



Digital Triax-to-Fiber Camera

Extend Sony HXC & HSC digital triax cameras on standard optical fiber

The Cobra 2DT permits use of fiber cable to extend the link between the industry's new high definition "digital triax" cameras and their Camera Control Units (CCU's). It is compatible with the industry's first, and most popular digital triax camera chains: the Sony HXC100 and HSC300.

Simple to set up and use

The Cobra 2DT system uses a pair of fiber optic transceivers that convert the camera and CCU's digital RF signals seamlessly to optical signals, transmitting them on a fiber cable, using one or two strands to deliver all the bidirectional video, audio, intercom and camera control signals between your camera and base station. Simple, easy-to-read signal strength meters provide realtime status at each end of the link.

10x the Distance, 1/10th the Weight

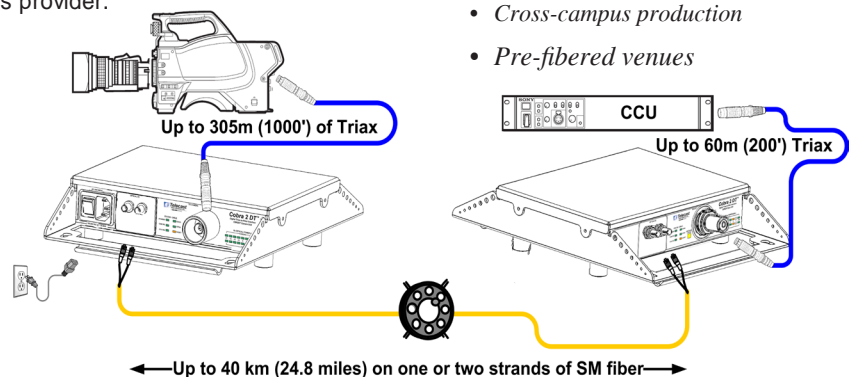
Use "dark" infrastructure fiber or durable, lightweight "tactical" fiber optic cable to extend the chain over 40 kilometers, with no repeaters. With Tac-2 fiber cable at 16 lbs per 1,000 feet, your setup and strike go faster and easier. Fiber also eliminates all electromagnetic and radio frequency interference, as well as ground faults and hum. The transceivers can be equipped with most standard fiber optic connectors, including, ST, LC, MX, OpticalCON, or SMPTE 304M.

Mussel Shell or Rack Mount

The Cobra 2DT transceivers are available in compact, robust, and weather resistant "Mussel Shell" style enclosures. The Camera Unit runs off of 100-240VAC, and powers your camera by reinserting power up to 300 meters (1000') of triax cable, depending on camera/CCU model.. The Base Unit is powered from the camera chain's CCU. One or two of the base units can be configured into a single 1RU rack-mountable enclosure.

Control Cross-Town or Cross-Campus Cameras

Share production facilities among several city-wide or facility-wide venues. Use fiber optic backbone cables in your building or campus, between your stadium and arena, or use metropolitan "dark fiber" from your carrier or access provider.



Features

- Extends the reach of Sony's High Definition Digital Triax Camera Chains
 - HXC100
 - HSC300
- Complete camera control
- Reach to 40 kilometers with no repeaters
- All 2-way triax signals
 - High-Def Digital Video
 - Return video & genlock
 - Audio, intercom & IFB
 - Control data & tally
- Portable, lightweight units
- Integrated Optical Power measurement tools (bi-di)
- Eliminates all EMF and RF interference, ground faults, hum
- Provides camera power with advanced cable-check interlock, insuring user safety.
- Drives long triax runs
- Fast, easy setup/teardown
- Uses one or two strands of fiber
- Multiplex up to eight camera chains onto a single fiber strand using Telecast TelePort system

Applications

- Sports teleproduction
 - Golf, skiing, racing, etc.
- Remote Camera Links
- Metropolitan production
- Cross-campus production
- Pre-fibered venues

Ordering Information

Configuration Table

| | | | | | | |
|--------|-------|----------------|---------------------------------|------------------------------------|-----------------------------|---|
| CBR2 | S1 | CA | MS | 1 | S2 | F |
| Series | Model | Camera or CCU? | Enclosure | # of Units* | Fiber Connector | Triax Connector |
| CBR2 | S1 | CA BS | Mini Mussel MS Rack RM | Mini Mussel 1 Rack 1 2 | S2 S1 L2 OC2 MX | F-Fischer KG-Kings DH-Damar-Hagen |

| Series | CBR2 | Cobra2D Triax-to-Fiber |
|--------------------|------|--|
| Camera Make | S1 | Sony HSC/HXC |
| Camera or CCU End? | CA | Camera End |
| | BS | CCU end |
| Enclosure | MS | Mussel Shell |
| | RM | 1 RU rack mount |
| Units | 1 | single |
| | 2 | Dual CCU End (Rack Mount only) (2 in BS-RM only) |
| Fiber Conns | S2 | 2 ST connectors |
| | S1 | 1 ST connector (WDM) |
| | L2 | 2 LC connectors |
| | OC2 | OpticalCON connector (dry) |
| | MX | MX connector |
| Triax Conns | 304 | SMPTE 304M connector (dry) |
| | F | Fischer |
| | KG | Kings |
| | DH | Damar-Hagen |

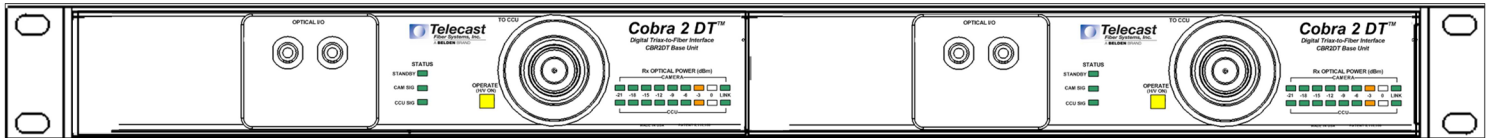
Typical Models

Model Number

Model Description

| | |
|----------------------|---|
| CBR2-S1-CA-MS-1-S2-F | Cobra2D, Model S1 (Sony HSC/HXC chains), Camera End, single Mussel Shell enc., fiber: 2 ST connectors, Fischer triax con. |
| CBR2-S1-BS-MS-1-S2-F | Cobra2D, Model S1 (Sony HSC/HXC chains), CCU end, single Mussel Shell enc., fiber: 2 ST connectors, Fischer triax con. |
| CBR2-S1-BS-RM-1-S2-F | Cobra2D, Model S1 (Sony HSC/HXC chains), CCU end, single 1 RU rack mount enc., fiber: 2 ST connectors, Fischer triax con. |
| CBR2-S1-BS-RM-2-S2-F | Cobra2D, Model S1 (Sony HSC/HXC chains), CCU end, dual CCU 1 RU rack mount enc., fiber: 2 ST connectors, Fischer triax con. |

(change "-F" to "-K" for Kings triax connectors)



CCU transceiver in dual rack-mount enclosure

Specifications

Transmission

| | |
|---|--------------------|
| Data Rate..... | 2.7Gb/s |
| Optical Source..... | Laser Diode |
| Fiber Type..... | Single Mode |
| Optical Output Power (typical)..... | -7 dBm/0dBm |
| Optical Sensitivity (typical)..... | >-20 dBm |
| Link Margin/ Distance (typical)..... | 20 dB/40 km (typ.) |
| Wavelength (from camera/to camera) 1-fiber version..... | 1300/1550 nm |
| Input/Output Impedance..... | 75 Ω |
| Available in 1-fiber or 2-fiber versions | |

Mechanical/Environmental

| | |
|--|------------------|
| Throw Down Mussel Shall: t(LxWxH)..... | 12" x 9" x 2.5" |
| 1 RU Base Unit (single or double (LxWxH))..... | 12" x 18" x 1.5" |
| Weight, Camera End..... | 4.6 lbs |
| Weight, Base Station End (throwdown)..... | 3.6 lbs |
| Weight Base Station End (1RU unit): single/double..... | 4 lbs/7 lbs |

Connectors:

| | |
|--|--|
| Triaxial connector..... | Kings Tri-Loc, Fischer, Damar Hagen |
| Optical..... | ST Single Mode (standard), ST(Single), ST(Dual), 304M(Dry), Neutrik OpticalCON, MX, LC |
| Input Voltage..... | 100 VAC to 240 VAC |
| Output Voltage to Camera..... | DC |
| Standby..... | 36VDC +/- 10% |
| Operate..... | 180VDC +/- 10% |
| Triaxial range, Cobra to Camera, typical, CCU dependant..... | 300 meters |
| Power Consumption : | |
| Base Unit..... | <10 Watts |
| Camera Unit (excluding camera power)..... | <30 Watts |
| Temperature Range, operating..... | -40 C to +55 C |
| Humidity Range..... | 0 to 95% non-condensing |



Represented by:

324 Clark Street; Worcester, MA 01606 USA
 Phone: (508)754-4858 FAX: (508)752-1520
 telecast-sales@belden.com
 www.telecast-fiber.com