

DA2 HD 8K AE and DA2 HD 8K AI • Setup Guide

IMPORTANT NOTE:

Go to www.extron.com for the complete user guide, installation instructions, and specifications before connecting the product to the power source.



DA2 HD 8K AE / DA2 8K AI

The Extron DA2 HD 8K AE and DA2 HD 8K AI distribution amplifiers distribute one HDMI input signal to two outputs simultaneously at resolutions up to 8K @ 30 Hz 4:4:4 or 8K @ 60 Hz 4:2:0, and comply with HDMI 2.1 and HDCP 2.2. The DA2s also features EDID Minder Plus and remote control and monitoring via USB.

The DA2 HD 8K AE extracts LPCM 2-channel audio from the HDMI signal, converts it to analog, and outputs it as balanced or unbalanced analog audio. The DA2 HD 8K AI accepts stereo balanced or unbalanced analog audio, convert it to 2-Channel 16-bit LPCM audio at 48 KHz, and embed it onto the HDMI signal.

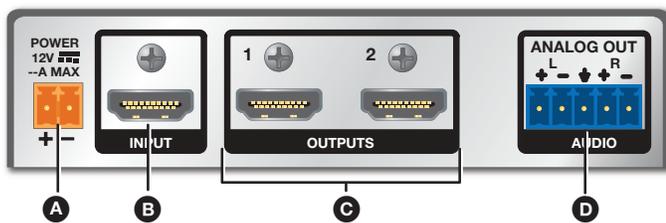
This setup guide provides basic instructions for installation by an experienced installer. For complete instructions, see the *DA2 HD 8K AE and DA2 HD 8K AI User Guide* at www.extron.com.

Mounting

The DA2 HD 8K AE and DA2 HD 8K AI distribution amplifiers can be placed on a desktop or tabletop using the included rubber feet, or mounted to a rack or furniture (see the *DA2 HD 8K AE and DA2 HD 8K AI User Guide* at www.extron.com, for mounting options and instructions).

Rear Panel Cabling

DA2 HD 8K AE



DA2 HD 8K AI

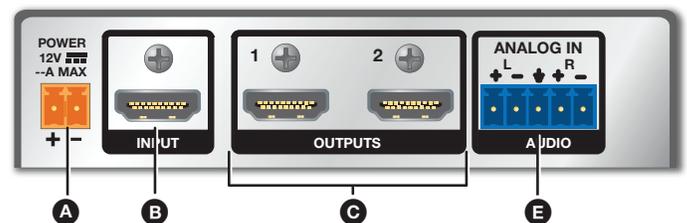


Figure 1. DA2 HD 8K AE and DA2 HD 8K AI Rear Panels

- A Power input** — Connect the provided 12 VDC, 1.5 A power supply to this 2-pole 3.5 mm captive screw port.

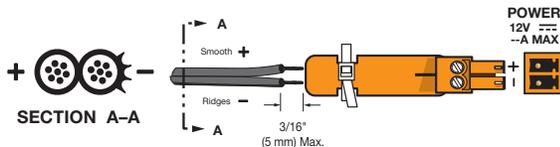


Figure 2. Wiring the Power Connector

- B HDMI input** — Connect a source device to this female HDMI type A input.
- C HDMI outputs** — Connect up to two display devices to these female HDMI type A outputs.

NOTE: Use the provided LockIt® HDMI cable lacing brackets to secure the HDMI connectors (see [Installing the LockIt Bracket](#) on page 2).

- D Analog audio output (DA2 HD 8K AE model only)** — Connect an audio output device to this 5-pole, 3.5 mm captive screw port. This port outputs 2-channel LPCM audio (converted to analog) that is extracted from the HDMI input signal.

ATTENTION:

- Do not connect the power supply before reading the Attention in the Power Supply section of the *DA2 HD 8K AE and DA2 HD 8K AI User Guide*.
- Ne branchez pas la source d'alimentation externes avant d'avoir lu les mises en garde dans la section « Power Supply » du *DA2 HD 8K AE and DA2 HD 8K AI User Guide*.

- E Analog audio input (DA2 HD 8K AI model only)** — Connect an analog audio device to this 5-pole 3.5 mm captive screw port. This port accepts 2-channel stereo balanced or unbalanced audio.

NOTE: By default, the DA2 HD 8K AI is configured to always embed analog audio. This can be configured using Extron PCS software or SIS commands.

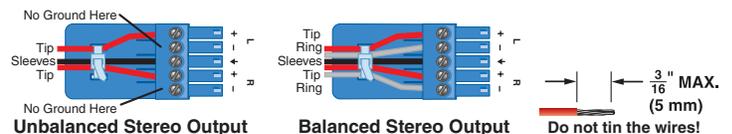


Figure 3. Wiring the Audio Output Connector

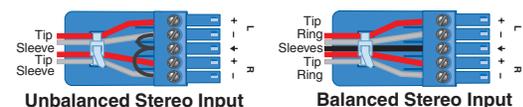


Figure 4. Wiring the Audio Input Connector

DA2 HD 8K AE and DA2 HD 8K AI • Setup Guide (Continued)

ATTENTION:

- Connect the sleeve to the ground (Gnd) terminal. Connecting the sleeve to a negative (-) terminal will damage the audio output circuits.
- Connectez le manchon à la terminaison terre (Gnd). Connecter le manchon à une terminaison négative (-) endommagera les circuits de la sortie audio.

Installing the LockIt Bracket

Follow these instructions to secure the input and output HDMI connectors to the unit with the LockIt HDMI lacing brackets provided:

1. Plug the HDMI cable into the rear panel connection (1).
2. Loosen the HDMI connection mounting screw from the rear panel enough to allow the LockIt lacing bracket to be placed over it (2). The screw does not have to be removed.
3. Place the LockIt lacing bracket on the screw and against the HDMI connector, then tighten the screw to secure the bracket (3).

ATTENTION:

- Do not overtighten the HDMI connection mounting screw. The shield it fastens to is very thin and can easily be stripped.
- Ne serrez pas trop la vis de montage du connecteur HDMI. Le blindage auquel elle est attachée est très fin et peut facilement être dénudé.

4. Loosely place the included tie wrap around the HDMI connector and the LockIt lacing bracket as shown (4).
5. While holding the connector securely against the lacing bracket, tighten the tie wrap, then remove any excess length.

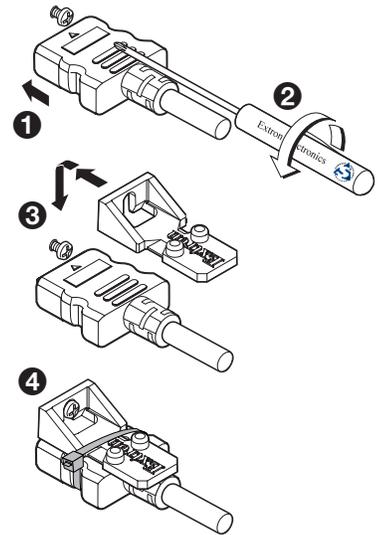


Figure 5. LockIt Diagram

Front Panel

NOTE: The front panel for the DA2 HD 8K AE and DA2 HD 8K AI are the same.

A Power status LED — Lights when power is applied to the unit.

B USB C Config port — Connect a PC to this port to configure and monitor the device via SIS or PCS.

C Input and Outputs LEDs —

Input LEDs —

- **Signal** — Lights when a TMDS signal is detected on the HDMI input. If the source requires HDCP encryption, lights only when HDCP is authenticated.

- **HDCP** — Lights when the source requires HDCP encryption and it has been authenticated with the HDMI input.

Outputs LEDs —

- **Signal** — Light when HPD is detected from the corresponding sink device and a TMDS signal is detected at the input.
- **HDCP** — Light when HDCP is authenticated between a DA output and the corresponding sink device.

D Audio In LEDs — These three LEDs provide the status of the various audio input functions:

- **2-CH LPCM** — Lights when the incoming embedded audio signal is a 2-channel Digital LPCM audio format.
- **Bitstream** — Lights when the incoming embedded audio signal is a Dolby Digital or DTS audio format.
- **Other** — Lights to indicates Audio Input other than 2-CH LPCM or AC-3/DTS Bit Stream.

E EDID STORE button and LED — When pushed in, the **STORE** button initiates both reading and storing the EDID from the connected display. The LED blinks when reading and storing and lights steady when storing is complete. Press the **STORE** button to read the EDID of the connected device and store it to a user slot selected by the rotary switch. Up to four EDID files (switch positions C through F) can be stored.

Reset — To reset the DA, use the **STORE** button according to the directions in [Reset modes](#) (see page 4).

F EDID rotary switch — Use the 16-position rotary switch to select from 12 factory EDID files and 4 store slots. When a position is selected, the corresponding slot in the [EDID table](#) (see page 3) is assigned to the input, and an unsolicited SIS response is sent. The default position is 5.

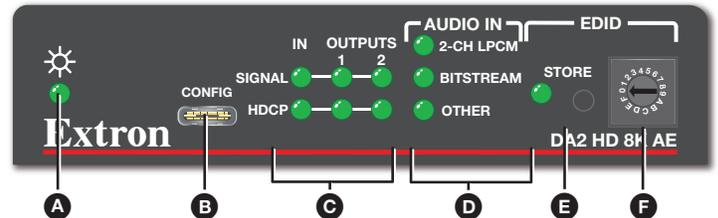


Figure 6. DA2 HD 8K AE Front Panel

NOTE: The DA2 HD 8K AE and DA2 HD 8K AI store the EDID from output 1 only.

	Rotary Switch	Resolution	Refresh	Rate Type	Video Format	Audio Format
1	0	1280x800	60 Hz	IT	HDMI 1.3	2-Ch
2	1	1920x1200	60 HZ	IT	HDMI 1.3	2-Ch
3	2	720p	50 Hz	CE	HDMI 1.3	2-Ch
4	3	720p	60 Hz	CE	HDMI 1.3	2-Ch
5	4	1080p	50 Hz	CE	HDMI 1.3	2-Ch
6	5	1080p	60 Hz	CE	HDMI 1.3	2-Ch
7	6	1080p	60 Hz	CE	HDMI 1.3	Multi-Ch
8	7	4K/UHD	30 Hz	CE	HDMI 1.4	2-Ch
9	8	4K/UHD 4:4:4	60 Hz	CE	HDMI 2.0	2-Ch
10	9	4K/UHD 4:4:4	60 Hz	CE	HDMI 2.0	Multi-Ch
11	A	8K 4:2:0	60 Hz	CE	HDMI 2.1	2-Ch
12	B	8K 4:2:0	60 Hz	CE	HDMI 2.1	Multi-Ch
13	C	Store Slot 1				
14	D	Store Slot 2				
15	E	Store Slot 3				
16	F	Store Slot 4				

LED State	Rotary Switch	Store Button	Description
Off	0-B	Non-functional	EDID storing is not possible on the selected rotary position.
Green (blinking)	C-F	Button has been pressed and released	The STORE button has been pressed and the EDID is currently being stored to the selected user store slot.
Green (solid)	C-F	N/A	EDID storing is possible on the selected rotary position, or the storing process is complete (if following the flashing state).

Assign Extron Factory EDID

Rotary switch positions 0 through B are Extron factory EDID. Select a switch position corresponding to the desired resolution (see image below).

Additionally, four user slots C through F are available to save the EDID of connected displays (see Store an EDID in a User Store Slot) and to import EDID files from an external source with PCS (see the *DA2 HD 8K AE and DA2 HD 8K AI Help File*). EDID saved to these slots are retained after a power cycle. Upon a factory reset, these EDID slots revert to the default (1080p @ 60 Hz, 2-Ch audio). EDID can only be stored via the rotary switch.

Store an EDID in a User Store Slot

To store EDID from a connected display or other sink device:

1. Turn the rotary switch (see image on the right) to the desired user slot location (C through F).
2. Connect the display device to the HDMI output port of the DA2.
3. Connect a power source and apply power to the DA2. The power LED lights steady when power is available.
4. Power on the display device.
5. Press **STORE** once and hold for 1 second to store the display EDID to the memory slot selected in **step 1**. The LED blinks 3 times to confirm. When the LED returns to solid, the EDID is stored (see the image on the right).



NOTES:

- EDID stored in user slots C through F are saved until a new EDID is stored to that slot or the device is reset.
- The DA2 HD 8K AE and DA2 HD 8K AI store the EDID from output 1 only.

Reset modes

The front panel **STORE** button initiates one reset. Use a pointed stylus, ballpoint pen, or small screwdriver to access the recessed button. See the Reset Mode table for a summary of the reset.

ATTENTION:

- Review the reset mode carefully. Some reset modes delete all user loaded content and revert the device to default configuration.
- Analysez minutieusement les différents modes de réinitialisation. Certains modes de réinitialisation suppriment l'intégralité du contenu chargé de l'utilisateur et remettent l'appareil au mode de configuration par défaut.

Reset Mode			
Mode	Activation	Result	Purpose and Notes
Partial Factory Reset	Hold in the STORE button until all the front panel LEDs blink once (about 3 seconds). Then, release and press the STORE button again momentarily for 1 second, within 1 second.	Resets the unit back to factory default: The LEDs blink two times if the program is starting. The LEDs blink three times if the program is stopping.	Use to reset the unit to factory settings. Equivalent to SIS command ZXXX.

Connect and Power the DA2 HD 8K AE and DA2 HD 8K AI

1. Set the rotary switch (see [figure 6, F](#) on page 2) for the desired resolution (see [EDID table](#) on page 3).
2. Connect an HDMI cable from the source to the DA2 Input (see [figure 1, B](#) on page 1).
3. Connect an HDMI cable from the DA2 Output (see [figure 1, C](#)) to the display or distribution system.
4. Turn on the video display.
5. Connect the power supply to the DA2 (see [figure 1, A](#)).
6. Connect AC power to the power supply. The DA2 power LED lights green.
7. Turn on the video source. The video source reads the EDID from the DA2.

Configuration

Several DA2 HD 8K AE and DA2 HD 8K AI features can be configured using the following:

- **Extron Product Configuration Software (PCS)** — To configure the unit using PCS, download the software from www.extron.com (see the *DA2 HD 8K AE and DA2 HD 8K AI User Guide* and *DA2 HD 8K AE and DA2 HD 8K AI Help File* for details).
- **Simple Instruction Set™ (SIS) commands** — SIS commands can be sent from a PC to the DA2 HD 8K AE and DA2 HD 8K AI using Extron DataViewer or other command interface (see the SIS Commands section of the *DA2 HD 8K AE and DA2 HD 8K AI User Guide*).

For information on safety guidelines, regulatory compliances, EMI/EMF compatibility, accessibility, and related topics, see the [Extron Safety and Regulatory Compliance Guide](#) on the Extron website.