

# Scaling HDBaseT Receiver

**(AC-EX70-SC2-R)**

480 to 4K, interlaced to progressive scaler with an HDBaseT input and an HDMI output, built for 18Gbps 4K signaling with HDR.





## Your Stable Choice for HDMI Distribution

Built to handle full 4K60 (4:4:4) at 18Gbps, the AC-EX70-SC2-R stabilizes your troubled distribution runs by allowing you to control the signals resolution and timing. The slim design and easy to use controls allow you to manage EDIDs, extract audio, and of course scale the signal.

- Built in EDID management
- Audio Extraction
- Interlaced to Progressive converting
- Static output resolutions (always send 4K)



# Features

- HDMI 2.0(a/b)
- Fixed Output Options 480P, 720P, 1080P & 4K
- 70 Meter 4K Support
- HDBaseT Trusted Technologies
- Adaptive Scaling Mode
- Plug & Play Match Display Preference Mode
- 16 EDID Options (Including Auto & HDR EDID Options)
- L/R Audio De-embedding (PCM only, does not downmix)
- Test Pattern Generation
- Simple, Easy to Use, 3-Button Operation
- 18Gbps Bandwidth Support
- Up to 4K60 4:4:4 Support
- Full HDR Support (HDR 10 & 12 Bit)
- HDR, HDR10+, and HLG Support
- EDID Management and EDID Emulate
- 720P, 1080P & 4K Test Patterns Built-in for Troubleshooting
- HDCP 2.x (and all earlier versions supported)
- CEC Pass-Through
- 3D Support
- LED Status, Link, Power Indication Lights
- Micro USB Port for Control
- Supports Uncompressed PCM 2- Ch., LPCM 5.1 & 7.1, Dolby Digital, DTS, Dolby TrueHD, DTS HD-Master Audio, Atmos on HDMI

# Connection: HDBaseT Matrix Switchers

**AV** Pro edge  
AC-EX70-SC2-R

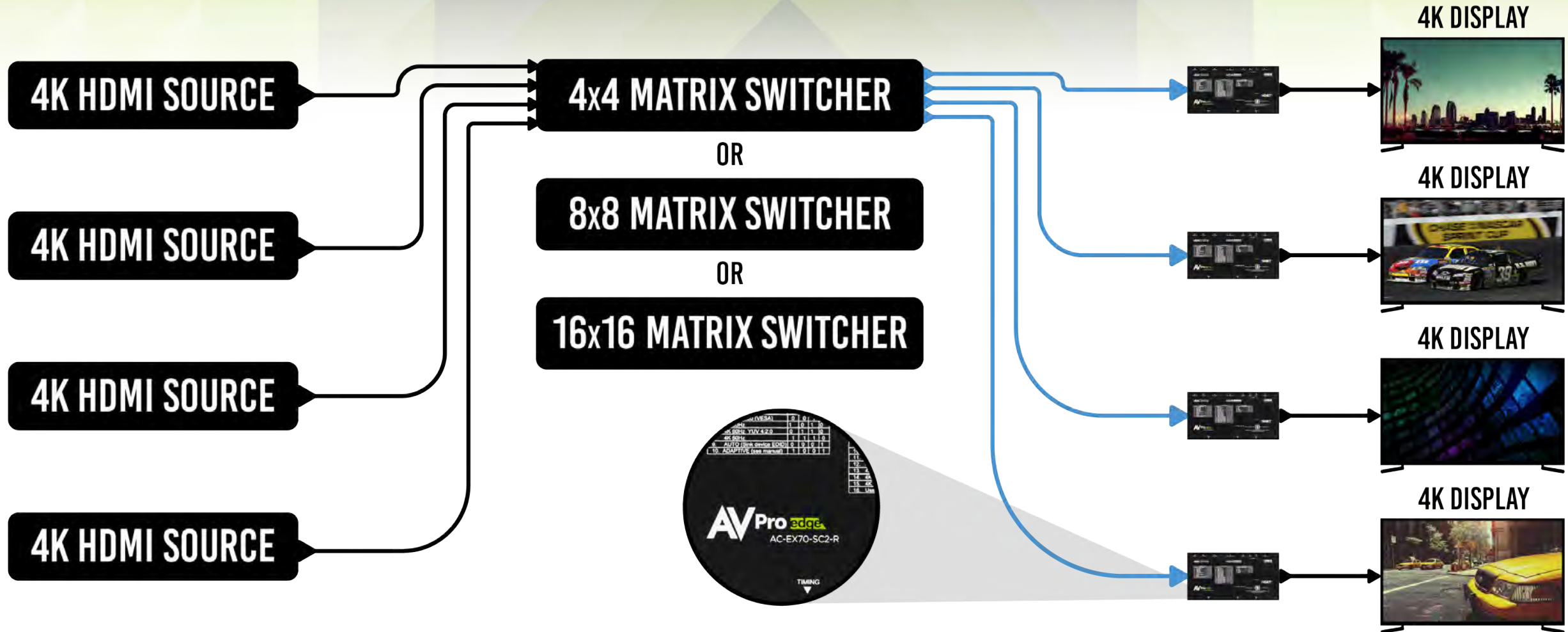
## SCALING CONNECTION DIAGRAM



THE AC-EX70-SC2-R CAN GIVE THE SINK ANY RESOLUTION FROM 480P TO 4K 60 NO MATTER WHAT THE SOURCE IS OUTPUTTING



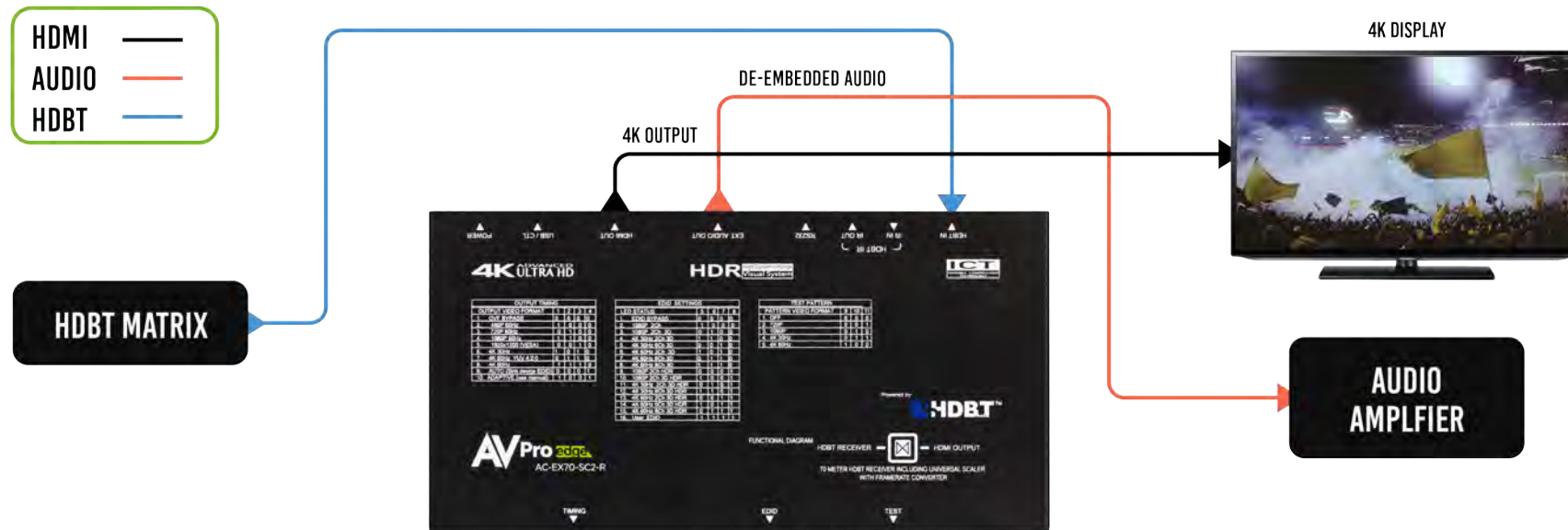
# Connection: HDBaseT Matrix Switchers



# Connection: Audio Extraction

**AVPro** edge  
AC-EX70-SC2-R

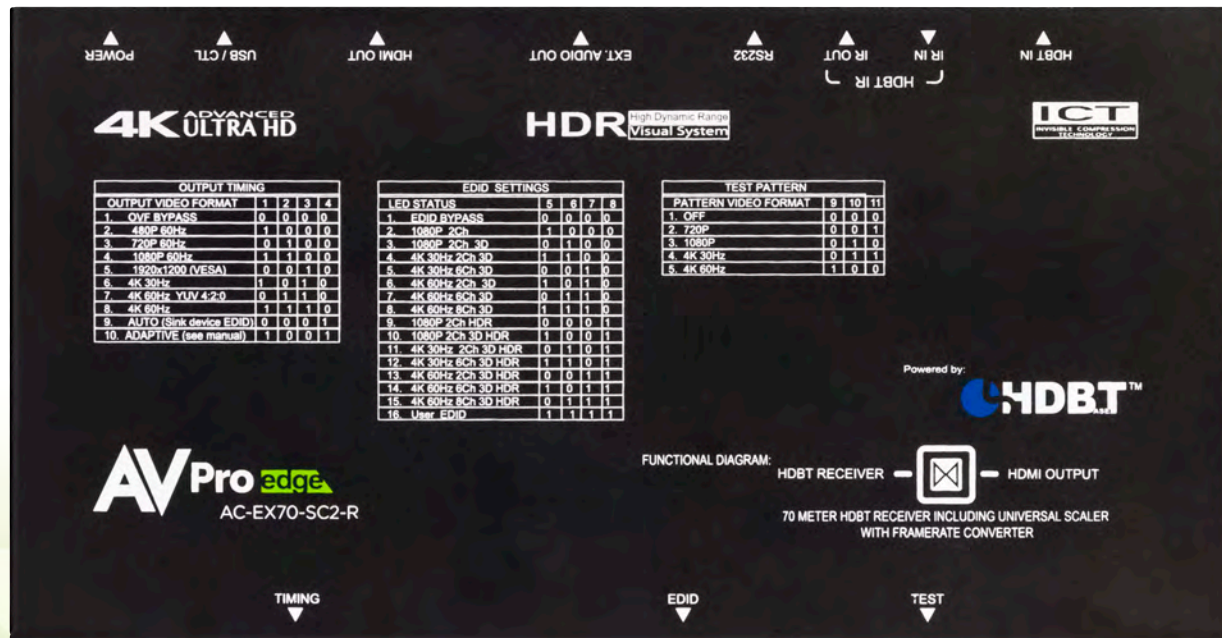
## AUDIO DE-EMBEDDING / UPSCALING



WITH THE AC-EX70-SC2-R YOU ARE ABLE TO DE-EMBED AUDIO AND UPSCALE A SIGNAL AT THE SAME TIME.

# Adaptive Scaling Mode

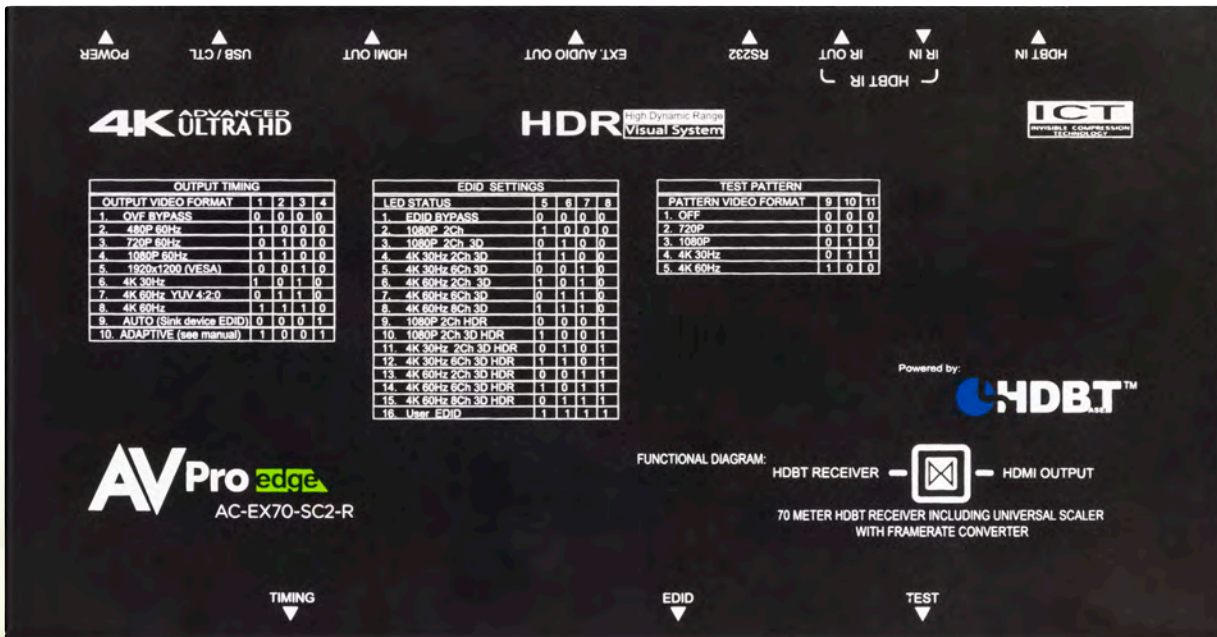
This EXCLUSIVE AVPro Edge technology was designed specifically to overcome problems with legacy sources, like set-top boxes outputting 720P or 1080i. When these legacy formats are implemented into modern, high-bandwidth distribution systems, sink devices can exhibit stability issues. The Adaptive Scaling Mode will convert all signals less than 1080P to 1080P and will bypass 4K and HDR signals through untouched. This will allow you to install legacy sources in modern systems comfortably. Giving you a reputation for delivering stable solutions with less truck rolls. That will increase your word of mouth traffic and net you more installations.





# Hold the Handshake

- The AC-EX70-SC2-R produces a black splash screen on the HDMI output even when there is no incoming signal. This black splash screen matches the selected scaling resolution to ensure that there is no handshake drop when input signal is changed.
- Resolving pesky Unsupported and No Signal messages commonly seen when using a variety of signals from a matrix switch.

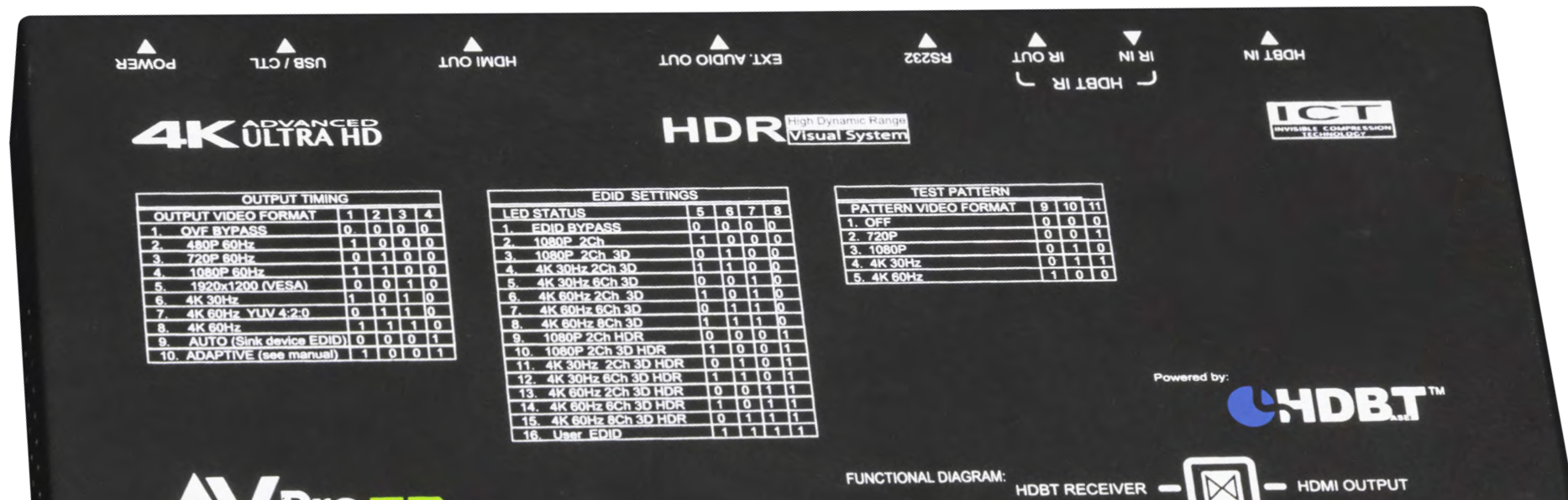




# Advanced EDID Management

Advanced EDID Management is a stock feature on this scaling HDBaseT rx unit, this allows you to override the EDID's coming from the display, and give the source an EDID that you choose.

Working with a known EDID that you have used in the past and you know works for you systems can cut your installation time drastically, leaving more room to get to the next job, helping the business's bottom line.



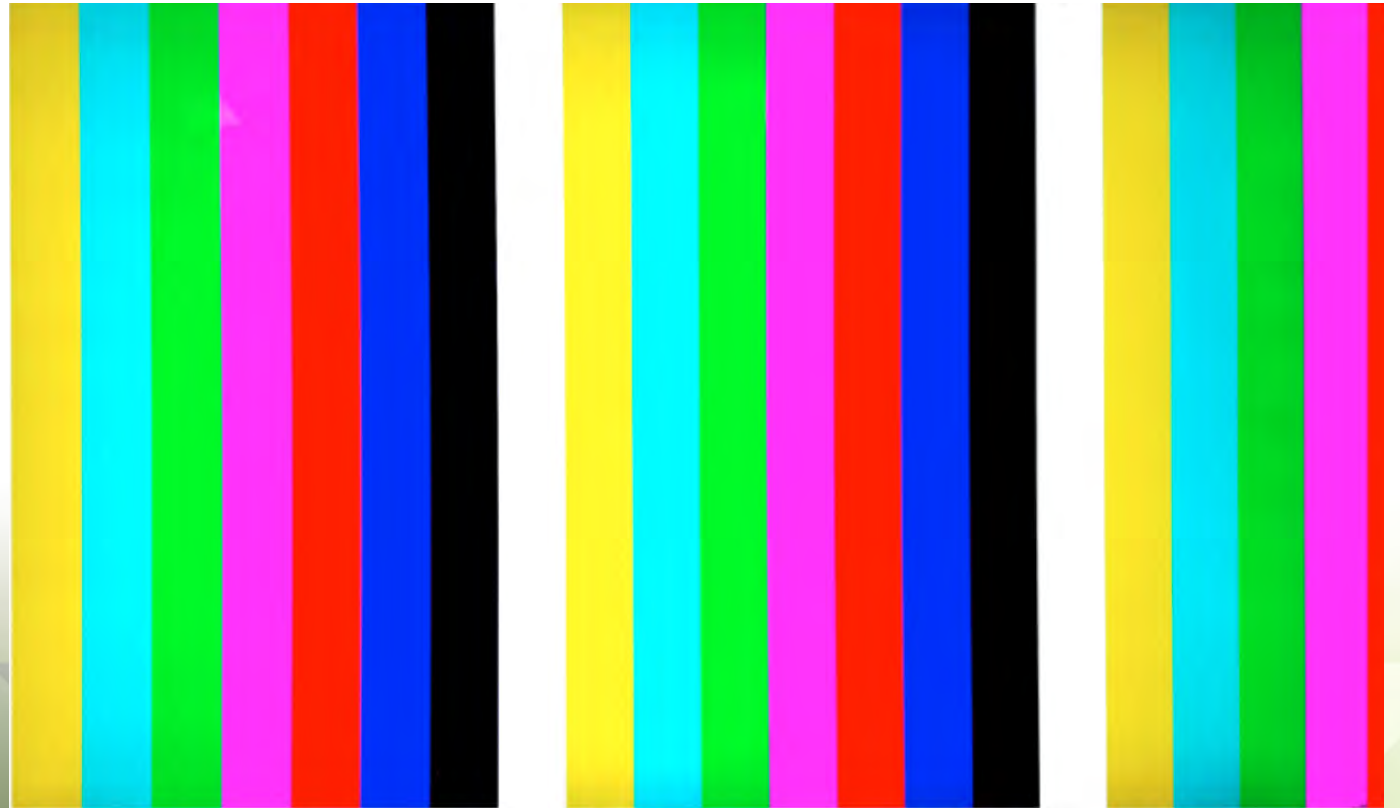
# Stabilize Set Top Boxes and Satellite Receivers

**Interlaced to Progressive Scaling:** This advanced technology will help installers overcome problematic 1080i sources by converting interlaced signals to progressive signals. For example, you can convert a 1080i signal to 1080P, 4K 30Hz, 4K 60Hz 4:2:0, or 4K 60Hz 4:4:4 at the users will. Perfect for working with set-top boxes or satellite receivers.



# On-Board Troubleshooting

This receiver/scaler allows you to generate a 720P, 1080P, or 4K test pattern to identify external problems (source, repeater, displays, etc.) Now, you can be sure that your wiring is correct and get to the bottom of issues quickly without having to worry if the source or sink is working correctly. Increasing your installation speed and allowing you to move to the next job, and the next payout.





# Where do these Fit?

These devices can be used in a wide variety of ways. Knowing they are able to handle 18Gbps video signaling gives you the confidence that it will work for years to come.

## APPLICATIONS

- Stable scaling solution for all HDBaseT Matrix Switchers & Wall Plates.
- For mixed systems with SD, HD, and UHD displays within a matrix. Since a matrix will typically "down-clock" to the lowest common format, putting a scaler in will essentially "trick" the matrix into sending 4K UHD material. The scaler will downscale the content to 480 for the HD display.
- EDID causes about 80% of HDMI connectivity issues – The AC-EX70-SC2-R can fix them all.
- EDID capture and emulation – would you like to test endpoints before hanging that 600-pound projector 100 feet up on the ceiling? Use the AC-EX70-SC2-R, and your problem is solved.

# 10-Year Warranty

AVPro Edge offers a 10-Year advanced replacement no B.S. warranty. With that length of coverage, if something goes wrong you will be covered. This will give you as the integrator and the customer peace of mind when installing, knowing that you have installed a product built to last.



# Compatible Products

## AVPro Edge HDBaseT Matrix Switchers

- 4x4
- 8x8
- 16x16

## ConferX Wall Plates

- HDMI
- USB-C
- Mini DisplayPort
- VGA
- ConferX Switchers 4x2, 6x2

## Distribution Amplifiers

- 2x10





# Need More Information?

Never hesitate to give us a call at 605-274-6055, we are always happy to clarify any questions you may have.

<https://www.avproedge.com/ac-ex70-sc2-r.html>

[info@avproedge.com](mailto:info@avproedge.com)

|   |  |
|---|--|
| 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)<br>HDR10, HDR10+, DOLBY VISION, HLG   |
| COLOR SPACE   | YUV (COMPONENT), RGB<br>(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 (1080P) UP TO 12 BIT (4K)   |
| <b>AUDIO:</b>   |  |
| AUDIO FORMATS SUPPORTED HDMI  | PCM 2.0 CH, LPCM 5.1 & 7.1, DOLBY DIGITAL, DTS 5.1,<br>DOLBY DIGITAL PLUS, DOLBY TRUEHD, DTS-HD<br>MASTER AUDIO, DTS-X, DOLBY ATMOS            |
| AUDIO FORMATS SUPPORTED EXTRACTED (2 CH PORT)                                       | PCM 2 CH (NO DOWNMIX)  |
| AUDIO FORMATS SUPPORTED EXTRACTED (DIGITAL TOSLINK)                                 | PCM 2 CH, LPCM 6 CH, LPCM 7 CH, DOLBY DIGITAL,<br>DOLBY DIGITAL PLUS, DTS-HD MASTER AUDIO  |
| <b>SCALING:</b>   |  |
| FIXED OUTPUT OPTIONS<br>(SCALES ALL INPUT FORMATS TO THE SAME)                      | 480P 60HZ, 720P 60HZ, 1080P 60HZ, 1920X1200<br>(VESA), 4K 30HZ, 4K60HZ YUV 4:2:0, 4K60HZ, AUTO<br>(SINK DEVICE EDID) *SEE MANUAL FOR MORE INFO |
| FRAMERATE COVERSION   | YES  |
| INTERLACED-> PROGRESSIVE CONVERSION   | YES  |
| TEST PATTERN GENERATOR  | YES  |
| <b>DISTANCE:</b>  |  |
| HDBASET (CAT) DISTANCE (4K)   | 70 METERS / 230 FEET (CAT 6A)  |
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| HDMI LEAD IN/OUT (4K60 4:4:4)   | UP TO 50 FEET (USING BULLET TRAIN HDMI)  |
| HDMI LEAD IN/OUT (W/ ADC CABLE) (4K60 4:4:4)  | UP TO 130 FEET (USING BULLET TRAIN AOC)  |
| <b>OTHER:</b>   |  |
| BANDWIDTH   | 18 GBPS  |
| HDCP  | HDCP 2.2 AND EARLIER   |
| <b>PORTS:</b>   |  |
| HDMI  | TYPE A   |
| HDBASET   | RJ45   |
| AUDIO (EXTRACTED ANALOG)  | 5 PIN TERMINAL BLOCK (BALANCED)  |
| AUDIO (EXTRACTED DIGITAL)   | OPTICAL TOSLINK  |
| IR TX   | 3.5MM MONO (2 CUNDUCTOR)   |
| IR RX   | 3.5MM MONO (3 CUNDUCTOR)   |
| RS232   | 3 PIN TERMINAL BLOCK   |
| POWER   | 2 PIN TERMINAL BLOCK   |
| <b>ENVIRONMENTAL:</b>   |  |
| 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)   |
| <b>POWER:</b>   |  |
| POWER CONSUMPTION (TOTAL)   | 24 WATTS MAX   |
| POWER SUPPLY  | INPUT: AC 100-240V ~ 50/60HZ<br>OUTPUT: DC 48V 1A  |
| <b>DIMENSIONS:</b>  |  |
| DIMENSIONS (UNIT ONLY LENGTH/WIDTH/HEIGHT)  | MM: 107.92 X 184.15 X 28.1<br>INCH: 4.25 X 7.25 X 1.11   |
| DIMENSIONS (PACKAGED LENGTH/WIDTH/HEIGHT) (KIT)                                     | MM: 184.2 X 316 X 79.5<br>INCH: 7.25 X 12.44 X 3.13  |
| WEIGHT (UNIT)   | 0.7 LBS (0.32 KG)  |
| WEIGHT (PACKAGED)   | 1.4 LBS (0.64 KG)  |
| *SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE. MASS & DIMENSIONS ARE APPROXIMATE |  |