



## AC-AXION-8: AXION 8x8 Matrix Switch 18Gbps 4k60 4:4:4 and 7.1Ch Downmixing



The AC-AXION-8 is a high bandwidth audio/video matrix switcher. What really makes this product special is the ability to downmix bitstream audio beyond 7.1 channel into a 2-channel audio signal via all four inputs, that includes Dolby Atmos and DTS-X. This Matrix switcher's back-end UI has been completely redesigned from the ground up. Controlling the AC-AXION-8 is not a problem, through the AXION Interface, you can manage all the settings and controls. We also offer drivers for all the top control systems. The AC-AXION-8 will become a staple in your large demanding installations!

In a multi-zoned distribution system, every zone is not set to handle full Dolby Atmos sound. Most zones are going to need 2 channel audio. The AC-AXION-8 Matrix Switcher allows you to deliver 24+ channels to your Dolby Atmos home theater, at the same time it delivers 2-channel to the rest of the installation. We do this by allowing the downmixing to only affect the de-embedded audio outputs, the 8 mirrored HDMI/HDBaseT ports leave the audio unimpeded, allowing you to distribute full Dolby Atmos and DTS HD through them. Supporting the full HDMI 2.0 a/b specification and supporting every version of HDR, this matrix will ensure you can get the most out of any system. This 8x8 down mixing matrix supports HDR formats Including HDR, HDR10, HDR10+, Dolby Vision, HLG, BBC and NHK. All of them are supported in up to 4K 60Hz and up to 12 Bit Deep Color. All color space compression is compatible.



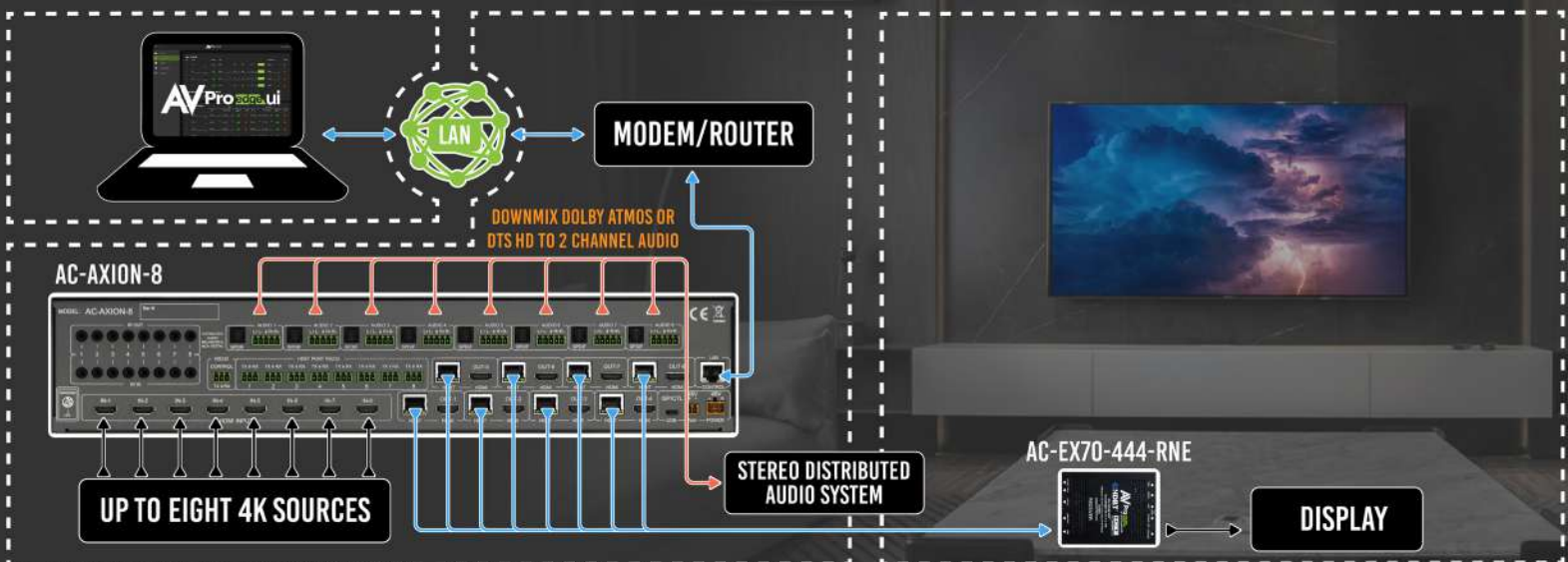
## AXION 8 LUXURY HOME APPLICATION



ANY ROOM

AV RACK

8 DISPLAYS IN DIFFERENT ZONES





## PRODUCT SPECIFICATIONS

### VIDEO:

VIDEO RESOLUTIONS	UP TO 4K 60HZ 4:4:4
VESA RESOLUTIONS	UP TO DCI 4K (4096X2160)
HDR FORMATS/RESOLUTIONS	420, 422, 444 (10 AND 12 DEEP COLOR) HDR10, HDR10+, DOLBY VISION, HLG
COLOR SPACE	YUV (COMPONENT), RGB (CSC: REC. 601, REC. 709, BT2020, DCI, P3 D6500)
CHROMA SUBSAMPLING	4:4:4, 4:2:2, 4:2:0 SUPPORTED
DEEP COLOR	UP TO 16 BIT (1080), UP TO 12 BIT (4K)
SCALERS (HDMI) PER OUTPUT OPTIONAL	1080P TO 4K UP-SCALING (RESOLUTIONS ONLY, FRAMERATE STAYS THE SAME)
SCALERS (HDBASET) PER OUTPUT OPTIONAL	4K TO 1080P DOWN-SCALING (RESOLUTIONS ONLY, FRAMERATE STAYS THE SAME)

### AUDIO:

AUDIO FORMATS SUPPORTED HDMI	PCM 2.0 CH, LPCM 5.1 & 7.1, DOLBY DIGITAL, DTS 5.1, DOLBY DIGITAL PLUS, DOLBY TRUEHD, DTS-HD MASTER AUDIO, DTS-X, DOLBY ATMOS
AUDIO FORMATS SUPPORTED EXTRACTED (TOSLINK)	ALWAYS DOWN-MIXED TO 2CH.
AUDIO FORMATS SUPPORTED EXTRACTED (2CH PORT)	ALWAYS DOWN-MIXED TO 2CH.
AUDIO EXTRACTION LOCATION	BIND TO INPUT, BIND TO OUTPUT, OR MATRIX (INDEPENDENT)
AUDIO DELAY (PER OUTPUT, EXTRACTED)	UP TO 630MS

### DISTANCE:

HDBASET OUT (4K60 4:4:4 & HDR) W/AC-EX70-444-RNE	70 METERS / 230 FEET (CAT 6A)
HDBASET OUT (1080P) W/AC-EX70-444-RNE	100 METERS / 330 FEET (CAT 6A)
HDBASET OUT (4K60 4:2:0 MAX) W/AC-EX70-UHD-R	40 METERS / 131 FEET (CAT 6A)
HDBASET OUT (1080P) W/AC-EX70-UHD-R	70 METERS / 230 FEET (CAT 6A)
HDMI IN/OUT (4K60 4:4:4)	UP TO 50 FEET (USING BULLET TRAIN HDMI)
HDMI IN/OUT (W/ AOC CABLE) (4K60 4:4:4)	UP TO 130 FEET (USING BULLET TRAIN AOC)

### OTHER:

BANDWIDTH HDMI	18 GBPS UNCOMPRESSED
BANDWIDTH HDBASET	18 GBPS (USES ICT ABOVE 10.2 GBPS SIGNALS)
HDCP	HDCP 2.3 AND EARLIER
POH FOR RECEIVERS (NO NEED TO POWER RECEIVERS)	YES, ALL OUTPUTS

### CONTROL:

PORTS	LAN, RS232, IR
DRIVERS	C4, RTI, ELAN, CRESTRON, URC (FOR MORE INFORMATION - SEE DRIVERS PAGE ON AVPROEDGE.COM/DRIVERS)
LAN WEB	YES

### PORTS:

HDMI	TYPE A
HDBASET	RJ45 W/ POH FOR HDBASET RECEIVERS
LAN	RJ45 W/ WEB INTERFACE/ CONTROL
AUDIO (EXTRACTED DIGITAL)	TOSLINK
AUDIO (EXTRACTED ANALOG)	5 PIN TERMINAL BLOCK (BALANCED)
IR	3.5MM STEREO (3 CONDUCTOR)
RS232	3 PIN TERMINAL BLOCK

### ENVIRONMENTAL:

OPERATING TEMPRATURE	23 TO 125°F (-5 TO 51°C)
STORAGE TEMPERATURE	-4 TO 140°F (-20 TO 60°C)
HUMIDITY RANGE	5-90% RH (NO CONDENSATION)

### POWER:

POWER CONSUMPTION (TOTAL)	56 WATTS MAX
POWER SUPPLY - MATRIX	INPUT: AC 100-240V ~ 50/60HZ OUTPUT: DC 48V 2A

### DIMENSIONS:

DIMENSIONS (UNIT ONLY - HEIGHT/DEPTH/WIDTH)	MM: 89.52 X 228.6 X 441.33 INCH: 3.52 X 9 X 17.38
DIMENSIONS (PACKAGED HEIGHT/DEPTH/WIDTH)	MM: 136 X 375 X 495 INCH: 5.34 X 14.75 X 19.5
RACK UNITS	2U
WEIGHT (UNIT)	9.8 LBS (4.45 KG)
WEIGHT (PACKAGED)	14.2 LBS (6.44 KG)

\*SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE. MASS & DIMENSIONS ARE APPROXIMATE

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### About AXION

AXION is a customizable video distribution system built for luxury environments, allowing installers to customize a matrix switcher designed for the specific installation. This matrix becomes the backbone of the entire installation delivering 18Gbps 4K signals from the source to display. What makes AXION stand out are the choices the integrator has. Selecting between HDMI or HDBaseT for long video runs lets the integrator decide what type of infrastructure will work best for them. With 4x4, 8x8, and a customizable 16x16, AXION Systems has a product that will work with the sources and displays/projectors your installation requires.

