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



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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 **OUTPUT 1 – 2:** (2) Green LEDs, each indicates video signal transmission at the corresponding HDMI output

 $\mbox{\sc HDCP}$: (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

Power Consumption: 4.3 W (typical)

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.

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