

Dolby Audio

dts HD

# AV Pro edge



## 18GBPS HDBASET 4x4 MATRIX SWITCH FEATURING ICT & DOWNMIXING AC-AXION-4

**HDMI**  
HIGH-DEFINITION MULTIMEDIA INTERFACE

**HDBT**  
HIGH-BANDWIDTH DIGITAL BASET

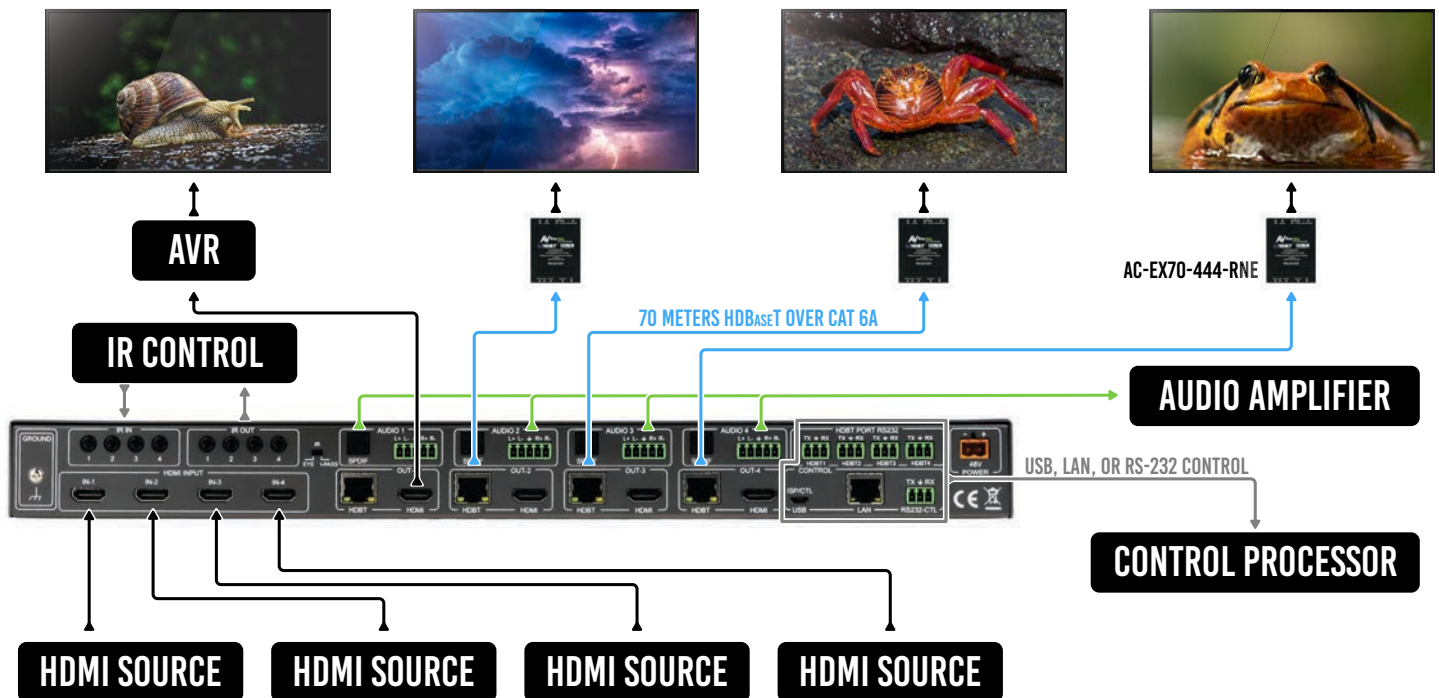
**HDCP**  
HIGH-BANDWIDTH DIGITAL CONTENT PROTECTION

**ICT**  
INVISIBLE COMPRESSION  
TECHNOLOGY

THE AC-AXION-4 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 INTERFACE HAS BEEN COMPLETELY REDESIGNED FROM THE GROUND UP, ALLOWING FULL CONTROL THROUGH THIS AXION INTERFACE. CONTROLLING THE AC-AXION-4 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-4 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-4 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 4 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 4x4 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.



**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 2.2 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 TEMPERATURE	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)	38 WATTS MAX
POWER SUPPLY - MATRIX	"INPUT: AC 100-240V ~ 50/60HZ OUTPUT: DC 48V 1.5A "

**DIMENSIONS:**

DIMENSIONS (UNIT ONLY - HEIGHT/DEPTH/WIDTH)	"MM: 50.8 X 256 X 441.33 INCH: 2 X 10.07 X 17.375"
DIMENSIONS (PACKAGED HEIGHT/DEPTH/WIDTH)	"MM: 88.9 X 393.7 X 495.3 INCH: 3.5 X 15.5 X 19.5"
RACK UNITS	1 UNIT
WEIGHT (UNIT)	7.5 LBS (3.4 KG)
WEIGHT (PACKAGED)	10 LBS (4.54 KG)

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



**FEATURES**

- HDMI 2.0(a/b)
- 18Gbps Bandwidth Support
- 4K60 4:4:4 Support
- Ultimate HDR Support (HDR 10 & 12 Bit)
- Dolby Vision, HDR10+ and HLG Support
- HDCP 2.3 (and all earlier versions supported)
- Simple setup with front panel control screen
- AXION Interface for simple connectivity and control/management
- Advanced EDID Management
- IR, RS-232 and LAN Control Options
- Front Panel Control
- Digital Coax Audio Out (6CH PCM, DD, DTS)
- Driver Support for Crestron, C4, RTI, ELAN and more!
- Extracted Audio Now Has 3 Operating Modes. Bound to Input, Bound to Output, or Independent Matrix
- Mirrored HDMI Outputs include unimpeded Audio
- Built in Downmixer
- Built in Downscalers
- ICT used in the HDBaseT outputs
- Volume Control