



SHADOW BOX

In-Line Audio, Video, Icom, and Data for SMPTE Hybrid Cable Runs

The NEW Shadow Box system from Joseph Electronics is the answer. These small boxes get installed between a SMPTE Hybrid-equipped camera and its CCU to provide a full complement of broadcast signals without the need to run additional cables.

The CCU side box is placed near the truck/camera CCU to provide access to the additional audio, video, data, and intercom signals and patches directly to the CCU with a hybrid jumper. Another SMPTE hybrid cable then connects to a similar box near the camera. Another short jumper then extends on to the camera.

By borrowing a bit of power from the hybrid cable and then optically multiplexing the additional signals onto the 2 fibers in the hybrid cable, users are able to get those extra signals without the need to run more cables. The system is modular, giving customers the ability to build and reconfigure a solution that best suits their unique needs.

Perfect for stand-ups in places with no access for more cables or not suitable for wireless, Shadow Box provides the extra signals you need on the cable that's already there.

Trust Joseph electronics for the innovative solutions that make broadcasting easier.

Need More Signals but Can't Run More Cable?

FEATURES & APPLICATIONS

FEATURES

- Small, portable packaging
- Rugged design
- Choose the signal count that's best for you
- SD/HD/3G or Analog Video
- 4-wire or powered 2-wire comms
- Analog audio with gains
- 10/100/1000 Ethernet
- Three powering options
 - From hybrid camera cable
 - Local mains
 - Battery
- Power passes through the Shadow Box and onto the Camera
- Field re-configurable
- 5 year warranty

APPLICATIONS

- Studios
- Outside Broadcast (OB)
- Sport Venues / Arenas
- ENG / SNG
- Cross-Campus
- Tele-Medicine



Typical Configuration

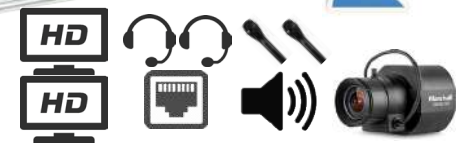
SMPTE Hybrid Jumper



SMPTE Hybrid Jumper



SMPTE Hybrid To Cam



SPECIFICATIONS

MECHANICAL, ENVIRONMENTAL

Dimensions (LxWxH)	14.0 x 10.25 x 21.25"
Weight	28 lbs.
Video connectors	BNC
Audio connectors	XLR-3M, XLR-3F
Intercom connector	XLR-3m, XLR-4M
Temperature Range	0 - 100F
Humidity Range	0-95% Non-condensing via
Power Input	SMPTE cable, External 12VDC or 12VDC Battery
Power rating, nominal	50w max@12VDC
Power Requirement	<8w @12VDC

DIGITAL VIDEO

Interface	SMPTE 424M, 297M, 292M, 259M-C, DVB-ASI, MADI
Input Coax EQ	@3 Gbps: 80m @1.485 Gbps: 150m @143-360 Mbps: 350m
Input level	800mV (peak to peak)
Impedance	75 Ohms
Bit-error rate	10 ⁻¹²
Jitter	< 0.031U under 1 MHz
Rise/fall times	< 270ps
Return Loss	>15 dB at 5 MHz - 1.485 GHz >10 dB up to 3 GHz

ANALOG AUDIO

S/N	>90db
Frequency Response	< +/-0.1db (20Hz - 20kHz)
Distortion	< 0.05%
Level Adjust	28, 16, 10, 4 dBu
Max I/O Level	28 dBu
Impedance In (bal)	600 Ohms
Impedance Out (bal)	<10 Ohms
Icom level	4 dBu FS
Icom Impedance In	10 K Ohm
Icom Impedance Out	<50 Ohm

ELECTRO-OPTICAL

Operating Wavelengths	DFB 1271-1591nm
TX Laser output power	-2 - 0dBm, Class 1
Receiver Sensitivity	-20 dBm
Fiber Compatibility	singlemode
Optical Connector	Lemo SMPTE

Conforms with 89/366/EEC, EN 61000-6-1, EN 61000-6-2,
Class 1 laser product, and RoHS 2002/95EC

CHICAGO

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