

# DISTRIBUTION AMPLIFIERS

1x2, 1x4, AND 1x8 18GBPS DISTRIBUTION AMPLIFIERS WITH ADVANCED EDID MANAGEMENT



## QUICK START GUIDE

AVProEdge's line of Distribution Amplifiers offer full 18Gbps HDMI distribution to multiple displays. This is ideal for bars, restaurants, homes, etc. where you would like to watch one source on multiple displays. If distribution for more displays is needed, multiple DAs can be daisy chained together using "Cascade Mode".

This Quick Start Guide will walk you through the installation and configuration of the AC-DA12-AUHD-GEN2, AC-DA14-AUHD, and the AC-DA18-AUHD-GEN2. We will cover:

- INSTALLATION
- EDID MANAGEMENT
- CASCADE MODE
- DOWNSCALING
- AUDIO EXTRACTION
- USB CONNECTION
- TROUBLESHOOTING

\*NOTE - Each DA has built in EDID management and Cascade Mode. The AC-DA12-AUHD-GEN2 adds downscaling and audio extraction via Toslink.

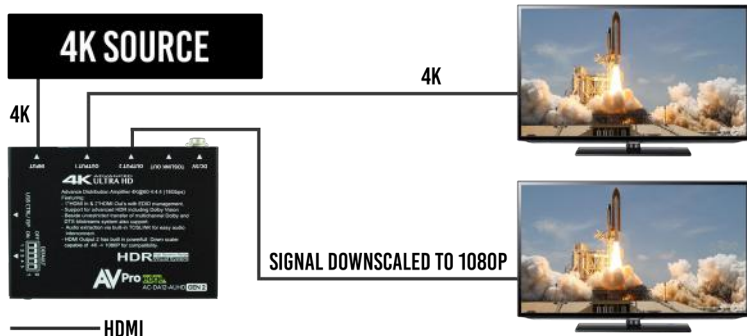
### INSTALLATION:

For basic setups where a simple HDMI splitter is needed, each DA in our line is Plug & Play. Follow these steps:

1. Using an 18Gbps HDMI cable, connect the source to the "INPUT" of the DA
2. Using an 18Gbps HDMI cable, connect each "OUTPUT" of the DA to a display.
3. Connect power to the DA using the included power supply

\*NOTE - There is no "Power" button. The unit will power on once the power supply is connected.

Here is an example of a setup with an AC-DA12-AUHD-GEN2 connecting one source to two displays:

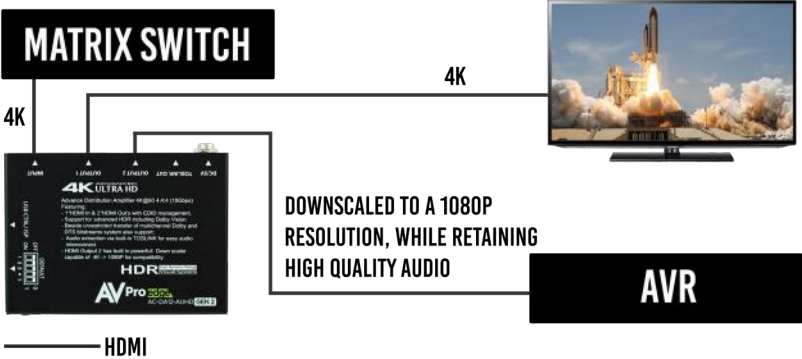


Working with a legacy AVR that cannot pass 18Gbps signals? The AC-DA12-AUHD-GEN2 is a perfect solution!  
Follow these steps for maximum audio and video quality:

- 1. Using an 18Gbps HDMI cable, connect the source to the "INPUT" of the DA
- 2. Using an 18Gbps HDMI cable, connect "OUTPUT 1" to the display
- 3. Using a high quality HDMI cable, connect "OUTPUT 2" to an input on the AVR



# AVR BYPASS APPLICATION



Here is an example of a setup with an AC-DA14-AUHD connecting one source to four displays:



# CONNECTION DIAGRAM



Here is an example of a setup with a AC-DA18-AUHD-GEN2 connecting one source to eight displays:

**AVPro**edge  
AC-DA18-AUHD-GEN2

## CONNECTION DIAGRAM



### EDID MANAGEMENT:

Advanced EDID management is built into each DA model. This allows you to select from a multitude of different presets, including Cascade Mode and "from display" (EDID Copy). This gives you the ability to get the right signal throughout the system and ensures communication with virtually any device.

#### AC-DA12-AUHD-GEN2 & AC-DA14-AUHD

1. Locate the 5 dip switches on the side of the unit
2. Each switch has two settings, 0 and 1 (UP=0, DOWN=1). The default mode is "00000" (all switches "UP"). In this mode the DA will copy the EDID from the sink (display) that is plugged into "OUTPUT 1".

To use a different EDID follow the guide on the next page.



AC-DA12-AUHD-GEN2



AC-DA14-AUHD

## EDID DIP SWITCH SETTINGS:

00000: EDID Copy	01101: 4K60Hz_3D_2CH(PCM)
00001: 1080P_2CH(PCM)	01110: 4K60Hz_3D_6CH
00010: 1080P_6CH	01111: 4K60Hz_3D_8CH
00011: 1080P_8CH	10000: 1080P_2CH(PCM)_HDR
00100: 1080P_3D_2CH(PCM)	10001: 1080P_6CH_HDR
00101: 1080P_3D_6CH	10010: 1080P_8CH_HDR
00110: 1080P_3D_8CH	10011: 1080P_3D_2CH(PCM)_HDR
00111: 4K30Hz_3D_2CH(PCM)	10100: 1080P_3D_6CH_HDR
01000: 4K30Hz_3D_6CH	10101: 1080P_3D_8CH_HDR
01001: 4K30Hz_3D_8CH	10110: 4K30Hz_3D_2CH(PCM)_HDR
01010: 4K60Hz(Y420)_3D_2CH(PCM)	10111: 4K30Hz_3D_6CH_HDR
01011: 4K60Hz(Y420)_3D_6CH	11000: 4K30Hz_3D_8CH_HDR
01100: 4K60Hz(Y420)_3D_8CH	11100: 4K60Hz_3D_2CH(PCM)_HDR
11001: 4K60Hz(Y420)_3D_2CH(PCM)_HDR	11101: 4K60Hz_3D_6CH_HDR
11010: 4K60Hz(Y420)_3D_6CH_HDR	11110: 4K60Hz_3D_8CH_HDR
11011: 4K60Hz(Y420)_3D_8CH_HDR	11111: Cascading Mode

\*NOTE - For "00000" (EDID Copy mode) the EDID will be copied from the display that is plugged into "OUTPUT 1".

\*NOTE - Each DA comes from the factory in "EDID COPY" mode. We do this for maximum "Plug & Play" compatibility

## AC-DA18-AUHD-GEN2

EDID management on the AC-DA18-AUHD works exactly like the AC-DA12-AUHD-GEN2 and the AC-DA14-AUHD, except instead of dip switches it uses 2 rotary dials.

Rotary dial 1 represents the first digit in the desired setting while Rotary dial 2 represents the second. The default mode is "00" (both rotary dials on "0"). In this mode the DA will copy the EDID from the sink (display) that is plugged into "OUTPUT 1". To use a different EDID follow the guide on the next page.



00: EDID Copy	16: 4K60Hz_3D_2CH(PCM)
01: 1080P_2CH(PCM)	17: 4K60Hz_3D_6CH
02: 1080P_6CH	18: 4K60Hz_3D_8CH
03: 1080P_8CH	19: 1080P_2CH(PCM)_HDR
04: 1080P_3D_2CH(PCM)	20: 1080P_6CH_HDR
05: 1080P_3D_6CH	21: 1080P_8CH_HDR
06: 1080P_3D_8CH	22: 1080P_3D_2CH(PCM)_HDR
07: 4K30Hz_3D_2CH(PCM)	23: 1080P_3D_6CH_HDR
08: 4K30Hz_3D_6CH	24: 1080P_3D_8CH_HDR
09: 4K30Hz_3D_8CH	25: 4K30Hz_3D_2CH(PCM)_HDR
10: 4K60Hz(Y420)_3D_2CH(PCM)	26: 4K30Hz_3D_6CH_HDR
11: 4K60Hz(Y420)_3D_6CH	27: 4K30Hz_3D_8CH_HDR
12: 4K60Hz(Y420)_3D_8CH	28: 4K60Hz_3D_2CH(PCM)_HDR
13: 4K60Hz(Y420)_3D_2CH(PCM)_HDR	29: 4K60Hz_3D_6CH_HDR
14: 4K60Hz(Y420)_3D_6CH_HDR	30: 4K60Hz_3D_8CH_HDR
15: 4K60Hz(Y420)_3D_8CH_HDR	31: Cascading Mode

## CASCADE MODE:

Cascade Mode will allow you to daisy chain multiple DAs together. This may be desired for large installations with extra long HDMI runs or if you'd like to add more displays than what the DA can handle. To use Cascade Mode follow these steps:

### AC-DA12-AUHD-GEN2 & AC-DA14-AUHD

- 1) Start with the power off
- 2) Use a preset EDID (from the guide above) on the first DA in the series.
- 3) Set the dip switches to "11111" (all down)
- 4) Connect the source via HDMI to the "INPUT" of the DA
- 5) Power up the system

### AC-DA18-AUHD-GEN2

- 1) Start with the power off
- 2) Use a preset EDID (from the guide above) on the first DA in the series.
- 3) Set the rotary dials to "00"
- 4) Connect the source via HDMI to the "INPUT" of the DA
- 5) Power up the system

## DOWNSCALING (AC-DA12-AUHD-GEN2 ONLY):

Use this feature for downscaling 4K/HDR content to legacy 1080p displays or other components.

\*NOTE - The downscaler only works on "OUTPUT 2" of the DA

To use the downscaler follow these steps:

1. Locate the "SCALER" button on the side of the unit. Press it to toggle the scaler on and off
2. If the red LED next to the "SCALER" button is on, the DA will downscale to 1080p on "OUTPUT 2"
3. If the red LED next to the "SCALER" button is off, there is no scaling



## AUDIO EXTRACTION (AC-DA12-AUHD-GEN2 ONLY):

Extract audio via Toslink (7CH PCM, DD, DD+, DTS, DTS-MA) to send digital audio signals to an AVR or surround sound processor.

\*NOTE - Need to downmix to 2CH? Check out the AC-ADM-COTO or AC-ADM-AUHD

To use Audio Extraction follow these steps:

1. Locate the Toslink connection on the side of the DA
2. Connect a Toslink cable to the "OPTICAL OUT" port
3. Connect the other end of the Toslink cable to the input of an AVR or surround sound processor



## USB CONNECTION:

Each DA in our line has a USB connection. On all 3 models this connection is used for firmware updates.



The AC-DA12-AUHD-GEN2's USB connection can also be used for control. For a full list of the commands please see the owner's manual.

## TROUBLESHOOTING:

Having problems? Here are some general troubleshooting tips that may help:

1. Be sure that all of the HDMI cables in a 4k/HDR system are rated for 18Gbps.
2. If using short HDMI cables (.5m, 1m) try a longer cable. Some short HDMI cables do not sync well.
3. Getting no picture or sound? Power down the entire system. Power it back up starting with the display first and work your way back to the source.
4. If you are still having issues after troubleshooting, feel free to contact our Tech Support department.

\*NOTE - Each DA has LEDs that can help you troubleshoot the unit. Since each model has a slightly different set of LED indicators, refer to the owner's manual of the specific model that you are working with.

**HAVE A QUESTION OR NEED ASSISTANCE?  
DON'T HESITATE TO CONTACT US!**

**SUPPORT: +1 605-274-6055**

**USA TOLL FREE: 877-886-5112**

**EMAIL: [SUPPORT@AVPROEDGE.COM](mailto:SUPPORT@AVPROEDGE.COM)**

**DRIVERS ARE AVAILABLE AT  
[WWW.AVPROEDGE.COM/DRIVERS](http://WWW.AVPROEDGE.COM/DRIVERS)**

