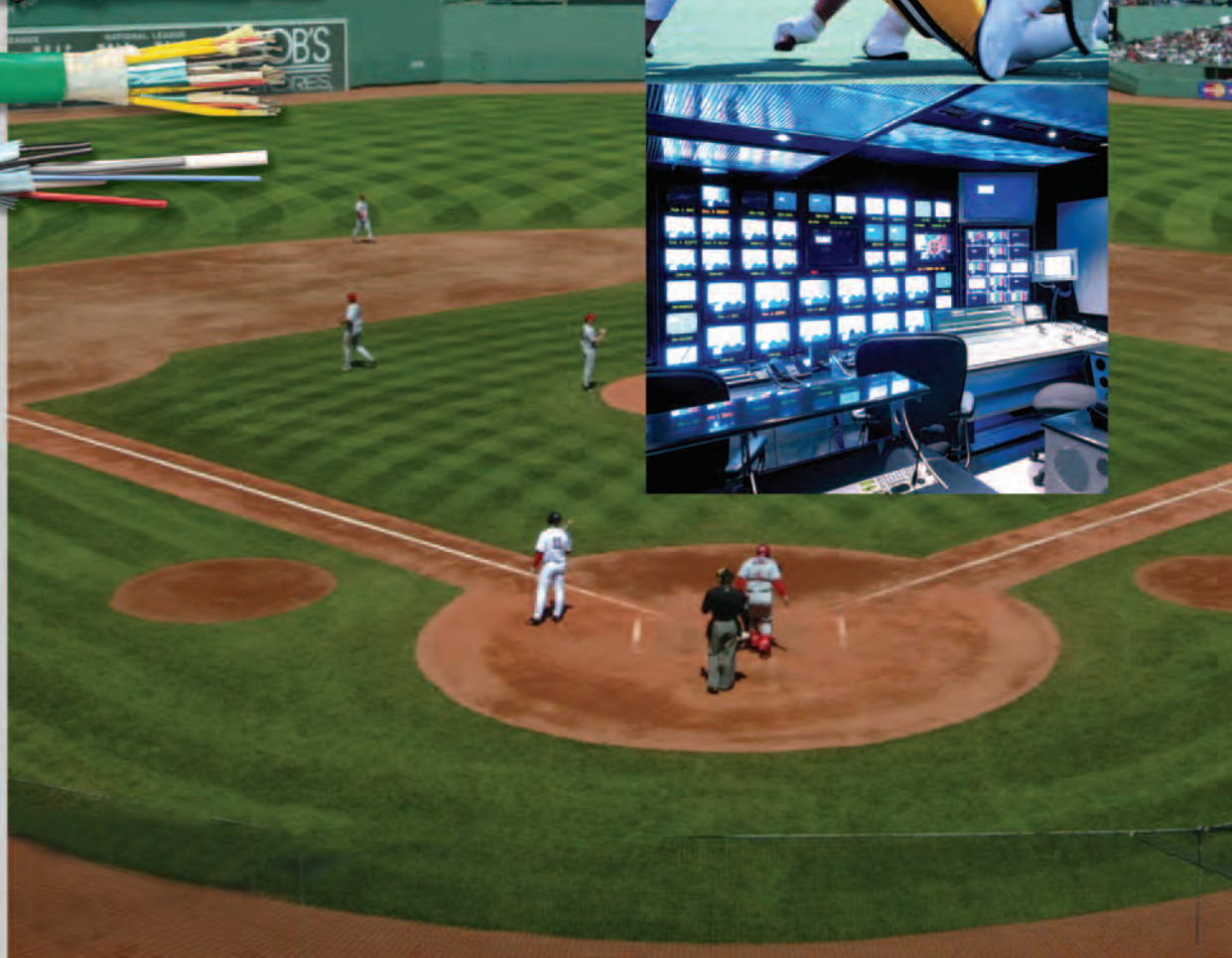
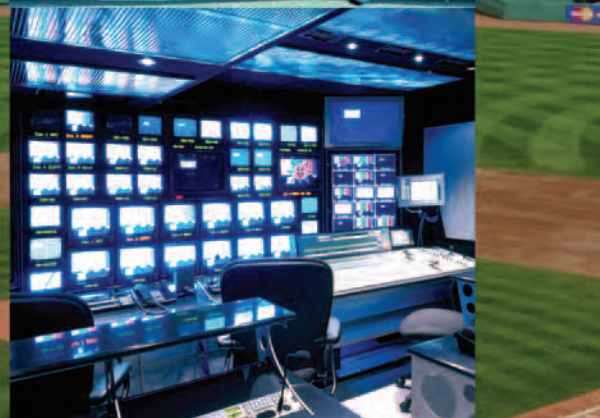
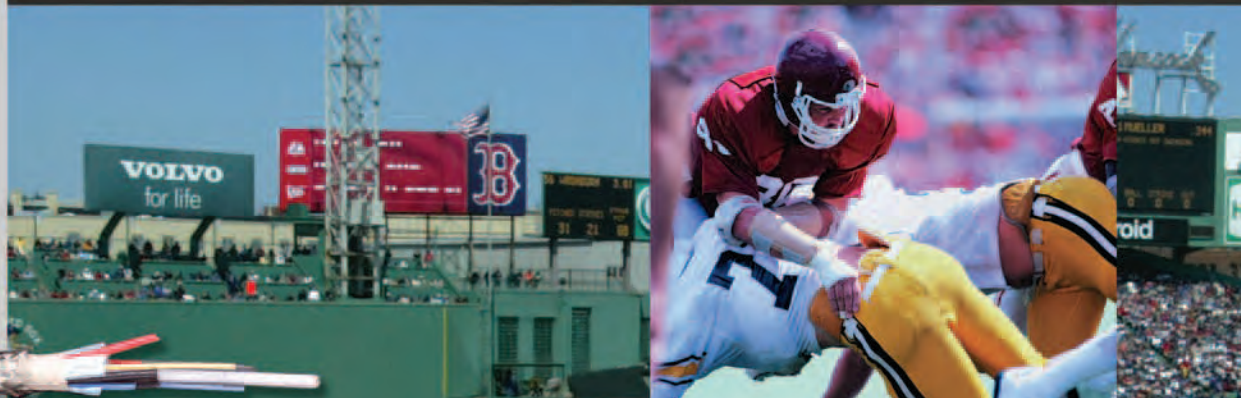


MOHAWK

CAMERA CABLES, ASSEMBLIES & CONNECTORS



Fiber Optic Camera Cable Assemblies



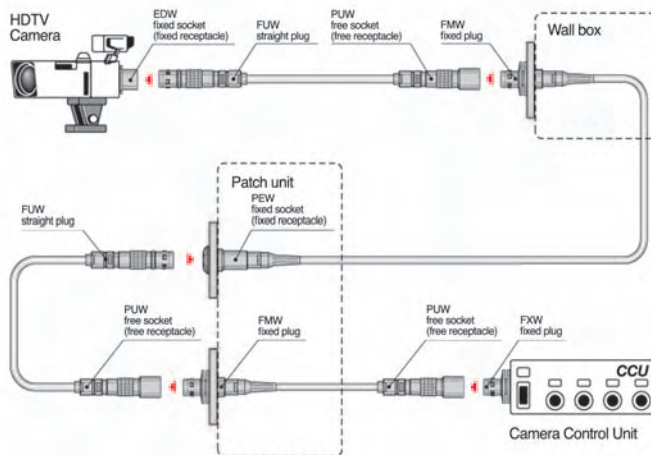
Mohawk offers broadcasters a complete end to end cabling solution for their HDTV infrastructure upgrades. Utilizing the highest quality Corning® Single-Mode optical fibers to transmit the uncompressed 1.5 gigabits per second, coupled with years of termination expertise, ensures optimal performance and repeatability.

Fiber Optic Connectors for HDTV Cameras

Mohawk offers a complete line of Hybrid Optical Fiber camera cables which comply to the SMPTE 311M specification.

Factory polished and terminated with over 12 years of experience terminating LEMO 304M connectors ensures superior performance and durability. These assemblies provide unlimited bandwidth, exceptional digital distance transmission and noise immunity in any HDTV or SD camera system. Standard on every assembly is a high performance LEMO solid stainless steel shell and full-length rubber protective boot with end cap, ensuring that cable and connector gets the “shot” done.

Studio Configuration



- LEMO Push-Pull self-latching system for quick and easy mating
- Meets SMPTE 304M-1998
- Optimum sealing (IP 68) meeting the requirements of the IEC 60529 standard, for safe outdoor applications
- Easily cleaned fiber optic contacts thanks to removable alignment sleeve
- Compact design with 2 fiber optic contacts, 2 power and 2 signal electrical contacts
- Return Loss (upc) > 45 dB
- Rugged stainless steel outer shell
- Contact Mohawk for other LEMO broadcast connectors and preterminated options



Breakout Jumpers & Patch Panels

Mohawk provides an easy solution to expensive on-site LEMO terminations. Utilizing custom made LEMO to industry standard fiber connector types, (ST, FC, SC) and multi-pin crimp on copper connectors, customers and integrators can quickly and inexpensively re-cable their studios, mobile trucks or stadiums with ease.

Fiber Optic Camera Cables

Meets SMPTE Standard for Hybrid Electrical and Fiber Optical Camera Cable

Product Description – These special fiber/copper composite cables consist of two tight buffered, Single-Mode optical fibers, four 20 AWG (19x32) and two 24 AWG (7x32) tinned copper conductors, insulated with PE. These are cabled around a

jacketed stranded steel strength element, with an overall tinned copper braid, 80% min. coverage, and a black Dura-Flex jacket. These cables are compliant with SMPTE 311M and UL recognized type AWM, 300 volt rating.

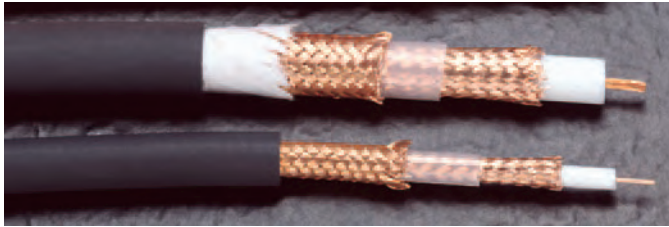
	Mohawk Part Number	Nominal OD		Weight		Min. Bend Radius		Max Load (Installation)		Optical Attenuation	Jacket
		inch	mm	lbs/M'	kg/km	inch	cm	lbs	Newtons	dB/km*	
Studio Light Duty 	M96040	.362	9.2	84	125	2.5	6.0	160	710	0.80 Max	Thermo-Plastic Elastomer
Harsh Environment Outdoor Cable 	M96818	.362	9.2	82	122	2.5	6.0	160	710	0.80 Max	Polyurethane
Riser rated 9.2mm & Breakout Style 	M96921	.362	9.2	89	132	2.5	6.0	160	710	0.80 Max	UL type CMR-OF Listing
	M96825	.406	10.3	110	163	3.25	8.3	160	710	0.80 Max	
12 mm Double Jkt. 	M97938	.472	12	110	163	2.5	8.3	160	710	0.80 Max	Thermo-Plastic Elastomer
Plenum rated & Breakout Style 	M96920	.294	7.47	69	102	2.5	6.0	160	710	0.80 Max	PVDF Copolymer UL type CMP-OF Listing
	M92924	.256	6.50	61	91	2.5	6.0	160	710	0.80 Max	
Stedicam / Patch† 	M97176	.166	4.2	18	27	1.0	4.3	80	355	0.80 Max	PVC
Stadium† 	M97673	.525	13.34	135	201	3.5	8.9	160	710	0.80 Max	PVC UL type CMR-OF

*At 1310 nm †Contact Mohawk for fiber count and copper size/count. Not 311M Compliant

Specialty riser and plenum rated versions available for permanent installations.

For use with SMPTE standard 304M video connectors, manufactured by LEMO.

Video Triaxial Cables



For use to interconnect video cameras to related equipment. Triaxial cables are constructed with a solid or stranded center conductor and two isolated shields. The center conductor and the inner isolated shield make up a coaxial cable configuration that functions to carry the video signal. The outer isolated shield can be used for several separate signals by means of multiplexing that may include teleprompter feeds and control for automation such as robotics.

We offer both RG/U types of triaxial cable. The standard sizes include RG59/U and RG11/U types. The RG59/U is the smaller of the two and is generally more flexible. RG11/U has lower attenuation values that will allow longer cable runs. Both cables may be used with various OEM's Triax Adapter Systems for SD/HD transmission. The Mohawk, Dura-Flex jacket was developed to enhance flexibility and provide excellent protection through a wide range of temperatures.



1/2" & 3/8" Triaxial Cable Assemblies

All assemblies are available in custom lengths. We offer industry standard Kings Tri-Lock® connectors as well as Fischer and LEMO triax connectors.

RG/U Type Video Triaxial Cables

Mohawk Part Number	AWG (stranding) Nom DCR	Dielectric Type Nominal OD Inch mm	Shield Type	Nominal OD		Nom Imp ohms	Nominal Capacitance		Nom Attenuation			Weight		Suggested Connector & Tooling
				inch	mm		pF/ft	pF/m	freq MHz	dB/ 100 ft	dB/ 100m	lbs/ M'	kg/ km	
M80248 UL AWM/10296 3/8" Triax RG-59/U Type	20 (Solid) .032 Bare Copper 10.1 Ω/M' 33.1 Ω/km	Cellular Polyethylene	2 BC - Inner 2.5 Ω/M' 8.3 Ω/km Outer 1.6 Ω/M' 5.3 Ω/km 95% Shield Coverage	.355	9.02	75	16.2	53.2	1	.3	.98	85	126	<i>Connector:</i> Kings Female 7703-2 Kings Male 7705-2 <i>Tooling:</i> Kings KTH-1000 Tool Kings KTH-2002 Die
									10	.8	2.62			
									71.5	2.2	7.22			
									135	3.0	9.84			
									270	4.2	13.78			
									360	4.8	15.75			
									540	5.9	19.36			
									720	6.9	22.64			
									1000	8.8	28.87			
									M52479 UL AWM/10296 1/2" Triax RG-11/U Type	14 (19x27) .064 Bare Copper 3.1 Ω/M' 10.2 Ω/km	Cellular Polyethylene			
10	.50	1.64												
71.5	1.20	3.94												
135	1.80	5.91												
270	2.60	8.53												
360	3.10	10.17												
540	3.90	12.80												
720	4.70	15.42												
1000	5.70	18.70												

The above cables are available as assemblies using Kings, Fischer and LEMO Connectors. Kings are also available with protective full-body boots.

Water Resistant video Triaxial Cables and Triax Rubber Boot

Product Description – This cable is a broadcast quality triaxial cable which is specially manufactured to provide moisture protection. This cable has a dual braid shield configuration separated by an inner polyolefin belt. An overall jacket of Dura-Flex provides excellent physical and mechanical properties. Offered in both 3/8" and 1/2" size.



These special triax boots are available on our assemblies to protect the connectors against handling and weather.



Multicore Assemblies



Types of assemblies offered:

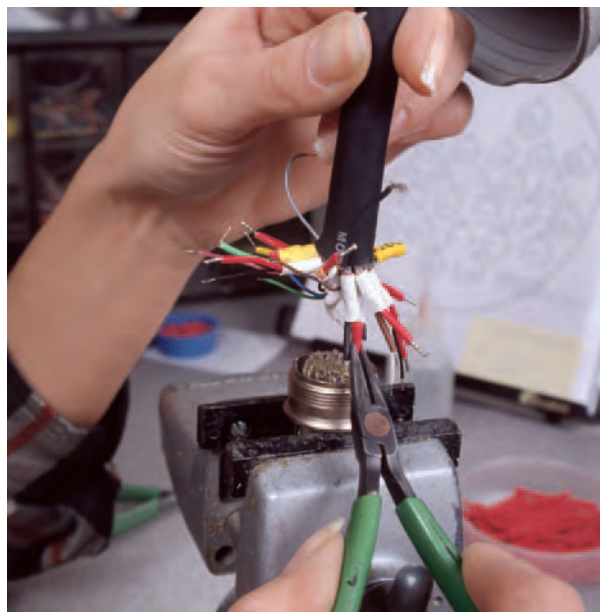
Manufacturer	Manufacturer's Part #	Description
Sony	CCZAD	26 pin Digital
Sony	CCZA	26 pin Analog
Sony	CCA7	10 pin
Sony	CCA5	8 pin
Sony	CCQ-AM	14 pin to 14 pin
Sony	VDC-C	12 pin
Ikegami	MCC	26 pin
Ikegami	CP	8 pin
Hitachi	KAB	26 pin
Hitachi	KR	28 pin
Hitachi	CR	41 pin
JVC	VCP	26 pin
Panasonic	WVCA26U	26 pin
Panasonic	32A	32 pin

Custom Lengths Available

Mohawk is an approved source of camera cable assemblies for the major manufacturers of professional camera systems. We use only the highest quality components from the tightly specified coaxial and interconnect transmission lines that make up our UL listed cable to the highest quality connectors.

Repair Services

Mohawk offers quality and innovation in our repair service facility. We can repair many types of cables including hybrid fiber optic assemblies and the various multicore assemblies, no matter who the manufacturer. We can diagnose the problem and offer a solution at a competitive cost.



Fiber Optic Tactical Cables



Recommended Applications

- ENG vehicles
- Outdoor events
- Re-deployable communications
- Digital camera transmission

Product Features

- Rugged jacket
- Durable design for repeated handling
- Designed to military standards
- Superior level of crush resistance

Mechanical & Environmental Characteristics

- Crush Resistance (EIA-455-41) 440 N/cm mil. requirement
- Impact Resistance (EIA-455-25) 200 Impacts mil. requirement w/2.2 N-m
- Flexure (EIA-455-104) 2000 Cycles min. mil. requirement
- Min. Bend Radius Long Term – No Load 8X Cable diameter
- Min. Bend Radius Short Term – Load 15X Cable diameter
- Short Term Loading (EIA-455-33) 330 lbs (1468N)
- Operating Temp. (EIA-455-3) -55°C to +85°C
- Storage Temp. (EIA-455-3) -70°C to +85°C

Mohawk Part Number	Fiber Count	Nominal OD		Weight		Min. Bend Radius		Long Term		Max Load Installation	
		inch	mm	lbs/M'	kg/km	Short Term inch	cm	inch	cm	lbs	Newtons

Single-Mode

M96566	2	.210	5.3	19	28	3.2	8.3	1.7	4.3	330	1468
M96639	4	.225	5.7	19	28	3.4	8.6	1.8	4.6	330	1468
M96567	6	.240	6.1	24	36	3.6	9.1	1.9	4.8	330	1468
M96568	8	.250	6.3	26	39	3.8	9.7	2.5	6.4	330	1468
M96569	10	.265	6.7	28	42	4.0	10.2	2.7	6.9	330	1468
M96570	12	.255	6.5	24	36	3.8	9.7	2.0	5.1	330	1468

Multimode (62.5/125)

M96566	2	.210	5.3	19	28	3.2	8.3	1.7	4.3	330	1468
M96639	4	.225	5.7	19	28	3.4	8.6	1.8	4.6	330	1468
M96567	6	.240	6.1	24	36	3.6	9.1	1.9	4.8	330	1468
M96568	8	.250	6.3	26	39	3.8	9.7	2.5	6.4	330	1468
M96569	10	.265	6.7	28	42	4.0	10.2	2.7	6.9	330	1468
M96570	12	.255	6.5	24	36	3.8	9.7	2.0	5.1	330	1468

Multimode (50/125) optical fiber also available – contact factory.

Optical Characteristics

Glass Type	Wavelength nm	Attenuation dB/km		Bandwidth MHz-km
Single-Mode	1310	0.50 Typical	0.80 Max	–
	1550	0.40 Typical	0.50 Max	–
Multimode 62.5/125	850	2.70 Typical	3.50 Max	160 Min
	1300	0.75 Typical	1.25 Max	500 Min
Multimode 50/125	850	2.70 Typical	3.50 Max	400 Min
	1300	0.75 Typical	1.25 Max	400 Min

MOHAWK
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Mohawk's three-circuit 'Stadium' fiber optic cable is installed at Fenway Park. Cover Photographs are courtesy of the Boston Red Sox and Venue Services Group.