**Dolby Audio**

**dts HD**

**AV Pro edge**



HDR READY

**HDMI®**
HIGH-DEFINITION MULTIMEDIA INTERFACE

**HDBT™**

**HDCP™**
HIGH-BANDWIDTH DIGITAL CONTENT PROTECTION

**ICT**
INVISIBLE COMPRESSION TECHNOLOGY

# 18GBPS HDBASET
# 4X4 MATRIX SWITCH
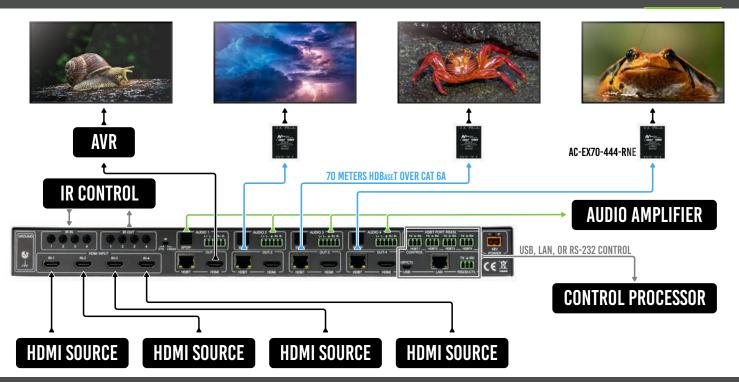## FEATURING ICT & DOWNMIXING
## AC-AXION-4

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.



AVR

IR CONTROL

70 METERS HDBASET OVER CAT 6A

AC-EX70-444-RNE

AUDIO AMPLIFIER

USB, LAN, OR RS-232 CONTROL

CONTROL PROCESSOR

HDMI SOURCE    HDMI SOURCE    HDMI SOURCE    HDMI SOURCE

## 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 DIGTAL, 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:

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

### DIMENSIONS:

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|---|---|
| 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