



## SDV-CTR-X-BD

SDVoE Full 4K 10G AV over IP Bi-directional Transceiver with USB Extension



The SDV-CTR-X-BD is designed for high-quality, IP routable, AV extension with minimum latency for the SDVoE range of 10G AV over IP. Every Transceiver is capable of simultaneous bi-directional AV extension, 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 audio/video streams (HDMI or Display Port) and data.

Advanced HDMI content such as HDR (High Dynamic Range), 10-bit colour and multi-channel HD Bitstream audio can be transmitted in pass-through mode. The use of high quality 10 Gigabit Ethernet ports and Cat.6 (Cat.6a recommended) 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 IP Master Controller (SDV-CS8), the functionality of the Transceiver expands exponentially. Multiple Transceivers or SDVoE TX/RXs may be combined with one or more 10-Gigabit Ethernet switches and the units can be used together to form a distributed video matrix, with multi-view and video wall configuration adding to their flexibility in large event installations.

The integrated USB hub of each Transceiver can function as a simple point to point KVM extension or freely routed between any two endpoints. This type of USB KVM routing flexibility enables a wide range of multi-user, control room, or on-demand installation scenarios. The built-in EDID and HDCP management functionality enables the unit to fit into every situation.

A specialised use of the SDV-CTR-X-BD is for the creation of true multi-view signals within a video wall arrangement, simply add one SDV-CTR-X-BD to any SDVoE system and through its bi-directional nature any user can simply directly connect the HDMI I/O, setting up the receiver side to a Multi-view arrangement and routing the transmitter side onto any video wall arrangement, saving having to purchase very expensive video wall processors.

Basic configuration of the unit can be achieved via front panel buttons with an OSD (On-Screen Display). Advanced control requires the optional IP Master Controller (SDV-CS8).

### PANELS



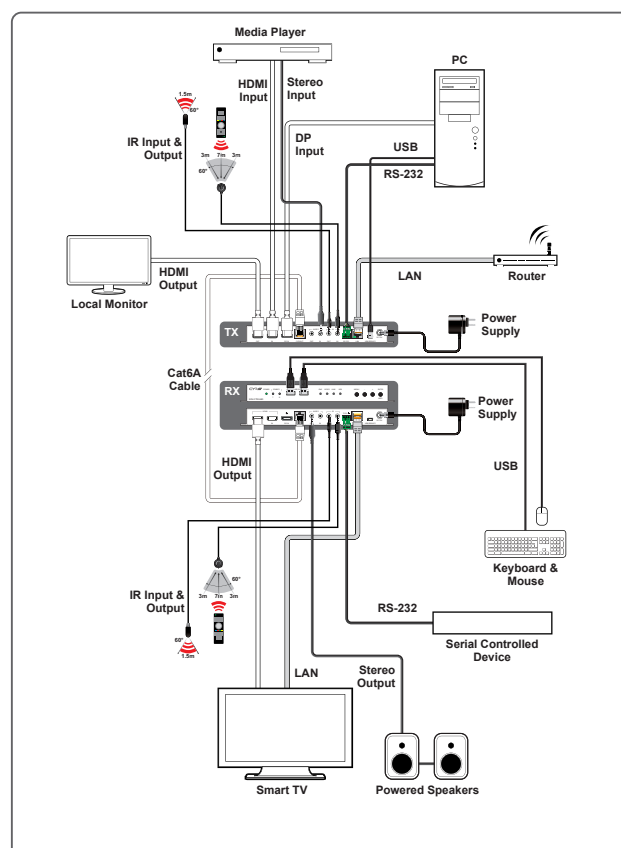
Front View

Rear View

### FEATURES

- HDMI 2.0 and DVI 1.0 compatible
- HDCP 2.2 and HDCP 1.x compliant
- 1 HDMI and 1 DisplayPort input
- 1 HDMI output
- 1 analogue stereo input & 1 analogue stereo output
- 2 USB 2.0 (Type-A) ports and 1 USB 2.0 (Mini-B) port
- Transceiver supports simultaneous bi-directional AV signal extension
- IP switchable with minimum latency
- Ultra-light compression, lossless for most content
- Extension up to 100m in Point-to-Point or 10G IP matrix mode
- Supports independent breakaway A/V matrix switching with minimal latency, video wall generation, and multiview compositing (requires SDV-CS8)
- Supports pass-through of 10/12-bit HDR sources
- Supports pass-through of audio formats including LPCM (up to 8 channels), Bitstream and HD Bitstream from HDMI or DP sources
- Analogue stereo audio extension, insertion and extraction (insertion and extraction requires optional IP Master Controller, the SDV-CS8)
- Bi-directional AV, 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. Requires optional IP Master Controller)
- Unit can be powered directly by PoE when connected to a 10 Gigabit Ethernet (10GbE) switch that provides PoE (802.3at)
- Basic configuration via front panel buttons with an OSD

### DIAGRAM





## SDV-CTR-X-BD

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### SPECIFICATIONS

#### Interfaces

|                     |                                                                                                                                           |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| Input Port          | 1 HDMI (Type A)<br>1 DisplayPort(Female)<br>1 Analogue(3.5mm)                                                                             |
| Output Port         | 1 HDMI (Type A)<br>1 Analogue(3.5mm)                                                                                                      |
| Bi-directional Port | 1 10GbE LAN (RJ45)                                                                                                                        |
| Control I/O         | 1 Ethernet (RJ-45)<br>1 IR Extender (3.5mm)<br>1 IR Blaster (3.5mm)<br>1 RS-232 (3-pin terminal block)<br>1 USB (Mini-B)<br>2 USB(Type A) |

#### Video

|                     |                    |
|---------------------|--------------------|
| HDMI Compliance     | HDMI 2.0 (DVI 1.0) |
| HDCP Compliance     | 2.X                |
| Input Signal Types  | 4K@60 YUV 4:4:4    |
| Output Signal Types | 4K@60 YUV 4:4:4    |

#### Resolutions

|                |                     |                         |
|----------------|---------------------|-------------------------|
| Maximum Input  | HDMI                | 4096×2160p@60 YUV 4:4:4 |
|                | DP                  | 4096×2160p@60 YUV 4:4:4 |
| Maximum Output | 10G LAN (Streaming) | 4096×2160p@60 YUV 4:4:4 |
|                | HDMI                | 4096×2160p@60 YUV 4:4:4 |

#### Audio

|           |                                                       |
|-----------|-------------------------------------------------------|
| HDMI      | LPCM (8 Channels), Bitstream, High Bit Rate Bitstream |
| DP        | LPCM (8 Channels), Bitstream, High Bit Rate Bitstream |
| 10GbE LAN | LPCM (8 Channels), Bitstream, High Bit Rate Bitstream |
| Line In   | 1 Vrms<br>S/N Ratio: > 80dB (1kHz with 0dBFS)         |
| Line Out  | 1 Vrms<br>S/N Ratio: > 80dB (1kHz with 0dBFS)         |

#### Power

|                   |                     |
|-------------------|---------------------|
| Power Supply      | 12V/3A DC (Locking) |
| Power Consumption | 18.7W               |

#### Enclosure

|                    |                                                                      |
|--------------------|----------------------------------------------------------------------|
| Chassis Material   | Metal (Steel)                                                        |
| Chassis Colour     | Black                                                                |
| Dimensions (W×H×D) | 231.5mm×25mm×158mm [Case Only]<br>231.5mm×25mm×167mm [All Inclusive] |
| Weight             | 916g                                                                 |

#### Field Firmware Update

PC

### ORDERING INFORMATION

| Model No.    | Product Description                                                        |
|--------------|----------------------------------------------------------------------------|
| SDV-CTR-X-BD | SDVoE Full 4K 10G AV over IP Bi-directional Transceiver with USB Extension |
| SDV-C2-RX    | SDVoE Full 4K 10G AV over IP HDMI Receiver with USB                        |
| SDV-C2-TX    | SDVoE Full 4K 10G AV over IP Transmitter with USB                          |
| SDV-FTRX-U   | SDVoE Full 4K 10G AV over IP Fiber based Transceiver with USB              |
| SDV-CS8      | SDVoE 10G AV over IP Master Controller and Configurator                    |