

SMPTE Hybrid Elimination Devices



SHED-BS-ST



SHED-C-ST



HDX-2-RC-ST

Operate your SMPTE Hybrid fiber-equipped cameras on ordinary single mode optical fibers

There are many instances where it is impractical to use SMPTE 311M hybrid fiber/copper cable to connect cameras to CCUs:

- No SMPTE cable installed in venue
- Distance too long
- SMPTE cable too expensive
- SMPTE cable too heavy
- Cable & connectors fragile and unreliable
- Connectors difficult to clean and maintain
- Need faster setup and/or strike
- Lightning or grounding concerns

Telecast's family of SHED (SMPTE Hybrid Elimination Device) products allows your cameras to be used with low cost, conventional single mode fiber cable instead of SMPTE 311M hybrid fiber/copper cables.

This permits use of any facility's infrastructure fiber, or connect with industry standard mil-spec, tactical (TAC™) fiber in the field, using standard fiber connectors, such as STs, SCs, MX™, or Neutrik's OpticalCon™.

More Reliable, Longer Range

Eliminating the SMPTE cable for the bulk of your camera-to-CCU connection improves reliability, lowers the cable cost, and increases the distance you can connect your cameras by several times.

Two Power Options

You can power the camera locally, or reinject power back into the camera-side SMPTE cable in the field using the HDX.

Features

Allows the use of conventional single mode fiber cable

- Infrastructure Fiber
- Tactical Fiber Cable

Uses ST, SC, MX or OpticalCon connectors

Extends distance limits of camera

Provides power to camera (via HDX)

Permits local powering of camera

Small, lightweight adapters

Built-in optical power meter

Front panel status monitoring

Safety interlock on HDX

Remote shut-off of camera head (optional)

Fast plug-and-play operation

Can be used with TelePort/TeleThon for CWDM optical multiplexing

All camera signals on lightweight fiber cable

Digital SDI or HD/SDI program video

HDX also supports CopperHead PowerPlus and powered POV systems

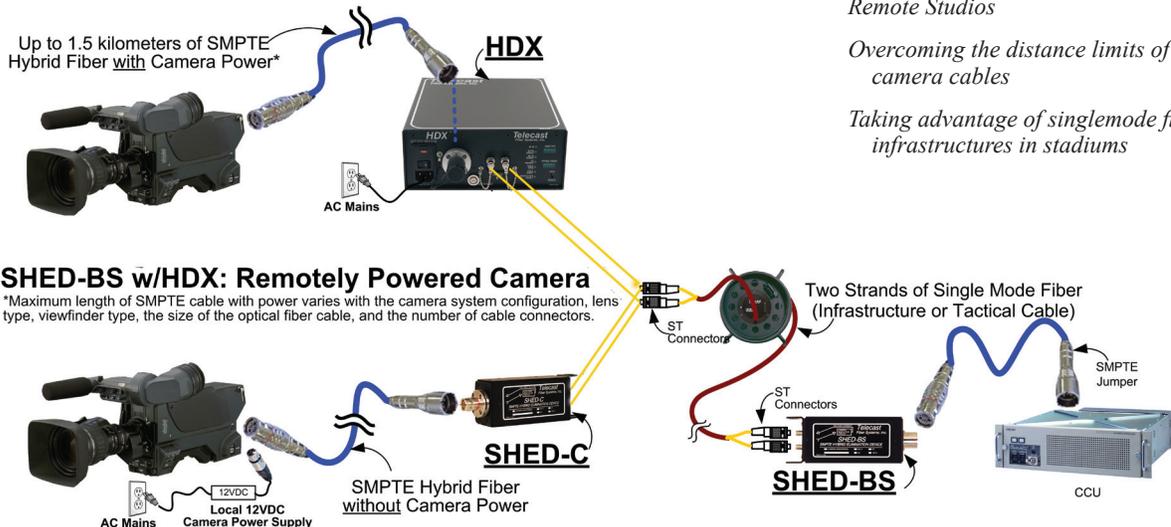
Applications

Remote Sports Broadcasting

Remote Studios

Overcoming the distance limits of hybrid camera cables

Taking advantage of singlemode fiber infrastructures in stadiums



SHED-BS w/HDX: Remotely Powered Camera

*Maximum length of SMPTE cable with power varies with the camera system configuration, lens type, viewfinder type, the size of the optical fiber cable, and the number of cable connectors.



SHED-BS w/SHED-C: Locally Powered Camera

← Average Overall Optical Budget of 10 dB (dependent on camera/CCU specifications) →

Tougher than SMPTE Hybrid, Triax, or Coax

Telecast's TAC-series fiber cables are lightweight and flexible, and stand up better to abuse, temperature extremes, vehicle traffic and flexing than any copper-based cable. Three sizes of Telecast OX-Frame™ reels give you the length you need.



OX-Frame reel with TAC cable

Two Ways to Power Your Camera

Power the camera with a local AC power supply or camera battery. Or, using the HDX unit connected to any AC mains, power the camera up to 1500m* via SMPTE 311M hybrid cable.

Up to Eight Cameras On One or Two Fiber Strands!

The SHED/HDX can be combined with Telecast's Teleport™ and TeleThon™ technology, multiplexing eight HD cameras, 2,048 AES or analog audio channels, or a mix of HD/SDI, SD/SDI, analog video, ethernet, and intercom, all onto one or two strands of fiber and carried over ten kilometers away!

See Teleport & TeleThon datasheets for more details.

HDX Optical Power Monitoring

Two four-digit alphanumeric displays show what type of camera is attached to the HDX, as well as the received optical power from the CCU, providing vital troubleshooting information.



Remote Camera Power Shutdown

This feature permits shutting down your locally-powered camera from the CCU's control panel, a major time saver when your camera is located far from your control room.



The HDX-FR-2 Frame accepts two HDX units for convenient rack mounting

Supported Camera Systems

- Sony** HDC1000, 1400, 1500 w/HDCU1000/1500
HDC1450, 1550 w/HDCU1000/1500 & HDFX-100
HDC3300 w/ HDCU3300, HDC 700, 750, 900, 930, 950
BVP-9500WS, BVP-950/CA950 w/ CCU 900
- Ikegami** HDK-79E, HDK-790E, HDK-725P, HDK-725, HDK-79EXIII,
HDK-75EX, HDK-79EX, HDK-79EXII, HDK-790EXIII,
HDK-727P, HDK-79EC, HDK-790EXII, HDK-727
(all with CCU-790, 790A, 890)

- Grass Valley** All LDK-6000 and 8000 Series
- Panasonic** AK-HC931B, AK-HC3500
- Hitachi** All CH-HD1000 and CH-HD500 CCU-based systems



The SHED-6 cost effectively packages the capabilities of six SHED-BS units in 1RU of rack space.

Ordering Information

CCU Side

All camera/CCU combinations

SHED-BS or SHED-6-BS

Camera Side

	Standard	Remote Camera Power (RC denotes Remote Camera Shutdown feature)
	Unpowered	Powered
Sony & Ikegami:	SHED-C	HDX-2-RC
Grass Valley:	SHED-C	HDX-2-LD3-RC
Panasonic:	N/A	HDX-2-PAN-RC
Hitachi:	N/A	HDX-2-HIT-RC

Rack Mount for HDX

Rack Mount Kit for two HDX units:

HDX-FR-2

Blank Plate for HDX-FR-2

13013-028

Fiber Connectors

All HDX and SHED devices can be equipped with ST, SC, MX, or Optical-CON connectors. Please specify when ordering.

Specifications

Electro-Optical

Note: SHEDs and HDXs are optically passive

Fiber type

Single mode

Mechanical/Environmental

Dimensions (LxWxH)

HDX	13" x 3.5" x 8.5"
SHED	7.5" x 2" x 2.5"
SHED-6	17.4" x 9" x 1.75"

Weight

HDX	10.5 lbs
SHEDs	1 lb
SHED-6	5 lbs

Connector

Electrical IEC on HDX, XLR-4 on SHED-6 (requires AC adapter)
Optical ST, SC, MX, OpticalCON
Hybrid Lemo, Fischer

HDX Input Voltage

Output Max Load 115-230 VAC

Power Consumption

Indicators < 20 Watts

Temperature Range

Power On, Voltage Indications, Optical Power -20° C to +55° C

* Note: Maximum length of SMPTE cable with power varies with the camera system configuration, lens type, viewfinder type, the size of the optical fiber cable, and the number of cable connectors.



A BELDEN BRAND

© 2010 Telecast Fiber Systems, Inc.
Specifications subject to change without notice.
Trademarks are property of their respective organizations

Represented by:

102 Grove Street; Worcester, MA 01605 USA
Phone: (508)754-4858 FAX: (508)752-1520
telecast.sales@belden.com
www.telecast-fiber.com