



This Transceiver is designed for high-quality, IP routable, AV extension with minimum latency. Every Transceiver can be configured to function as either a Transmitter or a Receiver, enhancing the flexibility of any installation. By using a sophisticated ultra-light compression scheme (lossless for most content) it's a great solution for extending 4K HDMI audio/video streams and data. Advanced HDMI content such as HDR (High Dynamic Range), 10-bit color and multi-channel HD Bitstream audio can be transmitted in pass-through mode. The use of high quality 10-Gigabit Ethernet ports and Cat.6A cable allows for point-to-point transmission of the video signal up to 100m. Multiple control and data signals may also be transmitted along with the audio and video, including IR, RS-232, USB 2.0, and Ethernet.

When combined with the optional control center or control software, the functionality of the Transceiver expands exponentially. Multiple Transceivers may be combined with one or more 10-Gigabit Ethernet switches and the units can be used together to form a distributed video matrix, a multi-viewer system, or a video wall system adding to their flexibility in large event installations. The integrated USB hub of each Transceiver can be configured to be in USB Host or Device Mode and can function as a simple point to point KVM extension, freely routed between any two endpoints, or it can be configured into a special "Simultaneous" mode, allowing up to 7 Host Mode Transceivers to extend their USB ports to a single Device Mode Transceiver. This type of USB KVM routing flexibility enables a wide range of multi-user, control room, or on-demand installation scenarios.

The unit may be powered directly by PoE when connected via Cat.6A to a 10-Gigabit Ethernet switch that provides PoE (802.3at) allowing for great flexibility in installation location. The built-in EDID and HDCP management functionality enables the unit to fit into every situation. Basic configuration of the unit can be achieved via front panel buttons with an On-Screen Display (OSD). Advanced control requires optional control center, or control software, and a LAN connection.

PANELS



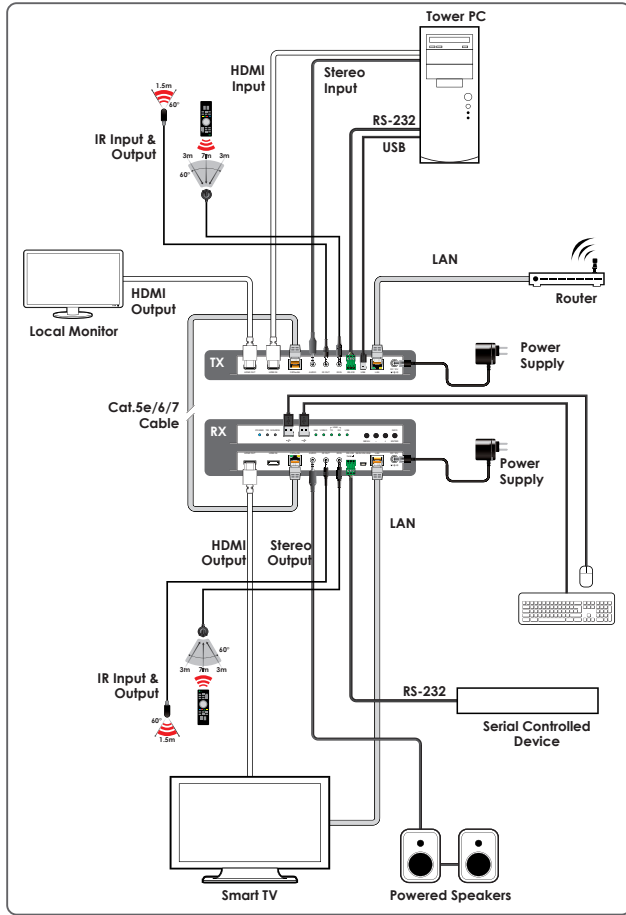
Front View

Rear View

FEATURES

- Can be configured to function as either a Transmitter or a Receiver
- 1 HDMI output (Functions as local monitor output in Transmitter Mode)
- 1 analog stereo jack (Functions as an input in Transmitter Mode or an output in Receiver Mode)
- IP switchable with minimum latency (requires optional control center/software)
- Ultra-light compression, lossless for most content
- Extension up to 100m in point-to-point mode (w/ Cat.6A cable)
- Independent breakaway A/V matrix switching (requires optional control center/software)
- Video wall generation (requires optional control center/software)
- Multi-view compositing (requires optional control center/software)
- Supports pass-through of 10/12-bit HDR sources (Point-to-point and GenLock modes only)
- Supports pass-through of audio formats including LPCM (up to 8 channels), Bitstream and HD Bitstream from HDMI sources
- Analog stereo audio extension, insertion and extraction (insertion and extraction requires optional control center/software)
- Bi-directional IR, RS-232, USB 2.0, and Ethernet extension
- Supports a special Simultaneous Mode for USB extension allowing a host connected to a single Transceiver to connect to up to 7 Transceivers with USB devices connected (mass storage devices are not supported in this mode)
- Unit can be powered directly by PoE when connected to a 10-Gigabit Ethernet (10GbE) switch that provides PoE (802.3at)
- Signal transmission interfaces with 10-Gigabit Ethernet switches via a single Cat.6A cable
- Basic configuration via front panel buttons with an On-Screen Display (OSD)
- Supports the use of an external control center or control software to provide expanded functionality (Contact your authorized dealer for more information)

DIAGRAM



SPECIFICATIONS

Interfaces

Input Port	1 HDMI (Type-A)
Output Port	1 HDMI (Type-A)
Bi-directional Port	1 10GbE LAN (RJ-45)
Pass-through Ports	1 Unbalanced Stereo (3.5mm) 1 IR Extender (3.5mm) 1 IR Blaster (3.5mm) 1 RS-232 (3-pin Terminal Block) 1 Ethernet (RJ-45) 2 USB (Type-A)
Service Port	1 USB (Mini-B)

Video

HDMI Compliance	HDMI 2.0 (DVI 1.0)	
HDCP Compliance	2.2	
Input Signal Types	4K@60, HDR10	
Output Signal Types	4K@60, HDR10	

Resolutions

Maximum Input	HDMI	4096×2160p@60 2560×1600p@60RB
	Streaming	4096×2160p@60 2560×1600p@60RB
Maximum Output	HDMI	4096×2160p@60 2560×1600p@60RB
	Streaming	4096×2160p@60 2560×1600p@60RB

Audio

Digital Formats	HDMI	8CH LPCM, Bitstream, HD Bitstream
Analog Formats	Unbalanced 2 Channel	
Line Level	Frequency Response: $\pm 0.5\text{dB}$ (20Hz to 20kHz) THD: <math>< 0.02\%</math> (20Hz to 20kHz) S/N Ratio: > 80dB (1kHz with 0dBFS) Crosstalk: <math>< -80\text{dB}</math> (10kHz, $V_{in}=0\text{dBFS}$)	

Power

Power Supply	12V/3A (Locking)
Power Consumption	30W (Full load)

Enclosure

Chassis Material	Metal (Steel)
Chassis Color	Black
Dimensions (W×H×D)	231.5mm×25mm×108mm [Case Only] 231.5mm×25mm×116.7mm [All Inclusive]
Weight	552g

Field Firmware Update

USB to PC

ORDERING INFORMATION

Model No.	Product Description
CH-V502TR	HDMI over IP Transceiver with USB Extension
CDPS-CS7-S	AV over IP Master Controller