*AT Series

- Designed for fixed installations
- Aluminum foil shielding provides 100% coverage
- DuPont Kevlar* filler can resist stretching of cable when pulled through conduit. (excluding L-4E3AT)
- Foil shield and drain wire offer quick assembly work
- L-4E*ATG has an OFC conductor
- L-4E*AT-WBS has a high-density double-braided shield. Its foil and braided shield are insulated by inner jacket.



Frequency Characteristics for L-4E5AT (100m)



Cable Pull Load and Stretch Ratio

■ Braided Shield

Type	Model	Sales units	Nom. O.D.	Weight	Composition				Electrical characteristics			
					No. of cond.	Cross sec. area (AWG) and cond. comp.	Twist pitch	Shield Coverage (braid)	Cond. DCR	Shield DCR	Nom. cap.*	Nom. cap.**
		m	mm	kg/100m		mm²/(AWG) Q'ty/mm	mm	%	Ω/100m	Ω/100m	pF/m	pF/m
 Jacket colors for L-4E5C: BLK RED ORN YEL GRN BLU GRY L-4E6S: BLK BRN RED ORN YEL GRN BLU PPL GRY WHT	L-4E5C	100 200	4.8	3.4	4	0.15(26) 30/0.08A	18	96%	13.0	2.4	162	200
	L-4E6S		6.0	4.8	4	0.20(24) 40/0.08A	20	94%	9.8	3.1	150	185
 Jacket colors for L-4E5: GRY BLK L-4E6: GRY	L-4E5	100 200	4.8	3.5	4	0.15(26) 30/0.08A	18	96%	13.0	1.9	162	200
	L-4E6	100 200 400	6.5	6.1	4	0.23(24) 20/0.12A	25	96%	8.6	1.6	144	187

Insulation: Cross-linked PE Jacket: PVC Dielectric strength: 500V AC/min.

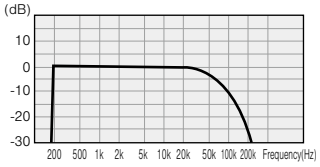
*Capacitance between conductors. **Capacitance between conductor and shield.

L-4E5C, L-4E6S

- Bend resistant design: the conductor consists of ultrafine 0.08 mm strands offers excellent durability.
- High-density braided shield

L-4E5, L-4E6

- High-density braided shield
- Drain wire included

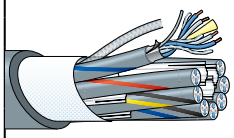


Frequency Characteristics for L-4E6S (100m)

Multichannel Star Quad Microphone Cables

Website

■ Aluminum Foil Shield

Type	Model	No. of ch.	Sales units	Nom. O.D.	Weight	No. of cond.	Unit composition: Cross sec. area (AWG) and cond. comp.	Unit composition: Twist pitch	Unit composition: Ch. O. D.	Electrical characteristics: Cond. DCR	Electrical characteristics: Shield DCR	Electrical characteristics: Nom. cap.*	Electrical characteristics: Nom. cap.**
			m	mm	kg/100m		mm²/(AWG) Q'ty/mm	mm	mm	Ω/100m	Ω/100m	pF/m	pF/m
 L-4E4-8AT	L-4E3-2AT	2	100 200 500	8.5	7.3	8	4E3AT Unit 0.08(28) 7/0.12A	16	3.0	24.8	—	—	—
	L-4E3-4AT	4		10.0	11	16							
	L-4E3-8AT	8		13.8	19	32							
	L-4E3-12AT	12		15.6	26	48							
	L-4E3-16AT	16		17.2	32	64							
	L-4E3-24AT	24		21.3	47	96							
	L-4E4-2AT	2		10.5	12	8	4E4AT Unit 0.18(25) 16/0.12A	21	3.7	10.8	—	164	222
	L-4E4-4AT	4		12.3	17	16							
	L-4E4-8AT	8		16.9	31	32							
	L-4E4-12AT	12		18.9	41	48							
	L-4E4-16AT	16		20.9	50	64							
Jacket color: GRY	L-4E4-24AT	24		26.1	76	96							

Insulation: Cross-linked PE (blue-blue, white-white) Jacket, inner Jacket: PVC Dielectric strength: 500V AC/min. *Capacitance between conductors **Capacitance between conductor and shield.

L-4E3-AT, L-4E4-**AT**

- The multichannel microphone cable is the cable of choice for music auditorium and studio facilities where noise prevention and audio quality are the prime considerations.
- Each unit contains the highly pull-resistant Kevlar* cable filler.
  *Kevlar is a trademark of DuPont.
- Drain wire included in each unit.

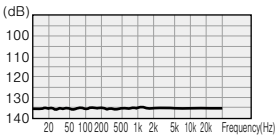
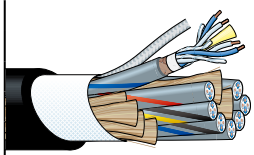


Fig. 1 Crosstalk Characteristics for L-4E4-4AT (100m)

■ Braided Shield

Type	Model	No.of ch.	Sales units	Nom. O.D.	Weight	No. of cond.	Unit composition: Cross sec. area (AWG) and cond. comp.	Unit composition: Twist pitch	Unit composition: Shield coverage (braid)	Unit composition: Ch. O.D.	Electrical characteristics: Cond. DCR	Electrical characteristics: Shield DCR	Electrical characteristics: Nom. cap.*	Electrical characteristics: Nom. cap.**
			m	mm	kg/100m		mm²/(AWG) Q'ty/mm	mm	%	mm	Ω/100m	Ω/100m	pF/m	pF/m
 L-4E3-8P	L-4E3-2H	2	100 200 500	8.9	9.5	8	0.08(28) 7/0.12A	16	93%	3.4	24.9	3.4	145	170
	L-4E3-2P	2		8.9	8.2	8								
	L-4E3-4P	4		10.9	13	16								
	L-4E3-8P	8		15.3	26	32								
	L-4E3-12P	12		17.4	36	48								
	L-4E3-16P	16		18.9	46	64								
	L-4E3-24P	24		24.0	70	96	0.15(26) 30/0.08A	18	95%	4.0	13.1	2.4	162	200
	L-4E4-2P	2		11.1	13	8								
	L-4E4-4P	4		13.4	21	16								
Jacket color: BLK (L-4E3-2H GRY)	L-4E4-8P	8		18.2	34	32								

Insulation: Cross-linked PE (blue-blue, white-white) Jacket, inner jacket: PVC Dielectric strength: 500V AC/min. *Capacitance between conductors **Capacitance between conductor and shield.

L-4E3-2H, L-4E3-P, L-4E4-**P**

- Ideal multichannel cable for PA and live events where cables are laid down and taken back up on a regular basis.
- Each unit of L-4E3-*P and L-4E3-2H contains the highly pull-resistant Kevlar* cable filler.
  *Kevlar is a trademark of DuPont.
- The L-4E3-2H is the reinforced version containing a stainless steel wire support.

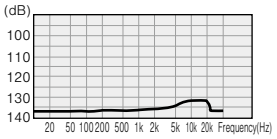
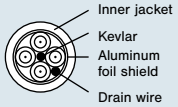


Fig. 1 Crosstalk Characteristics for L-4E4-4P (100m)

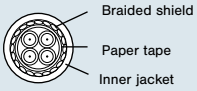
■ Cross-sectional View

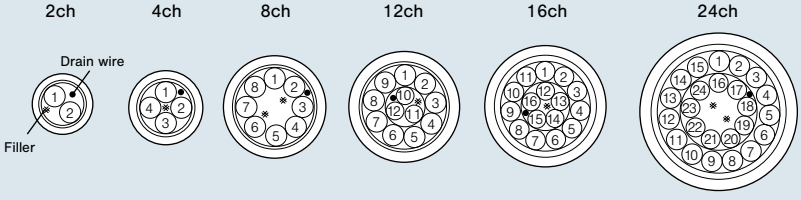
Single unit config.

Aluminum foil shield



Braided shield





■ Channel color code: Spiral marks on inner jacket (gray).

Unit no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Spiral mark	RED	BLU	YEL	GRN	BRN	-	BLU/ BLK	YEL/ BLK	GRN/ BLK	BRN/ BLK	BLK	BLU/ ORN	YEL/ ORN	GRN/ ORN	BRN/ ORN	ORN	BLU/ PNK	YEL/ PNK	GRN/ PNK	BRN/ PNK	PNK	BLU/ WHT	YEL/ WHT	GRN/ WHT

Two-Conductor Shielded Cables (Single)

Website

■ Aluminum Foil Shield

Type	Model	Sales units	Nom. O.D.	Weight	Composition			Electrical characteristics			
					No. of cond.	Cross sec. area (AWG) and cond. comp.	Twist pitch	Cond. DCR	Shield DCR	Nom. cap.*	Nom. cap.**
		m	mm	kg/100m		mm²/(AWG) Q'ty/mm	mm	Ω/100m	Ω/100m	pF/m	pF/m
 Jacket colors: GRY BLK	L-2B2AT	200 500	3.2	1.3	2	0.18(25) 16/0.12A	25	10.5	—	66	120
 Jacket color: GRY	L-2B2AL	200	3.2	1.1	2	0.18(25) 7/0.18TA Overall tin coated	20	11.3	—	—	—
 Jacket colors: GRY BLK SEPIA	L-2E5AT	200	5.0	3.3	2	0.31(23) 12/0.18A	30	6.2	—	68	140
 Jacket color: GRY	L-2E5AL	200 500	5.0	3.7	2	0.29(23) 7/0.23TA Overall tin coated	30	6.8	—	—	—

Insulation: Cross-linked PE (polyethylene for L-2E5AL and L-2B2AL) Jacket: PVC Dielectric strength: 500V AC/min. *Capacitance between conductors **Capacitance between conductor and shield.

L-2B2AT, L-2E5AT

- Ideal for internal rack wiring.
- Drain wire included.
- The L-2E5AT contains the Tetoron cable filler reinforcement material. <Fig. 1>

L-2B2AL, L-2E5AL

- Cables for connecting devices with which wrapping tools can be used.
- Drain wire included.

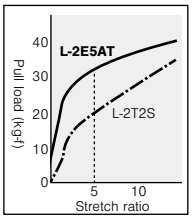


Fig. 1 Pull Load and Stretch Ratio for Cable

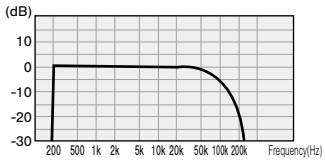


Fig. 2 Frequency Characteristics for L-2B2AT (100m)

■ Braided Shield

Type	Model	Sales units	Nom. O.D.	Weight	Composition				Electrical characteristics			
					No. of cond.	Cross sec. area (AWG) and cond. comp.	Twist pitch	Shield coverage (braid)	Cond. DCR	Shield DCR	Nom. cap.*	Nom. cap.**
		m	mm	kg/100m		mm²/(AWG) Q'ty/mm	mm	%	Ω/100m	Ω/100m	pF/m	pF/m
 L-2T2S Jacket colors L-2T2S: BLK RED ORN YEL BLU GRY L-2E5: BLK	L-2T2S	100 200	6.0	4.6	2	0.30(23) 60/0.08A	20	94%	6.5	3.1	60	106
	L-2E5	200	4.6	3.0	2	0.15(26) 30/0.08A	18	97%	12.7	2.2	63	117

Insulation: Cross-linked PE Jacket: PVC Dielectric strength: 500V AC/min. *Capacitance between conductors **Capacitance between conductor and shield.

L-2T2S, L-2E5

- Braid coverage of 94% and above provides dense shielding that blocks out electromagnetic noise.
- L-2T2S consists of 60 ultra-fine 0.08 mm strands (30 for L-2E5) in a stranded format that offers excellent durability.
- Highly pliable and durable PVC used for jacket. (Brittle temp. -49°C)

Cables

Two-Conductor Shielded Cables

■ Spiral Shield

Type	Model	Sales units	Nom. O.D.	Weight	Composition				Electrical characteristics			
					No. of cond.	Cross sec. area (AWG) and cond. comp.	Twist pitch	Shield coverage	Cond. DCR	Shield DCR	Nom. cap.*	Nom. cap.**
		m	mm	kg/100m		mm²/(AWG) Q'ty/mm	mm	%	Ω/100m	Ω/100m	pF/m	pF/m
 MS202 Jacket color: BLK	MS202	200	2.8	1.4	2	0.18 (25) 1/0.18TA + 30/0.08TA	25	91% (spiral)	11.3	3.2	74	145
 MS203 Jacket color: GRY	MS203	200	3.5	2.1	2	0.31(23) 12/0.18TA	30	91% (spiral)	6.5	2.3	—	—

Insulation: Cross-linked PE Jacket: PVC Dielectric strength: 500V AC/min. *Capacitance between conductors **Capacitance between conductor and shield.

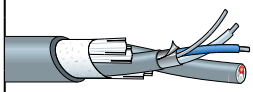
Website

MS202
- Ideal for analog audio internal rack wiring.
- Composite conductors with 1 of 0.18 mm and 30 of 0.08 mm strands.
- Drain wire included.

MS203
- Ideal for internal rack wiring.
- Drain wire included.

Two-Conductor Shielded Multichannel Cables

■ Aluminum Foil Shield

Type	Model	No. of ch.	Sales units	Nom. O.D.	Weight	No. of cond.	Unit composition			Electrical characteristics			
							Cross sec. area (AWG) and cond. comp.	Twist pitch	Ch. O. D.	Cond. DCR	Shield DCR	Nom. cap.*	Nom. cap.**
			m	mm	kg/100m		mm²/(AWG) Q'ty/mm	mm	mm	Ω/100m	Ω/100m	pF/m	pF/m
 L-2E4-2AL Jacket color: GRY	L-2E4-2AL	2	100 200 500	8.6	7.6	4	0.29(23) 7/0.23TA Overall tin coated	30	3.7	6.9	—	81	144
	L-2E4-4AL	4		10.8	13.1	8							
	L-2E4-8AL	8		14.9	23.7	16							
	L-2E4-12AL	12		16.9	32.0	24							
	L-2E4-16AL	16		18.8	40.0	32							

Insulation: Cross-linked PE Jacket: PVC Dielectric strength: 500V AC/min. *Capacitance between conductors **Capacitance between conductor and shield.

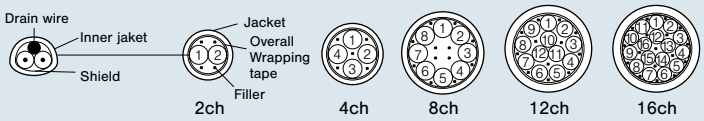
L-2E4-AL Series
- Used as cables for connecting devices with which wrapping tools can be used.
- Drain wire included in each unit.

Website

No.	Dot line markings
1	—
2	— —
3	— — —
4	— — — —
5	— — — — — — — — — — — — — — —
6	——
7	—— ——
8	—— —— ——
9	—— —— —— ——
0	—— —— —— —— ——

■ Cross-sectional View

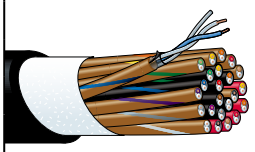
Single unit config.



■ Channel color code: color-coded insulation and dot line makings (ch 1 to 10: red, ch 11 to 16: blue) on inner jacket (gray).

Unit no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Insulation color	RED/ WHT	BLU/ WHT	YEL/ WHT	GRN/ WHT	BRN/ WHT	GRY/ WHT	BLU/ BLK	YEL/ BLK	GRN/ BLK	BRN/ BLK	GRY/ BLK	BLU/ ORN	YEL/ ORN	GRN/ ORN	BRN/ ORN	GRY/ ORN

■ Aluminum Foil Shield

Type	Model	No. of ch.	Sales units	Nom. O.D.	Weight	No. of cond.	Unit composition			Electrical characteristics			
							Cross sec. area (AWG) and cond. comp.	Twist pitch	Ch. O. D.	Cond. DCR	Shield DCR	Nom. cap.*	Nom. cap.**
			m	mm	kg/100m		mm²/(AWG) Q'ty/mm	mm	mm	Ω/100m	Ω/100m	pF/m	pF/m
 M202-24AT Jacket color: BLK	M202-2AT	2	100 200 500	6.5	4.8	4	0.18(25) 16/0.12A	30	—	10.5	—	75	135
	M202-4AT	4		8.1	9.0	8							
	M202-8AT	8		11.1	16	16							
	M202-12AT	12		12.5	18	24							
	M202-16AT	16		13.8	24	32							
	M202-24AT	24		16.8	32	48							
	M202-32AT	32		18.6	40	64							
 MR202-24AT Jacket color: BLK	MR202-2AT	2	100 200 500	6.7	4.5	4	0.18(25) 7/0.18A	25	2.7	10.7	—	76	142
	MR202-4AT	4		7.6	6.2	8							
	MR202-8AT	8		11.0	13.2	16							
	MR202-12AT	12		12.7	18.4	24							
	MR202-16AT	16		14.0	22.8	32							
	MR202-24AT	24		17.4	34.0	48							
	MR202-32AT	32		19.1	43.8	64							

Insulation: Cross-linked PE Jacket: PVC Dielectric strength: 500V AC/min. *Capacitance between conductors **Capacitance between conductor and shield.

M202-AT Series

- Multichannel cable featuring light weight and slim form. At only 16kg for a 50 m length of 24 channel cable, the M202-AT achieves a 47% weight reduction over previous Canare cables.
- Each channel is individually isolated using insulated (PET) aluminum foil shield. <Fig. 1>
- Contains the highly pull-resistant Kevlar cable filler.
- Drain wire included.

Note:
This series does not have inner jacket, so it cannot be used for fantails.

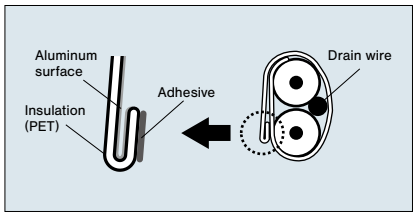
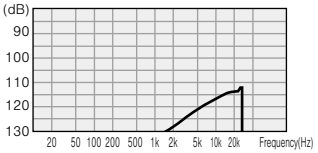


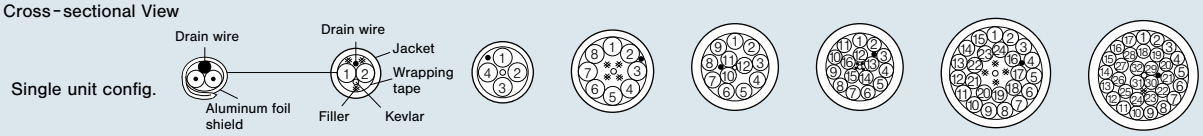
Fig. 1 Aluminum Foil Shield



Crosstalk Characteristics for M202-24AT (100m)

Website

■ Cross-sectional View



■ Channel color code:

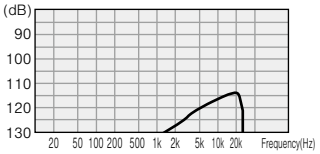
Unit no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Insulation color	RED/ WHT	BLU/ WHT	YEL/ WHT	GRN/ WHT	BRN/ WHT	GRY/ WHT	BLU/ BLK	YEL/ BLK	GRN/ BLK	BRN/ BLK	GRY/ BLK	BLU/ ORN	YEL/ ORN	GRN/ ORN	BRN/ ORN	GRY/ ORN	BLU/ PNK	YEL/ PNK	GRN/ PNK	BRN/ PNK	GRY/ PNK	BLU/ RED	YEL/ RED	GRN/ RED	BRN/ RED	GRY/ RED	YEL/ BLU	GRN/ BLU	BRN/ BLU	GRN/ YEL	BRN/ YEL	GRY/ YEL

MR202-AT Series

Our bestselling two-conductor multichannel cable featuring AWG 25 stranded conductor, 100% shielding by aluminum foil, and drain wire.

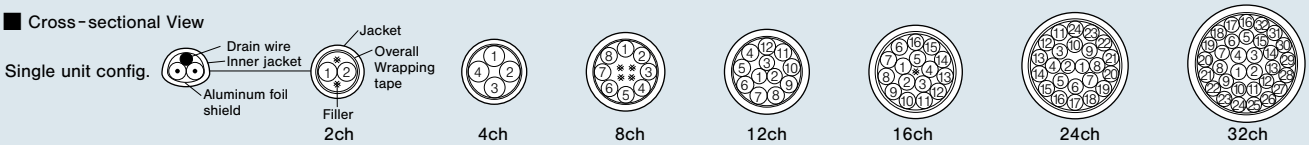
- Studio interconnect, portable snake system
- Each channel identified per resistor color-coding
- Aluminum foil shield and drain wire for easy terminate

Note:
Not appropriate for heavy-duty applications.



Crosstalk Characteristics for MR202-24AT (100m)

■ Cross-sectional View



■ Channel color code: Inner jacket color coding and spiral markings.* Insulation inside units: one is clear and the other bears the same color as the spiral markings.

Unit no.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Insulation color	BRN	RED	ORN	YEL	GRN	BLU	PPL	GRY	WHT	BLK	BRN	RED	ORN	YEL	GRN	BLU	PPL	GRY	WHT	BLK	BRN	RED	ORN	YEL	GRN	BLU	PPL	GRY	WHT	BLK	BRN	RED
Spiral markings	BRN	RED	ORN	YEL	GRN	BLU	PPL	GRY	WHT	BLK	-	RED	ORN	YEL	GRN	BLU	PPL	GRY	WHT	BLK	BRN	-	ORN	YEL	GRN	BLU	PPL	GRY	WHT	BLK	BRN	RED
Inner jacket color	BLK									BRN										RED										ORN		

Cables

Two-Conductor Shielded Cables

■ Spiral Shield

Type	Model	No. of ch.	Sales units	Nom. O.D.	Weight	No.of cond.	Unit composition				Electrical characteristics			
							Cross sec. area (AWG) and cond. comp.	Twist pitch	Shield coverage	Ch. O. D.	Cond. DCR	Shield DCR	Nom. cap.*	Nom. cap.**
			m	mm	kg/100m		mm²/(AWG) Q'ty/mm	mm	%	mm	Ω/100m	Ω/100m	pF/m	pF/m
 MS202-8P Jacket color: BLK	MS202-2P	2	100 200 500	7.1	5.9	4	0.18 (25) 1/0.18TA + 30/0.08TA	25	91% (spiral)	2.8	11.4	3.3	74	145
	MS202-4P	4		8.2	9.2	8								
	MS202-8P	8		10.9	16.0	16								
	MS202-12P	12		13.6	24.2	24								

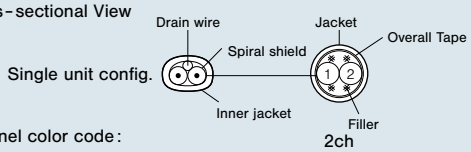
Insulation: Cross-linked PE Jacket: PVC Dielectric strength: 500V AC/min. *Capacitance between conductors **Capacitance between conductor and shield.

MS202-P Series

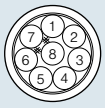
- Multichannel cable for analog audio.
- Composite conductors with 1 of 0.18 mm and 30 of 0.08 mm strands.
- Easy-to-use color-coded units and spiral shield.
- Drain wire included in each unit.

Website

■ Cross-sectional View




4ch

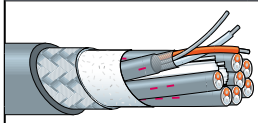

8ch


12ch

■ Channel color code:

Unit no.	1	2	3	4	5	6	7	8	9	10	11	12
Insulation color	BRN	RED	ORN	YEL	GRN	BLU	PPL	GRY	WHT	BLK	BRN	RED
Spiral markings	BRN	RED	ORN	YEL	GRN	BLU	PPL	GRY	WHT	BLK	-	RED
Inner jacket color	BLK									BRN		

■ Spiral Shield

Type	Model	No. of ch.	Sales units	Nom. O.D.	Weight	No.of cond.	Unit composition				Overall shield coverage (braid)	Electrical characteristics			
							Cross sec. area (AWG) and cond. comp.	Twist pitch	Shield coverage	Ch. O.D.		Cond. DCR	Shield DCR	Nom. cap.*	Nom. cap.**
			m	mm	kg/100m		mm²/(AWG) Q'ty/mm	mm	%	mm		Ω/100m	Ω/100m	pF/m	pF/m
 MS203-8BS Jacket color: GRY	MS203-2BS	2	100 200 500	8.9	11	4	0.31(23) 12/0.18TA	30	91% (spiral)	3.5	79%	6.6	2.3	—	—
	MS203-4BS	4		10.3	15	8					80%				
	MS203-8BS	8		13.5	27	16									

Insulation: Cross-linked PE (orange, white) Jacket: PVC Dielectric strength: 500V AC/min. *Capacitance between conductors **Capacitance between conductor and shield.

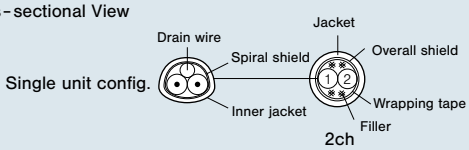
MS203-BS Series

- Multichannel version of MS203. (See page 51)
- Overall braided shield enables robust shielding performance.
- Drain wire included in each unit.

Website

No.	Dot line markings
1	—
2	— —
3	— — —
4	— — — —
5	— — — — — — — — — — — — — — — —
6	——
7	—— ——
8	—— —— ——
9	—— —— —— ——
0	———— ————

■ Cross-sectional View




4ch

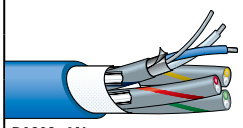

8ch

■ Unit ID: by dot line markings

AES/EBU Digital Audio Cables

Website

Ideal for conveying digital audio signals in conformance with AES/EBU and IEC standards.

Type	No. of ch.	Model	Sales units	Nom. O.D.	Weight	Unit composition				Electrical characteristics				Charac-teristic impedance	Attenua-tion
						Cross sec. area (AWG) and cond. comp.	Twist pitch	Shield coverage (braid)	Unit O.D.	Cond. DCR	Shield DCR	Nom. cap.*	Nom. cap.**		
			m	mm	kg/100m	mm²/(AWG) Q'ty/mm	mm	%	mm	Ω/100m	Ω/100m	pF/m	pF/m	Ω	dB/100m (3 MHz)
 Jacket color: BLU	1	**DA206**	100 200	7.3	7.5	0.56(20) 7/0.32A	60	95%	—	3.3	1.4	48	73	110	2.6
 Jacket color: BLU	1	**DA202**	100 200	5.0	3.6	0.18(25) 7/0.18A	32	95%	—	10.6	2.0	48	—	110	5.1
 Jacket color: BLU	1	**DA202AT**	100 200	4.0	1.6	0.18(25) 7/0.18A	38	—	—	10.6	—	45	—	110	6.7
 Jacket color: BLU	1	**DA203AL**	100 200	6.0	4.2	0.29(23) 7/0.23TA Overall tin coated	45	—	—	6.8	—	48	95	110	5.4
 DA202F-8P Jacket color: BLU	2	**DA202F-2P**	100 200 500	7.7	6.7	0.18(25) 7/0.18TA	25	91% Spiral shield	3.0	11.3	3.0	47	95	110	5.6
	4	**DA202F-4P**		8.8	10										
	8	**DA202F-8P**		11.5	17										
 DA203-4AL Jacket color: BLU	2	**DA203-2AL**	100 200 500	11.8	12.2	0.29(23) 7/0.23TA Overall tin coated	42	—	4.9	6.9	—	48	95	110	5.4
	4	**DA203-4AL**		13.8	18.9										
	8	**DA203-8AL**		19.3	33.2										
	12	**DA203-12AL**		21.9	44.1										

Insulation: Cross-linked PE (DA202F-P: Cross-linked foam PE) Jacket: PVC Dielectric strength: 500V AC/min. *Capacitance between conductors **Capacitance between conductor and shield.

DA206, DA202

- PE rod configuration ensures consistent 110 Ω impedance with large or small bends in cable during installation.
- DA206 ideal for digital audio paths up to 360 m*.
  DA202 ideal for digital audio paths up to 180 m*.
- DA202 contains a drain wire.

DA202AT

- Designed for internal cabling connections on racks.
- Ideal for digital audio paths up to 140 m*.
- Drain wire included.

*Condition: AES3 SR48kHz

DA203-AL Series

- Wrapping tool can be used.
- Ideal for digital audio paths up to 170 m*.
- Drain wire included in each unit.

DA202F Series

- Slim and lightweight.
- DA202F-8P designed to fit snugly with D-sub 25 pin connector.
- Cross-linked foam PE insulation.
- Ideal for digital audio paths up to 140 m*.
- Drain wire included in each unit.

■ Channel Color Coding

DA202F-P: by the insulator color & the spiral markings on the inner jacket (blue).

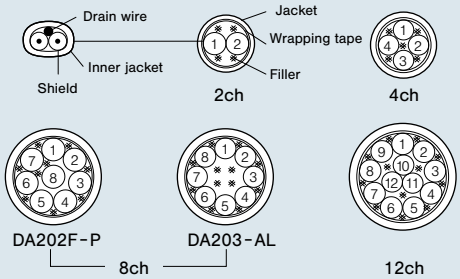
Unit no.	1	2	3	4	5	6	7	8
Insulator color	BRN, WHT	RED, WHT	ORG, WHT	YEL, WHT	GRN, WHT	BLU, WHT	PPL, WHT	GRY, WHT
Spiral markings	BRN	RED	ORN	YEL	GRN	-	PPL	GRY

DA203-AL: by the insulator color & the spiral markings on the inner jacket (gray).

Unit no.	1	2	3	4	5	6	7	8	9	10	11	12
Insulator color	RED, WHT	BLU, WHT	YEL, WHT	GRN, WHT	BRN, WHT	GRY, WHT	BLU, BLK	YEL, BLK	GRN, BLK	BRN, BLK	GRY, BLK	BLU, ORG
Spiral markings	RED	BLU	YEL	GRN	BRN	-	BLU, BLK	YEL, BLK	GRN, BLK	BRN, BLK	BLK	BLU, ORG

■ Cross-sectional View for DA202F-P & DA203-AL

Single unit config.



Speaker Cables (Single)

Website

Four-conductor configuration minimizes noise and polyethylene insulation reduces induction rate to boost frequency characteristics

■ 4-conductor Speaker Cable

Type	Model	Pair cross-sec.	Sales units	Nom. O.D.	Weight	Composition				Electrical characteristics	
						No. of cond.	Cross sec. area (AWG)	Cond. comp.	Twist pitch	Cond. DCR	Nom. capacitance*
		mm²	m	mm	kg/100m		mm²/(AWG)	Q'ty/mm	mm	Ω/100m	pF/m
 4S8	4S6	1.0	100 200 400	6.4	5.4	4	0.51(20)	20/0.18A	45	3.7	125
	4S8	2.5		8.3	9.5	4	1.27(16)	50/0.18A	70	1.5	145
	4S11	4.3		10.7	16	4	2.18(14)	41/0.26A	100	0.9	146
	4S6G	1.0		6.4	5.4	4	0.51(20)	20/0.18(OFC)	45	3.7	125
	4S8G	2.5		8.3	9.5	4	1.27(16)	50/0.18(OFC)	70	1.5	145
	4S11G	4.3		10.7	16	4	2.18(14)	41/0.26(OFC)	100	0.9	146

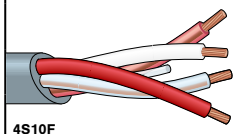
Jacket colors for
4S6: GRY BLK RED BLU WHT
4S8, 4S11, 4S6G: GRY BLK
4S8G, 4S11G: GRY

Insulation: polyethylene (red, translucent red, white, translucent white) Jacket: PVC Dielectric strength: 500V AC/min. *Capacitance between conductors.

4S6, 4S8, 4S11
- High-performance PVC jacket, resistant to bending and twisting.
- 4S6 designed to fit snugly with Cannon XLR.

4S6G, 4S8G, 4S11G
- The G versions feature oxygen-free copper (OFC, JIS H3510) conductors.

■ 4-conductor Speaker Cable for Fixed Installation

Type	Model	Pair cross-sec.	Sales units	Nom. O.D.	Weight	Composition				Electrical characteristics	
						No. of cond.	Cross sec. area (AWG)	Cond. comp.	Twist pitch	Cond. DCR	Nom. capacitance*
		mm²	m	mm	kg/100m		mm²/(AWG)	Q'ty/mm	mm	Ω/100m	pF/m
 4S10F	4S10F	3.5	100 200 400 1000	9.6	15	4	1.75(15)	33/0.26A	100	1.1	144
	4S12F	5.6		11.6	22	4	2.81(13)	35/0.32A	120	0.7	152
	4S14F	8.0		14.0	32	4	4.02(12)	50/0.32A	120	0.5	—
	4S18F	14.2		17.5	53	4	7.08(9)	88/0.32A	150	0.3	—
	4S10FG	3.5		9.6	15	4	1.75(15)	33/0.26(OFC)	100	1.1	144
	4S12FG	5.6		11.6	22	4	2.8(13)	35/0.32(OFC)	120	0.7	152

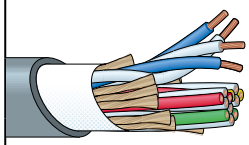
Jacket colors for
4S10F, 4S12F, 4S14F, 4S18F: GRY BLK
4S10FG, 4S12FG: GRY

Insulation: polyethylene (red, translucent red, white, translucent white) Jacket: PVC Dielectric strength: 500V AC/min. *Capacitance between conductors.

4S10F, 4S12F, 4S14F, 4S18F
- Special supple jacket designed for use in building conduits.

4S10FG, 4S12FG
- The G versions feature oxygen-free copper (OFC, JIS H3510) conductors.

Multichannel Speaker Cables

Type	Model	Pair cross-sec.	Sales units	Nom. O.D.	Weight	Unit composition				Electrical characteristics	
						No. of cond.	Cross sec. area (AWG) and cond. comp.	Twist pitch	Ch. O.D.	Cond. DCR	Nom. capacitance*
		mm²	m	mm	kg/100m		mm²/(AWG) Q'ty/mm	mm	mm	Ω/100m	pF/m
 S410-4P Jacket color: GRY	S410-4P	2.0	100 200 500	15.0	26	16	1.0(18) 127/0.10(OFC)	50	5.1	1.9	165
	S410-6P	2.0		18.3	39	24					
	S410-8P	2.0		21.6	53	32					

Insulation: Polyethylene Jacket: PVC Dielectric strength: 500V AC/min. *Capacitance between conductors.

S410-P Series
- Low crosstalk performance
- Ideal for use in multi-way speaker systems.
- Oxygen-free copper (OFC, JIS H3510) conductors.

Website

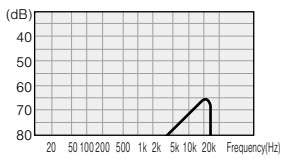
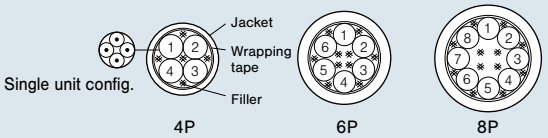


Fig. 1 Crosstalk Characteristics for S410-4P

■ Cross-sectional View of S410-4P and Channel color coding



Unit no.	1	2	3	4	5	6	7	8
Insulation color	RED/WHT/ RED/WHT	BLU/WHT/ BLU/WHT	YEL/WHT/ YEL/WHT	GRN/WHT/ GRN/WHT	BRN/WHE/ BRN/WHT	GRY/WHT/ GRY/WHT	BLU/BLK/ BLU/BLK	YEL/BLK/ YEL/BLK

2-conductor Speaker Cable

Type	Model	Sales units	Nom. O.D.	Weight	Composition				Electrical characteristics	
					No. of cond.	Cross sec. area (AWG)	Cond. comp.	Twist pitch	Cond. DCR	Nom. capacitance*
		m	mm	kg/100m		mm²/(AWG)	Q'ty/mm	mm	Ω/100m	pF/m
 2S11F	2S7F	100 200 400	6.8	5.2	2	1.27 (16)	50/0.18A	50	1.5	56
	2S9F		8.9	8.7	2	2.18 (14)	41/0.26A	60	0.9	56
	2S11F		11.1	14	2	3.62 (12)	45/0.32A	80	0.5	55
	2S14F		13.8	21	2	5.63 (10)	70/0.32A	90	0.3	55
	2S7FG		6.8	5.2	2	1.27 (16)	50/0.18(OFC)	50	1.5	56
	2S9FG		8.9	8.7	2	2.18 (14)	41/0.26(OFC)	60	0.9	56
	2S11FG		11.1	14	2	3.62 (12)	45/0.32(OFC)	80	0.5	55
Jacket colors: GRY BLK	2S14FG		13.8	21	2	5.63 (10)	70/0.32(OFC)	90	0.3	55

Insulation: polyethylene (orange, white) Jacket: PVC Dielectric strength: 500V AC/min. *Capacitance between conductors.

2S7F, 2S9F, 2S11F, 2S14F

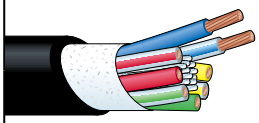
- Special supple jacket designed for use in building conduits.

2S7FG, 2S9FG, 2S11FG, 2S14FG

- The G versions feature oxygen-free copper (OFC, JIS H3510) conductors.

Website

Multicore Speaker Cable

Type	Model	Sales units	Nom. O.D.	Weight	Composition			Electrical characteristics	
					No. of cond.	Cross sec. area and cond. comp.	Cond. O. D.	Cond. DCR	Nom. capacitance*
		m	mm	kg/100m		mm²/(AWG) Q'ty/mm	mm	Ω/100m	pF/m
 Jacket color: BLK	8S15G	100	14.9	33.0	8	2.49 (14) 98/0.18 (OFC)	3.26	0.7	51

Insulation: polyethylene Jacket: PVC Dielectric strength: 500V AC/min. *Capacitance between adjacent conductors.

8S15G

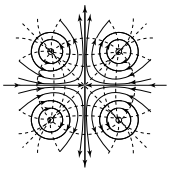
- Eight-core speaker cable ideally suited for use with Neutrik speaKON NL8 and a line array speaker.
- Oxygen-free copper (OFC, JIS H3510) conductors.

Website

Technical Note

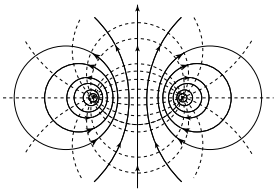
Four-conductor Configuration Minimizes Noise

Speaker cable must accommodate relatively high signal levels, typically tens to hundreds of watts of RMS power. Electromagnetic interference (EMI) can radiate from these speaker lines directly into adjacent low voltage cables (i.e. microphone, video, lines, etc.). Canare solves this problem by using a 4-conductor "Star Quad" configuration in all of our 4S-series speaker cables. Because every conductor is located the same distance from center, the opposing magnetic fields are cancelled out. Attenuation of magnetic field radiation is superior when compared to a standard 2-conductor speaker wire.



Size of magnetic field attenuates by $\frac{1}{\sqrt{3}}$. (γ: distance from point of intersection of 4 diagonal lines from 4 center conductors.)

Four-conductor cable



Size of magnetic field attenuates by $\frac{1}{\sqrt{2}}$ (γ: distance from point of center line for 2 conductors.)

Two-conductor cable

Selecting the Right Speaker Cable

Always try to keep speaker cables as short as possible and select cable models that offer a higher damping factor; 20-50 for music (i.e. connect sound) and 10-20 for speech (i.e. sport stadiums).
The greater the damping factor (DF), the better the ability to control speaker excursion to create sharp, clear quality in the low end frequency range.

$$\text{damping factor} = \frac{\text{speaker impedance}}{\text{power amp. output impedance} + \text{cable cond. resist. for total loop}}$$

As the above formula shows, a higher conductor resistance causes a lower damping factor, which prevents even top quality power amps from performing at peak optimum levels.

Speaker Cable Length obtained from the Damping Factor (reference)

Model	Cross-sec. Area	Cond. Resist.	Cond. Resist. for Total Loop	Cable Length (m)	
	mm²/AWG	Ω/100m	Ω/m	DF = 20	DF = 50
4S6(G)	1.02/17 (pair)	1.85	0.037	9.5	3.0
4S8(G)	2.52/14 (pair)	0.75	0.015	23.3	7.3
4S11(G)	4.36/11 (pair)	0.45	0.009	38.9	12.2
4S10F(G)	3.50/15 (pair)	0.55	0.011	31.8	10.0
4S12F(G)	5.62/13 (pair)	0.35	0.007	50.0	15.7
4S14F(G)	8.00/12 (pair)	0.25	0.005	70.0	22.0
4S18F(G)	14.16/9 (pair)	0.15	0.003	116.7	36.7
S410-*P	2.00/18 (pair)	0.95	0.019	18.4	5.8
2S7F(G)	1.27/16	1.5	0.030	11.7	3.7
2S9F(G)	2.18/14	0.9	0.018	19.4	6.1
2S11F(G)	3.62/12	0.5	0.010	35.0	11.0
2S14F(G)	5.63/10	0.3	0.006	58.3	18.3
8S15G	2.49/14	0.7	0.014	25.0	7.9

Conditions: Speaker impedance = 8 Ω, Power amplifier output impedance = 0.05 Ω

Cables

OFC Line, A/V Composite Cables

OFC Line Cables

Type	Model	Sales units	Nom. O.D.	Weight	Inner cond.		Insulation	Outer conductors	Electrical characteristics		
					Cross sec. area (AWG) and cond. comp.	Nom. O.D.	Nom. O.D.	Shield construction and coverage	Chan. DCR	Shield. DCR	Nom. cap.*
		m	mm	kg/100m	mm²/(AWG) Q'ty/mm	mm	mm	mm/ends/carriers	Ω/100m	Ω/100m	pF/m
 GS-6 Jacket colors for GS-4: BLK GS-6: BLK RED ORN YEL GRN BLU	GS-4	200	4.0	2.7	0.39(22) 50/0.1(OFC)	0.82	1.82	Carbon plastic shield + 0.1 (OFC)/6/16 93%	4.7	3.1	—
	GS-6	100 200	5.8	5.0	1.0(18) 127/0.1(OFC)	1.3	3.0	Carbon plastic shield + 0.1 (OFC)/8/16 92%	1.8	2.5	160

Insulation: polyethylene Jacket: PVC Dielectric strength: 500V AC/min. *Capacitance between conductor to shield.

GS-4, GS-6

- Outer conductor of fine 0.1 mmϕ OFC strands provide a highly flexible braided configuration. (See photographs A and B)

- Center conductor with 127 fine 0.1 mmϕ strands (50 for GS-4) increases durability.

Note:
The GS-4 and GS-6 have a layer of carbon plastic shield underneath the braided shield (see Fig. 1) to block out noise. Shorting will result if this shield contacts the center conductor line, so special care must be taken when connecting the cable.

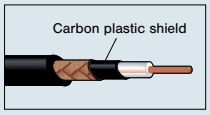


Fig. 1

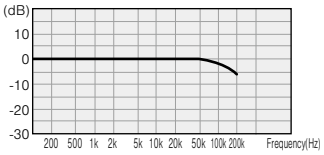
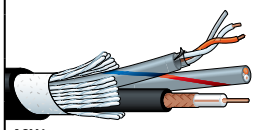


Fig. 2 Frequency Characteristics for GS-6 (100m, 100Ω ⟶ 1MΩ load)

Website

A/V Composite Cables

Used for linking audio video equipment and as extensions for video cameras.

Type		Model	Sales units	Nom. O.D.	Weight	Unit type V: Video A: Audio C: Control line		Unit composition			Electrical characteristics	
								Cross sec. area Conductor comp.	Shield coverage	Unit O.D.	Characteristic impedance	Attenuation
			m	mm	kg/100m			mm²/(AWG) Q'ty/mm	%	mm	Ω	dB/100m (10 MHz)
 A2V1		A2V1	100 200	9.7	11	V	Video 3C-2V × 1	0.20(25) 1/0.5A	97% (braid)	4.4	75	4.1
						A	Audio L-2B2AT × 2	Refer to L-2B2AT	Alminum foil shield	3.2	—	—
		A2V2-L		11.0	16	V	Video 3C-2V × 2	0.20(25) 1/0.5A	97% (braid)	4.4	75	4.1
						A	Audio L-2B2AT × 2	Refer to L-2B2AT	Alminum foil shield	3.2	—	—
						C	Control lines 0.2mm² × 4	0.20(24) 18/0.12A	—	1.3	—	—
		A2V1B		11.1	13	V	Video 3C-2VS × 1	0.18(25) 7/0.18A	97% (braid)	4.4	75	4.5
						A	Audio 4E3 Unit × 2	0.08(28) 7/0.12A	93% (braid)	3.4	—	—
		A2V2B		12.3	17	V	Video 3C-2VS × 2	0.18(25) 7/0.18A	97% (braid)	4.4	75	4.5
						A	Audio 4E3 Unit × 2	0.08(28) 7/0.12A	93% (braid)	3.4	—	—
Jacket color: BLK		A3V2-FB		12.4	17	V	Video 3CFB Unit × 2	0.33(22) 1/0.65A	91% (braid) + Alminum foil	4.4	75	3.7
						A	Audio L-2B2AT × 3	Refer to L-2B2AT	Alminum foil shield	3.2	—	—

Jacket: PVC Dielectric strength: 500V AC/min.

A2V1, A2V2-L

- Designed for fixed installation.

A2V1B, A2V2B

- Ideal for locations requiring cable bending.

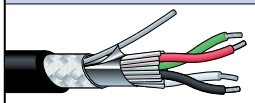
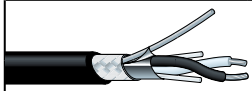
A3V2-FB

- 3 balanced audio channels and 2 video coax channels for ENG, EFP, or OB applications.

Website

DMX Cables

Designed for DMX 512 : commonly used to stage lighting control.

Type	Model	Sales units	Nom. O.D.	Weight	No. of cond.	Conductors		Shield		Cond. DCR	Character-istic impedance
						Cross sec. area (AWG) and cond. comp.	Twist pitch	Foil	Braid comp. (coverage)		
		m	mm	kg/100m		mm²/(AWG) Q'ty/mm	mm		mm/ends/ carries	Ω/100m	Ω
 Jacket colors : BLK GRY WHT	**DMX203-2P**	100 200 500	7.9	7.9	4 (2 pair)	0.35(22) 44/0.10TA	25	AL	0.10TA/10/24 (94%)	5.9	110
 Jacket color : BLK WHT	**DMX203**	100 200	6.0	5.0	2 (1 pair)	0.35 (22) 44/0.10TA	45	AL	0.10TA/10/24 (94%)	5.8	110
 Jacket color : BLK WHT	**DMX403**	100 200	6.5	6.2	4 (quad)	0.35 (22) 44/0.10TA	50	AL	0.10TA/10/24 (94%)	5.8	110

Insulation : Cross-linked PE Jacket : Frame retardant PVC Dielectric strength : 500V AC/min.

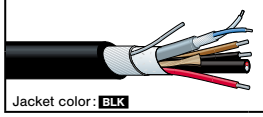
DMX203-2P
- Standard DMX cable
- PE filler rods ensure consistent 110Ω impedance

DMX203
- Single-pair cable suitable for RDM (Remote Device Management) bidirectional communication.
- PE filler rods ensure consistent 110Ω impedance

DMX403
- Slim profile 4-conductor cable
- Can be easily inserted into Neutrik NC5 connector.
- More flexible than DMX203-2P

Website

RS422 Cables

Type	Cross-section view	Model	Sales units	Nom. O.D.	Weight	Unit type		Unit composition			Overall Shield coverage	Conductor resistance	Characteristic impedance
								Cross sec. area (AWG) and cond. comp.	Shield coverage	Unit O.D.			
			m	mm	kg/100m			mm²/(AWG) Q'ty/mm	%	mm	%	Ω/100m	Ω
 Jacket color : BLK		**A2C3**	100 200 500	6.5	5.5	A	Digital lines two conductor shielded × 2	0.09(28) 7/0.127TA	90% Spiral shield	2.5	—	25.3	110
						C	Control lines 0.2mm² × 3	0.22(24) 11/0.16TA	—	1.24		9.0	—
 Jacket color : BLK		**A2C3-SS**		7.0	7.2	A	Digital lines two conductor shielded × 2	0.09(28) 7/0.127TA	90% Spiral shield	2.5	91% Spiral shield	25.3	110
						C	Control lines 0.2mm² × 3	0.22(24) 11/0.16TA	—	1.24		9.0	—

Insulation : Cross-linked foam PE Jacket : Frame retardant PVC Dielectric strength : 500V AC/min.

A2C3
- Short distance version of the RS422 class cables.
- Irradiated foam core PE used for the insulation in the digital signal unit.

A2C3-SS
- Created by adding an overall spiral shield to the A2C3 to heighten shielding performance.

Website

Ethernet Cables

Website

Experience unrivaled quality and stability with Canare ethernet cables. Engineered for AV over IP, our cables ensure professional connectivity for all your IP applications, whether you're on live productions, broadcast IP cabling, or any networking installations.

■ Mobile PoE PoE+ PoE++

Type	Model	Shield type	Sales units	Nom. O.D.	Weight	Conductors		Imped-ance	Insertion loss		
						Cross sec. area & composition	DCR		100 MHz	250 MHz	500 MHz
			m	mm	kg/100m	mm²/(AWG) Q'ty/mm	Ω/100m	Ω	dB/100m	dB/100m	dB/100m
 Jacket color: BLK	RJC6A-4P-SFM Cat 6A	Overall AL foil and braid (SF/UTP)	100 200	8.6	8.9	0.26 (23) 1/0.57A	8.2	100	19.1	31.1	45.3
 Jacket color: BLK	RJC5E-4P-WJ Cat 5e	N/A (U/UTP)	100 200	7.4	5.4	0.22 (24) 1/0.53A	8.8	100	22.0	—	—
 Jacket color: BLK	RJC5ES-4P-BS Cat 5e	Overall braid (S/UTP)	100 200	6.7	6.1	0.22 (24) 7/0.20A	9.5	100	44.0	—	—

Insulation: polyethylene Jacket: PVC Dielectric strength: 700V AC/min

RJC6A-4P-SFM
- Flexible and rugged SF/UTP Cat6A cable
- 10GbE 10GBASE-T network
- Maximum distance to 100 meters
- Aluminum foil + braided shielding

RJC5E-4P-WJ
- Durable U/UTP Cat5e cable
- 1GbE 1000BASE-T network
- Maximum distance to 100 meters
- Double PVC jacket

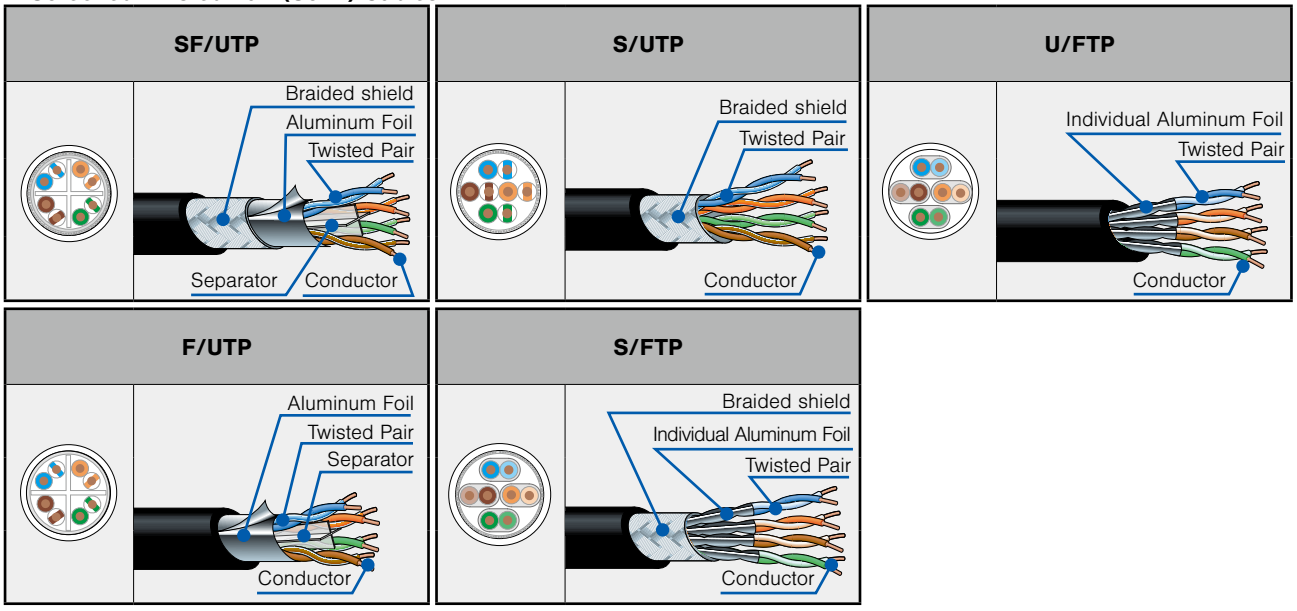
RJC5ES-4P-BS
- Flexible S/UTP Cat5e cable
- 1GbE 1000BASE-T network
- Maximum distance to 50 meters
- Stranded conductors
- Braided shielding

Technical Note

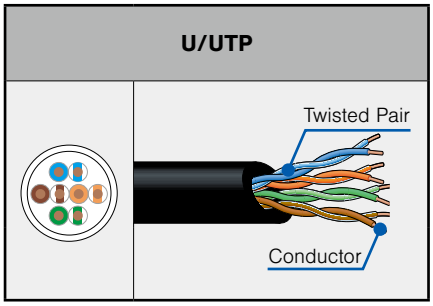
Ethernet Cable Guide

Growing market demand of higher data rates, ethernet cables are adding several different types. The following is a quote from ISO/IEC standard for LAN cables.

■ Screened Twisted Pair (ScTP) Cables



■ Unscreened Twisted Pair (UTP) cable



ISO/IEC 11801 (JIS X 5150)

S F / U TP

Overall Construction

U	Unscreened
F	Foil Screened
S	Braid Screened
SF	Braid & Foil Screened

Pair or Quad

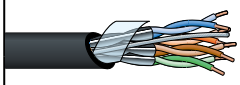
TP	Twisted Pair
TQ	Twisted Quad

Element

U	Unscreened
F	Foil Screened

Note: "Screen" in the standard, Canare refers to "Shield" and "Sheath" refers to "Jacket".

■ General PoE PoE+ PoE++

Type	Model	Shield type	Sales units	Nom. O.D.	Weight	Conductors		Imped-ance	Insertion loss		
						Cross sec. area & composition	DCR		100 MHz	250 MHz	500 MHz
			m	mm	kg/100m	mm²/(AWG) Q'ty/mm	Ω/100m	Ω	dB/100m	dB/100m	dB/100m
 Jacket colors: BLK WHT	RJC6A-F4PH Cat 6A HDBT³ Recommended	Individual aluminum foil (U/FTP)	200	7.6	5.5	0.27(23) 1/0.59A	9.4	100	19.1	31.1	45.3
 Jacket colors: BLK	New RJC6A-4P-FA Cat 6A HDBT™ Recommended	Overall aluminum foil (F/UTP)	100 200	7.4	5.3	0.24 (23) 1/0.55A	9.4	100	19.1	31.1	45.3
 Jacket colors: BLK LB	RJC6-4P-F Cat 6	Overall aluminum foil (F/UTP)	100 200	7.0	5.0	0.23 (24) 1/0.54A	9.4	100	19.8	32.8	—
 Jacket color: BLK	RJC6-4P+ Cat 6	N/A (U/UTP)	305	6.0	3.8	0.24 (23) 1/0.55A	9.4	100	19.8	32.8	—
 Jacket color: LB	RJC5E-4P+ Cat 5e	N/A (U/UTP)	305	5.0	3.0	0.20 (24) 1/0.50A	9.4	100	22.0	—	—

Insulation: polyethylene Jacket: PVC Dielectric strength: 700V AC/min.

RJC6-F4PH
- HDBaseT3.0 Premium certified
- U/FTP Cat6A cable
- 10GbE 10GBASE-T network
- Maximum distance to 100 meters

RJC6A-4P-FA
- HDBaseT certified
- F/UTP Cat6A cable
- 10GbE 10GBASE-T network
- Maximum distance to 100 meters

RJC6-4P-F
- High quality F/UTP Cat6 cable
- 1GbE 1000BASE-T network
- Maximum distance to 100 meters

RJC6-4P+, RJC5E-4P+
- High quality U/UTP cable
- Budget friendly solution
- 305m (1000ft) in pull box
- UL rated

RJ45 Modular Plug

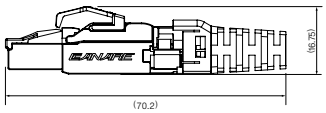
■ IDC Style Tool Less PoE PoE+ PoE++

Model	Suitable Cable	Standards
RJSP-6AFT	RJC6A-F4PH (Other suitable LAN cables specified below.)	ANSI/TIA-568-C.2 Cat6A, ISO 11801, ANSI/TIA-1096-A, IEC 60603-7

*Standard package (1 pc)

- Field termination ready
- Removable latch button reduces height by 25%
- IDC (Insulation Displacement Connection): Terminals cut into the wire for a secure, tool-free setup.

***Acceptable cables: O.D. 6.0 to 7.7mm, Insulator 0.8 to 1.47mm, 26AWG to 23AWG (Stranded / Solid)**



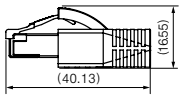
RJSP-6AFT

■ IPC Style PoE PoE+ PoE++

Model	Suitable Cable	Standards	Tool
RJSP-6A New	RJC6A-4P-FA	ANSI/TIA-568-C.2 Cat6A, ISO 11801, ANSI/TIA-1096-A, IEC 60603-7	TC-RJ1

*Standard package (50pc)

- Cost-effective alternative to the RJSP-6AFT
- Requires dedicated assembly tool (TC-RJ1)
- Superior Shielding: Unique internal sled for noise resistance
- IPC (Insulation Piercing Connection): Points pierce the insulation, optimized for compact, crimp-style plugs.



RJSP-6A

■ Accessory

Model	Description
RJSP-FTLB	Replacement Latch Button for RJSP-6AFT, Black
TC-RJ1 New	Dedicated crimping tool for RJSP-6A
RJP-PC New	Cable protection caps; compatible with O.D. 6.0–7.6 mm

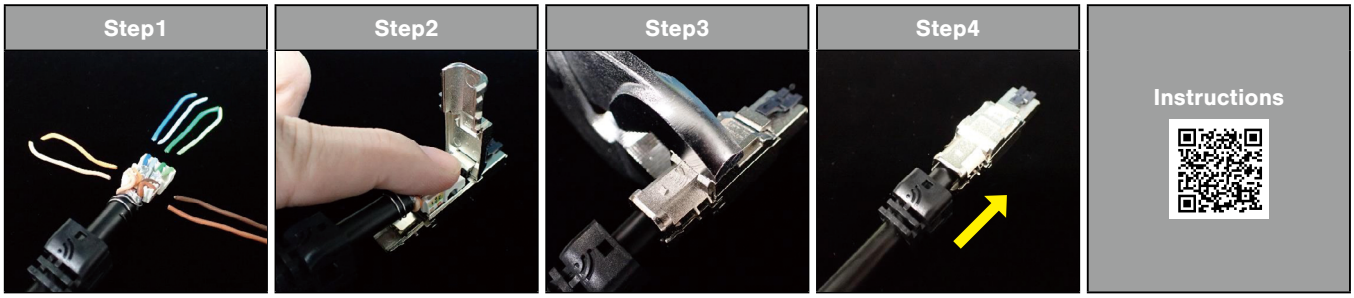
RJSP-FTLB

TC-RJ1

RJP-PC

■ Simplified Assembly Guide

*See "Instructions" for details.

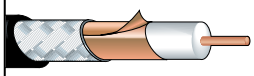


75Ω Coaxial Cables

Website

Analog to digital. HD to UHD. Canare 75Ω coaxial cable series expands the range of choices for any kind of video formats.

■ Ultra Coax 12G-SDI

Type	Model	Sales units	Nom. O.D.	Weight	Inner cond. Comp.	Inner cond. O.D.	Insulation O.D.	Outer conductors Foil	Outer conductors Braid comp. (coverage)	Inner cond. resist.	Outer cond. resist.	Static capacity	Charac-teristic impedance	Attenua-tion	NVP
		m	mm	kg/100m	(AWG) Q'ty/mm	mm	mm		mm/ends/ carriers	Ω/km	Ω/km	pF/m	Ω	dB/100m (6 GHz)	%
	L-3.3CUHD	100 200	5.5	4.1	(21) 1/0.75A	0.75	3.3	Cu	0.12TA/8/16 (92%)	41.4	14.9	55	75	68.5	82
	L-5.5CUHD	100 200 500 1000	7.7	7.1	(16) 1/1.35A	1.35	5.55	Cu	0.12TA/8/24 (91%)	12.8	10.3	52	75	39.5	86
Jacket colors: BLK and others	L-8CUHD	100 200 500 1000	11.1	14.1	(13) 1/2.00A	2.00	8.26	Cu	0.16TA/8/24 (90%)	5.8	6.3	52	75	28.5	86

Jacket: PVC Dielectric strength: 1000V AC/min.

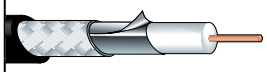
L-CUHD Series

- Specially designed for 12G-SDI
- The max. transmission distance of 4K UHD over L-5.5CUHD single link able to reach 100 m or longer*.
  *Depending on receiving equipment.
- As handy as conventional coaxial cables.
- Copper foil and high-density tinned copper braided shielding.
- Highly-foamed multi-layer PE insulation

Note 1: Designed for fixed installation, please avoid repeated bending or external pressure.
Note 2: Cable strippers (TS100 series) cannot be used for L-5.5CUHD and L-8CUHD.

Website

■ Super Coax

Type	Model	Sales units	Nom. O.D.	Weight	Inner cond. Comp.	Inner cond. O.D.	Insulation O.D.	Outer conductors Foil	Outer conductors Braid comp. (coverage)	Inner cond. resist.	Outer cond. resist.	Static capacity	Charac-teristic impedance	Attenua-tion	NVP
		m	mm	kg/100m	(AWG) Q'ty/mm	mm	mm		mm/ends/ carriers	Ω/km	Ω/km	pF/m	Ω	dB/100m (1.5 GHz)	%
	12G-SDI L-2.5CHD	100 200	4.2	2.6	(23) 1/0.59A	0.59	2.59	AL	0.12TA/7/16 (95%)	66.9	16.9	55	75	91.7 (6 GHz)	82
	L-4CHD		6.1	5.2	(20) 1/0.82A	0.82	3.68	AL	0.14TA/8/16 (95%)	36.4	11.4	53	75	30.6	82
	12G-SDI L-4.5CHD		7.0	6.2	(18) 1/1.02A	1.02	4.58	AL	0.14TA/6/24 (91%)	23.3	9.9	55	75	53.6 (6 GHz)	81
	L-5CHD		7.7	7.4	(17) 1/1.20A	1.20	4.9	AL	0.14TA/7/24 (93%)	16.1	8.2	53	75	22.5	85
	L-6CHD		8.9	9.0	(16) 1/1.40A	1.40	6.1	AL	0.14TA/8/24 (92%)	11.8	7.7	53	75	19.0	83
	L-7CHD		10.2	13.0	(14) 1/1.80A	1.80	7.3	AL	0.16TA/8/24 (92%)	7.1	6.1	53	75	15.9	84
Jacket colors: BLK and others	L-8CHD		11.1	13.5	(12) 1/2.00A	2.00	8.2	AL	0.16TA/8/24 (89%)	5.8	6.3	53	75	14.1	84
 Jacket colors: BLK and others	L-2.5CHLT	100 200	4.2	1.8	(23) 1/0.59A	0.59	2.59	AL	0.14TCCA/6/16 (95%)	66.9	21.5	53	75	43.1	82

Jacket: PVC Dielectric strength: 1000V AC/min.

L-CHD Series

- Best suited to 3G-SDI/HD-SDI transmission.
- Highly-foamed PE insulation allows further improvement in the attenuation characteristics.
- Multi-layer insulation in which to each layer is given a different foaming ratio is used to increase strength.
- High-density tinned copper braided shield with aluminum foil brings excellent shielding.
- Solid conductor

L-2.5CHLT

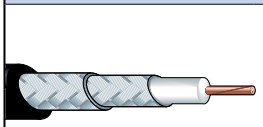
- Ideal for an O.B. van installation.
- Tinned copper-clad aluminum (CCA) braided shield brings an advantage in weight-saving.
- 30% lighter than L-2.5CHD, yet the same attenuation.
- Space-saving slim design: O.D. 4.2 mm
- High-density braided shield with aluminum foil
- Highly-foamed PE insulation
- Solid conductor

L-2.5CHD and L-4.5CHD 12G-SDI

- Sweep test up to 12GHz
- 12G-SDI solution with Canare Micro BNC

Note 1: Designed for fixed installation, please avoid repeated bending or external pressure.
Note 2: L-2.5CHLT has less connection strength with the connector BCP-B25HD compared with L-2.5CHD.
Note 3: Availability for Cable Stripper TS100 Series:
OK: L-2.5CHD and L-2.5CHLT, N/A: others

■ Mobile Coax

Type	Model	Sales units	Nom. O.D.	Weight	Inner cond.		Insulation	Outer conductors	Inner cond. resist.	Outer cond. resist.	Static capacity	Charac-teristic impedance	Attenua-tion	NVP
					Comp.	O.D.	O.D.	Braid comp. (coverage)						
		m	mm	kg/100m	(AWG) Q'ty/mm	mm	mm	mm/ends/ carriers	Ω/100m	Ω/100m	pF/m	Ω	dB/100m (1.5 GHz)	%
 Jacket colors: BLK and others	12G-SDI L-3.3CUHWS	100 200	5.8	4.8	(22) 7/0.26A	0.78	3.30	0.10TA/6/24 (92%) 0.10TA/7/24 (92%)	5.0	0.9	57	75	98.7 (6 GHz)	80
	12G-SDI L-5.5CUHWS	100 200 300	8.1	8.7	(16) 7/ Compact strand	1.30	5.56	0.10TA/9/24 (93%) 0.10TA/9/24 (90%)	1.4	0.8	54	75	57.0 (6 GHz)	82.5
 Jacket colors: BLK and others	L-2.5CHWS	100 200	4.2	3.2	(24) 7/0.20A	0.6	2.6	0.10TA/8/16 (95%) 0.10TA/9/16 (94%)	8.5	1.0	53	75	54.7	81
 Jacket colors: BLK and others	L-4.5CHWS	100 200	7.2	6.6	(20) 7/0.34A	1.02	4.57	0.10A/8/24 (93%) 0.10A/9/24 (95%)	3.3	0.8	53	75	33.3	79.5
 Jacket colors: BLK and others	L-3CFW	100 200 1000	5.8	5.1	(22) 1/0.65A	0.65	3.1	0.12A/5/24 (94%) 0.12A/6/24 (94%)	5.5	0.7	55	75	49.4	79
	L-5CFW		7.7	8.1	(18) 1/1.05A	1.05	5.0	0.12A/7/24 (93%) 0.12A/9/24 (96%)	2.1	0.5	55	75	28.4	79

Jacket: PVC Dielectric strength: 1000V AC/min.

Website

L-CUHWS Series 12G-SDI

- Specially designed for 12G-SDI mobile applications
- Flexible and low loss structure
- Highly-foamed PE insulation
- High-density double braided shield

Note: L-CUHWS series is specially designed as a cable for mobile use. Refer to "Typical Transmission Distance as per SMPTE Standard" on page66 for the length of the cable to be used.

L-CHWS Series

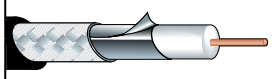
- Designed for mobile applications
- Flexible stranded center conductor
- Highly-foamed PE insulation
- High-density double braided shield

Note: Cable strippers (TS100 series) cannot be used for Mobile Coax.

L-CFW Series

- Designed for mobile applications
- Solid center conductor
- Foamed PE insulation
- High-density double braided shield

■ Low Loss Coax

Type	Model	Sales units	Nom. O.D.	Weight	Inner cond.		Insulation	Outer conductors		Inner cond. resist.	Outer cond. resist.	Static capacity	Charac-teristic impedance	Attenua-tion	NVP
					Comp.	O.D.	O.D.	Foil	Braid comp. (coverage)						
		m	mm	kg/100m	(AWG) Q'ty/mm	mm	mm		mm/ends/ carriers	Ω/100m	Ω/100m	pF/m	Ω	dB/100m (750 MHz)	%
 Jacket colors for L-2.5CFB: BLK L-3CFB: BLK and others L-4CFB: BLK and others L-5CFB: BLK and others L-7CFB: BLK	L-2.5CFB	100 200	4.0	2.4	(25) 1/0.50A	0.50	2.4	AL	0.12TA/6/16 (92%)	9.3	2.0	55	75	37.0	79
	L-3CFB		5.5	4.0	(22) 1/0.65A	0.65	3.1	AL	0.14TA/6/16 (91%)	5.5	1.6	55	75	29.1	79
	L-4CFB		6.1	4.9	(20) 1/0.80A	0.80	3.7	AL	0.14TA/8/16 (93%)	3.6	1.1	55	75	23.6	79
	L-5CFB		7.7	7.3	(18) 1/1.05A	1.05	5.0	AL	0.14TA/7/24 (93%)	2.1	0.8	55	75	17.7	79
	L-7CFB		10.2	13.0	(15) 1/1.50A	1.50	7.3	AL	0.18TA/8/24 (95%)	1.0	0.5	55	75	13.4	79

Jacket: PVC Dielectric strength: 1000V AC/min. **Note:** Designed for fixed installation, please avoid repeated bending or external pressure.

Website

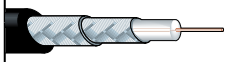
L-CFB Series

- Suited to HD video signals
- High-density tinned copper braided shield with aluminum foil
- Solid center conductor
- Foamed PE insulation

Cables

75Ω Coaxial Cables

■ Standard Coax (Solid PE Insulation)

Type	Model	Sales units	Nom. O.D.	Weight	Inner cond.		Insulation	Outer conductors	Inner cond. resist.	Outer cond. resist.	Static capacity	Charac-teristic impedance	Atten-uation	NVP
					Comp.	O.D.	O.D.	Braid composition (coverage)						
		m	mm	kg/100m	(AWG) Q'ty/mm	mm	mm	mm/ends/carriers	Ω/100m	Ω/100m	pF/m	Ω	dB/100m (10 MHz)	%
 L-3C2VS Jacket colors: BLK and others	L-1.5C2VS	200	2.9	1.3	(31) 7/0.09A	0.27	1.6	0.10A/5/16 (94%)	41.9	3.3	69	75	8.7	66
	L-3C2VS	100 200	5.5	4.5	(25) 7/0.18A	0.54	3.1	0.12A/7/16 (94%)	10.5	1.9	67	75	4.5	66
	LV-61S	153	6.1	5.0	(24) 7/0.20A	0.60	3.6	0.12A/6/24 (95%)	8.5	1.3	67	75	3.8	66
	L-5C2VS	100 200	7.4	6.8	(22) 7/0.26A	0.78	4.8	0.12A/7/24 (93%)	5.0	1.2	67	75	2.9	66
 L-3C2V Jacket colors: BLK and others	L-2.5C2V	100 200	4.0	2.4	(26) 1/0.40A	0.40	2.4	0.12TA/6/16 (94%)	19.2	2.1	69	75	5.2	66
	L-3C2V		5.4	4.3	(25) 1/0.50A	0.50	3.1	0.14TA/5/24 (97%)	9.3	1.2	67	75	4.1	66
	L-5C2V		7.4	7.2	(20) 1/0.80A	0.80	4.9	0.14TA/7/24 (94%)	3.6	0.8	67	75	2.5	66
 L-3C2W Jacket color: BLK	L-3C2W	100 200	6.5	7.0	(25) 1/0.50A	0.50	3.1	0.14TA/5/24 (97%) 0.14TA/5/24 (93%)	9.3	0.6	67	75	4.1	66
	L-5C2W		8.3	11.0	(20) 1/0.80A	0.80	4.9	0.14TA/7/24 (94%) 0.14TA/7/24 (95%)	3.6	0.4	67	75	2.5	66
	LV-77S	153	7.7	9.0	(22) 7/0.26A	0.78	4.8	0.12A/7/24 (92%) 0.12A/8/24 (95%)	5.0	0.6	67	75	3.4	66

Jacket: PVC Dielectric strength: 1000V AC/min.

Website

L-1.5C2VS, L-3C2VS, L-5C2VS, LV-61S

- Ideal for locations requiring cable bending.
- Flexible stranded center conductor
- High-density braided shield
- LV-61S is equivalent to RG-59B/U

L-2.5C2V, L-3C2V, L-5C2V

- Solid center conductor
- High-density tinned copper braided shield

L-3C2W, L-5C2W

- Solid center conductor
- High-density tinned copper double braided shield

LV-77S

- Ideal for locations requiring cable bending.
- Flexible stranded center conductor
- High-density double braided shield

Note: Cable strippers (TS100 series) cannot be used for L-1.5C2VS, L-3C2W, L-5C2W and LV-77S

Analog HD Coax

Type	Model	Sales units	Nom. O.D.	Weight	Inner cond.		Insulation	Outer conductors		Inner cond. resist.	Outer cond. resist.	Static capacity	Charac-teristic impedance	Atten-uation	NVP
					Comp.	O.D.	O.D.	Foil	Braid composition (coverage)						
		m	mm	kg/100m	(AWG) Q'ty/mm	mm	mm		mm/ends/carriers	Ω/100m	Ω/100m	pF/m	Ω	dB/100m (10 MHz)	%
 Jacket color: BLK	L-3C-AHD	300	5.5	3.0	(21) 1/0.75A	0.75	3.3	AL	0.14AL/4/24 (84%)	4.1	3.7	55	75	2.5	82

Jacket: PVC Dielectric strength: 1000V AC/min.

Website

L-3C-AHD

- Cost effective aluminum alloy braided shield
- Recommended for an analog high definition video surveillance system.
- Fits for AHD, HD-TVI and HD-CVI, and also for HD-SDI or EX-SDI
- Highly-foamed PE insulation for better transmission characteristics
- Packaged in REELEX pull box

Note 1: The aluminum braid cannot be soldered. BNC crimp plug for L-3C-AHD: BCP-A3AHD (see page21)
Note 2: Designed for fix installation

Nominal Attenuation

dB/100m

NTSC D1 7MHz	NTSC WD1 10MHz	AHD 1080/30p 36MHz	HD-TVI 1080/30p 48MHz	EX-SDI 1080/30p 135MHz	270 MHz	HD-SDI 750MHz	3G-SDI 1500MHz
2.0	2.5	4.9	5.7	10.1	14.3	24.2	34.7

75Ω Triaxial Cables

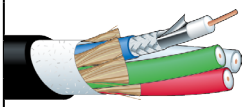
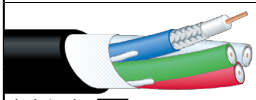
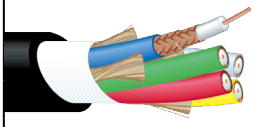
Type	Model	Sales units	Nom. O.D.	Weight	Inner cond.		Insulation 1	Outer cond.1	Insulation 2	Outer cond.2	Electrical characteristics			Charac-teristic impedance	Atten-uation	NVP
					Comp.	O.D.	O.D.	Braid coverage and comp.	O.D.	Braid coverage and comp.	Inner cond. resistance	Outer cond. resistance	Static capacity			
		m	mm	kg/100m	(AWG) Q'ty/mm	mm	mm	mm/ends/ carriers	mm	mm/ends/ carriers	Ω/100m	Ω/100m	pF/m	Ω	dB/100m (10 MHz)	%
 L-5CFTX Jacket colors: BLK RED GRN	L-5CFTX	100 200	8.8	12.0	(19) 1/1.0A	1.0	4.8	0.14A/6/24 (91%)	6.4	0.16A/8/24 (95%)	2.3	—	55	75	2.2	79
	L-4CFTX	100 200	9.1	10.5	(20) 1/0.80A	0.80	3.7	0.14A/7/16 (93%)	5.5	0.14A/7/24 (94%)	3.64	—	55	75	3.0	79
	L-7CFTX	100 200 500	11.0	15.4	(16) 1/1.40A	1.40	6.5	0.14A/8/24 (93%)	8.7	0.14A/8/24 (88%)	1.18	—	55	75	1.7	79

Insulation: 1: foamed PE 2: polyethylene Dielectric strength: 1000V AC/min.

Website

- For digital or analog broadcast camera applications.
- Abrasion-resistance PVC jacket.

75Ω Multichannel Coaxial Cables

Type	Model	No. of ch.	Sales units	Nom. O.D.	Weight	Unit composition						Inner cond. resist.	Outer cond. resist.	Charac-teristic impedance	Attenua-tion	NVP
						Inner cond.		Insulation	Outer conductors		Unit O.D.					
						Comp.	O.D.	O.D.	Foil	Braid comp. (coverage)						
			m	mm	kg/100m	(AWG) Q'ty/mm	mm	mm		mm/ends/ carriers	mm	Ω/100m	Ω/100m	Ω	dB/100m (750 MHz)	%
 V4-*CFB Jacket color: BLK Insulation: Foamed PE	V3-3CFB	3	100 500	11.5	14	(22) 1/0.65A	0.65	3.1	AL	0.14TA/6/16 (91%)	4.4	5.6	1.6	75	29.1	79
	V4-3CFB	4		13.0	19											
	V5-3CFB	5		14.2	23											
	V3-4CFB	3		12.9	18	(20) 1/0.80A	0.80	3.7	AL	0.14TA/8/16 (93%)	5.0	3.6	1.1	75	24.3	79
	V4-4CFB	4		14.4	23											
	V5-4CFB	5		16.1	29											
	V3-5CFB	3		17.1	29	(18) 1/1.05A	1.05	5.0	AL	0.14TA/7/24 (93%)	6.5	2.1	0.8	75	17.7	79
	V4-5CFB	4		18.8	36											
	V5-5CFB	5		21.1	46											
 Jacket color: BLK Insulation: Highly-foamed PE	V4-2.5CHW	4	100 500	13.0	21	(23) 1/0.59A	0.59	2.59	—	0.10TA/8/16 (95%) 0.10TA/9/16 (94%)	4.2	6.7	1.0	75	35.7	81
 V5-*CFW Jacket color: BLK Insulation: Foamed PE	V3-3CFW	3	100 500	13.0	22	(22) 1/0.65A	0.65	3.1	—	0.12A/5/24 (94%) 0.12A/6/24 (94%)	4.9	5.6	0.7	75	33.1	79
	V4-3CFW	4		14.6	28											
	V5-3CFW	5		16.2	34											
	V3-5CFW	3		18.4	36	(18) 1/1.05A	1.05	5.0	—	0.12A/7/24 (93%) 0.12A/9/24 (96%)	7.0	2.1	0.5	75	19.4	79
	V4-5CFW	4		20.4	47											
	V5-5CFW	5		22.4	58											
 V4-*C Jacket color: BLK Insulation: Solid PE	V3-1.5C	3	100 500	7.4	7.3	(31) 7/0.09A	0.27	1.55	—	0.10A/5/16 (94%)	2.6	42.3	3.3	75	—	66
	V4-1.5C	4		8.4	9.4											
	V5-1.5C	5		9.2	11											
	V3-3C	3		11.5	15	(25) 7/0.18A	0.54	3.1	—	0.14A/5/24 (97%)	4.4	10.6	1.1	75	43.2	66
	V4-3C	4		13.0	20											
	V5-3C	5		14.2	24											
	V3-5C	3		15.5	26	(22) 7/0.26A	0.78	4.8	—	0.12A/7/24 (93%)	6.0	5.1	1.2	75	29.2	66
	V4-5C	4		17.1	33											
	V5-5C	5		19.2	39											

Jacket PVC Dieritric strength: 1000V AC/min.

Note: Cable strippers (TS100 series) cannot be used for V-CHW, V-CFW, and V-1.5C.

V-CFB Series

- Low-loss multichannel coax for fixed installations.

V-CHW, V-CFW Series

- Mobile multichannel coax developed for digital video signals.

V-C Series

- Our long selling standard multichannel coax with flexible stranded center conductor.
- Ideal for component video signals.

Website

Cable Cross Section

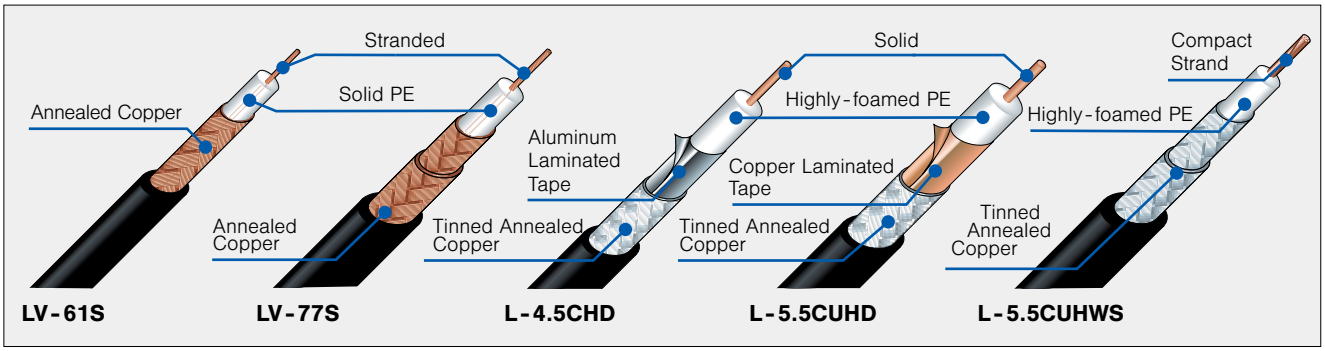
3CH 4CH 5CH

Technical Note

Many types of video coax. What're the differences and how select?

In brief, there are three of essential factors: 1 center conductor, 2 insulation, and 3 shield.
Each factor has its advantage and disadvantage as described below:

1	Center Conductor	Solid conductor	Single solid metal core, low signal loss, ideal for long-distance or high-frequency transmission.
		Stranded conductor	Multiple thin strands twisted together, offers flexibility and resistance to bending, commonly used for patch cords and mobile applications.
		Compact strand conductor	Multiple fine metal wires tightly bundled, denser than regular stranded conductors, which achieving advantages from both solid and stranded. It enhances low signal loss and flexibility, ideal for 12G-SDI mobile applications.
2	Insulation	Includes "Solid", "Foamed", and "Highly-foamed" types. Foamed and highly-foamed insulation would perform better attenuation, compared to the solid type thus they are often selected for hi-def video. However, since foamed and high-foamed insulation contain the air physically, they are weak to external pressure. You should pay attention to where and how the cables are installed.	
3	Shield	We have "Braided" and "Braided with aluminum foil" type. Braided shields include single, double, or triple layers as well as bare copper or tinned copper. Braided with aluminum foil offers perfect screening, but they are not suitable for repeated bending and mobile applications due to the foil's lack of strength. In that case, it's better to choose "Braided".	



What is Propagation Delay?

Propagation delay refers to the time required for a signal to be transmitted from one end of connection to another. In the case of cable transmission, this greatly depends on the materials and construction of the actual cable, and large differences in delay can cause transmission errors if they exceed the receiver delay tolerance.
The following table shows the differences in coaxial cable propagation delay time relative to the insulation type.

Propagation Delay Caused by Coaxial Cable Insulation (reference)

Insulation	Propagation Delay
Solid PE	5.0 ns/m
Foamed PE	4.2 ns/m
Highly-Foamed PE	3.7 ns/m

■ Typical Transmission Distance as per SMPTE Standard

SMPTE	ST 259				ST 344	ST 292	ST 424	ST 2082-1
Designation	SD-SDI				540 Mbps-SDI	HD-SDI	3G-SDI	12G-SDI
Video Format	NTSC	PAL	525/625 (4:3)	525/625 (16:9)	525/625 (4:3) p60	2K 1080i	2K 1080p	4K UHD
Bit Rate	143 Mb/s	177 Mb/s	270 Mb/s	360 Mb/s	540 Mb/s	1.5 Gb/s	3 Gb/s	12 Gb/s
Clock	143 MHz	177 MHz	270 MHz	360 MHz	540 MHz	1.485 GHz	2.97 GHz	11.88 GHz
Cable Loss @ 1/2 Clock	30 dB @ 72 MHz	30 dB @ 88 MHz	30 dB @ 135 MHz	30 dB @ 180 MHz	30 dB @ 270 MHz	20 dB @ 750 MHz	30 dB @ 1.5 GHz	40 dB @ 6 GHz
Model	m	m	m	m	m	m	m	m
L-2.5CFB	265	242	199	172	139	54	55	32
L-2.5CHD	314	287	237	206	168	66	69	43
L-2.5CHLT	314	287	237	206	168	66	69	43
L-3CFB	344	314	257	222	179	68	69	42
L-3.3CUHD	461	422	306	265	215	85	90	58
L-4CFB	422	314	315	272	220	84	86	52
L-4CHD	447	410	337	294	238	93	98	61
L-5CFB	563	513	420	364	294	112	114	68
L-4.5CHD	551	504	415	361	293	115	119	74
L-5CHD	614	562	464	403	327	128	133	82
L-6CHD	766	700	575	499	403	154	158	95
L-5.5CUHD	769	697	566	491	400	155	157	101
L-7CHD	902	824	678	589	476	184	188	116
L-8CHD	1034	937	769	681	545	208	212	131
L-8CUHD	1034	937	789	681	555	217	225	140
L-2.5CHWS	275	247	198	171	138	53	54	32
V4-2.5CHW	288	258	208	178	144	56	57	34
L-3CFW	319	288	230	197	158	60	60	35
L-3.3CUHWS	333	300	240	206	167	64	66	40
L-4.5CHWS	447	405	322	280	225	87	90	50
L-5CFW	535	483	384	333	267	103	105	56
L-5.5CUHWS	612	555	441	379	306	117	120	70

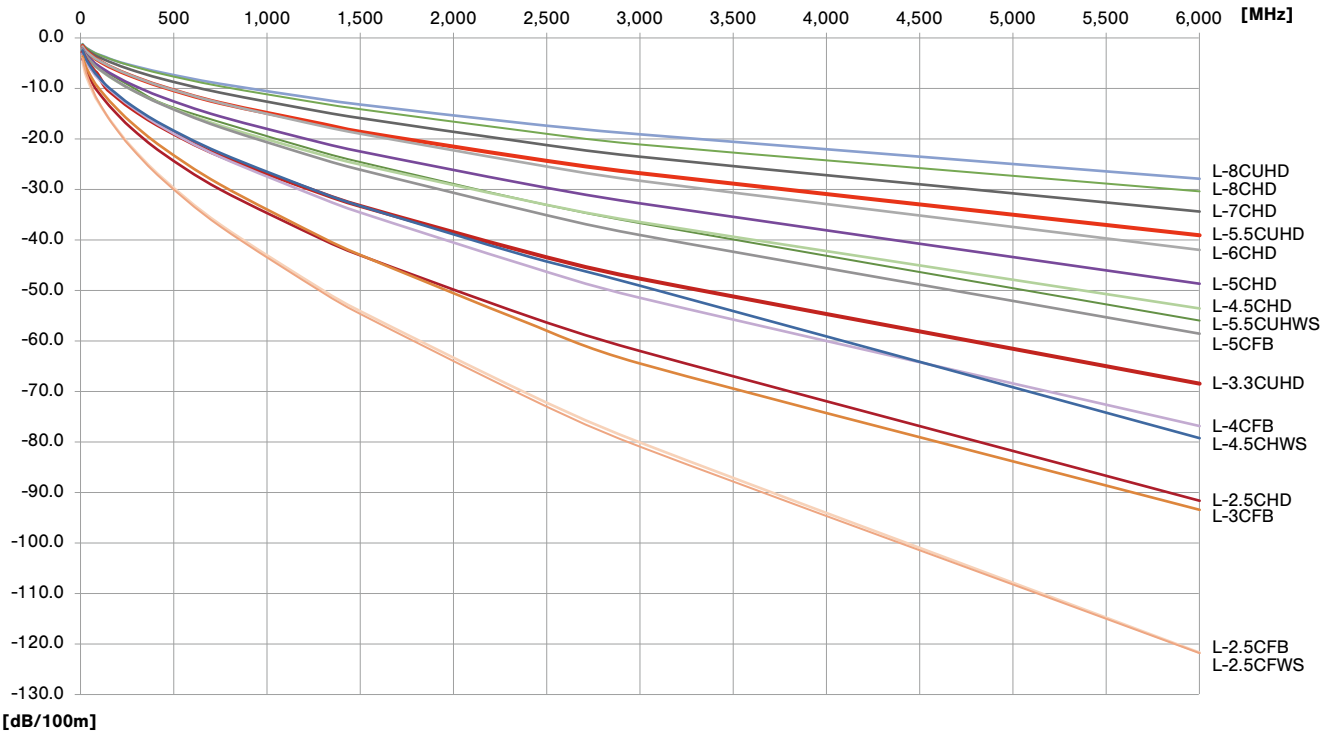
*The above values are distances when cable loss reaches a typical attenuation specified by SMPTE standard at 1/2 clock frequency.
*These values are not equivalent to actual transmission distances, which depends on the equalized distance of receiver.
*Please check with vendor of receiver for equalized distance and reference cable to calculate actual transmission distance.

■ 75Ω Coax Cable Nominal Attenuation

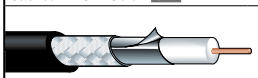
dB/100m

Model \ Frequency		10MHz	30MHz	SMPTE 259M Composite NTSC 72.0MHz	ITU-R BT.601 Composite PAL 88.0MHz	SMPTE 259M Composite 4:2:2 135MHz	SMPTE 259M Composite 4:2:2 16×9 180MHz	SMPTE 344M 540Mb/s SDI 270MHz	SMPTE 292M HD-SDI 750MHz	1.3GHz	SMPTE ST 424 3G-SDI 1.5GHz	3GHz	SMPTE ST 2082-1 12G-SDI 6GHz
75Ω	L-1.5C2VS	8.7	15.2	23.9	26.6	33.2	38.7	48.0	83.7	114.0	123.7	185.9	—
	V*-1.5C	8.7	15.1	23.6	26.2	32.7	37.9	46.8	80.5	108.6	117.5	173.4	—
	L-2.5CFB	4.8	7.6	11.3	12.4	15.1	17.4	21.5	37.0	50.0	54.1	80.2	121.8
	L-2.5CHD/L-2.5CHLT	4.1	6.5	9.5	10.4	12.6	14.5	17.8	30.2	40.0	43.1	62.0	91.7
	L-2.5CHWS	4.0	7.0	10.9	12.1	15.1	17.5	21.7	37.4	50.5	54.7	81.0	121.9
	V4-2.5CHW	3.8	6.7	10.4	11.6	14.4	16.8	20.7	35.7	48.3	52.3	77.4	115.9
	L-3C2V/L-3C2W	4.1	7.2	11.3	12.5	15.7	18.3	22.8	40.0	54.9	59.7	90.5	—
	L-3C2VS/V*-3C	4.5	7.9	12.4	13.8	17.2	20.0	24.8	43.3	58.9	63.9	96.0	—
	L-3CFB/V*-3CFB	3.7	5.9	8.7	9.5	11.7	13.5	16.7	29.1	39.6	43.0	64.5	93.5
	L-3CFW/V*-3CFW	3.4	5.9	9.4	10.4	13.0	15.2	18.9	33.1	45.4	49.4	74.8	114.2
	L-3.3CUHD	2.8	4.4	6.5	7.1	9.8	11.3	13.9	23.4	30.9	33.3	47.7	68.5
	L-3.3CUHWS	3.3	5.8	9.0	10.0	12.5	14.5	17.9	30.8	41.4	44.8	66.1	98.7
	L-4CFB	3.0	4.8	7.1	7.8	9.5	11.0	13.6	23.6	31.9	34.6	51.5	76.9
	V*-4CFB	3.0	4.9	7.2	7.9	9.7	11.2	13.9	24.3	33.2	36.0	54.3	83.8
	L-4CHD	2.9	4.6	6.7	7.3	8.9	10.2	12.6	21.3	28.4	30.6	44.3	65.1
	L-4.5CHD	2.3	3.7	5.4	6.0	7.2	8.3	10.2	17.4	23.2	25.1	36.5	53.6
	L-4.5CHWS	2.5	4.3	6.7	7.4	9.3	10.7	13.3	22.8	30.8	33.3	49.1	79.3
	L-5C2V/L-5C2W	2.5	4.5	7.1	7.9	9.9	11.5	14.4	25.7	35.7	38.9	60.0	94.8
	L-5C2VS/V*-5C	2.9	5.1	8.1	9.0	11.3	13.2	16.5	29.3	40.8	44.4	68.3	108.0
	L-5CFB/V*-5CFB	2.2	3.6	5.3	5.8	7.1	8.2	10.2	17.7	24.1	26.1	39.1	58.6
	L-5CFW/V*-5CFW	2.1	3.6	5.6	6.2	7.8	9.0	11.2	19.4	26.2	28.4	42.2	70.5
	L-5CHD	2.1	3.3	4.9	5.3	6.5	7.4	9.1	15.6	20.8	22.5	32.8	48.7
	L-5.5CUHD	1.5	2.5	3.9	4.3	5.3	6.1	7.5	13.3	17.1	19.0	26.8	39.5
	L-5.5CUHWS	1.8	3.1	4.9	5.4	6.8	7.9	9.8	17.0	23.6	25.0	37.4	57.0
	L-6CHD	1.7	2.7	3.9	4.3	5.2	6.0	7.4	12.9	17.5	19.0	28.3	42.0
	L-7CFB	1.6	2.5	3.8	4.2	5.1	6.0	7.5	13.4	18.8	20.5	32.0	53.6
	L-7CHD	1.4	2.3	3.3	3.6	4.4	5.1	6.3	10.9	14.7	15.9	23.5	34.4
	L-8CHD	1.2	2.0	2.9	3.2	3.9	4.4	5.5	9.6	13.0	14.1	21.1	30.4
	L-8CUHD	1.2	2.0	2.9	3.2	3.8	4.4	5.4	9.2	12.2	13.3	19.1	28.5
	LV-61S	3.8	6.6	10.4	11.5	14.4	16.8	20.9	36.8	50.4	54.8	83.1	—
	LV-77S	2.9	5.2	8.1	9.0	11.3	13.1	16.3	28.6	—	—	—	—

75Ω Low Loss Coax Cable Attenuation Chart



50Ω Coaxial Cables

Type	Model	Sales units	Nom. O.D.	Weight	Inner cond.		Insulation	Outer conductors		Inner cond. resist.	Outer cond. resist.	Static capacity	Charac-teristic impedance	Attenua-tion
					Comp.	O.D.	O.D.	Foil	Braid comp. (coverage)					
		m	mm	kg/100m	(AWG) Q'ty/mm	mm	mm		mm/ends/ carriers	Ω/100m	Ω/100m	pF/m	Ω	dB/100m (10 MHz)
 L-3D2V Jacket: PVC Color: GRY	L-3D2V	100 200	5.3	4.5	(20) 7/0.32A	0.96	3.0	—	0.14TA/5/24 (98%)	3.3	1.2	100	50	4.5
	L-5D2V		7.3	7.9	(15) 1/1.40A	1.40	4.8	—	0.14TA/7/24 (95%)	1.2	0.8	100	50	2.5
 L-3D2W Jacket: PVC Color: GRY	L-3D2W	100 200	6.4	7.3	(20) 7/0.32A	0.96	3.0	—	0.14TA/5/24 (98%) 0.14TA/5/24 (96%)	3.3	0.6	100	50	4.5
	L-5D2W		8.0	11.0	(15) 1/1.40A	1.40	4.8	—	0.14TA/7/24 (95%) 0.14TA/7/24 (96%)	1.2	0.4	100	50	2.5
 Jacket: PVC Color: BLK	L-5DFB	100 200	7.6	8.5	(14) 1/1.80A	1.80	5.0	AL	0.14TA/6/24 (90%)	0.7	1.1	84	50	2.4
 Jacket: PE Color: BLK	L-5DFBW-PE	100 200	8.0	10.4	(14) 1/1.80A	1.80	5.0	AL	0.14TA/7/24 (93%) 0.14TA/8/24 (95%)	0.7	0.4	84	50	2.4

Insulation: polyethylene Dielectric strength: 1000V AC/min

Website

L-3D2V, L-5D2V
- Tinned copper braided shield

L-3D2W, L-5D2W
- Tinned copper double braided shield

L-5DFB
- Low-loss foamed PE insulation
- Tinned copper braided shield with aluminum foil.

Note: Designed for fixed installation.

L-5DFBW-PE
- Ideal for digital microwave communication systems
- PE jacket for fixed outdoor installation
- Low-loss foamed PE insulation
- Tinned copper double braided shield with aluminum foil

Note: Designed for fixed installation.

■ 50Ω Coax Cable Nominal Attenuation

dB/100m

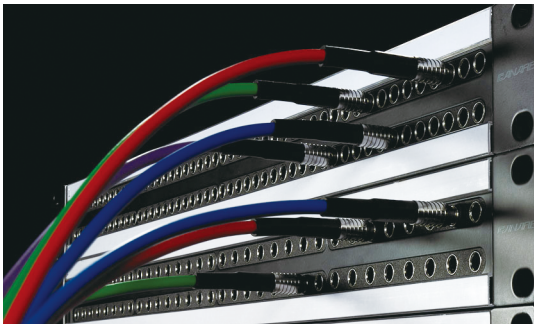
Model \ Frequency		10 MHz	130 MHz	470 MHz	600 MHz	710 MHz	714 MHz	800 MHz	1240 MHz	1260 MHz	1575 MHz	1700 MHz	2000 MHz	2400 MHz	2600 MHz	6000 MHz
50Ω	L-3D2V / L-3D2W	4.5	17.3	35.4	40.7	44.9	45.1	48.2	62.6	63.2	72.5	76.0	84.1	94.4	99.3	172.9
	L-5D2V / L-5D2W	2.5	9.6	19.6	22.6	25.0	25.1	26.8	35.0	35.3	40.5	42.5	47.1	53.0	55.8	98.0
	L-5DFB / L-5DFBW-PE	2.4	6.9	13.7	15.6	17.1	17.2	18.2	23.1	23.3	26.4	27.5	30.1	33.3	34.8	56.4

Panels and Patchbays

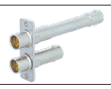
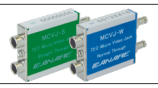
75Ω Video Patchbays

Overview

Video patchbays, as a backup or a final means for safety in a routing system, often face high demand on stable and constant patching connections and contacts. Over the decades, Canare has focused on these essentials and has developed the solutions for the latest video format such as 4K/8K.
The following table will help finding the right panels for you.



■ **Product Finder**

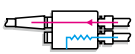
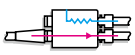
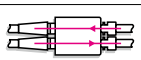
	Patchbays	CH	Rack Unit	Jacks	Self Termi-nating	Front	Rear	NET Weight (approx.)	SMPTE	Features	Patch Cord / U-Link
4K8K / 12G-SDI / 6G-SDI	 **32MCKA-ST***	32	1RU 1.5RU 2RU	 MCVJKA-STW/S	Yes	Canare Micro	BNC	1RU: 2.8 kg 1.5RU: 3.5 kg 2RU: 3.7 kg	ST 2081-x ST 2082-x	Mechanical switch with Dust-proof Shutter	 MCVPC**
	 **48MCK-H***	48	1RU	 MCVJHK-W/S	Yes	Canare Micro	Micro BNC	1RU: 2.3 kg		Mechanical switch with Dust-proof Shutter	 MCVPC**
	 **32SVK-ST**	32	1RU 1.5RU	 SVJK-S/L	No	Canare Single	BNC	1RU: 1.7 kg 1.5RU: 2.4 kg		MUSA style Hassle-free patching	 SVP-ULK SVPC**
2K4K / 3G-SDI / HD-SDI	 **48MC***	48	1RU	 MCVJ-W/S	Yes	Canare Micro	DIN 1.0/2.3	1RU: 2.3 kg	ST 292 ST 424 ST 425-x	Mechanical switch with Dust-proof Shutter	 MCVPC**
	 **32MD-ST***	32	1RU 1.5RU 4RU	 MDVJ-STW/S	Yes	Mini-WECO	BNC	1RU: 2.9 kg 2RU: 3.9 kg 4RU: 8.0 kg		100% sealed rotary switch	 MVPC**
	 **2xDV***	20 24 26	1RU 2RU	 DVJB-W/S	Yes	WECO	BNC	20DV: 2.4 kg* 24DV: 2.7 kg* 26DV: 2.8 kg* (*1RU)		100% sealed rotary switch	 VPC**

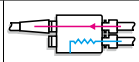
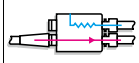
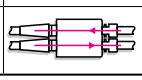
WECO: Western Electric Company (W.E. standard)

Technical Note

Dual Video Jack Normalling Chart

There are two types of dual video jacks: Normal Through and Straight Through. In Canare, these are identified at the end of the model name, W means the former and S means the latter. The following chart explains the differences between two types.

W type (Normal Through)			
Video Port: No Patch		**BNC Port**: Signal thru as Arrowed	Signal routes between top and bottom BNC without the use of Video plugs.
Video Port: Patch Upper		**BNC Port**: Lower Terminated	Inserting a Video Patch Cord into front "upper" port automatically terminates signal path into the lower 75Ω load.
Video Port: Patch Lower		**BNC Port**: Upper Terminated	Inserting a Video Patch Cord into front "lower" port automatically terminates signal path into the upper 75Ω load.
Video Port: Patch Both		**BNC Port**: Signal thru as Arrowed	Inserting Video Patch Cords into both front ports inputs and/or outputs signal.

S type (Straight Through)			
Video Port: No Patch		**BNC Port**: Both Signal Terminated	Two independent single jacks in a dual housing.
Video Port: Patch Upper		**BNC Port**: Lower Terminated	Inserting a Video Patch Cord into front "upper" port automatically terminates signal path into the lower 75Ω load.
Video Port: Patch Lower		**BNC Port**: Upper Terminated	Inserting a Video Patch Cord into front "lower" port automatically terminates signal path into the upper 75Ω load.
Video Port: Patch Both		**BNC Port**: Signal thru as Arrowed	Inserting Video Patch Cords into both front ports inputs and/or outputs signal.

75Ω 12G-SDI Micro Video Patchbays

Engineered for 12G-SDI (SMPTE ST 2082-1) with Micro BNC connectivity. These high-performance jacks are significantly thinner and lighter, enabling maximum I/O density in a compact 1RU design.

■ Patchbays 12G-SDI

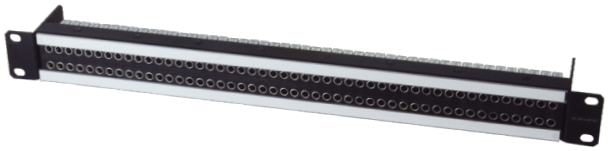
Model	Panel Size	Loaded Video Jacks
48MCK-H New	1RU	48 × MCVJHK-W
48MCK-HS New	1RU	48 × MCVJHK-S

Standard panel color: Black. Available in 6 colors. see page 76.

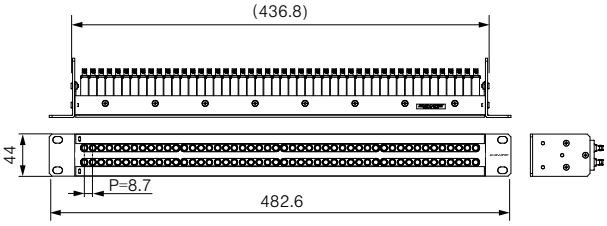
- 12G-SDI: SMPTE ST 2082-1 Fully Compliant
- Ultra-High Density: 48 Channels / 1RU
- Lightweight Jacks: 35g (50% lighter than standard)
- Ideal for Mobile Trucks: Maximum space and weight savings
- Micro BNC Rear Connectivity
- Equipped with Dust-Proof Shutters

Website

Note: Be sure to use with Canare Micro Video Patch Cords.



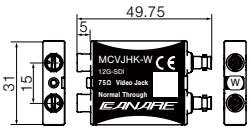
48MCK-H



■ Dual Video Jacks

Model	Description	Rear Jacks
MCVJHK-W New	Normal through	micro BNC
MCVJHK-S New	Straight through	micro BNC

Website

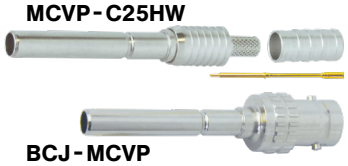


■ Micro Video Plug 12G-SDI

Model	Suitable Cable	Boot	Die Set
MCVP-C25HW	L-2.5CHWS	—	TCD-D253F

*Standard package: 20 pcs
*The plug is specifically designed for MCVJ and MCVJKA jacks.

Website



MCVP-C25HW

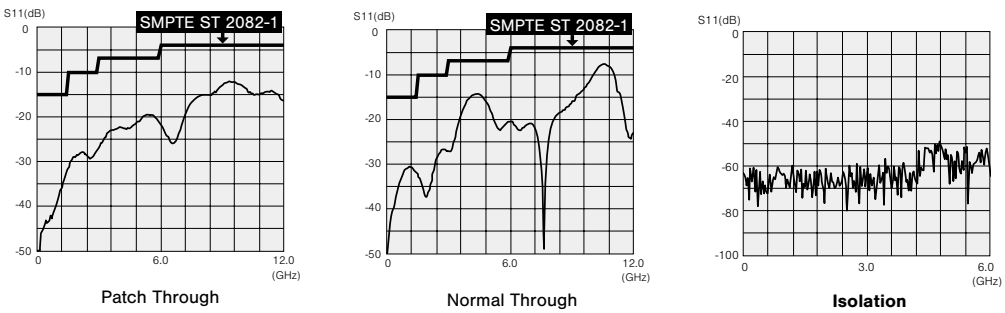
BCJ-MCVP

■ Accessories

Model	Description
MCVPC**	Canare Micro patch cords (see page 79)
BCJ-MCVP	BNC (female) to Micro Video plug conversion adapter (10 pcs)
BET-BNC	BNC extraction tool (see page 41)
PH50B	Patch cord holder for MCVPC**
MCVJ-DC	Dust cap for MCVJHK (black, 100 pcs)
MJ2-M48CK-1U New	Unloaded panels (see page 77)

■ Return Loss & Isolation

Model		MCVJHK-W	MCVJHK-S
RL	micro BNC-micro BNC: Normal Through	15 dB or more @ 1.5 GHz 10 dB or more @ 3 GHz 7 dB or more @ 6 GHz 4 dB or more @ 12 GHz	–
	micro BNC-Video: Patch Through		15 dB or more @ 1.5 GHz 10 dB or more @ 3 GHz 7 dB or more @ 6 GHz 4 dB or more @ 12 GHz
	micro BNC-Self: Termination		
Isolation		45 dB or more @ 6 GHz	45 dB or more @ 6 GHz



Return Loss for MCVJHK-W

75Ω Staggered Video Patchbays

The next-generation 12G-ready video patchbays with newly developed staggered dual video jacks.

■ Patchbays 12G-SDI

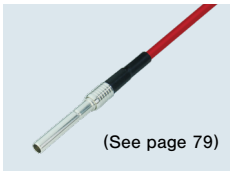
Model	Panel Size	Loaded Video Jacks
32MCKA-ST	1RU	32 × MCVJKA-STW
32MCKA-STS	1RU	32 × MCVJKA-STS
32MCKA-ST-1.5U	1.5RU	32 × MCVJKA-STW
32MCKA-STS-1.5U	1.5RU	32 × MCVJKA-STS
32MCKA-ST-2U	2RU	32 × MCVJKA-STW
32MCKA-STS-2U	2RU	32 × MCVJKA-STS

Standard panel color: Black. Available in 5 colors. see page 76.

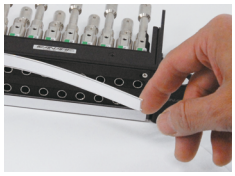
Website

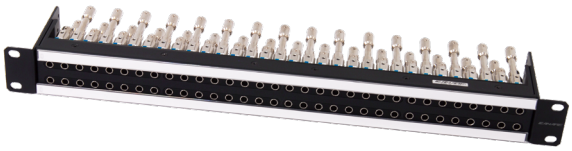
- 12G-SDI: SMPTE ST 2082-1 fully compliant
- Refined the entire performance for 12G applications
- Lightweight video jacks with simple structure
- Dust-proof shutter
- New 1.5RU and 2RU panels:
  Finger removal and wider designation strip

Note: Be sure to use with Canare Micro Video Patch Cords.

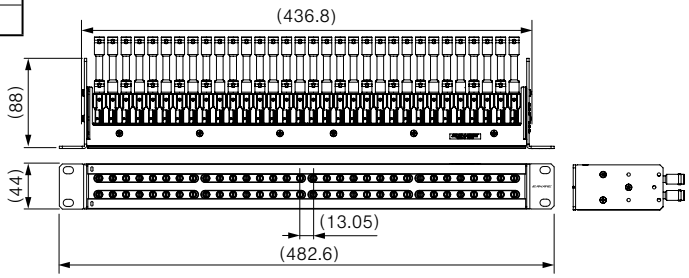


(See page 79)





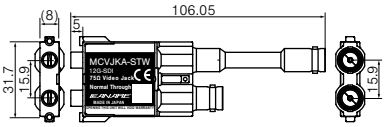
32MCKA-ST



■ Dual Video Jacks

Model	Description	Rear Jacks
MCVJKA-STW	Normal through, Staggered rear jacks	BNC
MCVJKA-STS	Straight through, Staggered rear jacks	BNC

Website



■ Micro Video Plug 12G-SDI

Model	Suitable Cable	Boot	Die Set
MCVP-C25HW	L-2.5CHWS	—	TCD-D253F

*Standard package: 20 pcs
*The plug is specifically designed for MCVJ and MCVJKA jacks.

Website

MCVP-C25HW

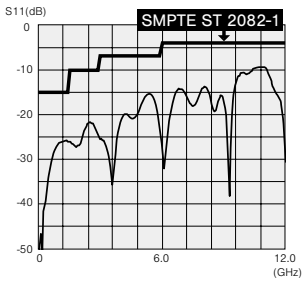
BCJ-MCVP

■ Accessories

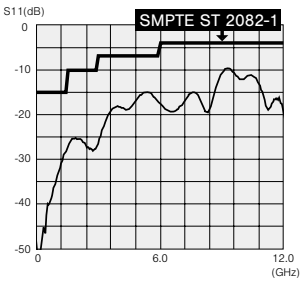
Model	Description
MCVPC**	Canare Micro patch cords (see page 79)
BCJ-MCVP	BNC (female) to Micro Video plug conversion adapter (10 pcs)
BET-BNC	BNC extraction tool (see page 41)
PH50B	Patch cord holder for MCVPC**
MCVJ-DC	Dust cap for MCVJKA (black, 100 pcs)
MJ2-M32CKA-*U-**	Unloaded panels (see page 77)

■ Return Loss & Isolation

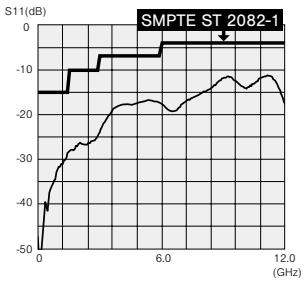
Model		MCVJKA-STW	MCVJKA-STS
RL	BNC-BNC: Normal Through	15 dB or greater @ 1.5 GHz 10 dB or greater @ 3 GHz 7 dB or greater @ 6 GHz 4 dB or greater @ 12 GHz	–
	BNC-Video: Patch Through		15 dB or greater @ 1.5 GHz 10 dB or greater @ 3 GHz 7 dB or greater @ 6 GHz 4 dB or greater @ 12 GHz
	BNC-Self Termination		
Isolation		45 dB or greater @ 6 GHz	45 dB or greater @ 6 GHz



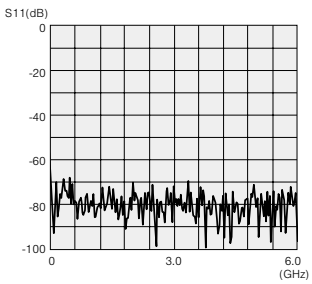
Normal Through



Patch Through
(Long BNC port)



Patch Through
(Short BNC port)



Isolation

Return Loss for MCVJKA-STW

75Ω Single Video Patchbay

The true 12G-SDI video patching system: Canare exclusive 12G capable single jacks, convenient looping plug, flexible patch cords, and 75Ω termination video plug. This MUSA style solution exceeds 4K/8K UHD requirements.

32SVK-ST

■ Patchbay 12G-SDI

Model	Panel Size	Loaded Video Jacks
32SVK-ST	1RU	32 × SVJK-L 32 × SVJK-S
32SVK-ST-1.5U	1.5RU	32 × SVJK-L 32 × SVJK-S

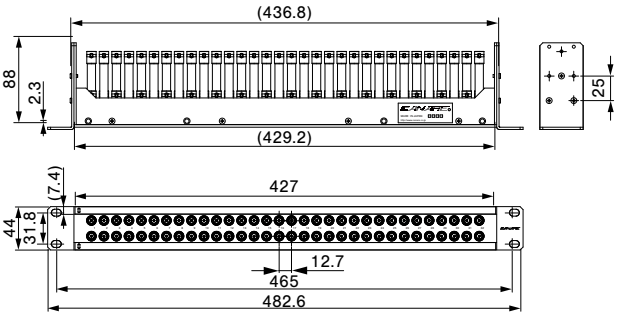
Standard panel color: Black. Available in 9 colors. see page 76.

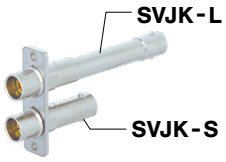
Website

- 12G-SDI: SMPTE ST 2082-1 compliant
- Return loss performance: 15dB@12GHz
- 40% lighter than 32MCKA-ST/32MD-ST
- 32 channels of I/O into 1RU or 1.5RU
- Canare original hassle-free patching design
- Staggered BNC rear jacks
- Can be recessed 25 mm
- Included a sheet of channel designator for easy identification

Note: Be sure to use with Canare Single Video Patch Cords.

SVPC**
(See page 79)





SVJK-L

SVJK-S

■ Single Video Jacks

Model	Description	Rear Jack
SVJK-L	Long type	BNC
SVJK-S	Short type	BNC

*Adapter plates: SVJK-AP should be used for loading the jacks. Call for the details.

Website

■ Single Video Plug

Model	Suitable Cable	Boot	Die Set
SVP-C25HW	L-2.5CHWS	CB02	TCD-D253F

*Standard package: 20 pcs

Website

SVP-ULK

(back)

■ U-link and Termination Plugs

Model	Description
SVP-ULK	U-link/Looping plug
SVP-TK	Termination plug (standard package 20 pcs)

Website

SVP-TK

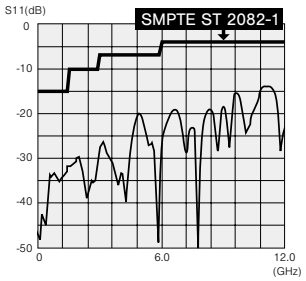
(back)

■ Accessories

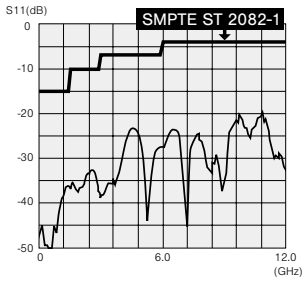
Model	Description
SVPC**	Canare SV patch cords (see page 79)
BET-BNC	BNC extraction tool (see page 41)
PH50A	Patch cord holder for SVPC**
SVJK-DC	Dust cap for SVJK (black, 10 pcs)
MJ2-M32-*U-***	Unloaded panels (see page 77)

■ Return Loss

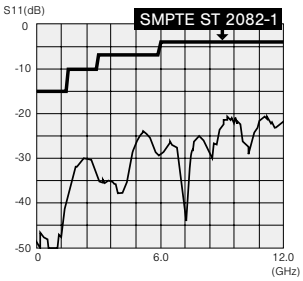
Model	SVJK-S, SVJK-L	SVP-TK	SVP-ULK
@ 3 GHz	26 dB or greater	25 dB or greater	20 dB or greater
@ 6 GHz	20 dB or greater	20 dB or greater	15 dB or greater
@ 12 GHz	15 dB or greater	10 dB or greater	10 dB or greater



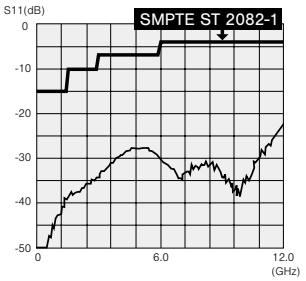
SVJK-S & -L with SVP-ULK



SVJK-L



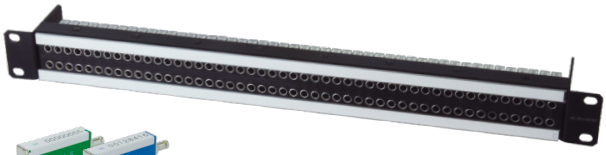
SVJK-S



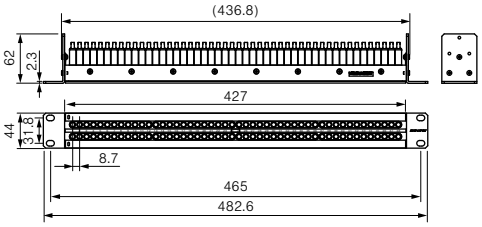
SVP-TK

75Ω Micro Video Patchbays

Our unique, thinnest and lightest video jacks realize ultimate space efficiency.



48MC



■ Patchbays

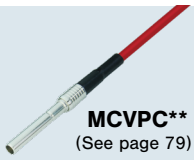
Model	Panel Size	Loaded Video Jacks
48MC	1RU	48 × MCVJ-W
48MCS	1RU	48 × MCVJ-S

Standard panel color: Black. Available in 5 colors. Contact for more details.

Website

- High density 48 channels of I/O into 1RU design.
- Video jack weights 35 g and is half of our conventional one.
- Space and weight saving; beneficial to O.B. vans
- DIN 1.0/2.3 rear jacks.
- Dust-proof shutter
- Included a sheet of channel designator for easy identification.
- Can be recessed 25 mm.
- 3G-SDI: SMPTE ST 424 compliant

Note: Be sure to use with Canare Micro Video Patch Cords.

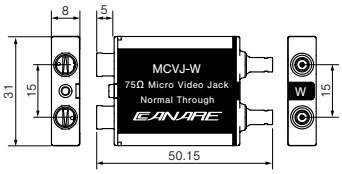


MCVPC**
(See page 79)

■ Dual Video Jacks

Model	Description	Rear Jacks
MCVJ-W	Normal through	DIN 1.0/2.3
MCVJ-S	Straight through	DIN 1.0/2.3

Website



■ Micro Video Plug

Model	Suitable Cable	Boot	Die Set
MCVP-C25HW	L-2.5CHWS	—	TCD-D253F

*Standard package: 20 pcs
*The plug is specifically designed for MCVJ and MCVJKA jacks.

Website

MCVP-C25HW

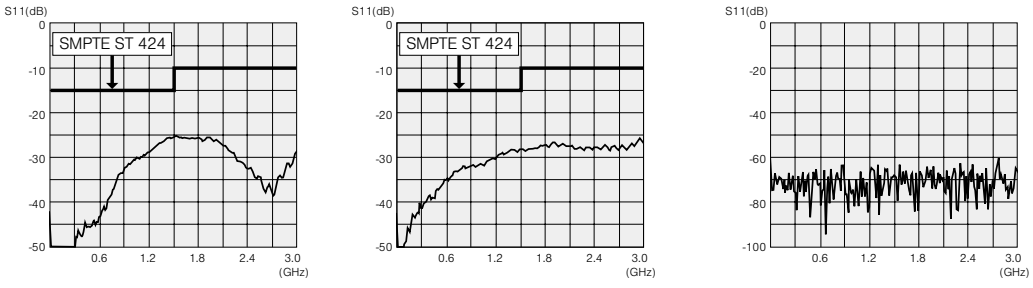
BCJ-MCVP

■ Accessories

Model	Description
MCVPC**	Canare Micro patch cords (see page 79)
BCJ-MCVP	BNC (female) to Micro Video plug conversion adapter (10 pcs)
BET-DIN	Extraction tool for DCP-C series (see page 41)
BET-D/H	
PH50B	Patch cord holder for MCVPC**
MCVJ-DC	Dust cap for MCVJ (black, 100 pcs)

■ Return Loss & Isolation

Model		MCVJ-W	MCVJ-S
RL	DIN-DIN: Normal Through	20 dB or greater @ 3 GHz	—
	DIN-Video: Patch Through	20 dB or greater @ 3 GHz	20 dB or greater @ 3 GHz
	DIN-Self Termination	10 dB or greater @ 3 GHz	20 dB or greater @ 3 GHz
Isolation		45 dB or greater @ 3 GHz	45 dB or greater @ 3 GHz



Return Loss for MCVJ-W

75Ω Staggered Mid-size Video Patchbays

3G-ready mid-size video jacks allow for more efficient use of rack space.

■ Patchbays

Model	Panel Size	Loaded Video Jacks
32MD-ST	1RU	32 × MDVJ-STW
32MD-STS	1RU	32 × MDVJ-STS
32MD-ST-2U	2RU	32 × MDVJ-STW
32MD-STS-2U	2RU	32 × MDVJ-STS
32MD-ST-4U	4RU	96 × MDVJ-STW
32MD-STS-4U	4RU	96 × MDVJ-STS

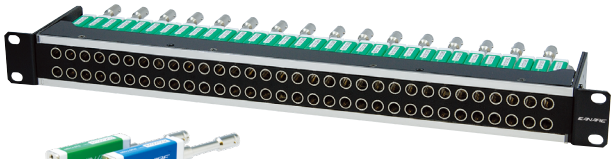
Standard panel color: Black. Available in 9 colors. see page 76.

Website

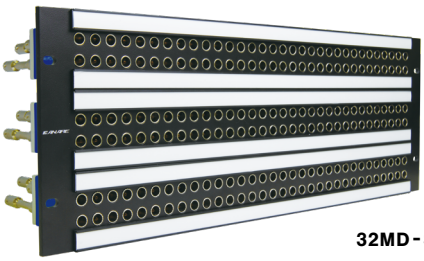
- 32 channels of I/O into 1 or 2RU, 96 channels of I/O into 4RU.
- Rotary Switch Technology with dual-contact construction.
- Can be recessed 25 mm (except 4RU type).
- Wide designation strip (2RU, 4RU type).
- Lightweight aluminum alloy video jacks.

Note: Be sure to use with Mini-WECO Video Patch Cords.

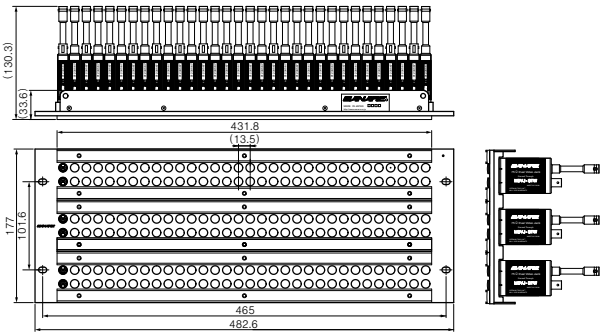
MVPC**
(See page 79)



32MD-STS



32MD-STS-4U



■ Dual Video Jacks

Model	Description	Rear Jacks
MDVJ-STW	Normal through, Staggered rear jacks	BNC
MDVJ-STS	Straight through, Staggered rear jacks	BNC

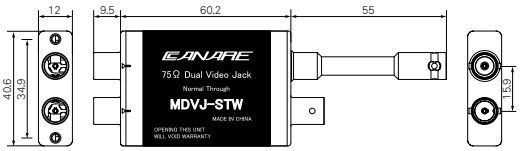
Website

■ Mini-WECO Video Plugs

Model	Suitable Cable	Boot	Die Set
MVP-C25HW	L-2.5CHWS	CB25	TCD-D253F
MVP-C4	LV-61S, RG-59B/U, Belden 8241, 8279, 88241	CB25	TCD-451CA TCD-4CA

*Standard package: 20 pcs

Website



MVP-C4

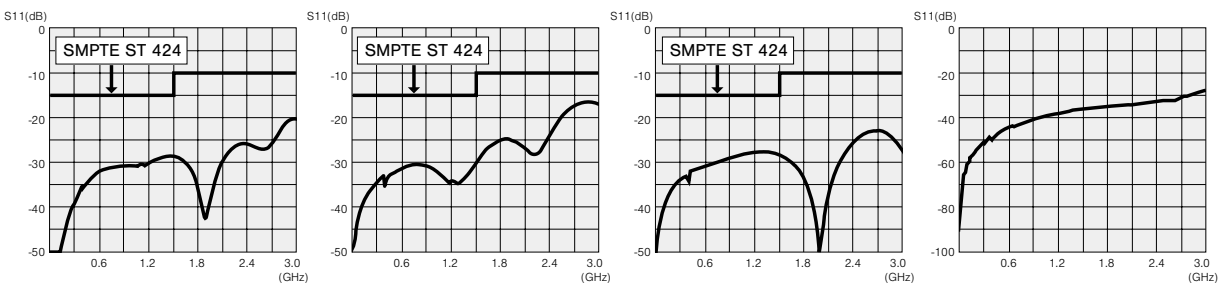
■ Accessories

Model	Description
MVPC**	Mini WECO patch cords (see page 79)
MVPC-HW**	
BCJ-MVP	BNC (female) to Mini-WECO plug conversion adapter (10 pcs)
BET-BNC	BNC extraction tool (see page 41)
PH50A	Patch cord holder for MVPC**
MVJ-DC	Dust cap for MDVJ (color: black 40 pcs)
MJ2-M32-*U-*	Unloaded panels (see page 77)
VJ2-M32-4U	

*BCJ-MVP is recommended to use with Slim BNC plug (see page 22).

■ Return Loss & Isolation

Model		MDVJ-STW	MDVJ-STS
RL	BNC-BNC: Normal Through	26 dB or greater @ 750 MHz 20 dB or greater @ 2.4 GHz 10 dB or greater @ 3 GHz	—
	BNC-Video: Patch Through		26 dB or greater @ 750 MHz 20 dB or greater @ 2.4 GHz 10 dB or greater @ 3 GHz
	BNC-Self Termination		26 dB or greater @ 750 MHz 20 dB or greater @ 1.5 GHz 10 dB or greater @ 3 GHz
Isolation		35 dB or greater @ 1.5 GHz 20 dB or greater @ 3.0 GHz	35 dB or greater @ 1.5 GHz 20 dB or greater @ 3.0 GHz

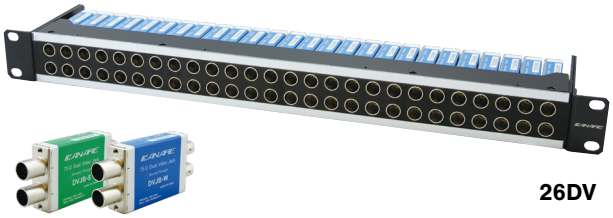


Normal Through | Patch Through (Long BNC port) | Patch Through (Short BNC port) | **Isolation**

Return loss for MDVJ-STW

75Ω Video Patchbays

3G-ready HD-SDI video patchbays featuring Canare's uniquely-developed rotary switches.

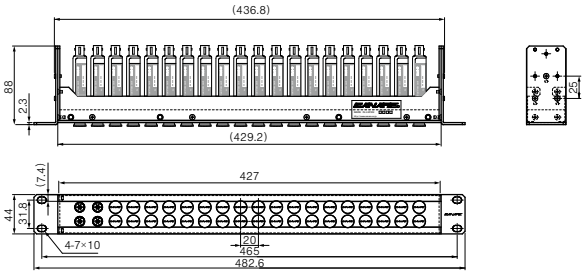


26DV

■ Patchbays

Model	Panel Size	Loaded Video Jacks
20DV	1RU	20 × DVJB-W
24DV		24 × DVJB-W
26DV		26 × DVJB-W
20DVS	1RU	20 × DVJB-S
24DVS		24 × DVJB-S
26DVS		26 × DVJB-S
20DV-2U	2RU	20 × DVJB-W
24DV-2U		24 × DVJB-W
26DV-2U		26 × DVJB-W
20DVS-2U	2RU	20 × DVJB-S
24DVS-2U		24 × DVJB-S
26DVS-2U		26 × DVJB-S

Standard panel color: Black. Available in 9 colors. see page page 76.



Website

- Rotary Switch Technology with dual-contact construction.
- Can be recessed 25 mm.
- Wide designation strip (2RU type).
- Lightweight aluminum alloy video jacks.

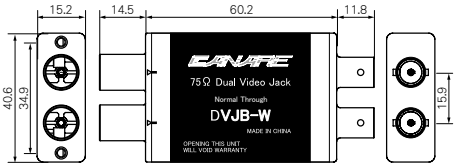
Note: Be sure to use with WECO Video Patch Cords.

VPC-WC**
(See page 79)

■ Dual Video Jacks

Model	Description	Rear Jacks
DVJB-W	Normal through	BNC
DVJB-S	Straight through	BNC

Website



■ WECO Plugs

Model	Suitable Cable	Boot	Die Set
VWP-C25HW	L-2.5CHWS	CB04	TCD-D253F
VWP-C4A	LV-61S, RG-59B/U, Belden 8241, 8279, 88241	CB04	TCD-451CA TCD-4CA

*Standard package: 20 pcs

VWP-C4A

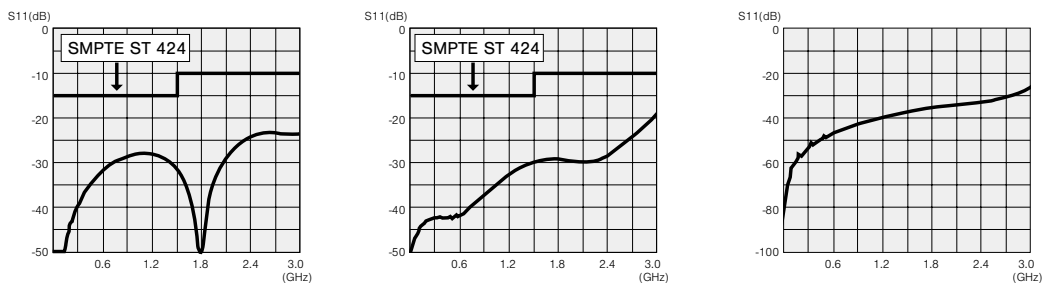
Website

■ Accessories

Model	Description
VPC-WC**	WECO patch cords (see page 79)
VPC-HW-WC**	
BCJ-VWP	BNC (female) to WECO plug conversion adapter
BET-BNC	BNC extraction tool (see page 41)
PH50A	Patch cord holder for VPC**
VJ-DC	Duct cap for DVJB (black, 40 pcs)
VJ2-V-*U-*****	Unloaded panels (see page 77)

■ Return Loss & Isolation

Model		DVJB-W	DVJB-S
RL	BNC-BNC: Normal Through	26 dB or greater @ 750 MHz 20 dB or greater @ 2.4 GHz 10 dB or greater @ 3 GHz	—
	BNC-Video: Patch Through		26 dB or greater @ 750 MHz 20 dB or greater @ 2.4 GHz 10 dB or greater @ 3 GHz
	BNC-Self Termination		26 dB or greater @ 750 MHz 20 dB or greater @ 1.5 GHz 10 dB or greater @ 3 GHz
Isolation		35 dB or greater @ 1.5 GHz 20 dB or greater @ 3.0 GHz	35 dB or greater @ 1.5 GHz 20 dB or greater @ 3.0 GHz



Return loss for DVJB-W

Ordering Information

WECO Video Patchbays

PanelColor / Signal Path / Rack Unit

24 DV S - 8 - xU

Channels

20	20 Channels
24	24 Channels
26	26 Channels

32 Channels Video Patchbays

PanelColor / Signal Path / Rack Unit

32 MCKA - ST S - 2 - xU

Jack Type

MCKA	12G Dual
SVK	12G Single
MD	3G Dual

48 Channels Video Patchbays

PanelColor / Signal Path / Rack Unit

48 MCK - H S - 2 - xU

Jack Type

MCK	12G Dual
MC	3G Dual

■ Panel Color

Model Name	Blank	1	2	3	4	5	6	7	8	9
48MCK-H(S)	Black	N/A	Red	N/A	Yellow	Green	Blue	Purple	N/A	N/A
48MC(S)	Black	N/A	Red	N/A	Yellow	Green	Blue	Purple	N/A	N/A
32MCKA-ST(S)	Black	N/A	Red	N/A	Yellow	Green	Blue	Purple	N/A	N/A
32SVK-ST	Black	Brown	Red	Orange	Yellow	Green	Blue	Purple	Gray	White
32MD-ST(S)	Black	Brown	Red	Orange	Yellow	Green	Blue	Purple	Gray	White
2xDV(S)	Black	Brown	Red	Orange	Yellow	Green	Blue	Purple	Gray	White

*32MD-ST(S)-4U type is available in black color only.

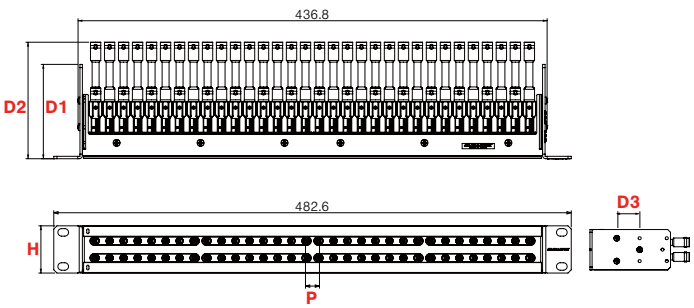
■ Rack Unit

Model Name	Blank	1.5U	2U	4U
48MCK-H(S)	1RU	N/A	N/A	N/A
48MC(S)	1RU	N/A	N/A	N/A
32MCKA-ST(S)	1RU	1.5RU	2RU	N/A
32SVK-ST	1RU	1.5RU	N/A	N/A
32MD-ST(S)	1RU	N/A	2RU	4RU
2xDV(S)	1RU	1.5RU	2RU	N/A

■ Signal Path

Model Name	Blank	S
48MCK-H(S)	Normal Through	Straight Through
48MC(S)		
32MCKA-ST(S)		
32MD-ST(S)		
2xDV(S)		

* 32SVK-ST is Single.



■ Dimensions

(mm)

Model Name	D1	D2	D3	H	P	Designation Strip
48MCK-H(S)	62	N/A	25	44	8.7	426 × 6.2
48MC(S)	62	N/A	25	44	8.7	426 × 8.5
32MCKA-ST(S)	88	108.7	25	44	13.05	426 × 8.5
32MCKA-ST(S)-1.5U	88	109.2	25	66.1	13.05	426.5 × 16.7
32MCKA-ST(S)-2U	88	109.4	25	88.1	13.05	426.5 × 16.7
32SVK-ST(S)	88	N/A	25	44	12.7	426 × 6.2
32SVK-ST(S)-1.5U	88	N/A	25	66.1	12.7	426.5 × 16.7
20DV(S)	88	N/A	25	44	20	426 × 6.2
24DV(S)	88	N/A	25	44	17	426 × 6.2
26DV(S)	88	N/A	25	44	16	426 × 6.2
20DV(S)-2U	88	N/A	25	88.1	20	426 × 6.2
24DV(S)-2U	88	N/A	25	88.1	17	420 × 18.4
26DV(S)-2U	88	N/A	25	88.1	16	420 × 18.4
32MD-ST(S)	88	126.8	25	44	12.7	426 × 6.2
32MD-ST(S)-2U	88	126.8	25	88.1	12.7	420 × 18.4
32MD-ST(S)-4U*	N/A	130.3	N/A	177	13.5	431.8 × 13.2

*See the drawings for 32MD-ST(S)-4U, 4RU type can not be recessed. (See page 74)

Designation Strip

Unloaded Video Jack Panels

Website

Model	Panel Size	Description
MJ2-M48CK-1U-*** New	1RU	48 ch (48 slots), for MCVJHK
MJ2-M32CKA-1U-***	1RU	32 ch (32 slots), for MCVJKA
MJ2-M32CKA-1.5U-***	1.5RU	32 ch (32 slots), for MCVJKA
MJ2-M32CKA-2U-***	2RU	32 ch (32 slots), for MCVJKA
MJ2-M32-1U-***	1RU	32 ch (64 holes), for MDVJ and SVJK
MJ2-M32-1.5U-***	1.5RU	32 ch (64 holes), for MDVJ and SVJK
MJ2-M32-2U-***	2RU	32 ch (64 holes), for MDVJ and SVJK
VJ2-M32-4U	4RU	96 ch (3 × 32 ch, 192 holes), for MDVJ, Black
VJ2-V20-1U-***	1RU	20 ch (40 holes), for DVJB
VJ2-V20-2U-***	2RU	20 ch (40 holes), for DVJB
VJ2-V24-1U-***	1RU	24 ch (48 holes), for DVJB
VJ2-V24-2U-***	2RU	24 ch (48 holes), for DVJB
VJ2-V26-1U-***	1RU	26 ch (52 holes), for DVJB
VJ2-V26-2U-***	2RU	26 ch (52 holes), for DVJB

MJ2-M32CKA

*** : Please refer to the ordering information below.

<Ordering Information>

WECO Video Patchbays

PanelColor
Rack Unit
VJ2 - V [2x] - [xU] - [BLK]
Channels

20	20 Channels
24	24 Channels
26	26 Channels

32 Channels Video Patchbays

PanelColor
Rack Unit
MJ2 - M32 [CKA] - [xU] - [BLK]
Jack Type

CKA	MCVJKA
Blank	MDVJ and SVJK

48 Channels Video Patchbays

PanelColor
Rack Unit
MJ2 - M48CK - [1U] - [BLK]

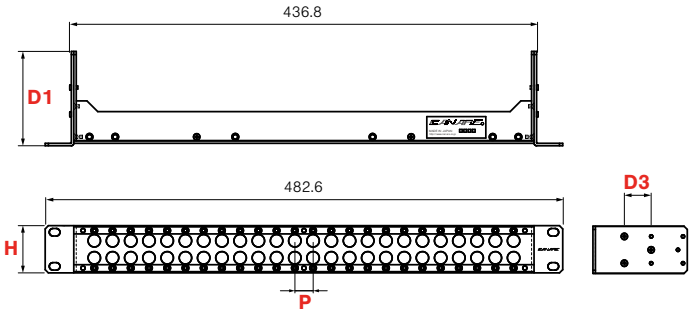
■ Panel Color

Model Name	BLK	BRN	RED	ORG	YEL	GRN	BLU	PPL	GRY	WHT
MJ2-M48CK-1U-***	Black	N/A	Red	N/A	Yellow	Green	Blue	Purple	N/A	N/A
MJ2-M32CKA-1U-***	Black	N/A	Red	N/A	Yellow	Green	Blue	Purple	N/A	N/A
VJ2-V2x-xU-***	Black	Brown	Red	Orange	Yellow	Green	Blue	Purple	Gray	White
MJ2-M32-xU-***	Black	Brown	Red	Orange	Yellow	Green	Blue	Purple	Gray	White
VJ2-M32-4U	Black	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

*4RU type is available in black color only.

■ Rack Unit

Model Name	1U	1.5U	2U	4U
MJ2-M48CK-1U-***	1RU	N/A	N/A	N/A
MJ2-M32CKA-1U-***	1RU	1.5RU	2RU	N/A
VJ2-V2x-xU-***	1RU	N/A	2RU	N/A
MJ2-M32-xU-***	1RU	1.5RU	2RU	N/A
VJ2-M32-4U	N/A	N/A	N/A	4RU



■ Dimensions

(mm)

Model Name	D1	D3	H	P	Designation Strip
MJ2-M48CK-1U-***	62	25	44	8.7	426 × 6.2
MJ2-M32CKA-1U-***	88	25	44	N/A	426 × 8.5
MJ2-M32CKA-1.5U-***	88	25	66.1	N/A	426.5 x 16.7
MJ2-M32CKA-2U-***	88	25	88.1	N/A	426.5 × 16.7
VJ2-V20-1U-***	88	25	44	20	426 × 6.2
VJ2-V24-1U-***	88	25	44	17	426 × 6.2
VJ2-V26-1U-***	88	25	44	16	426 × 6.2
VJ2-V20-2U-***	88	25	88.1	20	420 × 18.4
VJ2-V24-2U-***	88	25	88.1	17	420 × 18.4
VJ2-V26-2U-***	88	25	88.1	16	420 × 18.4
MJ2-M32-1U-***	88	25	44	12.7	426 × 6.2
MJ2-M32-1.5U-***	88	25	66.1	12.7	426.5 × 16.7
MJ2-M32-2U-***	88	25	88.1	12.7	420 × 18.4
VJ2-M32-4U	33.6	N/A	177	13.5	431.8 × 13.2

Designation Strip

*4RU type can not be recessed.

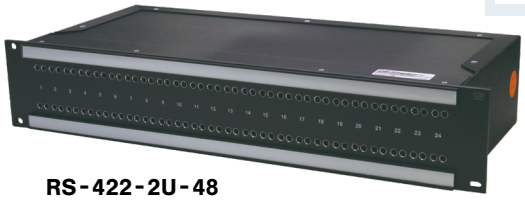
RS422 Patchbays

Model	Panel Size	Connectors	
		Front Panel	Rear Panel
RS-422-1U-16	1RU	Bantam	D sub 9P(F) × 16
RS-422-1U-24	1RU	Bantam	D sub 9P(F) × 24
RS-422-2U-32	2RU	Bantam	D sub 9P(F) × 32
RS-422-2U-48	2RU	Bantam	D sub 9P(F) × 48

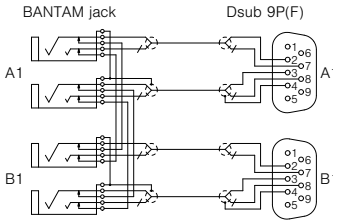
- The RS422 serial signal used for VTR remote applications can now be switched with Bantam patchbay ease.
- D sub screws are M2.6

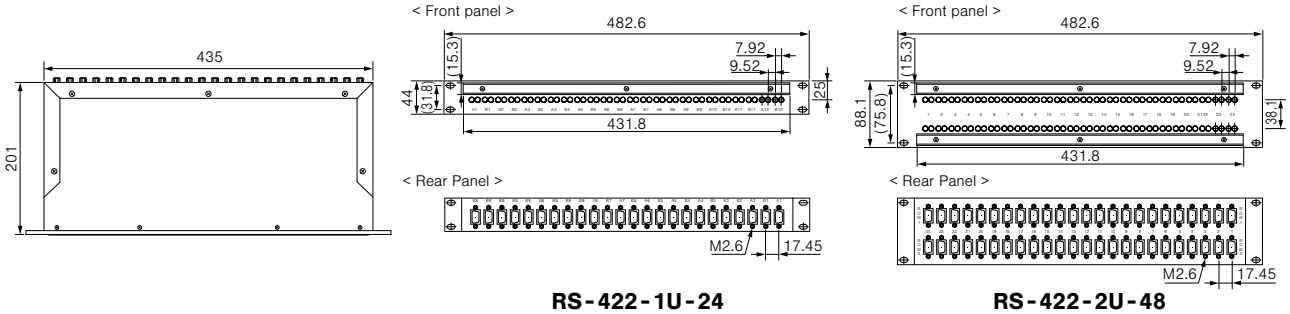
* Listed above items are other manufacturer's products.

Website



RS-422-2U-48





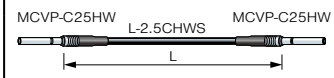
RS-422-1U-24

RS-422-2U-48

Video Patch Cords

■ Canare Micro

For 32MCKA-ST or 48MC

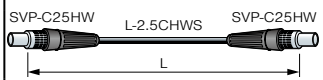
Type	Model	Length (m)
 BLK BRN RED YEL GRN BLU PPL	MCVPC003	0.3
	MCVPC005	0.5
	MCVPC01	1

Website

Canare Micro

■ Canare Single

For 32SVK

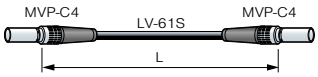
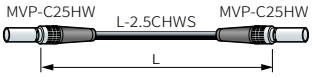
Type	Model	Length (m)
 BLK BRN RED YEL GRN BLU PPL	SVPC003	0.3
	SVPC005	0.5
	SVPC01	1

Website

Canare Single

■ Mini-WECO

For 32MD-ST and Mini-WECO patchbays

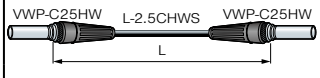
Type	Model	Length (m)
 BLK RED YEL GRN BLU	MVPC003	0.3
	MVPC005	0.5
	MVPC01	1
 BLK BRN RED YEL GRN BLU PPL	MVPC003-HW	0.3
	MVPC005-HW	0.5
	MVPC01-HW	1

Website

Mini-WECO

■ WECO

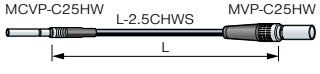
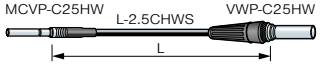
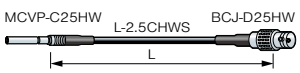
For 2*DV and WECO patchbays

Type	Model	Length (m)
 BLK BRN RED ORN YEL GRN BLU PPL GRY WHT	VPC003-WC	0.3
	VPC005-WC	0.5
	VPC01-WC	1
 BLK BRN RED YEL GRN BLU PPL	VPC003-HW-WC	0.3
	VPC005-HW-WC	0.5
	VPC01-HW-WC	1

Website

WECO

■ Canare Micro Conversion

Type	Model	Length (m)
to Mini-WECO  BLK BRN RED YEL GRN BLU PPL	MCVPC003-MVP	0.3
	MCVPC005-MVP	0.5
	MCVPC01-MVP	1
to WECO  BLK BRN RED YEL GRN BLU PPL	MCVPC003-VWP	0.3
	MCVPC005-VWP	0.5
	MCVPC01-VWP	1
to BNC (F)  BLK BRN RED YEL GRN BLU PPL	MCVPC002-BJ	0.2

Website

■ Mini-WECO Conversion

Type	Model	Length (m)
to BNC (F)  BLK RED YEL GRN BLU	MVPC002-BJ	0.2
to BNC (M)  BLK RED YEL GRN BLU	MVPC02A-BP	2
	MVPC05A-BP	5

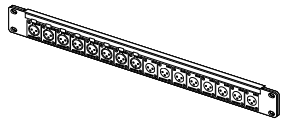
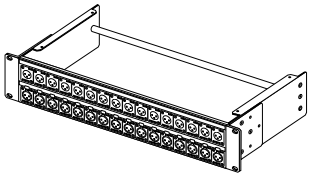
Website

Pre-Loaded A/V Connector Panels

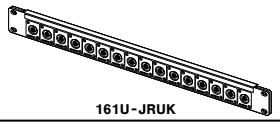
Website

- BNC and XLR types are available.
- Clear plastic cover, full screen desi-strip
- Variety of panel options
- Most popular panel holes XLR F77 and Neutrik D available

■ XLR Connector Panels

Type	Panel Size	Model	Loaded Connector	Panel P/N	Dimensions (mm)
 161U-X12F	1RU	**161U-X1F**	XLR3-31-F77 (16 pcs)	1U-AS1	44 × 482.6 × 39.7
		161U-X2F	XLR3-32-F77 (16 pcs)		44 × 482.6 × 26.6
		161U-X12F	XLR3-31-F77 (8 pcs, Left) XLR3-32-F77 (8 pcs, Right)		44 × 482.6 × 39.7
		161U-B1	NC3FD-LX-B (16 pcs)	1U-AS1D	44 × 482.6 × 31.3
		161U-B2	NC3MD-LX-B (16 pcs)		44 × 482.6 × 23.6
 162U-X21	2RU	**162U-X21**	XJ3M-P3FA (16 pcs, Upper Row) XJ3F-P3MA (16 pcs, Lower Row)	2U-AS7	88.1 × 482.6 × 217
		162U-X22	XJ3M-P3FA (32 pcs, 2 rows)		

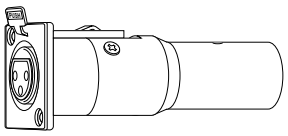
■ BNC Connector Panels

Type	Panel Size	Model	Loaded Connector	Panel P/N	Dimensions (mm)
 161U-JRUK	1RU	**161U-JRUK**	BCJ-JRUK (16 pcs)	1U-AS1	44 × 482.6 × 31.4
	2RU	**162U-JRUK**	BCJ-JRUK (32 pcs, 2 rows)	2U-AS7	88.1 × 482.6 × 217

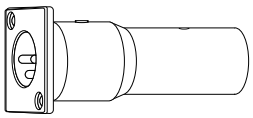
XLR3 Panel Mount Adapters

Model	Description		Flange Type
	Front	Rear	
XJ3M-P3FA	XLR 3pin (M)	XLR 3pin (F)	ITT XLR-F77
XJ3M-P3MA	XLR 3pin (M)	XLR 3pin (M)	
XJ3F-P3FA	XLR 3pin (F)	XLR 3pin (F)	
XJ3F-P3MA	XLR 3pin (F)	XLR 3pin (M)	

Website

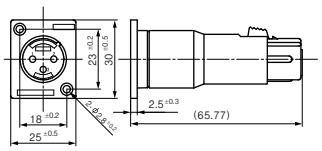


XJ3F-P3MA

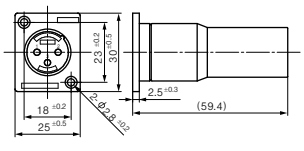


XJ3M-P3MA

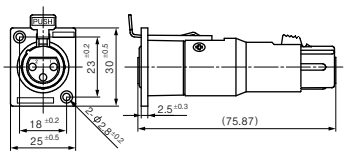
- XJ3 series are XLR3 full compatible.
- XLR jack to jack extremely reduce installation hours.



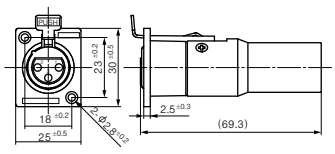
XJ3M-P3FA



XJ3M-P3MA



XJ3F-P3FA



XJ3F-P3MA

Blank Panels

Model	Description
BP-DXF (20 pcs)	Snap-on blank panels for both ITT XLR-F77/Neutrik D holes
BP-XF (10 pcs)	Blank panels for ITT XLR-F77 hole with screws
BP-D (10 pcs)	Blank panels for Neutrik D hole with screws

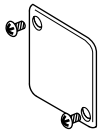
Website

BP-DXF

- Easy and quick snap-on mounting without any tools
- Can be used for both ITT XLR-F77 and Neutrik D holes

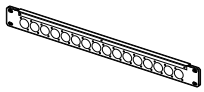
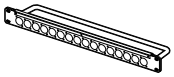
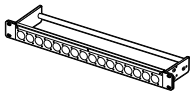
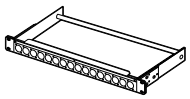
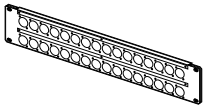
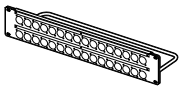
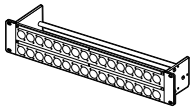
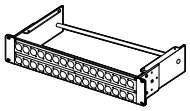
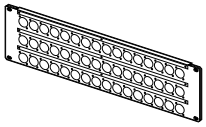
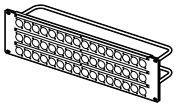
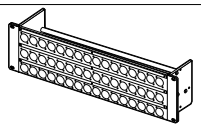
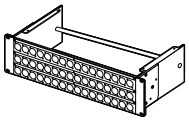
Note: Panel thickness range: t 1.2 to t 2.3 mm

BP-DXF



BP-XF

Unloaded A/V Connector Panels

Panel Type	AS1 (D)	AS3 (D)	AS5 (D)	AS7 (D)
Description	Flat panel	Flat panel w/cable tie bar	Variable panel w/cable tie bar short type	Variable panel w/cable tie bar Long type
1RU 16 holes × 1 row				
Model	**1U-AS1 (D)**	**1U-AS3 (D)**	**1U-AS5 (D)**	**1U-AS7 (D)**
Depth (mm)	—	64.8	100	217
2RU 16 holes × 2 rows				
Model	**2U-AS1 (D)**	**2U-AS3 (D)**	**2U-AS5 (D)**	**2U-AS7 (D)**
Depth (mm)	—	64.8	100	217
3RU 16 holes × 3 rows				
Model	**3U-AS1 (D)**	**3U-AS3 (D)**	**3U-AS5 (D)**	**3U-AS7 (D)**
Depth (mm)	—	64.8	100	217

Variable panel can be recessed 25 mm.

Ordering Information

Panel Height, Number of holes and Rows

1U	1RU, 16 holes, 1row
2U	2RU, 32 holes, 2rows
3U	3RU, 48 holes, 3rows

1U - **AS3** **D**

Hole Type

Blank	ITT XLR-F77 Type
D	Neutrik D Type

Panel Type

AS1	Flat panel
AS3	Flat panel w/ cable tie bar
AS5	Variable panel w/ cable tie bar - short depth
AS7	Variable panel w/ cable tie bar - long depth

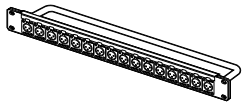
Website

Note: Depending on their length, some connectors can not be mounted on the panel with a cable tie bar installed.

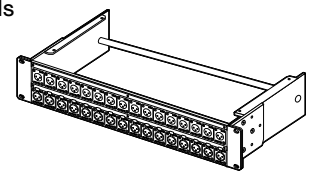
■ Related Products

Model	Description
M-MA1U02A	1RU mounting brakets for a Variable panel, 2 pcs. (left and right)
M-MA2U02	2RU mounting brakets for a Variable panel, 2 pcs. (left and right)
M-MA3U02	3RU mounting brakets for a Variable panel, 2 pcs. (left and right)
DS10-AS4	Designation strip for Canare A/V connector panels, 2 pcs.

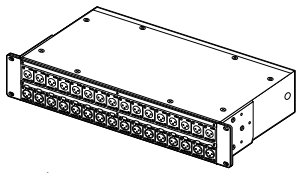
Examples of Custom-Made Connector Panels



1U-AS3 + XLR3-31-F77 × 16



2U-AS7 + XLR3-32-F77 × 16
XLR3-31-F77 × 16



2U-AS7 (box type)
Connectors can be mounted on the both side.

■ **Connectors** Canare Flush-mount BNC, F, RCA and XLR (ITT XLR-F77 or Neutrik D type) are available.

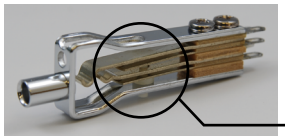
■ **Options**

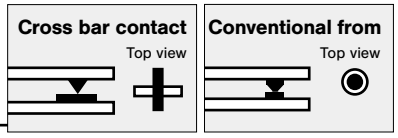
A) Rear Panel — A connector panel can be mounted on the rear.
B) Box Type — A connector panel, top plate and bottom plate can be mounted on the rear.
C) Recessed — Variable panel can be recessed 25 mm by changing the screw positions of the mounting brackets and can be recessed either 50 mm or 75 mm by changing the mounting brackets to M-MA1U02A or M-MA*U02.

Options	AS1 (D)	AS3 (D)	AS5 (D)	AS7 (D)
A) Rear Panel	N/A	N/A	Available	Available
B) Box Type	N/A	N/A	N/A	Available
C) Reccesed	N/A	N/A	Available	Available

Audio Patchbays

The gold alloy cross bar contact, which features a low faulty contact rate, is used for the jacks.





• 481U patchbay can be recessed 25 mm by changing the screw positions on the mounting brackets.

Bantam patch panel **481U-820AQ**

Bantam patch panel **48-12A/820AQ/EIA**

Website
Bantam

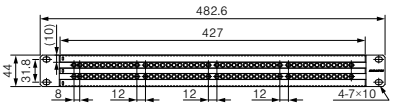
Website
Skini

Model	Description	Connector
481U-820AQ	Bantam Patchbay	820AQ × 96

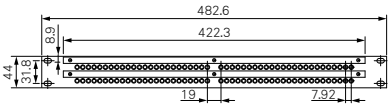
Model	Description	Connector
48-12A/820AQ/EIA	Bantam Patchbay	820AQ × 96
32-12A/620A/EIA	Skini Patchbay	620A × 64

* Listed above items are other manufacturer's products.

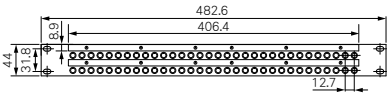
BC * M
(See page 94 for patch cords.)



481U-820AQ



48-12A/820AQ/EIA



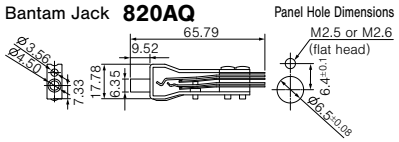
32-12A/620A/EIA

Audio Patchbays Related Products

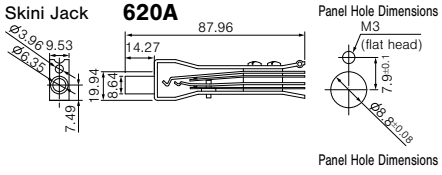
Model	Description
620A	Skini Jack
820AQ	Bantam Jack
ABJ-DC	Bantam Jack Dust Cap (100 pcs/pkg)
NP3TMC-B	Maxi/Skini Plug
ABP-DP	Bantam Dummy Plug (10 pcs.)
ABP-TA	600Ω Bantam Terminating Plug
PH50A	Maxi/Skini/Video Patch Cord Holder
PH50B	Bantam Patch Cord Holder
DS10-AS1	Designation Strip for Bantam (2 pcs.)
DS10-AS2	Designation Strip for Skini (2 pcs.)
DS10-AS3	Designation Strip for Maxi (2 pcs.)

* Listed above items are other manufacturer's products.

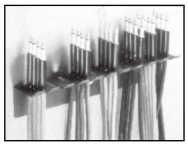
Bantam Jack **820AQ**



Skini Jack **620A**



Patch Cord Holder



Capable up to 50 patch cords.
Easy to install on the wall or side of rack.
PH50A
for Maxi/Skini, Video cords.
PH50B
for Bantam cords.

ABP-DP

ABP-TA

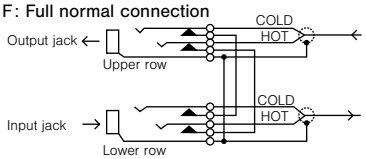
Technical Note

Audio Patchbay Normalling Descriptions

Output from a device is obtained from the upper row, while input to a device is normally connected to the lower row.
Users can select from the following three types of connecting functions.

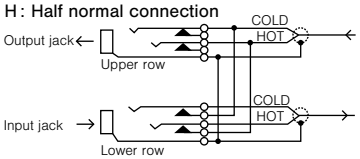
<Wiring formats connecting upper and lower connectors>

F: Full normal connection



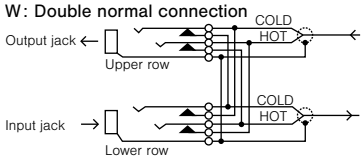
Full Normal Format (series)
The upper (output) row is connected to the lower row (input) in the state when a plug is not inserted.
When a plug is inserted in the upper jack to obtain a signal, the signal is not connected to the lower jack. A signal can be entered by inserting a plug in the lower jack. In this case the signal is not connected to the upper jack.

H: Half normal connection



Half Normal Format (half-parallel)
The upper (output) row is connected to the lower row (input) in the state when a plug is not inserted.
When a plug is inserted in the upper jack to obtain a signal, the signal is connected to the lower jack. This format allows the signal to be obtained in parallel. The signal can be prevented from going to the lower jack by inserting a dummy plug.
Signals are input by inserting a plug in the lower jack. In this case the signal is not connected to the upper jack.

W: Double normal connection



Double Normal Format (series-parallel)
The upper (output) row is connected to the lower row (input) in the state when a plug is not inserted.
When a plug is inserted in the upper jack to obtain a signal, the signal is connected to the lower jack. This format allows the signal to be obtained in parallel. The signal can be prevented from going to the lower jack by inserting a dummy plug.
A signal can be entered by inserting another plug in the lower jack. Note that the signal in this case is connected to the upper jack.
This can be prevented by inserting a dummy plug.

Panels and Patchbays

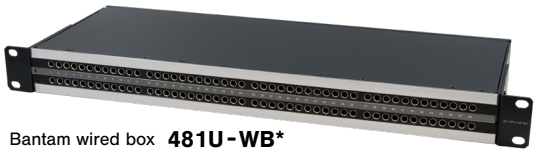
Audio Patchbays

■ Wired Box

Type	Model	Size	Connector	
			Front	Rear
Bantam	**481U-WBF**	1RU	820AQ × 96	90-602 × 4
	481U-WBH	1RU	820AQ × 96	90-602 × 4
	481U-WBW	1RU	820AQ × 96	90-602 × 4
	481U-WBS	1RU	820AQ × 96	90-602 × 4
	48WB-F	1RU	820AQ × 96	90-602 × 4
	48WB-H	1RU	820AQ × 96	90-602 × 4
	48WB-W	1RU	820AQ × 96	90-602 × 4
Skini	**32WB-F**	1RU	620A × 64	90-602 × 4
	32WB-H	1RU	620A × 64	90-602 × 4
	32WB-W	1RU	620A × 64	90-602 × 4

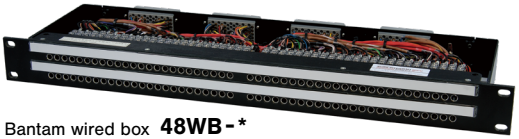
481U-WB can be recessed 25 mm
*90-602 connector is identical to ELCO 00-8016-090-***-702V connector

90-602



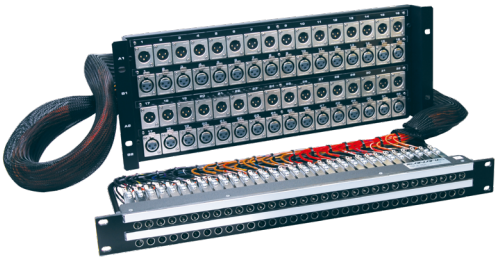
Website Bantam

Bantam wired box **481U-WB***



Website Skini

Bantam wired box **48WB-***



Skini wired panel **32XP-***

■ Wired Panels

Type	Model	Panel 1		Panel 2	
		Size	Connector	Size	Connector
Bantam	**48XP-F**	1RU	820AQ × 96	3RU × 2	XLR3-31-F77 × 48 XLR3-32-F77 × 48
	48XP-H	1RU	820AQ × 96	3RU × 2	XLR3-31-F77 × 48 XLR3-32-F77 × 48
	48XP-W	1RU	820AQ × 96	3RU × 2	XLR3-31-F77 × 48 XLR3-32-F77 × 48
Skini	**32XP-F**	1RU	620A × 64	4RU	XLR3-31-F77 × 32 XLR3-32-F77 × 32
	32XP-H	1RU	620A × 64	4RU	XLR3-31-F77 × 32 XLR3-32-F77 × 32
	32XP-W	1RU	620A × 64	4RU	XLR3-31-F77 × 32 XLR3-32-F77 × 32

*Cables are 2 meters in length.

Normaling Options

481U-WB*
48WB-*
48XP-*
- F: Full normal
- H: Half normal
- W: Double normal
- S: Single (No normal)

TCB**

(See page 94 or patch cords)

90-602 Connector Format (Wired box)

<Rear panel>

Bantam	Lower row 25~48 ch	Upper row 25~48 ch	Lower row 1~24 ch	Upper row 1~24 ch
Skini	Lower row 17~32 ch	Upper row 17~32 ch	Lower row 1~16 ch	Upper row 1~16 ch

90-602 connector is mated with 90-608 connector.
90-608 requires either 125 or 525 contact and 90-T cover for assembling.

<Wired box side>

90-602
(00-8016-090-000-702V)

<Cable side>

90-608 (00-8016-090-000-708V)
- Contact
  - **125:** Solder type (60-8016-0513-00-339)
  - **525:** Crimp type (60-8016-0313-00-339)
- Cover — **90-T:** Top entrance (30-8016-090-T)

*The numbers in parentheses are ELCO ordering codes.
** Contact extraction tool: 06-1877-04.
Crimping pliers for 525: 06-1001-015 (AWG #18), 06-1001-016 (AWG #20-#22), 06-1001-017 (AWG #24-#26).

Wiring Table for 90-602

Channel no.	Skini		Bantam		HOT	COLD	SHIELD
1	1	17	1	25	A	H	R
2	2	18	2	26	B	J	S
3	3	19	3	27	C	K	T
4	4	20	4	28	D	L	U
5	5	21	5	29	E	M	V
6	6	22	6	30	F	N	W
7	7	23	7	31	X	AE	AM
8	8	24	8	32	Y	AF	AN
9	9	25	9	33	Z	AH	AP
10	10	26	10	34	AA	AJ	AR
11	11	27	11	35	AB	AK	AS
12	12	28	12	36	AC	AL	AT
13	13	29	13	37	BJ	BS	BY
14	14	30	14	38	BK	BT	BZ
15	15	31	15	39	BL	BU	CA
16	16	32	16	40	BM	BV	CB
			17	41	BN	BW	CC
			18	42	BP	BX	CD
			19	43	CF	CN	CW
			20	44	CH	CP	CX
			21	45	CJ	CR	CY
			22	46	CK	CS	CZ
			23	47	CL	CT	DA
			24	48	CM	CU	DB

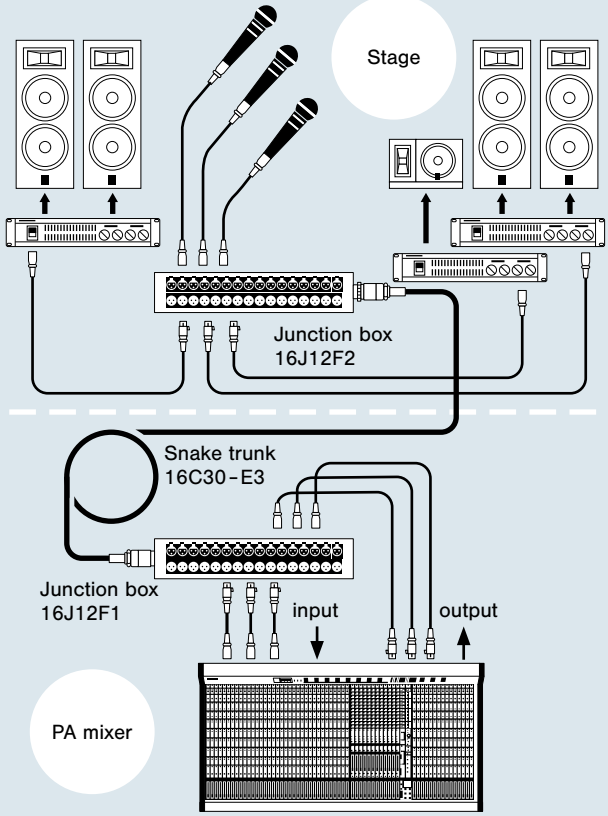
■ Snake Trunk

■ Junction Box

■ Fantail

■ Cable Reel Snake

■ System Example



■ Connectors used with Canare multichannel cable system

Cable mount

XLR3-11C (female)

Panel mount

XLR3-32-F77 (male)

Cable mount

XLR3-12C (male)

Panel mount

XLR3-31-F77 (female)

For multichannel cable
Plug

NK27-21C-R
(female)
+
NK-AD1-R
(barrel extension)

For Junction box
Receptacle

NK27-32S-R
(male)

For multichannel cable
Plug

FK37-21C-R
(female)
+
FK-AD2-R
(barrel extension)

For Junction box
Receptacle

FK37-32S-R
(male)

8·12 ch

NK27-22C-R
(male)
+
NK-AD1-R
(barrel extension)

NK27-31S-R
(female)

16 ch

FK37-22C-R
(male)
+
FK-AD2-R
(barrel extension)

FK37-31S-R
(female)

24 ch

D/MS3106B32A-10S
(female)
+
EB-02
(barrel extension)
+
D/MS3057-20A(R1)
(cable clamp)

D/MS3102A32A-10P
(male)

32 ch

D/MS3106B36-73S
(female)
+
EB-03
(barrel extension)
+
D/MS3057-24A(R1)
(cable clamp)

D/MS3102A36-73P
(male)

8 CH

Snake Trunks

L-4E3
Star quad, Braided shield

Connector: NK27-21C 3/4-R, NK27-22C 3/4-R
Cable: L-4E3-8P (black)
Rubber bushing: AN3420-12(R1) + Heat Shrink Tube

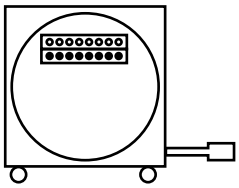
Model	Length	Weight
8C05-E3	5m	1.6kg
8C10-E3	10m	3.0kg
8C30-E3	30m	8.4kg
8C50-E3	50m	13.8kg

M2
Two-cord, AT shield

Connector: NK27-21C 3/4-R, NK27-22C 3/4-R
Cable: M202-8AT (black)
Rubber bushing: AN3420-10(R1), 12(R1) + Heat Shrink Tube

Model	Length	Weight
8C10-M2	10m	1.7kg
8C30-M2	30m	4.5kg
8C50-M2	50m	7.3kg

Cable Reel Snakes



Connector: NK27-21C-3/4-R
Cable: L-4E3-8P (black)

Model	Length	Weight	Cable reel
8R30-E3	30m	18.1kg	R380
8R50-E3	50m	23.0kg	R380

12 CH

Snake Trunks

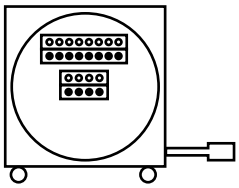
Connector: NK27-21C 7/8-R, NK27-22C 7/8-R
Cable: L-4E3-12P (black)
Rubber bushing: AN3420-16(R1)

Model	Length	Weight
12C05-E3	5m	2.1kg
12C10-E3	10m	3.9kg
12C30-E3	30m	11.1kg
12C50-E3	50m	18.3kg

Connector: NK27-21C 3/4-R, NK27-22C 3/4-R
Cable: M202-12AT (black)
Rubber bushing: AN3420-10(R1), 12(R1) + Heat Shrink Tube

Model	Length	Weight
12C10-M2	10m	2.1kg
12C30-M2	30m	5.8kg
12C50-M2	50m	9.3kg

Cable Reel Snakes



Connector: NK27-21C-7/8-R
Cable: L-4E3-12P (black)

Model	Length	Weight	Cable reel
12R30-E3	30m	20.6kg	R380
12R50-E3	50m	30.4kg	R460

16 CH

Snake Trunks

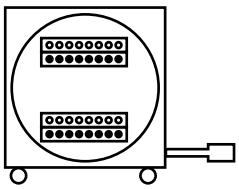
Connector: FK37-21C 7/8-R, FK37-22C 7/8-R
Cable: L-4E3-16P (black)
Rubber bushing: AN3420-16(R1)

Model	Length	Weight
16C05-E3	5m	2.6kg
16C10-E3	10m	4.9kg
16C30-E3	30m	14.1kg
16C50-E3	50m	23.3kg

Connector: FK37-21C 7/8-R, FK37-22C 7/8-R
Cable: M202-16AT (black)
Rubber bushing: AN3420-10(R1), 12(R1), 16(R1)

Model	Length	Weight
16C10-M2	10m	2.7kg
16C30-M2	30m	7.5kg
16C50-M2	50m	12.3kg

Cable Reel Snakes



Connector: FK37-21C-7/8-R
Cable: L-4E3-16P (black)

Model	Length	Weight	Cable reel
16R30-E3	30m	24.1kg	R380
16R50-E3	50m	36.1kg	R460

24 CH

Snake Trunks

Connector: <D/MS3106B32A-10S+D/MS3057-20A(R1)> × 2
Cable: L-4E3-24P (black)
Rubber bushing: AN3420-20(R1)

Model	Length	Weight
24C05-E3	5m	4.3kg
24C10-E3	10m	7.7kg
24C30-E3	30m	21.7kg
24C50-E3	50m	35.7kg

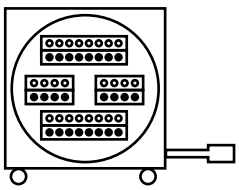
Extension Cord <D/MS3101A32A-10P+D/MS3057-20A(R1)> × 2
Cable: L-4E3-24P (black)

Model	24C005-E3MS22

Connector: <D/MS3106B32A-10S+D/MS3057-20A(R1)> × 2
Cable: M202-24AT (black)
Rubber bushing: AN3420-16(R1), 20(R1) + Heat Shrink Tube

Model	Length	Weight
24C10-M2	10m	4.0kg
24C30-M2	30m	10.4kg
24C50-M2	50m	16.8kg

Cable Reel Snakes



Connector: D/MS3106B32A-10S
Cable: L-4E3-24P (black)

Model	Length	Weight	Cable reel
24R30-E3	30m	34.6kg	R460

32 CH

Snake Trunks

Connector: <D/MS3106B36-73S+D/MS3057-24A(R1)> × 2
Cable: M202-32AT (black)
Rubber bushing: AN3420-16(R1), 20(R1), 24(R1)

Model	Length	Weight
32C10-M2	10m	4.8kg
32C30-M2	30m	13.1kg
32C50-M2	50m	21.0kg

Extension Cord
Connector: <D/MS3101A36-73P+D/MS3057-24A(R1)> × 2
Cable: M202-32AT (black)

Model	32C005-M2MS22

Website
Snake Trunk

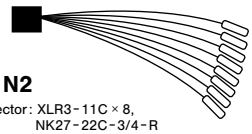
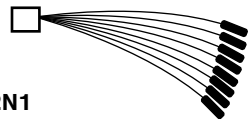
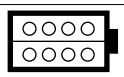
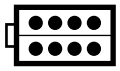
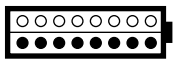
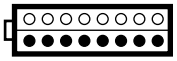
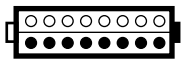
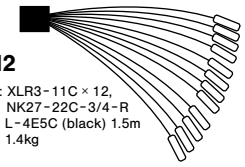
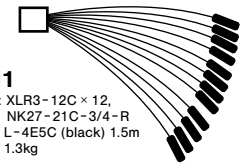
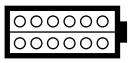
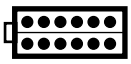
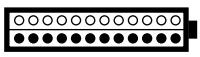
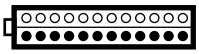
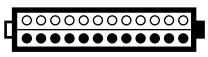
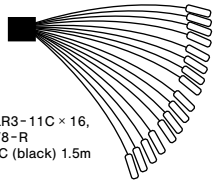
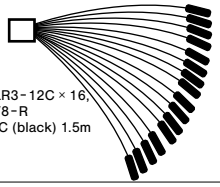
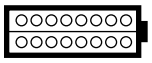
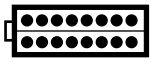
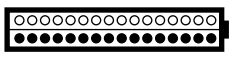
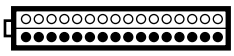
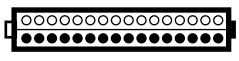
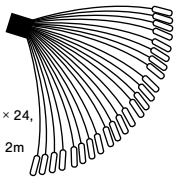
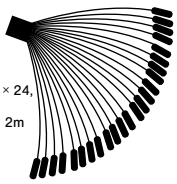
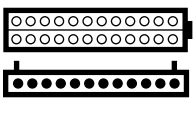
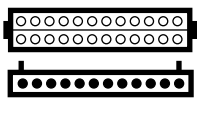
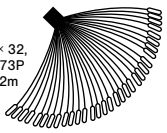
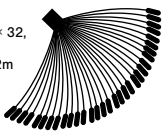
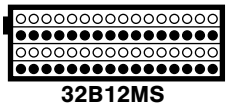
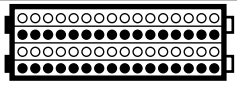
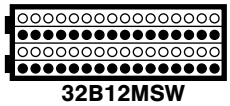
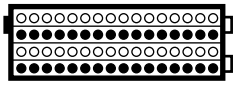
Website
Cable Reel Snakes

Website
Fantail

Website
Junction Box

□○ : Female
■● : Male

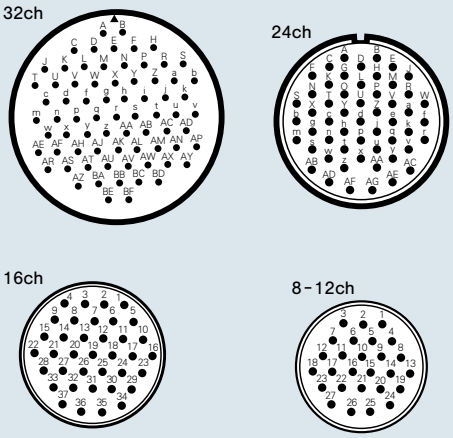
Note : Connecting cables 24C005-E3MS22 and 32C005-M2MS22 are to be used to interconnect snake trunks only and they do not mate with our other standard snake system.

Fantails	Junction Boxes		
	Single XLR per channel	Parallel XLR per channel	Parallel XLR per channel MultiPin feed through
 **8S1N2** Connector: XLR3-11C × 8, NK27-22C-3/4-R Cable: L-4E6S (black) 1.5m Weight: 1.1kg  **8S2N1** Connector: XLR3-12C × 8, NK27-21C-3/4-R Cable: L-4E6S (black) 1.5m Weight: 1.0kg	 **8B1N2** Connector: XLR3-31-F77 × 8, NK27-32S-R × 1 Weight: 0.9kg  **8B2N1** Connector: XLR3-32-F77 × 8, NK27-31S-R × 1 Weight: 1.1kg	 **8J12N2** Connector: XLR3-31-F77 × 8, XLR3-32-F77 × 8 NK27-32S-R × 1 Weight: 1.5kg  **8J12N1** Connector: XLR3-31-F77 × 8, XLR3-32-F77 × 8 NK27-31S-R × 1 Weight: 1.5kg	 **8J12N12** Connector: XLR3-31-F77 × 8, XLR3-32-F77 × 8 wNK27-31S-R × 1, NK27-32S-R × 1 Weight: 1.6kg
 **12S1N2** Connector: XLR3-11C × 12, NK27-22C-3/4-R Cable: L-4E5C (black) 1.5m Weight: 1.4kg  **12S2N1** Connector: XLR3-12C × 12, NK27-21C-3/4-R Cable: L-4E5C (black) 1.5m Weight: 1.3kg	 **12B1N2** Connector: XLR3-31-F77 × 12, NK27-32S-R × 1 Weight: 1.3kg  **12B2N1** Connector: XLR3-32-F77 × 12, NK27-31S-R × 1 Weight: 1.2kg	 **12J12N2** Connector: XLR3-31-F77 × 12, XLR3-32-F77 × 12 NK27-32S-R × 1 Weight: 2.1kg  **12J12N1** Connector: XLR3-31-F77 × 12, XLR3-32-F77 × 12 NK27-31S-R × 1 Weight: 2.1kg	 **12J12N12** Connector: XLR3-31-F77 × 12, XLR3-32-F77 × 12 NK27-31S-R × 1, NK27-32S-R × 1 Weight: 2.2kg
 **16S1F2** Connector: XLR3-11C × 16, FK37-22C-7/8-R Cable: L-4E5C (black) 1.5m Weight: 1.9kg  **16S2F1** Connector: XLR3-12C × 16, FK37-21C-7/8-R Cable: L-4E5C (black) 1.5m Weight: 1.7kg	 **16B1F2** Connector: XLR3-31-F77 × 16, FK37-32S-R × 1 Weight: 1.6kg  **16B2F1** Connector: XLR3-32-F77 × 16, FK37-31S-R × 1 Weight: 1.3kg	 **16J12F2** Connector: XLR3-31-F77 × 16, XLR3-32-F77 × 16 FK37-32S-R × 1 Weight: 2.5kg  **16J12F1** Connector: XLR3-31-F77 × 16, XLR3-32-F77 × 16 FK37-31S-R × 1 Weight: 2.5kg	 **16J12F12** Connector: XLR3-31-F77 × 16, XLR3-32-F77 × 16 FK37-31S-R × 1, FK37-32S-R × 1 Weight: 2.6kg
 **24S1MS2** Connector: XLR3-11C × 24, D/MS3101A32A-10P Cable: L-4E5C (black) 2m  **24S2MS2** Connector: XLR3-12C × 24, D/MS3101A32A-10P Cable: L-4E5C (black) 2m		 **24B12MS** Connector: XLR3-31-F77 × 24 (on top) XLR3-32-F77 × 24 (12 on each side) D/MS3102A32A-10P Weight: 2.7kg	 **24B12MSW** Connector: XLR3-31-F77 × 24 (on top) XLR3-32-F77 × 24 (12 on each side) D/MS3102A32A-10P × 2 Weight: 3.0kg
 **32S1MS2** Connector : XLR3-11C × 32, D/MS3101A36-73P Cable : L-4E5C (black) 2m  **32S2MS2** Connector : XLR3-12C × 32, D/MS3101A36-73P Cable: L-4E5C (black) 2m		 **32B12MS** Connector: XLR3-31-F77 × 32, XLR3-32-F77 × 32 D/MS3102A36-73P Weight: 5.3kg  **32B12MWF11** Connector: XLR3-31-F77 × 32, XLR3-32-F77 × 32 D/MS3102A36-73P × 2, FK37-31S-R × 2 Weight: 6.0kg	 **32B12MSW** Connector: XLR3-31-F77 × 32, XLR3-32-F77 × 32 D/MS3102A36-73P × 2 Weight: 5.5kg  **32B12MF11** Connector: XLR3-31-F77 × 32, XLR3-32-F77 × 32 D/MS3102A36-73P × 1, FK37-31S-R × 2 Weight: 5.7kg

Multichannel Connector Pin Assignments

Ch No.	Cable Unit Identification			32ch		24ch		16ch		8ch / 12ch	
	L-4E3	M202		D/MS3102A36-73 D/MS3106B36-73		D/MS3102A32A-10 D/MS3106B32A-10		FK37		NK27	
	Spiral Marker Color	Insulator Color: Identifying Color	Insulator Color: Common identifying Color	HOT	COLD	HOT	COLD	HOT	COLD	HOT	COLD
1	RED	RED	WHT	A	B	A	B	1	2	1	3
2	BLU	BLU		C	D	C	D	3	4	4	5
3	YEL	YEL		F	H	F	G	5	6	6	7
4	GRN	GRN		J	K	H	J	8	9	8	9
5	BRN	BRN		L	M	K	L	10	11	11	12
6	N/A	GRY		N	P	N	O	12	13	13	14
7	BLU • BLK	BLU	BLK	R	S	P	R	14	15	15	16
8	YEL • BLK	YEL		T	U	S	T	16	17	17	18
9	GRN • BLK	GRN		V	W	U	V	21	22	19	20
10	BRN • BLK	BRN		Y	Z	X	Y	23	24	22	23
11	BLK	GRY		a	b	Z	a	25	26	24	25
12	BLU • ORN	BLU	ORN	c	d	b	c	27	28	26	27
13	YEL • ORN	YEL		f	g	d	e	29	30	SHIELD	
14	GRN • ORN	GRN		h	i	g	h	32	33	10	
15	BRN • ORN	BRN		j	k	j	k	34	35		
16	ORN	GRY		m	n	m	n	36	37		
17	BLU • PNK	BLU	PNK	u	v	p	q	SHIELD			
18	YEL • PNK	YEL		w	x	s	t	19			
19	GRN • PNK	GRN		y	z	u	v				
20	BRN • PNK	BRN		AA	AB	w	x				
21	PNK	GRY		AC	AD	AB	z				
22	BLU • WHT	BLU	RED	AE	AF	AA	AC				
23	YEL • WHT	YEL		AH	AJ	AD	AF				
24	GRN • WHT	GRN		AL	AM	AG	AE				
25	—	BRN		AN	AP	SHIELD					
26	—	GRY		AR	AS	E					
27	—	YEL	BLU	AT	AU						
28	—	GRN		AV	AW						
29	—	BRN		AX	AY						
30	—	GRN	YEL	AZ	BA						
31	—	BRN		BC	BD						
32	—	GRY		BE	BF						

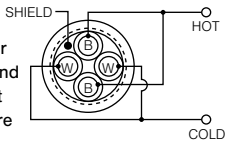
SHIELD		
E	q	t
X	r	AK
p	s	BB



Connection Method

L-4E3 Types:

Identify the channel number by the color of the spiral marker on the inner jacket (gray). The unit is 4-core construction and the insulator colors are blue, blue, white, and white. Connect these with the same colored cores, so that the blue cores are connected to Hot and the white cores to Cold.



M202 Types:

The unit is 2-core construction, with the channel number identified by the insulator color (a combination of the identifying color and common identifying color). Connect the identifying color core to Hot, and the common identifying color core to Cold.

Connections to XLR Connectors

Polarity	HOT	COLD	SHIELD
Pin No.	2	3	1

Lightweight Cable Reels

Lightweight plastic cable reels made by Schill™

Model	Flange Dim.	Description	Weight
RGT310.RM	310 mm	with auxiliary reel	1.8 kg
RGT380.RM	380 mm		4.8 kg
RGT310.MFK	310 mm	with latching door	1.4 kg
RGT380.MFK	380 mm		4.3 kg

Color: dark blue

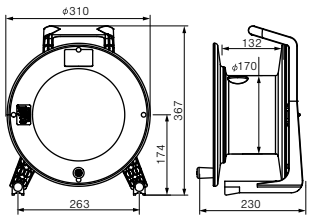

RGT310.RM


RGT380.MFK

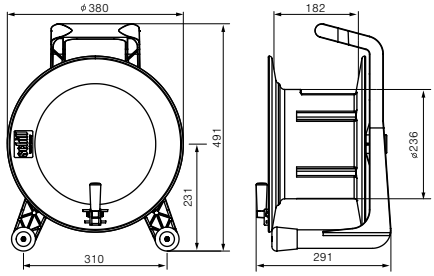
Website


RGT380.MFK
door open

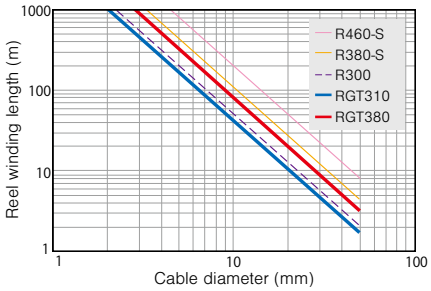
- Canare and Schill™ collaboration
  *Schill™ is a trademark of Schill GmbH & Co. KG
- Easy to carry around
- High quality resin: durable, weatherproof and lightweight.
- Locking brake
- Latchig door type (MFK) allows you to store cable connector inside reel.
- Canare special colored flange
- Rough estimate of maximum cable lengths (cable O.D.)
  RGT310: L-4E6S 120 m (6 mm)
  RGT380: L-5CFW 130 m (7.7 mm)
  RJC6A-4P-SFM 110m (8.6 mm)
  LF-2SM9N 100m (9.2 mm)



RGT310



RGT380



Cable winding length reference chart

Cable Reels

Dependable cable reels Dependable steel reels with 3-speed brake

Model	Flange Dim.	Description	Feature	Weight
R300-S	300 mm	with auxiliary reel	stackable	4.6 kg
R380-S	380 mm		w/caster	8.3 kg
R460-S	460 mm		w/caster	9.9 kg
R300	300 mm	cable hole on hub (no exit)	stackable	4.3 kg
R300-L	300 mm	connector trench on hub (no holes)	stackable	4.4 kg
R300-CN	300 mm	XLR3 receptacles on hub and flange	stackable	4.6 kg
R300-BN	300 mm	BNC receptacles on hub and flange	stackable	4.6 kg

Color: black

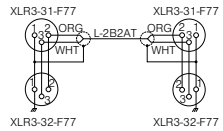
- 3-speed brake: lock/soft/free
- Oiless bearing
- Tubular steel E brace construction
- Parallel wired M & F XLR3s for genderless connection (R300-CN)

Website

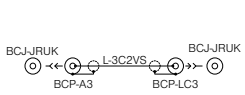
R460-S

R300-S

Wiring



R300-CN



R300-BN

3-speed brake

Reels with Cable Assemblies

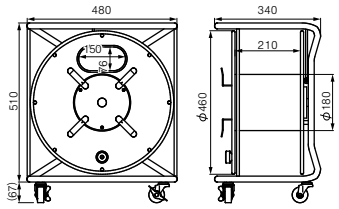
Cable reels with detachable cables

Model	Description				Weight (kg)
	Cable reel	Cable Assemblies			
		Inner end	Cable	Outer end	
CR100-CN	R300-CN	XLR3-12C	L-4E6S(100m)	XLR3-11C	9.6
CR100-S	R300-S	XLR3-12C	L-4E6S(100m)	XLR3-11C	9.6
CR90-BN	R300-BN	BCP-H5B	L-5C2VS(90m)	BCP-H5B	10.5

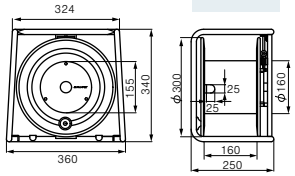
Website

CR100-CN

Dimensions

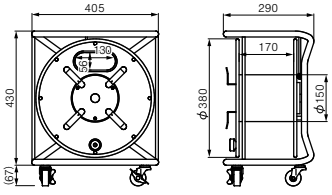


R460-S

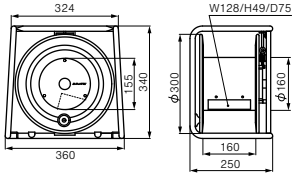


R300

(Connectors can be attached to the front panel)

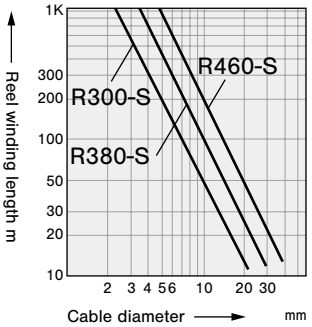


R380-S

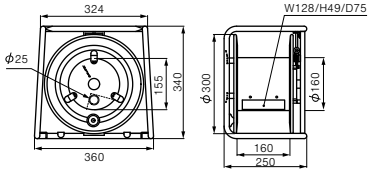


R300-L

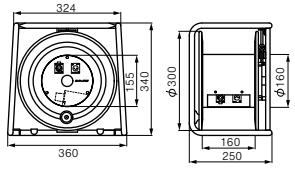
(Connectors can be attached to the front panel and the drum)



Cable winding length reference chart



R300-S



R300-CN

(R300-BN comes with BNC receptacles)

<Wind length conversion formula>

R300-S (S, L, CN) $L = \frac{8448}{D^2} \times 0.6$ (m)

R460-S $L = \frac{33852}{D^2} \times 0.6$ (m)

R380-S $L = \frac{18207}{D^2} \times 0.6$ (m)

D: cable outer diameter (mm)
L: wind length

Cable Assemblies

BNC

- High quality and reliable Canare assemblies are ideal for any interconnection including broadcast, professional A/V, and telecommunication.
- Custom assembly configurations can be special ordered at affordable cost and quick lead-time.

Website

■ BNC 12G-SDI

Type	Model	Length (m)
BNC (M) - BNC (M) Crimp For fixed installation BCP-D33UHD L-3.3CUHD BCP-D33UHD L BLK BRN GRN PPL	**D3.3UHDC005E**	0.5
	D3.3UHDC01E	1
	D3.3UHDC015E	1.5
	D3.3UHDC02E	2
	D3.3UHDC03E	3
	D3.3UHDC05E	5
	D3.3UHDC10E	10
BNC (M) - BNC (M) Crimp For fixed installation BCP-D55UHD L-5.5CUHD BCP-D55UHD L BLK BRN GRN PPL	**D5.5UHDC01E**	1
	D5.5UHDC03E	3
	D5.5UHDC05E	5
	D5.5UHDC10E	10
	D5.5UHDC20E	20
	D5.5UHDC30E	30
	D5.5UHDC50E	50
	D5.5UHDC70E	70
	D5.5UHDC100E	100
BNC (M) - BNC (M) Crimp For mobile applications BCP-D33UHW BCP-D33UHW L-3.3CUHWS L Heat Shrink Tubes BLK One tube for lengths <1m	**D3.3UHWC005-S**	0.5
	D3.3UHWC01-S	1
	D3.3UHWC02-S	2
	D3.3UHWC03-S	3
	D3.3UHWC05-S	5
	D3.3UHWC10-S	10
BNC (M) - BNC (M) Crimp For mobile applications BCP-D55UHW BCP-D55UHW L-5.5CUHWS L Heat Shrink Tubes BLK PPL Boot color: Black only	**D5.5UHWC10-S**	10
	D5.5UHWC20-S	20
	D5.5UHWC30-S	30
	D5.5UHWC50-S	50

■ BNC

For fixed installation

Type	Model	Length (m)
BNC (M) – BNC (M) Crimp BCP-B3F L-3CFB BCP-B3F L BLK RED YEL GRN BLU GRY WHT	**D3FBC005E**	0.5
	D3FBC01E	1
	D3FBC015E	1.5
	D3FBC02E	2
	D3FBC03E	3
	D3FBC05E	5
	D3FBC10E	10
BNC (M) – BNC (M) Crimp BCP-B25HD L-2.5CHD BCP-B25HD L BLK RED YEL GRN BLU GRY WHT	**D2.5HDC005E**	0.5
	D2.5HDC01E	1
	D2.5HDC015E	1.5
	D2.5HDC02E	2
	D2.5HDC03E	3
	D2.5HDC05E	5
	D2.5HDC10E	10
BNC (M) – BNC (M) Crimp BCP-B53 L-4.5CHD BCP-B53 L BLK BRN RED ORN YEL GRN BLU PPL GRY WHT	**D4.5HDC03E**	3
	D4.5HDC05E	5
	D4.5HDC10E	10
	D4.5HDC15E	15
	D4.5HDC20E	20

■ BNC

For mobile applications

Type	Model	Length (m)
BNC (M) – BNC (M) Crimp BCP-A3 L-3C2VS BCP-A3 L BLK BRN RED ORN YEL GRN BLU GRY WHT	**D3C005A-S**	0.5
	D3C01A-S	1
	D3C02A-S	2
	D3C03A-S	3
	D3C05A-S	5
	D3C10A-S	10
BNC (M) – BNC (M) Crimp BCP-A5 L-5C2VS BCP-A5 L BLK BRN RED ORN YEL GRN BLU GRY WHT	**D5C005A-S**	0.5
	D5C01A-S	1
	D5C015A-S	1.5
	D5C03A-S	3
	D5C05A-S	5
	D5C10A-S	10
	D5C15A-S	15
	D5C20A-S	20

Website

■ BNC water-proof

Type	Model	Length (m)
BNC (M) – BNC (M) 12G-SDI BCP-W55UHD L-5.5CUHD BCP-W55UHD L The waterproof standard: IPX7 BLK BRN GRN PPL	**WD5.5UHDC20**	20
	WD5.5UHDC30	30
	WD5.5UHDC50	50

Sold separately: BNC Cap: **BCP-DC** (20 pcs.)• BCP-W55UHD is not for sale.

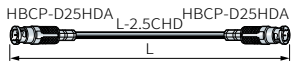
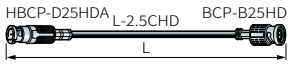
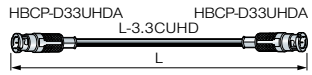
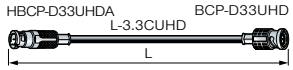
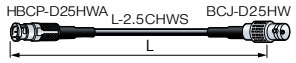
■ BNC-DIN

Type	Model	Length (m)
BNC (M) – DIN (M) Crimp BCP-B25HD L-2.5CHD DCP-C25HD L BLK RED YEL GRN BLU GRY WHT	**D2.5HDC005E-D**	0.5
	D2.5HDC01E-D	1
	D2.5HDC015E-D	1.5
	D2.5HDC02E-D	2
	D2.5HDC03E-D	3
	D2.5HDC05E-D	5
	D2.5HDC10E-D	10
BNC (M) – DIN (M) Crimp BCP-B53 L-4.5CHD DCP-C53 L BLK BRN RED ORN YEL GRN BLU PPL GRY WHT	**D4.5HDC03E-D**	3
	D4.5HDC05E-D	5
	D4.5HDC10E-D	10
	D4.5HDC15E-D	15
	D4.5HDC20E-D	20

■ BNC-RCA

Type	Model	Length (m)
BNC (M) – RCA (M) BCP-A3 L-3C2VS F-09 L BLK BRN RED ORN YEL GRN BLU GRY WHT	**D3C01A-SR**	1
	D3C03A-SR	3
	D3C05A-SR	5

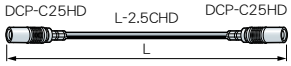
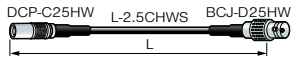
■ Micro BNC

Type	Model	Length (m)
Micro BNC (M) - Micro BNC (M) Crimp 12G-SDI  BLK BRN RED ORN YEL GRN BLU PPL GRY WHT PNK	**DM2.5HDC005A**	0.5
	DM2.5HDC01A	1
	DM2.5HDC015A	1.5
	DM2.5HDC02A	2
	DM2.5HDC03A	3
Micro BNC (M) - BNC (M) Crimp  BLK BRN RED ORN YEL GRN BLU PPL GRY WHT PNK	**DM2.5HDC005EA-BP**	0.5
	DM2.5HDC01EA-BP	1
	DM2.5HDC015EA-BP	1.5
	DM2.5HDC02EA-BP	2
	DM2.5HDC03EA-BP	3
Micro BNC (M) - Micro BNC (M) Crimp 12G-SDI  BLK BRN GRN PPL	**DM3.3UHDC03A**	3
	DM3.3UHDC05A	5
Micro BNC (M) - BNC (M) Crimp 12G-SDI  BLK BRN GRN PPL	**DM3.3UHDC03EA-BP**	3
	DM3.3UHDC05EA-BP	5
Micro BNC (M) - BNC (F) Crimp 12G-SDI  BLK BRN RED YEL GRN BLU PPL	**DM2.5HWSC002EA-BJ**	0.2

Website

DM2.5HDCA**

■ DIN

Type	Model	Length (m)
DIN (M) - DIN (M) Crimp  BLK RED YEL GRN BLU GRY WHT	**DN2.5HDC005**	0.5
	DN2.5HDC01	1
	DN2.5HDC015	1.5
	DN2.5HDC02	2
	DN2.5HDC03	3
	DN2.5HDC05	5
	DN2.5HDC10	10
DIN (M) - DIN (M) Crimp  BLK BRN RED ORN YEL GRN BLU PPL GRY WHT	**DN4.5HDC03**	3
	DN4.5HDC05	5
	DN4.5HDC10	10
	DN4.5HDC15	15
	DN4.5HDC20	20
DIN (M) - BNC (F) Crimp  BLK BRN RED YEL GRN BLU PPL	**DN2.5HWSC002E-BJ**	0.2

Website

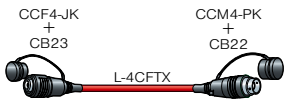
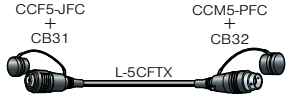
■ RCA (Video)

Type	Model	Length (m)
RCA (M) – RCA (M) Solder  BLK BRN RED ORN YEL GRN BLU GRY WHT	**DRC01-S**	1
	DRC03-S	3
	DRC05-S	5
RCA (M) – RCA (M) Crimp  BLK RED YEL GRN BLU WHT	**DRC10-F3**	10
	DRC15-F3	15
	DRC20-F3	20
	DRC30-F3	30
	DRC40-F3	40

Website

■ Triax

Cables used for connections such as those between broadcast cameras and CCUs.

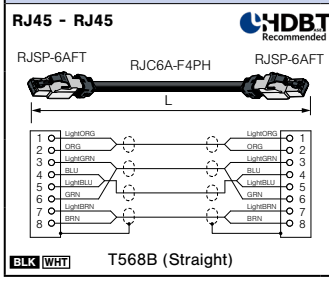
Type	Model	Length (m)
Triaxial (F) – Triaxial (M) U.S. preferred type  RED	**TXC10-K**	10
	TXC20-K	20
	TXC30-K	30
	TXC50-K	50
	TXC100-K	100
	TXC150-K	150
	TXC200-K	200
Triaxial (F) – Triaxial (M) EU preferred type  BLK RED GRN	**TXC10-F**	10
	TXC20-F	20
	TXC30-F	30
	TXC50-F	50
	TXC100-F	100
	TXC150-F	150
	TXC200-F	200

Website

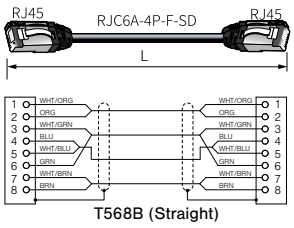
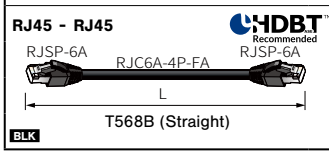
Cable Assemblies

Ethernet

■ Cat6A (Standard U/FTP)

Type	Model	Length (m)
RJ45 - RJ45 	**NC6AAT-30**	30
	NC6AAT-50	50
	NC6AAT-70	70
	NC6AAT-100	100

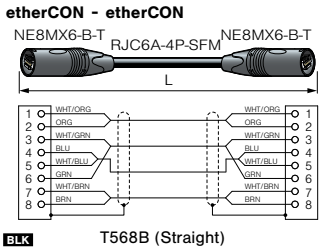
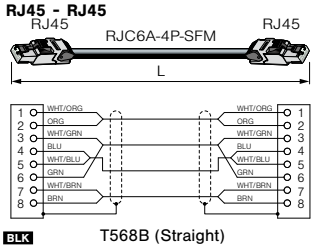
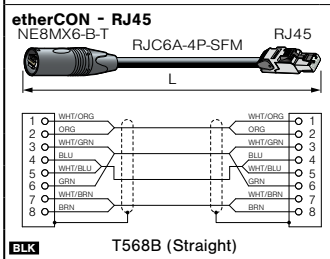
■ Cat6A (Standard F/UTP)

Type	Model	Length (m)
RJ45 - RJ45 	**NC6AFSD-01**	1
	NC6AFSD-015	1.5
	NC6AFSD-02	2
	NC6AFSD-03	3
	NC6AFSD-05	5
	NC6AFSD-07	7
	NC6AFSD-10	10
	NC6AFSD-15	15
	NC6AFSD-20	20
	NC6AFSD-25	25
	NC6AFSD-30	30
RJ45 - RJ45 	**NC6AF-30** New	30
	NC6AF-50 New	50
	NC6AF-70 New	70
	NC6AF-100 New	100

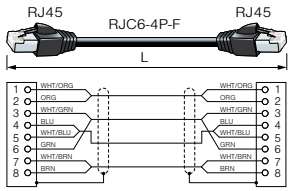
• RJC6A-4P-F-SD is not for sale.

Website

■ Cat6A (Flexible SF/UTP)

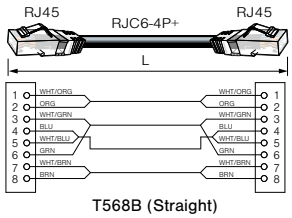
Type	Model	Length (m)
etherCON - etherCON 	**ETC6A-03-N**	3
	ETC6A-05-N	5
	ETC6A-10-N	10
	ETC6A-20-N	20
	ETC6A-30-N	30
	ETC6A-50-N	50
	ETC6A-70-N	70
	ETC6A-100-N	100
RJ45 - RJ45 	**ETC6A-03-T**	3
	ETC6A-05-T	5
	ETC6A-10-T	10
	ETC6A-20-T	20
	ETC6A-30-T	30
	ETC6A-50-T	50
	ETC6A-70-T	70
	ETC6A-100-T	100
etherCON - RJ45 	**ETC6A-01-TN**	1
	ETC6A-02-TN	2
	ETC6A-03-TN	3
	ETC6A-05-TN	5
	ETC6A-10-TN	10
	ETC6A-20-TN	20
	ETC6A-30-TN	30
	ETC6A-50-TN	50

■ Cat6 (Standard F/UTP)

Type	Model	Length (m)
RJ45 - RJ45 	**NC6F-01**	1
	NC6F-015	1.5
	NC6F-02	2
	NC6F-03	3
	NC6F-05	5
	NC6F-07	7
	NC6F-10	10
	NC6F-15	15
	NC6F-20	20
	NC6F-25	25
	NC6F-30	30
	NC6F-35	35
	NC6F-40	40
	NC6F-45	45
	NC6F-50	50
	NC6F-70	70
	NC6F-100	100

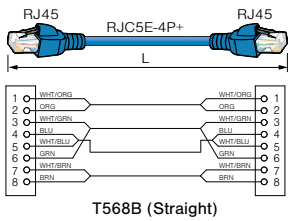
Website

■ Cat6 (Standard U/UTP)

Type	Model	Length (m)
RJ45 - RJ45 	**NC6-003**	0.3
	NC6-005	0.5
	NC6-01	1
	NC6-015	1.5
	NC6-02	2
	NC6-03	3
	NC6-05	5
	NC6-07	7
	NC6-10	10
	NC6-15	15
	NC6-20	20
	NC6-25	25
	NC6-30	30
	NC6-35	35
	NC6-40	40
	NC6-45	45
	NC6-50	50

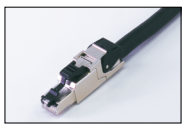
Website

■ Cat5e (Standard U/UTP)

Type	Model	Length (m)
RJ45 - RJ45 	**NC5E-003**	0.3
	NC5E-005	0.5
	NC5E-01	1
	NC5E-015	1.5
	NC5E-02	2
	NC5E-03	3
	NC5E-05	5
	NC5E-07	7
	NC5E-10	10
	NC5E-15	15
	NC5E-20	20
	NC5E-25	25
	NC5E-30	30
	NC5E-35	35
	NC5E-40	40
	NC5E-45	45
	NC5E-50	50

Website

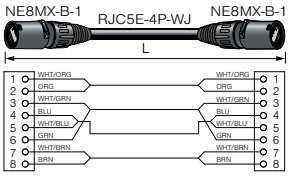
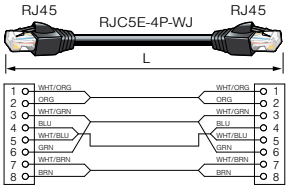
ETC6A--N**



ETC6A--T**

■ Cat5e (Flexible U/UTP)

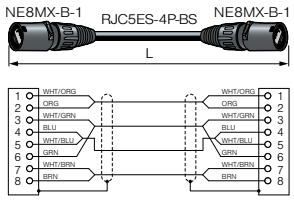
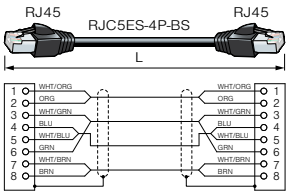
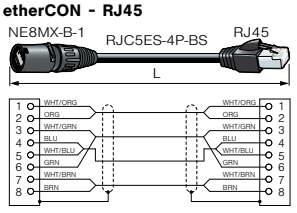
Easy routing

Type	Model	Length (m)
etherCON - etherCON  T568B (Straight) BLK	**ETC10L-B**	10
	ETC30L-B	30
	ETC50L-B	50
	ETC70L-B	70
	ETC100L-B	100
RJ45 - RJ45  T568B (Straight) BLK	**ETC10L-M**	10
	ETC30L-M	30
	ETC50L-M	50
	ETC70L-M	70
	ETC100L-M	100

Website

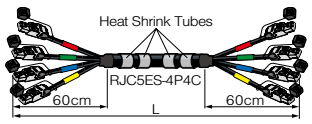
■ Cat5e (Flexible S/UTP)

For short distance (max. 50 m)

Type	Model	Length (m)
etherCON - etherCON  T568B (Straight) BLK	**ETC003S-B**	0.3
	ETC005S-B	0.5
	ETC01S-B	1
	ETC015S-B	1.5
	ETC02S-B	2
	ETC03S-B	3
	ETC05S-B	5
	ETC07S-B	7
	ETC10S-B	10
	ETC15S-B	15
	ETC20S-B	20
	ETC30S-B	30
	ETC50S-B	50
RJ45 - RJ45  T568B (Straight) BLK	**ETC003S-M**	0.3
	ETC005S-M	0.5
	ETC01S-M	1
	ETC015S-M	1.5
	ETC02S-M	2
	ETC03S-M	3
	ETC05S-M	5
	ETC07S-M	7
	ETC10S-M	10
	ETC15S-M	15
	ETC20S-M	20
	ETC30S-M	30
	ETC50S-M	50
etherCON - RJ45  T568B (Straight) BLK	**ETC01S-BM**	1
	ETC02S-BM	2
	ETC03S-BM	3
	ETC05S-BM	5
	ETC10S-BM	10
	ETC20S-BM	20
	ETC30S-BM	30
	ETC50S-BM	50

Website

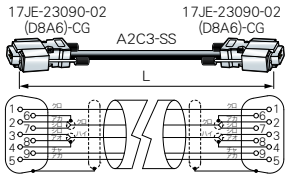
■ Quad-Cat5e (Flexible U/UTP)

Type	Model	Length (m)
RJ45 - RJ45  T568B (Straight) BLK	**4ETCS-30-T**	30
	4ETCS-50-T	50

Website

■ RS422

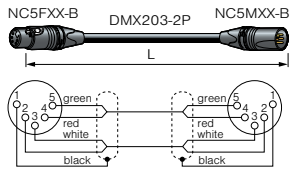
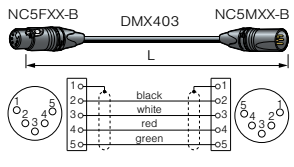
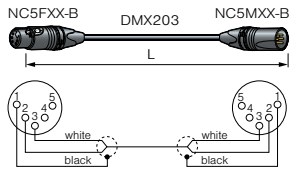
Used for RS422 serial signals.

Type	Model	Length (m)
Dsub9P (M) – Dsub9P (M)  Screws : 2.6 BLK	**DC01-9JE22**	1
	DC03-9JE22	3
	DC05-9JE22	5
	DC07-9JE22	7
	DC10-9JE22	10
	DC20-9JE22	20
	DC30-9JE22	30

Website

■ DMX

Used for controlling stage and studio lighting equipment.

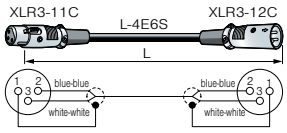
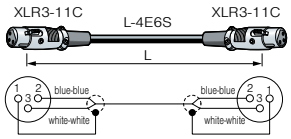
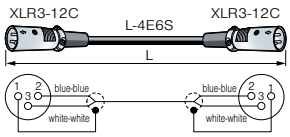
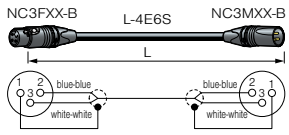
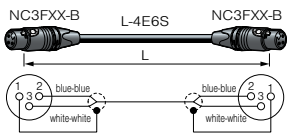
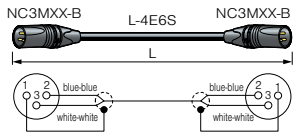
Type	Model	Length (m)
NC5 (F) – NC5 (M) Standard  BLK GRY WHT	**DMC01-B**	1
	DMC03-B	3
	DMC05-B	5
	DMC10-B	10
	DMC20-B	20
	DMC30-B	30
	DMC50-B	50
	DMC100-B	100
NC5 (F) – NC5 (M) Thinner  BLK WHT	**DM4C01-B**	1
	DM4C02-B	2
	DM4C03-B	3
	DM4C05-B	5
	DM4C10-B	10
	DM4C20-B	20
	DM4C30-B	30
	DM4C50-B	50
	DM4C100-B	100
NC5 (F) – NC5 (M) Thinnest (pins 4 & 5 unconnected)  BLK WHT	**DM2C01-B**	1
	DM2C02-B	2
	DM2C03-B	3
	DM2C05-B	5
	DM2C10-B	10
	DM2C20-B	20
	DM2C30-B	30
	DM2C50-B	50
	DM2C100-B	100

Website

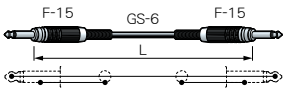
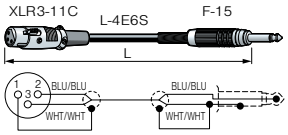
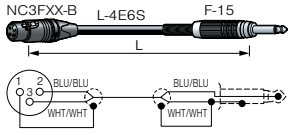
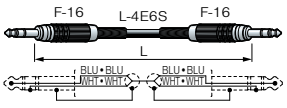
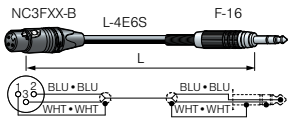
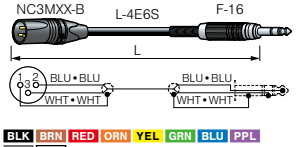
Cable Assemblies

XLR, Phone

■ XLR3

Type	Model	Length (m)
XLR3 (F) – XLR3 (M)  BLK BRN RED ORN YEL GRN BLU PPL GRY WHT	EC003	0.3
	EC005	0.5
	EC01	1
	EC015	1.5
	EC02	2
	EC03	3
	EC05	5
	EC07	7
	EC10	10
	EC15	15
	EC20	20
XLR3 (F) – XLR3 (F)  BLK BRN RED ORN YEL GRN BLU PPL GRY WHT	EC003-X11	0.3
	EC005-X11	0.5
	EC01-X11	1
	EC015-X11	1.5
	EC02-X11	2
	EC03-X11	3
	EC05-X11	5
	EC10-X11	10
XLR3 (M) – XLR3 (M)  BLK BRN RED ORN YEL GRN BLU PPL GRY WHT	EC003-X22	0.3
	EC005-X22	0.5
	EC01-X22	1
	EC015-X22	1.5
	EC02-X22	2
	EC03-X22	3
	EC05-X22	5
	EC10-X22	10
NC3 (F) – NC3 (M)  BLK BRN RED ORN YEL GRN BLU PPL GRY WHT	EC003-B	0.3
	EC005-B	0.5
	EC01-B	1
	EC015-B	1.5
	EC02-B	2
	EC03-B	3
	EC05-B	5
	EC07-B	7
	EC10-B	10
	EC15-B	15
	EC20-B	20
NC3 (F) - NC3 (F)  BLK BRN RED ORN YEL GRN BLU PPL GRY WHT	EC003-B11	0.3
	EC005-B11	0.5
	EC01-B11	1
	EC015-B11	1.5
	EC02-B11	2
	EC03-B11	3
	EC05-B11	5
	EC10-B11	10
NC3 (M) – NC3 (M)  BLK BRN RED ORN YEL GRN BLU PPL GRY WHT	EC003-B22	0.3
	EC005-B22	0.5
	EC01-B22	1
	EC015-B22	1.5
	EC02-B22	2
	EC03-B22	3
	EC05-B22	5
	EC10-B22	10

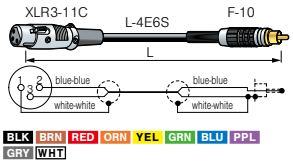
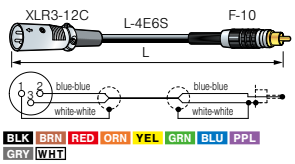
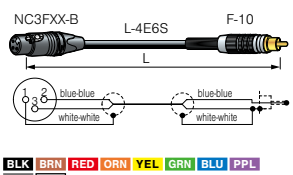
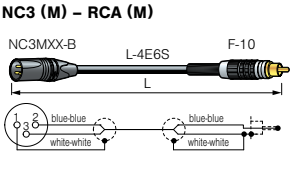
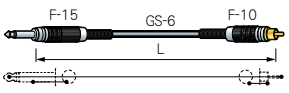
■ Phone

Type	Model	Length (m)
Mono Phone (M) - Mono Phone (M)  BLK RED ORN YEL GRN BLU	LC018	1.8
	LC03	3
	LC05	5
XLR3 (F) – Mono Phone (M)  BLK BRN RED ORN YEL GRN BLU PPL GRY WHT	PC03	3
	PC05	5
	PC07	7
	PC10	10
NC3 (F) - Mono Phone (M)  BLK BRN RED ORN YEL GRN BLU PPL GRY WHT	PC03-B	3
	PC05-B	5
	PC07-B	7
Stereo Phone (M) - Stereo Phone (M)  BLK BRN RED ORN YEL GRN BLU PPL GRY WHT	SPC01	1
	SPC03	3
	SPC05	5
	SPC07	7
	SPC10	10
NC3 (F) - Stereo Phone (M)  BLK BRN RED ORN YEL GRN BLU PPL GRY WHT	SPC02-B1	2
	SPC05-B1	5
NC3 (M) - Stereo Phone (M)  BLK BRN RED ORN YEL GRN BLU PPL GRY WHT	SPC02-B2	2
	SPC05-B2	5

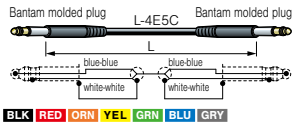
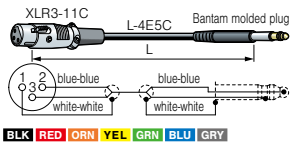
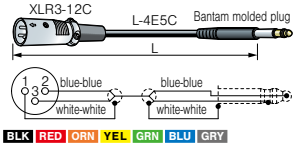
Website XLR3

Website Phone

■ RCA (Audio)

Type	Model	Length (m)
RCA (M) – RCA (M)  BLK RED ORN YEL GRN BLU	**RC018**	1.8
	RC03	3
	RC05	5
XLR3 (F) – RCA (M)  BLK BRN RED ORN YEL GRN BLU PPL GRY WHT	**RC02-X1**	2
	RC05-X1	5
XLR3 (M) – RCA (M)  BLK BRN RED ORN YEL GRN BLU PPL GRY WHT	**RC02-X2**	2
	RC05-X2	5
NC3 (F) – RCA (M)  BLK BRN RED ORN YEL GRN BLU PPL GRY WHT	**RC02-B1**	2
	RC05-B1	5
NC3 (M) – RCA (M)  BLK BRN RED ORN YEL GRN BLU PPL GRY WHT	**RC02-B2**	2
	RC05-B2	5
Mono Phone (M) - RCA (M)  BLK RED ORN YEL GRN BLU	**QC018**	1.8
	QC03	3
	QC05	5

■ Audio Patch (Bantam)

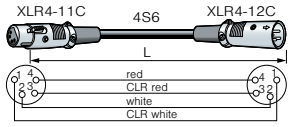
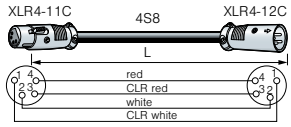
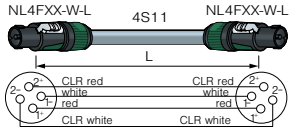
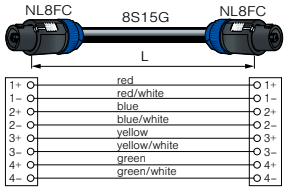
Type	Model	Length (m)
Bantam (M) – Bantam (M)  BLK RED ORN YEL GRN BLU GRY	**BC003M**	0.3
	BC006M	0.6
	BC009M	0.9
XLR3 (F) –Bantam (M)  BLK RED ORN YEL GRN BLU GRY	**BC02M-X1**	2
XLR3 (M) – Bantam (M)  BLK RED ORN YEL GRN BLU GRY	**BC02M-X2**	2

BC003M

Website RCA Audio

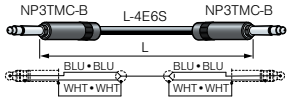
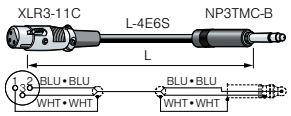
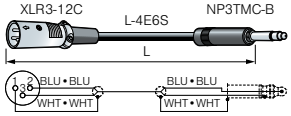
Website Bantam

■ Speaker

Type	Model	Length (m)
XLR4 (F) – XLR4 (M)  BLK RED BLU GRY WHT	**SC003**	0.3
	SC005	0.5
	SC01	1
	SC05	5
	SC10	10
	SC15	15
XLR4 (F) – XLR4 (M)  BLK GRY	**SC05-S8**	5
	SC10-S8	10
	SC15-S8	15
NL4 – NL4  BLK GRY	**SC005A-NL**	0.5
	SC01A-NL	1
	SC02A-NL	2
	SC05A-NL	5
	SC10A-NL	10
	SC15A-NL	15
	SC20A-NL	20
	SC30A-NL	30
NL8 - NL8  BLK	**SC03-8NL**	3
	SC05-8NL	5
	SC10-8NL	10
	SC20-8NL	20
	SC30-8NL	30
	SC50-8NL	50

Website

■ Audio Patch (Skini/Maxi)

Type	Model	Length (m)
Skini/Maxi (M) – Skini/Maxi (M)  BLK BRN RED ORN YEL GRN BLU PPL GRY WHT	**TC003B**	0.3
	TC005B	0.5
	TC01B	1
XLR3 (F) – Skini/Maxi (M)  BLK BRN RED ORN YEL GRN BLU PPL GRY WHT	**TC02B-X1**	2
	TC05B-X1	5
XLR3 (M) – Skini/Maxi (M)  BLK BRN RED ORN YEL GRN BLU PPL GRY WHT	**TC02B-X2**	2
	TC05B-X2	5

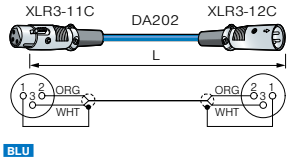
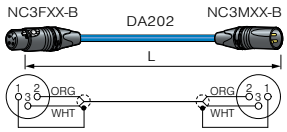
TC003B

Website

Cable Assemblies

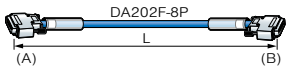
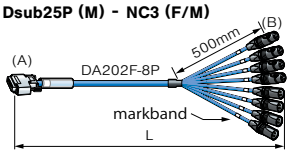
Digital Audio, Analog Audio

■ AES/EBU Digital Audio

Type	Model	Length (m)
XLR3 (F) – XLR3 (M)  BLU	**DAC03**	3
	DAC05	5
	DAC10	10
	DAC20	20
	DAC30	30
NC3 (F) – NC3 (M)  BLU	**DAC003-B**	0.3
	DAC005-B	0.5
	DAC01-B	1
	DAC02-B	2
	DAC03-B	3
	DAC05-B	5
	DAC10-B	10
	DAC20-B	20
	DAC30-B	30

Website

■ AES/EBU Digital Audio (Multi)

Type	Model	Length (m)
Dsub25P (M) – Dsub25P (M)  BLU	**8DAC02-##**	2
	8DAC03-##	3
	8DAC05-##	5
	8DAC07-##	7
	8DAC10-##	10
	8DAC30-##	30
Dsub25P (M) - NC3 (F/M)  BLU	**8DACS02-#B12**	2
	8DACS03-#B12	3
	8DACS05-#B12	5
	8DACS07-#B12	7
	8DACS10-#B12	10
	8DACS30-#B12	30

* Please use following information to fill in the '#' in the model above.

Website

<Ordering Information>

Model	Brands (ref.)	A-side		B-side	
		Screws	Wiring	Screws	Wiring
8DAC**-DD	Digidesign	4-40	Individual-A	4-40	Individual-B
8DAC**-TT	TEAC	4-40	Individual-A	4-40	Individual-B
8DAC**-YY	YAMAHA	M2.6	Common-A	M2.6	Common-B
8DAC**-DT	Digidesign - TEAC	4-40	Individual-A	4-40	Individual-B
8DAC**-DY	Digidesign - YAMAHA	4-40	Individual-A	M2.6	Common-B
8DAC**-TY	TEAC - YAMAHA	4-40	Individual-A	M2.6	Common-B
8DACS**-DB12	Digidesign	4-40	Individual-A	N/A	2: Hot 3: Cold 1: Shield
8DACS**-TB12	TEAC	4-40	Individual-A	N/A	
8DACS**-YB12	YAMAHA	M2.6	Common-A	N/A	

<Wiring>

Individual-A

Ch. No.	Color Coding	HOT	COLD	SHIELD	N.C.
1	BLU/BRN	24	12	25	13
2	BLU/RED	10	23	11	
3	BLU/ORG	21	9	22	
4	BLU/YEL	7	20	8	
5	BLU/GRN	18	6	19	
6	BLU/-	4	17	5	
7	BLU/PPL	15	3	16	
8	BLU/GRY	1	14	2	

Individual-B

Ch. No.	Color Coding	HOT	COLD	SHIELD	N.C.
1	BLU/BRN	18	6	19	13
2	BLU/RED	4	17	5	
3	BLU/ORG	15	3	16	
4	BLU/YEL	1	14	2	
5	BLU/GRN	24	12	25	
6	BLU/-	10	23	11	
7	BLU/PPL	21	9	22	
8	BLU/GRY	7	20	8	

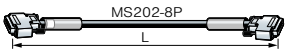
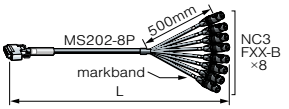
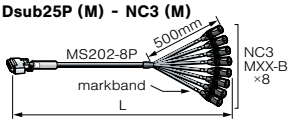
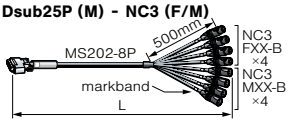
Common-A

Ch. No.	Color Coding	HOT	COLD	SHIELD	N.C.
1	BLU/BRN	1	14	10	9 11
2	BLU/RED	2	15	12	
3	BLU/ORG	3	16	13	
4	BLU/YEL	4	17	22	
5	BLU/GRN	5	18	23	
6	BLU/-	6	19	24	
7	BLU/PPL	7	20	25	
8	BLU/GRY	8	21		

Common-B

Ch. No.	Color Coding	HOT	COLD	SHIELD	N.C.
1	BLU/BRN	5	18	10	9 11
2	BLU/RED	6	19	12	
3	BLU/ORG	7	20	13	
4	BLU/YEL	8	21	22	
5	BLU/GRN	1	14	23	
6	BLU/-	2	15	24	
7	BLU/PPL	3	16	25	
8	BLU/GRY	4	17		

■ Analog Audio (Multi)

Type	Model	Length (m)
Dsub25P (M) - Dsub25P (M)  Screws: M2.6 or #4-40 BLK	**8MC02-#**	2
	8MC03-#	3
	8MC05-#	5
	8MC07-#	7
	8MC10-#	10
	8MC30-#	30
Dsub25P (M) - NC3 (F)  Screws: M2.6 or #4-40 BLK	**8MCS02-#B1**	2
	8MCS03-#B1	3
	8MCS05-#B1	5
	8MCS07-#B1	7
	8MCS10-#B1	10
	8MCS30-#B1	30
Dsub25P (M) - NC3 (M)  Screws: M2.6 or #4-40 BLK	**8MCS02-#B2**	2
	8MCS03-#B2	3
	8MCS05-#B2	5
	8MCS07-#B2	7
	8MCS10-#B2	10
	8MCS30-#B2	30
Dsub25P (M) - NC3 (F/M)  Screws: #4-40 BLK	**8MCS02-CB12**	2
	8MCS03-CB12	3
	8MCS05-CB12	5
	8MCS07-CB12	7
	8MCS10-CB12	10
	8MCS30-CB12	30

* Please choose between A: M2.6 and C: #4-40, and fill in the '#' in the model with A or C.
e.g. 8MC02-A, 8MCS02-CB1

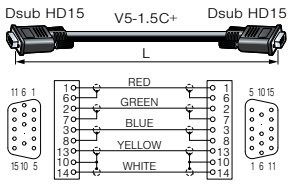
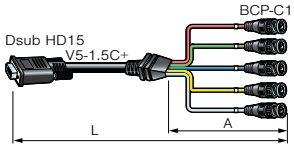
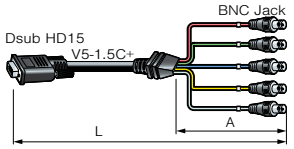
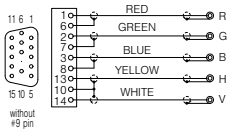
Website

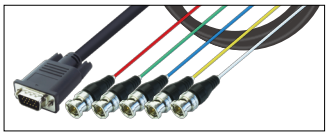
<Wiring for 8MC/8MCS>

Ch. No.	Color Coding	Dsub25P				NC3		
		HOT	COLD	SHIELD	N.C.	HOT	COLD	SHIELD
1	BLK/BRN	24	12	25	13	2	3	1
2	BLK/RED	10	23	11		2	3	1
3	BLK/ORG	21	9	22		2	3	1
4	BLK/YEL	7	20	8		2	3	1
5	BLK/GRN	18	6	19		2	3	1
6	BLK/BLU	4	17	5		2	3	1
7	BLK/PPL	15	3	16		2	3	1
8	BLK/GRY	1	14	2		2	3	1

■ VGA

Not compatible with VESA-DDC Plug and Play.

Type	Model	Length (m)
HD-15 (M) – HD-15 (M)  Screws: #4-40 UNC inch thread BLK	**5VDC015A-1.5C**	1.5
	5VDC02A-1.5C	2
	5VDC03A-1.5C	3
	5VDC05A-1.5C	5
	5VDC10A-1.5C	10
	5VDC15A-1.5C	15
	5VDC20A-1.5C	20
HD-15 (M) – BNC (M)  Screws: #4-40 UNC inch thread A: 15cm (5VDS015A-1.5C) 30cm (others) BLK	**5VDS015A-1.5C**	1.5
	5VDS02A-1.5C	2
	5VDS03A-1.5C	3
	5VDS05A-1.5C	5
	5VDS10A-1.5C	10
HD-15 (M) – BNC (F)  A: 10cm (5VDS003A-J1.5C) 15cm (5VDS015A-J1.5C) 30cm (others)  Screws: #4-40 UNC inch thread BLK	**5VDS003A-J1.5C**	0.3
	5VDS015A-J1.5C	1.5
	5VDS02A-J1.5C	2
	5VDS03A-J1.5C	3
	5VDS05A-J1.5C	5
	5VDS10A-J1.5C	10
HD-15 (M) – BNC (F)  Lock nuts included	**HDR15F-J1.5CA**	0.13

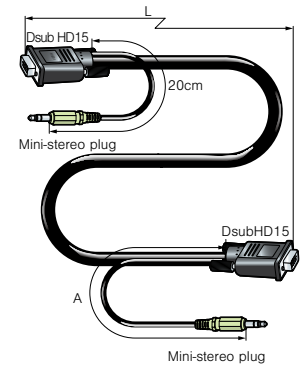
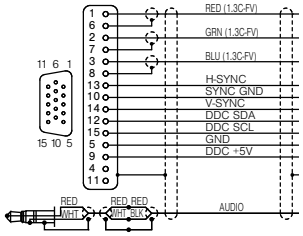


5VDS02A-1.5C

Website

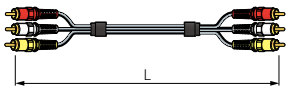
■ VGA with Audio

VESA-DDC Plug and Play compliant

Type	Model	Length (m)
HD-15 (M) 3.5 mm TRS – HD-15 (M) 3.5 mm TRS  A: 200 mm (A1VGA005) 600 mm (others)  Screws: #4-40 UNC inch thread BLK	**A1VGA005**	0.5
	A1VGA0075	0.75
	A1VGA01	1
	A1VGA015	1.5
	A1VGA02	2
	A1VGA03	3
	A1VGA05	5
	A1VGA10	10

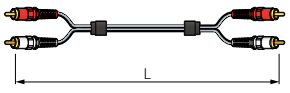
Website

■ 3 RCA Video & Audio

Type	Model	Length (m)
RCA - RCA  BLK	**3RCS003**	0.3
	3RCS005	0.5
	3RCS01	1
	3RCS015	1.5
	3RCS02	2
	3RCS03	3
	3RCS05	5
	3RCS10	10
	3RCS15	15
	3RCS20	20
	3RCS30	30

Website

■ 2 RCA Stereo Audio

Type	Model	Length (m)
RCA - RCA  BLK	**2RCS003**	0.3
	2RCS005	0.5
	2RCS01	1
	2RCS015	1.5
	2RCS02	2
	2RCS03	3
	2RCS05	5
	2RCS10	10
	2RCS15	15
	2RCS20	20
	2RCS30	30

Website

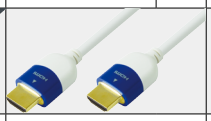
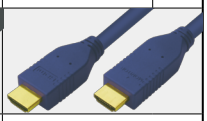
Cable Assemblies

HDMI

Overview

4K/8K HDMI solution has been adopted by a lot of applications such as digital signage, video conference systems, streaming video, e-sports, live events, and even more for professional broadcasting. Canare's HDMI product line offers reliable and fully knowledgeable products based on more than 10 years of experience in HDMI business.

■ Product Finder

Model		HDM***U	page 98	HDM***P	page 98	HDM***P-A6	page 99	HDM***AE HDM**H	page 98	HDM**H-A	page 98	HDM10M-EQ	page 98
Appearance													
Description		ULTRA High Speed HDMI Cable		PREMIUM High Speed HDMI Cable with Ethernet		High Speed HDMI Active Optical Cable		High Speed HDMI Cable with Ethernet (H Series)		High Speed HDMI Cable with Ethernet H Series		Active Durable High Speed HDMI Cable	
Bit Rate		48Gbps		18Gbps		18Gbps		10.2Gbps		10.2Gbps		10.2Gbps	
Frame Rate	8K	60p		N/A		N/A		N/A		N/A		N/A	
	4K	120p		60p		60p		30p		30p		30p	
High Dynamic Range		Dynamic HDR/HDR		HDR		HDR		N/A		N/A		N/A	
Audio Return Channel		eARC/ARC		ARC		ARC * *30-100m not Supported		ARC		ARC		ARC	
Length		1-7m		0.6-9m		5-100m		0.6-10m		15m, 20m		10m	
O.D.		6.0 / 8.0 / 9.0mm		4.5 / 5.7 / 6.5 / 9.0mm		6.0mm		6.0 / 7.3 / 8.0mm		8.5mm		8.0mm	
Remarks		Supports all functions specified in HDMI 2.1a, passive copper cable, lengths up to 7m.		Supports all functions specified in HDMI 2.0, passive copper cable, lengths up to 9m.		Long distance up to100m, built-in IC, one-directional, optical fiber, flexible cable.		Affordable solution for 4K@30p, passive copper cable, lengths up to 10m.		Lengths up to 20m, built-in IC, one-directional, active copper cable.		For mobile application, built-in IC, one-directional, flexible & durable copper cable, 10 meters only.	

Technical Note

HDMI 2.1 Specification

HDMI 2.1 increases bandwidth capability up to 48 Gbps. It highlights supporting ultra high video resolutions and refresh rates including 8K60p/4K120p, additionally Dynamic HDR.
Canare HDM***U series has qualified for The Ultra High Speed HDMI Certification Program. HDM***U is backwards compatible and can be used with the existing installed base of HDMI devices. The following table shows the entire functions that each HDMI device per version features.

	HDMI version						
	1	1.1	1.2-1.2a	1.3-1.3a	1.4-1.4b	2.0-2.0b	**2.1**
Full HD Blu-ray Disc and HD DVD video	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
Consumer Electronic Control (CEC)	Yes	Yes	Yes	Yes	Yes	Yes	**Yes**
DVD-Audio	No	Yes	Yes	Yes	Yes	Yes	**Yes**
Super Audio CD (DSD)	No	No	Yes	Yes	Yes	Yes	**Yes**
Auto lip-sync	No	No	No	Yes	Yes	Yes	**Yes**
Dolby TrueHD / DTS-HD Master Audio bitstream capable	No	No	No	Yes	Yes	Yes	**Yes**
Updated list of CEC commands	No	No	No	Yes	Yes	Yes	**Yes**
3D video	No	No	No	No	Yes	Yes	**Yes**
Ethernet channel (100 Mbit/s)	No	No	No	No	Yes	Yes	**Yes**
Audio return channel (ARC)	No	No	No	No	Yes	Yes	**Yes**
4 audio streams	No	No	No	No	No	Yes	**Yes**
2 video streams (Dual View)	No	No	No	No	No	Yes	**Yes**
Hybrid Log-Gamma (HLG) HDR OETF	No	No	No	No	No	Yes	**Yes**
Static HDR (HDR static metadata)	No	No	No	No	No	Yes	**Yes**
Dynamic HDR (HDR dynamic metadata)	No	No	No	No	No	No	**Yes**
Enhanced audio return channel (eARC)	No	No	No	No	No	No	**Yes**
Variable Refresh Rate (VRR)	No	No	No	No	No	No	**Yes**
Quick Media Switching (QMS)	No	No	No	No	No	No	**Yes**
Quick Frame Transport (QFT)	No	No	No	No	No	No	**Yes**
Auto Low Latency Mode (ALLM)	No	No	No	No	No	No	**Yes**
Display Stream Compression (DSC)	No	No	No	No	No	No	**Yes**

■ Ultra High Speed HDMI Cable

Type	Model	Length (m)	O.D. (mm)
HDMI - HDMI  BLK	HDM01U	1	6.0
	HDM015U	1.5	
	HDM02U	2	
	HDM03U	3	
	HDM05U	5	8.0
	HDM07U	7	9.0

- Ultra High Speed HDMI Certification Program qualified
- 8K60p/4K120p, and 48 Gbps data rate support
- Improved finger grip connector design
- Simple package

Website

■ Premium High Speed HDMI Cable with Ethernet

Type	Model	Length (m)	O.D. (mm)
HDMI - HDMI  *HDM07P and HDM09P are BLK only. BLK WHT	HDM006P	0.6	4.5
	HDM01P	1	
	HDM015P	1.5	5.7
	HDM02P	2	
	HDM03P	3	
	HDM05P	5	6.5
	HDM07P	7	9.0
	HDM09P	9	

- Premium HDMI Cable Certification Program qualified
- 4K60p, and 18 Gbps data rate support
- Two jacket colors available

Website

■ High Speed HDMI Cable with Ethernet

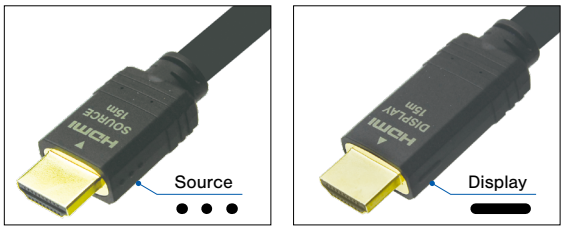
Type	Model	Length (m)	O.D. (mm)
HDMI - HDMI  BLK	HDM006AE	0.6	6.0
	HDM01AE	1	
	HDM015AE	1.5	
	HDM02AE	2	
	HDM03AE	3	
	HDM05AE	5	7.3

- 4K30p, and 10.2 Gbps data rate support
- Cost effective

■ High Speed HDMI Cable with Ethernet H Series

Type	Model	Length (m)	O.D. (mm)
HDMI - HDMI  BLK	HDM07H	7	8.0
	HDM10H	10	
HDMI - HDMI  Source-side Monitor-side BLK Note: The cables are directional	HDM15H-A	15	8.5
	HDM20H-A	20	

- 4K30p, and 10.2 Gbps data rate support
- Reliabilities updated
- UL AWM 20276 VW-1
- Offering budget friendly solutions
- 15m and 20m cables for fixed installations featuring built-in IC



HDM**H-A

■ Active Durable High Speed HDMI Cable

Type	Model	Length (m)	O.D. (mm)
HDMI - HDMI  NB Source-side Monitor-side	HDM10M-EQ	10	8.0

HEC not supported

Note: The cables are directional

- Ideal for mobile applications
- Verified 20,000 cycles of bending test
- 10 meters transmission with built-in IC
- 4K30p, and 10.2 Gbps data rate support

Website

■ High Speed HDMI Extension Cable

Type	Model	Length (m)	O.D. (mm)
HDMI (M) - HDMI (F)  BLK	HDM003E-FM	0.3	5.7
	HDM02E-FM	2	6.5

- HDMI Type A female-to-male extension
- 4K30p, and 10.2 Gbps data rate support

■ HDMI Extender

Extends uncompressed HDMI signal up to 100 meters over a Cat6 STP cable.

Model	In the Box
HDE100CP-EXA	TX unit, RX unit, IR cables, AC/DC adapter, wall mount tabs, and RS-232 cable mount connectors.

Website

- Up to 100 m* at 1080p @ 60 Hz or WUXGA
- Up to 70 m* at 4K @ 30 Hz
- Power over Ethernet (PoE)
- HDCP 1.4/2.2 passthrough
- CEC passthrough
- RS-232 and 20 to 60 Hz wideband IR extension.
- TX unit can be purchased individually as a HDBaseT transmitter. (Model: HDE100CP-TXA. Contact us for more details.)

TX

RX

HDE100CP-EXA

TX: 115 × 29 × 71 mm, 160 g
RX: 115 × 29 × 83 mm, 170 g

HDBT™

* The transmission distance may vary depending on a cable type and environmental factors.
* Recommended cable: Cat6 STP 24 AWG
* HEC and ARC not supported

Note: HDE100CP-EXA does not include Ethernet/HDMI/RS232 cables.

* "HDMI" and "HDMI Logo" are registered by HDMI Licensing Administrator, Inc..
* "HDBaseT" and "HDBaseT Logo" are registered by HDBaseT Alliance.

Cable Assemblies

HDMI

■ High Speed HDMI Active Optical Cable

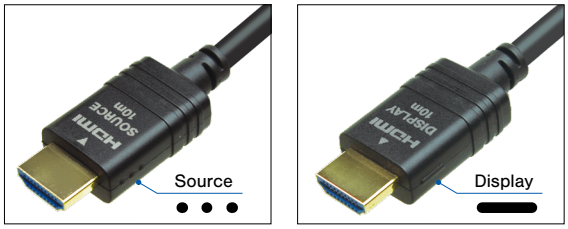
HEC not supported

Type	Model	Length (m)	O.D. (mm)
HDMI - HDMI	HDM05P-A6	5	6.0
	HDM10P-A6	10	
	HDM15P-A6	15	
	HDM20P-A6	20	
	HDM30P-A6 *	30	
	HDM50P-A6 *	50	
	HDM70P-A6 *	70	
BLK	HDM100P-A6 *	100	

- Built-in IC, fiber and copper
- Supports 4K60p
- For longer cabling up to 100 meters without extra device
- flexible, and lightweight

* ARC not supported

Note: The cables are directional



HDMP-A6**

■ Detachable HDMI Active Optical Cable

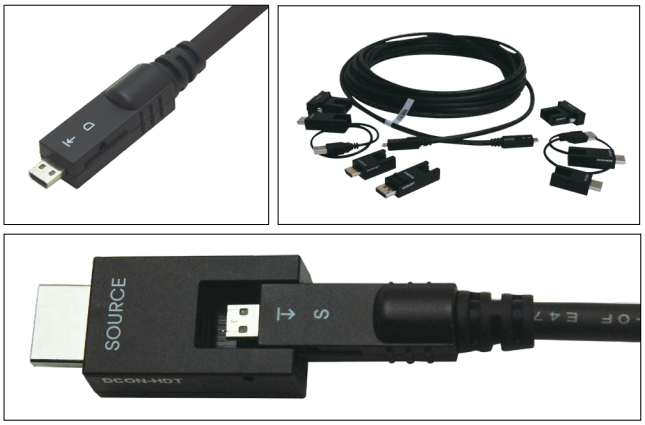
ARC & HEC not supported

Type	Model	Length (m)	O.D. (mm)
HDMI Type D - HDMI Type D	APF10-DCON	10	5.8
	APF15-DCON	15	
	APF20-DCON	20	
	APF30-DCON	30	
	APF50-DCON	50	
	APF70-DCON	70	
BLK	APF100-DCON	100	

- Built-in IC, fiber plus 28 AWG copper, HDMI type D
- Supports 4K60p
- Detachable solution for narrow space wiring
- Optional interfaces: HDMI type A, Display Port, and DVI
- Slim, flexible, and lightweight

Website

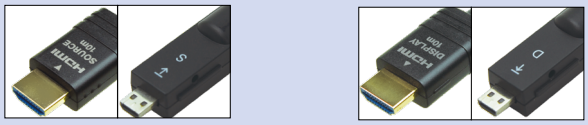
Note: The cables are directional



APF-DCON**

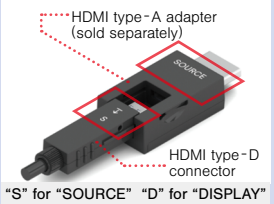
Use of HDMI Active Optical Cables

Connect the right direction



HDMI Active Optical Cables are equipped with IC in both ends connectors. Confirm a designation mark on the connector. It is directional and shall be connected in the right way.

APF**-DCON and adapters



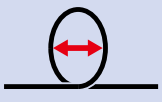
"S" for "SOURCE" "D" for "DISPLAY"

Stick a lock pin in the hole to complete.

APF**-DCON is outfitted with HDMI type-D, a smaller profile of the normal size of HDMI called type-A, ideal for backside installation of wall/ ceiling. Available in HDMI type-A, Display Port, or DVI adapter (sold separately) to hook up devices. Be sure of the appropriate combination of source and display.

Handling Tips

Avoid twisting cable



Bending diameter

HDM**P-A6
40mm installing
40mm permanent

APF**-DCON
12mm installing
30mm permanent

Grip the right position

■ Interface Connector Options

Cables and Detachable Connectors are sold separately.

Type	Model	Plug Type
	DCON-HDT	Source(TX) HDMI Type A
	DCON-HDR	Monitor(RX) HDMI Type A

Type	Model	Plug Type
	DCON-DPT	Source(TX) DisplayPort
	DCON-DVT	Source(TX) DVI-D
	DCON-DVR	Monitor(RX) DVI-D

■ HDMI with USB-A(5V)

Type	Model	Plug Type
	DCON-HDE-SET	HDMI Type A with Built-in Equalizer

- Equipped with USB power supply for power insufficient condition.

Be sure to attach these connectors to both ends of the cable when using it.
Sales unit; 2pcs package only

■ Interface Options

Source(TX)	Resolution	Monitor(RX)
HDMI Type D	4K60p	HDMI Type D
HDMI Type D	4K60p	DCON-HDR
HDMI Type D	DVI-D	DCON-DVR
DCON-HDT	4K60p	DCON-HDR
DCON-HDT	4K60p	HDMI Type D
DCON-HDT	DVI-D	DCON-DVR

Source(TX)	Resolution	Monitor(RX)
DCON-DVT	DVI-D	DCON-DVR
DCON-DVT	4K30p	HDMI Type D
DCON-DVT	4K30p	DCON-HDR
DCON-DPT	4K60p	HDMI Type D
DCON-DPT	4K60p	DCON-HDR
DCON-DPT	DVI-D	DCON-DVR
DCON-HDE-SET	4K60p	DCON-HDE-SET

Why Canare HDMI Active Optical Cable is so reliable?

One of our responsibilities is to deliver the truly reliable products for professionals. Canare engineers put a lot of efforts to achieve the highest quality of HDMI active optical cables for professional use ready.

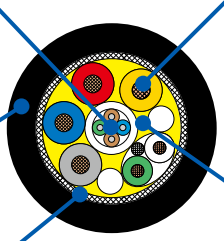
Canare HDMI Active Optical Cable

Cable

Fiber unit in the center
The right position to avoid critical damage from outside impact.

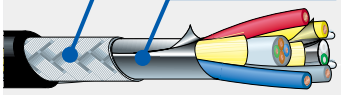
Quality PVC material
Smooth and nice feeling like L-4E6S.

Aluminum foil + braided shield
Rejecting noises perfectly. Costly but the most reliable construction.



Stranded conductor
Optimizing flexibility of cable, better handling than solid conductor.

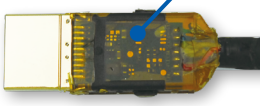
Plenty of reinforcing filler
Performing enhanced durability including cable tensile strength and bending stress.



Connector

ESD level 4, fully covered enclosure
Verified ESD: Electro-Static Discharge level 4 performance, stable in even harsh environment.

Securely crimped
Jacket and filler are properly crimped to connector.

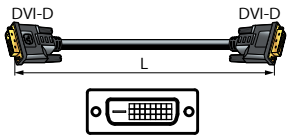


Inner molded
Filled with resign inside of connector to prevent PCB damage.

■ DVI-D Dual Link

VESA-DDC Plug and Play compliant

Type	Model	Length (m)
DVI-D (M) - DVI-D (M)	DVID01A	1
	DVID015A	1.5
	DVID02A	2
	DVID03A	3
	DVID05A	5



Screws: #4-40 UNC inch thread

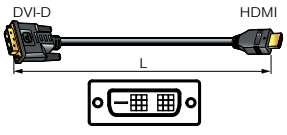
BLK

Website

■ DVI-HDMI

DVI-D Single Link to HDMI

Type	Model	Length (m)
DVI-D (M) - HDMI	DVI01-HDMA	1
	DVI015-HDMA	1.5
	DVI02-HDMA	2
	DVI03-HDMA	3
	DVI05-HDMA	5



Screws: #4-40 UNC inch thread

BLK

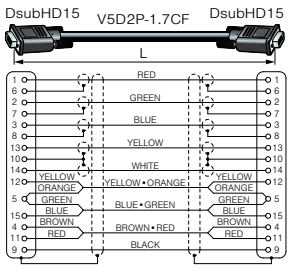
Note: DVI cannot carry audio signal.

Website

■ VGA

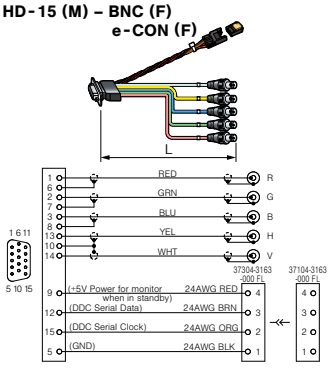
VESA-DDC Plug and Play compliant.
5VDC-1.7CF series are enhanced by low-loss coax unit.

Type	Model	Length (m)
HD-15 (M) – HD-15 (M)	5VDC015-1.7CF	1.5
	5VDC02-1.7CF	2
	5VDC03-1.7CF	3
	5VDC05-1.7CF	5
	5VDC10-1.7CF	10
	5VDC15-1.7CF	15
	5VDC20-1.7CF	20
HD-15 (M) – BNC (F) e-CON (F)	HDR15F-EJ1.5CA	0.13



Screws: #4-40 UNC inch thread

BLK



e-CON male plug and lock nuts included

• V5D2P-1.7CF is not for sale.

Website

Technical Note

USB Type-C Technology

■ Advantages of USB Type-C

USB Type-C refers to the shape and specification of a USB connector. Below are some features and benefits of USB Type-C:

1) Reversible connector
2) Compact and lightweight
3) High-speed data transfer up to 80Gbps
4) High power delivery up to 240W
5) Integration of multiple functions including 4K/8K video
6) Widely adopted and compatible

Canare believes USB Type-C will be future-proof, a key solution for Professional AV system installations.

■ Simplify naming of USB Type-C cables

USB-IF (USB Implementers Forum) concerns that inconsistent use of terminology creates confusion in the market, can be misleading to users. To fix this issue, USB-IF has developed the below recommendations on how to enter marketing names during product certification registration.

USB-IF Marketing Name	Data Rate	Mode Name	Multiple Lanes	Lane Rate
Hi-Speed USB	480 Mbps	USB 2.0	Single	480 Mbps
USB 5Gbps	5 Gbps	USB 3.2 Gen1 * Old names as USB 3.0 and USB 3.1 Gen1	Single	5 Gbps
N/A	10 Gbps	USB 3.2 Gen1 × 2	Dual	5 Gbps
USB 10Gbps	10 Gbps	USB 3.2 Gen2 * Old name as USB 3.1 Gen2	Single	10 Gbps
N/A	10 Gbps	USB4 Gen2x1	Single	10 Gbps
N/A	20 Gbps	USB 3.2 Gen2 × 2	Dual	20 Gbps
USB 20Gbps	20 Gbps	USB 3.2 Gen2 × 2	Dual	10 Gbps
N/A	20 Gbps	USB4 Gen3 × 1	Single	20 Gbps
USB 40Gbps	40 Gbps	USB 4 Version1	Dual	20 Gbps
USB 80Gbps	80 Gbps	USB 4 Version2	Symmetric	40 Gbps

■ USB Power Delivery

USB PD (Power Delivery) is an enhanced aspect of the USB Type-C standard, enabling higher power levels for faster charging and efficient power delivery between devices. This table illustrates common power levels supported by the USB PD specification along with their corresponding PD specification names.

Power Delivery	Voltage	Current	Connector
PD15W	5V	3A	USB Type-C
PD45W	15V	3A	
PD60W	20V	3A	
PD75W	15V	5A	
PD100W	20V	5A	
PD240W	48V	5A	

< Connection Example : USB Type-C >

■ USB Type-C Active Optical Cable

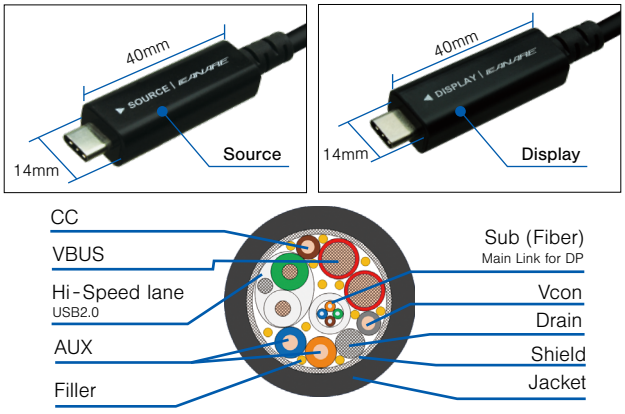
UCC-H Series: DP Alt 4-lane 8K30p + USB2.0 + PD60W

Type	Model	Length (m)	O.D. (mm)
USB Type-C - USB Type-C 	UCC03-HP6D1-A5	3	4.6
	UCC05-HP6D1-A5	5	4.6

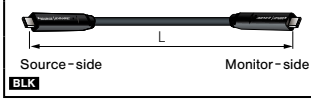
- Flexible O.D. 4.6mm smooth PVC jacket
- 480 Mbps data rate, USB2.0
- 4K60p, 4K120p, and 8K30p support
- DP1.4a: 4 lanes max payload rate 25.92 Gbps for full DP performance
- PD60W allowing PC device connections simpler
- Lengths mark on connectors

Note: Directional connection

UCC-HP6D1-A5**



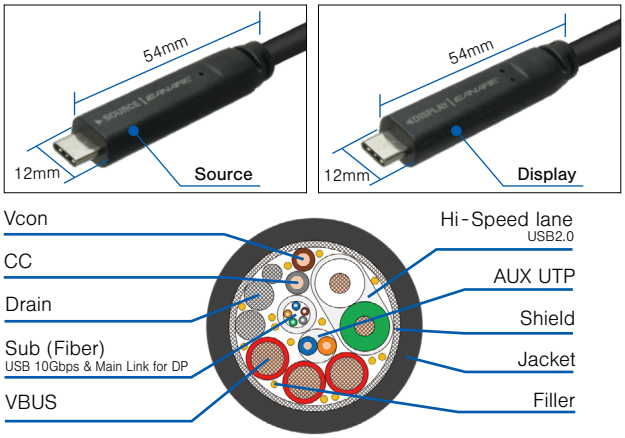
UCC-G Series: DP 4-lane 8K30p + USB 10Gbps + PD60W

Type	Model	Length (m)	O.D. (mm)
USB Type-C - USB Type-C 	UCC05-G1P6D1-A7	5	6.5
	UCC10-G1P6D1-A7	10	6.5

- Maneuverable O.D. 6.5mm smooth PVC jacket
- 10 Gbps data rate, USB 3.2 Gen2
- 4K60p, 4K120p, and 8K30p support
- DP1.4a: 4 lanes max payload rate 25.92 Gbps for full DP performance
- PD60W allowing PC device connections simpler
- Lengths mark on connectors

Note: Directional connection

UCC-G1P6D1-A7**



Note: Use quality verified USB charger/adapter, PC, and monitor to optimize PD60W performance and avoid overheating.

Technical Note

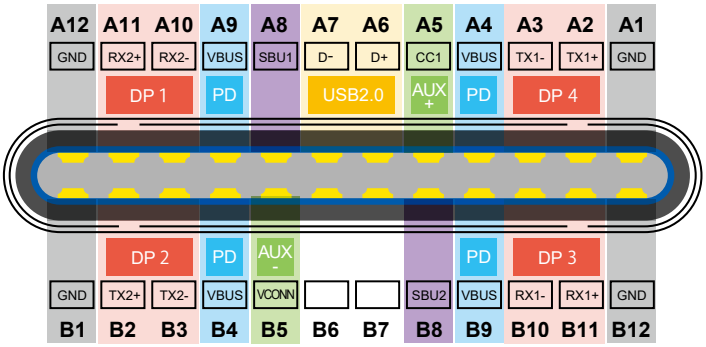
USB Type-C Technology

■ DisplayPort over USB Type-C (DisplayPort Alternate Mode)

"DP Alt Mode" or "DP Alt" is a standard for communicating protocols such as DisplayPort and HDMI over USB Type-C interface. DP Alt Mode allows devices with USB Type-C ports to transfer DisplayPort signals, enabling them to connect directly to external displays. This specification enhances device portability and supports multiple functions through a single connector. It combines USB Type-C flexibility with DisplayPort performance for convenient connectivity.

Standard	Data Bandwidth		Video Format
	Max Link	Max Payload	
DP1.4Alt 8.1Gbps × 2lane	16.2 Gbps	12.96 Gbps	4K30p, YCC444, 10b 4K60p, YCC420, 10b
DP1.4Alt 8.1Gbps × 4lane	32.4 Gbps	25.92 Gbps	4K60p, YCC444, 12b 4K120p, YCC420, 12b 8K30p, YCC420, 12b

As shown in the below pin-out, Canare USB Type-C cable, UCC series is engineered with DP1.4 8.1Gbps "4 lanes" technology for the maximum compatibilities.



Canare DP1.4 Alt USB Type-C Cable Pin-out

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: Bestselling products

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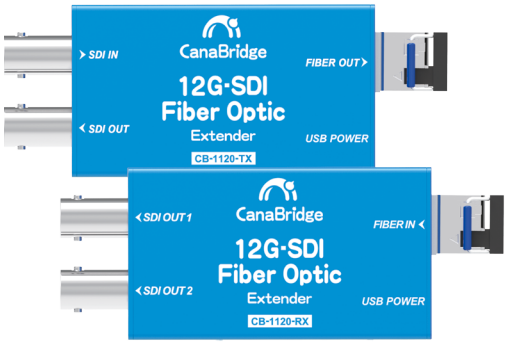
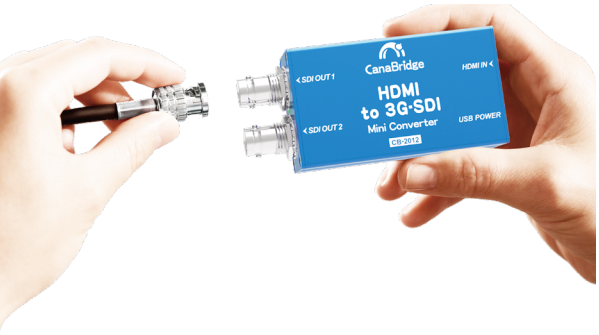




About CanaBridge

The professionals' choice

A sub brand "CanaBridge" is established by Canare. Providing simple and affordable solutions of video signals, bridging long lasting Canare users between new generation of SNS video creators.

CanaBridge video converters will give you smart move on HDMI, 3G-SDI, and 12G-SDI interconnects. Canare engineers its development and quality verification. All CanaBridge products are equipped with light weight and sleek aluminum chassis.

CanaBridge 5 Identities

01 Superb Combination

We raised the bar on mini converters solutions. CanaBridge converters connected with Canare products are superb combination.

02 Professional Support

Canare is here to assist you all the time. All CanaBridge products include one-year hassle free exchange program. In addition, We will provide the best sales support as well as after sale service.

03 Stable Performance

CanaBridge converters will deliver stable performance even under demanding environments. It meets your expectation without any surprises.

04 Fully Engineered

Canare engineers invest engineering effort and whole enthusiasm into CanaBridge products. Verified technical accuracies and put it into original aluminum case.

05 Solid

CanaBridge has been looking at cutting-edge technologies, appropriate materials, and standardized processes.

CanaBridge

Website

Lifetime Support
CanaBridge 5 Identities Guarantees

5 CanaBridge Identities Guarantees

12G-SDI Solutions

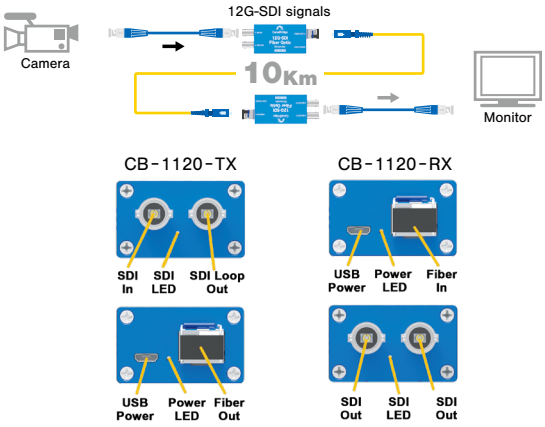
CB-1120 (TX and RX)

12G-SDI Fiber Optic Extender

Key Features and Benefits

- 12G/6G/3G-SDI input & loopout on transmitter
- Dual 12G-SDI outputs on receiver
- Supports up to 12G bandwidth
- SDI input automatic switching SD, HD, 3G, 6G, 12G-SDI
- 10km transmission distance

12G-SDI



■ Specifications

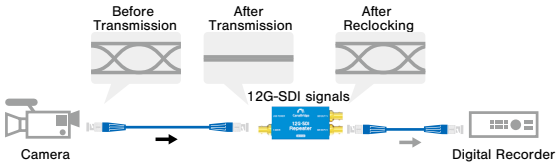
Model	CB-1120 (TX and RX)
Power	Micro USB
Power Consumption	2.0W (Max)
Voltage Range	USB 3.3-5.5 V
Dimension	72.4 × 41 × 24.6 mm
Net Weight	Transmitter: 115 g, Receiver: 115 g
Gross Weight	960g

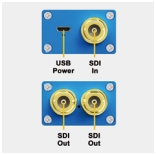
CB-8120

12G-SDI 1 × 2 Signal Repeater

Key Features and Benefits

- Input: 1 × 12G-SDI, Output: 2 × 12G-SDI
- Support DVB-ASI signal
- Automatically detects SD, HD, 3G, 6G, 12G-SDI
- Automatic cable equalization and signal retiming
- Detachable bracket design for wall mounting





■ Specifications

Model	CB-8120
Power	Micro USB
Power Consumption	1.0W (Max)
Voltage Range	USB 3.3-5.5 V
Dimension	72.4 × 41 × 24.6 mm
Net Weight	110 g
Gross Weight	470g

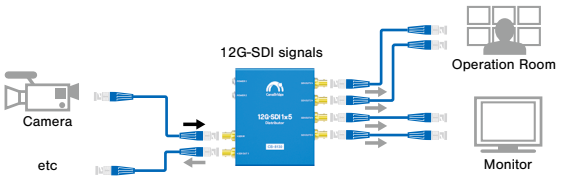
CB-8130

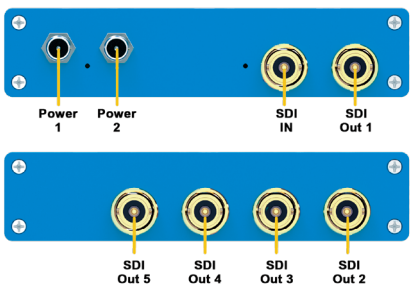
12G-SDI 1 × 5 Reclocking Distribution Amplifier

Key Features and Benefits

- 12G/6G/3G/HD/SD-SDI multi-rate signal processing
- 5 buffered and re-clocked outputs
- Support DVB-ASI signal (OUT1, 4, 5)
- Automatic cable equalization and signal retiming
- All ancillary data is passed to the outputs

12G-SDI





■ Specifications

Model	CB-8130
Power Supply	Threaded locking DC connector
Voltage Range	DC 6-23 V
Power Consumption	3W (Max)
Dimension	125.5 × 102 × 27.5 mm
Net Weight	310 g
Gross Weight	950 g

3G-SDI Solutions

CB-2011

3G-SDI to HDMI mini Converter

CB-2012

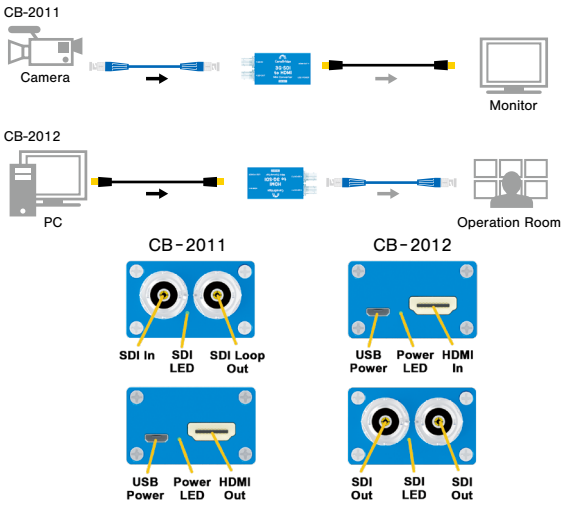
HDMI to 3G-SDI mini Converter

Key Features and Benefits

- Being made for Broadcast equipment
- Powered Anywhere
- Pocket Size and Easy to Mount

■ Specifications

Model	CB-2011	CB-2012
Power	Micro USB	
Power Consumption	2.5W (Max)	2W (Max)
Voltage Range	USB 3.3-5.5 V	
Dimension	72.4 × 41 × 24.6 mm	
Net Weight	110 g	
Gross Weight	470 g	



CB-2021

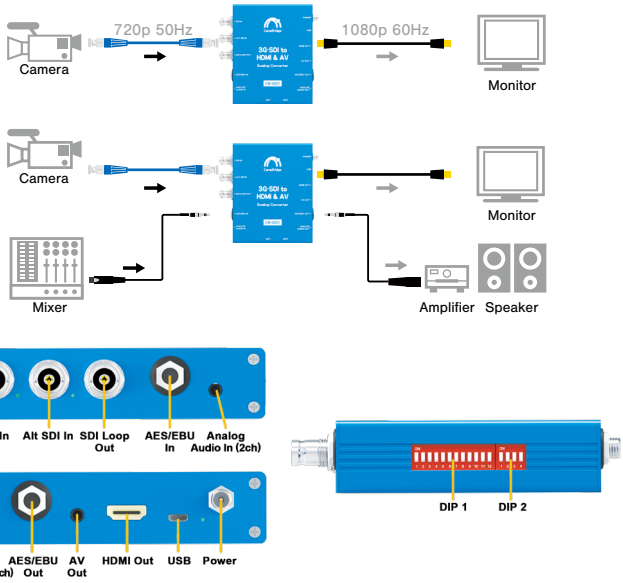
3G-SDI to HDMI & AV Scaling Converter

Key Features and Benefits

- Up/down scaling and frame rate conversion
- AES/EBU or Analog Audio Embedding & De-embedding
- Input signal automatic detection and configuration
- LED indicators for power and signal lock

■ Specifications

Model	CB-2021
Power	Threaded locking connector
Power Consumption	6W (Max)
Voltage Range	DC 6-24 V
Dimension	125.5 × 101.4 × 27.5 mm
Net Weight	310 g
Gross Weight	995 g



CB-2022

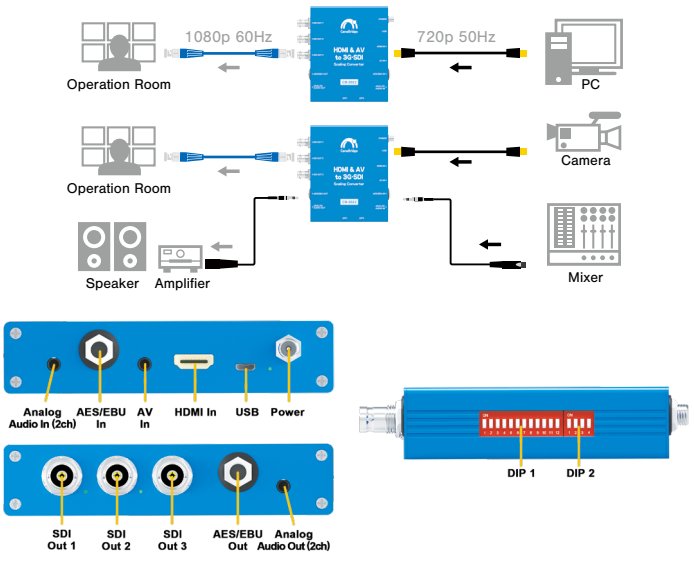
HDMI & AV to 3G-SDI Scaling Converter

Key Features and Benefits

- Up/down scaling and frame rate conversion
- AES/EBU or Analog Audio Embedding & De-embedding
- Input signal automatic detection and configuration
- LED indicators for power and signal lock

■ Specifications

Model	CB-2022
Power	Threaded locking connector
Power Consumption	6W (Max)
Voltage Range	DC 6-15 V
Dimension	125.5 × 101.4 × 27.5 mm
Net Weight	310 g
Gross Weight	995 g



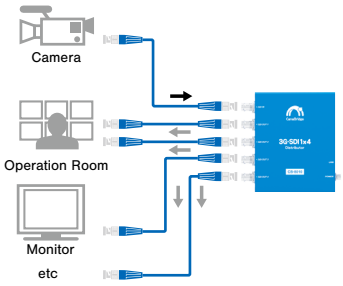
3G-SDI Solutions

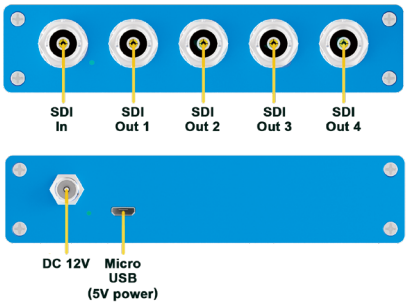
CB-8010

3G-SDI 1 × 4 Distribution Amplifier

Key Features and Benefits

- Automatically detects SD, HD and 3G-SDI
- 4 buffered and re-clocked outputs
- 3G/HD/SD-SDI multi-rate signal processing
- Output 2 & 4 support DVB-ASI signal
- Automatic cable equalization and signal retiming





■ Specifications

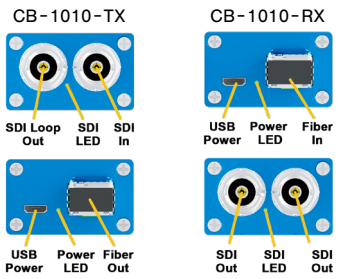
Model	CB-8010
Power	Micro USB or Threaded locking DC connector
Power Consumption	1.5W (Max)
Voltage Range	USB 5V, DC 5-17 V
Dimension	125.5 × 101.4 × 27.5 mm
Net Weight	310 g
Gross Weight	920 g

CB-1010 (TX and RX)

3G-SDI Fiber Optic Extender

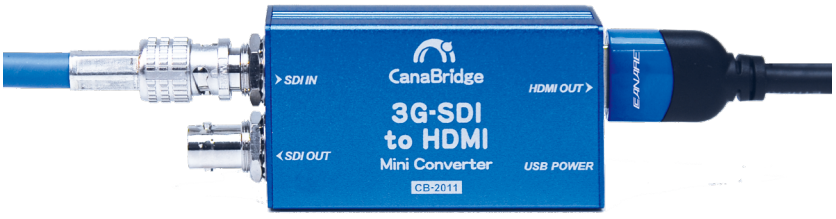
Key Features and Benefits

- 20km transmission distance
- Support 3Gbit Level A and Level B (all formats)
- SFP/LC Fiber transmitter & receiver
- SDI equalization and re-clocking
- 3G-SDI input & loopout on transmitter



■ Specifications

Model	CB-1010 (TX and RX)
Power	Micro USB
Power Consumption	1.5W (Max)
Voltage Range	USB 3.3-5.5 V
Dimension	72.4 × 41 × 24.6 mm
Net Weight	Transmitter: 115 g, Receiver: 115 g
Gross Weight	750 g



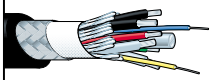
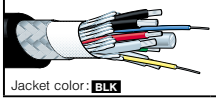
ANNEX: Regional Product Catalog

For European Market

Canare Europe GmbH is expanding its cabling product portfolio to meet European construction requirements. In Canare quality/performance, we made installation cables with appropriate FRNC and LSZH materials for broadcast infrastructures and ProAV installations.

Hybrid Fiber-optic Camera Cables (SMPTE ST311)

: Bestselling products

Type	Model	Sales Units (m)	Nom. O.D. (mm)	Weight kg/100m	Outer Jacket	Overall Shield	Tension Tolerance (N)	Strength Member O.D. (mm)	Min. Bend Radius	Temp. Range (deg C)	Channel Unit		
											Fiber	Aux. (Power)	Signal (Control)
 Jacket color: BLK	LF-2SM9N-PUR	Call	9.2	12.0	PUR	9/24/ 0.10TA 91%	700	2.6	6 × Nom. O.D.	-40 to +75	2 × SM 9/125 (low-water-peak) Unit O.D. 0.9 mm	4 × 20 AWG 21/0.18TA Unit O.D. 1.7 mm	2 × 25 AWG 7/0.18TA Unit O.D. 1.2mm
 Jacket color: BLK	LF-2SM9-FRNC CPR Eca	Call	9.2	12.0	FRNC	9/24/ 0.10TA 91%	700	2.6	6 × Nom. O.D.	-40 to +75	2 × SM 9/125 (low-water-peak) Unit O.D. 0.9 mm	4 × 20 AWG 21/0.18TA Unit O.D. 1.7 mm	2 × 25 AWG 7/0.18TA Unit O.D. 1.2mm

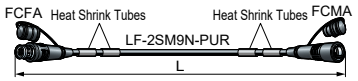
LF-2SM9N-PUR

- PUR: Polyurethane jacketed durable SMPTE cable
- Bend-resistant in extremely low temperatures

LF-2SM9-FRNC

- Fire Rated: IEC 60332-1, IEC 60754-2, and IEC 61034
- FRNC jacketed installation cable

■ Camera to CCU

Type	Model	Length (m)
 Jacket color: BLK	FCC10N-PUR	10
	FCC50N-PUR	50
	FCC100N-PUR	100
	FCC200N-PUR	200

FCFA

FCMA

FCCN-PUR**

- Heavy duty SMPTE camera cable
- For all studio and outside broadcast applications
- Assembled in Europe
- Professional service points in EU for quick support

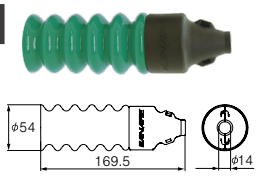
HFO Protective Covers

Any-time-fit-on protector for SMPTE connector-the new traditional

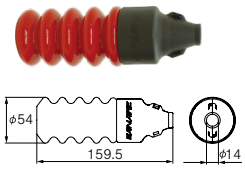
Model	Shape	Component	Color
FC-CV-F-SET-**	Female	1 × Boot 1 × Holder	RD: Red GR: Green YL: Yellow BK: Black
FC-CV-M-SET-**	Male		

Please specify the color such as FC-CV-F-SET-RD

Cover: PVC, Holder: PE



FC-CV-F-SET-GR



FC-CV-M-SET-RD

Lightweight Cable Reels

Lightweight plastic cable reels made by Schill™

Model	Flange Dim.	Description	Weight
RGT310.RM	310 mm	with auxiliary reel	1.8 kg
RGT380.RM	380 mm		4.8 kg
RGT310.MFK	310 mm	with latching door	1.4 kg
RGT380.MFK	380 mm		4.3 kg

Color: dark blue

- Canare and Schill™ collaboration
  *Schill™ is a trademark of Schill GmbH & Co. KG
- Easy to carry around
- High quality resin: durable, weatherproof and lightweight.
- Locking brake
- Latchig door type (MFK) allows you to store cable connector inside reel.
- Canare special colored flange
- Rough estimate of maximum cable lengths (cable O.D.)
  RGT310: L-4E6S 120 m (6 mm)
  RGT380: L-5CFW 130 m (7.7 mm)
  RJC6A-4P-SFM 110m (8.6 mm)
  LF-2SM9N 100m (9.2 mm)

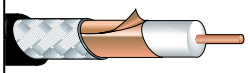
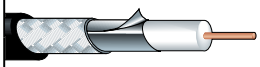
RGT310.RM

RGT380.MFK

Website

RGT380.MFK
door open

CPR Rated 75Ω Coaxial Cables

Type	Model	Sales units	Nom. O.D.	Weight	Inner cond.		Insulation	Outer conductors		Inner cond. resist.	Outer cond. resist.	Static capacity	Characteristic impedance	Attenuation	NVP
					Comp.	O.D.	O.D.	Foil	Braid comp. (coverage)						
		m	mm	kg/100m	(AWG) Q'ty/mm	mm	mm		mm/ends/ carriers	Ω/km	Ω/km	pF/m	Ω	dB/100m (6 GHz)	%
Ultra Coax  Jacket colors: BLK BRN GRN PPL	12G-SDI **L-3.3CUHD-FRNC** CPR B2ca	100 200	5.5	4.4	(21) 1/0.75A	0.75	3.3	Cu	0.12TA/ 8/16 (92%)	41.4	14.9	52	75	68.5	82
	12G-SDI **L-5.5CUHD-FRNC** CPR B2ca	100 200 500 1000	7.7	7.7	(16) 1/1.35A	1.35	5.55	Cu	0.12TA/ 8/24 (92%)	12.8	10.3	52	75	39.1	86
Super Coax  Jacket colors: BLK and others	**L-2.5CHD-FRNC** CPR B2ca	100 200	4.2	2.8	(23) 1/0.59A	0.59	2.59	AL	0.12TA/ 7/16 (95%)	65.6	16.9	53	75	91.7	82
	L-4.5CHD-FRNC CPR Cca		7.0	6.8	(18) 1/1.02A	1.02	4.57	AL	0.15TA/ 9/16 (94%)	23.3	9.9	53	75	53.6	81

Jacket: FRNC Dielectric strength: 1000V AC/min.

L-CUHD-FRNC Series

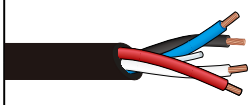
- FRNC jacketed ultra coax
- CPR Euro Class B2ca
- Specially designed for 12G-SDI
- The max. transmission distance of 4K UHD over L-5.5CUHD single link able to reach 100 m or longer*.
  * Depending on receiving equipment.
- As handy as conventional coaxial cables.
- Copper foil and high-density tinned copper braided shielding.
- Highly-foamed multi-layer PE insulation

L-CHD-FRNC Series

- FRNC jacketed super coax
- CPR Euro Class B2ca or Cca
- Best suited to 3G-SDI/HD-SDI transmission
- Highly-foamed PE insulation allows further improvement in the attenuation characteristics.
- Multi-layer insulation in which to each layer is given a different foaming ratio is used to increase strength.
- High-density tinned copper braided shield with aluminum foil brings excellent shielding.

Note 1: Designed for fixed installation, please avoid repeated bending or external pressure.
Note 2: Cable strippers (TS100 series) cannot be used for L-5.5CUHD-FRNC.

CPR Rated Loudspeaker Cable

Type	Model	Sales units	Nom. O.D.	Weight	Composition				Electrical characteristics	
					No of cond.	Cross sec area(AWG)	Cond. Comp.	Twist pitch	Cond. DCR	Nom capacitance*
		m	mm	kg/100m		mm²(AWG)	Q'ty/mm	mm	Ω/100m	pF/m
 Jacket colors: BLK	**2S1.5FG-CCA** New CPR Cca	in multiples of 100 m	7.0	6.8	2	1.52(16)	28/0.26 OFC	45	1.26	60.2
	2S2.5FG-CCA New CPR Cca		9.1	11.5	2	2.45(14)	50/0.25 OFC	55	0.9	62.5
 Jacket colors: BLK	**4S2.5FG-CCA** New CPR Cca		10.9	21.1	4	2.45(14)	50/0.25 OFC	80	0.76	—
	4S4.0FG-CCA New CPR Cca		13.9	34.2	4	3.96(12)	56/0.30 OFC	100	0.44	—

* Capacitance between conductors.

2S**FG-CCA / 4S**FG-CCA Series

- FRNC jacket installation cable
- Fire Performance Tested according to EN 50399, EN 61034-2, EN 60754-2.
- CPR Euroclass Cca-s1a, d1, a1
- Oxygen-free copper conductors

Converters

Regionally Exclusive Sales

12G-SDI EO/OE Converters 12G-SDI — 1 slot

12G | 6G | 3G | HD | SD | DVB-ASI

Electric to Optic Converter (TX)

1310 nm | 1 × LC | 1 × 75Ω BNC
1 EO12G-100B

1271-1451nm for CWDM | 1 × LC | 1 × 75Ω BNC
3 EO12G-100A-**

Optic to Electric Converter (RX)

1260-1650nm | 1 × LC | 1 × 75Ω BNC
2 OE12G-101B

- Capable of Pathological Test Pattern transmission
- 12G-SDI Optical transmission: 12km (typ.)

12G-SDI Repeater 12G-SDI — 1 slot

12G | 6G | 3G | HD | SD | DVB-ASI

4 EE12G-100 | 2 × 75Ω BNC

- 12G -SDI Cable Reach : 100 m over L-5.5CUHD (Typ.)
- Capable of Pathological Test Pattern transmission

3G-SDI EO/OE Converters

3G | HD | SD | DVB-ASI

Electric to Optic Converter (TX)

1310 nm | 1 × LC | 1 × 75Ω BNC
5 EO3G-100 | 1 slot

1310 nm | 1 × LC | 2 × 75Ω BNC
7 EO3G-200 | 2 slots

1271-1611nm for CWDM | 1 × LC | 2 × 75Ω BNC
9 EO3G-100A-** | 1 slot

Optic to Electric Converter (RX)

1200-1620nm | 1 × LC | 1 × 75Ω BNC
6 OE3G-101 | 1 slot

1200-1620nm | 1 × LC | 2 × 75Ω BNC
8 OE3G-201 | 2 slots

- Capable of Pathological Test Pattern transmission
(SMPTE RP-178, 198 Check Field Test Pattern)

Analog Audio Optical Converters — 5 slots

Analog Audio

1310 nm | 1 × SC | 1 × D sub 25 pin(F)
10 TRM-540

1550 nm | 1 × SC | 1 × D sub 25 pin(F)
TRM-541

1471-1611 nm for CWDM | 2 × LC | 1 × D sub 25 pin(F)
11 TRM-540A-**

- Enables line level audio signals to transmit long distance over a fiber-optic cable.

1000BASE-T Optical Converters — 2 slots

1000BASE-T

1310 nm | 1 × SC | 1 × RJ45
12 TRM-300-G31

1550 nm | 1 × SC | 1 × RJ45
TRM-300-G55

1471-1611 nm for CWDM | 2 × LC | 1 × RJ45
13 TRM-300A-G**

- Media converters for Gigabit Ethernet 1000BASE-T

100BASE-TX Optical Converters — 2 slots

100BASE-TX

1310 nm | 1 × SC | 1 × RJ45
14 TRM-210

1550 nm | 1 × SC | 1 × RJ45
TRM-211

1471-1611 nm for CWDM | 2 × LC | 1 × RJ45
15 TRM-210A-**

- Media converters for Fast Ethernet 100BASE-TX

HFO Transmission Devices

26 FCBK4-12G 12G-SDI

12G | 6G | 3G | HD | SD | DVB-ASI

FCFRA (Female) | 4 × OE12G-101B
FCBK4-FF5W1-12G

FCFRA (Female) | 4 × OE12G-101 | IDX V-plate
FCBK4-FF5W1-12G-PV

FCMRA (Male) | 4 × EO12G-100A
FCBK4-FM5W2-12G

FCMRA (Male) | 4 × EO12G-100A | IDX V-plate
FCBK4-FM5W2-12G-PV

27 FCBA4-3G

3G | HD | SD | DVB-ASI

FCFRA (Female) | 4 × OE3G-101
FCBA4-FF5W1

FCFRA (Female) | 4 × OE3G-101 | IDX V-plate
FCBA4-FF5W1-PV

FCMRA (Male) | 4 × EO3G-100A
FCBA4-FM5W2

FCMRA (Male) | 4 × EO3G-100A | IDX V-plate
FCBA4-FM5W2-PV

28 FCBK-12G 12G-SDI

12G | 6G | 3G | HD | SD | DVB-ASI

FCFRA (Female) | EO/OE 12G
FCBK-FF3W1-12G

FCFRA (Female) | EO/OE 12G | IDX V-plate
FCBK-FF3W1-12G-PV

FCMRA (Male) | OE/EO 12G
FCBK-FM3W2-12G

FCMRA (Male) | OE/EO 12G | IDX V-plate
FCBK-FM3W2-12G-PV

29 FCBA-3G

3G | HD | SD | DVB-ASI

FCFRA (Female) | EO/OE 3G
FCBA-FF3W1-3G

FCFRA (Female) | EO/OE 3G | IDX V-plate
FCBA-FF3W1-3G-PV

FCMRA (Male) | OE/EO 3G
FCBA-FM3W2-3G

FCMRA (Male) | OE/EO 3G | IDX V-plate
FCBA-FM3W2-3G-PV

1  EO12G-100B	2  OE12G-101B	3  EO12G-100A-**	4  EE12G-100	5  EO3G-100	6  OE3G-101
7  EO3G-200	8  OE3G-201	9  EO3G-100A-**	10  TRM-540	11  TRM-540A-**	12  TRM-300-G31
13  TRM-300A-G**	14  TRM-210	15  TRM-210A-**	16  TRM-220	17  TRM-220A-**	18  TRM-100

Active Devices for Broadcasting, Live Production, and ProAV

Converters, Platforms, Stand Alone Kit, CWDM Mux/Demux, Optical Splitter

Please note that certain products on these pages may not be eligible for sale due to non-compliance with local regulations, including but not limited to UL, CE, KC certifications, and voltage specifications. Contact us for further information.

Website

RS-422/RS-232 Optical Converters — 3 slots

RS-422 | RS-232

1310 nm — 1 × SC — 1 × Dsub 9 pin(F)

16 TRM-220

1550 nm — 1 × SC — 1 × Dsub 9 pin(F)

TRM-221

1471-1611 nm for CWDM — 2 × LC — 1 × Dsub 9 pin(F)

17 TRM-220A-**

- TIA-422, SMPTE ST 207, RS-232

18 HD-SDI/RS-485 Optical Converters — 3 slots

HD-SDI + RS-485 | SD-SDI + RS-485

TRM-100 — 1 × LC — 1 × Dsub 9 pin(F)

TRM-101 — 1 × LC — 1 × Dsub 9 pin(F)

19 NTSC/Audio/Data Optical Converters — 3 slots

NTSC + Audio + RS-422 + Relay

TRM-400 — 1 × SC — 1 × BNC — 2 × Terminal Block

TRM-401 — 1 × SC — 1 × BNC — 2 × Terminal Block

20 7ch Relay signal/RS-232/422 Optical Converters — 3 slots

7ch Relay + RS-232/422

TRM-230 — 1 × SC — 1 × Circular Connector — 2 × Terminal Block

TRM-231 — 1 × SC — 1 × Circular Connector — 2 × Terminal Block

Platforms

1RU rack mount type — 16 Number of Slots

Power Supply Unit

21 161UPS-LC

- One power supply module installed as standard equipment

WEPZ0340

- Optional redundant power supply module
- AC 100-240V to DC 5V adapter, AC Inlet Type C14, AC Cable not included

Portable type — 6 Number of Slots

Power Supply Unit

22 6PSC-**

- Hot swappable

Palm size — 2 Number of Slots

Power Supply Unit

23 2PSC

- Hot swappable

Stand Alone Kit

24 WMM0190

- a clamping bracket (one side)

25 WEPZ0258

- AC 100-240V to DC 5V adapter, Plug Type A No CE marking

CWDM Mux/Demux

Slot-in Module Types — 8 slots

8 ch

30 FCWDM-8B — 1471-1611 nm

FCWDM-8B-13 — 1271-1451 nm

1RU Rack Mount Types

8 ch

31 FCWDM8/1A — 1471-1611 nm

FCWDM8/1A-13 — 1271-1451 nm

2 each of 8 ch

32 FCWDM8/2A — 2 each of 1471-1611 nm

FCWDM8/2A-13 — 2 each of 1271-1451 nm

16 ch

33 FCWDM16A — 1271-1611 nm

Optical Splitter

1 × 2 Splitter for Single Mode Fiber

34 FDM-2

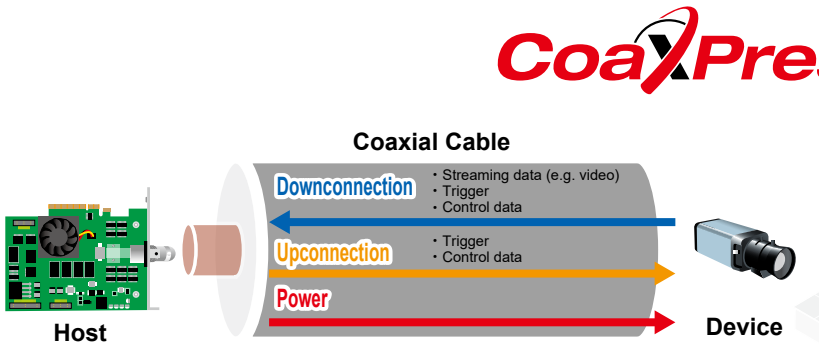
1 × 4 Splitter for Single Mode Fiber

35 FDM-4

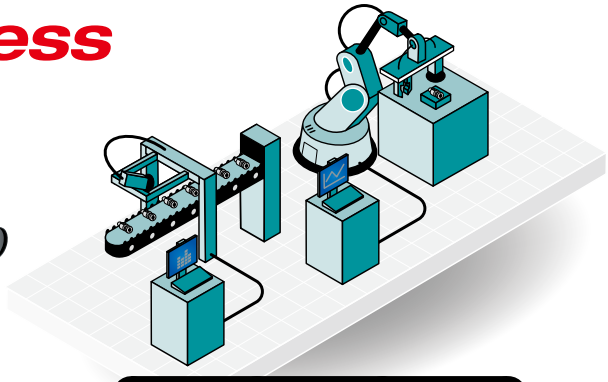
- Divides single optical input into multiple optical output.
- Passive and stand-alone products.
- Can be loaded into platform for Canare plug-in unit.
- Easy to use-Just plug in SC-type connectors.
- Low insertion loss.

CoaXPress

CoaXPress (CXP) is a standard for imaging technology for industrial machineries. Japan Industrial Imaging Association (JIIA) released CXP in December 2010. The standard specifies an interface that enables high-speed connection between cameras and frame grabbers over 75Ω coaxial cables. It achieves data transfer of up to 12.5 Gbps from the camera to the frame grabber, control signals such as trigger signals from the frame grabber to the camera of up to 41.7 Mbps, and a power supply of 13W (Power-over-Coax). For higher data transfer speed, link aggregation allows data to be distributed and transferred over multiple cables. Version 2.0 adds 10 and 12.5 Gbps and enhances the protocol.



Singnaling connections and data flow



Industrial Imaging Solutions

Cables and Connectors

CoaXPress specifies applicable cables shall be 75Ω coaxial type and shall be selected depending on data rate of applications. The connectors shall be 75Ω BNC and MicroBNC connectors for up to 12.5 Gbps data transfer, and DIN 1.0/2.3 connectors up to 6.25 Gbps. DIN connectors can be used for multiple data link as well. CoaXPress verifies cable and connectors upon manufacturer's request. The certified cable and connectors can be found on their website at [https://jiia.org/en/cxp/].

■ Specifications 1 : CXP Coax Cables

Type	Impe-dance	Bit Rate (Gbps)	Max. Attn. (dB)	@ Freq. (GHz)	Low Speed Attn. (dB)	DC Resistance (Round Trip)	Suggested Distance with Approx. 15% Margin				
							L-2.5CHD	L-3.3CUHD	L-4.5CHD	L-5.5CUHD	L-8CUHD
CXP-1	75Ω (±4Ω)	1.25	21.2	0.625	≦4.74 @30MHz	<4.98Ω	56m	81m	99m	144m	208m
CXP-2		2.5	26.0	1.25			52m	70m	89m	123m	176m
CXP-3		3.125	26.8	1.5625			48m	64m	81m	112m	160m
CXP-5		5.0	20.9	2.5			29m	39m	49m	68m	96m
CXP-6		6.25	15.8	3.125			20m	27m	34m	47m	60m
CXP-10		10.0	20.8	5.0	≦2.5 @60MHz		21m	27m	34m	47m	65m
CXP-12		12.5	17.9	6.25			16m	19m	26m	35m	50m

Note : Cable distances for CXP-6 and CXP-12 are based on JIIA ECT (Electric Compliance Test) program.

■ Specifications 2 : CXP Connectors

Type	Normative Reference	Impedance	Contact Material	Return Loss	CXP Speed	Canare
BNC	IEC 61169-8	75Ω (±4Ω)	Center : Gold plated Outer : Nickel or white bronze plated	0-500MHz : 20dB 500MHz-6.25GHz : 15dB	Up to CXP-12	BCP-D BCP-B
MicroBNC	N/A					HBCP-D
DIN 1.0/2.3	IEC 61169-29		Center : Gold plated Outer : Gold plated		Up to CXP-6	DCP-C

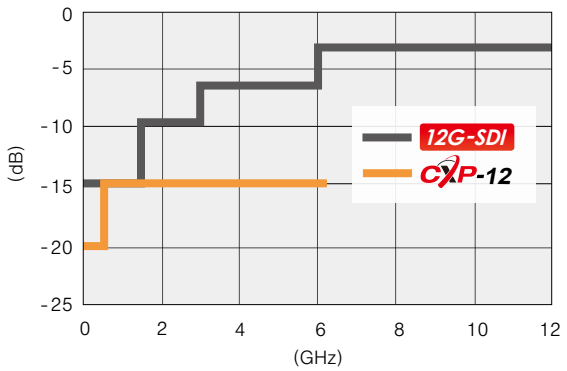
Why Canare?

Canare has industry-leading expertise and a proven track record in SDI transmission within the broadcasting industry. The transmission requirements for 12G-SDI and CXP-12 are very similar, allowing us to widely leverage the coaxial cable transmission technology we have developed over the years.

■ Comparison: 12G-SDI and CXP-12

Format	12G-SDI	CXP-12
Bit Rate	11.88Gbps	12.50Gbps
Impedance	75Ω	75±4Ω (TDR)
Cable Loss	40dB @5.94GHz	17.9dB @6.25GHz
Return Loss	4dB @12GHz	15dB @6.25GHz

< Return Loss >

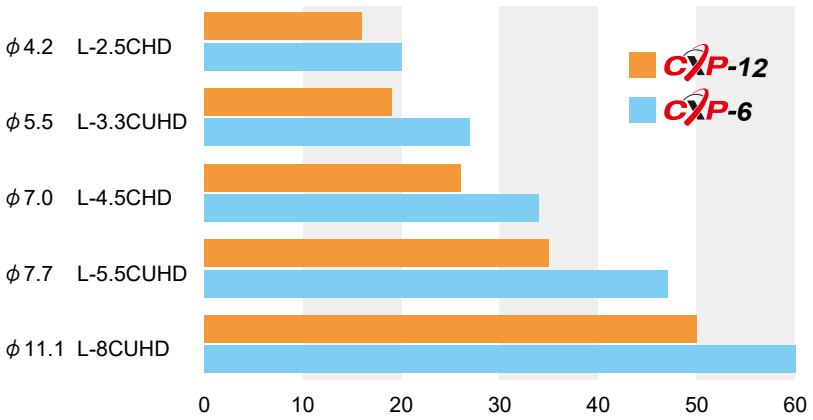


■ Canare CXP-6/12 Products (for fixed installations)

Coax Cable	UL Type	BNC	MicroBNC	DIN 1.0/2.3 (up to CXP-6)	Die Set
L-2.5CHD	CMR	BCP-B25HD BCP-LD25HD	HBCP-D25HDA	DCP-C25HD	BCP : TCD-35CA HBCP & DCP: TCD-D253F
L-3.3CUHD		BCP-D33UHD	HBCP-D33UHDA	N/A	BCP : TCD-35CA HBCP: TCD-D253F
L-4.5CHD		BCP-B53	HBCP-D53A	DCP-C53	BCP : TCD-35CA HBCP & DCP: TCD-D534F
L-5.5CUHD		BCP-D55UHD	HBCP-D55UHD	N/A	TCD-55UHD
L-8CUHD		BCP-D8UHD	N/A	N/A	TCD-8HD

■ Canare CXP-6/12 Cable Assemblies Maximum Lengths

Coax Cable		CXP-6	CXP-12	Memo
L-2.5CHD		20m	16m	-
L-3.3CUHD		27m	19m	DIN not available
L-4.5CHD		34m	26m	-
L-5.5CUHD		47m	35m	DIN not available
L-8CUHD		60m	50m	BNC both ends only
End Connectors	BNC both	Yes	Yes	See page 89-90 for more information
	MicroBNC both	Yes	Yes	
	DIN both	Yes	-	
	BNC-MicroBNC	Yes	Yes	
	BNC/MicroBNC-DIN	Yes	-	



CANARE

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www.canare.co.jp/en/

ISO 9001
ISO 14001
BUREAU VERITAS
Certification

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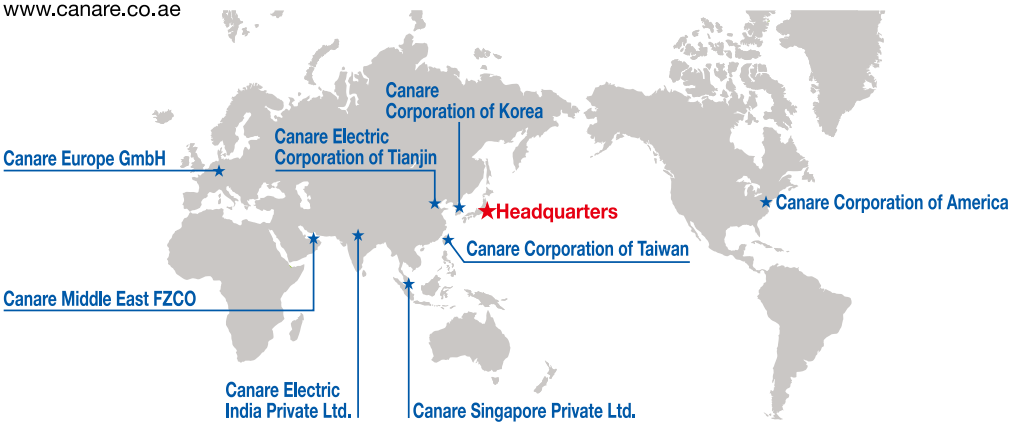

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