Hybrid Fiber-Optics • Snake Systems • Connectors • Cable Reels • Patchbays • Cable

CANARE®

Catalog 11

VIDEO PATCHBAYS & BULKHEAD PANELS

FIBER-OPTICS

CONNECTORS

CABLE

CABLE REELS, SNAKES & ASSEMBLIES

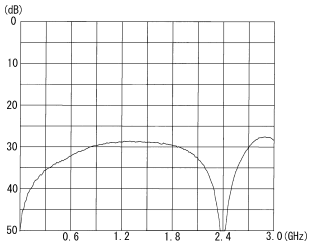
MD Series

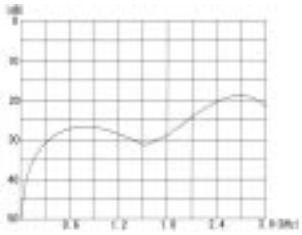
75Ω MID-SIZE VIDEO PATCHBAY

Equipped with newly developed 3GHz-compatible (Normal Through) rotary switch. Lightweight, high-density 32-channel video patchbay ideal for mobile broadcast van applications.

Panel Size	Video jack		
	Q'ty	Normal through	Straight through
EIA panel 1U	**32**	**32MD**	**32MDS**

- New 3GHz (Normal Through) rotary switch more reliable.
- 32 channels of input and output into a 1U and 2U size panel.
- Light-weight aluminum-alloy video jacks.





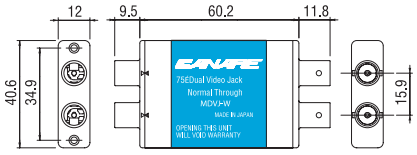
MID-SIZE DUAL VIDEO JACK

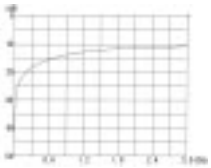
The video jack is equipped with Canare's newly-developed rotary switch.

Model	Description
MDVJ-W	**Normal through**
MDVJ-S	**Straight through**

<New Rotary Switch>

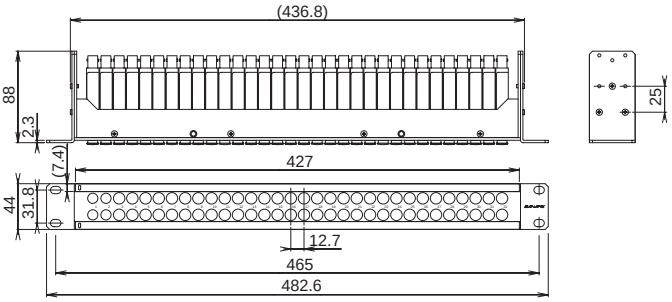
At the heart of the video jack is a newly-developed rotary switch which has been specially designed for use with high frequency signals. It features dual-contact construction for excellent contact stability.





Return Loss

Signal Routing	MDVJ-W	MDVJ-S
BNC-BNC: Normal Through	20dB or greater (up to 3.0GHz)	——
BNC-VIDEO: Patch Through	18dB or greater (up to 2.4GHz)	18dB or greater (up to 2.4GHz)
BNC-Internal Terminator	20dB or greater (up to 2.4GHz)	15dB or greater (up to 2.4GHz)

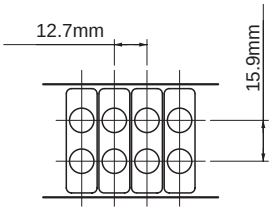


Card dimensions (426ø6.2mm)

- The patchbay can be recessed 25mm by changing the mounting hole positions of the mounting brackets.

<Caution>

Conventional video plugs and BNC connectors are too large in O.D. to be connected to the 32-Channel Video Patchbay. Please be sure to use only the appropriate connectors, referring to the tables on the next page.

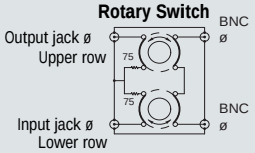


Technical Note

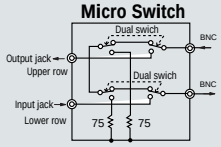
Video Patchbay Switching Systems

Either of the following two switching systems can be selected, depending on application.

Normal Through jack Rotary Switch



Micro Switch

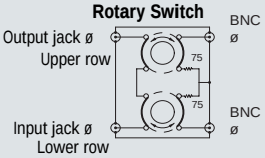


Shown prior to plug insertion

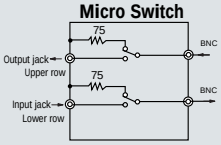
The circuit linking the upper (output) and lower (input) sections remains connected until a plug is inserted. Signal is obtained by inserting plug in upper jack, which connects lower section to internal terminating resistor.

Signal is input by inserting plug in lower jack, which connects upper section to internal terminating resistor.

Straight Through jack Rotary Switch



Micro Switch



Shown prior to plug insertion

The upper (output) and lower(input) sections are terminated by resistors. Signal is obtained by inserting plug in upper jack, at which time the lower section is terminated.

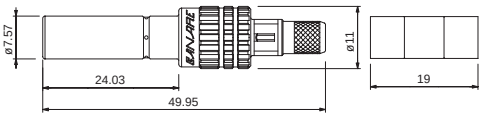
Signal is input by inserting plug in lower jack, at which time the upper section is terminated.

MID -SIZE VIDEO PATCH PLUG

Model	Matching Cable	Matching Boot	Crimp Die
MVP-C4	LV-61S, RG-59B/U	CB25	TCD-4CA, TCD-451CA

- Return loss of 20dB or greater at DC-2.4 GHz
- Gold-plated center contact pin.
- Compatible with mid-size video jacks.

MVP -C4

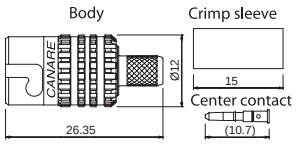


MVP -C4

Model	Matching Cable	Matching Boot	Crimp Die
MBCP-C3F	L-3CFB	CB24	TCD-35CA
MBCP-C4	LV-61S, RG-59B/U	CB25	TCD-4CA, TCD-451 CA
MBCP-C25F	1855A	—	TCD-3C TCD-35CA
MBCP-C4F	1505A	CB25	TCD-4C TCD-451C
MBCP-C53	1694A	CB25	TCD-35CA
MBCP-C5F	1189A	CB26	TCDD5CF

- Return loss 20 dB or greater at DC-2.4 GHz
- 12 mm O.D. ideal for use with high-density integrated devices.

MBCP-C3F



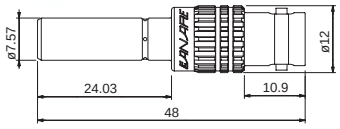
MBCP-C3F

MID-SIZE VIDEO PATCH PLUG TO BNC ADAPTER

Model	Description
BCJ-MVP	BNC-(female) - Miniature video patch plug

- Return loss of 26dB or greater (DC-3GHz)

BCJ-MVP



BCJ-MVP

SLIM BNC INSERTION/EXTRACTION TOOL

Model	Matching Connector
BET-MBNC	MBCP-C3F, MBCP-C4

- This driver is used to insert and remove plugs on the rear panel of the Carare 32-Channel Video Patchbay. (Length: 30cm)

BET-MBNC

NOTE: The BET-MBNC tool is a specialized tool for the Slim BNC plugs, and cannot be used for other connectors.

NOTE: MD Series products cannot be used in conjunction with any other series of components.

MID-SIZE VIDEO PATCH CABLE

Type	Model	Length(ft.)
Mini-video plug (male)-Mini-video parch plug (male) MVP-C4 LV-61S MVP-C4 L Jacket colors: black, red, yellow, green, blue	**MVPC001F**	**1**
	MVPC002F	2
	MVPC003F	3
Mini-video plug (male)-BNC (male) MVP-C4 LV-61S BCP-C4B L Jacket colors: black, red, yellow, green, blue	**MVPC006F-BP**	6
	MVPC015F-BP	15

* Special Order

APPLICATIONS

- Serial Digital Video (SDI)
- Analog Baseband Video
- HDTV Upgrades (DTV)
- Satellite Headends
- CATV Broadband
- SMPTE 276M/AES3 Digital Audio

KEY FEATURES

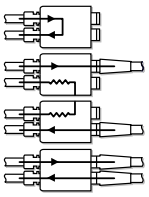
- DC-1.5GHz Digital Bandwidth
- Sealed Microswitch Contacts
- 30,000 Insertion Cycles
- Rear Mount/Front Screws
- Color Label ID
- Lifetime Warranty*

Canare 75Ω Dual Video Jacks are designed for transmission ranges from NTSC baseband analog video to Serial Digital Video (HDTV) frequencies, not just in normal pass through mode, but at all four patch point insertion states.

Canare Digital Video Jacks will perform to spec for years of trouble-free operation thanks to precision engineering, extremely tight manufacturing tolerances, technical "know-how" and consistent attention to every design detail.

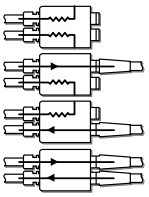
DVJ-W Normal Through

Signal routes between top and bottom BNC without the use of external looping plugs. Inserting a Canare VPC Video Patch Cord into either front WE port automatically terminates signal path into a 75Ω load. Our most popular DVJ model.



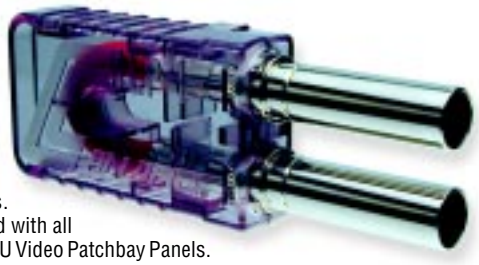
DVJ-S Straight Through

Two independent single jacks in a dual housing. Inserting a Canare VPC Video Patch Cord into either front WE port breaks the 75Ω termination for straight signal pass through. Very useful for bringing up auxiliary equipment to a designated central patchbay location.



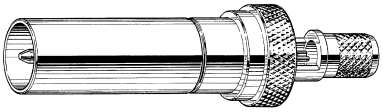
LP-1 LOOPING PLUG

New 75Ω U-Link is the perfect way to quickly manually normal the input & output on our **DVJ-S** straight-through Digital Video Jack. You get 1.5GHz (≥20dB Return Loss) impedance matched performance. WE (*WE.090"*) gold plated center contacts. Can be conveniently used with all Canare 1RU, 2RU and 4RU Video Patchbay Panels.



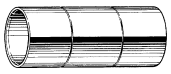
LP-1 COLORS AVAILABLE									
BLK	BLU	BRN	GRY	GRN	ORN	PPL	RED	WHT	YEL

75Ω WE VIDEO PATCH CRIMP PLUG



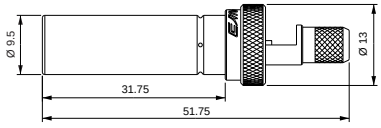
VWP-C4A

Cable:	LV-61S
Boot:	CB04
Crimp Die:	TCD-451C

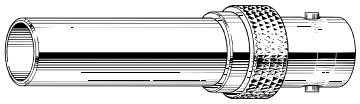


DC to 1.5GHz ≥20dB Return Loss matches the electrical and mechanical performance of our DVJ-W and DVJ-S Digital Video Jacks.

WE (*WE.090"*) gold plated center contact is also compatible with older Canare VWJ2 series Video Jacks. Solder pin, Crimp Sleeve.



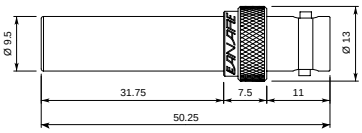
75Ω WE VIDEO PATCH PLUG TO BNC ADAPTER



BCJ-VWP

Contacts:	Berrylium Copper Gold Plating
Body:	Brass Nickel Plating
Dielectric:	PTFE

DC to 1.5GHz ≥20dB Return Loss. WE (*WE.090"*) gold plated center contact pin. Video Patch to 75Ω BNC female jack. Use with any Canare BNC Broadcast Video Patch Cords.



* **LIFETIME WARRANTY STATEMENT**

Canare warrants that the DVJ-W and DVJ-S will be free from defects in materials and workmanship for as long as these products remain in use. Canare will replace, or repair, at its option, products which are proven to be defective. This warranty does not apply to any products that have been subject to misuse, improper storage, or incorrect installation or servicing. At Canare's option, Canare may replace any defective product with the same or similar product. This warranty is void if the product Label has been tampered with or removed.

This warranty is in lieu of all other warranties, express or implied, including (but not limited to) any warranty of fitness for a particular purpose or warranty of merchantability. This warranty states the full extent of Canare's liability resulting from any breach, and in no event shall Canare be liable for indirect, consequential or special damages (including, but not limited to, lost profits) sustained by any party as a result of a breach of this warranty.

APPLICATIONS

- DIGITAL VIDEO BROADCAST (SDI)
- ANALOG VIDEO (NTSC)
- SATELLITE HEADENDS
- HDTV SYSTEMS (DTV)
- OB VANS
- BROADBAND TELCOM

KEY FEATURES

- 1RU, 2RU or 4RU Panels
- 20, 24 or 26 across loading
- Normal & Straight Dual Jacks
- 75Ω Self-Terminating
- Easy Front Mount Assembly
- Reduced Weight
- Extra Wide Designation Strips

Serial Digital Video (SDI) production equipment operates at super high data bit rates. Every interconnect component in the modern post facility must be checked for 75Ω matched impedance and have sufficient headroom to pass HDTV signals in excess of 720MHz.

Canare 75Ω Digital Video Patchbays are designed for maximum reliability and will pass all Serial Digital signal formats with excellent Return Loss characteristics and very few signal reflections (VSWR).

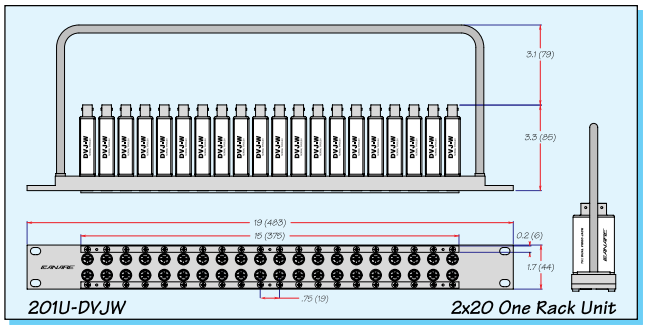
LOADED PATCH PANEL SPECIFICATIONS

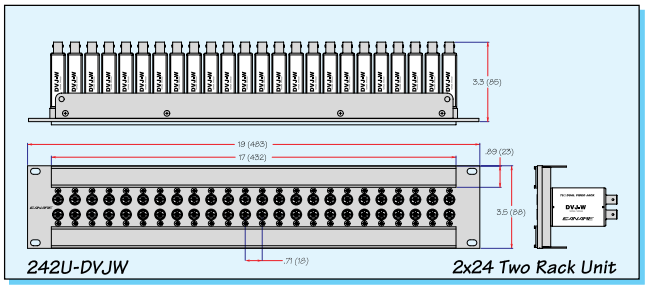
Loaded Panel Model	Rack Panel Height	DVJ Circuit Type	Row Config	*Jack Model	DVJ Qty	Patch Points	Blank Panel
201U-DVJW	1RU	Normal	**2 x 20**	DVJ-W	20	40	**VJ2-E20**
241U-DVJW	1RU	Normal	**2 x 24**	DVJ-W	24	48	**VJ2-L24-1U**
261U-DVJW	1RU	Normal	**2 x 26**	DVJ-W	26	52	**VJ2-L26-1U**
242U-DVJW	2RU	Normal	**2 x 24**	DVJ-W	24	48	**VJ2-L24-2U**
262U-DVJW	2RU	Normal	**2 x 26**	DVJ-W	26	52	**VJ2-L26-2U**
244U-DVJW	4RU	Normal	**6 x 24**	DVJ-W	72	144	**VJ2-E24-4U**
264U-DVJW	4RU	Normal	**6 x 26**	DVJ-W	78	156	**VJ2-E26-4U**

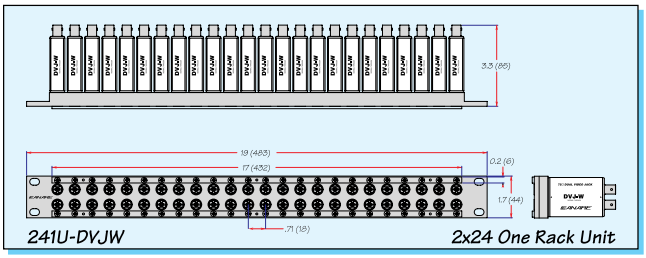
*Canare 75Ω Digital Video Patchbays can be custom ordered with all DVJ-S jacks (ex: **261U-DVJS**), partially loaded or with any specified Normal & Straight Jack combinations.

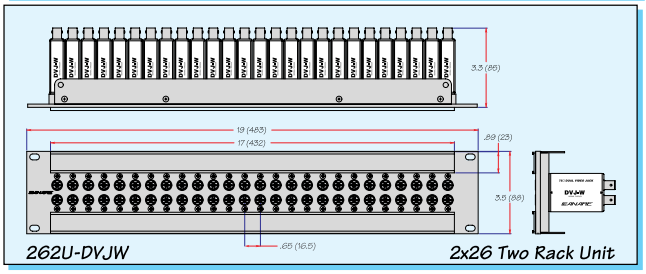
HIGH DENSITY 26 ACROSS PATCHBAYS

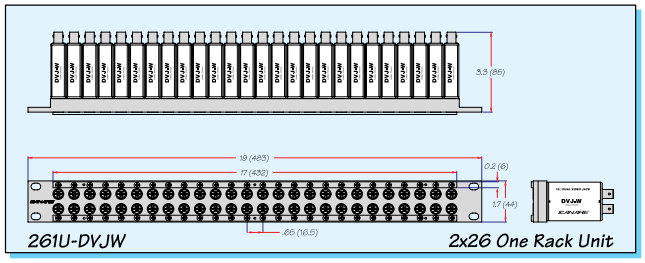
Choose our 2x26 one rack unit (1RU), 2x26 two rack unit (2RU) or our ultra high density 6x26 four rack unit (4RU) Jack Panels. Perfect choice for Master Control, Headends, Edit Suites, small Production Studios, OB Vans or anywhere rack space is at a premium.

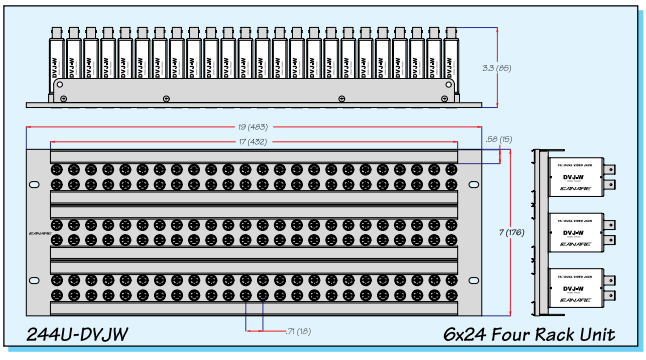












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HDTV-SDI CABLING MATERIAL SELECTION

Broadcast stations and postproduction studios in many countries around the world are currently being required to change their systems to handle high definition (HDTV) digital signals, in addition to SDTV digital signals. The SDTV-SDI transmission speed is 270Mbps, while the HDTV-SDI transmission speed is much higher at 1.485Gbps. The following explains the selection of cabling materials for such transition periods.

CABLING MATERIAL SELECTION

Both coaxial cables and fiber-optic cables are used for HDTV-SDI cabling.

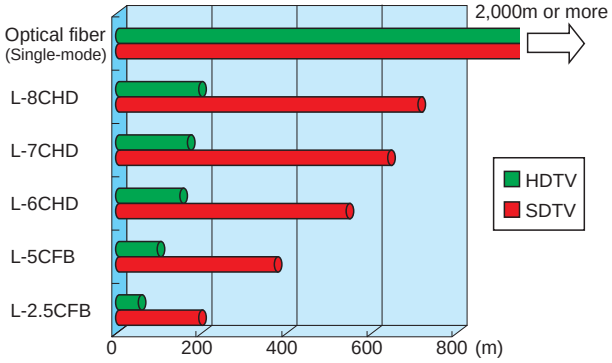
Coaxial cables are used for relatively short transmission distances, as shown in the table on the right. For example, L-2.5CFB is better suited to cabling inside an equipment rack, and L-5CFB is a more appropriate choice for cabling between racks. Likewise, Canare's specially developed L-8CHD (high-foam coaxial cable) is ideal for cabling between rooms.

On the other hand, as can be seen from the fact that fiber-optic cables are now widely used in the communications field, they are better suited for long-distance transmission. Because the cost of fiber-optic transmission equipment can be expected to continue to fall, fiber optics is expected to make further inroads into the short-distance transmission field in the near future.

HDTV-SDI Transmission Distance

Cabling Material		SDTV (270Mbps)	HDTV (1.485Gps)
Coaxial cable	L-2.5CFB	195	55
	L-5CFB	370	100
	L-6CHD	540	150
	L-7CHD	620	170
	L-8CHD	710	200
Optical fiber (single mode)			2,000 or more

(Unit: m)



Technical Note

Characteristic Impedance

Imagine a coaxial cable that extends forever. The frequency impedance as registered on the sending-end of such a cable is referred to as "characteristic impedance." Real cables are fixed in length, allowing the characteristic impedance to be measured and the cables terminated by applying resistance of equal value. The end result is the configuration of a cable that seems limitless in length. (See Fig. 1)

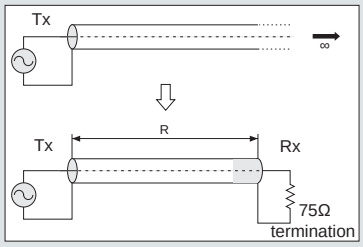


Fig. 1 Limited and Unlimited Length Coaxial Cables

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 traveling 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. 2. 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 traveling wave current. (See Fig. 3)

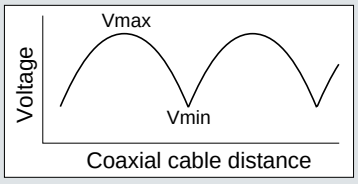


Fig. 2 Voltage Distribution Over CoaxialCable

VSWR	Return Loss (dB)
2	9.5
1.5	14
1.2	20
1.1	26
1.05	32
1.02	40
1.01	46.1

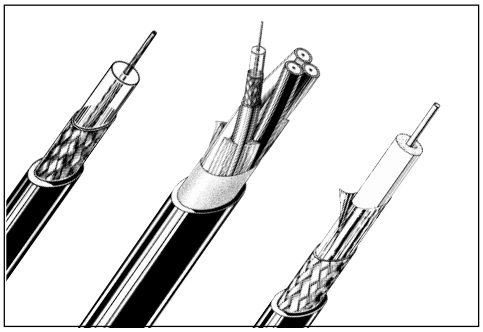
Fig. 3 VSWR to Return Loss Conversion Table

As shown in this table, the specifications of HDTV-SDI coaxial cable interfaces are specified by ARIB Standard BTA S-004B. Because the 75Ω type generally provides better electrical characteristics than the 50Ω type, both connectors and cables must be rated for 75Ω. If the HDTV-SDI transmission system uses a mixture of 50Ω connectors and 75Ω cables or 75Ω connectors and 50Ω cables, the impedance mismatch will significantly increase return loss, which in turn generates jitter, causing bit errors. Note that impedance ratings are not clearly indicated on some commercially available BNC connectors and coaxial cables. When using such commercial products for HDTV-SDI signal transmission path, be sure to always check to ensure that their nominal impedance is 75Ω before use.

Cabling Materials and Electrical Characteristics (HDTV-SDI coaxial cable interface) **(ARIB standard)**

Connector		75Ω BNC connector
Cable		75Ω coaxial cable
Electrical Characteristics	Transmission Loss	20dB or less (742.5MHz)
	Reflection	15dB or less (5MHz - 742.5MHz)
	Return Loss	10dB or less (742.5MHz - 1.485GHz)

Canare 75Ω BNC connectors



Canare 75Ω coaxial cables

Technical Note

Matched and Mismatched Connectors

The return loss is 26dB or less (VSWR=1.1) for frequencies up to 2 GHz in 75Ω coaxial cables using 75Ω BNC connectors. If 50Ω BNC connectors are attached to both ends of the same cable, the return loss takes on the characteristics shown in Fig. 4, below, when frequencies exceed 100MHz. This makes it incapable of transmitting signals with any accuracy.

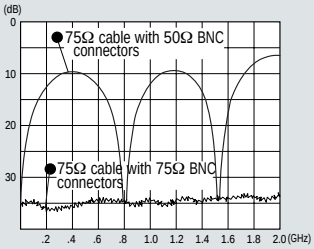


Fig. 4 Matched and Mismatched Impedances

Reasons for Wide Use of 75Ω Coaxial Cable

Calculation results for impedances and corresponding attentuation rates in coaxial cables are shown in Fig. 5 below. The levels of characteristic impedance requiring only minimal attenuation were 60Ω for lines with polyethylene insulation, 75Ω for foam PE (50%) insulation and 95Ω for air insulation. This is why 75Ω cable is used for longer distance transmissions.

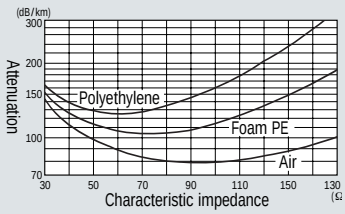


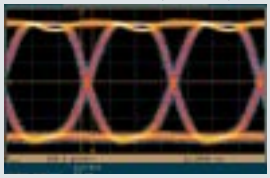
Fig. 5 Impedance Levels That Minimize Attentuation Conditions:
Outer conductor; copper braid; insulation 0.0 5mm
Inner conductor; solid copper; frequency 200MHz

Jitter

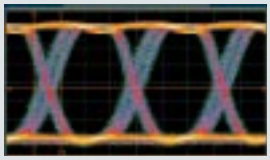
Digital signals are made up of stepped waveforms spaced at a fixed interval called the "timing sequence." Receivers must detect and monitor this timing in order to accurately read the signal. Shifts in the waveform—which must intrinsically maintain a fixed interval—can be introduced by such factors as irregular equipment conditions or overly long transmission lines, causing signal distortion. Such shifts in the timing axes of transmitted and received signal waveforms are referred to as 'jitter'. Increasing amounts of jitter distortion can lead to bit error, which may result in picture deterioration or horizontal noise interference.

One tool regularly used to measure jitter is the oscilloscope. Owing to its distinctive shape, the measured waveform is called an "eye pattern," with the jitter expressed by the width of the area where the rising and falling edges of the waveforms cross each other. This jitter value is specified by the ARIB (SMPTE) Standard shown in the accompanying table.

Jitter measurement (eye pattern)



a) Waveform jitter = 93ps



b) Waveform jitter = 210ps

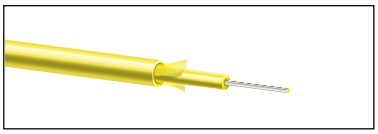
SDTV	HDTV
≤740ps	≤135ps

Specified jitter values (by the ARIB(SMPTE) Standard)

FIBER-OPTIC INTERFACE

As shown in the table below, HDTV-SDI fiber-optic interface specifications are covered by ARIB Standard BTA S-004B. Although the fiber-optic cable may have excellent characteristics in terms of signal transmission, it may be liable to the influence of tension or bends that exceed its permissible range, as well as to humidity or dust. In particular, care must be exercised during installation since tension is more apt to be applied to the interface. To ensure stable light signal transmission, be sure to handle the interface properly, and correctly clean the fiber-optic connectors.

(Canare fiber-optic cable with SC connector)

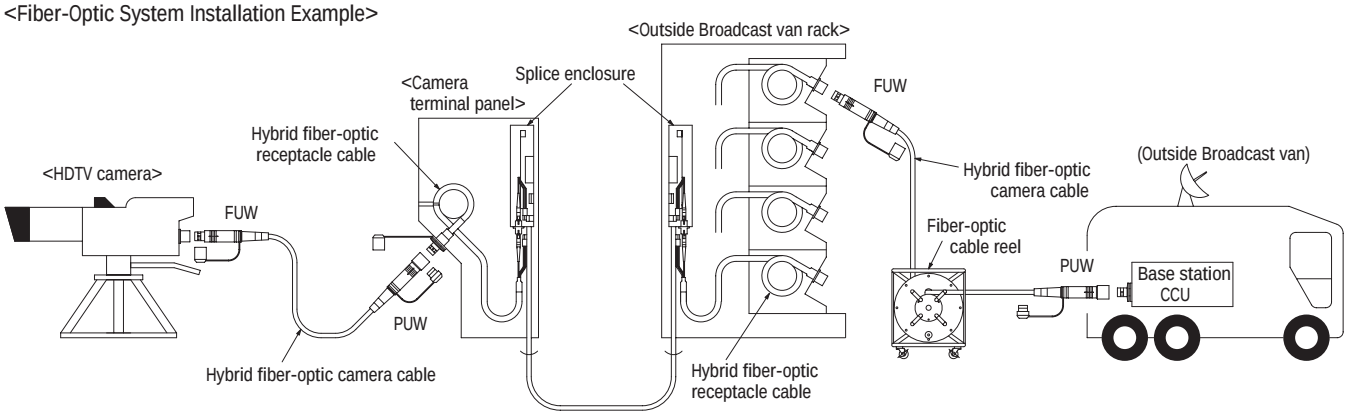


(Canare fiber-optic cord)

Optical Characteristics (HDTV-SDI Fiber-Optic Interface) (ARIB Standard)

Fiber-Optic Connector		SC conn
Optical Fiber		1.3um range zero-distribution single mode
Light Characteristics	Wavelength	1310nm+40nm
	Max. Spectacle Half-Value Width	10nm
	Timing Jitter	Within 1UI (673ps)
	Alignment Jitter	Within 0.2UI (135ps)

<Fiber-Optic System Installation Example>



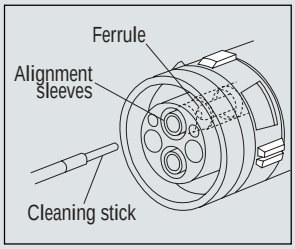
Technical Note

MAINTAINING FIBER-OPTIC HYBRID 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 fiber-optic connectors.

- For the Plugs (FUW), the interior surfaces of alignment sleeves and the tips of ferrules are to be cleaned with the non-alchohol treated cleaning stick using a gentle stroking action. The slender design of the cleaning stick enables alignment sleeves to be cleaned without having to detach them.
- For the Jack (PUW), 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.

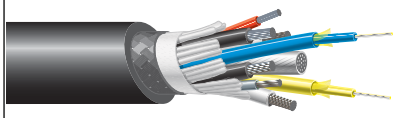
*Contact Canare for information on the recommended cleaning stick.
*The alignment sleeve (split sleeve) keeps the ferrules in exact alignment with each other.



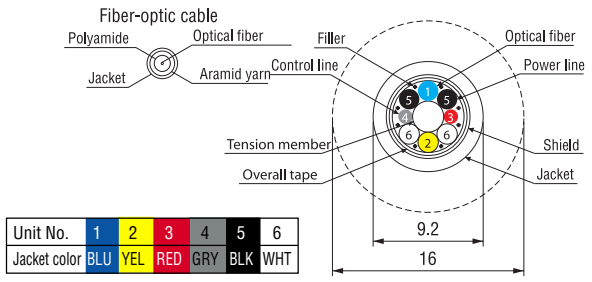
Before cleaning

After cleaning

tel: 818.365.2446
fax: 818.365.0479

Type	Model	Nom.O.D	Weight	Overall shield coverage	Tension tolerance	Bend radius tolerance	Temperature range
		mm	kg/100m	%	N		
 LF-2SM9R Jacket color for LF-2SM9R, LF-2SM9, LF-2SM16: black	LF-2SM9R	9.2	11.0	91.8	700 (71kgf)	Over 6 times cable outer diameter	-40°C~ +70°C
	LF-2SM9						
	LF-2SM16	16.0	28.0				

Cross-Sectional View [2] Configuration



(Fiber-optic cable)	2 single-mode fibers (blue, yellow) Core outer diameter 0.9mm, jacket outer diameter 1.7mm Transmission loss 0.5dB/km or less (λ=1.3 μm) 0.2dB or less when length is less than 200m
(Power line)	4x0.52mm^2 (20 AWG, black, white) 21/0.18TA, conductor resistance 37.5Ω/km or less Insulation resistance 10000Ω or more - km Withstand voltage 1750 AC • 1min.
(Control line)	2x0.18mm^2 (25 AWG, red gray) 7/0.18TA, conductor resistance 113Ω/km or less Insulation resistance 10000Ω or more - km Withstand voltage 1750V AC • 1 min.

• Other colors are also available on a custom-made basis. Please contact your Canare salesperson.

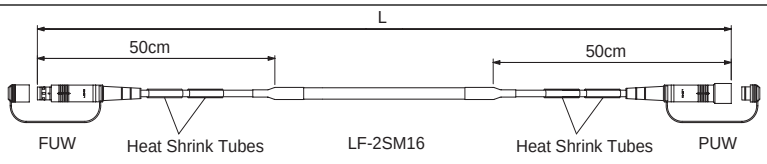
* Special order

LF-2SM9R
- Cable designed for studio and broadcast applications.
- Polyurethane jacket provides tear resistant characteristics.
- Elastomer used in the sheath construction ensures superb mechanical strength.

LF-2SM9
- Cable designed for fixed installations.
- PVC jacket provides quiet movement.

LF-2SM16
- Cable designed for studio applications
- Polyvinylchloride and polyurethane composite material used for the jacket.
- 16mm outer diameter double jacket configuration on the cable is designed to prevent cable from catching on skirt of camera pedestals.

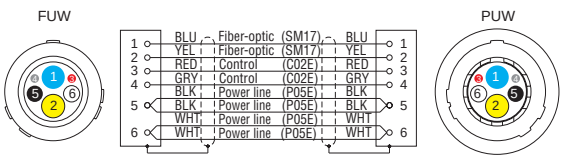
• FUW - PUW (black)

Type	Model	Length (m)
	**FCC10**	**10**
	FCC20	**20**
	FCC30	**30**
	FCC50	**50**
	FCC100	**100**
	FCC150	**150**
	FCC200	**200**
	**FCC50-WJ**	**50**
	FCC100-WJ	**100**

* Special order

- Stainless steel connectors
- ARIB BTA standard S-1005B and SMPTE standard 304M compliant.
- Stainless steel tension member prevents kinks.

Wiring Diagram



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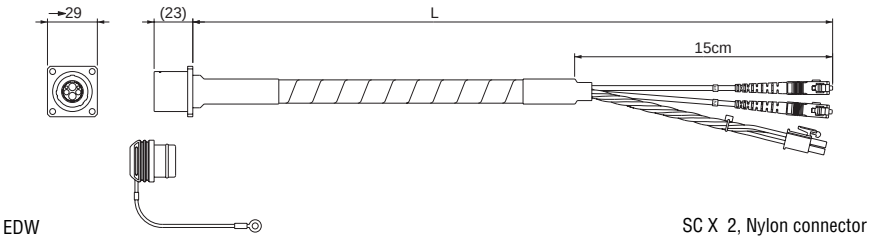
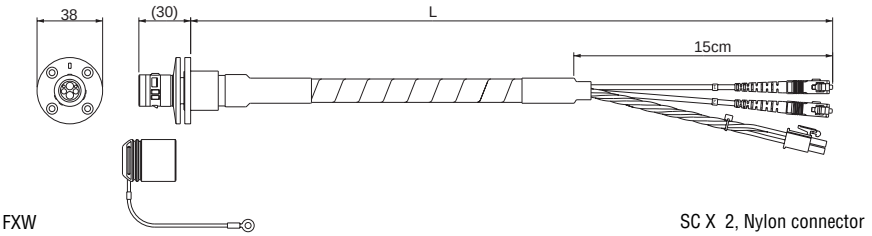
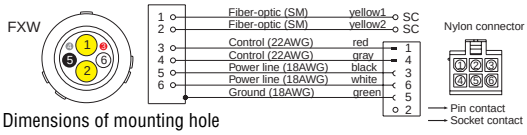
HYBRID FIBER-OPTIC RECEPTACLE CABLE

Type	Model	Length (m)
 EDW SC X 2, Nylon connector	FCSO3-EDW	3
 FXW SC X 2, Nylon connector	FCS03-FXW	3

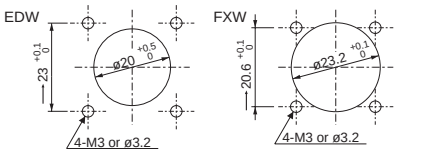
*Special Order

- In camera and patch panel hybrid fiber optic cable.
- SC connectors come with BellCore boots.
- Single-mode fiber-optic cables.

- Wiring Diagram

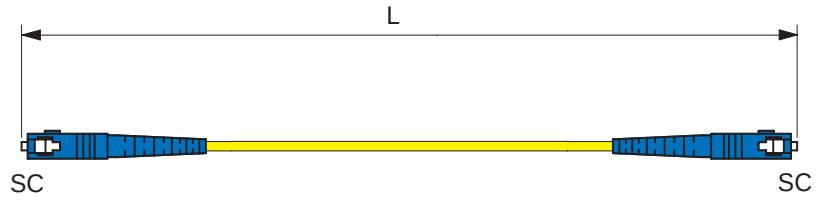


- Dimensions of mounting hole



FIBER-OPTIC SINGLE MODE ASSEMBLIES

- **SC-SC**

Type	Model	Length (m)
	FS3C02-S	2
	FS3C03-S	3
	FS3C05-S	5

*Special Order

- SC connectors come with BellCore boots.
- Single-mode fiber-optic cables.

Precautions For Use

Caution: Points to Note For Working With Optical Fibers

- Avoid Looking Directly into Light Sources (Laser diodes and LEDs)
Extremely powerful light sources are sometimes used in fiber-optic devices and optical measuring equipment. Wavelengths invisible to the naked eye are used in fiber-optic transmissions, so it is important never to look into the optical light source. Doing so can permanently damage the eyes.

- Fiber Cutting Fragments Can Be Dangerous.
The ends of the fiber optic filament are very slender and sharp and can pierce the body. It is important to take special care in cleaning up any cuttings from optical fiber generated during installation and termination operations.

Caution: Working with Hybrid Fiber-Optic Camera Cables

- Make sure not ot kink, exceed the bend radius (6 x cable diameter) and tension (700N:71 kgf) tolerance of the cable. Although only momentary, negative effects can result.

- Make sure to rotate the reel and drum at reasonable speed when unwinding the cable in order to prevent cable kinking. And take care to use the tension member in order to prevent excessive tension being applied to the fiber-optic cable.

- Be careful to avoid applying tension once cable is installed.

- Fiber-optic cable is sensitive to humidity, so be sure to seal cable ends using cable caps during storage.

- When not is use, cables should be wound onto proper cable reels or stacked in figure 8 configurations.

HYBRID FIBER-OPTIC SPLICE ENCLOSURE

Mode	Mo. of cables	Fusion splice tray No.	Adapter	
			SC	Nylon connector
FCE-2	2	1	4	2
FCE-4	4	2	8	4
FCE-6	6	3	12	6

*Special Order

- Designed for the hybrid fiber-optic camera cable (LF-2SM9)
- The enclosure can be installed on walls or placed flat.
- The tension member is installed from the chassis.

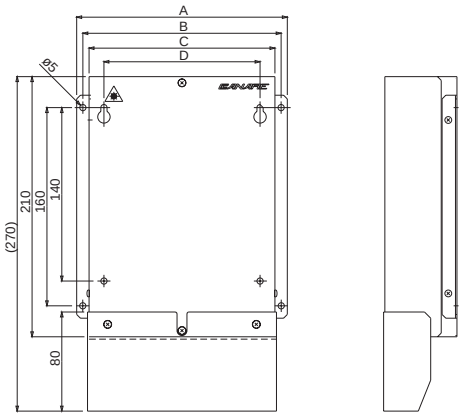
Note: The following special tools are required for installing the nylon connectors.
Models: AMP90758-1 (26 to 22 AWG) and AMP90760-1 (18 to 20 AWG)

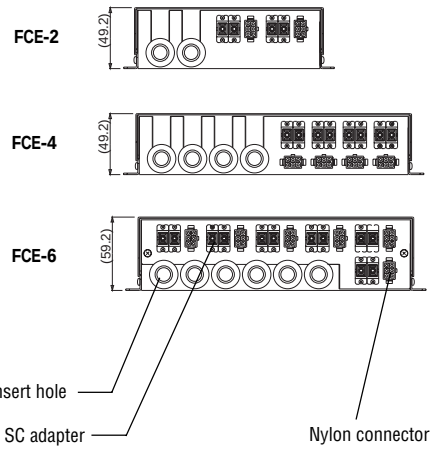
PARTS

Above parts are for FCE-2.

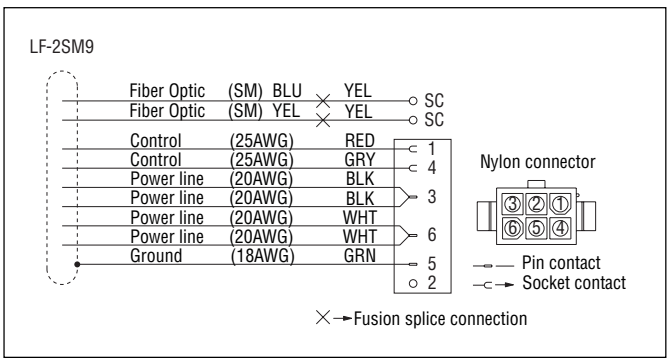
Type	FCE-2	FCE-4 FDC-6
A	170	240
B	160	230
C	150	220
D	126	196

(mm)





• Wiring Diagram (Canare standard)



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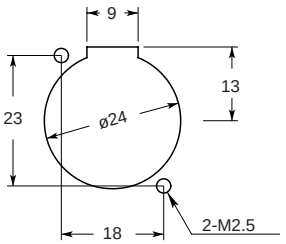
APPLICATIONS

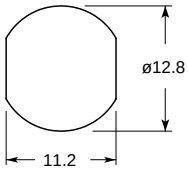
- HEADENDS
- MULTIMEDIA EDIT SUITES
- MASTER CONTROL ROOMS
- SATELLITE
- TELCOM
- BROADBAND

FEATURES

- Isolated BNC, RCA, F, XLR on Same Panel
- Flush Mount or Standoff style Connectors
- Strong 16 gauge Cold Rolled Steel (1.62mm) Panel
- Top & Bottom Panel Reinforcement Folds
- Matte Black Powder Coat Panel Finish
- Tapped Screw Holes for Connector Mounts
- Clear Plastic Desi-Strips & Channel ID Numbers

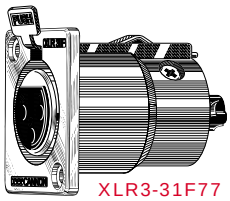


Flush-Mount Hole

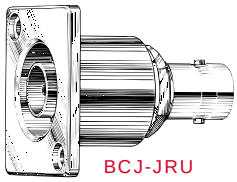


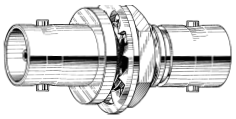
DD-Mount Hole

XLR

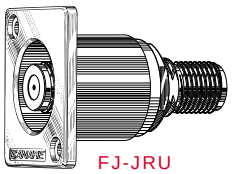

XLR3-31F77

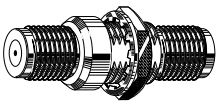
BNC


BCJ-JRU

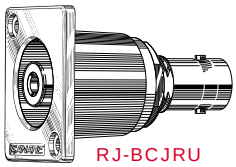

BCJ-JR

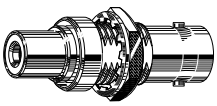
F

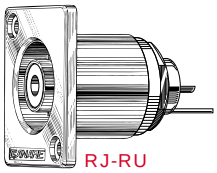

FJ-JRU

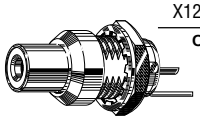

FJ-JR

RCA


RJ-BCJRU


RJ-BCJR


RJ-RU


RJ-R

Model Selection Guide

16 | 1U | - | BJRU

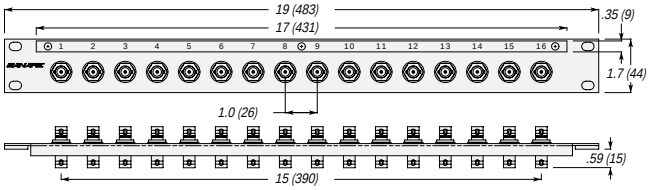
Connector Qty
16 , 32

Panel Height
1U = 1 Rack Unit; 19" x 1.7"
2U = 2 Rack Unit; 19" x 3.5"

		Connector Model	Type	(Panel Style)
BJR	=	BCJ-JR 75Ω	BNC - BNC	(Iso Standoff)
BJRU	=	BCJ-JRU 75Ω	BNC - BNC	(Flush Mount)
FJR	=	FJ-JR 75Ω	F - F	(Iso Standoff)
FJRU	=	FJ-JRU 75Ω	F - F	(Flush Mount)
RJS	=	RJ-R 75Ω	RCA - Solder	(Iso Standoff)
RJBR	=	RJ-BCJR 75Ω	RCA - BNC	(Iso Standoff)
RJSU	=	RJ-RU 75Ω	RCA - Solder	(Flush Mount)
RJRU	=	RJ-BCJRU 75Ω	RCA - BNC	(Flush Mount)
X1F	=	XLR3-31F77 Female	XLR - Solder	(Flush Mount)
X2F	=	XLR3-32F77 Male	XLR - Solder	(Flush Mount)
X12F	=	XLR3-31/32F77 M&F	XLR - Solder	(Flush Mount)

Custom Iso Bushing Colors: BLK, BLU, GRN, RED, YEL

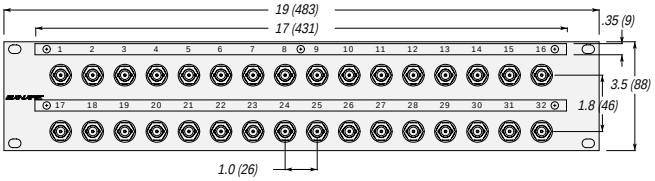
BNC • STANDOFF



161U-BJR

16ea 75Ω BNC–BNC Barrel Jacks

Iso Bushing: WHT

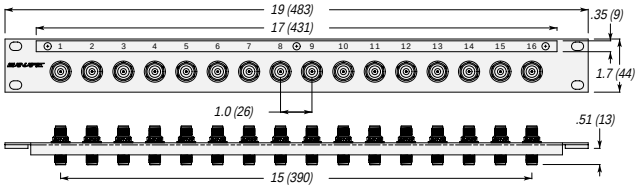


322U-BJR

32ea 75Ω BNC–BNC Barrel Jacks

Iso Bushing: WHT

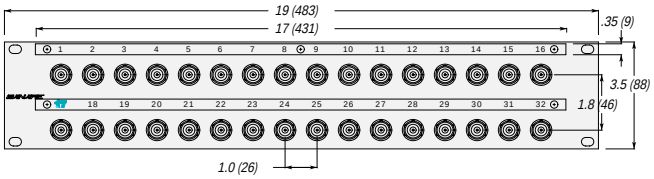
F • STANDOFF



161U-FJR

16ea 75Ω F–F Barrel Jacks

Iso Bushing: WHT

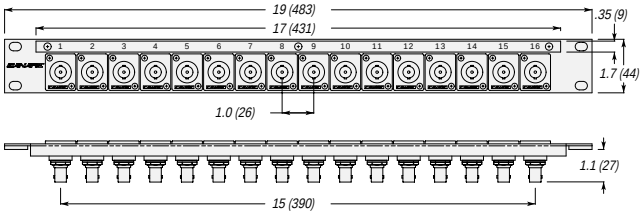


322U-FJR

32ea 75Ω F–F Barrel Jacks

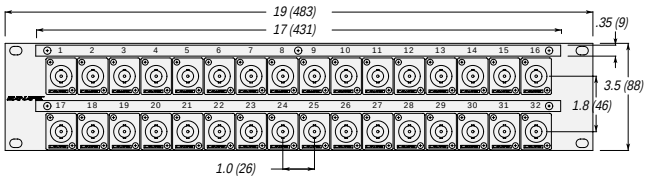
Iso Bushing: WHT

BNC • FLUSH MOUNT



161U-BJRU

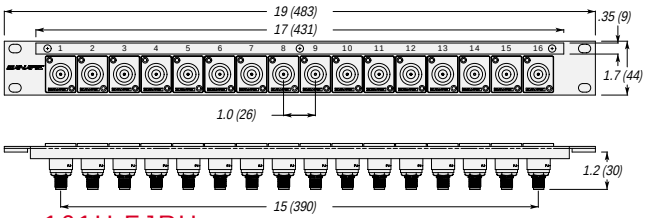
16ea 75Ω BNC–BNC Jacks



322U-BJRU

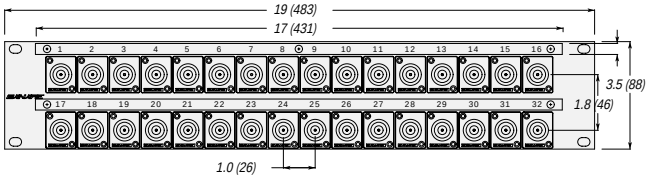
32ea 75Ω BNC–BNC Jacks

F • FLUSH MOUNT



161U-FJRU

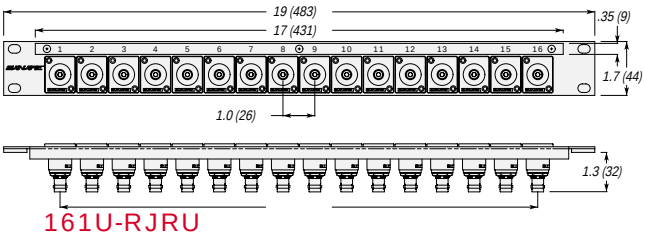
16ea 75Ω F–F Jacks



322U-FJRU

32ea 75Ω F–F Jacks

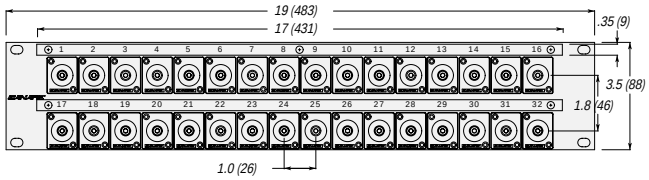
RCA • FLUSH MOUNT



161U-RJRU

16ea 75Ω Type RCA–BNC Jacks

Insulator Colors: Red, Green, Blue, Yellow, White

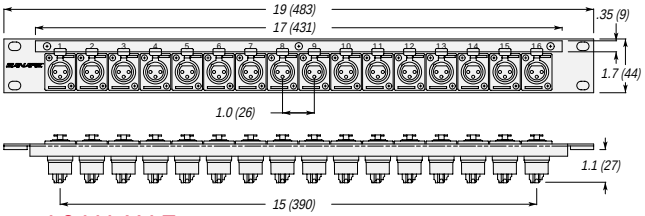


322U-RJRU

32ea 75Ω Type RCA–BNC Jacks

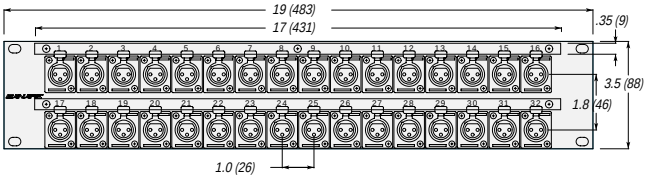
Insulator Colors: Red, Green, Blue, Yellow, White

XLR • FLUSH MOUNT



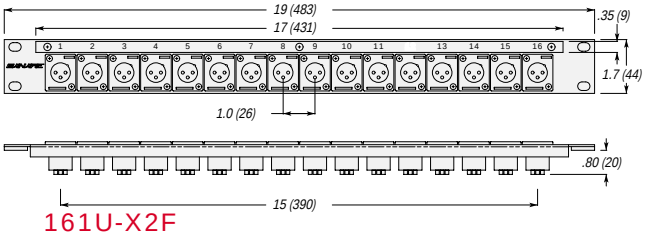
161U-X1F

16ea XLR3 Female–Solder Jacks



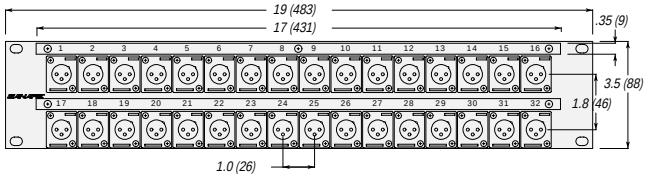
322U-X1F

32ea XLR3 Female–Solder Jacks



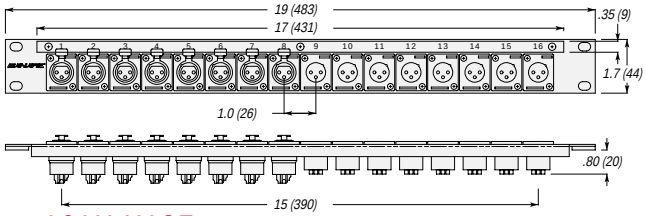
161U-X2F

16ea XLR3 Male–Solder Jacks



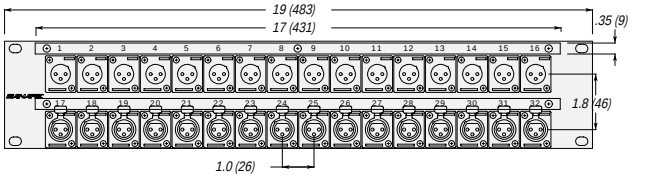
322U-X2F

32ea XLR3 Male–Solder Jacks



161U-X12F

8ea XLR3 Male & Female–Solder Jacks



322U-X12F

16ea XLR3 Male & Female–Solder Jacks

APPLICATIONS

- SMPTE 259M & 292M COMPLIANT
- SERIAL DIGITAL VIDEO (SDI)
- HDTV UPGRADES (DTV)
- NTSC ANALOG
- TEST EQUIPMENT
- SATELLITE HEADENDS
- TELCOM

Features

True 75Ω construction; Crimp Pin & Sleeve

DC to 2 GHz; ≥26 dB Return Loss (≤1.1 VSWR)

Mechanically mates with common 50Ω BNC

Elongated Body for better finger grip

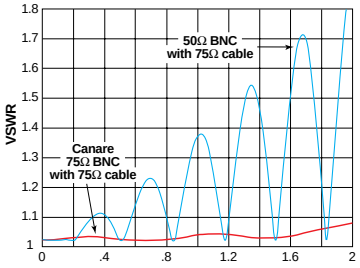
Superior cable pull strength

Gold Plated Contact Pin 'Snap Locks' into place

Beryllium Copper Outer Contact

Canare offers a full line of high performance **MIL-C-39012** true 75Ω BNC connectors with impedance matched performance characteristics and specifications that properly address the latest generations of high bandwidth digital video equipment.

Importantly, Canare 75Ω BNC connectors offer excellent mechanical pull strength and very low digital signal reflections; RL ≥26dB (VSWR ≤1.1) DC to 2GHz.



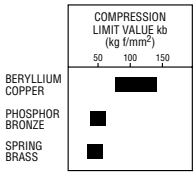
Influence by impedance matching and mismatching.

Note: *Much of the 75Ω video coax cable in use today may still be terminated with 50Ω BNC connectors. Although this pairing is adequate for lower frequency bandwidths (such as standard NTSC broadcast transmissions), this mismatch will result in signal degradation and reduced picture quality at today's ultra high analog and digital video transmission rates.*

Note:
We conveniently package our BNC crimp plugs in a special 100pc Egg-Carton style box.
The Crimp Pins and Sleeves are supplied in 100pc Bulk Bags for quick and easy setup and assembly.

PTFE dielectric is designed with an exclusive ***air gap*** compensation circuit that maintains a constant 75Ω matched impedance, even if variances in contact pin crimping occur.

Characteristics of alloys

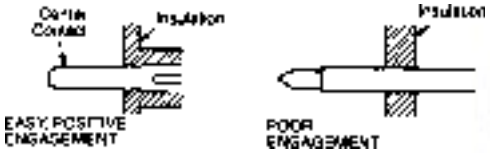


Beryllium Copper outer contact is extremely resilient to constant flexing.

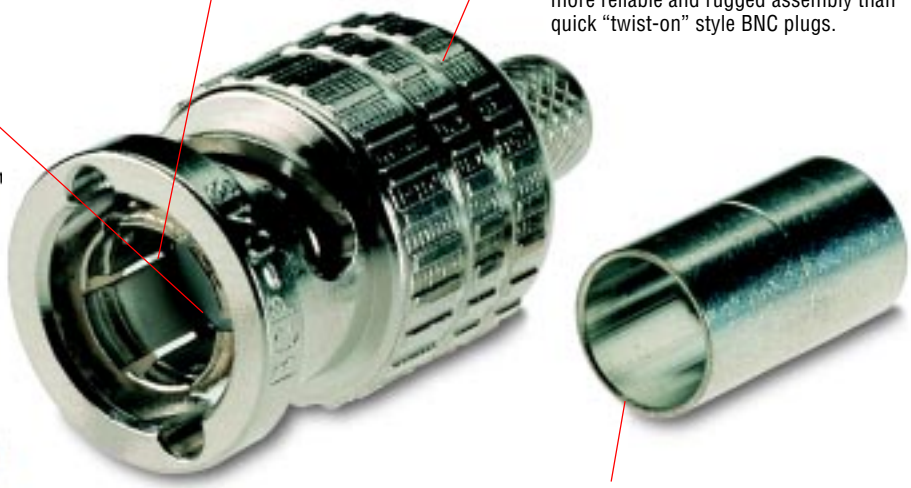
Exclusive **Elongated Body** design allows better finger grip action.
Special Nickel Plated Bell Brass remains brilliant even after many years of field service.
Canare 75Ω BNC connectors will mechanically mate with all 50Ω type BNC connectors.

Canare Dual Crimp BNC connectors are a more reliable and rugged assembly than quick "twist-on" style BNC plugs.

Captive Contact Pin
Canare BNC crimp pins snap and lock into place to prevent pin migration, the leading cause of most BNC connector failure.



CANARE 75Ω BNC — COMMON 50Ω BNC



Gold plated center crimp pin inhibits corrosion and offers low contact resistance with superior mating properties.

Our longer Sleeves offer a wider crimping surface area for improved cable pull strength.


COMMON 50Ω BNC — CANARE 75Ω BNC

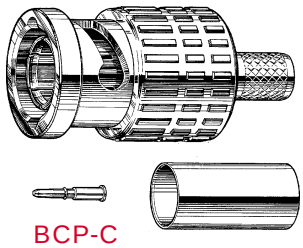
The connector on the left is a commonly used 50Ω BNC. Notice that the dielectric (white ring) is visible at the top of the outer contact.
The Canare plug on the right is a true 75Ω BNC connector. Its dielectric material is recessed... Your visual assurance that there will be proper 75Ω impedance matching between the source equipment, interconnecting cables, patchbay and load equipment. The end result: no signal reflections (VSWR) for longer cable runs and enhanced system performance.

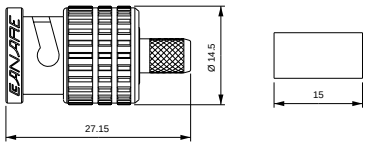
tel: 818.365.2446
fax: 818.365.0479

Features

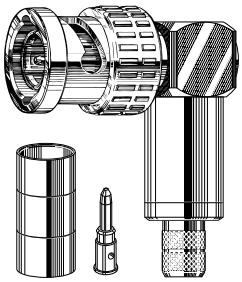
- True 75Ω construction; Crimp Pin & Sleeve
- DC to 2 GHz; ≥26 dB Return Loss (≤1.1 VSWR)
- Mechanically mates with common 50Ω BNC
- Elongated Body for better finger grip
- Superior cable pull strength
- Gold Plated Contact Pin 'Snap Locks' into place
- Beryllium Copper Outer Contact
- Easy Assembly using Canare Strip & Crimp Tools

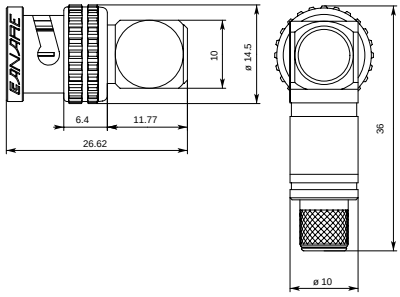
MODEL	PINS	SLEEVES
BCP-C1	(SOLDER)	BN7022
BCP-C25F	BN1051	BN7029C
BCP-C3B	B11014D	BN7003A
BCP-C3F	B11015D	BN7003A
BCP-LC3F	B11015D	BN7003A
BCP-C32	B11016D	BN7026
BCP-C4B	B11015D	BN7015A
BCP-C4F	B11016D	BN7015A
BCP-C41	B11016D	BN7016
BCP-C5B	B11016D	BN7016
BCP-C51	B11016D	BN7002
BCP-C53A	B11020C	BN7046
BCP-C55A	B11020C	BN7045
BCP-C5FA	B11020C	B75004A
BCP-LC5F	B11020C	B75004A
BCP-C77A	B11016D	B75004A
BCP-C7FA	BN1012A	BN7021A
BCP-C71A	BN1043	BN7021A





BCP-C





BCP-LC

75Ω BNC CRIMP PLUG NOMINAL SPECIFICATIONS

Type 3 piece Assembly	Imp	Bandwidth VSWR Return Loss DC to 2GHz	Body Material Plating	Center Contact Material Plating	Dielectric	Crimp Sleeve Material Plating	Cable Retention lbs. *(kgs)*	Insulation resistance at 500V DC	Voltage rating for 1 minute	Center contact resistance	Outer contact resistance
Body Crimp Pin Crimp Sleeve	75Ω	≤1.1 ≥26 dB	Brass Nickel	Brass Gold	PTFE	Copper Tin	> 55 *> 24.9*	> 1000MΩ	1500V AC(rms)	< 6mΩ	< 3mΩ

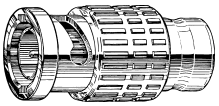
CANARE 75Ω BNC CRIMP PLUGS — CABLE / CONNECTOR / TOOLING X-REFERENCE CHART

	BCP-C1	BCP-C25F	BCP-C3B	BCP-C3F BCP-LC3F	BCP-C32	BCP-C4B	BCP-C4F	BCP-C41	BCP-C5B	BCP-C51	BCP-C53A	BCP-C55A	BCP-C5FA BCP-LC5F	BCP-C77A	BCP-C7FA	BCP-C71A
CANARE CABLE																
	L-1.5C2VS V-1.5C	L-2.5CFB	A2V1 A2V2-L V-3C	L-3C2VS / V-3CFB A3V1-FB A3V2-FB / L-3CFB		LV-61S	V-4CFB	L-4CFB		V-5C			L-5CFB V-5CFB	LV-77S	L-7CFB	
BELDEN																
	83264 83267	1855A			1506A 1824A 1825A 1826A	8241 8279 (RG59B/U)		1505A 8241F 8212 9167 9259 9659		8281 88281 728A 8281B	1694A 9066 9116 9118 9248	1695A 87120 89120 633948 9116P	9290 1189A	8281F		9011 9064 9292 87292 89292 1617A 7731A
COMMSCOPE																
		7538 753605			2037V 2041K 2065V			2000 5553 5565 5572 556510	S59HEC2	7501 7506	2227K/V 2229V 5729 5765 F690BVV	2275V 2276V 2277V 2279V	5731			5906 5940 2285K 5914 F11SSVV
COAX CABLE STRIPPERS	N/A	TS100E	TS100E TS-V3C	TS100E TS-3C / TS100E TS-V3C / TS100E TS-3C	TS100E TS-3C	TS100E TS-4C	TS100E TS-3C	TS100E TS-4C	TS100E	TS100E TS-4C	TS100E TS-5C	TS100E TS-31C	TS100E	TS100E TS-5C	TS100E TS-5C	TS100E	TS100E
TOOL TC-1	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	○
DIE SETS TCD-1DB	●																
TCD-3C		◉	◉	◉	◉	◉	◉										
TCD-35CA		●	●	●	●	●	●		●	●		●	●				
TCD-4C								◉	◉	◉							
TCD-451CA								●	●	●							
TCD-5CF													●	●			
TCD-7CA															●	●	

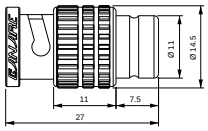
◉ Alternate Die Set.
Note: All Stripper Models are Pre-Set for Canare 75Ω BNC Crimp Plug Dimensions

BCP-TA FEATURES

- DC to 2 GHz; ≥26 dB Return Loss (≤1.1 VSWR)
- 75Ω Metal Film Resistor (± 1%,1/4 Watt @°100ppm)
- Gold Plated Center Pin; Beryllium Copper Outer Contact
- Specially Designed for all Digital Video Equipment
- Elongated Body Design



BCP-TA

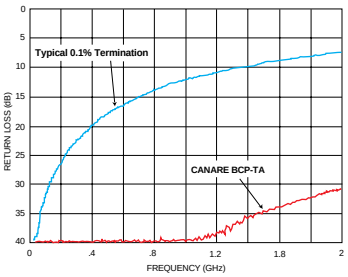


All 75Ω signals, once entered into a termination, must be fully converted into energy. If the impedance matching is not perfect, part of this energy will be reflected and poor Return Loss (VSWR) will result, especially at higher operating frequencies (i.e. computer graphics, digital video, etc.).

Common BNC terminators use a 50Ω type body with a generic 75Ω DC resistor tacked onto the back of the center contact pin.

Canare's precision 75Ω BCP-TA, far exceeds (by 20 to 30 dB) other commercial terminations, even those rated at .1% tolerance.

Careful attention to impedance design detail makes this the first true 75Ω termination with the same VSWR performance found in test lab precision terminators which cost hundreds of dollars.



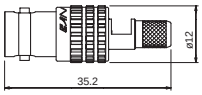
Return Loss Comparison Chart

75Ω BNC PLUG FEMALE CONNECTOR

75Ω BNC FEMALE PLUG			
Model	Matching Cable	Boot	Die
BCJ-C4	RG-59 B/U, LV-61S	CB25	TCD-4CA, TCD-451CA

- 1.1 or less VSWR up to 1.5 GHz, or less up to GHz
- Beryllium cooper (gold plated) is used on the center contact for its superior spring characteristics. (Center contact is soldered)

BCJ-C4

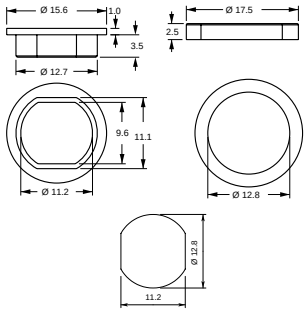


BCJ-C4

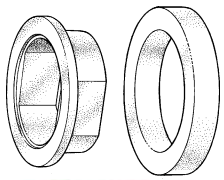
ISOLATION BUSHINGS

IU-7/16

- 2 Piece Expandable Isolation Bushing
- **Colors: Blk, Blu, Grn, Red, Wht, Yel**
- High compression, ABS plastic
- Accommodates 1.2mm ~ 3mm thick panels



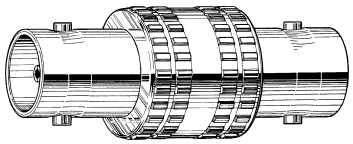
IU-7/16 Panel Mount Hole Dimensions

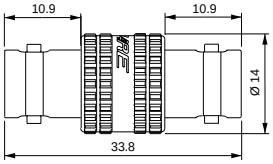


75Ω BNC BARREL

BCJ-J

- 75Ω BNC in-line cable extension adapter
- Jack to Jack
- DC to 2 GHz; ≥26 dB Return Loss (≤1.1 VSWR)





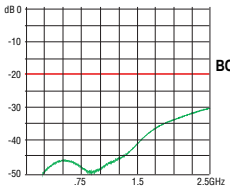
75Ω BNC PC MOUNT RECEPTACLES

APPLICATIONS

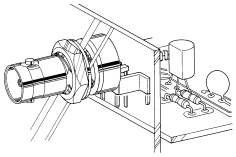
- OEM'S
- HDTV EQUIPMENT
- TELCO BROADBAND
- NTSC ANALOG VIDEO
- SATELLITE HEADEND

FEATURES

- **≥26 dB Return Loss; DC to 1GHz (≤VSWR 1.1)**
- **Securely mounts to PCB with Chassis Support**
- **Gold Plated Beryllium Copper center contact**



BCJ-BPLH Return Loss

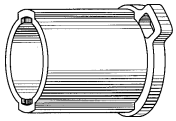


For complete model listings & detailed product specifications, request Canare's "OEM Parts Catalog"

BNC DUST CAP

BCJ-DC

Protects all unused BNC Bulkhead Receptacles from dirt and dust



BCJ-JRU

75Ω BNC RECESSED Bulkhead
Jack to Jack
Mounts in Common Canare Hole Punch
Totally Isolated from Panel
≤1.1 VSWR DC-2GHz

BCJ-RU

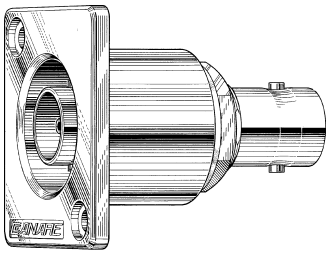
75Ω BNC RECESSED Bulkhead
Jack to Solder Pin
Mounts in Common Canare Hole Punch
Totally Isolated from Panel
≤1.1 VSWR DC-2GHz

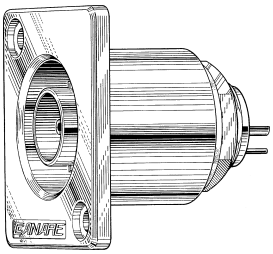
BCJ-JR

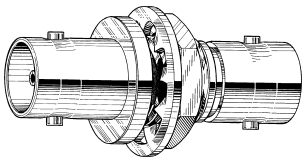
75Ω BNC Bulkhead
Jack to Jack
Use with Isolation Bushing IU-7/16
Double D Hole Punch
≤1.1 VSWR DC-2GHz

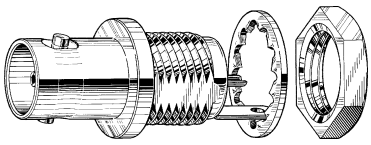
BCJ-R/1

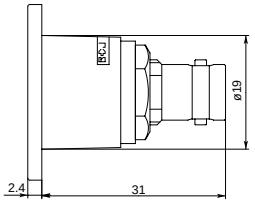
75Ω BNC Bulkhead
Jack to Solder Pin
Use with Isolation Bushing IU-7/16
Double D Hole Punch
≤1.1 VSWR DC-2GHz

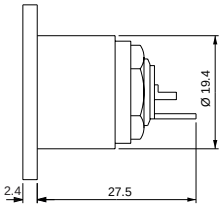


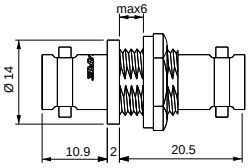


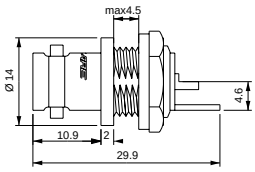


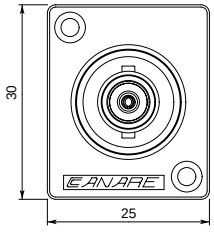




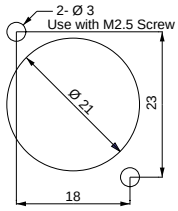




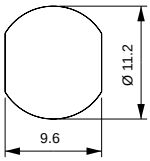




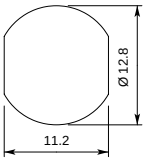
Front View



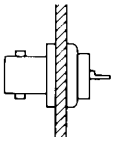
Canare Recessed
Panel Mount Hole Dimensions



Double D
Panel Mount Hole Dimensions
(**without** IU-7/16 Iso Bushing)

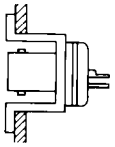


Double D
Panel Mount Hole Dimensions
(**with** IU-7/16 Iso Bushing)

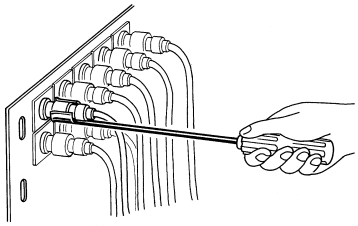


Because ordinary panel mount BNC bulkhead connectors are often precariously exposed on a wall plate located in high traffic areas, they offer little protection from physical damage.

To solve this problem, Canare developed a unique recessed ***flush mount*** panel jack design that effectively protects the housed connector.



Our BCJ-JRU and BCJ-RU BNC jacks have a ***built in panel isolation bushing***, so they may safely reside on the panel alongside any audio, power, data or intercom lines without electrical crosstalk or grounding problems. Also available in recessed 75Ω **F** and **RCA** jack versions.



Canare now offers a high quality removal tool (**BET-12**) that can be used to insert & extract all Canare BNC crimp plugs from our recessed or standoff BNC receptacles and DVJ digital video jacks.

Note: any generic 50Ω BNC plug will mechanically mate with Canare 75Ω BNC fittings.

BCJ-JRU

BCJ-RU

BCJ-JR

BCJ-R/1

75Ω BNC JACK NOMINAL SPECIFICATIONS								
Bandwidth VSWR Return Loss DC to 2GHz	Center Contact Material Plating	Body Material Plating	Dielectric	Flange Material Plating	Insulation resistance at 500V DC	Voltage rating for 1 minute	Center contact resistance	Outer contact resistance
≤ 1.1 > 26dB	Beryllium Copper Gold	Brass Nickel	PTFE	DieCast AL Nickel	> 1000MΩ	1500V AC(rms)	< 6mΩ	< 3mΩ

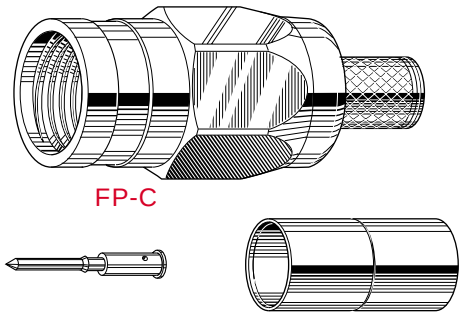
APPLICATIONS

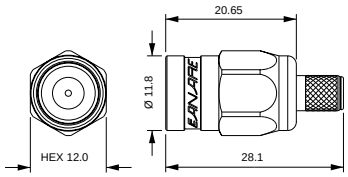
- DIGITAL BROADBAND
- SATELLITE SYSTEMS
- RF EQUIPMENT
- CABLE MODEMS
- HEADENDS

FEATURES

- ≥26dB Return Loss DC–2GHz (≤1.1 VSWR)
- Crimp Pin & Sleeve Design
- Use with Solid or Stranded Center 75Ω Coax
- Center Pin Snap Locks into Connector
- Superior cable pull strength

F MODEL	PINS	SLEEVES
FP-C3	BN1002A	BN7003A
FP-C3F	BN1003A	BN7003A
FP-C4	BN1003A	BN7015A
FP-C4F	BN1004A	BN7015A
FP-C5	BN1004A	BN7016
FP-C51	BN1004A	BN7002
FP-C53A	BN1005A	BN7046
FP-C55A	BN1005A	BN7045
FP-C5F	BN1005A	B75004A
FP-C7FA	BN1030	BN7021A
FP-C71A	BN1041	BN7021A





75Ω F CRIMP PLUG NOMINAL SPECIFICATIONS

Type	Imp (Ω)	Bandwidth VSWR Return Loss	Body Material Plating	Center Contact Material Plating	Dielectric	Crimp Sleeve Material Plating	Cable Retention lbs. *(kgs)*	Insulation resistance at 500V DC	Voltage rating for 1 minute	Center contact resistance	Outer contact resistance
Dual Crimp Pin & Sleeve	75	DC to 2GHz ≤ 1.1 > 26 dB	Brass Nickel	Brass Gold	PTFE	Copper Tin	> 55 *> 24.9*	> 500MΩ	500V AC(rms)	< 5mΩ	< 5mΩ

Most **F** connectors on the market utilize a coaxial cable's solid inner conductor as the plug's center contact pin. This design can cause near and long term problems from center conductor nicks, bending, dielectric migration, metal fatigue and contact corrosion. Furthermore, this type of commonly installed F connector may also produce signal degradation, outages, poor picture quality, RF leakage problems and most importantly... *an expensive service call.*

To meet the growing demands of advanced Digital Broadband equipment, Canare has developed the world's first precision, highly reliable 75Ω F Connector. Electromechanically stable (nickel over brass body, high quality tapped threads, extra wide torque nut, gold crimp pin, extra long crimp sleeve), our FP-C is quick to install using the same Canare strip & crimp tools as our standard 75Ω BNC and RCA plugs.

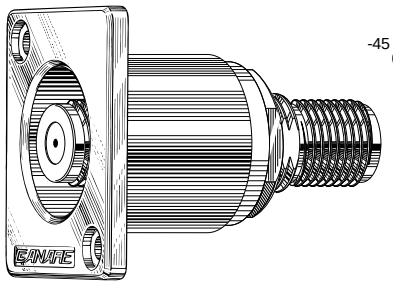
Canare true 75Ω F Connectors are impedance matched with excellent Return Loss characteristics and can easily handle future "Smart House" RF broadband multimedia networks to 1 GHz and beyond. Will mate with **SCTE** approved standard F receptacles.

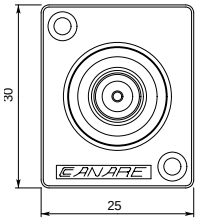
75Ω F Crimp Plugs		CABLE / CONNECTOR / TOOLING X-Reference Chart												
		FP-C3		FP-C3F		FP-C4	FP-C4F		FP-C5	FP-C51	FP-C53A	FP-C55A	FP-C5F	FP-C7FA	FP-C71A
CANARE CABLE															
		A2V1 A2V2-L V-3C	L-3C2VS	L-3CFB	A3V1-FB A3V2-FB V-3CFB	LV-61S	L-4CFB	V-4CFB	V-5C				L-5CFB V-5CFB	L-7CFB	
BELDEN															
						8241 8279 88241	1505A 8241F 8212 9167 9259 9659	1506A		8281 88281 728A 8281B	1694A 9066 9114 9116 9118 9248	1695A 87120 89120 633948 9116P	9290 1189A		1617A 7731A 9011 9064 9292 87292 89292
COMMSCOPE															
							2000 5553 5565 5572 556510	2065V		7501 7506	2227K/V 2229V 5729 5765 F690BVV	2275V 2276V 2277V 2279V	5731		5906 5940 2285K 5914 F11SSVV
COAX CABLE STRIPPERS		TS100E TS-V3C	TS100E TS-3C	TS100E TS-3C	TS100E TS-V3C	TS100E TS-4C	TS100E TS-4C	TS100E TS-3C	TS100E TS-4C	TS100E TS-5C	TS100E TS-31C	TS100E	TS100E TS-5C	TS100E	TS100E
TOOL	TC-1	○	○	○	○	○	○	○	○	○	○	○	○	○	○
DIE SETS	TCD-3C	●	●	●	●										
	TCD-35CA	●	●	●	●				●		●	●			
	TCD-4C					●	●	●							
	TCD-451CA					●	●	●		●					
	TCD-5CF												●		
	TCD-7CA													●	●

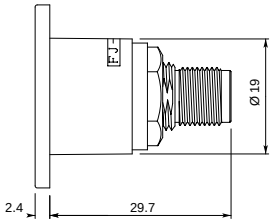
● Alternate Die Set.
Note: All Stripper Models are Pre-Set for Canare 75Ω F Crimp Plug Dimensions

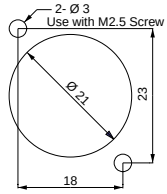
FJ-JRU

75Ω F RECESSED Bulkhead Port
Jack (Female) to Jack (Female)
Mounts in Common Canare Hole Punch
Totally Isolated from Panel
≥26dB (≤1.1 VSWR) DC-2GHz

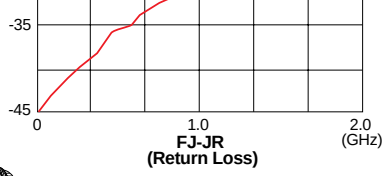








Canare Recessed
Panel Mount Hole Dimensions



FJ-JR
(Return Loss)

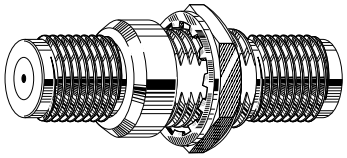
75Ω F JACK NOMINAL SPECIFICATIONS								
Bandwidth VSWR Return Loss DC to 2GHz	Center Contact Material Plating	Body Material Plating	Dielectric	Flange Material Plating	Insulation resistance at 500V DC	Voltage rating for 1 minute	Center contact resistance	Outer contact resistance
≤ 1.1 > 26dB	Beryllium Copper Gold	Brass Nickel	PTFE	DieCast AL Nickel	> 500MΩ	500V AC(rms)	< 5mΩ	< 5mΩ

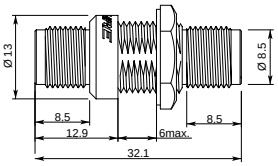
FJ-JRU

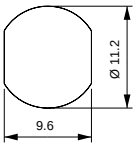
FJ-JR

FJ-JR

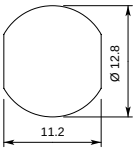
75Ω F Bulkhead Port
Jack (Female) to Jack (Female)
Double D Hole Punch
IU-7/16 Iso Bushing
≥26dB (≤1.1 VSWR) DC-2GHz







Double D
Panel Mount Hole Dimensions
(**without** IU-7/16 Iso Bushing)

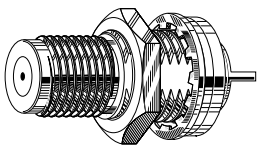


Double D
Panel Mount Hole Dimensions
(**with** IU-7/16 Iso Bushing)

75Ω F PC MOUNT RECEPTACLE

APPLICATIONS

- OEM
- BROADBAND EQUIPMENT
- CABLE MODEMS
- RF BOXES
- SATELLITE SYSTEMS



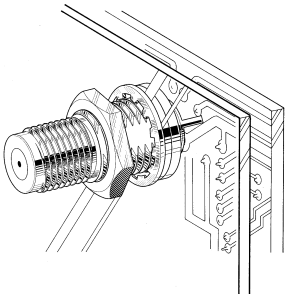
FJ-FPC

FEATURES

≥26 dB Return Loss (≤1.1 VSWR); DC to 2GHz

Securely mounts to PCB with Chassis Support

Gold Plated Beryllium Copper center contact



Canare introduces a new high precision 75Ω F Receptacle for PC Board solder trace hole mounting. This new connector is impedance matched and perfectly suited for use in all advanced generations of Digital Video Broadcast Equipment as well as other applications where high bandwidth and low Return Loss is required.

For complete model listings & detailed product specifications, request Canare's
"OEM Parts Catalog"

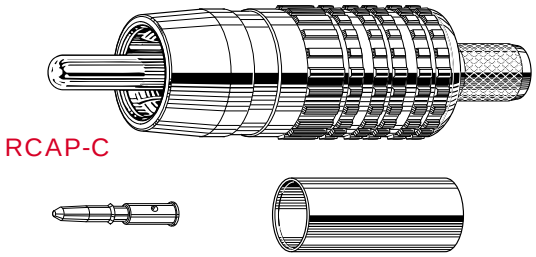
APPLICATIONS

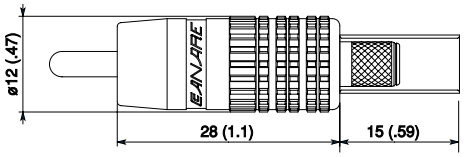
- MULTIMEDIA PATCHCORDS
- HI-RES VIDEO MONITORS
- SPDIF DIGITAL AUDIO
- DUPLICATION DECKS
- VCR & CAMCORDERS
- AUDIO INTERCONNECTS

FEATURES

- **VSWR ≤1.1 DC to 200MHz**
- **Absolutely No Soldering Required**
- **Assembly Time Reduced by >80%**
- **Use Standard Canare Crimp & Strip Tools**
- **Internal Pressure Contact Fingers**
- **Gold Plated Center Shaft**
- **Wide Selection of Cable Types**

MODEL	PINS	SLEEVES
RCAP-C3A	B11014D	BN7003A
RCAP-C3F	B11015D	BN7003A
RCAP-C4A	B11015D	BN7015A
RCAP-C4F	B11016D	BN7015A
RCAP-C5A	B11016D	BN7016
RCAP-C53	B11020C	BN7016
RCAP-C5F	B11020C	B75004
RCAP-C77	B11016D	B75004





75Ω TYPE RCA CRIMP PLUG NOMINAL SPECIFICATIONS

3-Piece Assembly	Bandwidth VSWR Return Loss	Body Material Plating	Center Contact Material Plating	Outer Contact Material Plating	Dielectric	Crimp Pin Material Plating	Crimp Sleeve Material Plating	Cable Retention lbs.*(kgs)*	Insulation resistance at 500V DC	Voltage rating for 1 minute	Contact resistance
Body Crimp Pin Crimp Sleeve	DC to 200MHz ≤ 1.1 > 26 dB	Brass Nickel	Phosphor Bronze Gold	Beryllium Copper Gold	PPO Noryl	Brass Gold	Copper Tin	> 55 *> 24.9*	> 100MΩ	500V AC(rms)	< 10mΩ

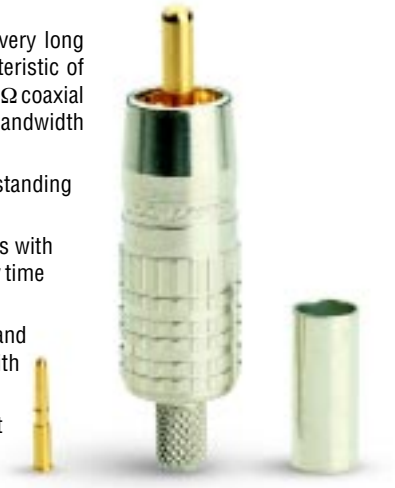
Generic "off-the-shelf" RCA audio plugs are quite common and have been in use for a very long time...well over 50 years! These old-style RCA type solder plugs have an impedance characteristic of roughly 25Ω and exhibit extremely poor Return Loss performance when mated with precision 75Ω coaxial video cable. In fact, they are virtually unusable for 6MHz Broadcast Video frequencies, high bandwidth RGB Video Monitor lines, or even Digital Audio data bit streams.

Canare's all new 75Ω type RCAP Video Crimp Plugs are impedance matched and achieve outstanding analog and digital electrical performance with a usable bandwidth to 200MHz.

Our original 3-piece connector design offers consistent and extremely reliable terminations with a wide variety of 75Ω coaxial cable sizes. This unique construction reduces set-up and assembly time by >80% because no soldering is ever required!

Assembling your own high-quality Canare RCA video patch cords is now quick, easy and affordable...you just: (a) strip back the cable, (b) crimp on the center pin, (c) snap-lock the pin with cable into the RCAP body, (d) slide up the sleeve and crimp...that's all there is to it!

All RCAP connectors utilize the same high-quality gold Pins & Sleeves found in Canare's most popular 75Ω BNC crimp plug series. This special design feature permits 100% compatibility with the standard Canare Hand Tool, Die sets and our award winning "15 Second Quick" TS coaxial cable Strippers.



75Ω TYPE RCA CRIMP PLUG — CABLE / CONNECTORS / TOOLING X-Reference Chart

	RCAP-C3A	RCAP-C3F			RCAP-C4A	RCAP-C4F		RCAP-C5A	RCAP-C53	RCAP-C5F	RCAP-C77
CANARE CABLE	A2V1 A2V2-L V-3C	L-3C2VS	L-3CFB	A3V1-FB A3V2-FB V-3CFB	LV-61S	L-4CFB	V-4CFB	V-5C		L-5CFB V-5CFB	LV-77S
BELDEN					8241 8279	1505A 8212 8241F 9167 9259 9659	1506A		1694A 9116 9066	1189A 9290	8281F
COMMSCOPE						2000 5553 5565 5572 556510			2227K/V 2229V	5731	
COAX CABLE STRIPPERS	TS100E TS-V3C	TS100E TS-3C	TS100E TS-3C	TS100E TS-V3C	TS100E TS-4C	TS100E TS-4C	TS100E TS-3C	TS100E TS-4C	TS100E TS-31C	TS100E TS-5C	TS100E TS-5C
TOOL TC-1	○	○	○	○	○	○	○	○	○	○	○
DIE SETS TCD-3C	●	●	●	●							
TCD-35CA	●	●	●	●				●	●		
TCD-4C					●	●	●				
TCD-451CA					●	●	●				
TCD-5CF										●	●

● Alternate Die Set.
Note: All Stripper Models are Pre-Set for Canare 75Ω Type RCA Crimp Plug Dimensions

tel: 818.365.2446
fax: 818.365.0479

RJ-BCJRU

75Ω Type RCA to BNC RECESSED Bulkhead
Jack (Female) to Jack (Female)
Mounts in Common Canare Hole Punch
Totally Isolated from Panel
≤1.1 VSWR DC-100MHz

RJ-RU

75Ω Type RCA RECESSED Bulkhead
Jack (Female) to Solder Cup
Mounts in Common Canare Hole Punch
Totally Isolated from Panel
≤1.1 VSWR DC-100MHz

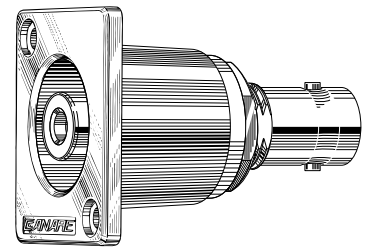
RJ-BCJR

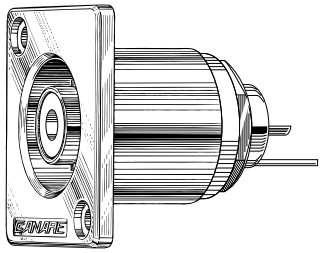
75Ω Type RCA to BNC Bulkhead
Jack (Female) to Jack (Female)
Use with Isolation Bushing IU-7/16
Double D Hole Punch
≤1.1 VSWR DC-100MHz

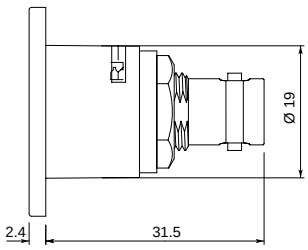
RJ-R

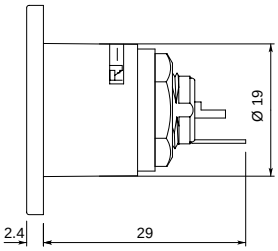
75Ω Type RCA Bulkhead
Jack (Female) to Solder Cup
Use with Isolation Bushing IU-7/16
Double D Hole Punch
≤1.1 VSWR DC-100MHz

Insulator Colors: Red, Green, Blue, Yellow, White

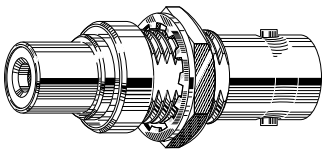


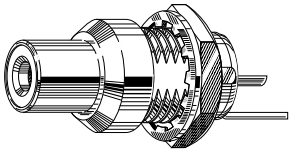


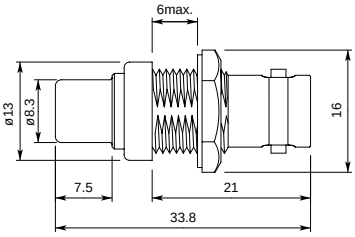


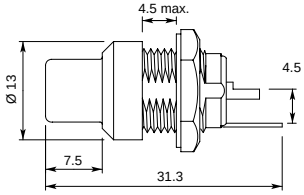


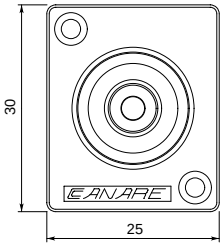
Insulator Colors: Red, Yellow, White



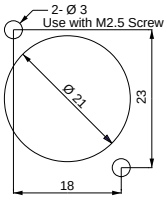




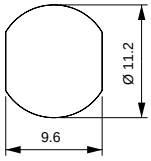




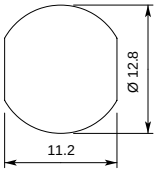
Front View



Canare Recessed
Panel Mount Hole Dimensions



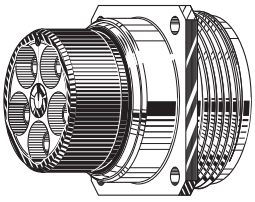
Double D
Panel Mount Hole Dimensions
(**without** IU-7/16 Iso Bushing)



Double D
Panel Mount Hole Dimensions
(**with** IU-7/16 Iso Bushing)

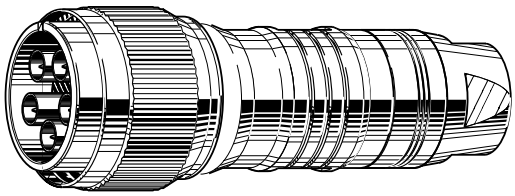
75Ω TYPE RCA JACK SPECIFICATIONS							
Bandwidth VSWR Return Loss DC to 100MHz	Center Contact Material Plating	Body Material Plating	Dielectric	Flange Material Plating	Insulation resistance at 500V DC	Voltage rating for 1 minute	Center contact resistance
≤ 1.1 > 26dB	Beryllium Copper Gold	Brass Nickel	PTFE	DieCast AL Nickel	> 100MΩ	500V AC(rms)	< 10mΩ

75 Ω MULTI-PIN COAXIAL CONNECTORS



MCF-V5C3

female bulkhead



MCM-V5C3

male cable mount

Single Connector Handles Up to Five 75Ω Coaxial Connections.

Model	Description	Matching Cable
MCM-V5C3	Plug	V5-3C
MCF-V5C3	Receptacle	V5-3C, L-3C2V, 3C-2V

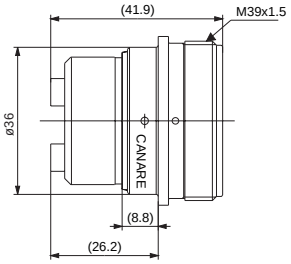
Model	Description	Matching Connector
DCMO1	Dust Cap	MCM-V5C3
DCF01		MCF-V5C3

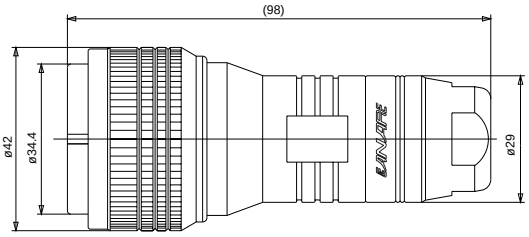
Applications

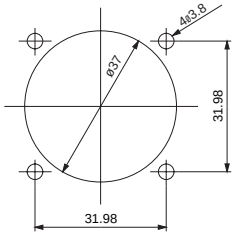
- RGB-HV Snake Systems
- Digital Video Projectors
- SDI Tie Lines
- OB Vans
- A/V Multimedia Installers

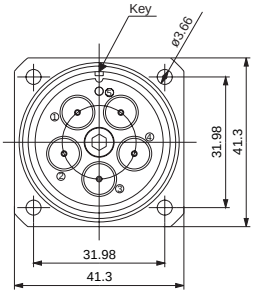
Features

- Modular "Snap 'n' Lock" Pins & sockets (5ea)
- Easy to Assemble in Shop or Field
- No soldering Required, Just Crimp
- Uses Standard Canare Crimp Tools & Strippers
- Color Coded Channel ID's









Connector Unit BN9078

Connector Unit BN9079

Model	Nom Imped. Ohms	Bandwidth VSWR Return Loss	Bandwidth Insertion Loss	Insulation resistance at 500V DC	Withstand Voltage	Contact resistance	Operating Temp. °F(°C) Humidity %	Life Cycles	Tools
MCM-V5C3 male MCF-V5C3 female	75Ω	DC-1.5 GHz. ≤ 1.2 ≥ 20 dB	DC-1.5 GHz. ≤0.3 dB	≥1000MΩ	1500V AC 1 min.	≤10mΩ	-40°F to +149°F -40°C to +65°C 90%	500 Times	24mm & 27mm (Wrenches) TC-1 TCD-35CA

tel: 818.365.2446
fax: 818.365.0479

75 Ω TRI-K PRO TRIAXIAL CONNECTORS

Cable compatibility meets American interconnecting requirements.

Model	Boot or dust cap	Description	Applicable cable	Tools	Retro Fit Kit
CCF4-JK	CB23	Female cable mount	L-4CFTX	TC-1 TCD-316C	BN9127
CCM4-PK	CB22	Male cable mount			BN9128
CCF4-JKR	DCM02	Female panel mount			BN9127
CCM4-PKR	DCM03	Male panel mount			BN9128

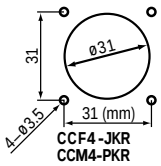
- Push-lock mechanism - no cable stress when detaching to prevent cable disconnection.
- Simple construction for easy assembly
- Sturdy construction
- Detailed instructions included

L-4CFTX
Jacket colors: black, red, green

*Please ask our sales personnel regarding Canare connector compatability with connectors of other makes.

CB23

DCM02



Mounting hole dimension

75 Ω TRI-F PRO TRIAXIAL CONNECTORS

Cable compatability meets European Interconnecting requirements.

Model	Boot or dust cap	Description	Applicable cable	Tools
CCF5-JF	CB16	Female cable mount	L-4CFTX	Wrenches 14mmx2 17mmx2 19mmx1 22mmx1
CCM5-PF	CB17	Male cable mount		
CCF5-JFR	DCFO2	Female panel mount		
CCM5-PFR	DCMO2	Male panel mount		
CCF10-JF	CB18	Female cable mount	10CFTX-SC (Custom model. Cable O.D. 14.5mm)	Wrenches 17mmx2 22mmx2 24mmx1 26mmx1
CCM10-PF	CB19	Male cable mount		
CCF10-JFR	DCF02	Female panel mount		
CCM10-PFR	DCM02	Male panel mount		

- Push-lock mechanism - no cable stress when detaching to prevent cable disconnection.
- Simple construction for easy assembly
- Sturdy construction
- Detailed instructions included
- No special assembly tools required

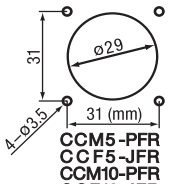
L-5CFTX
Jacket colors: black, red, green

10CFTX-SC
Jacket colors: black, red, green

*Please ask our sales personnel regarding Canare connector compatability with connectors of other makes.

CB18

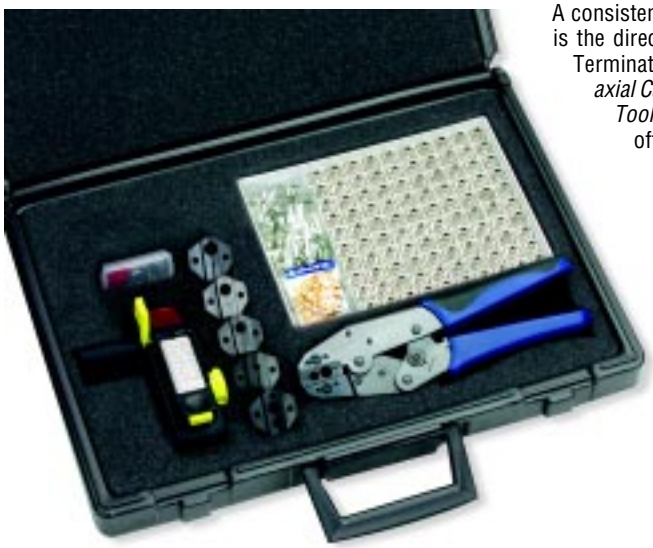
DCF02



Mounting hole dimension

75Ω TRIAX CONNECTORS NOMINAL SPECIFICATIONS

Model	Nom. Imped. Ohms	Bandwidth VSWR Return Loss	Center Contact / Material Plating	Inner Body Material Plating	Body / Material Plating	Dielectric	Center Contact	Cable Retention lbs. (kgs.)	Insulation resistance at 500V DC	Withstand Voltage	Center Contact resistance	Operating Temp. °F(C)/ Humidity %	Life Cycles
Tri-KPro series 4	75Ω	DC-1.5 GHz ≤1.1 ≥26dB	male=Brass female = Beryllium Copper / Gold	Brass & Phospher Bronze/ Gold	Brass/ Nickel	PTFE & POM	Crimp	>100 >45	≥ 5000 MΩ	1500V AC 1 min.	≤10mΩ	-40° to + 185°F -40°C to +85°C 85%	1000 Times
Tri-FPro	75Ω	DC-1.5 GHz ≤ 1.2 ≥ 20dB	male = Brass female=Beryllium Copper / Gold	Brass & Phospher Bronze/ Gold	Brass /S.S. /Nickel	PTFE	Solder	>110 >50	≥ 5000 MΩ	2000 V AC 1 min.	≤10mΩ	-40° to + 185°F -40°C to +85°C 85%	5000 Times



A consistent and reliable crimp connection is the direct result of a Quality Controlled Termination Set consisting of: The *Coaxial Cable*, *Connector*, *Stripper, Crimp Tool and precision Die Set.* Canare offers a complete turnkey Assembly Package. There is no tooling guesswork... the only surprise is how quick and easy it is to terminate your own cables.

R5A Storage Road Case
Low cost, lightweight yet rugged, holds:
(1-2) **TC-1** hand tools
(5) **TCD** crimp die sets
(100) Canare **BNC**, **F** or **RCA** crimp plugs
(1) **TS100E** or, (3) **TS-C** Stripping tools
Misc. adapters, replacement blades, rulers, etc.

Buyer Beware:
*There are other products available that may look similar to the Canare **TC-1** Hand Crimp Tool & **TCD** Die Sets, but they may not meet the same high quality standard and will not perform to our strict specifications.*

TC-1 Hand Crimp Tool
Interchangeable die sets
Scissor ratchet action
Emergency release lever
Adjustable crimp force via drag washer
Hardened Swedish Steel construction
Rated at 50,000 dura-cycle lifespan

TCD Die Sets
2 piece precision fit design
2 Hex Bolts for quick hand tool loading
Tight dimensional tolerances
1 and 2 Hex Sleeve versions
Engraved Model I.D.

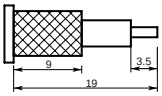
TS-SERIES COAXIAL CABLE STRIPPERS

Stripping & prepping coaxial cable for Canare's true 75Ω BNC, F and RCA Crimp Connectors, is now simple, quick and easy. No more hassles working with awkward razor blades or difficult-to-use straight edge tools. Our TS-Series dramatically reduces assembly time when compared the most other commonly used methods. You simply "insert the cable, rotate and remove". Completes the job in just 15 seconds! All models have 3fully-adjustable circular steel blades, specially designed and hardened to precisely cut "around" the cable...not chop through it like utility knifes or ordinary wire strippers. Our innovative side-slit blade allows you to carefully peel off the jacket for consistant and productive cable prep.

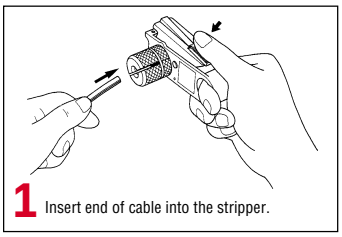
TS100E "5 in 1" Coaxial Cable Stripper
Quick & Easy-to-use hand tool
Rotary Knob selects 5 different cable set-ups
3 Circular Steel Blades Cut cleanly & precisely
Blade height is fully adjustable, wrench included
Special extra "side-slit" jacket blade
Unique V-Guide aligns coax in center of chamber
5 Factory pre-sets...or, create your own settings
TSC Blade Cassette
Replaceable circular steel blade pack

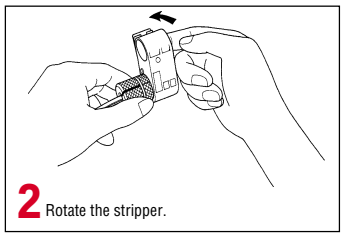
MODEL SELECTION	
Model	**Max. Cable O.D.**
TS100E	.158in – .433in (4mm – 11mm)
TS-V3C	.197in (5.0mm)
TS-3C	.236in (6.0mm)
TS-4C	.256in (6.5mm)
TS-31C	.291in (7.4mm)
TS-5C	.327in (8.3mm)

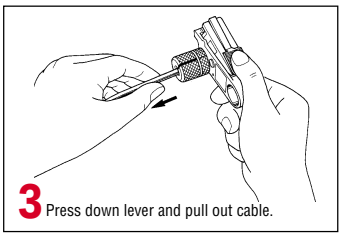
Strip Lengths all Models (mm)



TS-C Coaxial Cable Strippers
3 Circular Steel Cutting Blades
'Side Slit Blade' for easy peel jacket
Blade height fully adjustable







Application note: All stripper models are pre-set for use with Canare BNC, F and RCA Crimp Plug dimensions only.

CANARE CABLE REEL STAND

CRS-02 Cable Storage Rack

Canare introduces a premium cable reel storage rack stand that easily accommodates 10 full-size Canare Cable spools (ex: 10ea. 300 meter rolls of L-5CFB). Extra heavy duty gauge steel frame with solid reinforced welded joints. Rugged crinkled powder coat Blue finish.

Includes four (4) industrial strength roll-around locking casters so rack 'stays put' when paying out cable.

A must-have for multiple cable pulls, system installation job sites and professional wire assembly shops.

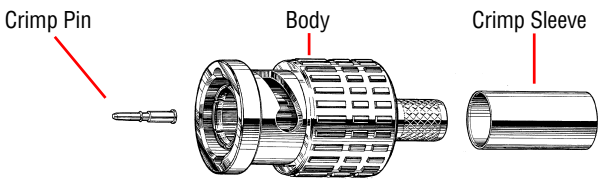
BNC EXTRACTION TOOL

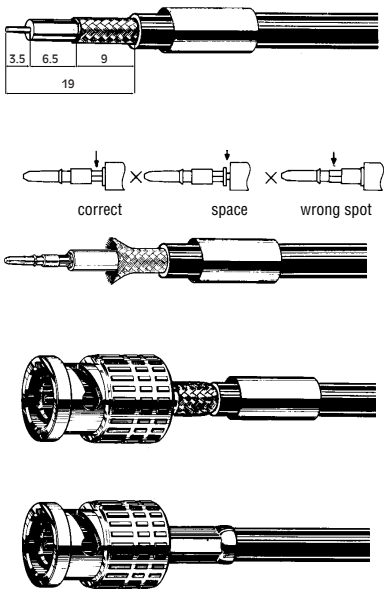
BET-12

Our specially designed connector removal tool perfectly fits not only Canare 75Ω BCP-C BNC series, but all other standard MIL-SPEC BNC line plugs. The BET-12 allows easy access to those hard-to-reach BNC jacks located deep inside rear rack enclosures.

Tapered channel socket permits various cable O.D. sizes up to and including Canare L-7CFB, RG11 (.405in, *10.29mm*). Long 12 inch heavy duty metal probe shaft will not bend or deform under normal use. Clear Blue plastic handle.

ASSEMBLY • CANARE 75Ω BNC, F AND RCA CRIMP PLUGS

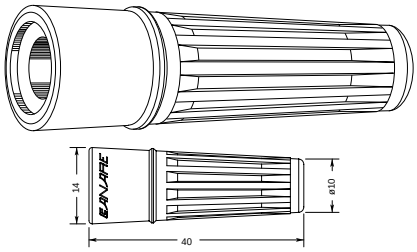




1. Slide crimp sleeve over cable.
2. Strip cable jacket using Canare TS-Series Coax Strippers (see mm dimensions)
3. Place contact pin on center conductor. Using the TC-1 hand tool and appropriate die set, crimp center pin as shown in diagram. (Do not leave a gap between rear of the pin and cable insulation end.)
4. Flair braided shield to aid insertion of connector body.
5. Push cable with crimped pin into body housing until you detect an audible "snap". (Jamming the pin may bend center conductor and damage connector dielectric.)
6. Lightly tug cable (@ 4.5 lbs/2.0 kgs) to verify that pin is properly seated in body housing.
7. Slide crimp sleeve up against the body and place in tool die.
8. Complete assembly by crimping down on sleeve to form hex.

Note: *Flair gap at sleeve end is normal and allows cable jacket extra flexing room.*

CABLE BOOT



CB04

Our new push-on silicon rubber boot helps prevent cable damage at the connector sleeve stress point due to flexing, fatigue and environmental changes. Available in 10 matte colors for matching cable jacket or channel ID call-outs.

MODEL SELECTION

MODEL	Fits on Cable	Connectors
CB01	L-1, 5C2VS	BCP-C series
CB02	L-2, 5CFB, V-3C	
CB03	L-3C2VS, L-3CFB, V-3C, V-3CFB	
CB04	LV-61S, L-4CFB, V-4CFB	
CB05A	LV-77S, L-5CFB, V-5C, V-5CFB	
CB24	L-3C2VS, L-3CFB, V-3C, V-3CFB	MBCP-C series
CB25	LV-61S, L-4CFB, V-4CFB	FP-C series
CB26	LV-77S, L-5CFB, V-5C, V-5CFB	RCAP-C series

COLORS AVAILABLE

MODEL	BLK	BLU	BRN	GRY	GRN	ORN	PPL	RED	WHT	YEL
CB01	■	■			■			■	□	■
CB02	■									
CB03	■	■	■	■	■	■	■	■	□	■
CB04	■	■	■	■	■	■	■	■	□	■
CB05A	■	■	■	■	■	■	■	■	□	■
CB24	■	■			■			■	□	■
CB25	■	■			■			■	□	■
CB26	■	■			■			■	□	■

APPLICATIONS

- GUITAR / KEYBOARDS
- SOUND MIXERS
- PA SYSTEMS
- TEST PROBES
- HI-FI INTERCONNECTS

FEATURES

Robust Dependable Construction

Brass with Nickel/Gold Plating

360˚ Crimpable Cable Strain Relief

Easy to Solder

Beautiful Long Lasting Finish

Canare offers in-line cable mount audio plugs in a variety of configurations for the discriminating professional. Each model is carefully designed to accommodate small to large O.D. cables and all versions offer a generous soldering area for easy wiring assembly, good electromechanical characteristics, super performance and long life durability.

All F-Series audio plugs have a beautiful nickel plated, bell brass handle with a specially designed knurled surface to prevent finger slippage.

The F-09 RCA plug features an extra narrow profile body (for high density panels). The handle extends over the outer contact sleeve for improved RF shielding.

F-09 and F-10 plugs have a Gold plated brass inner shaft that offers low contact resistance and eliminates corrosion problems with the mating receptacle.

Canare F-Series audio plugs feature a proprietary 360° cable clamp design that ensures long life reliability.

Spring type strain relief prevents cable damage due to repeated bending at the connector entry point; cable lasts three times longer than plugs without strain relief.

F-10

Reinforced one-piece body and sleeve includes a pure brass bar that runs the length of the handle; 50% stronger than ordinary plugs and 20% stronger than other high-grade plugs.

F-15

Satin-finished, nickel-plated solid brass handle, shuts out static and electromagnetic noise.

Canare F-15 and F-16 1/4" phone plugs use a patented "V-Lock" system that ensures good electrical contact by keeping the plugs tight where others pull out.

F-09

F-11

F-16

F-12

CONNECTOR SPECIFICATIONS

Model	Type	Notes	Cable Entry I.D. in (mm)	* Max Cable O.D. in (mm)	Shaft material plating	Dielectric	Body material plating	Insulation tube	Cable spring plating
F-09	RCA	Narrow profile. Body extends over contact	.248 6.3	.236 6.0	Brass Gold	Polyacetal	Brass Nickel	–	Nickel
F-10	RCA	Deluxe clamp and body design	.244 6.2			PTFE		Black PVC	
F-11	Mini Phone TS	Tip, Sleeve	.248 6.3		Brass Nickel	–		–	
F-12	Mini Phone TRS	Tip, Ring, Sleeve	.244 6.2					Black PVC	
F-15	1/4" TS phone	Tip, Sleeve							
F-16	1/4" TRS phone	Tip, Ring, Sleeve							

* With Spring Removed, Max. Cable O.D. is .295in (7.5mm)

tel: 818.365.2446
fax: 818.365.0479

APPLICATIONS

- POST PRODUCTION SUITES
- DAT ROUTING
- RECORDING STUDIOS
- DIGITAL AUDIO TIE LINES

FEATURES

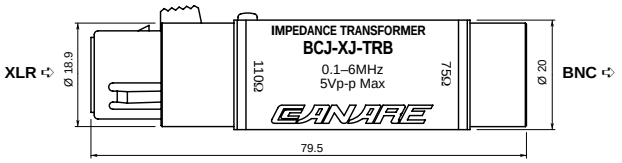
SMPTE 276M & AES3 Transmission Standards

Coaxial Routing of 2 Channel AES/EBU Digital Audio

Permits longer cable runs vs 110Ω Twisted Pair

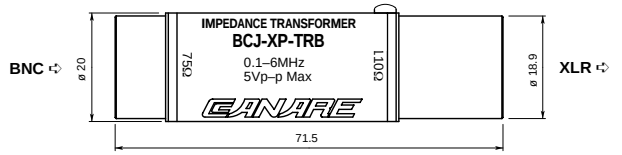
Signal Distribution: Canare Video Patchbays, Routers & VDA's

BCJ-XJ-TRB



XLR3 - Female	BNC Receptacle
110Ω Input	75Ω Output

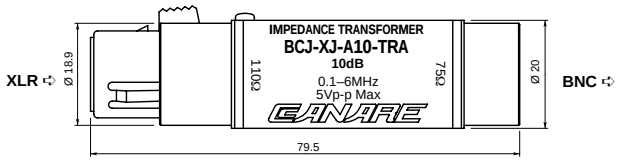
BCJ-XP-TRB



BNC Receptacle	XLR3 - Male
75Ω Input	110Ω Output

BCJ-XJ-A10TRA

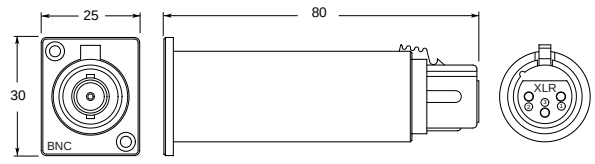
"1 Volt peak to peak" Output version for integrating base band Video DA's and Routing Switchers.



XLR3 - Female	BNC Receptacle
110Ω Input	75Ω Output (at 1V p-p)
10dB Attenuation Pad	

PANEL MOUNT VERSIONS

Fits in all standard Canare Bulkhead Panels (pages 14~15)

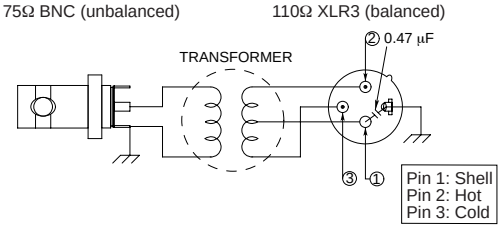


Model	Description (Front ~ Back)
XJ3F-TRB-BCJ	XLR(F) ~ BNC
XJ3M-TRB-BCJ	XLR(M) ~ BNC
BCJ-TRB-XP3F	BNC ~ XLR(F)
BCJ-TRB-XP3M	BNC ~ XLR(M)
XJ3F-A10TRA-BCJ	XLR(F) ~ BNC 10dB Pad
BCJ-A10TRA-XP3F	BNC ~ XLR(F) 10dB Pad

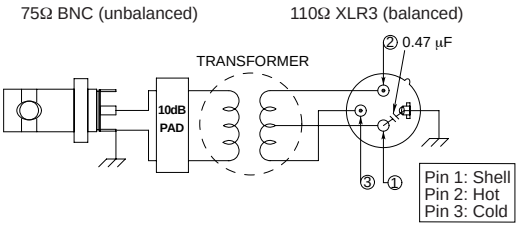
GENERAL SPECIFICATIONS
Bandwidth: 0.1 ~ 6MHz
Maximum Voltage: 5V p-p
VSWR: Less than 1.1
Insertion Loss: Less than 0.3 dB

Canare Impedance Transformers allow 75Ω coaxial transmission of all 2 channel AES/EBU Digital Audio signals. Low cost and easy to use, our I/O adapters are designed to passively convert all standard AES/EBU digital audio signals from 110Ω/XLR3 Output (@ 4.5 Volts) to a 75Ω BNC coaxial cable and then back again to a 110Ω/XLR3 Input (200mV min). Also provides excellent rejection against hum and noise.

BCJ-XJ-TRB / BCJ-XP-TRB



BCJ-XJ-A10TRA



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

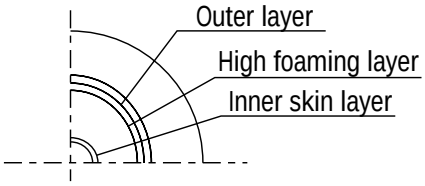
AES/EBU Transmitter (V)	Transformer Out (V)
2.0	1.60
3.0	2.39
4.0	3.18
4.5	3.60
5.0	3.98
6.0	4.78
7.0	5.58
8.0	6.38
9.0	7.18
10.0	7.98

BCJ-XJ-TRB / BCJ-XP-TRB

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-A10TRA

From Analog to Digital, to HDTV



L-6CHD, L-7CHD, L-8CHD

- Ideal for transmitting HDTV-SDI signals.
- Offers 1.3 times the transmission distance of existing cables of the same size.(for 7C cable)
- The combination of laminated aluminum tape and braid used for the shield offers strong shielding.
- A three-layer insulaton configuration in which to each layer is given a different foaming ratio is used to increase strength and resisitance to humidity.

Note 1;
Designed for fixed installation, and not fit for mobile use where external force or pressure is unavoidable.
Note 2;
Cable strippers cannot be used.

MECHANICAL SPECFICATIONS										ELECTRICAL PERFORMANCE							
Model	Weight Stand. length lbs/328ft. (kgs/100m)	Nom. O.D. Inch (mm)	PVC Jacket Thickness inch (mm)	Brittle Point °F (°C)	Conductor Material	Cond. O.D. inch (mm)	Dielectric Insulation Type *	Insulation O.D. inch (mm)	Shield Materials & Coverage	Cond. D.C.R. Ω/1000ft (Ω/100m)	Shield D.C.R. Ω/1000ft. (Ω/100m)	Nom.Cap @1KHz pF/ft pF/mt	Nom. Imped. Ohms	Velocity of Prop.	Attenuation at 750MHz dB/100m **	Structural Return Loss up to 2.5 GHz dB Minimum	HDTV Length @1.485 Gbps (742.5MHz) -20dB att. **
L-6CHD	22 10	0.350 8.9	0.040 1.0	-22°F -30°C	Bare Copper 15	0.059 1.5	Foam PE	0.240 6.1	Al Foil 100% TAC ≥92%	≤3.13 ≤1.03	≤2.35 ≤0.77	15 50	75Ω±3	89%	13	≥20	505 ft. (430ft.)
L-7CHD	29 13	0.401 10.2	0.040 1.0	-22°F -30°C	Bare Copper 13	0.071 1.8	Foam PE	0.287 7.3	Al Foil 100% TAC ≥92%	≤2.16 ≤0.71	≤1.86 ≤0.61	15 50	75Ω±3	89%	11.2	≥20	587 ft. (499ft.)
L-8CHD	31 14	0.437 11.1	0.040 1.0	-22°F -30°C	Bare Copper 12	0.080 2.03	Foam PE	0.323 8.2	Al Foil 100% TAC ≥89%	≤1.77 ≤0.58	≤1.92 ≤0.63	15 50	75Ω±3	89%	9	≥20	728 ft. (620ft.)

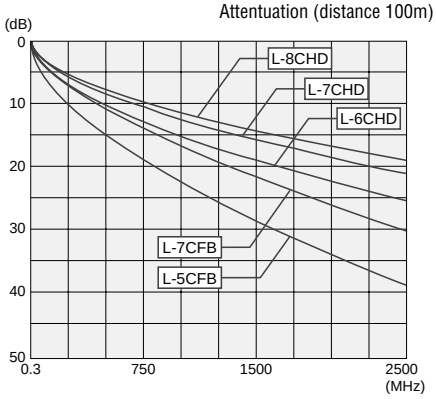
*Special Order

CANARE L-6CHD	1/2 Clock Freq.	Feet	Meters
Composite NTSC SMPTE 170M (143Mb/s)	71.5 MHz		
Minimum Loss (dB)	20	1, 640	500
Maximum Loss (dB)	30	2,460	750
Component Video SMPTE 259M (270Mb/s)	135 MHz		
Minimum Loss (dB)	20	1, 194	364
Maximum Loss (dB)	30	1,788	545
Compressed HDTV SMPTE 259M (360Mb/s)	180 MHz		
Minimum Loss (dB)	20	1, 027	313
Maximum Loss (dB)	30	1, 538	469
Uncompressed HDTV SMPTE 292M (1.485Gb/s)	742.5 MHz		
Minimum Loss (dB)	20	505	154
Maximum Loss (dB)	30	758	231

CANARE L-7CHD	1/2 Clock Freq.	Feet	Meters
Composite NTSC SMPTE 170M (143Mb/s)	71.5 MHz		
Minimum Loss (dB)	20	1, 929	588
Maximum Loss (dB)	30	2,893	882
Component Video SMPTE 259M (270Mb/s)	135 MHz		
Minimum Loss (dB)	20	1, 368	417
Maximum Loss (dB)	30	2, 050	625
Compressed HDTV SMPTE 259M (360Mb/s)	180 MHz		
Minimum Loss (dB)	20	1, 194	364
Maximum Loss (dB)	30	1, 788	545
Uncompressed HDTV SMPTE 292M (1.485Gb/s)	742.5 MHz		
Minimum Loss (dB)	20	587	179
Maximum Loss (dB)	30	879	268

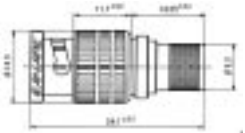
CANARE L-8CHD	1/2 Clock Freq.	Feet	Meters
Composite NTSC SMPTE 170M (143Mb/s)	71.5 MHz		
Minimum Loss (dB)	20	2,263	690
Maximum Loss (dB)	30	3,392	1034
Component Video SMPTE 259M (270Mb/s)	135 MHz		
Minimum Loss (dB)	20	1, 561	476
Maximum Loss (dB)	30	2,342	714
Compressed HDTV SMPTE 259M (360Mb/s)	180 MHz		
Minimum Loss (dB)	20	1, 338	408
Maximum Loss (dB)	30	2, 007	612
Uncompressed HDTV SMPTE 292M (1.485Gb/s)	742.5 MHz		
Minimum Loss (dB)	20	728	222
Maximum Loss (dB)	30	1, 092	333

Attentuation (distance 100m)



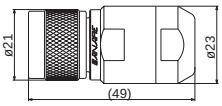
Crimp-on Type 75Ω BNC Plug

Model	Matching cable
BCP-C6HD	L-6CHD
BCP-C7HD	L-7CHD



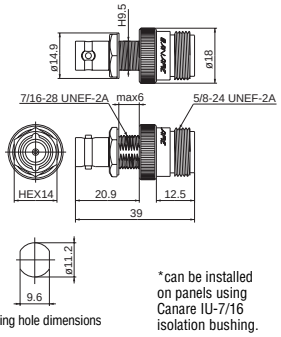
Solder type 75Ω N Plug

Model	Matching cable
NCP-H8HD	L-8CHD



75Ω BNC-N Adapter

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



Mounting hole dimensions

*can be installed on panels using Canare IU-7/16 isolation bushing.

75Ω BNC, N Plug Connectors for HDTV and N-BNC Adapter				
	BCP-C6HD BNC	BCP-C7HD BNC	NCP-H8HD N	NCJ-BCJR N(F)- BNC(F)
Matching cable				
DIE SET	L-6CHD	L-7CHD	L-8CHD	—
TCD-67HD	•	•	Solder	

APPLICATIONS

- SERIAL DIGITAL VIDEO (SDI)
- SATELLITE HEAD ENDS
- HDTV UPGRADES (DTV)
- BROADBAND FACILITIES

L-2.5CFB
- micro coax
- 25 AWG

.157

L-3CFB
- mini coax
- 22 AWG

.217

L-4CFB
- RG59 type
- 20 AWG

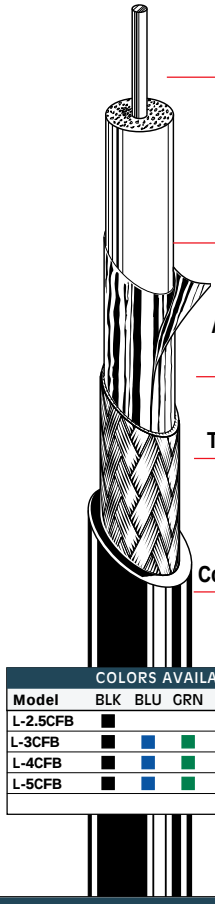
.240

L-5CFB
- RG6 type
- 18 AWG

.303

L-7CFB
- RG11 type
- 15 AWG

.402



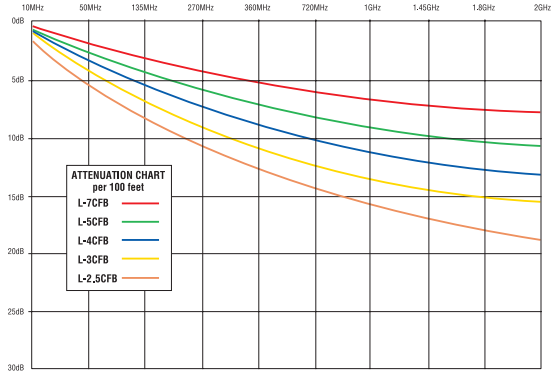
Center Conductor: Solid Annealed Copper

Low Loss Dielectric: Foam Polyethylene, strips clean

Aluminum Foil: Easy peel for quick assembly 100% Shield Coverage

Tightly Woven Braid Shield: Tinned Copper

Colors: 7 Matte Finish PVC Jacket Selections



Structural Return Loss
≥20 dB to 2GHz

L-CFB SERIES

CANARE 75Ω precision digital video cable, offers the professional Broadcaster a high performance, 100% Sweep Tested, low cost, low loss coax that meets the demands of today's facility migration trends toward Serial Digital Video and HDTV standards.

COLORS AVAILABLE						
Model	BLK	BLU	GRN	RED	YEL	PPL
L-2.5CFB	■					
L-3CFB	■	■	■	■		
L-4CFB	■	■	■	■	■	■
L-5CFB	■	■	■	■	■	

Tech Note: Serial Digital video signals are transmitted at very high data bit rates and should be handled quite differently than traditional baseband analog video lines. Typical digital frequency platform bandwidths range from 143 MHz for Composite digital video, 270 MHz for Component digital video and 360 MHz for the proposed HDTV rate. Commonly used 75Ω coaxial cables like RG59 and 8281 are generally acceptable for analog baseband video and may even be used for short runs of digital video transmission. But, in a modern facility system design, where new ***SERIAL DIGITAL*** equipment installations require long tie lines and multiple I/O's, it is important to consider the 75Ω Coaxial Cable selection along with ***"Impedance Matching" BNC Connectors and Patchbays*** to maximize the overall electrical length and achieve optimum results.

MECHANICAL SPECIFICATIONS											ELECTRICAL PERFORMANCE					
Model	Stand. Length	Weight Stand. Length lbs *(kgs)*	Nom. O. D. inch *(mm)*	PVC Jacket Thickness inch *(mm)*	Brittle Point °F *(°C)*	Conductor Material AWG	Cond. O.D. inch *(mm)*	Dielectric Insulation Type *	Insulation O.D. inch *(mm)*	Shield Materials & Coverage	Cond. D.C.R. Ω/1000ft *(Ω/100m)*	Shield D.C.R. Ω/1000ft *(Ω/100m)*	Nom. Cap. @1KHz pF/ft *(pF/mt)*	Nom. Imped. Ohms	Velocity of Prop.	Serial Digital Transmission Lengths @ 270 Mb/s **
L-2.5CFB	984ft *300m*	17 *7*	.157 *4.0*	.020 *0.5*	-22 *-30*	Bare Copper 25	.02 *.5*	Foam PE	.094 *2.4*	Al Foil 100% TAC Braid >92%	<28.35 *<9.3*	<7.3 *<2.4*	17 *55*	75Ω	79%	470 ft min. 614 ft max.
L-3CFB	984ft *300m*	29 *13*	.217 *5.5*	.035 *.9*	-22 *-30*	Bare Copper 22	.026 *.65*	Foam PE	.122 *3.1*	Al Foil 100% TAC Braid >91%	<16.8 *<5.5*	<4.3 *<1.4*	17 *55*	75Ω	79%	650 ft min. 830 ft max.
L-4CFB	984ft *300m*	33 *15*	.240 *6.1*	.035 *0.9*	-22 *-30*	Bare Copper 20	.032 *0.80*	Foam PE	.146 *3.7*	Al Foil 100% TAC Braid >93%	<11.0 *<3.6*	<3.0 *<1.0*	17 *55*	75Ω	79%	710 ft min. 920 ft max.
L-5CFB	984ft *300m*	49 *22*	.303 *7.7*	.043 *1.1*	-22 *-30*	Bare Copper 18	.041 *1.05*	Foam PE	.192 *4.9*	Al Foil 100% TAC Braid >93%	<7.0 *<2.3*	<2.1 *<0.7*	17 *55*	75Ω	79%	940 ft min. 1,210 ft max.
L-7CFB	984ft *300m*	86 *39*	.402 *10.2*	.039 *1.0*	-22 *-30*	Bare Copper 15	.059 *1.50*	Foam PE	.287 *7.3*	Al Foil 100% TAC Braid >96%	<3.1 *<1.0*	<1.4 *<0.5*	17 *55*	75Ω	79%	1,280 ft min. 1,660 ft max.

* Dielectric Strength = 1000V AC / 1min. Insulation resistance/3Mft = >1000MΩ. ** For reference only.

CABLE / CONNECTOR ASSEMBLY ITEMS						
Model	CANARE 75Ω Connectors			Cable Stripper	Crimp Tool	Die Set
	BNC	F	RCA			
L-2.5CFB	BCP-C25F	–	–	TS100E	TC-1	TCD-35CA
L-3CFB	BCP-C3F	FP-C3F	RCAP-C3F	TS100E	TC-1	TCD-35CA
L-4CFB	BCP-C4F	FP-C4F	RCAP-C4F	TS100E	TC-1	TCD-451CA
L-5CFB	BCP-C5FA	FP-C5F	RCAP-C5F	TS100E	TC-1	TCD-5CF
L-7CFB	BCP-C7FA	FP-C7FA	–	TS100E	TC-1	TCD-7CA

NOMINAL ATTENUATION VALUE										
Model		10MHz	50MHz	135MHz	270MHz	360MHz	720MHz	1GHz	1.45Ghz	1.8Ghz	2GHz
L-2.5CFB	dB/100 ft *dB/100m*	1.6 *5.8*	3.1 *10.5*	4.6 *15*	6.5 *21.2*	7.6 *24.8*	10.9 *35.7*	13.0 *44.4*	15.8 *52.0*	17.8 *58.4*	18.9 *62.0*
L-3CFB	dB/100 ft *dB/100m*	1.0 *3.2*	2.5 *8.0*	3.7 *12.3*	5.2 *17.2*	6.1 *20.0*	8.9 *29.1*	10.6 *34.7*	13.0 *42.6*	14.7 *48.3*	15.6 *51.2*
L-4CFB	dB/100 ft *dB/100m*	0.9 *2.9*	2.0 *6.6*	3.1 *10.2*	4.4 *14.5*	5.1 *16.7*	7.4 *24.3*	8.9 *29.1*	10.9 *35.8*	12.4 *40.7*	13.2 *43.3*
L-5CFB	dB/100 ft *dB/100m*	0.7 *2.2*	1.6 *5.3*	2.5 *8.1*	3.5 *11.5*	4.1 *13.4*	5.9 *19.4*	7.1 *23.3*	8.8 *29.0*	10.1 *33.1*	10.7 *35.1*
L-7CFB	dB/100 ft *dB/100m*	0.5 *1.6*	1.2 *3.8*	1.8 *5.8*	2.5 *8.1*	2.9 *9.4*	4.2 *13.9*	5.2 *16.8*	6.4 *21.0*	7.3 *24.1*	7.8 *25.7*

APPLICATIONS

- SERIAL DIGITAL VIDEO (SDI)
- HDTV UPGRADES (DTV)
- COMPONENT ANALOG VIDEO
- VIDEO WALLS
- HI-RES VIDEO PROJECTION
- CG / CAD WORKSTATIONS

V-3CFB
- mini coax type
- 22 AWG

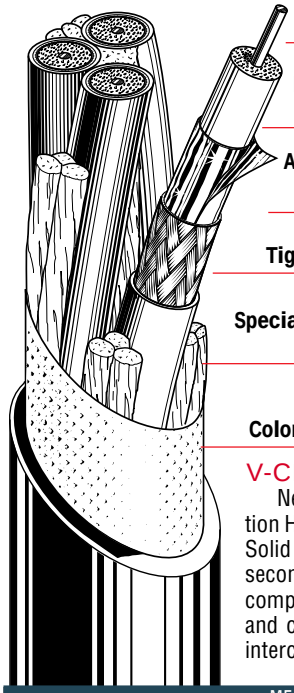
.173

V-4CFB
- RG59 type
- 20 AWG

.197

V-5CFB
- RG6 type
- 18 AWG

.256



Center Conductor: Solid Annealed Copper

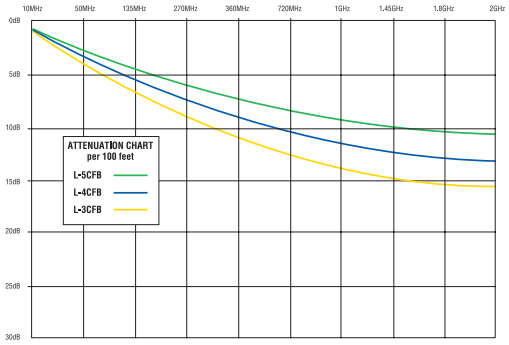
Low Loss Dielectric: Foam Polyethylene, strips clean

Aluminum Foil: Easy peel for quick assembly
100% Shield Coverage

Tightly Woven Braid Shield: Tinned Copper

Special Jacket Fillers: Maintains tight bundle, reduces Shift & Twist

Color Coded Channel ID: Red, Green, Blue, White, Yellow

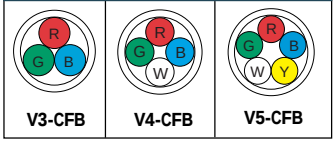


Structural Return Loss
≥20 dB to 2GHz

V-CFB SERIES

Newly developed coax specifically designed for **DIGITAL** and next generation HDTV facilities. Each coaxial channel includes a **Foam Core PE** dielectric, Solid Bare Copper Center Conductor and double Foil/Braid Shield. < 2.2 nano second channel-to-channel differential delay time, reduces phase errors in component video setup alignments. Bundled cable helps keep work site neat and clean. Can be used with confidence for Super Hi-Res CG workstation interconnects and Digital Video installations.

CABLE CROSS SECTION



V3-CFB | V4-CFB | V5-CFB

MECHANICAL SPECIFICATIONS													ELECTRICAL PERFORMANCE					
Model	Stand. Length	Number of Channels (colors)	Wgt. Stand. Lng. lbs (kgs)	Nom. O.D. inch (mm)	PVC Jacket Thick. inch (mm)	Brittle Point °F (°C)	Indv. Chan. O.D. (in.) (mm.)	Insul. Type *	Insul. O.D. (in.) (mm.)	Cond.- AWG (Qty./mil.) Cross Sec. Area (mil²)	Cond. O.D. (in.) (mm.)	Shield Coverage	Cond. D.C.R. (Ω/1000ft) (Ω/100m)	Shield D.C.R. (Ω/1000ft) (Ω/100m)	Nom. Cap. (pF/ft) (pF/m)	Nominal Impedance	Chan. Diff. Delay 100ft (nS)	Velocity of Prop.
V3-3CFB	984ft 300m	3 RED, GRN BLUE	93 42	.453 11.5	.035 .90	-22 -30	.173 4.4	FPE	.122 3.1	AC–#22 1/25.6 512	.026 .65	TAC >91% AL Foil 100%	<17.1 <5.6	<4.3 <1.4	17 55	75Ω	<2.2	79%
V4-3CFB		4 RED, GRN BLUE, WHT	126 57	.512 13.0	.043 1.10													
V5-3CFB		5 RED, GRN BLUE, WHT YEL	153 69	.559 14.2	.043 1.10													
V3-4CFB	984ft 300m	3 RED, GRN BLUE	120 54	.508 12.9	.039 1.0	-22 -30	.197 5.0	FPE	.146 3.7	AC–#20 1/31.5 775	.031 .80	TAC >93% AL Foil 100%	<11.3 <3.7	<3.0 <1.0	17 55	75Ω	<2.2	79%
V4-4CFB		4 RED, GRN BLUE, WHT	153 69	.567 14.4	.043 1.1													
V5-4CFB		5 RED, GRN BLUE, WHT YEL	192 87	.634 16.1	.047 1.2													
V3-5CFB	984ft 300m	3 RED, GRN BLUE	192 87	.673 17.1	.051 1.3	-22 -30	.256 6.5	FPE	.192 4.9	AC-#18 1/41.3 1341	.041 1.05	TAC >93% AL Foil 100%	<7.1 <2.4	<2.1 <0.7	17 55	75Ω	<2.2	79%
V4-5CFB		4 RED, GRN BLUE, WHT	240 109	.740 18.8	.051 1.3													
V5-5CFB		5 RED, GRN BLUE, WHT YEL	306 139	.831 21.1	.059 1.5													

* Dielectric Strength = 500V AC / 1min. Insulation resistance/3Mft = >1000MΩ.

CABLE / CONNECTOR ASSEMBLY ITEMS						
Model	CANARE 75Ω Connectors			Cable Stripper	Crimp Tool	Die Set
	BNC	F	RCA			
V-3CFB	BCP-C3F	FP-C3F	RCAP-C3F	TS100E	TC-1	TCD-35CA
V-4CFB	BCP-C4F	FP-C4F	RCAP-C4F	TS100E	TC-1	TCD-451CA
V-5CFB	BCP-C5FA	FP-C5F	RCAP-C5F	TS100E	TC-1	TCD-5CF

NOMINAL ATTENUATION VALUE											
		10MHz	50MHz	135MHz	270MHz	360MHz	720MHz	1GHz	1.45Ghz	1.8Ghz	2GHz
V-3CFB	dB/100 ft dB/100m	1.0 3.2	2.5 8.0	3.7 12.3	5.2 17.2	6.1 20.0	8.9 29.1	10.6 34.7	13.0 42.6	14.7 48.3	15.6 51.2
V-4CFB	dB/100 ft dB/100m	0.9 2.9	2.0 6.6	3.1 10.2	4.4 14.5	5.1 16.7	7.4 24.3	8.9 29.1	10.9 35.8	12.4 40.7	13.2 43.3
V-5CFB	dB/100 ft dB/100m	0.7 2.2	1.6 5.3	2.5 8.1	3.5 11.5	4.1 13.4	5.9 19.4	7.1 23.3	8.8 29.0	10.1 33.1	10.7 35.1

tel: 818.365.2446
fax: 818.365.0479

APPLICATIONS

- BROADCAST TRANSMISSION
- ANALOG & DIGITAL
- ENG/EFP
- INTER-RACK WIRING
- VIDEO PATCH CORDS

L-1.5C2VS
- Micro coax
- 31 AWG

.114

L-3C2VS
- mini coax
- 25 AWG

.217

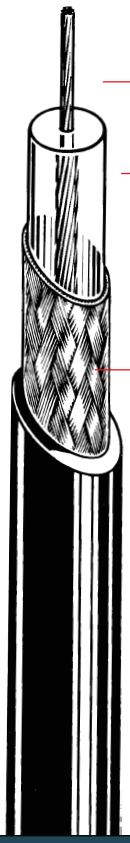
LV-61S
- RG59 type
- 24 AWG

.240

LV-77S
- 8281F type
- 22 AWG

.303

Structural Return Loss
≥20 dB to 2GHz



Flexible Center Conductor: Stranded Bare Copper

Dielectric: Polyethylene, strips clean

Double Braid Shields: 95% over 92% Bare Copper

Tightly Woven Braid Shield: >94% Bare Copper

LV-77S

An amazingly *flexible version of* ***8281*** double shielded precision 75Ω video coax. Typically used for longer cable runs between equipment, Canare LV-77S offers good return loss characteristics and excellent signal isolation. Available in 10 different non-glare PVC jacket colors.

LV-61S

Canare's **No.1 Selling Coax**. A lightweight, very flexible **RG59B/U** equivalent that is perfect for all video facility equipment interfacing, ENG/OB work and video patch cord assemblies. Our smooth non-glare finish PVC jackets are available in 10 distinctive colors (including **Chroma-Key Blue!**) and will stay flexible even in sub-zero weather!

L-3C2VS

Our thinnest 75Ω coax is both lightweight and super flexible, an ideal choice for all short run inter-rack control room wiring. This is the same cable type being used inside our most popular RGB component video cable; **V-3C** series.

COLORS AVAILABLE

Model	BLK	BLU	BRN	GRY	GRN	ORN	PPL	RED	WHT	YEL
L-1.5C2VS	■									
L-3C2VS	■	■			■			■		
LV-61S	■	■	■	■	■	■	■	■	□	■
LV-77S	■	■	■	■	■	■	■	■	□	■

MECHANICAL SPECIFICATIONS / **ELECTRICAL PERFORMANCE**

Model	Standard Length	Weight Stand. Length lbs. (kgs)	Nom. O. D. inch (mm)	PVC Jacket Thickness inch (mm)	Brittle Point °F (°C)	Cond - AWG (Qty./mil.) Cross Sec. Area	Cond. O.D. inch (mm)	Insul. Type *	Insul. O.D. inch (mm)	Shield Material Coverage	Cond. D.C.R. Ω/1000ft (Ω/100m)	Shield D.C.R. Ω/1000ft (Ω/100m)	Nom. Cap. (1KHz) pF/ft (pF/mt)	Nom. Imp.	Nom. Attn. (10MHz) dB/1000ft (dB/100m)	Velocity of Prop.
L-1.5C2VS	656ft 200m	5.8 2.6	.114 2.9	0.02 0.5	-22 -30	AC-#31 7/0.09	.011 0.27	PE	.061 1.55	AC >94%	<127.7 <41.9	<9.94 <3.26	21 67	75Ω	29.3 9.6	66%
L-3C2VS	656ft 200m	20 9.1	.217 5.5	.039 1.0	-22 -30	AC-#25 7/7.09	.021 0.54	PE	.122 3.10	AC >94%	<32.1 <10.5	<5.8 <1.9	21 67	75Ω	15 4.9	66%
LV-61S	500ft 153m	19 8.6	.240 6.1	.039 1.0	-22 -30	AC-#24 7/7.88	.024 0.60	PE	.142 3.60	AC >95%	<25.9 <8.5	<4.0 <1.3	21 67	75Ω	13 4.2	66%
LV-77S	500ft 153m	32 14.5	.303 7.7	.035 0.9	-22 -30	AC-#22 7/10.24	.031 0.78	PE	.189 4.80	AC >92% (inner) >95% (outer)	<15.3 <5.0	<1.8 <0.6	21 67	75Ω	10 3.4	66%

* Dielectric Strength = 1000V AC / 1min. Insulation resistance/3Mft = >1000MΩ.

CABLE / CONNECTOR ASSEMBLY ITEMS

Model	CANARE 75Ω Connectors			Cable Stripper	Crimp Tool	Die Set
	BNC	F	RCA			
L-1.5C2VS	BCP-C1	–	–	–	TC-1	TCD-1DB
L-3C2VS	BCP-C3B	FP-C3	RCAP-C3A	TS100E	TC-1	TCD-35CA
LV-61S	BCP-C4B	FP-C4	RCAP-C4A	TS100E	TC-1	TCD-451CA
LV-77S	BCP-C77A	–	RCAP-C77	TS100E	TC-1	TCD-5CF

NOMINAL ATTENUATION VALUE

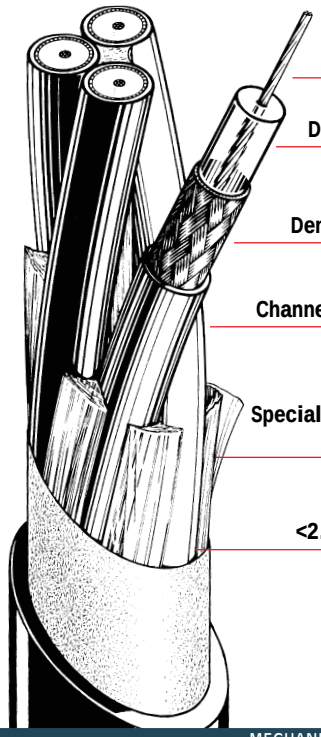
		1 MHz	10 MHz	50 MHz	100 MHz	150 MHz	200 MHz	400 MHz	700 MHz	900 MHz	1 GHz
L-1.5C2VS	dB/100 ft	0.9	2.9	6.5	9.3	11.3	13.1	18.5	24.5	27.8	29.3
	dB/100m	3.0	9.6	21.5	30.4	37.2	42.9	60.7	80.3	91.1	96.0
L-3C2VS	dB/100 ft	0.5	1.5	3.2	4.7	5.8	6.7	9.4	12.5	14.2	14.9
	dB/100m	1.5	4.9	10.4	15.5	19.0	21.9	31.0	41.0	46.5	49.0
LV-61S	dB/100 ft	0.4	1.3	2.7	4.1	5.0	5.7	8.1	10.7	12.1	12.8
	dB/100m	1.3	4.2	9.0	13.3	16.3	18.8	26.6	35.1	39.8	42.0
LV-77S	dB/100 ft	0.3	1.0	2.4	3.3	4.0	4.6	6.6	8.6	9.8	10.4
	dB/100m	1.1	3.4	7.8	10.8	13.2	15.2	21.5	28.4	32.3	34.0

APPLICATIONS

- COMPONENT ANALOG VIDEO
- VIDEO WALLS
- VIDEO PROJECTORS
- STUDIO TIE LINES
- CG WORKSTATIONS

V-1.5C	V-3C	V-5C
• Micro coax • 31 AWG	• RG59 type • 25 AWG	• 8281F type • 22 AWG
.102	.173	.237

Structural Return Loss
≥20 dB to 2GHz



Flexible Center Conductor: Stranded Bare Copper

Dielectric: Polyethylene, strips clean

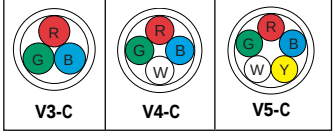
Dense Braid Shield: Bare Copper

Channel ID Colors: Red, Green, Blue, White, Yellow

Special Jacket Fillers: Maintains tight bundle, reduces Shift & Twist

<2.2 nanosecond differential delay

CABLE CROSS SECTION



V-1.5C SERIES

New Canare Ultra-Mini V-Series! Offers excellent flexibility and reduced overall jacket OD. Specifically designed for **very short run RGB** fan-out cables, where robust pulling strength and high bandwidth is not a key factor. Terminate with Canare's newly developed 75Ω BNC Plug **BCP-C1** *(Not Shown in catalog. Features a Solder Pin and Crimp Sleeve).*

V-3C SERIES

Our most popular 75Ω component video series. Roughly equivalent to RG59 performance. A good choice for limited length cable runs or where conduit size may be restricted. Excellent flexibility for untangled pay-out and easy wrap-ups.

V-5C SERIES

Offers 8281 type performance for extra long cable runs over wide bandwidth RGB component analog systems. Also highly recommended for field operations where cable flex strength and maximum durability is a must.

MECHANICAL SPECIFICATIONS													ELECTRICAL PERFORMANCE						
Model	Std. Lng.	Number of Channels / colors	Wgt. Stand. Lng. lbs/ *(kgs)*	Nom. O.D. inch *(mm)*	PVC Jacket Thick. inch *(mm)*	Brittle Point °F *(°C)*	Indv. Chan. O.D. inch *(mm)*	Insul. Type *	Insul. O.D. inch *(mm)*	Cond.- AWG (Qty./mil.) Cross Sec. Area	Cond. O.D. inch *(mm)*	Shield Coverage	Cond. D.C.R. Ω/1000ft *(Ω/100m)*	Shield D.C.R. Ω/1000ft *(Ω/100m)*	Nom. Cap. pF/ft *(pF/m)*	Nom. Imp.	Nom. Attn. 10MHz dB/1000ft *(dB/100m)*	Chan. Diff. Delay 100ft (nS)	Velocity of Prop.
V3-1.5C	328ft *100m*	**3** RED, GRN BLUE	16/*7*	.291 *7.4*	.032 *0.8*	-22 *-30*	.102 *2.6*	PE	.061 *1.55*	AC–#31 7/3.5	.011 *.27*	>94%	<129.2 *<42.4*	<10.1 *<3.3*	21 *69*	75Ω	29.3 *9.6*	<2.2	66%
V4-1.5C		**4** RED, GRN BLUE, WHT	21/*10*	.331 *8.4*	.039 *1.0*														
V5-1.5C		**5** RED, GRN BLUE, WHT YEL	24/*11*	.362 *9.2*	.039 *1.0*														
V3-3C	328ft *100m*	**3** RED, GRN BLUE	33/*15* 66/*30*	.453 *11.5*	.036 *0.9*	-22 *-30*	.173 *4.4*	PE	.122 *3.1*	AC–#25 7/7.09	.021 *0.54*	>97%	<32.1 *<10.5*	<3.7 *<1.1*	21 *67*	75Ω	15.0 *4.9*	<2.2	66%
V4-3C		**4** RED, GRN BLUE, WHT	44/*20* 88/*40*	.512 *13.0*	.043 *1.1*														
V5-3C	656ft *200M*	**5** RED, GRN BLUE, WHT YEL	53/*24* 106/*48*	.559 *14.2*	.043 *1.1*														
V3-5C	328ft *100m*	**3** RED, GRN BLUE	51/*23* 102/*46*	.611 *15.5*	.047 *1.2*	-22 *-30*	.237 *6.0*	PE	.189 *4.8*	AC–#22 7/10.24	.031 *0.78*	>94%	<15.5 *<5.1*	<3.7 *<1.2*	21 *67*	75Ω	10.0 *3.4*	<2.2	66%
V4-5C		**4** RED, GRN BLUE, WHT	66/*30* 132/*60*	.674 *17.1*	.047 *1.2*														
V5-5C	656ft *200m*	**5** RED, GRN BLUE, WHT YEL	84/*38* 168/*76*	.756 *19.2*	.055 *1.4*														

* Dielectric Strength = 500V AC / 1min. Insulation resistance/3Mft = >1000MΩ.

CABLE / CONNECTOR ASSEMBLY ITEMS						
Model	CANARE 75Ω Connectors			Cable Stripper	Crimp Tool	Die Set
	BNC	F	RCA			
V-1.5C	BCP-C1	–	–	–	TC-1	TCD-1DB
V-3C	BCP-C3B	FP-C3	RCAP-C3A	TS100E	TC-1	TCD-35CA
V-5C	BCP-C5B	FP-C5	RCAP-C5A	TS100E	TC-1	TCD-35CA

NOMINAL ATTENUATION VALUE											
		1 MHz	10 MHz	50 MHz	100 MHz	150 MHz	200 MHz	400 MHz	700 MHz	900 MHz	1 GHz
V-1.5C	dB/100 ft *dB/100m*	0.9 *3.0*	2.9 *9.6*	6.5 *21.5*	9.3 *30.4*	11.3 *37.2*	13.1 *42.9*	18.5 *60.7*	24.5 *80.3*	27.8 *91.1*	29.3 *96.0*
V-3C	dB/100 ft *dB/100m*	0.5 *1.5*	1.5 *4.9*	3.2 *10.4*	4.7 *15.5*	5.8 *19.0*	6.7 *21.9*	9.4 *31.0*	12.5 *41.0*	14.2 *46.5*	14.9 *49.0*
V-5C	dB/100 ft *dB/100m*	0.3 *1.1*	1.0 *3.4*	2.4 *7.8*	3.3 *10.8*	4.0 *13.2*	4.6 *15.2*	6.6 *21.5*	8.6 *28.4*	9.8 *32.3*	10.4 *34.0*

THE STAR QUAD STORY

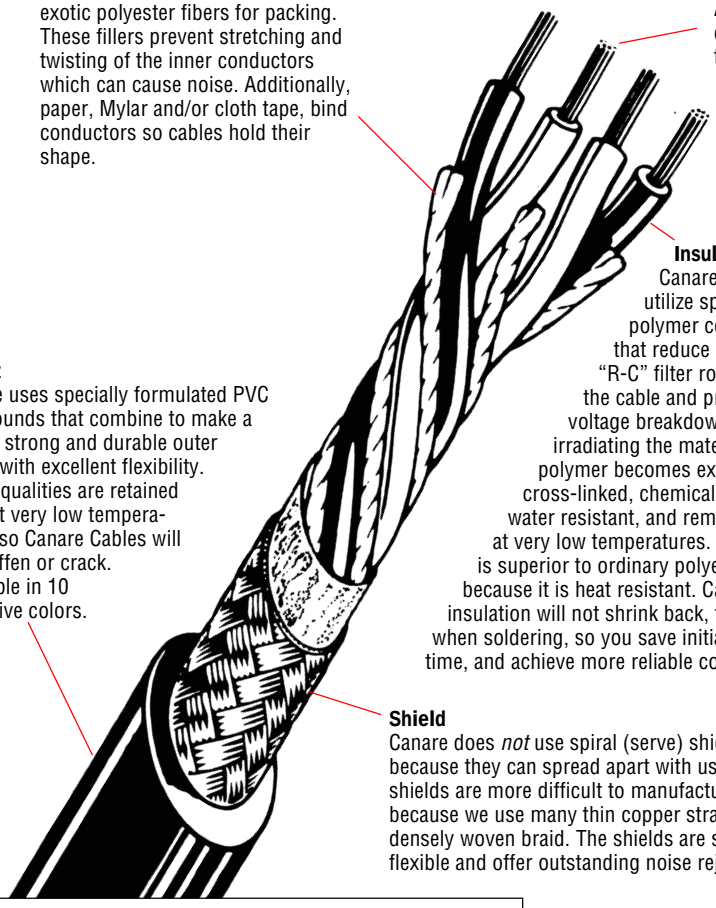
Canare Star Quad obtains its name from the 4-conductor style construction that minimizes the "loop area" between twists of the conductors. This "double balanced" pairing, reduces susceptibility to electromagnetically induced noise. The improvement in noise rejection is so noticeable that even SCR dimmer 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 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.

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.

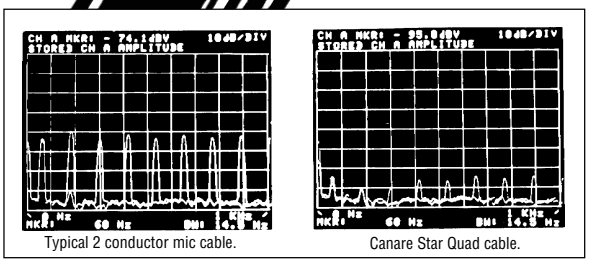
Conductors
All Canare microphone cables utilize high-conductivity, annealed copper wires, stranded to form flexible conductors and shields.



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.

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.

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.

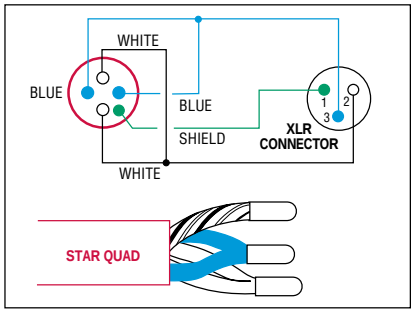


Typical 2 conductor mic cable. Canare Star Quad cable.

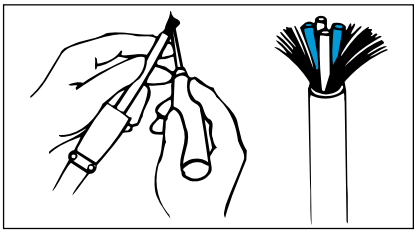
TECHNICAL NOTE *The signal generated by a microphone during quiet periods can be very low in level, -70dB to -120dB (0.3 millivolts to 1 microvolt). The cable that must carry this signal to the mixer is very sensitive to Electromagnetic Interference (EMI), Radio Frequency Interference (RFI) and electrostatic coupling of hum and noise. Mechanical vibration, bending, flexing (handling noise) and ambient temperature fluctuations can cause detrimental capacitance changes within the microphone cable. Canare Cables are carefully designed and manufactured to very close tolerances using the highest quality materials available so that low level microphone circuits will not be affected by these outside disturbances. The difference is clearly measurable and audible.*

For a more detailed illustration, please request our Technical White Paper: ***"Evaluating Microphone Cable Performance and Specifications."***

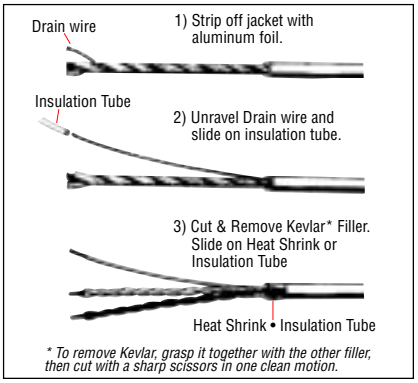
In order to maximize noise rejection, Star Quad must be properly wired to the XLR-3 connector (or terminal block).



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.



Terminating L-4E6S and L-4E5C (Braid Shield)



Terminating L-4E5AT and L-4E6AT (Foil Shield)

APPLICATIONS

- MICROPHONES
- AUDIO RACK WIRING
- PA SYSTEMS
- AUDIO PATCH CORDS

FEATURES

Copper Braid or Aluminum Foil Shields

Cross-Linked PE Insulation

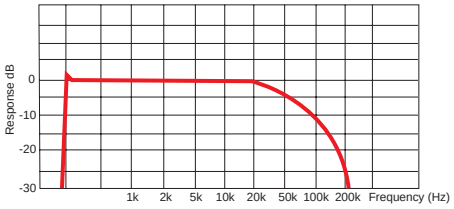
Reduced Handling Noise

Rejects EMI and RFI

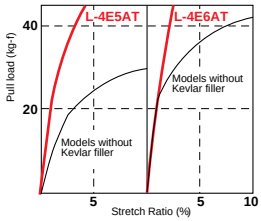
10 Matte Color Jacket Selections

Flexible in Extreme Cold Weather

For Portable Applications
Braided Copper Shield



Frequency Characteristics for L-4E6S (100m)



Cable Pull Strength

L-4E6S

The premier Star Quad cable for all hand held microphone applications. Flexible, satin smooth to the touch and extra-strong, this standard diameter, 21 AWG cable fits perfectly in all XLR-type audio connectors. Forty separate strands in each conductor eliminate breakage due to flexing. Available in 10 beautiful matte finish color jackets.

L-4E5C

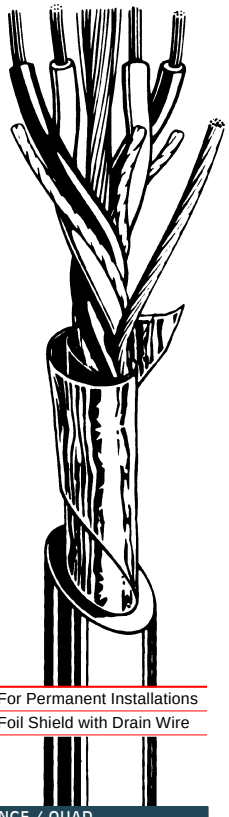
A narrow profile version of L-4E6S. Specifically designed to save space and reduce weight during remote field expeditions or confining installations.

L-4E6AT

A 20 AWG Star Quad cable specifically designed for point to point wiring in fixed installations. **Aluminum Foil** Shielding provides 100% coverage. Slick, easy to pull PVC Jacket. Cable internally reinforced with **Dupont Kevlar 29** filler, stronger than steel, can resist stretching or kinking of wires when pulled through conduit bends. Foil shield & drain wire strips easily for quick assembly work (1/3 the assembly time of braided shields). Irradiated PE conductor insulation resists solder iron meltdown.

L-4E5AT

A 22 AWG narrow profile Star Quad audio cable with the same shield, drain wire and **Kevlar** construction style as L-4E6AT.



For Permanent Installations
Foil Shield with Drain Wire

COLORS AVAILABLE

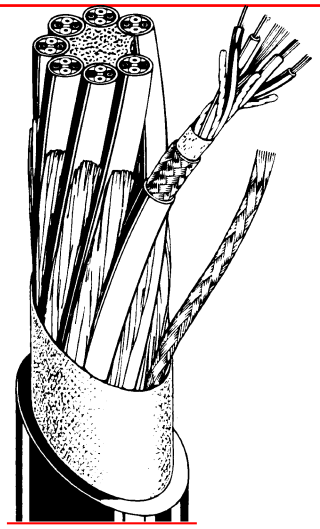
Model	BLK	BLU	BRN	GRY	GRN	ORN	PPL	RED	WHT	YEL
L-4E6S	■	■	■	■	■	■	■	■	□	■
L-4E5C	■	■		●	●	●		●	○	●
L-4E6AT	●			■						
L-4E5AT	●			■						

□ = Standard Stock ○ = Special Order

MECHANICAL SPECIFICATIONS / **ELECTRICAL PERFORMANCE / QUAD**

Model	Standard Length	Wgt. Stand. Length lbs (kgs)	Nom. O.D. inch (mm)	Jacket Nom. Thick. inch (mm)	Brittle Point °F (°C)	No. of Cond.	Insul. Type * Thick. mil	Cond - AWG (Qty./mil) Cross Sec. Area mil.² **Quad AWG	Pitch Twist Quad inch (mm)	Shield Coverage	Cond. D.C.R. Ω/1000ft (Ω/100m)	Shield D.C.R. Ω/1000ft (Ω/100m)	Nom. Cap. *** pF/ft (pF/m)	Nom. Cap. † pF/ft (pF/m)	Nom. Imp. (Ω)	Nom. Atten. V/1000ft (V/100m)	Group Delay Time nS/ft (nS/m)
L-4E6S	656 ft *200m* 1000 ft *305m*	24 *11* 35 *16*	.236 *6.00*	PVC .044 *1.12*	-56 *-49*	4 2 Blue 2 Wht	IPE 15.7	AC - #24 40/3.15 310 **#21**	.79 *20*	>95% TAC Braid	<29.9 <*9.8*	<9.1 <*3.0*	46 *150*	57 *185*	44	0.9 *0.3*	1.80 *5.9*
L-4E5C	656ft *200m*	18 *8*	.189 *4.80*	PVC .032 *0.80*	-56 *-49*	4 2 Blue 2 Wht	IPE 11.8	AC - #26 30/3.15 232.5 **#23**	.71 *18*	>96% TAC Braid	<39.7 <*13.0*	<7.6 <*2.5*	50 *162*	61 *200*	40	0.9 *0.3*	1.71 *5.6*
L-4E5AT	656ft *200m*	16 *7*	.197 *5.00*	PVC .039 *1.03*	-22 *-30*	4 2 Blue 2 Wht	IPE 12.6	AC - #25 16/4.73 279 **#22**	.83 *21*	100% Alum. Tape ‡‡	<32.7 <*10.7*	—	50 *164*	68 *222*	37	0.9 *0.3*	1.71 *5.6*
L-4E6AT	656ft *200m*	23 *10*	.244 *6.20*	PVC .047 *1.20*	-22 *-30*	4 2 Blue 2 Wht	IPE 15.7	AC - #23 12/7.09 481 **#20**	.99 *25*	100% Alum. Tape ‡	<19.4 <*6.4*	—	46 *150*	64 *210*	37	0.6 *0.2*	1.68 *5.5*

*Dielectric Strength = 500V AC / 1min. Insulation resistance/3Mft = >1000MΩ. ** Effective AWG of combined twin conductors.
*** Capacitance between twin Blue and twin White Conductors. † Capacitance between conductors to shield. ‡ Drain Wire #23 AWG. ‡‡ Drain Wire #25 AWG.



For Portable Applications
Braided Copper Shields

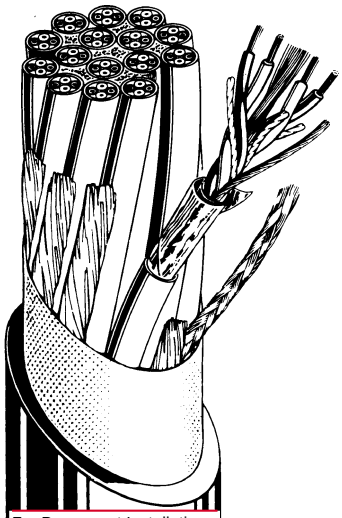
L-4E3-P

A Multichannel Star Quad Snake cable with braided shields. Each channel is completely isolated and consists of 4 conductors surrounded by an overall braided shield encased in a color coded striped PVC jacket. Fine conductor stranding for flexibility, facilitates roll up and easy payout. The four conductor design provides superior EMI and RFI noise rejection in problem areas on stage. Excellent crosstalk characteristics allow vastly different signals (-120dB mic, +4dB line, +10dB time code levels) to be used in adjacent channels.

*Note: All Canare **DT12** Snake assemblies are built using our road-worthy and flexible L-4E3-12P cable.*

L-4E4-AT

A 100% shielded Canare Star Quad Multichannel Snake cable, designed for all fixed audio installations. Each four conductor channel is completely isolated and contains Kevlar 29 for tensile pulling strength. Individual foil shield, drain wire and color banded PVC channel jacket strips easily for quick on-site termination.



For Permanent Installations
Foil Shield with Drain Wire

MECHANICAL SPECIFICATIONS

Model	Standard Length	No. of Quad Channels	Weight 328ft *100m* lbs/ *(kgs)*	Nom. O.D. inch	PVC Jacket Nom. Thick. inch/ *(mm)*	Brittle Point °F *(°C)*	Number of Cond. (4 per Channel)	Channel O.D. Inch *(mm)*	Channel Jacket Nom. Thick. mil	Insul. Type * Thick mil	Cond - AWG (Qty./mil) Cross Sec. Area (mil.²) ** Quad AWG	Pitch Twist Quad Inch *(mm)*	Shield Coverage Channel Drain Wire (Bundle Drain Wire)
L-4E3-2P		2	18/*8*	.350	.032/*0.8*		8				AC-#28		
L-4E3-4P	*328ft* *100m*	4	31/*14*	.429	.043/*1.1*	-22 *-30*	16				7/4.72		AC Braid >93%
L-4E3-8P		8	57/*26*	.602	.051/*1.3*		32	.134	PVC	IPE	124 #25	<0.63	–
L-4E3-12P	656ft *200m*	12	79/*36*	.685	.051/*1.3*		48	*3.4*	11.8	10.6		*<16*	(20AWG)
L-4E3-16P		16	101/*46*	.744	.047/*1.2*	-22 *-30*	64						
L-4E3-24P		24	154/*70*	.945	.059/*1.5*		96						
L-4E4-2AT		2	18/*8*	.413	.051/*1.3*		8				AC-#25		
L-4E4-4AT	328ft *100m*	4	40/*18*	.484	.055/*1.4*		16				16/4.73		AL Foil 100%
L-4E4-8AT		8	73/*33*	.665	.059/*1.5*	-22 *-30*	32	.146	PVC	IPE	279 #22	<0.83	
L-4E4-12AT	656ft *200m*	12	95/*43*	.748	.059/*1.5*		48	*3.7*	11.8	12.6		*<21*	23AWG (16AWG)
L-4E4-16AT		16	117/*53*	.827	.059/*1.5*		64						
L-4E4-24AT		24	152/*69*	1.031	.067/*1.7*		96						

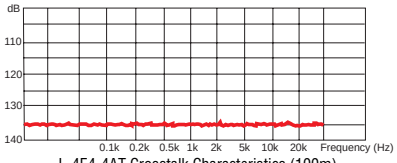
* Dielectric Strength = 500V AC / 1min. Insulation resistance/3Mft = >1000MΩ.

** Effective AWG of combined twin conductors.

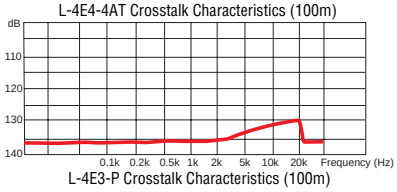
ELECTRICAL PERFORMANCE / QUAD

Model	Cond. D.C.R. (Ω/1000ft) *(Ω/100m)*	Shield D.C.R. (Ω/1000ft) *(Ω/100m)*	Nom. Cap. * (pF/ft) *(pF/m)*	Nom. Cap. ** (pF/ft) *(pF/m)*	Nom. Imp. (Ω)	Nom. Atten. (V/1000ft) *(V/100m)*	Group Delay Time (nS/ft) *(nS/m)*	X-Talk Input 3.31V (mV/1000ft) *(mV/100m)*
L-4E3 SERIES	<75.8 *<24.9*	<10.3 *<3.4*	44 *145*	52 *170*	43	1.8 *0.6*	1.8 *5.8*	<3 *<1*
L-4E4 SERIES	<32.9 *<10.8*	—	50 *164*	68 *222*	—	—	—	—

* Capacitance between twin Blue and twin White Conductors.
** Capacitance between conductors to shield.



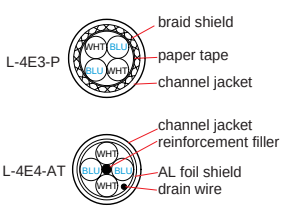
L-4E4-4AT Crosstalk Characteristics (100m)

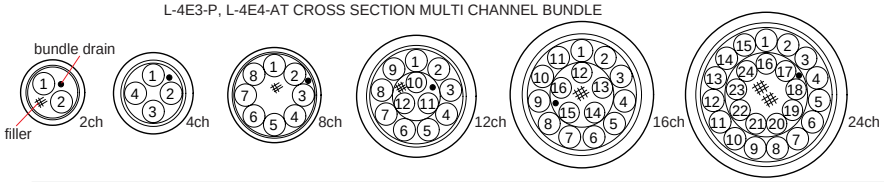


L-4E3-P Crosstalk Characteristics (100m)

L-4E3-P, L-4E4-AT CROSS SECTION MULTI CHANNEL BUNDLE

CROSS SECTION
INDIVIDUAL STAR QUAD CHANNEL





CHANNEL COLOR CODE • SPIRAL MARKERS ON GRAY JACKET

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
RED	BLU	YEL	GRN	BRN	BARE	BLK BLU	BLK YEL	BLK GRN	BLK BRN	BLK	ORN BLU	ORN YEL	ORN GRN	ORN BRN	ORN	PNK BLU	PNK YEL	PNK GRN	PNK BRN	PNK	WHT BLU	WHT YEL	WHT GRN

tel: 818.365.2446
fax: 818.365.0479

L-2T2S

Our standard diameter 2-conductor microphone cable for general purpose audio applications. The high density braided copper shield and two inner conductors (composed of 60 thin strands of copper wire), allow for maximum flexibility and reduced handling noise. A special compound PVC outer jacket resists cracking and tears even in sub-zero environments.

L-2E5

Miniature version of L-2T2S when small size and light weight is a consideration. Useful for patch cables, hidden lavaliere microphones or any balanced audio installation.

L-2B2AT

Canare's thinnest profile audio hookup wire. Amazingly flexible, with 100% foil shield, drain wire and PVC jacket that strips easily for rapid assembly. Suitable for large cable harness bundles, mixing consoles, tape machines and inter-rack wiring.

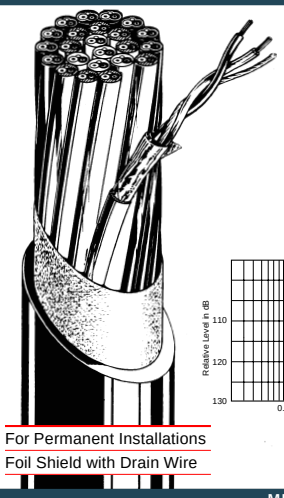
COLORS AVAILABLE						
Model	BLK	BLU	GRY	ORN	RED	YEL
L-2T2S	■	●	●	●	●	●
L-2E5	■	●			●	
L-2B2AT	●		■			

☐ = Standard Stock ◯ = Special Order

MECHANICAL SPECIFICATIONS											ELECTRICAL PERFORMANCE						
Model	Standard Length	Wgt. Stand. Lngth. lbs (kgs)	Nom. O.D. inch (mm)	PVC Jacket Nom. Thick. inch (mm)	Brittle Point °F (°C)	No. of Cond.	Insul. Type * Thick mil	Cond - AWG (Qty./mil) Cross Sec. Area (mil.²)	Pitch Twist Quad inch (mm)	Shield Coverage	Cond. D.C.R. Ω/1000ft (Ω/100m)	Shield D.C.R. Ω/1000ft (Ω/100m)	Nom. Cap. ** pF/ft (pF/m)	Nom Cap *** pF/ft (pF/m)	Nom. Imp. Ω	Nom. Atten. V/1000ft (V/100m)	Group Delay Time mV/1000ft (mV/100m)
L-2T2S	656ft 200m	20 9	.236 6.00	.039 1.0	-56 -49	2	IPE 19.7	AC-#23 60/3.15 465	<0.79 <20	>94% TAC Braid	<19.8 <6.5	<9.4 <3.1	22 70	33 106	88	0.9 0.3	1.83 6.00
L-2E5	656ft 200m	20.2 9	.181 4.6	.035 0.9	-56 -49	2	IPE	AC-#26 30/3.15 322.5	<0.79	>96.7%	<38.7 <12.7	<6.7 <2.2	—	—	—	—	—
L-2B2AT	656ft 200m	6 3	.126 3.2	.012 0.3	-13 -25	2	IPE 12.6	AC-#25 16/4.73 279	<0.99 <25	100% Alum. Tape ****	<31.9 <10.5	— —	23 73	37 120	—	—	—
	1640ft 500m	15 7															

* Dielectric Strength = 500V AC / 1min. Insulation resistance/3Mft = >1000MΩ. ** Capacitance between Conductors.
*** Capacitance between conductors to shield. **** Drain Wire #22 AWG.

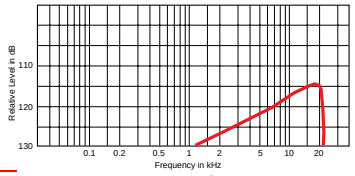
MULTICHANNEL AUDIO SNAKE CABLE



For Permanent Installations
Foil Shield with Drain Wire

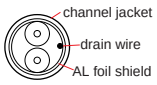
MR202-AT

A practical, 100% foil shielded multichannel audio snake cable for general purpose studio applications. Each individually isolated channel consists of 2 twisted conductors under an easy-to-strip PVC jacket extruded over a foil shield and drain wire. The color striped PVC channel jacket alleviates the need to use costly shrink tubing. Surprisingly flexible, this multichannel cable is perfect for control room layout and interfacing between equipment racks, audio patchbays, mixers and tape decks.

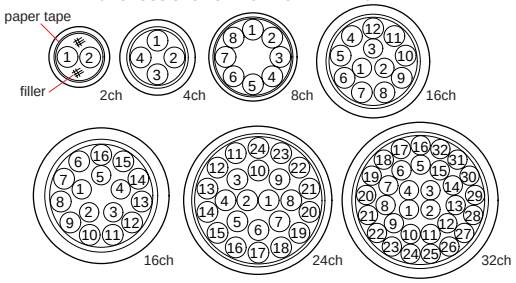


MR202-24AT Crosstalk

CROSS SECTION
INDIVIDUAL CHANNEL



MR202 CROSS SECTION MULTI CHANNEL BUNDLE



MECHANICAL SPECIFICATIONS													ELECTRICAL PERFORMANCE		
Model	Standard Length	No. of Chan. (Pairs)	Wgt. Stand. Length lbs/ (kgs)	Nom. O.D. inch	PVC Jacket Thickness inch/ (mm)	No. of Cond. (2 Per Chan)	Chan. O.D. Inch (mm)	Chan. Jack. Thick mil	Brittle. Point °F (°C)	Insulation Type * Thick mil	Cond - AWG (Qty./mil) Cross Sec. Area (mil.²)	Pitch of Pairs inch (mm.)	Shield Coverage	Cond. D.C.R. Ω/1000ft (Ω/100m)	Nom. Cap. ** pF/ft (pF/m)	Nom. Cap. *** pF/ft (pF/m)
MR202-2AT		2	12/5	.264	.032/0.8	4										
MR202-4AT		4	17/8	.299	.032/0.8	8							100%			
MR202-8AT	328ft	8	35/16	.433	.039/1.0	16	.106	11.8	-4	IPE	AC - #25	<.99	Alum.	<32.5	23.2	43.3
MR202-12AT	100m	12	46/21	.500	.047/1.2	24	2.7		-20		7/7.09	<25	Tape	<10.7	76	142
MR202-16AT		16	57/26	.551	.047/1.2	32				9.1	279		†			
MR202-24AT		24	86/39	.685	.051/1.3	48										
MR202-32AT		32	88/40	.752	.059/1.5	64										

* Dielectric Strength = 500V AC / 1min. Insulation resistance/3Mft = >1000MΩ. ** Capacitance between Conductors. *** Capacitance between conductors to shield.
† Drain Wire #25 AWG.

MR202-AT 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
Insulator 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 Marker	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										ORG		

NOTE: Identify the conductor by Spiral Marker and color of Inner Jacket. *Insulator in the unit: one is same color as Spiral Marker and the other is clear.

APPLICATIONS

- ELECTRONIC INSTRUMENTS
- HI-FI INTERCONNECTS
- TEST PROBES
- AUDIO PATCH CORDS
- AMP TO CABINET LEADS

FEATURES

Stays Flexible even in Sub-Zero Weather

Oxygen Free Copper Conductor & Shield

Reduced Microphonic Handling Noise

Low Capacitance & Resistance

Conductor
Extra thick 18 AWG Center Conductor composed of **127 strands of Oxygen Free Copper**, resists nicking and corrosion at solder joint. This robust Conductor has been specially designed to cut power loss on Hi-Z guitar pick-ups and all hot musical instrument signals.

Insulation
Excellent frequency response results from using a special polyethylene dielectric that offers low capacitance and low series resistance.

Special Inner Shield
We use a proprietary conductive polyvinyl carbon sheath that helps dissipate microphonic handling noise from high gain stage amplification.

Outer Shield
Canare uses a special high density braid that is tightly woven with many thin strands of Oxygen Free Copper. Our GS-Series professional level instrument cable will withstand severe flexing, nightly stage workouts & heavy duty studio use.

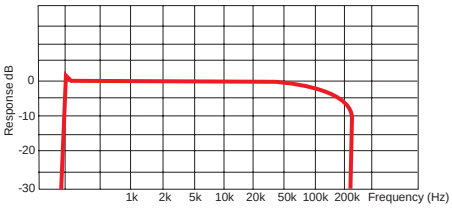
Jacket
Tough but flexible PVC jacket resists tears and cracks. Stays pliant and will not stiffen, even at sub-zero temperatures. Available in a variety of smooth, satin matte finishes.

GS-6

A specially designed **Oxygen Free Copper** 18 AWG cable for connecting Guitar/Bass or Keyboards to amps, mixers, effects pedals and all outboard signal processing gear. Low capacitance and low series resistance provides improved frequency response (flat to 50kHz). A bright, ringing characteristic sound is preserved, even when using HI-Z guitar pickups with long cable runs. The proprietary double Carbon/Braid Copper shield construction eliminates microphonic handling noise, especially on stage where amps are often set at maximum volume levels. Also highly recommended for Amp Head to Speaker Cabinet leads.

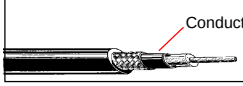
GS-4

Miniature size 22 AWG version of GS-6. Good choice for short run unbalanced audio interconnects and general instrumentation cables.



GS-6 Frequency Characteristics (100m, 100Ω > 1MΩ load)

Important Wiring Note:
Canare GS-4 and GS-6 utilize a specially designed ***Conductive Carbon Plastic Shield*** *to protect against undesirable microphonic handling noise. This inner sleeve can cause a short circuit if allowed to come in contact with the OFC center conductor. Please be very careful when stripping cable and remove this material from exposed insulation before soldering.*



COLORS AVAILABLE					
Model	BLK	BLU	ORN	RED	YEL
GS-6	■	■	●	■	●
GS-4	■	●	●	●	●

□ = Standard Stock ○ = Special Order

MECHANICAL SPECIFICATIONS										ELECTRICAL PERFORMANCE		
Model	Stand. Length	Wgt. Stand. Lng. lbs (kgs)	Nom. O.D. inch (mm)	PVC Jacket Nom. Thick. inch (mm)	Brittle Point °F (°C)	No. of Cond.	Insul. Type * Thick. mil	Cond - AWG (Qty./mil) Cross Sec. Area (mil.²)	Dual Shield Coverage	Chan. D.C.R. Ω/1000ft (Ω/100m)	Shield D.C.R. Ω/1000ft (Ω/100m)	Nom Cap ** pF/ft at 1KHz (pF/m at 1KHz)
GS-6	656ft *200m*	22 *10*	.228 *5.8*	.039 *1.0*	-56 *-49*	1	PE 33.5	OFC-#18 127/3.94 1550	OFC>92% Braid + Carbon Sleeve	<5.6 *<1.8*	<7.6 *<2.5*	49.0 *160*
GS-4	656ft *200m*	12 *5*	.157 *4.0*	.028 *0.7*	-56 *-49*	1	PE 19.7	OFC - #22 50/3.94 604.5	OFC >93% Braid Carbon Sleeve	<14.7 *<4.8*	<9.8 *<3.2*	47.0 *154*

* Dielectric Strength = 500V AC / 1min. Insulation resistance/3Mft = >1000MΩ.
** Capacitance between conductor to shield.

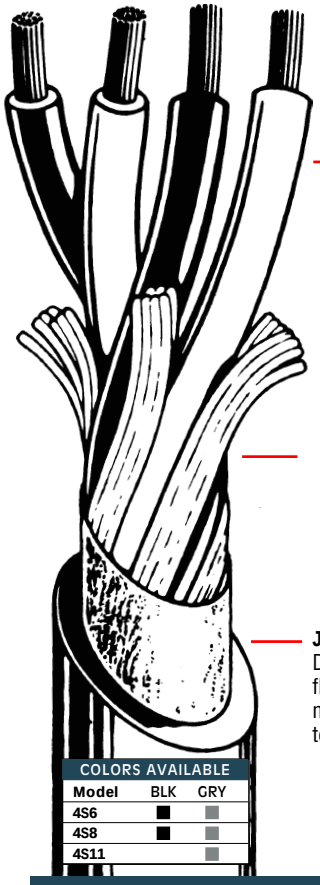
APPLICATION

FEATURES

Super Flexibility, even in Sub-Zero Weather

Star Quad Design Reduces EMI Noise

Low Capacitance & Resistance



Conductor
Canare uses many thin strands of annealed copper for excellent flexibility and long life reliability.

Insulation
Special polyethylene dielectric offers low capacitance and low series resistance for improved frequency response over long distance cable runs. Star Quad configuration improves damping factor at the speaker. Individual conductor Color Coding (Red, Clear Red, White, Clear White) allows easy continuity checks.

Filler
4S-Series speaker cables use tightly packed cotton fibers to help maintain cable shape and keep conductors from shifting.

Jacket
Durable PVC outer jacket. Stays flexible, resists tears and cracks. Will not stiffen even at sub-zero temperatures.

COLORS AVAILABLE		
Model	BLK	GRY
4S6	■	■
4S8	■	■
4S11		■

4S6 (17 GAUGE / STAR QUAD)

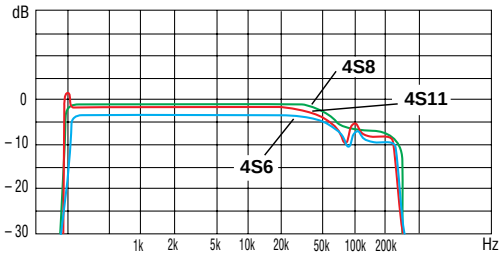
A lighter gauge, very flexible speaker cable, using 4 x 20 AWG insulated conductors. Good choice for high frequency components, short line runs or DC power cords.

4S8 (13 GAUGE / STAR QUAD)

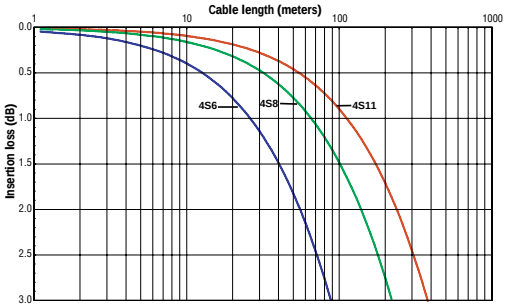
Our most popular 4 x 16 AWG flexible speaker cable. Perfect choice for all broad spectrum speaker systems and general purpose power amp setups. Good on Bi-Amp rigs.

4S11 (11 GAUGE / STAR QUAD)

Recommended for long runs and low end Power Amplifier sub-woofer systems. Heavy duty 4 x 14 AWG conductors.



Frequency Response



Insertion loss of 4S series speaker cable

MECHANICAL SPECIFICATIONS										ELECTRICAL PERFORMANCE/ QUAD WIRED	
Model	Std. Lng.	Wt. Std. Lng. lbs (kgs)	Nom. O.D. inch (mm)	Jacket Thick. PVC inch (mm)	Brittle Point °F (°C)	Number of Conductors	Cond - AWG (Qty./mil) Cross Sec. Area (mil.²) * Quad AWG	Pitch of Quad in. (mm)	Insul. Type ** Thick mil	Cond. D.C.R. Ω/1000ft (Ω/100m)	Nom. Cap. *** pF/ft (pF/m)
4S6	656ft *200m*	24 *11*	.252 *6.4*	.032 *0.8*			AC-#20 20/7.09 791 #17	<1.78 <*45*	PE 19.7	11.4 *3.7*	38 *125*
4S8	656ft *200m*	42 *19*	.327 *8.3*	.043 *1.1*	-56 *-49*	4 RED, CLR RED WHT, CLR WHT	AC-#16 50/7.09 1969 #13	<2.76 <*70*	PE 19.7	4.5 *1.5*	44 *145*
4S11	656ft *200m*	70 *32*	.421 *10.7*	.047 *1.2*			AC-#14 41/10.24 3379 #11	<4.73 <*120*	PE 27.6	2.6 *0.9*	45 *146*

* Effective AWG of combined twin conductors. *** Capacitance between twin Red and twin White Conductors.
** Dielectric Strength = 500V AC / 1min. Insulation resistance/3Mft = >1000MΩ. .

DAMPING FACTOR: *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. concert sound) and 10-20 for speech (i.e. sport stadiums).*

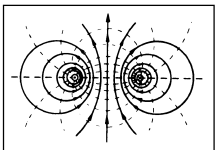
The greater the damping factor (DF), the better the ability to control speaker excursion to create sharp, clear quality in the low end frequency range.

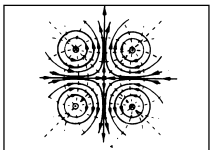
$$\text{Damping Factor} = \frac{\text{speaker impedance}}{\text{power amp. output impedance + speaker cable cond. resistance}}$$

Values calculated assuming power amplifier output at 0.05Ω

Model	Pair cond. resist. (Ω/100m) & cross-sec (mm²)		Cond. resist. (Ω/100m) for return path	Cable length/damping factor DF=20	DF=50
4S6	1.87/1.0mm² AWG	17	3.7	9.5m	3.0m
4S8	0.75/2.5mm² AWG	14	1.5	23.3	7.3
4S11	0.43/4.3mm² AWG	11	0.87	40.2	12.6

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


Size of magnetic field attenuates by 1/r². (r: distance from point of center line for 2 conductors.)
Magnetic field of 2-conductor cable


Size of magnetic field attenuates by 1/r³. (r: distance from point of intersection of 4 diagonal lines from 4 center conductors.)
Magnetic field of 4-conductor cable

TECH NOTE: *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 the center, the opposing magnetic fields are cancelled out. Attenuation of magnetic field radiation is superior when compared to a standard 2-conductor speaker wire.*

APPLICATIONS

- OB VANS
- ENG/EFP
- A/V COMBO SNAKES

FEATURES

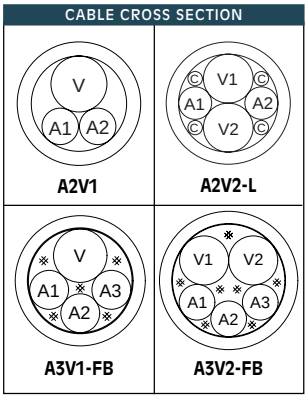
Audio + Video in Same Cable Bundle

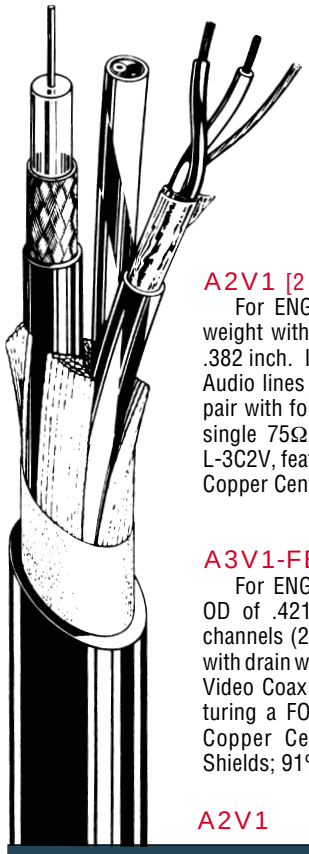
Stays Flexible even in Sub-Zero Weather

Special Fillers prohibit Cable Component Twisting

Use with Canare 75Ω BNC, F or RCA Crimp Plugs

CABLE CROSS SECTION





A2V1 [2 AUDIO, 1 VIDEO]

For ENG/EFP/OB applications. Lightweight with a very thin profile OD of just .382 inch. Includes two 25 AWG balanced Audio lines (Canare L-2B2AT type twisted pair with foil shield and drain wire) plus a single 75Ω Video Coax channel (Canare L-3C2V, featuring a PE dielectric with Solid Copper Center Conductor).

A3V1-FB [3 AUDIO, 1 VIDEO]

For ENG/EFP/OB applications. Narrow OD of .421 inch. Three balanced Audio channels (25 AWG twisted pair, foil shield with drain wire) plus a single 75Ω Low Loss Video Coax channel (Canare L-3CFB, featuring a FOAM core dielectric with Solid Copper Center Conductor and double Shields; 91% Braid over 100% Foil).

A2V1

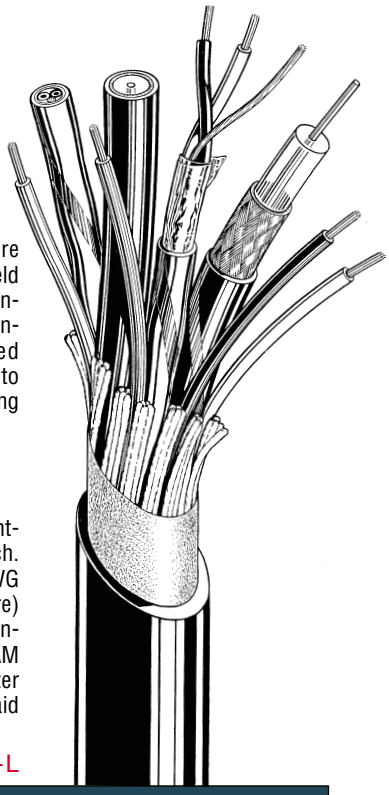
A2V2-L [2 AUDIO, 2 VIDEO, 4 COMM]

Two balanced Audio lines (Canare L-2B2AT type twisted pair with foil shield and drain wire), two 75Ω Video coax channels (Canare L-3C2V, featuring a Solid Center Conductor) plus four insulated "intercom/remote control tally lines" to trigger camera, VCR or other switching functions. OD .433 inch.

A3V2-FB [3 AUDIO, 2 VIDEO]

For ENG/EFP/OB applications. Lightweight with a reduced OD of only .488 inch. Three balanced Audio channels (25 AWG twisted pair, foil shield with drain wire) plus two Low Loss 75Ω Video Coax channels (Canare L-3CFB, featuring a FOAM core dielectric with a Solid Copper Center Conductor and Double Shields; 91% Braid over 100% Foil).

A2V2-L



AUDIO + VIDEO COMBO CABLE

Model	Std. Lng.	Nom. O.D. Inch (mm)	Weight Standard Length lbs. (kgs)	Channel Unit Type x Qty	Cond. Strand Qty./mm AWG	Insulation Type * Color Code	Shield Coverage	Channel Jacket PVC Color Code	Channel Unit OD in (mm)	Nom. Imp.
A2V1	328ft *100m*	.382	24 *11*	**V** Coax 3C-2V x 1	1/0.5 #24	PE CLEAR	>97% AC Braid	BLK	.173 *(4.4)*	75Ω
	656ft *200m*	*9.7*	48 *22*	**A** Twisted Pair 2B2-AT x 2	16/0.12 #25	IPE ORN, WHT	100% AL FOIL + TC Drain Wire	GRY/RED, GRY/BLU	.126 *(3.2)*	–
A2V2-L	328ft *100m*	.433	35 *16*	**V** Coax 3C-2V x 2	1/0.5 #24	PE CLEAR	>97% AC Braid	BLK/YEL, BLK	.173 *(4.4)*	75Ω
	656ft *200m*	*11.0*	70 *32*	**A** Twisted Pair 2B2-AT x 2	16/0.12 #25	IPE ORN, WHT	100% AL FOIL + TC Drain Wire	GRY/RED, GRY/BLU	.126 *(3.2)*	–
				C Control Line 0.2mm²x 4	18/0.12 #24	PE RED, YEL, BLU, WHT	–	–	.051 *(1.3)*	–
A3V1-FB	656ft	.421	53	**V** Coax 3C-FB x 1	1/0.65 #22	FOAM PE WHT	>91% TAC Braid 100% AL FOIL	YEL	.173 *(4.4)*	75Ω
	200m	*10.7*	*24*	**A** Twisted Pair 2B2-AT x 3	16/0.12 #25	IPE ORN, WHT	100% AL FOIL + TC Drain Wire	GRY/YEL GRY/RED, GRY/BLU	.126 *(3.2)*	–
A3V2-FB	656ft	.488	75	**V** Coax 3C-FB x 2	1/0.65 #22	FOAM PE WHT	>91% TAC Braid 100% AL FOIL	YEL, WHT	.173 *(4.4)*	75Ω
	200m	*12.4*	*34*	**A** Twisted Pair 2B2-AT x 3	16/0.12 #25	IPE ORN, WHT	100% AL FOIL + TC Drain Wire	GRY/YEL GRY/RED, GRY/BLU	.126 *(3.2)*	–

* Dielectric Strength: 500 VAC/min. Insulation resistance: > 1000MΩ

75Ω VIDEO CHANNEL / CONNECTOR ASSEMBLY ITEMS

Model	CANARE 75Ω Connectors			Cable Stripper	Crimp Tool	Die Set
	BNC	F	RCA			
3C-2V	BCP-C3B	FP-C3	RCAP-C3A	TS100E	TC-1	TCD-35CA
3C-FB	BCP-C3F	FP-C3F	RCAP-C3F	TS100E	TC-1	TCD-35CA

75Ω VIDEO CHANNEL / NOMINAL ATTENUATION

Model	Length	10 MHz	30 MHz	275 MHz	800 MHz
3C-2V	dB/100 ft *dB/100m*	1.3 *4.2*	2.2 *7.3*	6.7 *22.0*	11.5 *37.6*
3C-FB	dB/100 ft *dB/100m*	1.0 *3.2*	1.7 *5.5*	5.1 *16.8*	8.7 *28.6*

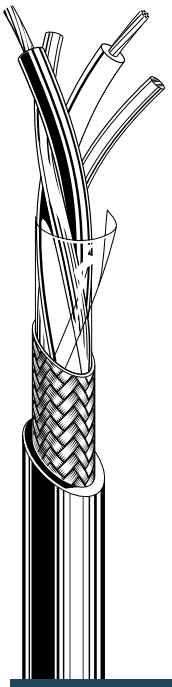
APPLICATIONS

• AES/EBU DIGITAL AUDIO

FEATURES

Twisted Pairs with Braid or Foil Shield

Special PE FILLER RODS maintain constant 110Ω impedance



DA206

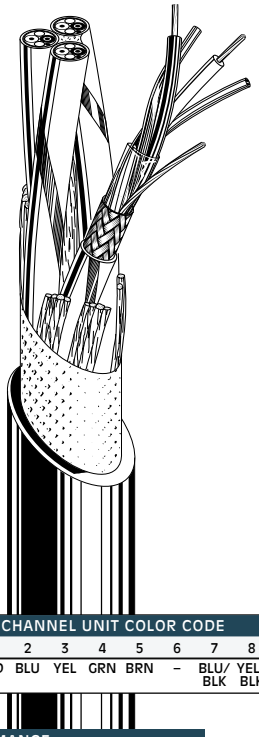
Large OD for longest cable runs. Robust construction makes this cable a good choice for all Digital Pro Audio field recording. Maximum recommended AES/EBU Length: 1,180ft (360meters). Jacket color: **BLUE**.

DA202

Mini version of DA206. 25 AWG conductors allow use with common IDC Punch Down Block, Digital Audio "110Ω Type" Patchbays. Integral Drain Wire for easy ground wiring. Maximum recommended AES/EBU Length: 590ft (180meters). Jacket color: **BLUE**.

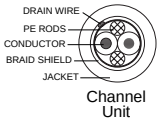
DA202AT

Good choice for short cable runs. 25 AWG conductors suitable for all Rack Wiring applications, especially IDC Punch Down Block Digital Audio "110Ω Type" Patchbays. **Foil Shield** with Drain Wire allows easy strip, prep and ground wire termination. Maximum recommended AES/EBU Length: 426ft (130meters). Jacket color: **BLUE**.



DA202-P

Multi Channel version of DA202. Available in 2, 4 and 8 channel pairs. 25 AWG conductors allow use with Punch Down Block Audio Patchbays. Integral Drain Wire for easy ground wiring. Maximum recommended Length: 180meters. Overall Jacket color: **BLUE**



Channel Unit

DA202-2P

DA202-4P

DA202-8P

DA202-P CHANNEL UNIT COLOR CODE

Channel No.	1	2	3	4	5	6	7	8
	RED	BLU	YEL	GRN	BRN	–	BLU/ BLK	YEL/ BLK

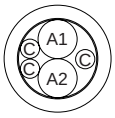
MECHANICAL SPECIFICATIONS / **ELECTRICAL PERFORMANCE**

Model	Standard Length	Wgt. Stand. Length lbs. (kgs)	Nom. O.D. in. (mm)	Jacket Thickness PVC inch (mm)	Brittle Point °F (°C)	No. of Channels	Insul. Type * Thick. mil	Cond - AWG (Qty./mil) Cross Sec. Area	Shield Coverage	Cond. D.C.R. Ω/1000ft (Ω/100m)	Shield D.C.R. Ω/1000ft (Ω/100m)	Nom. Cap. ** pF/ft (pF/m)	Nom. Cap. † pF/ft (pF/m)	Nominal Impedance
DA206	328ft *100m* 656ft *200m*	17 *8* 35 *16*	.287 *7.3*	.035 *0.9*	-56 *-49*	1	IPE 30.3	AC–#20 7/12.60	>95% Braid	<10.1 *<3.3*	<4.3 *<1.4*	14.6 *48*	22.3 *73*	110Ω
DA202	328ft *100m*	8 *4*	.197 *5.0*	.034 *0.8*	-56 *-49*	1	IPE 16.9	AC–#25 7/7.09	>95% Braid	<32.3 *<10.6*	<6.8 *<2.2*	–	–	110Ω
DA202AT	656ft *200m*	9 *4*	.157 *4.0*	.012 *0.3*	-56 *-49*	1	IPE 20.9	AC–#25 7/7.09	100% AL Foil	<32.3 *<10.6*	–	–	–	110Ω
DA202-2P	328ft *100m*	26 *12*	.421 *10.7*	.043 *1.1*	-56 *-49*	2	IPE 16.9	AC–#25 7/7.09	>95% Braid	<32.3 *<10.6*	<7.0 *<2.3*	–	–	110Ω
DA202-4P	328ft *100m*	42 *19*	.496 *12.6*	.047 *1.2*	-56 *-49*	4								
DA202-8P	328ft *100m*	77 *35*	.646 *16.4*	.051 *1.3*	-56 *-49*	8								

*Dielectric Strength = 500V AC / 1min. Insulation resistance/3Mft = >1000MΩ. ** Capacitance between Conductors.
† Capacitance between conductors to shield.

RS-422 CABLE

CABLE CROSS SECTION



A2C3

Usable for RS-422 signals over short haul equipment interconnect distances. Data channel uses special Foam PE insulation for extra low signal loss.

DATA CABLE

D403-AT

Star Quad style 64Ω data control cable; also usable for **MIDI** harness wiring. Four #22 Gauge Individually Color Coded Conductors. 100% Aluminum Foil shield with integral drain wire. Excellent pulling strength. Jacket color: SEPIA.

NOMINAL SPECIFICATIONS

Model	Stand. Length	Nom. O.D. Inch (mm)	Weight Standard Length lbs. (kgs)	Unit Channel	Qty. of Unit (Cond.)	Cond. Strand (Qty./mm) Cross Sec. Area (mm²)	AWG Size	Insulation Color Code	Shield Strand (mm/Qty.)	Overall Shield Coverage	Insulation Type *	Channel Jacket	Jacket Nom. Thick. inch (mm)
A2C3	656ft *200m*	.260 *6.5*	24 *11*	**A** Digital Data	2 (4)	7/.127 TAC 0.09	#28	A1-RED/WHT A2-BLU/WHT	0.1/37-47 Spiral		Foam Polyethylene	BLK, GRY	.032 *0.8*
				C Control	1 (3)	11/0.16 TAC 0.22	#24	BLK, BRN RED	Not Available		Vinyl Chloride		
A2C3-SS	656ft 200m	0.276 7.0	32 14.4	**A** Digital Data	2(4)	7/.127	#28	A1-RED/WHT A2-BLU/WHT	.01/37-47 Spiral	92.70% Spiral Shield	Foam Polyethylene	BLK, GRY	0.036 0.9
				C Control	1(3)	11.0.16 TAC 0.22	#24	BLK, BRN RED	Not Available		Vinyl Chloride		
D403AT	656ft *200m*	.205 *5.2*	36 *16*	–	1 (4)	TAC 7/7.09	#22	RED, GRN, WHT, YEL	AL Foil 100%		IPE	Sepia	.205 *5.2*

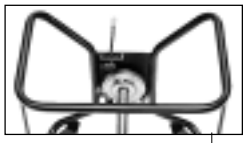
* Dielectric Strength: 500 VAC/min. Insulation resistance: > 1000MΩ

SPECIAL FEATURES

- **Durable long lasting black finish**
- **Rugged winding handle**
- **Roll-around removable casters**
- **Snake cable hanger tabs**
- **Exit flange port for snake ends**

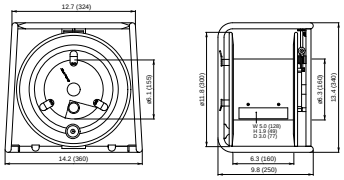
Canare has developed a dependable and road worthy Cable Reel in three useful sizes that keeps cable stored neatly when not in use, yet allows quick deployment without tangles and twisting. A perfect way to facilitate transporting and laying cable. Protect your valuable cable investment with Canare Cable Reels.

3 Position Brake Lock System
All R-Series models include a 3-position brake lever:
(Position 1) **FREE SPOOL**: cable will pull from reel with ease, this position is ideal for rewinding,
(Position 2) **SOFT BRAKE**: cable can be pulled from the reel, but friction prevents excess spillage when cable is pulled quickly,
(Position 3) **FULL LOCK**: used during transportation, the reel will not rotate, so cable will not spill.

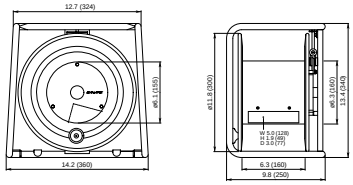


R460S

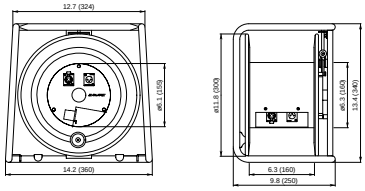
Stackability
All R300 series models have built in stacking tabs, so Cable Reels can be placed one on top of the other for secure transporting and storage.



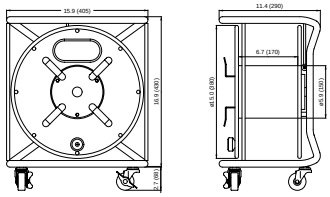
R300S



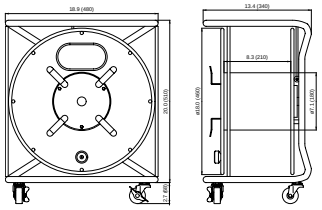
R300L



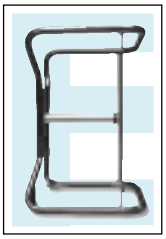
R300CN
R300BN



R380S



R460S



Tubular Steel Construction
Canare Cable Reels are constructed using tubular steel, with an "E" shaped brace design which makes them all extremely durable. All R-Series Reels use heavy duty permanently lubricated bearings which will perform as new even after years of hard road use.

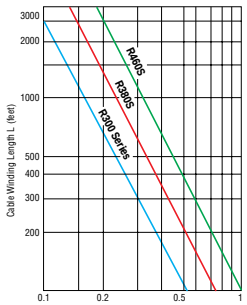
Special Connector Mounting Plates
The R300L features a special User removable recessed Flange Door and Hub Plate for mounting BNC, F, RCA, or XLR Panel receptacles.

Please use the capacity chart and/or formula to determine length of a given cable that will fit on a specific reel. Formulas are based on loose wrap

Calculation Formula

R300 (S,L,CN,BN)	$L = \frac{43}{D^2} \times 0.6$ (ft)
R380S	$L = \frac{93}{D^2} \times 0.6$ (ft)
R380D	$L = \frac{82}{D^2} \times 0.6$ (ft)
R460S	$L = \frac{172}{D^2} \times 0.6$ (ft)
R460C	$L = \frac{148}{D^2} \times 0.6$ (ft)

Formula Example:
L-4E3-8P Cable O.D. is .603"
93 ÷ (.603 x .603) x .6 = 155
An R380S Cable Reel will hold approx. 155 feet of



Reel with Cable Assembly

Detachable Cable

Model	Cable reel	Description: Cable Assemblies — Set at inner end / Set at outer end	Weight (kg)
CR100-CN	R300-CN		9.6
CR100-S	R300-S		9.6
CR90-BN	R300-BN		10.5

CABLE REEL SPECIFICATIONS

Model	Size	Weight lbs.	Stackable	Casters	Connector Mounting	Cable Cut-Out	Hanger
R300S	SMALL	9.5	YES	NO	NO	YES	YES
R300L	SMALL	9.5	YES	NO	Hub & Flange	NO	NO
R300CN	SMALL	9.5	YES	NO	Parallel wired M & F XLR on Hub & Flange	NO	NO
R300BN	SMALL	9.5	YES	NO	75Ω BNC Jack 1ea.Hub & Flange	NO	NO
R380S	MED.	17.5	NO	YES	NO	YES	YES
R380D	MED.	17.5	NO	YES	Hub	NO	NO
R460S	LARGE	22.0	NO	YES	NO	YES	YES
R460C	LARGE	22.0	NO	YES	Hub	NO	NO

CR100-CN (with 100m cable)
L-4E6S (EC100) bundled with R300-CN.
(Set with XLR3-11C at the cable outer end when sold.)

CR90-BN (with 90m cable)
L-3C2VS (DH5C90-S) bundled with R300-BN.

CR100-S (with 100m cable)
L-4E6S (EC100) bundled with R300-S.
(Set with XLR3-11C at the cable outer end when sold.)

SNAKE TRUNK

Assembled with super flexible Canare L-4E3-P Star Quad multichannel audio cable, terminated at both ends with a MIL Spec JAE Cannon multipin connector. Dust caps with chain are included.

12 | C30 | E3

Number of Channels
8, 12, 16, 24
(32 Chan by special order)

Cable Length
C10 = 10 meters (33ft)
C30 = 30 meters (98ft)
C50 = 50 meters (164ft)

Cable Type
E3 = Canare L-4E3-P Star Quad

- 8 & 12 Chnl NK27 Male to Female
- **DT12** & 16 Chnl FK37 Male to Female
- 24Chnl MS32 Female to Female

FANTAIL

All versions are pre-assembled using Canare Star Quad L-4E microphone cable wired to JAE Cannon XLR-3 and multipin bayonet lock connectors. The overall fantail length is 5 feet and each channel is fitted with a large, sliding number collar ring for quick identification. Dust cap with chain included on multipin connector.

12 | S2 | N | 1

Number of Channels
8, 12, 16, 24
(32 Channel by special order)

XLR Configuration
S1 = Female (entry)
S2 = Male (exit)

Multipin Type
1 = Female (entry)
2 = Male (exit)

- N = NK27 Pin (8, 12 Chnl)
- F = FK37 Pin (**DT12**, 16 Chnl)
- MS = MS32 54 Pin (24 Chnl)

CABLE REEL SNAKE

A unique and economical approach to multichannel cable storage and system component integrating. Assembled with a durable R-Series Canare Cable Reel, built-in flange-mounted junction box, hardwired Star Quad L-4E3-P Multichannel audio cable and multipin female Cannon connector. This modular design approach allows simple and secure mating with standard Canare Snakes, Junction Boxes, Pigtails or other Cable Reel Snakes.

16 | R30 | E3

Number of Channels
8, 12, 16, 24

Cable Length
R30 = 30 meters (98ft)
R50 = 50 meters (164ft)

Cable Type
E3 = Canare L-4E3-P Star Quad

- XLR Male & Female parallel wired
- 8 & 12 Chnl NK27 Female Multipin
- 16 Chnl FK37 Female Multipin
- 24 Chnl MS32 Female Multipin

JUNCTION BOX

Typically used at one or both ends of an audio snake. A Canare Junction Box will accept single microphone or line level XLR-3 type cables. The black anodized chassis is constructed from thick gage aluminum (0.16") which is light weight but exceptionally strong. All panel mount receptacles are secured to the chassis with screws (not pop rivets), should service ever be necessary. Skid pads and multipin dust caps with chain are included.

12 | J12 | N | 12

Number of Channels
8, 12, 16, 24
(32 Channel by special order)

XLR Configuration
B1 = Female Only (inputs)
B2 = Male Only (returns)
J12 = Parallel Wired Male & Female

Multipin Type
1 = Female Only (Entry)
2 = Male Only (exit)
12 = Male & Female (feed through)

- N = NK27 Pin (8, 12 Chnl)
- F = FK37 Pin (**DT12**, 16 Chnl)
- MS = MS32 54 Pin (24 Chnl)

CONNECTORS

High quality ITT CANNON, JAE or DDK Multipin bayonet lock and XLR3 connectors are meticulously hand assembled and soldered with a minimum of unshielded wire leads.

Canare 8, 12, 16, 24, 32 channel Snakes are common shield wired via an integral shared return buss. This system is cost effective, saves space, and helps reduce noise and ground loops when used as a discreet audio snake arrangement. **DT12** Snakes are wired with individually isolated channel shields.

(ITT CANNON) XLR3 CONNECTORS TYPICAL FOR ALL CHANNELS

XLR-3-11C

XLR-3-32

XLR-3-12C

XLR-3-31

(JAE) FOR 8 & 12 CHANNELS

NK27-21C

NK27-32S

NK27-22C

NK27-31S

(JAE) FOR 16 CHANNELS & DT12

FK37-21C

FK37-32S

FK37-22C

FK37-31S

(DDK) FOR 24 CHANNELS

MS3106B-32A-10S +MS3057-20A

MS3102A-32A-10P

(DDK) FOR 32 CHANNELS

MS3106B36-73S +MS3057-24A

MS3102A-36-73P

tel: 818.365.2446
fax: 818.365.0479

☐ ○ Female ■ ● Male

CABLE REEL SNAKE

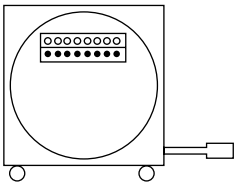
L-4E3 Type Cable

D indicates R380 cable reel *C indicates R460 cable reel*

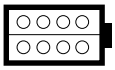
JUNCTION BOXES

Single XLR per channel	Parallel XLR per channel	Parallel XLR per channel MultiPin Feed Through	CHANNEL

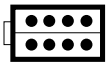
8 Channel



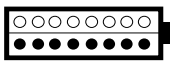
Length	Model	Cable reel	
30 m	8R30E3	D	XLR3-32 x 8, XLR3-31 x 8, NK27-21C
50 m	8R50E3	D	



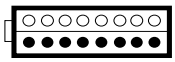
8B1N2
XLR3-31 x 8, NK27-32S



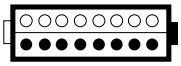
8B2N1
XLR3-32 x 8, NK27-31S



8J12N2
XLR3-31 x 8, XLR3-32 x 8, NK27-32S

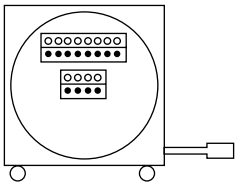


8J12N1
XLR3-31 x 8, XLR3-32 x 8, NK27-31S

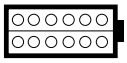


8J12N12
XLR3-31 x 8, XLR3-32 x 8, NK27-31S, NK27-32S

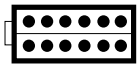
12* Channel



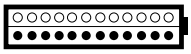
Length	Model	Cable reel	
30 m	12R30E3	D	XLR3-32 x 12, XLR3-31 x 12, NK27-21C
50 m	12R50E3	C	



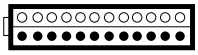
12B1N2
XLR3-31 x 12, NK27-32S



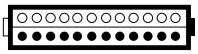
12B2N1
XLR3-32 x 12, NK27-31S



12J12N2
XLR3-31 x 12, XLR3-32 x 12, NK27-32S



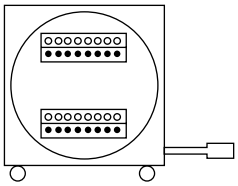
12J12N1
XLR3-31 x 12, XLR3-32 x 12, NK27-31S



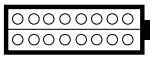
12J12N12
XLR3-31 x 12, XLR3-32 x 12 NK27-31S, NK27-32S

*** DT12 CALL OR EMAIL CANARE FOR MECHANICAL & WIRING SPECIFICATIONS**

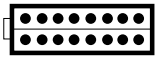
16 Channel



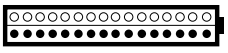
Length	Model	Cable reel	
30 m	16R30E3	D	XLR3-32 x 16, XLR3-31 x 16, FK37-21C
50 m	16R50E3	C	



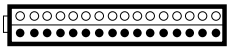
16B1F2
XLR3-31 x 16, FK37-32S



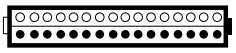
16B2F1
XLR3-32 x 16, FK37-31S



16J12F2
XLR3-31 x 16, XLR3-32 x 16, FK37-32S

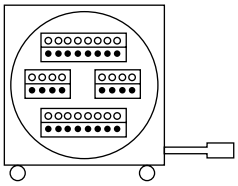


16J12F1
XLR3-31 x 16, XLR3-32 x 16, FK37-31S

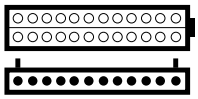


16J12F12
XLR3-31 x 16, XLR3-32 x 16, FK37-31S, FK37-32S

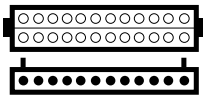
24 Channel



Length	Model	Cable reel	
30 m	24R30E3	C	XLR3-32 x 24, XLR3-31 x 24, MS3106B-32A-10S



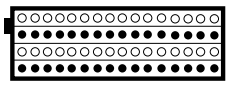
24B12MS
XLR3-31 x 24 (on top), XLR3-32 x 24 (12 on each side), MS3102A-32A10P



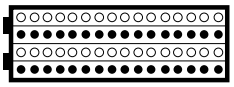
24B12MSW
XLR3-31 x 24 (on top), XLR3-32 x 24 (12 on each side), MS3102A-32A10P x 2

32 Channel

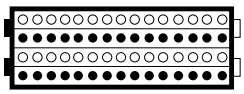
ALL 32 CHANNEL SNAKE COMPONENTS ARE SPECIAL ORDER ITEMS



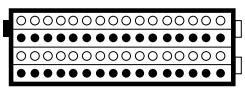
32B12MS
XLR3-31 x 32, XLR3-32 x 32, MS3102A36-73P



32B12MSW
XLR3-31 x 32, XLR3-32 x 32, MS3102A36-73P x 2



32B12MWF11
XLR3-31 x 32, XLR3-32 x 32, MS3102A36-73P x 2, FK37-31S x 2

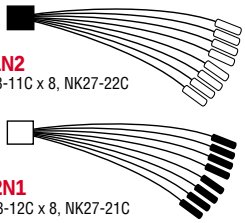
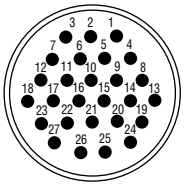
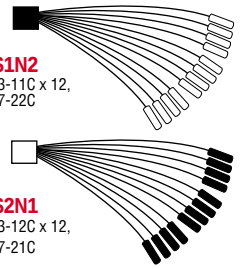
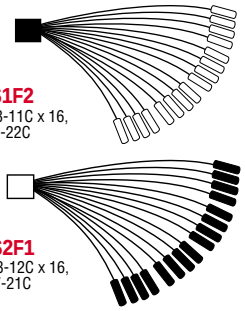
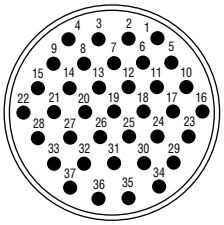
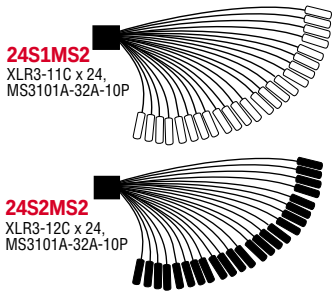
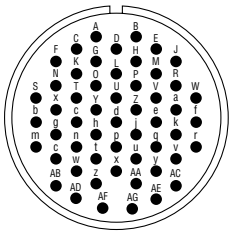
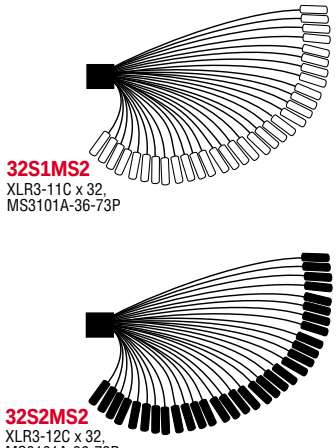
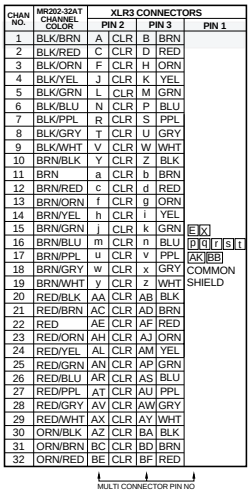
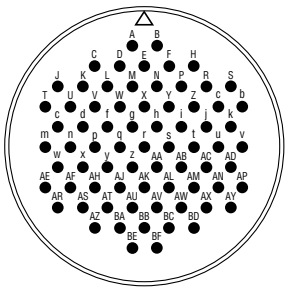


32B12MF11
XLR3-31 x 32, XLR3-32 x 32, MS3102A36-73P x 1, FK37-31S x 2

Snake System Configuration Chart

1 meter = 3.28 feet, 10 m = 33 ft, 30 m = 90 ft, 50 m = 164 ft

□ ○ Female ■ ● Male

CHANNEL	SNAKE TRUNKS	FANTAILS	CONNECTORS
8	 Length / Model / Connectors L-4E3 Type Cable 10 m 8C10E3 NK27-21C, 30 m 8C30E3 NK27-22C 50 m 8C50E3	 8S1N2 XLR3-11C x 8, NK27-22C 8S2N1 XLR3-12C x 8, NK27-21C	For 8 & 12 Channels  NK-27 CHAN NO. / L-4E3-P CHANNEL COLOR / XLR3 CONNECTORS PIN 2 / PIN 3 / PIN 1 1 RED 1 WHT 3 BLU 2 BLU 4 WHT 5 BLU 3 YEL 6 WHT 7 BLU 4 GRN 8 WHT 9 BLU 5 BRN 11 WHT 12 BLU 10 6 – 13 WHT 14 BLU COMMON 7 BLK/BLU 15 WHT 16 BLU SHIELD 8 BLK/YEL 17 WHT 18 BLU 9 BLK/GRN 19 WHT 20 BLU 10 BLK/BRN 22 WHT 23 BLU 11 BLK 24 WHT 25 BLU 12 ORN/BLU 26 WHT 27 BLU MULTI CONNECTOR PIN NO
12*	 Length / Model / Connectors L-4E3 Type Cable 10 m 12C10E3 NK27-21C, 30 m 12C30E3 NK27-22C 50 m 12C50E3	 12S1N2 XLR3-11C x 12, NK27-22C 12S2N1 XLR3-12C x 12, NK27-21C	*DT12 CALL OR EMAIL CANARE FOR MECHANICAL & WIRING SPECIFICATIONS
16	 Length / Model / Connectors L-4E3 Type Cable 10 m 16C10E3 FK37-21C, 30 m 16C30E3 FK37-22C 50 m 16C50E3	 16S1F2 XLR3-11C x 16, FK37-22C 16S2F1 XLR3-12C x 16, FK37-21C	For 16 Channels  FK-37 CHAN NO. / L-4E3-P CHANNEL COLOR / XLR3 CONNECTORS PIN 2 / PIN 3 / PIN 1 1 RED 1 WHT 2 BLU 2 BLU 3 WHT 4 BLU 3 YEL 5 WHT 6 BLU 4 GRN 8 WHT 9 BLU 5 BRN 10 WHT 11 BLU 6 – 12 WHT 13 BLU 7 BLK/BLU 14 WHT 15 BLU 19 8 BLK/YEL 16 WHT 17 BLU COMMON 9 BLK/GRN 21 WHT 22 BLU SHIELD 10 BLK/BRN 23 WHT 24 BLU 11 BLK 25 WHT 26 BLU 12 ORN/BLU 27 WHT 28 BLU 13 ORN/YEL 29 WHT 30 BLU 14 ORN/GRN 32 WHT 33 BLU 15 ORN/BRN 34 WHT 35 BLU 16 ORN 36 WHT 37 BLU MULTI CONNECTOR PIN NO
24	 Length / Model / Connectors L-4E3 Type Cable 1 m 24C001E3M22 Connecting cable MS3101A-32A-10P (both ends) 10 m 24C10E3 MS3106B-32A-10S (both ends) 30 m 24C30E3 50 m 24C50E3	 24S1MS2 XLR3-11C x 24, MS3101A-32A-10P 24S2MS2 XLR3-12C x 24, MS3101A-32A-10P	For 24 Channels  32A10 CHAN NO. / L-4E3-P CHANNEL COLOR / XLR3 CONNECTORS PIN 2 / PIN 3 / PIN 1 1 RED A WHT B BLU 2 BLU C WHT D BLU 3 YEL F WHT G BLU 4 GRN H WHT J BLU 5 BRN K WHT L BLU 6 – N WHT O BLU 7 BLK/BLU P WHT R BLU 8 BLK/YEL S WHT T BLU 9 BLK/GRN U WHT V BLU 10 BLK/BRN X WHT Y BLU 11 BLK Z WHT a BLU E 12 ORN/BLU b WHT c BLU COMMON 13 ORN/YEL d WHT e BLU SHIELD 14 ORN/GRN g WHT h BLU 15 ORN/BRN i WHT k BLU 16 ORN m WHT n BLU 17 PNK/BLU p WHT q BLU 18 PNK/YEL s WHT t BLU 19 PNK/GRN u WHT v BLU 20 PNK/BRN w WHT x BLU 21 PNK AB WHT z BLU 22 WHT/BLU AA WHT AC BLU 23 WHT/YEL AD WHT AF BLU 24 WHT/GRN AG WHT AE BLU MULTI CONNECTOR PIN NO
32	 Length / Model / Connectors MR202-AT Type Cable 1 m 32C001MR2M22 Connecting cable MS3101A-36-73P (both ends) 10 m 32C10MR2 MS3106B-36-73S (both ends) 30 m 32C30MR2 50 m 32C50MR2	 32S1MS2 XLR3-11C x 32, MS3101A-36-73P 32S2MS2 XLR3-12C x 32, MS3101A-36-73P	 CHAN NO. / MR202-32AT CHANNEL COLOR / XLR3 CONNECTORS PIN 2 / PIN 3 / PIN 1 1 BLK/BRN A CLR B BRN 2 BLK/RED C CLR D RED 3 BLK/ORN F CLR H ORN 4 BLK/YEL J CLR K YEL 5 BLK/GRN L CLR M GRN 6 BLK/BLU N CLR P BLU 7 BLK/PPL R CLR S PPL 8 BLK/GRY T CLR U GRY 9 BLK/WHT V CLR W WHT 10 BRN/BLK Y CLR Z BLK 11 BRN a CLR b BRN 12 BRN/RED c CLR d RED 13 BRN/ORN f CLR g ORN 14 BRN/YEL h CLR i YEL 15 BRN/GRN j CLR k GRN E X 16 BRN/BLU m CLR n BLU p q r s t 17 BRN/PPL u CLR v PPL AK BB 18 BRN/GRY w CLR x GRY COMMON 19 BRN/WHT y CLR z WHT SHIELD 20 RED/BLK AA CLR AB BLK 21 RED/BRN AC CLR AD BRN 22 RED AE CLR AF RED 23 RED/ORN AH CLR AJ ORN 24 RED/YEL AL CLR AM YEL 25 RED/GRN AN CLR AP GRN 26 RED/BLU AR CLR AS BLU 27 RED/PPL AT CLR AU PPL 28 RED/GRY AV CLR AW GRY 29 RED/WHT AX CLR AY WHT 30 ORN/BLK AZ CLR BA BLK 31 ORN/BRN BC CLR BD BRN 32 ORN/RED BE CLR BF RED MULTI CONNECTOR PIN NO For 32 Channels  36-73

tel: 818.365.2446
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APPLICATIONS

- ANALOG & DIGITAL VIDEO
- RGB(S, H/V) COMPONENT VIDEO
- VIDEO WALLS
- HI-RES PROJECTORS
- CG / CAD WORKSTATIONS

FEATURES

- Canare true 75Ω BCP-C Crimp Plugs
- < 2.2 nanoseconds channel delay
- Super Flexible, easy payout & wrap-up
- Bundled Cables keep work site neat
- 100% Test and Quality Controlled
- Excellent Connector Pull Strength
- Color Matching BNC Strain Relief Boots
- Jacket Protection Sleeve at Fan Breakout
- Wide Selection of V-Series Cable Types

VS • 75Ω COMPONENT VIDEO FANTAILS

Canare 75Ω VS component cable is available in a variety of pre-cut lengths terminated with our true 75Ω BNC crimp plugs. All assemblies are precisely timed with less than 2.2 nanoseconds between adjacent video channels. Canare VS fantails offer extra wide video bandwidth performance because cable and connectors are 75Ω impedance matched.

Custom assembly configurations can be special ordered using any of Canare's other V-Series models: **V-1.5C, V-3C, V-5C, V-3CFB, V-4CFB**and **V-5CFB** multichannel video snake series in a variety of metric lengths.

STANDARD STOCK • VS 75Ω VIDEO SNAKES					
Model	Lng.	Number of Channels	75Ω Cable	75Ω BNC Plugs	Color Boot
3VS03-3C	9.8ft, *3m*	3 RED, GRN, BLU	V3-3C	BCP-C3B	CB03
3VS05-3C	16.4ft, *5m*				
4VS03-3C	9.8ft, *3m*	4 RED, GRN BLUE, WHT	V4-3C		
4VS05-3C	16.4ft, *5m*				
5VS03-3C	9.8ft, *3m*	5 RED, GRN BLUE, WHT, YEL	V5-3C		
5VS05-3C	16.4ft, *5m*				

Custom Model Selection Guide

4	VS	05	–	3C

Number of Channels
3, 4, 5

Video Snake
VS = 75Ω BNC-BNC
VF = BNC-F
VR = BNC-RCA
VC = F-RCA
VP = F-F
VH = RCA-RCA

Length (meters)
3, 5, 8, 15, 30, 50
Other Custom Lengths are available

V–Series Cable Type
1.5C
3C
5C
3CFB
4CFB
5CFB

VGA ASSEMBLIES

- Canare VGA cables come in a variety of convenient lengths.
- All cables are pre-assembled with easily identifiable colored Canare 75 ohm miniature coaxials.
- Can be used with 75 ohm component video fantails for running long lengths.

Dsub15P (M) - Dsub 15p (M)

STANDARD STOCK	
MODEL	Lng.
5VDCO2-1.5C	6.6ft, 2m
5VDCO3-1.5C	9.8ft, 3m
5VDC05-1.5C	16.4 ft, 5m
5VDC10-1.5C	32.8ft, 10m

Dsub15P (M) - BNC(M)

STANDARD STOCK	
MODEL	Lng.
5VDS015-1.5C	4.9ft, 1.5m
5VDS02-1.5C	6.6ft, 2m
5VDS03-1.5C	9.8ft, 3m
5VDS05-1.5C	16.4 ft, 5m
5VDS10-1.5C	32.8 ft, 10m

Dsub15P (M) -BNC (F)

STANDARD STOCK	
MODEL	Lng.
5VDS015-J1.5C	4.9ft, 1.5m
5VDS02-JI.5C	6.6ft, 2m
5VDS03-J1.5C	9.8ft, 3m
5VDS05-J1.5C	16.4ft, 5m
5VDS10-J1.5C	32.8ft, 10m

APPLICATIONS

- ANALOG & DIGITAL VIDEO
- STUDIO TIE LINES
- PATCH CORDS
- RACK WIRING
- SATELLITE HEADENDS
- OB VANS

FEATURES

Canare 75Ω BNC, F or RCA Crimp Plugs

Super Flexible, easy payout & wrap-up

High Density Copper Braid, or Foil + Braid Shields

Variety of Matte Finish Jacket Colors

100% Test and Quality Controlled

Excellent Connector Pull Strength

Color Matching Strain Relief Boots

VAC • 75Ω BNC (RG59) VIDEO CORDS

Our high quality **RG59B/U** 75Ω BNC-BNC cord is perfect for patching, rack wiring or layout between video plant equipment. All models are super flexible and come pre-assembled with 2 color matched cable strain relief boots. Canare cable and connectors offer excellent performance because they are 75Ω impedance matched for cleaner and sharper video resolution.

STANDARD STOCK • 75Ω VIDEO CORDS				
MODEL	Lng.	75Ω Coax Cable	75Ω BNC Crimp Plugs	Color Boot
VAC003F	3ft	LV-61S	BCP-C4B	CB04
VAC006F	6ft			
VAC010F	10ft			
VAC025F	25ft			

COLORS AVAILABLE										
	BLK	BLU	BRN	GRY	GRN	ORN	PPL	RED	WHT	YEL
VAC	■	■	■	■	■	■	■	■	□	■

VIC • 75Ω BNC (8281F) VIDEO CORDS

Canare VIC cords are useful for both inter-rack harness wiring and longer video cable runs. This super flexible **8281F** type pre-made 75Ω BNC-BNC assembly is available in a variety of colors. Our low loss cord offers outstanding video bandwidth performance because all components used are impedance matched for cleaner and sharper video resolution.

STANDARD STOCK • 75Ω VIDEO CORDS				
MODEL	Lng.	75Ω Coax Cable	75Ω BNC Crimp Plugs	Color Boot
VIC010F	10ft	LV-77S	BCP-C77A	No
VIC025F	25ft			
VIC050F	50ft			
VIC100F	100ft			

COLORS AVAILABLE										
	BLK	BLU	BRN	GRY	GRN	ORN	PPL	RED	WHT	YEL
VIC	■	■	■	■	■	■	■	■	○	■

□ = Standard Stock ○ = Special Order

75Ω F CORDS

Premium RF video line cords can now be special ordered using our new **FP-C** series 2GHz crimp connector. Choose from a wide assortment of jacket colors and lengths of Canare standard analog or low loss digital 75Ω Video Coax Cables.

75Ω RCA VIDEO CORDS

RCA video patch cords can now be special ordered. Made with our new **RCAP** series 200MHz crimp connector. Choose from a wide assortment of Canare 75Ω Video Coax Cables. Perfect for **SPDIF** Digital Audio and MultiMedia.

Custom Model Selection Guide

B 02 B 005 F BLACK

1st End Connector Type
B = 75Ω BNC Crimp Plug (BCP-C)
F = 75Ω F Crimp Plug (FP-C)
R = 75Ω type RCA Crimp Plug (RCAP-C)

75Ω COAX Cable Type
01 = L-1.5C2VS
02 = L-3C2VS
03 = LV-61S
04 = LV-77S
05 = L-2.5CFB
06 = L-3CFB
07 = L-4CFB
08 = L-5CFB
09 = L-7CFB

Cable Color
BLACK, BLUE, BROWN, GRAY, GREEN
ORANGE, PURPLE, RED, WHITE, YELLOW

Boot
BLANK = 2ea Matching Color CB Boots
X = No Boots
S = Other CB Boot Colors

Length (feet)
1, 2, 3, 5, 8, 10, 15, 30, 50, 100
Other Custom Lengths are available

2nd End Connector Type
B = 75Ω BNC Crimp Plug
F = 75Ω F Crimp Plug
R = 75Ω type RCA Crimp Plug
X = Blunt Cut

NOMINAL ATTENUATION VALUE										
		1 MHz	10 MHz	50 MHz	100 MHz	200 MHz	400 MHz	700 MHz	900 MHz	1 GHz
L-3C2VS	dB/100 ft	0.5	1.5	3.2	4.7	6.7	9.4	12.5	14.2	14.9
	dB/100m	*1.5*	*4.9*	*10.4*	*15.5*	*21.9*	*31.0*	*41.0*	*46.5*	*49.0*
LV-61S	dB/100 ft	0.4	1.3	2.7	4.1	5.7	8.1	10.7	12.1	12.8
	dB/100m	*1.3*	*4.2*	*9.0*	*13.3*	*18.8*	*26.6*	*35.1*	*39.8*	*42.0*
LV-77S	dB/100 ft	0.3	1.0	2.4	3.3	4.6	6.6	8.6	9.8	10.4
	dB/100m	*1.1*	*3.4*	*7.8*	*10.8*	*15.2*	*21.5*	*28.4*	*32.3*	*34.0*
L-3CFB	dB/100 ft	0.3	1.0	2.5	3.3	4.5	6.5	8.8	10.1	10.6
	dB/100m	*1.1*	*3.2*	*8.0*	*10.7*	*14.7*	*21.3*	*28.9*	*33.0*	*34.8*
L-4CFB	dB/100 ft	0.3	0.9	2.0	2.7	3.8	5.4	7.3	8.4	8.9
	dB/100m	*1.0*	*2.9*	*6.7*	*8.9*	*12.4*	*17.7*	*24.0*	*27.6*	*29.3*
L-5CFB	dB/100 ft	0.3	0.5	1.6	2.2	3.0	4.3	6.0	6.8	7.2
	dB/100m	*0.8*	*1.6*	*5.3*	*7.1*	*9.9*	*14.2*	*19.5*	*22.2*	*23.7*
L-7CFB	dB/100 ft	0.2	0.5	1.2	1.6	2.1	3.1	4.2	4.8	5.1
	dB/100m	*0.7*	*1.6*	*3.9*	*5.2*	*6.9*	*10.0*	*13.8*	*15.7*	*16.7*

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VPC 75Ω VIDEO PATCH CORDS

Canare video patch cords are the perfect compliment to our 75Ω video patchbays. Assembled with Canare LV-61S and VWP-C4A plugs, they are impedance matched for 1.5GHz performance.

Precisely cut to length, super flexible and available in a variety of colors including Red, Green and Blue for component analog systems. All video patch cords come with a special color-matched rubber boot to ensure extra long life reliability.

75Ω VIDEO PATCH CORDS				
Model	Lng.	75Ω Coax Cable	75Ω Video Plugs	Color Boot
VPC002F	2ft	LV-61S	VWP-C4A	CB04
VPC003F	3ft			
VPC006F	6ft			

COLORS AVAILABLE										
BLK	BLU	BRN	GRY	GRN	ORN	PPL	RED	WHT	YEL

BC BANTAM AUDIO PATCHCORDS

Canare offers a highly flexible, yet extremely rugged premium TT Patchcord usable in all balanced Audio Bantam Patchbays. Carefully assembled using Canare **L-4E5C** mini **Star Quad** audio cable and meticulously soldered onto Nickel & **Gold** Plated TRS Bantam Plugs. Available in 7 Cable jacket Colors and supplied with set of snap in place Color ID Rings.

TRS BANTAM AUDIO PATCH CORDS				
Model	Lng.	Star Quad Audio Cable	Audio Plug	Color Rings
BC003M	1ft	L-4E5C	TRS Bantam	Red, Orn, Yel, Grn, Blu, Gry
BC006M	2ft			
BC009M	3ft			

COLORS AVAILABLE						
BLK	BLU	GRY	GRN	ORN	RED	YEL

☐ = Standard Stock ◯ = Special Order

GO GUITAR CORDS

These high quality 1/4" guitar/patch cords come in a variety of convenient lengths and colors. All models are meticulously hand soldered using our very flexible, low noise GS-6 instrument cable mated with two premium Canare F-15 1/4" mono phone plugs. Also highly recommended as an Amplifier to Speaker Cabinet lead.

GO PRE-MADE CORDS			
Model	Lng.	Cable	Audio connector 1/4" Phone Plug
GO10F	10ft	GS-6	F-15
GO20F	20ft		
GO25F	25ft		

COLORS		
BLK	BLU	RED

AV COMBO SNAKES

For ENG/EFP/OB operations. Broadcast quality made-to-order A/V combo snakes using flexible Canare **A2V1** (pictured)**, A3V1-FB, A2V2-L, A3V2-FB** Audio+Video composite cable.

Each end precisely terminated to your choice of impedance matched 75Ω BNC, F or RCA crimp plugs with Male &/or Female XLR3 Connectors. Contact Canare for all custom snake requirements.

APPLICATIONS

- MICROPHONES
- STUDIO AUDIO TIE LINES
- PATCH CORDS
- RACK WIRING
- SNAKE SYSTEMS
- PA MIXERS

FEATURES

Super Flexible even in sub-zero weather

Rejects EMI, RFI and Handling Noise

High Density Copper Braid Shield

Variety of Matte Finish Jacket Colors

100% Test and Quality Controlled

Excellent Connector Pull Strength

STAR QUAD

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

Canare pre-assembled Star Quad Professional Microphone audio cords are available in a variety of convenient lengths and matte finish jacket colors. Both ends are meticulously hand soldered using premium Neutrik XLR-3 connectors with black chrome shells and gold plated contact pins.

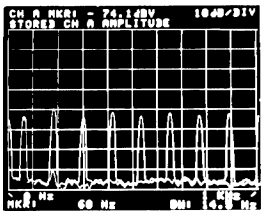
EC MICROPHONE CORDS

STANDARD STOCK • STAR QUAD AUDIO CORDS

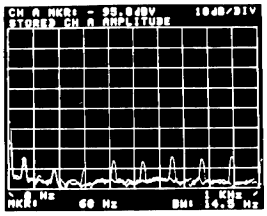
Model	Lng.	Cable Star Quad	Connector Plug XLR3-Female	Connector Plug XLR3-Male
EC005F	5ft	L-4E6S	Neutrik NC3FX-B Black Shell Gold pin	Neutrik NC3MX-B Black Shell Gold Pin
EC015F	15ft			
EC025F	25ft			
EC050F	50ft			
EC100F	100ft			

COLORS AVAILABLE

BLK	BLU	BRN	GRY	GRN	ORN	PPL	RED	WHT	YEL



Typical 2 conductor mic cable.



Canare Star Quad cable.

TECHNICAL NOTE *The signal generated by a microphone during quiet periods can be very low in level, -70dB to -120dB (0.3 millivolts to 1 microvolt). The cable that must carry this signal to the mixer is very sensitive to Electromagnetic Interference (EMI), Radio Frequency Interference (RFI) and electrostatic coupling of hum and noise. Mechanical vibration, bending, flexing (handling noise) and ambient temperature fluctuations can cause detrimental capacitance changes within the microphone cable. Canare Cables are carefully designed and manufactured to very close tolerances using the highest quality materials available so that low level microphone circuits will not be affected by these outside disturbances. The difference is clearly measurable and audible.*

For a more detailed illustration, please request our Technical White Paper: ***"Evaluating Microphone Cable Performance and Specifications."***

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TECHNICAL TERMS ABBREVIATION TABLE

ABS	Acrylonitrile-Butadiene-Styrene
AC	Annealed Copper
AT	Aluminum Tape
AWG	American Wire Gauge
dB	Decibel
ft	Feet
in	Inch
IPE	Irradiated Polyethylene
m	Meter
MHz	Megahertz
mil	One Thousandth of an inch
mm	Millimeter
mV	Millivolt
MΩ	Mega Ohm
mΩ	Milli Ohm
nS	Nano Second
PE	Polyethylene
pF	Pico Farad
PPO	Polyphenylene Oxide
PTFE	Polytetrafluoroethylene
PVC	Polyvinylchloride
RL	Return Loss
TAC	Tinned Annealed Copper
V	Volt
VSWR	Voltage Standing Wave Ratio
Ω	Ohm

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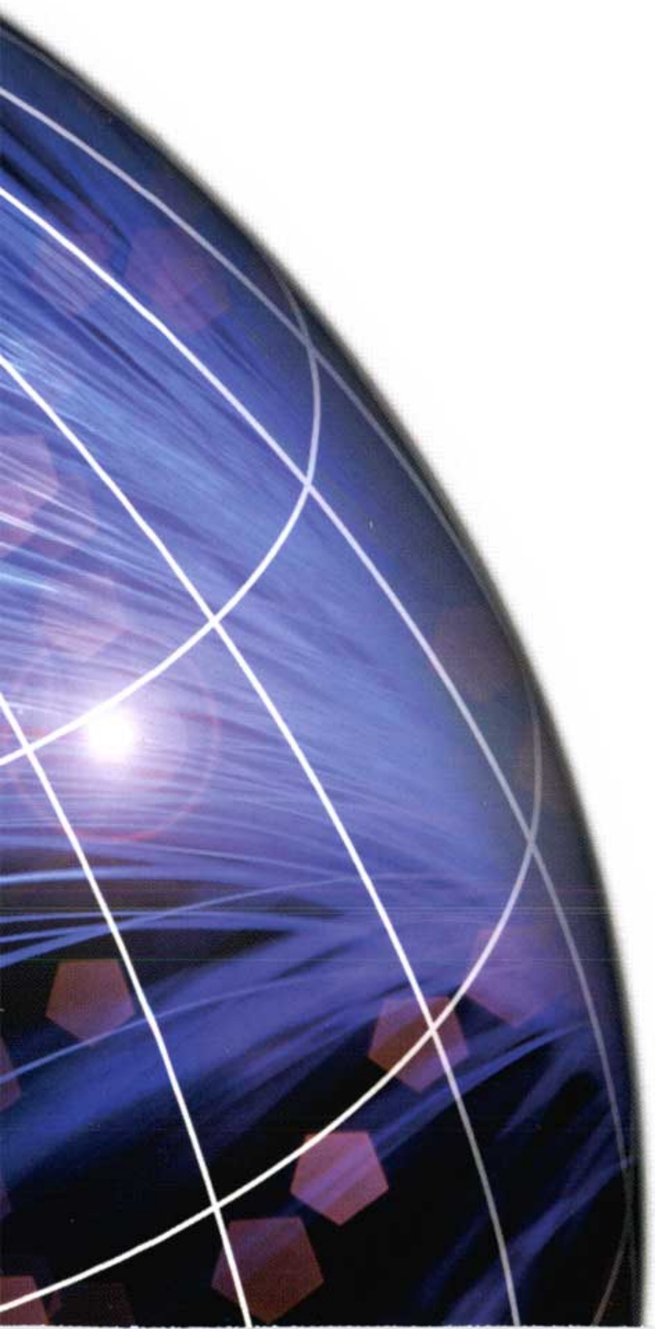

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