

CCAP CMTS™ Wiring Harnesses

- Quality construction using Belden dual and quad shield mini headend cable
- Compression connectors provide enhanced pull-out strength and prevent signal leakage
- Available in standard bundles of eight cables. Individual cables, components, tools and accessories also sold separately.
- Made in the USA

Preterminated Jumper Harnesses



F-connector



MCX connector

Description

Technetix Pre-terminated Wiring Harnesses are designed for fast and easy installation of a CCAP CMTS. Available in standard 10 Foot lengths, the wiring harnesses come in two variations, an upstream harness and a downstream harness. Both harness variants consists of a bundle of eight mini cable jumpers secured in a flexible outer jacket. For the upstream harness, each mini cable jumper is terminated with a male MCX connector on one end and male compression fit F-connector on the other end. The MCX connections connect directly to the downstream card. The male F-connector can be used to connect directly to the splitting and combining network. For the downstream, harness each jumper is terminated with a male compression fit F-connector on both ends. The male F-connectors can be used both for connecting directly to the downstream card and for connection to the splitting and combining network. Additionally, Technetix provides longer harnesses pre-terminated on one end with your choice of connector. The other end is left un-terminated, so cables can be cut to the correct size and terminated during installing by the on-site technician. Technetix also offers kits including connectors, a stripping tool, a compression tool, and tie wraps as a single orderable item. Harness components, tools and other accessories are sold separately.

Fully Terminated Harnesses

Upstream Harnesses

Technetix #	Mfg #	Description
802443	120BKASFCXF8D	JUMPER; CCAP 120IN DUAL SHIELD RG59 MINI BELDEN YR47193 BLACK 8 PACK MINI F MALE COMPRESSION TO MCX MALE COMPRESSION
802456	120ORASFCXF8D	JUMPER; CCAP 120IN DUAL SHIELD RG59 MINI BELDEN YR47193 ORANGE 8 PACK MINI F MALE COMPRESSION TO MCX MALE COMPRESSION
802468	120BKASFCXF8Q	JUMPER; CCAP 120IN QUAD SHIELD RG59 MINI BELDEN YR53058 BLACK 8 PACK MINI F MALE COMPRESSION TO MCX MALE COMPRESSION
802472	120ORASFCXF8Q	JUMPER; CCAP 120IN QUAD SHIELD RG59 MINI BELDEN YR53058 ORANGE 8 PACK MINI F MALE COMPRESSION TO MCX MALE COMPRESSION

Downstream Harnesses

Technetix #	Mfg #	Description
802444	120BKASFASF8D	JUMPER; CCAP 120IN DUAL SHIELD RG59 MINI BELDEN YR47193 BLACK 8 PACK MINI F MALE COMPRESSION TO MINI F MALE COMPRESSION
802457	120ORASFASF8D	JUMPER; CCAP 120IN DUAL SHIELD RG59 MINI BELDEN YR47193 ORANGE 8 PACK MINI F MALE COMPRESSION TO MINI F MALE COMPRESSION
802469	120BKASFASF8Q	JUMPER; CCAP 120IN QUAD SHIELD RG59 MINI BELDEN YR53058 BLACK 8 PACK MINI F MALE COMPRESSION TO MINI F MALE COMPRESSION
802473	120ORASFASF8Q	JUMPER; CCAP 120IN QUAD SHIELD RG59 MINI BELDEN YR53058 ORANGE 8 PACK MINI F MALE COMPRESSION TO MINI F MALE COMPRESSION

Semi-Custom Preterminated Harnesses and Kits

Upstream Harnesses

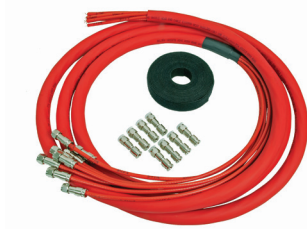
Technetix #	Mfg #	Description
802446	180BKMCXFBLT8D	JUMPER; CCAP 180IN DUAL SHIELD RG59 MINI BELDEN YR47193 BLACK 8 PACK MCX MALE COMPRESSION TO OPEN END
802459	180ORMCXFBLT8D	JUMPER; CCAP 180IN DUAL SHIELD RG59 MINI BELDEN YR47193 ORANGE 8 PACK MCX MALE COMPRESSION TO OPEN END
802471	180BKMCXFBLT8Q	JUMPER; CCAP 180IN QUAD SHIELD RG59 MINI BELDEN YR53058 BLACK 8 PACK MCX MALE COMPRESSION TO OPEN END
802475	180ORMCXFBLT8Q	JUMPER; CCAP 180IN QUAD SHIELD RG59 MINI BELDEN YR53058 ORANGE 8 PACK MCX MALE COMPRESSION TO OPEN END
802555	180RDMCXFBLT8Q	JUMPER; CCAP 180IN QUAD SHIELD RG59 MINI BELDEN YR53058 RED 8 PACK MCX MALE COMPRESSION TO OPEN END

Downstream Harnesses

Technetix #	Mfg #	Description
802445	180BKASFBLT8D	JUMPER; CCAP 180IN DUAL SHIELD RG59 MINI BELDEN YR47193 BLACK 8 PACK MINI F MALE COMPRESSION TO OPEN END
802458	180ORASFBLT8D	JUMPER; CCAP 180IN DUAL SHIELD RG59 MINI BELDEN YR47193 ORANGE 8 PACK MINI F MALE COMPRESSION TO OPEN END
802470	180BKASFBLT8Q	JUMPER; CCAP 180IN QUAD SHIELD RG59 MINI BELDEN YR53058 BLACK 8 PACK MINI F MALE COMPRESSION TO OPEN END
802474	180ORASFBLT8Q	JUMPER; CCAP 180IN QUAD SHIELD RG59 MINI BELDEN YR53058 ORANGE 8 PACK MINI F MALE COMPRESSION TO OPEN END
803706	180RDASFBLT8Q	JUMPER; CCAP 180IN QUAD SHIELD RG59 MINI BELDEN YR53058 RED 8 PACK MINI F MALE COMPRESSION TO OPEN END

Technetix also provides longer harnesses preterminated with MCX or F-connectors on one end, so the other end can be cut to the required length and terminated by the technician performing the installation. Harnesses include F-connectors for terminating the other end and velcro straps for securely attaching to rack.

Tool kits include an 8 pack round cable prep tool, mini cable stripper, compression tool, and Torque Removal Tool.



DCAM Kit



UCAM Kit



Tool Kit

Tool Kit	Description
704397K	TOOL KIT: INCLUDES ONE ROUND CABLE STRIPPER FOR 8 PACK OUTER JACKET, ONE CABLE PREP TOOL FOR 22-24 AWG MINI HE CABLE, ONE COMPRESSION TOOL FOR F CONNECTORS, AND ONE REMOVAL TORQUE TOOL 20 IN/LB.

DCAM Kit	Description
802470K	DCAM INSTALLATION KIT: INCLUDES ONE 15' BLACK 8 PACK QUAD SHIELDED HARNESS TERMINATED WITH MINI F CONNECTOR ON ONE END AND UNTERMINATED ON THE OTHER, ONE BAG OF 10 EA MINI F CONNECTORS, AND ONE 5 YD SPOOL OF BLACK 3/4" VELCRO
802445K	DCAM INSTALLATION KIT: INCLUDES ONE 15' BLACK 8 PACK DUAL SHIELDED HARNESS TERMINATED WITH MINI F CONNECTOR ON ONE END AND UNTERMINATED ON THE OTHER, ONE BAG OF 10 EA MINI F CONNECTORS, AND ONE 5 YD SPOOL OF BLACK 3/4" VELCRO
802474K	DCAM INSTALLATION KIT: INCLUDES ONE 15' ORANGE 8 PACK QUAD SHIELDED HARNESS TERMINATED WITH MINI F CONNECTOR ON ONE END AND UNTERMINATED ON THE OTHER, ONE BAG OF 10 EA MINI F CONNECTORS, AND ONE 5 YD SPOOL OF BLACK 3/4" VELCRO
802458K	DCAM INSTALLATION KIT: INCLUDES ONE 15' ORANGE 8 PACK DUAL SHIELDED HARNESS TERMINATED WITH MINI F CONNECTOR ON ONE END AND UNTERMINATED ON THE OTHER, ONE BAG OF 10 EA MINI F CONNECTORS, AND ONE 5 YD SPOOL OF BLACK 3/4" VELCRO
803706K	DCAM INSTALLATION KIT: INCLUDES ONE 15' RED 8 PACK QUAD SHIELDED HARNESS TERMINATED WITH MINI F CONNECTOR ON ONE END AND UNTERMINATED ON THE OTHER, ONE BAG OF 10 EA MINI F CONNECTORS, AND ONE 5 YD SPOOL OF BLACK 3/4" VELCRO

UCAM Kit	Description
802471K	UCAM INSTALLATION KIT: INCLUDES THREE 15' BLACK 8 PACK QUAD SHIELDED HARNESS TERMINATED WITH MINI MCX CONNECTOR ON ONE END AND UNTERMINATED ON THE OTHER, ONE BAG OF 25 EA MINI F CONNECTORS, AND THREE 5 YD SPOOL OF BLACK 3/4" VELCRO
802446K	UCAM INSTALLATION KIT: INCLUDES THREE 15' BLACK 8 PACK DUAL SHIELDED HARNESS TERMINATED WITH MINI MCX CONNECTOR ON ONE END AND UNTERMINATED ON THE OTHER, ONE BAG OF 25 EA MINI F CONNECTORS, AND THREE 5 YD SPOOL OF BLACK 3/4" VELCRO
802475K	UCAM INSTALLATION KIT: INCLUDES THREE 15' ORANGE 8 PACK QUAD SHIELDED HARNESS TERMINATED WITH MINI MCX CONNECTOR ON ONE END AND UNTERMINATED ON THE OTHER, ONE BAG OF 25 EA MINI F CONNECTORS, AND THREE 5 YD SPOOL OF BLACK 3/4" VELCRO
802459K	UCAM INSTALLATION KIT: INCLUDES THREE 15' ORANGE 8 PACK DUAL SHIELDED HARNESS TERMINATED WITH MINI MCX CONNECTOR ON ONE END AND UNTERMINATED ON THE OTHER, ONE BAG OF 25 EA MINI F CONNECTORS, AND THREE 5 YD SPOOL OF BLACK 3/4" VELCRO
802555K	UCAM INSTALLATION KIT: INCLUDES THREE 15' RED 8 PACK QUAD SHIELDED HARNESS TERMINATED WITH MINI MCX CONNECTOR ON ONE END AND UNTERMINATED ON THE OTHER, ONE BAG OF 25 EA MINI F CONNECTORS, AND THREE 5 YD SPOOL OF BLACK 3/4" VELCRO

Accessories

		Tools
704397	RCS-114	STRIPPER ROUND CABLE STIPPER FOR DIAMETER CABLE 0.178 TO 1.14 INCH P/N 37140 UTILITY TOOL
717184	CB231	BLADE REPLACEMENT BLADE FOR RCS-114 OR RCS-158 STRIPPER
802422	LDT MINI	TRIMMER; MINI 59 HEC 22 TO 24 AWG 38833
802423	RCMINI-250	TRIMMER; REPLACEMENT CARTRIDGE FOR LDT MINI 59 HEC 22 TO 24 AWG 38587
802421	MP-NBCT	TOOL; COMPRESSION TOOL FOR F BNC AND MCX CONNECTORS SUITABLE FOR MOST MANUFACTURERS CONNECTORS
802453	RTF716-2.5L	TOOL; REMOVAL TORQUE 20 IN/LBS TOOL FOR F-CONNECTORS 7/16 INCH HEAD & 8 INCH SHAFT LENGTH/TOOL LENGTH 11 3/4 INCHES
704266	CAT-UNIVERSAL	TOOL; COMPRESSION ASSEMBLY UNIVERSAL PLUNGER TIP FOR DIGICON-S GILBERT-ULTRASEAL PPC-EX XL T&B-SNAP-N-SEAL PCT-DRS CONNECTORS

		Connectors
802369	MCXFPSLC	CONNECTOR; COMPRESSION MCX MALE NON BLIND ENTRY USE WITH TOOL MPNBCT
802466	MCXFPSLCQ	CONNECTOR; COMPRESSION QUAD SHIELD MCX MALE NON BLIND ENTRY USE WITH TOOL MPNBCT
786072	ASFPSLC2	CONNECTORS MINI HEC COMPRESSION CONNECTORS 100 PER BAG
791319	ASFPSLCQ	CONNECTOR MINI HEC QUAD CONNECTORS
802439	PP24RF2RUNUM	PANEL; PATCH ALUMINUM BLACK POWDER COAT DRF81H INSTALLED 2RU 24 PORTS REVERSIBLE SILK SCREEN PORT NUMBERED 0-23 FOR SIDE A UPSTREAM NUMBERED 0-7 X3 FOR SIDE B
802452	GT.75X1800	VELCRO; 3/4 INCH WIDE CUSTOM LENGTH VELCRO STRAPS BLACK 5 YDS PER ROLL

Specifications for Quad Shielded Mini Cable

Electrical Characteristics:

Impedance(*):	75+/-1.5 ohms
Nom. Inductance:	.106 micro-H/ft
Nom. Capacitance (Conductor to Shield):	16.3 pF/ft.
Nom. Velocity of Propagation:	83%
Nom. Delay:	1.22 ns/ft.
Nom. Conductor Resistance at 20 deg. C:	20.1 ohms/1000 ft.
Nom. Shield DC Resistance at 20 deg. C:	3.5 ohms/1000 ft.
Return loss(**):	23dB min., 5-850 MHz 21dB min., 851-3000 MHz
Max. Operating Voltage:	300 Vrms (UL)

Nom. Attenuation:

MHz	dB/100 ft.	MHz	dB/100 ft.
1	.39	180	4.38
3.58	.78	270	5.40
5	.92	360	6.20
7	1.08	540	7.70
10	1.20	720	9.47
67.5	2.83	750	9.59
71.5	3.06	1000	10.5
88.5	3.16	1500	13.0
100	3.33	2000	15.1
135	3.81	2250	16.0
143	3.92	3000	18.5

Physical Characteristics:

Temperature Rating:	-20 to +75 deg. C
Min. Bend Radius:	1.5"
Max. Pulling Tension:	36 lbs.
Nom. Weight/1000 ft:	30 lbs.
Conductor Material and Diameter:	#23 Solid Bare Copper, .0228" Nom.
Dielectric Material and Diameter:	Gas Injected Foam High Density PE, .102" Nom.
Shield Type and Percentage Coverage:	1st - Duobond® Tape, 100% 2nd - Tinned Copper Braid, 95% 3rd - Duofoil® Tape, 100% 4th - Tinned Copper Braid, 90%
Jacket Material and Diameter:	PVC, .185" Nom.
Jacket colors:	Brown, Red, Orange, Yellow, Green, Blue, Violet, Gray, White, Black
Applicable Specifications:	UL/NEC: CMR CEC C(UL): CMR
Flame Resistance:	UL: UL-1666 Riser CSA: FT-4
Use:	Suitable for Indoor use only.

* Tested in accordance with ASTM D-4566 paragraph 43.2, option 2 using a 75 ohm fixed bridge and termination.

** Tested in accordance with ASTM D-4566 paragraph 45.3, using a 75 ohm fixed bridge and termination.

Specifications for Dual Shielded Mini Cable

Electrical Characteristics:

Impedance(*):	75+/-1.5 ohms
Nom. Inductance:	.106 micro-H/ft
Nom. Capacitance (Conductor to Shield):	16.3 pF/ft.
Nom. Velocity of Propagation:	83%
Nom. Delay:	1.22 ns/ft.
Nom. Conductor Resistance at 20 deg. C:	20.1 ohms/1000 ft.
Nom. Shield DC Resistance at 20 deg. C:	7.6 ohms/1000 ft.
Return loss(**):	23dB min., 5-1600 MHz 21dB min., 1600-4500 MHz
Max. Operating Voltage:	300 Vrms (UL)

Nom. Attenuation:

MHz	dB/100 ft.	MHz	dB/100 ft.
1	.39	180	4.38
3.58	.78	270	5.40
5	.92	360	6.20
7	1.08	540	7.70
10	1.20	720	9.47
67.5	2.83	750	9.59
71.5	3.06	1000	10.5
88.5	3.16	1500	13.0
100	3.33	2000	15.1
135	3.81	2250	16.0
143	3.92	3000	18.5
		4500	22.8

Physical Characteristics:

Temperature Rating:	-20 to +75 deg. C
Nom. Bulk Cable Weight:	18 lbs/1000 ft.
Min. Bend Radius (install):	1.5"
Max. Recommended Pulling Tension:	36 lbs.
Conductor Material:	23 AWG Solid Bare Copper
Nom. Conductor Diameter:	.0228"
Dielectric Material and Diameter:	Gas Injected Foam High Density PE
Nom. Dielectric Diameter:	.102"
Shield Type and Percentage Coverage:	1st - Duobond® Tape, 100% 2nd - Tinned Copper Braid, 95%
Jacket Material:	PVC
Nom. Jacket Diameter:	.159"
NEC/(UL) Specification:	CMR
CEC/C(UL) Specification:	CMR
CSA Specification:	FT-4
UL Flame Test:	UL 1666 Vertical Riser
Use:	Suitable for Indoor use only.
RoHS Compliant:	Yes

* Tested in accordance with ASTM D-4566-05 paragraph 48.2 option 2 using a 75-ohm fixed bridge and termination.

** Tested in accordance with ASTM D-4566-05 paragraph 50.3 using a 75-ohm fixed bridge and termination.