

CH-801TR

UHD+ 2x1 HDMI/DP to HDMI AV over IP Transceiver



This Transceiver is designed for high-quality, AV extension with minimum latency through IP transmit. Transceiver can be configured to function as either a Transmitter or a Receiver, enhancing the flexibility of any installation. This will also reduce the inventory management efforts. With ultra-light compression scheme (lossless for most content) to extending 4K audio/video streams (HDMI or DisplayPort) with simultaneous transmitter and receiver Video, and data under 0.1 milliseconds of matrix switch-like end to end transit. Excellent performance for almost Zero latency transmission for all signal types.

Full suite of peripherals supported, including USB, 1G Ethernet, RS232, IR and GPIO. Supporting all HDMI 2.0 formats including multichannel PCM, Dolby True HD and DTS HD master audio. Analog stereo audio extension, insertion and extraction (insertion and extraction requires optional control center or control software) are supported. Signal transmission interfaces with 10-Gigabit Ethernet switches via XFI (IEEE 802.3ae) compatible SFP+ fiber modules are implemented.

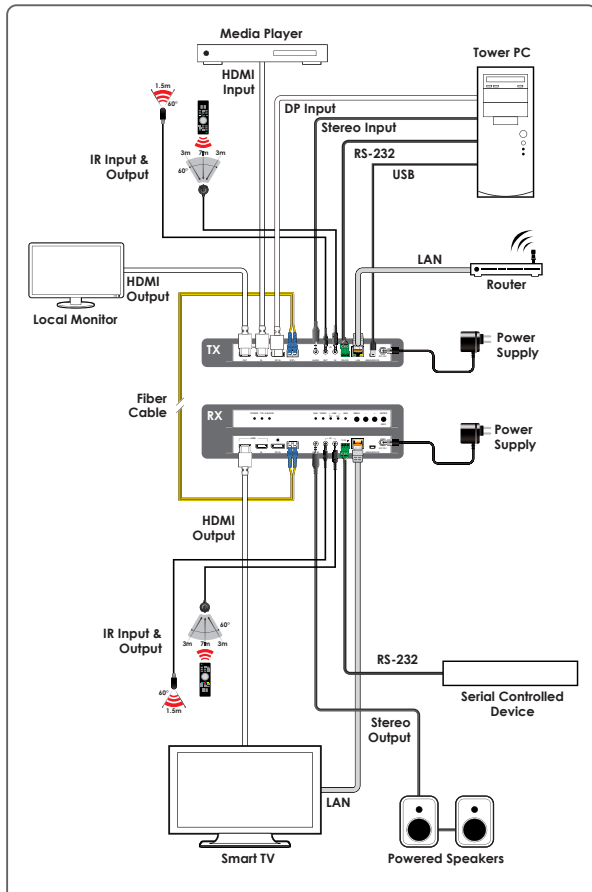
**USB functionality TBD. Will preserve a daughter Board as USB 1.1 and 2.0, for more detail will be confirmed after consult with vendor FAE.*

*** LAN switch and HID also needs to confirm too.*

PANELS



DIAGRAM



FEATURES

- Full range of formats including 4K60 RGB/4:4:4, HDR, 3D and broadcast-friendly 4K60 10-bit 4:2:2
- Broadcast quality scaler, programmable to scale up or down any resolutions up to 4K
- Video wall image splitting with bezel correction
- Audio down-mixing engine from multi-channel PCM audio to stereo
- Colour space conversion and frame rate conversion
- Extension up to 30km (maximum distance depends on the SFP+ module and type of fiber used)
- Supports pass-through of 10/12-bit HDR sources
- Bi-directional IR, RS-232, and Ethernet extension
- Basic configuration via front panel buttons with an On-Screen Display (OSD)

SPECIFICATIONS

Interfaces

Input Port	1 HDMI (Type A) 1 Display Port
Output Port	1 HDMI (Type A)
Bi-directional Port	1 10GbE LAN (SFP+) 1 Audio
Control I/O	1 IR Extender (3.5mm) 1 IR Blaster (3.5mm) 1 RS-232 (3-pin Terminal Block) 1 USB (Mini-B) 1 GbE LAN (RJ-45)

Video

HDMI Compliance	HDMI 2.0 (DVI 1.0)
HDCP Compliance	2.2
Input Signal Types	HDMI 4K@60 12bit HDR10 DisplayPort 1.4 w/ HBR2 SFP+ 4K@60 12bit HDR10
Output Signal Types	HDMI 4K@60 12bit HDR10 SFP+ 4K@60 12bit HDR10

Resolutions

Maximum Input	LAN (Streaming)	4096×2160p@60 YUV 4:4:4
	Display Port	4096×2160p@60 YUV 4:4:4
	SFP+	4096×2160p@60 YUV 4:4:4
Maximum Output	HDMI	4096×2160p@60 YUV 4:4:4
	SFP+	4096×2160p@60 YUV 4:4:4

Audio

HDMI LPCM (8 Channels), Bitstream, High Bit Rate Bitstream

Line In 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, Vin=0dBFS)

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Power

Power Supply	12V/3A DC (Locking)
Power Consumption	TBD

Enclosure

Chassis Material	Metal (Steel)
Chassis Color	Black
Dimensions (W×H×D)	231.5mm×25mm×158mm [Case Only] 231.5mm×25mm×116.7mm [All Inclusive]
Weight	518g

Field Firmware Update

Mini-USB to PC

ORDERING INFORMATION

Model No.	Product Description
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