USING THE UH4-4K/UH8-4K CASCADED ON VIDEO WALL:

To display identical videos on multiple displays, you can connect several UH4-4K and UH8-4K Distribution Amplifiers in a series.
Connect the HDMI extension cable between the "HDMI Output 2" port on the 1st level of the UH4-4K/UH8-4K Amplifier and the "HDMI IN" port on the 2nd level of the UH4-4K/UH8-4K Amplifier.

- Always use a UHDTV on port 1 of the first amplifier
- It is recommended to limit the cascade series of UH4-4K/UH8-4K units to 10 or less. If you need a longer display chain than this, place the source in the center of the display wall and connect downstream amplifiers in both directions. Creating a display chain of 10 or more amplifiers in a cascade, may cause the signal to become unstable
- Any 1080p or lower resolution TV's connected to this display may not display a picture due to the resolution being too high
- Maximum internal EDID resolution is 4K @30Hz. You must connect a 4k60 UHDTV to port 1 and set the Amplifier for Pass-through Mode to achieve 4k60 output

CE labs can support many areas of your audio and video distribution needs. We manufacture:

- Digital Signage software and Media Players
- HD Matrix Switchers
- RF modulators & RF amplifiers
- HDMI and Component HD distribution amplifiers
- CAT 5 Signal Extenders
- VGA Extenders and Splitters
- and cables of all types.

See our full product line at www.celabs.net

WARRANTY

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INSTRUCTION MANUAL
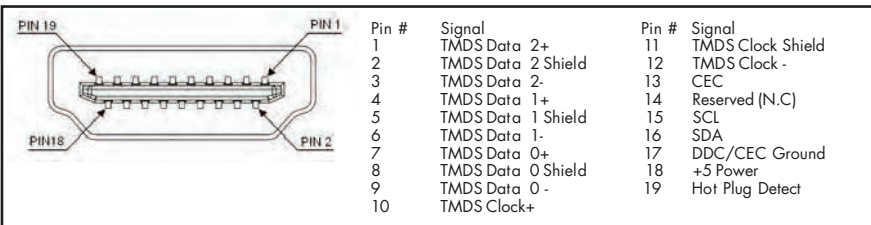
Ultra HD HDMI Splitters
UH4-4K & UH8-4K

UH4-4K

UH8-4K

- HDMI, HDCP, and DVI compatible
- Supports video resolutions up to 4Kx2K @60 Hz, 8-bit, 4:2:0 color, 4Kx2K @30Hz, 10-bit 4:2:2 color, 1080p @60 Hz, 12-bit or 720p/1080i @120Hz, 12-bit
- Supports all the mandatory and optional 3D formats up to 300 MHz
- DDC copy & CEC Bypass from Output #1
- Repeater function supports up to 127 devices
- Cascadable for retail video wall displays
- Integrated Cable retention bracket (CE labs® patented)

PACKAGE CONTENTS

- 1 UH4-4K "OR" UH8-4K UHD HDMI Splitter
- 1 Power Adapter 100-240 VAC – 12Vdc 1.25Amp 2.5mm
- 1 Instruction Manual
- 2 Mounting Screws
- 4 Rubber Pads

Pin #	Signal	Pin #	Signal
1	TMDS Data 2+	11	TMDS Clock Shield
2	TMDS Data 2 Shield	12	TMDS Clock -
3	TMDS Data 2-	13	CEC
4	TMDS Data 1+	14	Reserved (N.C)
5	TMDS Data 1 Shield	15	SCL
6	TMDS Data 1-	16	SDA
7	TMDS Data 0+	17	DDC/CEC Ground
8	TMDS Data 0 Shield	18	+5 Power
9	TMDS Data 0 -	19	Hot Plug Detect
10	TMDS Clock+		

PIN 19 PIN 1 PIN 18 PIN 2

Use these tabs to secure the HDMI cables with a cable tie.

UH4-4K/UH8-4K Ultra HD HDMI Amplifiers

2 2 1 2 2

UH4-4K Front View

UH8-4K

2 2 2 2 1 2 2 2 2

1 – HDMI Input port
2 – HDMI Output ports
3 – Tabs for cable support

7   8 9   10
4 5 6   11

4 – F/W Upgrade
5 – Reset
6 – Mode (must reset after set)

OFF	OFF	1080P
OFF	ON	Port 1 to Input
ON	ON	2Kx4K
ON	OFF	Reserved

7 – Output port 1-8 LED connection detection
8 – HDCP LED
9 – HDMI Input LED
10 – Power ON LED
11 – DC 12V 1.25mA connector

INSTALLATION/OPERATION INSTRUCTIONS

1. Turn off the devices to be connected together. (Source and UHDTV)

2. Connect the HDMI cable (High Speed rated) between the 4Kx2K source (Media Player, Satellite Receiver, etc.) and "HDMI Input" port of the UH4-4K/UH8-4K

3. Connect the HDMI cables from the outputs of the distribution amplifier to the inputs of the UHDTV. Connect a quality brand TV to port 1 output.

4. Power up the UH4-4K/UH8-4K and the UHDTV connected to HDMI output number one on the amplifier. Leave the other UHDTV's off for now.

5. Turn on power to the source device. The UHDTV connected to output number one should have picture and sound within 5 seconds.

6. Turn on power to the remaining UHDTV's.

7. Install a cable tie around the HDMI cable and chassis tab, if desired, to prevent accidental unplugging of the HDMI cables. See picture above.

NOTES: 1. All UHDTV's connected to the UH4-4K/UH8-4K should be capable of the same resolution.
2. Always connect the first UHDTV to output number one on the UH4-4K/UH8-4K first. This is necessary for the Electronic ID to be read properly by the source.
3. For optimum performance, try to use HDMI cables no longer than 5 meters in length, and 4Kx2K approved (High Speed Rated).

SPECIFICATIONS

Model	UH8-4K	UH4-4K
HDMI Connector (A-Type Female)	1	1
HDMI Connector (A-Type Female)	8	4
Max Resolution	4Kx2K @30Hz, 8-bit, 4:2:0 pixel, 1080p @60Hz, 12-bit or 720p/1080i @120Hz, 12-bit	
Cable Distance	10m (Max.) 5m recommended	
Signal Type	HDMI V1.4 Compliant	
Power Adapter (Min.)	DC 12V 1.25A 2.5mm	
Housing	Metal	
Weight	2.9 lbs. (1.32 Kg)	1.3 lbs (0.59 Kg)
Dimensions (LxWxH)	9.5" x 7" x 1"	6.75" x 7" x 1"
Color Depth	4Kx2K @30Hz, 8-bit, 4:2:0 pixel, 1080p @60Hz,12-bit or 720p/1080i @120Hz, 12-bit, Full 3D Support	