

HUT-APE System

Hybrid Universal Transceiver – Advanced Power Extension for SMPTE-Based Camera Chains

FEATURES

- > SMPTE 304M Standard
- Operate Cameras on Plain Single Mode Fiber
- Extend Distance Without Sacrificing Performance
- ▶ Plug & Play Operation with Automatic Camera Recognition

- Can Provide Power for Cameras Up to 3km
- Supports Camera Chains from Sony, Grass Valley, Panasonic, and more
- Works with Optional Optical Repeater/ Remapper FiberSaver
- Standard Remote Camera Shut-Off
- Rugged Design
- Designed and Manufactured in the USA

APPLICATIONS

- > Remote Broadcasting
- > Sports Production
- > Shared Control Rooms
- Campus Facilities
- Arenas and Stadiums

Extend Camera Chains Beyond SMPTE Cable Limitations Via Standard Single Mode Fiber



The HUT-APE system frees camera chains from the limitations of hybrid copper and fiber cabling permitting cameras to be separated from their CCUs by distances of over 10km using inexpensive, conventional single mode fiber. This has many advantages over SMPTE hybrid cable including:

- · Eliminating RF, EMI and grounding issues
- · Faster set and strike times saves time and money
- Reduced weight makes for lighter OB trucks,
 B-units and cable shipments

CONNECT ANYWHERE EASILY

The plug and play system allows camera chains to connect via a facility's fiber infrastructure or on tactical fiber cable in the field using industry-standard connectors, such as STs, LCs, SCs, or OpticalCON. The HUT system works by "spoofing" (or "tricking") the camera and CCU into seeing a physical copper connection between them when connected only by single mode fiber cable.



LOCAL OR REMOTE POWER

After a long run of single mode fiber, HUT-enabled camera systems can be configured in one of two ways:

- Power the camera with the HUT-APE with up to 3km of hybrid cable. Power is sufficient for hand-held cameras or cameras installed in sleds with long lenses and other high-power accessories.
- 2. Power the camera locally and use the HUT-CS.

ROUTE AND MULTIPLEX CAMERAS

Once the hybrid cable is removed, a camera chain can be easily routed through optical routers or used with MultiDyne's FiberSaver systems to multiplex up to nine cameras onto just one strand of a single mode fiber.

USE LESS FIBER WITH FIBERSAVER

While passive to the camera chain optics, the HUT-APE can be used with the MultiDyne line of FiberSaver wavelength shifting muxes.

- · Multiplex a camera chain onto a single fiber strand
- · Boost the optical range
- Remap the camera & CCU optics to different wavelengths

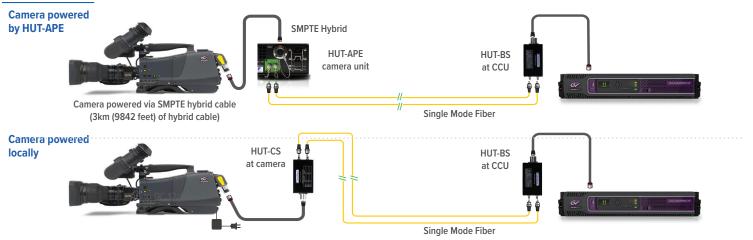
HUT-APE SUPPORTS THE FOLLOWING CAMERAS:		
MultiDyne	SilverBack-APE: Advanced Power Extension adapter with multiple power outputs. Can be matched with any Camcorder or Cine cameras from any manufacturer. Attaches to a battery plate, on the back of a camera, from IDX or Anton Bauer	
Grass Valley	Focus or LDX cameras	
Sony	HDC-1000/2000/3000/4300 series camera chains with SMPTE fiber connections	
Panasonic	AK-HC3900	



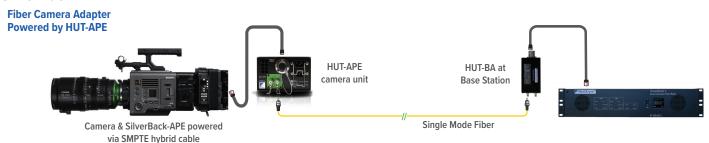
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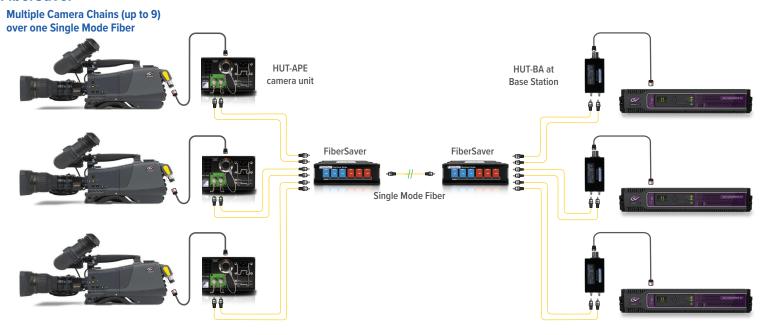




SilverBack-APE



FiberSaver





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TECHNICAL SPECIFICATIONS

Mechanical, Environmental

Electrical	IEC 320 (3-pin)
Hybrid Optical	SMPTE 304M
Optical only	ST/UPC, SC/UPC, SC/APC, LC/UPC, OpticalCON, MX
Fiber Type	SingleMode
Input Voltage	95-250 VAC/5.0-2.0A, 47-63Hz
Output Max Load	Up to 300W
Standby Power Consumption	<10W (no SMPTE Output Connection)
Temperature Range	-40C to +70C
Humidity Range	0 to 95% RH
Dimensions	3.456" x 5.740" x 11.269"
Weight	7 lbs.

CCU / Base Station Side SMPTE to Single-Mode Converter



ORDERING INFORMATION

Part #	DESCRIPTION
HUT-APE-U2-SPP-ST2XXF	Powered HUT - Camera side, Portable, 2 singlemode fibers (ST connectors), Hybrid cable SMPTE-304M plug connector. Provides power and signal transport to Sony HDC series, Panasonic AK-HC3900, GrassValley Focus and LDX series, and SilverBack-APE.
HUT-APE-U2-SPP-LC2XXF	Powered HUT - Camera side, Portable, 2 singlemode fibers (LC connectors), Hybrid cable SMPTE-304M plug connector. Provides power and signal transport to Sony HDC series, Panasonic AK-HC3900, GrassValley Focus and LDX series, and SilverBack-APE.
HUT-APE-U2- SPP-D2XXF	Powered HUT - Camera side, Portable, 2 singlemode fibers (Neutrik OpticalCon Duo connector), Hybrid cable SMPTE-304M plug connector. Provides power and signal transport to Sony HDC series, Panasonic AK-HC3900, GrassValley Focus and LDX series, and SilverBack-APE.
HUT-BS-U2-SPR-ST2XXA	HUT - CCU Side, Portable, Hybrid cable SMPTE-304M socket connector, 2 singlemode fibers (ST connectors). For Sony HDC series, Panasonic, Ikegami, and Hitachi cameras.
HUT-BS-G1-SPR-ST2XXA	HUT Base/CCU Adaptor, SMPTE 304M receptacle(front) & 2 ST's (rear); Grass Valley cameras only.
HUT-BS-G1-SPR-D2RXXA	HUT Base/CCU Adaptor, SMPTE 304M receptacle(front) & Neutrik OpticalCON (rear); Grass Valley Cam only.
HUT-CS-U2-SPP-ST2XXA	Passive HUT - Camera Side, Portable, 2 singlemode fibers (ST connectors), SMPTE-304M plug connector. Local power required to provide power to the camera. For Sony HDC series, Panasonic, Ikegami, and Hitachi cameras.
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If you don't see the model you need, please contact your MultiDyne salesperson for other available signal configurations.