

HDMI 2.1 Converter Box

SD-7075-A



SD-7075-A is an HDMI converter box to convert four channels of HDMI 2.0 to one channel of HDMI 2.1. It is useful for connecting to an HDMI 2.1 TV from a set top box or graphic board that has 4 channels of HDMI 2.0 output.

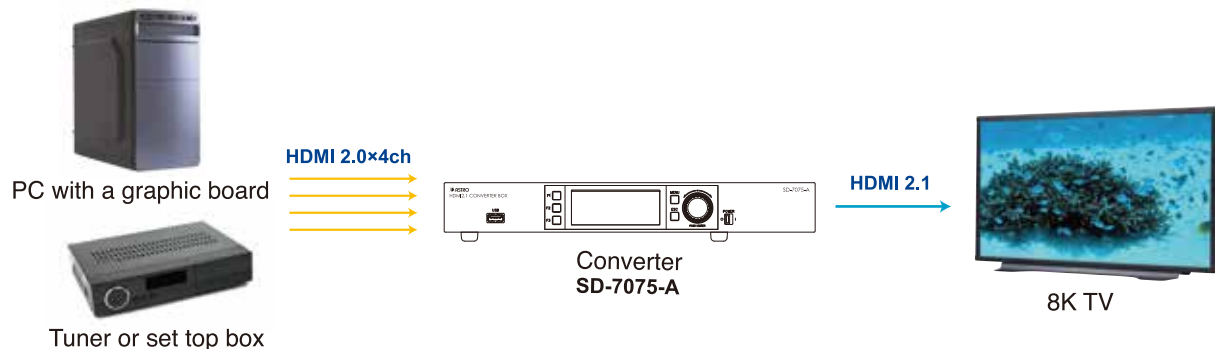
Features

- Convert HDMI 2.0 TMDS (4ch) to HDMI 2.1 FRL (1ch).
- Supports DSC (Display Stream Compression) 1.2.
- Supports HDCP 1.4 and 2.3.
- EDID, SCDC and Link Training status are displayed on the front panel.
- LAN, RS-232C and GPIO (customized base) for external control.

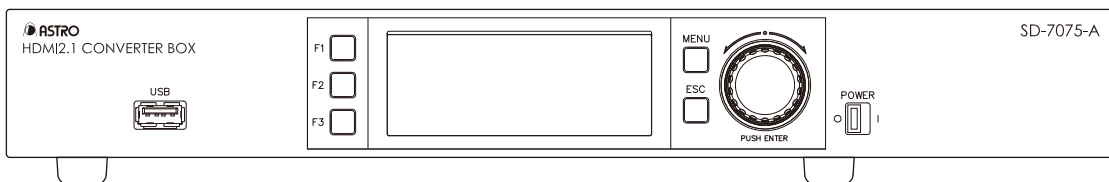
Note :

- 1 : Frame rate and bit depth of output video are same as input video. In case of 8K/50p, 59.94p and 60p output, it becomes YCbCr 4:2:0 automatically.
- 2 : FRL output rate is determined according to the EDID of the HDMI Sink. If there is no EDID in the HDMI Sink, maximum FRL rate will be output.
- 3 : All 4 input channels should be connected to the Source.

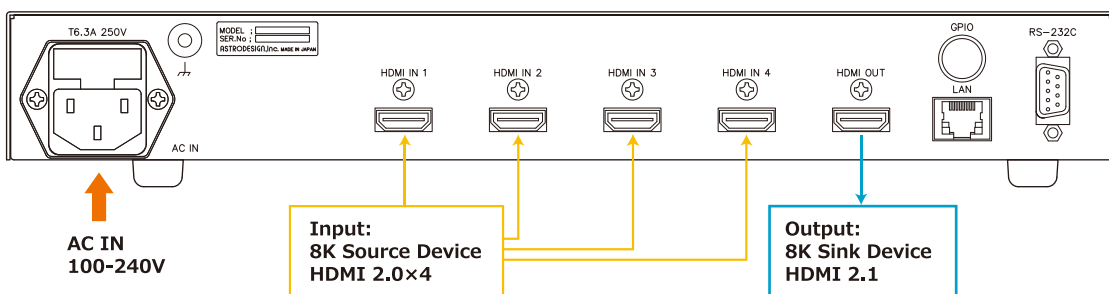
Application



Front View



Rear View



Input Format (per each HDMI port)

| Resolution | Frame Rate | Colorimetry | Bit |
|--------------|-----------------|-------------------------------|---------|
| 3840 × 2160p | 60/59.94/50p | RGB/YCbCr 4:4:4 | 8 |
| 3840 × 2160p | 60/59.94/50p | YCbCr 4:2:2 | 12 |
| 3840 × 2160p | 60/59.94/50p | YCbCr 4:2:0 | 8/10/12 |
| 3840 × 2160p | 30/25/24p | RGB/YCbCr 4:4:4 | 8/10/12 |
| 3840 × 2160p | 30/25/24p | YCbCr 4:2:2 | 12 |
| 1920 × 1080p | 120/119.88/100p | RGB/YCbCr 4:4:4, 4:2:2, 4:2:0 | 8/10/12 |
| 640 × 480p | 60p | RGB/YCbCr 4:4:4 | 8/10/12 |

| Audio Format |
|--|
| L-PCM: 8ch (max) 32kHz/44.1kHz/48kHz/88.2kHz/96kHz/ 176.4kHz/192kHz, 16bit/20bit/24bit |
| AAC LC: 6ch (max), 32kHz/44.1kHz/48kHz/96kHz, 576kbps(max) |
| DTS: 6ch (max), 44.1kHz/48kHz, 1536kbps (max) |
| AC-3: 6ch (max), 32kHz/44.1kHz/48kHz, 640kbps (max) |

Output Format

Video

| DSC | Resolution | Frame Rate | Colorimetry | Bit | FRL Rate | | | | | | |
|-------------|-------------|-----------------|-----------------|-------------|----------|--------|-------|-------|-------|-------|---|
| | | | | | 12G/4L | 10G/4L | 8G/4L | 6G/4L | 6G/3L | 3G/3L | |
| OFF | 7680 × 3840 | 60/59.94/50p | YCbCr 4:2:0 | 12 | ● | | | | | | |
| | | | | 10 | ● | ● | | | | | |
| | | | | 8 | ● | ● | ● | | | | |
| | | 30/25p | RGB/YCbCr 4:4:4 | 12 | ● | | | | | | |
| | | | | 10 | ● | ● | | | | | |
| | | | | 8 | ● | ● | ● | | | | |
| | 30/25/24p | RGB/YCbCr 4:4:4 | YCbCr 4:2:2 | 12 | ● | ● | ● | | | | |
| | | | | 10 | ● | ● | ● | | | | |
| | | | | 8 | ● | ● | ● | ● | | | |
| | 3840 × 2160 | 120/119.88/100p | RGB/YCbCr 4:4:4 | YCbCr 4:2:2 | 12 | ● | ● | ● | | | |
| | | | | | 10 | ● | ● | ● | | | |
| | | | | | 8 | ● | ● | ● | ● | | |
| YCbCr 4:2:2 | | | RGB/YCbCr 4:4:4 | 12 | ● | ● | ● | ● | | | |
| | | | | 10 | ● | ● | ● | ● | | | |
| | | | | 8 | ● | ● | ● | ● | ● | | |
| ON | 7680 × 4320 | 60/59.94/50p | RGB/YCbCr 4:4:4 | 8 | ● | ● | ● | ● | | | |
| | | | | 12 | ● | ● | ● | ● | | | |
| | | | | 10 | | | ● | ● | | | |
| | | YCbCr 4:2:2 | RGB/YCbCr 4:4:4 | 12 | ● | ● | ● | ● | | | |
| | | | | 10 | | | ● | ● | | | |
| | | | | 8 | | | ● | ● | | | |
| | 30/25/24p | RGB/YCbCr 4:4:4 | YCbCr 4:2:2 | 12 | | ● | ● | ● | ● | | |
| | | | | 10 | | | ● | ● | ● | ● | |
| | | | | 8 | | | ● | ● | ● | ● | |
| | 3840 × 2160 | 120/119.88/100p | RGB/YCbCr 4:4:4 | YCbCr 4:2:2 | 12 | | ● | ● | ● | ● | ● |
| | | | | | 10 | | | ● | ● | ● | ● |
| | | | | | 8 | | | ● | ● | ● | ● |

Audio follows input format.

General Specifications

| Items | Description | |
|--------------------|--------------------------|--|
| HDMI | Dot Clock | 25MHz to 2376MHz |
| | Color Format | RGB, YCbCr 4:4:4/4:2:2/4:2:0 |
| | Color Depth | 8, 10, 12-bit |
| | Audio Sampling Frequency | 32kHz to 192kHz (L-PCM 2 to 8ch) IEC60958, 61937 |
| | HDCP | Ver. 1.4/2.3 |
| | E-EDID | Ver. 1.4 (DDC2B) |
| | External Supplying Power | 5V/Max. 50mA |
| Power Requirements | AC 100 – 240V | |
| Power Consumption | TBD | |
| Dimensions | TBD | |
| Weight | Approx. 2kg | |

* The specifications are subjected to change without notice.