

MP-DA28UHD

HDMI 2.0 2×8 Splitter with Audio Breakout and 4K to 1080P Down-Scaling

4K to 1080P Down-Scaling



PRODUCT OVERVIEW

The MP-DA28UHD is an HDMI 2.0 2×8 splitter that distributes either one of two HDMI inputs to eight outputs. It supports video resolutions up to 4K@60Hz 4:4:4, 1080P 3D and multichannel audio. HDMI digital audio can be de-embedded to stereo analog L/R and Toslink SPDIF outputs for connection to existing audio systems.

KEY FEATURES

- Supports HDMI 2.0 and video resolution up to 4K@60Hz 4:4:4.
- HDMI inputs support HDCP 2.2 and outputs support HDCP 1.4.
- 18Gbps high bandwidth.
- Automatic 4K-to-1080P down-scaling for compatibility with 1080P displays.
- RCA L/R and Toslink connectors for audio de-embedding.
- Advanced EDID management with multiple presets and user-defined EDID.
- Built-in equalizer for signal enhancement and reduced transmission attenuation.
- CEC control for display power and volume adjustment.
- Front-panel LEDs indicate operating status and assist installation/troubleshooting.
- Firmware upgrade through Micro-USB.

TECHNICAL SPECIFICATIONS

Video & Audio

VIDEO INPUT

Input	2 × HDMI
Input Connector	2 × Female Type-A HDMI
HDMI Input Resolution	Up to 4K×2K@60Hz 4:4:4 8-bit
HDMI Standard	2.0
HDCP Version	2.2
CEC	Supported

VIDEO OUTPUT

Output	8 × HDMI
Output Connector	8 × Female Type-A HDMI
HDMI Output Resolution	Up to 4K×2K@60Hz 4:4:4 8-bit
HDMI Standard	2.0
CEC	Supported

AUDIO

De-embedded Outputs	1 × AUDIO OUT; 1 × SPDIF OUT
Output Connectors	1 × RCA (L/R) jack; 1 × Toslink connector
HDMI Audio Format	LPCM 7.1, Dolby Atmos®, Dolby® TrueHD, Dolby Digital® Plus, DTS:X™, DTS-HD® Master Audio™ pass-through
Stereo Analog L/R	PCM
Toslink Digital Audio	PCM, Dolby Digital, DTS, DTS-HD
Frequency Response	20Hz–20kHz, ±3dB
Max Output Level	2.0Vrms ±0.5dB
THD+N	<0.05% (–80dB), 20Hz–20kHz bandwidth, 1kHz sine at 0dBFS
SNR	>80dB, 20Hz–20kHz bandwidth
Crosstalk Isolation	>70dB
L-R Level Deviation	<0.3dB @ 1kHz
Frequency Response Deviation	<±0.5dB, 20Hz–20kHz
Output Load Capability	1kΩ and higher
Stereo Channel Separation	>70dB @ 1kHz

CONTROL & GENERAL SPECIFICATIONS

Control, Physical & Environmental

CONTROL

Control Part	5 × control buttons; 1 × EDID 3-pin DIP switch; 1 × EDID 4-pin DIP switch; 1 × Micro-USB port
Source Selection	Manual source selection or automatic switching mode
Automatic Switching	Selects the first available active source starting at HDMI input 1; automatically changes to a newly connected active source
CEC Functions	Display ON/OFF; Volume UP/DOWN; mute (for CEC-compatible displays)
Firmware Upgrade	Micro-USB

GENERAL

Bandwidth	18Gbps
Operating Temperature	−10°C to +55°C
Storage Temperature	−25°C to +70°C
Relative Humidity	10%–90%
Power Supply	Input: 100–240V AC; Output: 12V DC 1A
Power Consumption	12W (Max)
Dimensions (W×H×D)	324 × 20 × 100mm
Net Weight	Approx. 900g

PANEL DESCRIPTION

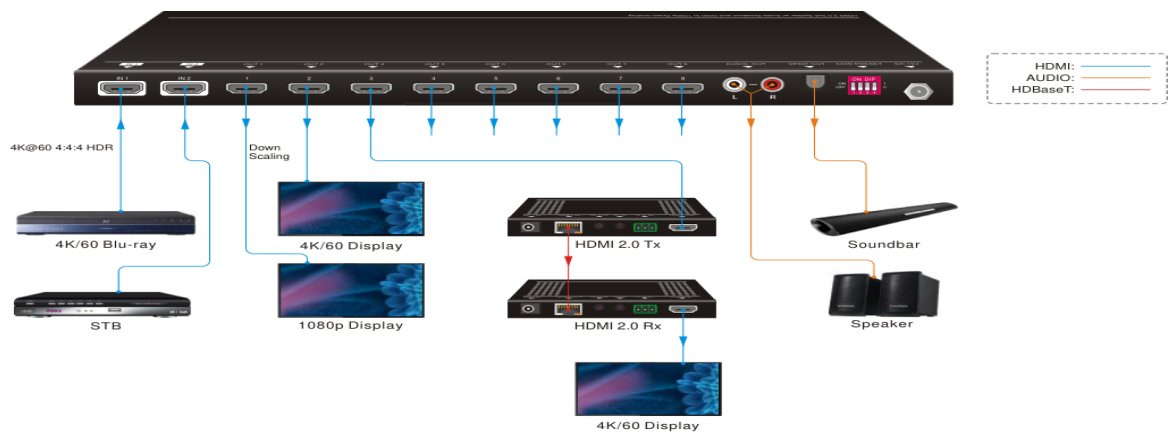
Front Panel	Power LED; 8 output LEDs; source button and LEDs; Display ON/OFF buttons; Volume DOWN/MUTE and Volume UP; 3-pin EDID DIP switch; Micro-USB FW port
Rear Panel	2 × HDMI inputs; 8 × HDMI outputs; RCA L/R audio output; Toslink SPDIF output; 4-pin EDID DIP switch; DC 12V input

PACKING LIST

1 × HDMI 2.0 2×8 Splitter; 2 × mounting ears with 4 screws; 4 × plastic cushions; 1 × 12V DC 1A power adapter; 1 × user manual.

SYSTEM CONNECTION & EDID MANAGEMENT

Application Diagram and Configuration



SYSTEM CONNECTION

The system diagram in the supplied manual (manual page 7) shows two HDMI sources feeding the splitter and multiple HDMI display/output paths. The application includes 4K/60 displays, a 1080P display, a 4K/60 Blu-ray source, an HDMI 2.0 Tx/Rx path, and audio de-embedding to a soundbar and speaker. The diagram also illustrates 4K@60 4:4:4 HDR input and down-scaling.

EDID MANAGEMENT

L.RES	Reads EDID information from all connected displays and passes the lowest-resolution EDID to the source.
PRESET	The rear 4-pin DIP switch selects predefined EDID values or a customized EDID.
H.RES	Reads EDID information from all connected displays and passes the highest-resolution EDID to the source.

PREDEFINED EDID

0000-0111	Obtains EDID from HDMI output ports 1-8 respectively.
1000	720P / LPCM
1001	1080P / LPCM
1010	1080P / DTS/Dolby
1011	3840×2160@30Hz / LPCM
1100	3840×2160@30Hz / DTS/Dolby
1101	3840×2160@60Hz / LPCM
1110	3840×2160@60Hz / DTS/Dolby
1111	User-defined EDID (ID 15)

VIDEO DOWNSCALING

The splitter can automatically degrade a 4K input to 1080P output to maintain compatibility with 1080P displays.

Source: supplied MP-DA28UHD User Manual, Version MP-DA28UHD_2018V1.0. Specifications are reproduced from the supplied manual.