

# Cobra™ 2DT

Fiber optic camera interface for digital triax camera systems



## DESCRIPTION

The Cobra™ 2DT system allows the extension of Sony's new HD digital triax camera chains, such as the HXC-100K and HSC-300K, over durable, lightweight tactical fiber or over an installed fiber optic infrastructure. Cameras can now be separated from their CCUs and be located around a building, across a campus, or even 20 km across town via metropolitan "dark fiber".

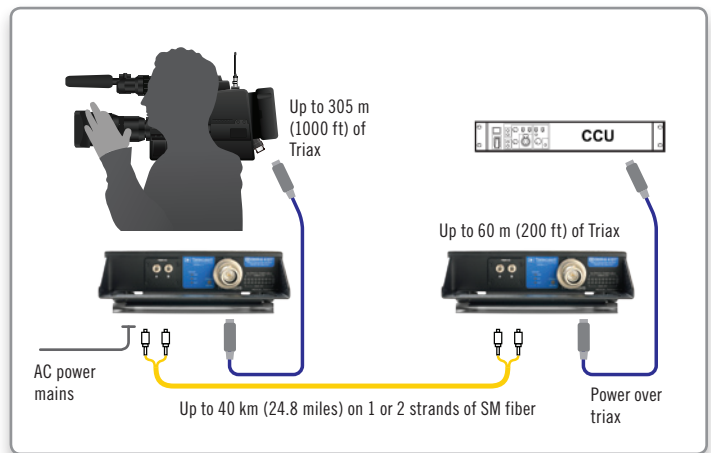
All of the signals carried on the camera chain's triax cable are extended on the fiber without any loss in signal or fidelity. These signals include:

- HD digital video
- Return video and genlock
- Audio, intercom and IFB
- Control data and tally

## KEY FEATURES AND BENEFITS

- Extends the reach of Sony's HD Digital Triax Camera Chains
  - HXC100
  - HSC300
- Complete camera control
- 13 dB optical budget
- All 2-way triax signals
  - HD digital video
  - Return video and genlock
  - Audio, intercom and IFB
  - Control data and tally
- Portable, lightweight units
- Integrated bi-directional optical power measurement tools
- 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 the TelePort™ 3G system

The lightweight portable Cobra™ 2DT units are rugged and robust, designed for the harshest outside broadcast environments. The Cobra™ 2DT camera module can power an additional 300 meter run of triax to the camera. Using the TelePort™ 3G systems, up to eight digital triax camera chains can be multiplexed over a long distance onto a pair of fibers, all at the lowest pricing Telecast Fiber Systems has ever been able to offer for our patented triax-to-fiber technology.



## TECHNICAL SPECIFICATIONS

### TRANSMISSION

Data rate: 2.7 Gbps  
 Optical source: Laser diode  
 Fiber type: Single-mode  
 Optical output power (min): -7 dBm  
 Optical sensitivity (typical): >-20 dBm  
 Link margin/distance: 13 dB  
 Wavelength (from camera/to camera)  
 1-fiber version: 1310/1550 nm  
 I/O impedance: 75 ohm  
 Note: Available in 1-fiber or 2-fiber versions

### MECHANICAL/ENVIRONMENTAL

Throwdown Mussel Shell  
 (W x H x D): 9 x 2.5 x 12 in  
 IRU (single or double)  
 (W x H x D): 18 x 1.5 x 12 in  
 Weight, camera end: 4.6 lb  
 Weight, base station end (throwdown): 3.6 lb  
 Weight base station end IRU: Single 4 lb, Double 7 lb

Connectors: Triaxial connector: Kings Tri-Loc, Fischer  
 Optical: ST single-mode (standard), ST (single), ST (dual), Neutrik OpticalCON  
 Input voltage: 100 VAC to 240 VAC  
 Output voltage to camera DC: Standby: 36 VDC ±10 %  
 Operate: 180 VDC ±10 %  
 Triaxial range, Cobra to camera, typical, CCU dependant: 300 m  
 Power consumption: Base unit: <10 W  
 Camera unit (excluding camera power): <30 W  
 Temperature range, operating: -40° to 55 °C  
 Humidity range: 0 to 95 % non-condensing

## ORDERING INFORMATION

CBR2-SON-CA-MS-1-ST2-F-#1-#2-#3-#4-#5 Cobra2D, Model S1 (Sony HSC/HXC chains), Camera end, single Mussel Shell enc., fiber: 2 ST connectors, Fischer triax con

### USE THE VARIABLES IN GREEN BELOW TO BUILD YOUR ORDER CODE

#### #1 CAMERA OR CCU END

CA Camera end  
 BS CCU end (base)

#### #3 UNITS

1 Single  
 2 Dual CCU end (rack mount only) 2 in BS-RM only

#### #4 FIBER CONNS

ST2 2 ST connectors  
 ST1 1 ST connector WDM  
 NEU2 OpticalCON connector (dry)

#### #5 TRIAX CONNS

F Fischer  
 KG Kings

#### #2 ENCLOSURE

MS Mussel Shell  
 RM 1RU rack mount, base only