HALL
T E C H N O L O G I E S

ECHO-4S
4 Channel HDBaseT™ Transmitter

FEATURES

- HDBaseT Extender
- Extend UHD 4K@60Hz 4:4:4 up to 70m & 1080p up to 100m
- HDCP 2.2, HDR10, 3D Support
- RS-232 Pass-Through & Control
- Bi-directional IR (Wide Band)
- HDMI loop output on the Sender
- Dual HDMI output on the Receiver
- Audio Extraction on the Sender and Receiver

- EDID management
- Power over Cable (only Sender side needs power supply)
- Locking Power Supply Connector
- Daisy chain support of Transmitters up to four

DESCRIPTION

The ECHO-4S is designed to allow a single HDMI 2.0 source to be displayed remotely at up to four different locations, using HDBaseT™ technology. HDMI resolutions up to 4K UHD (4K@60 4:4:4) can be extended up to 70m, while resolutions up to 1080p can be extended 100m over a single CAT5e or CAT6 cable. ECHO supports HDCP 2.2 and 1.4 content protection, as well as HDR10 High Dynamic Range video.

In addition to HDMI extension, the ECHO-4S also extends RS-232 serial data, and bi-directional IR for control of remote devices. All senders include a local HDMI output, EDID routing control, de-embedded analog audio, and Power over Cable (PoC) to power remote receivers. The ECHO-4S has built-in HDMI splitters to extend a single video to four receivers respectively, and have additional features including RS-232 and IR loop output for daisy-chaining transmitters, and digital TOSLINK audio de-embedding.

Video Standards:	HDMI 2.0 video specifications including HDR10, 3D video HDCP 2.2, 1.4 DVI (single link)
Video Connectors:	(1) HDMI Input, (1) HDMI Output
Resolutions:	HDTV signal - 480p through 4K@60 4:4:4 DVI signal VGA (640x480) thru WUXGA (1920x1200)
Audio:	Formats - LPCM 2CH Audio (32-192kHz sample rate) DTS-HD, DOLBY-HD
Other Signals:	RS-232 (2) RX, TX and GND on Terminal Strip (Input and Loop Output) RS-232 Input Baud Rate: 115200, N, 8, 1 for configuration otherwise pass-through RS-232 Output to ECHO-RX2 Baud Rate: pass-through
IR:	(2) 3.5mm IR Inputs (Input and Loop) (2) 3.5mm IR Outputs (Input and Loop) Wide-band IR pass-through: 38 – 56 kHz supported
USB:	USB USB 2.0 Micro type B (for firmware update only)
General:	Power Supply 100 VAC to 240 VAC, 47-63 Hz, External; 24VDC 4A
Temp/Humidity:	Storage: -40 to +158°F (-40 to +70°C) / 5% to 90%, non-condensing Operating: +14 to +131°F (-10 to +55°C) / 5% to 90%, non-condensing
Typical Power Consumption:	15W (Sender) 30W (PoC)
Cooling:	Convection
Enclosure Type:	Metal (steel)
Dimensions:	1.74" H x 10.64" W x 7.46" D (44.2mm H x 270mm W x 189.5mm D) (All dimensions include mounting flange width)
Safety:	CE
EMI/EMC:	CE, FCC Class A
MTBF:	90,000 hours (estimate)
Warranty:	3 years parts and labor
Weight:	Model ECHO-4S - 3.85 lbs Shipping ECHO-4S - 10.0 lbs