HD-DA2-4KZ-E

1:2 HDMI® Distribution Amplifier w/4K60 4:4:4 & HDR Support

- > Splits one HDMI® source to two outputs
- > Handles 4K60 4:4:4 and HDR video signals [1]
- > Fully compatible with HD 1080p, UHD 4K, and DCI 4K sources and displays
- > Handles 3D video and Deep Color
- > Handles Dolby® TrueHD, Dolby Atmos®, DTS HD®, DTS:X®, and uncompressed 7.1 linear PCM audio
- > Selectable handling of HDCP 2.2 or HDCP 1.4
- > EDID management options
- > Input and output video presence indication
- > No programming or control system required
- > Thin profile less than one inch deep
- > Surface, shelf, or single rack rail mountable
- > External 100-240V universal power pack included

The Crestron® HD-DA2-4KZ-E is a simple to use, high-performance 4K AV distribution amplifier designed to split a single HDMI® signal to feed two separate displays, switchers, and/or other devices. It provides full support for UHD and DCI 4K60 4:4:4 and HDR video, HDCP 1.4 or 2.2 copy protection, and high-bitrate 7.1 audio, to ensure optimal performance and compatibility for any HD or 4K video application. No programming or control system is required for operation.^[1]

For larger applications, refer to models HD-DA4-4KZ-E and HD-DA8-4KZ-E.

SPECIFICATIONS

Video

Input Signal Type: HDMI w/HDR10, Deep Color, 3D, & 4K60 4:4:4 support [1] (DVI & Dual-Mode DisplayPort compatible [2])

Output Signal Type: HDMI w/HDR10, Deep Color, 3D, & 4K60 4:4:4 support [1] (DVI compatible [2])

Copy Protection: Selectable for HDCP 2.2, HDCP 1.4, or HDCP disabled

Maximum Resolutions:

Scan Type	Resolution	Frame Rate	Color Sampling	Color Depth
Progressive	4096x2160 DCI 4K & 3840x2160 4K UHD	24 Hz	4:4:4	36 bit
		30 Hz	4:4:4	36 bit
		60 Hz	4:2:2	36 bit
		60 Hz	4:4:4	24 bit
	2560x1600 WQXGA	60 Hz	4:4:4	36 bit
	1920x1080 HD1080p	60 Hz	4:4:4	36 bit
Interlaced	1920x1080 HD1080i	30 Hz	4:4:4	36 bit

NOTE: Common resolutions are shown; other resolutions are supported at pixel clock rates up to 600 MHz



Audio

Input Signal Type: HDMI (Dual-Mode DisplayPort compatible [2])

Output Signal Type: HDMI

Formats: Dolby Digital®, Dolby Digital EX, Dolby Digital Plus, Dolby TrueHD, Dolby Atmos, DTS®, DTS-ES, DTS 96/24, DTS HD High Res, DTS HD Master

Audio, DTS:X, LPCM up to 8 channels

Communications

USB: USB 2.0 host; supports firmware update and custom EDID upload

via a USB flash drive

HDMI: HDCP & EDID (does not pass CEC)

HDCP Version: Selectable for HDCP 2.2, 1.4, or OFF;

HDCP encrypted content is blanked in OFF mode

EDID Mode: Selectable for DEFAULT or COPY 1ST;

- The factory default EDID is 4K60 4:4:4 non-HDR video with 2-channel LPCM audio;
- The factory default EDID can be replaced with a custom EDID via USB;
- Sliding the switch from DEFAULT to COPY 1ST copies and stores the EDID from the device at OUTPUT 1 and passes it to the INPUT source device:
- Sliding the switch from COPY 1ST to DEFAULT erases the stored EDID and uses the factory default or custom EDID;

Note: Changing the device at OUTPUT 1 will not update the stored EDID until the switch is moved to DEFAULT and back to COPY 1ST

Connectors

INPUT: (1) HDMI Type A connector, female;

HDMI digital video/audio input [1];

(DVI & Dual-Mode DisplayPort compatible [2])

OUTPUT 1 – 2: (2) HDMI Type A connectors, female;

HDMI digital video/audio outputs [1];

(DVI compatible [2])

SERVICE: (1) USB Type A connector, female;

USB 2.0 host port;

For firmware update and custom EDID upload via a USB flash drive



HD-DA2-4KZ-E 1:2 HDMI® Distribution Amplifier w/4K60 4:4:4 & HDR Support





HD-DA2-4KZ-E - Rear View

24VDC 0.75A: (1) 2.1 x 5.5 mm DC power connector;

24 Volt DC power input;

PW-2407WU power pack included

Controls & Indicators

PWR: (1) Bi-color LED, indicates operating power is supplied via the power pack; illuminates amber while booting, green when operating

SETUP: (1) Pushbutton and (1) red LED, restores factory settings

RESET: (1) Recessed pushbutton for hardware reset

INPUT: (1) Green LED, indicates video signal presence at the HDMI input 0UTPUT 1-2: (2) Green LEDs, each indicates video signal transmission at the corresponding HDMI output

 $\mbox{\sc HDCP:}\ (\mbox{\sc 1})$ 3-position slide switch, selects the HDCP version (OFF, 1.4,

or 2.2)

EDID: (1) 2-position slide switch, selects the EDID mode (DEFAULT or COPY 1ST)

Power

Power Pack (included): Input: 100-240 Volts AC, 50/60 Hz;

Output: 0.75 Amps @ 24 Volts DC;

Model: PW-2407WU

Environmental

Temperature: 32° to 104° F (0° to 40° C) Humidity: 10% to 90% RH (non-condensing)

Enclosure

Chassis: Metal, black finish, with (2) integral mounting flanges

Mounting: Freestanding, surface mount, or attach to a single rack rail

Dimensions

Height: 0.87 in (22 mm) Width: 5.73 in (146 mm) Depth: 4.67 in (119 mm)

Compliance

CE, IC, FCC part 15 Class B digital device

MODELS & ACCESSORIES

Available Models

HD-DA2-4KZ-E: 1:2 HDMI® Distribution Amplifier w/4K60 4:4:4 & HDR Support

Included Accessories

PW-2407WU: Wall Mount Power Pack, 24VDC, 0.75A, 2.1mm, Universal (Qty. 1 included)

Available Accessories

CBL-HD Series: High-Speed HDMI® Cables

Notes:

- 1. 4K60 4:4:4 and HDR support requires the use of HDMI cables and couplers with a minimum TMDS bandwidth of 18 Gbps. If 4K60 4:2:0 or 4K30 4:4:4 performance is acceptable, cables and couplers with a minimum bandwidth of 10.2 Gbps may be used. Please be aware that bandwidth loss is cumulative, so performance may be reduced when inserting multiple cables and couplers inline.
- HDMI requires an appropriate adapter or interface cable to accommodate a DVI or Dual-Mode DisplayPort signal. CBL-HD-DVI interface cables are available separately.

This product may be purchased from an authorized Crestron dealer. To find a dealer, please contact the Crestron sales representative for your area. A list of sales representatives is available online at https://www.crestron.com/How-To-Buy/Find-a-Representative or by calling 855-263-8754.

The specific patents that cover this and other Crestron products are listed online at https://www.crestron.com/legal/patents.

Certain Crestron products contain open source software. For specific information, visit https://www.crestron.com/opensource.

Crestron and the Crestron logo are either trademarks or registered trademarks of Crestron Electronics, Inc. in the United States and/or other countries. Dolby, Dolby Atmos, and Dolby Digital are either trademarks or registered trademarks of Dolby Laboratories in the United States and/or other countries. DTS, DTS HD, and DTS:X are either trademarks or registered trademarks of DTS, Inc. in the United States and/or other countries. HDMI and the HDMI Logo are either trademarks or registered trademarks of HDMI Licensing LLC in the United States and/or other countries. Other trademarks, registered trademarks, and trade names may be used in this document to refer to either the entities claiming the marks and names or their products. Crestron disclaims any proprietary interest in the marks and names of others. Crestron is not responsible for errors in typography or photography. Specifications are subject to change without notice.



