

## **User Manual**

HDBaseT 2-8-2 splitter with Audio De-Embedding, EDID Management, and switchable inputs.

## **AC-DA210-HDBT**





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## **Introduction**

The AC-DA210-HDBT is designed for massive distributions over extreme distances. Using tried and true HDBaseT Technology, this distribution amplifier has simplified long distance distribution while giving the end points undisturbed HD and UHD images.

Simplicity and "Plug & Play" are focal points of this unit. With RS-232 and IR you can manage your end points as well for things like "Power On" or "Power Off". Additionally, these have two switchable inputs making for more robust systems. The dual HDMI inputs allow you to expand the switching virtually forever.

The AC-DA210-HDBT is ideal for Retail Spaces, Bars, Restaurants, Showrooms and Public Spaces where you want to have consistent messaging, images or signage across large spaces. Having two inputs allows you to option between sources like custom signage, computers and any HDCP protected content.

#### **Features**

- Advanced Equalization and amplification of outputs for smooth switching
- 2 HDMI inputs, In 2 supports HDCP2.2
- Advanced EDID Management
- Support HDMI 2.0 4K60 4:2:0
- IR, RS-232 Control Options
- IR, RS232 routed to HDBaseT output
- Digital Toslink Out
- · L/R Analog Out
- Digital S/PDIF Out
- Good little clear circuit ensure the cascading capability

### Whats in the box

- AC-DA210-HDBT
- 48V Power Supply
- 2x Phoenix Connectors (RS-232 and 2CH Audio)
- Mounting Brackets





# **Specifications**

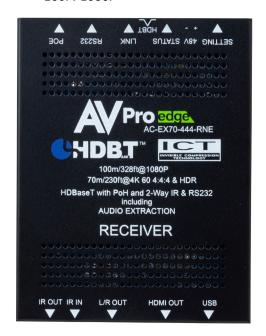
VIDEO.	
VIDEO:	UD TO AV COUT A-O.O. / AV COUT A-A-A
VIDEO RESOLUTIONS	UP TO 4K 60HZ 4:2:0 / 4K 30HZ 4:4:4
COLOR SPACE	YUV (COMPONENT), RGB
OUDONA GURGANIRUNG	(CSC: REC. 601, REC. 709, BT2020, DCI, P3 D6500)
CHROMA SUBSAMPLING	4:4:4, 4:2:2, 4:2:0 SUPPORTED
DEEP COLOR	UP TO 16 BIT (1080), UP TO 12 BIT (4K)
AUDIO:	POLICE OUL IPOLITE A DEL PARIO DE LA DEL PARIO DEL PARIO DE LA DEL PARIO DE LA DEL PARIO DE LA DEL PARIO DE LA DEL PARIO DEL P
	PCM 2.0 CH, LPCM 5.1 & 7.1, DOLBY DIGTAL, DTS 5.1,
AUDIO FORMATS SUPPORTED HDMI	DOLBY DIGITAL PLUS, DOLBY TRUEHD, DTS-HD MASTER
EVER ACTED AUDIO	AUDIO, DTS-X, DOLBY ATMOS
EXTRACTED AUDIO	2CH (PHOENIX), DIGITAL (TOSLINK AND SPDIF)
DISTANCE:	40.44
HDBASET (CAT) DISTANCE (4K)	40 METERS / 131 FEET (CAT 6A)
HDBASET (CAT) DISTANCE (FULL HD)	70 METERS / 230 FEET (CAT 6A)
HDMI LEAD IN/OUT (4K60 4:4:4)	UP TO 50 FEET (USING BULLET TRAIN HDMI)
HDMI LEAD IN/OUT (W/ AOC CABLE) (4K60 4:4:4)	UP TO 130 FEET (USING BULLET TRAIN AOC)
OTHER:	
BANDWIDTH HDMI	18 GBPS
BANDWIDTH HDBT (AC-EX70-UHD-R)	10.2 GBPS
BANDWIDTH HDBT (AC-EX70-444-RNE)	18 GBPS
HDCP	HDCP 2.2 AND EARLIER
PORTS:	
I LIDIAL (TV A DV)	
HDMI (TX & RX)	TYPE A
HDBASET	RJ45 W/ POH FOR HDBASET RECEIVERS
HDBASET IR (TX & RX)	RJ45 W/ POH FOR HDBASET RECEIVERS 3.5MM STEREO
HDBASET IR (TX & RX) RS232	RJ45 W/ POH FOR HDBASET RECEIVERS 3.5MM STEREO 3 PIN TERMINAL BLOCK
HDBASET IR (TX & RX) RS232 POWER	RJ45 W/ POH FOR HDBASET RECEIVERS 3.5MM STEREO
HDBASET IR (TX & RX) RS232 POWER ENVIRONMENTAL:	RJ45 W/ POH FOR HDBASET RECEIVERS 3.5MM STEREO 3 PIN TERMINAL BLOCK
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HDBASET IR (TX & RX) RS232 POWER ENVIRONMENTAL:	RJ45 W/ POH FOR HDBASET RECEIVERS 3.5MM STEREO 3 PIN TERMINAL BLOCK PHOENIX
HDBASET IR (TX & RX) RS232 POWER ENVIRONMENTAL: OPERATING TEMPRATURE STORAGE TEMPERATURE HUMIDITY RANGE	RJ45 W/ POH FOR HDBASET RECEIVERS 3.5MM STEREO 3 PIN TERMINAL BLOCK PHOENIX 23 TO 125°F (-5 TO 51°C)
HDBASET IR (TX & RX) RS232 POWER ENVIRONMENTAL: OPERATING TEMPRATURE STORAGE TEMPERATURE	RJ45 W/ POH FOR HDBASET RECEIVERS  3.5MM STEREO  3 PIN TERMINAL BLOCK PHOENIX  23 TO 125°F (-5 TO 51°C)  -4 TO 140°F (-20 TO 60°C)
HDBASET IR (TX & RX) RS232 POWER ENVIRONMENTAL: OPERATING TEMPRATURE STORAGE TEMPERATURE HUMIDITY RANGE	RJ45 W/ POH FOR HDBASET RECEIVERS  3.5MM STEREO  3 PIN TERMINAL BLOCK PHOENIX  23 TO 125°F (-5 TO 51°C)  -4 TO 140°F (-20 TO 60°C)
HDBASET IR (TX & RX) RS232 POWER ENVIRONMENTAL: OPERATING TEMPRATURE STORAGE TEMPERATURE HUMIDITY RANGE POWER: POWER CONSUMPTION (TOTAL)	RJ45 W/ POH FOR HDBASET RECEIVERS  3.5MM STEREO  3 PIN TERMINAL BLOCK  PHOENIX  23 TO 125°F (-5 TO 51°C)  -4 TO 140°F (-20 TO 60°C)  5-90% RH (NO CONDENSATION)
HDBASET IR (TX & RX) RS232 POWER ENVIRONMENTAL: OPERATING TEMPRATURE STORAGE TEMPERATURE HUMIDITY RANGE POWER:	RJ45 W/ POH FOR HDBASET RECEIVERS  3.5MM STEREO  3 PIN TERMINAL BLOCK PHOENIX  23 TO 125°F (-5 TO 51°C) -4 TO 140°F (-20 TO 60°C)  5-90% RH (NO CONDENSATION)  88 WATTS (MAX)
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HDBASET IR (TX & RX) RS232 POWER ENVIRONMENTAL: OPERATING TEMPRATURE STORAGE TEMPERATURE HUMIDITY RANGE POWER: POWER CONSUMPTION (TOTAL) POWER SUPPLY - MATRIX DIMENSIONS:	RJ45 W/ POH FOR HDBASET RECEIVERS  3.5MM STEREO  3 PIN TERMINAL BLOCK PHOENIX  23 TO 125°F (-5 TO 51°C)  -4 TO 140°F (-20 TO 60°C)  5-90% RH (NO CONDENSATION)  88 WATTS (MAX) INPUT: AC 100-240V ~ 50/60HZ
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IR (TX & RX) RS232 POWER ENVIRONMENTAL: OPERATING TEMPRATURE STORAGE TEMPERATURE HUMIDITY RANGE POWER: POWER CONSUMPTION (TOTAL) POWER SUPPLY - MATRIX DIMENSIONS: DIMENSIONS (UNIT ONLY HEIGHT/DEPTH/WIDTH)	RJ45 W/ POH FOR HDBASET RECEIVERS  3.5MM STEREO  3 PIN TERMINAL BLOCK PHOENIX  23 TO 125°F (-5 TO 51°C) -4 TO 140°F (-20 TO 60°C)  5-90% RH (NO CONDENSATION)  88 WATTS (MAX) INPUT: AC 100-240V ~ 50/60HZ OUTPUT: DC 48V 2A  MM: 43.69 X 143 X 441.45
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HDBASET IR (TX & RX) RS232 POWER ENVIRONMENTAL: OPERATING TEMPRATURE STORAGE TEMPERATURE HUMIDITY RANGE POWER: POWER CONSUMPTION (TOTAL) POWER SUPPLY - MATRIX DIMENSIONS: DIMENSIONS (UNIT ONLY HEIGHT/DEPTH/WIDTH) DIMENSIONS (PACKAGED HEIGHT/DEPTH/WIDTH)	RJ45 W/ POH FOR HDBASET RECEIVERS  3.5MM STEREO  3 PIN TERMINAL BLOCK PHOENIX  23 TO 125°F (-5 TO 51°C)  -4 TO 140°F (-20 TO 60°C)  5-90% RH (NO CONDENSATION)  88 WATTS (MAX) INPUT: AC 100-240V ~ 50/60HZ OUTPUT: DC 48V 2A  MM: 43.69 X 143 X 441.45 INCH: 1.72 X 5.63 X 17.38  MM: 88.9 X 336.55 X 495.3 INCH: 3.5 X 13.25 X 19.5



# **Compatible HDBaseT Receivers**

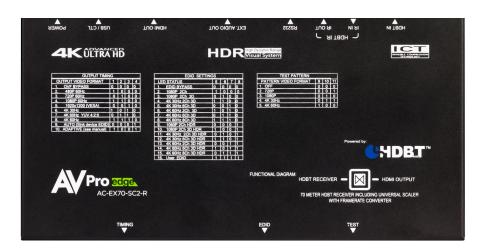
AC-EX70-444-RNE (Receiver /No Ethernet)

- 70M 4k 60 4:4:4 & HDR
- 100M 1080P



AC-EX70-SC2-R (Scaling Receiver)

- 70M 4k 60 4:4:4 & HDR
- · 100M 1080P



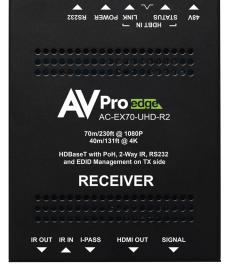
#### AC-CX100-RAMP

- 70M 4k 60 4:2:0 & HDR
- 70M 1080P

# RS 232 CONTROL RS 47 TX RX + TX RX +

#### AC-EX70-UHD-R

- 40M 4k 30 4:4:4/4k 60 4:2:0
- 70M 1080P



Non AVPro HDBaseT Receivers may work but ICT (our Invisible Compression Technology) will not. This means higher bandwidth signals (greater than 10.2Gbps) will not pass as this requires ICT.



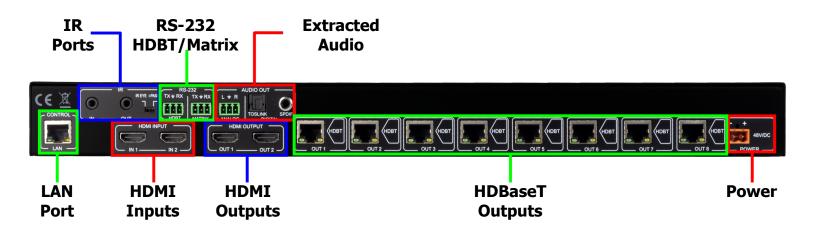
## **Front and Rear Panel Overview**

These devices are perfect for distributing any one/two sources to an unlimited amount of displays. (One source at a time)

Think:

- Retail signal distribution Big Box Stores & Local Retail for Advertising; School's & Office's for Info boards – 1000's of new accounts just opened up to you!
- Bars & Restaurants a very simple way to "split" the signal to show in multiple locations.
- Digital Signage low cost method for airports, rail, subway and more to distribute high value 4K signals
- A word on Cascading need more displays? Just connect an output to the next devices input and keep stringing the displays together now you have a 1 x 500 DA that can switch two sources!







# **Front Panel Control - Switching**

The AC-DA210-HDBT can be switched from the front panel by pressing the "Select" button. This switches back and forth from Input 1 and Input 2.



# Front Panel Control - EDID Management

To Change the scaler settings

- 1. Pressing and holding the button for more than 3 seconds will enter an EDID management mode.
- 2. When in EDID management mode the HDMI out LED's 1&2 will be flickering.
- 3. HDBT out LED's 1 through 5 are used to identify the EDID setting.
- 4. Press the button to cycle through the available EDID's
- 5. Press and hold for 3 seconds again to set the selected EDID
  - a. If all LED's light up it is successful, and press the button once more to return to normal operating mode.
  - b. If all LED's are flickering, the setting failed. Press the button to resume normal operating mode and try again.
- 6. The table below (Page 8) shows the different EDID options.



HDBT Output lights	1	2	3	4	5	6	7	8
0:1080P 2CH		_		_				-
1:1080P 6CH	_	_	_	_	_	_	_	
2:1080P 8CH	_	_	_	_	_	_		_
3:1080P_3D_2CH	_	_	_	_	_	_		
4:1080P 3D 6CH	_	_	_	_	-		_	_
5:1080P_3D_8CH	_	-	-	-	-		_	
6:4K30HZ_3D_2CH	_	_	-	-	-			-
7:4K30HZ_3D_6CH	-	-	-	-	-			
8:4K30HZ_3D_8CH	_	_	-	-		-	-	-
9:4K60HzY420_3D_2CH	_	-	-	-		-	-	
10:4K60HzY420_3D_6CH	-	-	-	-		-		-
11:4K60HzY420 3D 8CH	-	-	-	-		-		
12:4K60HZ 3D 2CH	-	-	-	-			-	-
13:4K60HZ 3D 6CH	-	-	-	-			-	
14:4K60HZ_3D_8CH	-	-	-	-	•	•	•	-
15:1080P_2CH_HDR	-	-	-	-				
16:1080P_6CH_HDR	-	-	-	•	-	-	-	-
17:1080P_8CH_HDR	-	-	-		-	-	-	
18:1080P_3D_2CH_HDR	-	-	-	•	-	-	•	-
19:1080P_3D_6CH_HDR	-	-	-		-	-		
20:1080P_3D_8CH_HDR	-	-	-		-		-	-
21:4K30HZ_3D_2CH_HDR	-	-	-		-		-	
22:4K30HZ_3D_6CH_HDR	-	-	-		-			-
23:4K30HZ_3D_8CH_HDR	-	-	-		-			
24:4K60HzY420_3D_2CH_HDR	-	-	-			-	-	-
25:4K60HzY420_3D_6CH_HDR	-	-	-			-	-	
26:4K60HzY420_3D_8CH_HDR	-	-	-			-		-
27:4K60HZ_3D_2CH_HDR	-	-	-			-		
28:4K60HZ_3D_6CH_HDR	-	-	-				-	-
29:4K60HZ_3D_8CH_HDR	-	-	-				-	
30:USER1_EDID	-	-	-					-
31:USER2_EDID	-	-	-					
32:USER3_EDID	-	-		-	-	-	-	-



### **Extracted Audio:**

The extracted audio is always active by default, you may simply plug into any/all of the ports (Toslink, SP-DIF, 2CH) and the audio will be output based on the active source. Additionally the extracted audio ports can be disabled/enabled via RS-232 & TCP/IP. See page(s) 13 for command list.

The SPDIF Toslink ports support up to 5.1Ch digital audio and the 3pin terminal connector supports 2Ch PCM. This means in order for the ANALOG L/R port to output audio the sources have to be set to 2Ch PCM. This unit does NOT down mix the audio (see the Axion series of matrices for down mixing). To get more than two channels you will want to use the TOSLINK or SPDIF port.

NOTE: Pre-made 3pin terminal connector to 2Ch L/R cables are available, product part number





### IR Control Switch

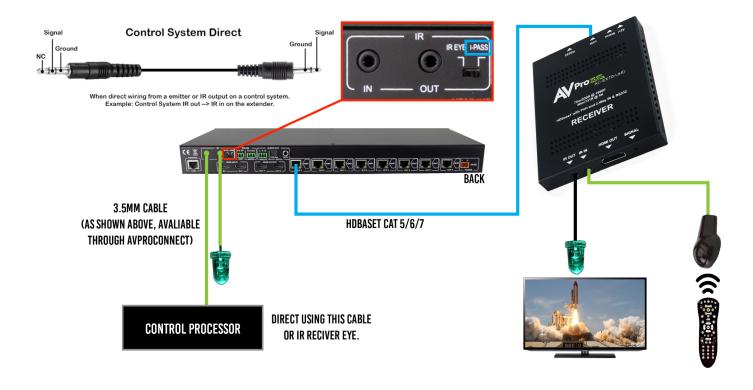
The IR IN port on the back can accept an IR Receiving Eye (EYE) or a direct connection from a control system (I-PASS). There is a toggle switch change between the two.

NOTE: If you are having any issues, verify the switch is properly set. To verify toggle from your desired setting, to other setting, and then back to your desired setting.

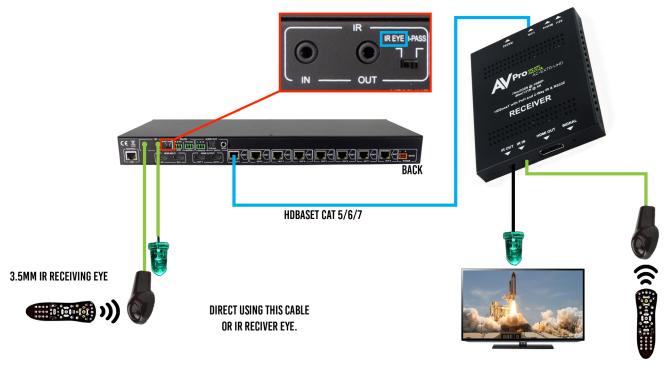




I-PASS: Set the switch to "I-PASS" to utilize a 3.5mm direct connection to a control system.



IR EYE: Set the switch to "IR EYE" to utilize an IR Receiving eye.





# **RS-232 and TCP/IP Control:**

The AC-DA210-HDBT can be controlled with either RS-232 or TCP/IP commands. Certain switching or format configurations can only be done using these commands. We recommend using either the MyUART (RS-232 - free) or Hercules (TCP/IP - free) apps as they are very easy to use for sending commands to the machine.

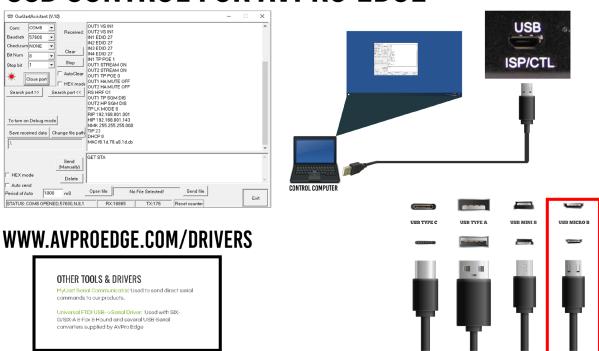
For TCP/IP control commands use Telnet Port 23.

For RS-232, use a null modem serial cable adapter and set the serial communications to: 57600,n,8,1 (baud: 57600, no parity, 8 data bits and 1 stop bit) with no handshaking.

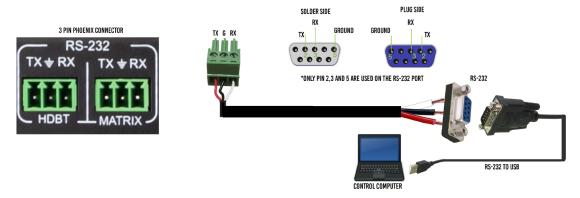
Please add a carriage return (Enter key) after each command when using direct commands.

The unified command list (ASCII) is listed on page(s) 13. Text version available <u>here</u>, and under the resources tab of on the products <u>web page</u>.

# **USB CONTROL FOR AVPRO EDGE**



# RS-232 CABLE FOR AVPRO EDGE





# RS-232 and TCP/IP Control Cont.

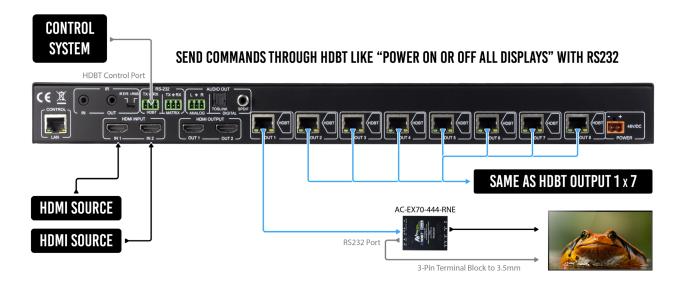
The AC-DA210-HDBT has two RS-232 ports on the back. One is for controlling the AC-DA210-HDBT (Matrix) and the other is for sending RS-232 commands to/through the HDBaseT Extenders.

- HDBT For sending RS-232 commands to the HDBaseT Receivers.
- MATRIX For controlling the DA, see <a href="Page 13">Page 13</a> for the AC-DA210-HDBT complete command list.



#### RS232 COMMANDS TO HDBT DIAGRAM

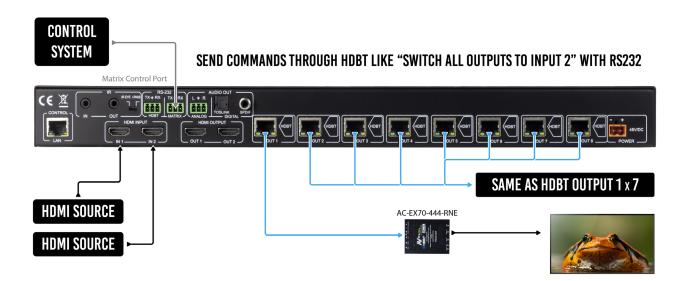






#### **RS232 COMMANDS TO MATRIX DIAGRAM**







# **Command List:**

Baudrate: 57600Checksum: NoneBit Num: 8Stop Bit: 1

Н	: Help				
STA	: Show Global System Status				
SET RST	: Reset to Factory Defaults				
SET RBT	: System Reset to Reboot				
SET ADDR xx	: Set System Address to xx {xx=[00-99](00=Single)}				
GET ADDR	: Get System Address				
GET STA	: Get System Status				
GET INX SIG STA	: Get Input x Signal Statu{x=[0-2](0=ALL)]	}			
Output Setup Commands:	(Note:output number(x)=[1-10])				
	{Output Zone 1=HDMI OUTPUT[1],2=HDM	I OUTPUT[2] & HDBT OUTPUT[1-8]}			
SET OUTx VS INy	: Set Output Zone x To Input y {x=[0-2](0=	:ALL), y=[1~2]			
SET OUTx EXA EN/DIS	: Set Ex-Audio Output Enable/Disable{x=[0	](0=ALL)}			
SET OUTx TP POEy	: Set HDBT Output x Power Mode{x=[0-8](	0-ALL),y=[0-1](0-Auto,1-EN)}			
SET OUTX HP STREAM ON/OFF	: SET HDMI OUTx STREAM ON/OFF{x=[0~2	?](0=ALL)}			
SET OUTX TP STREAM ON/OFF	: SET HDBT OUTx STREAM ON/OFF{x=[0~8				
GET OUTx VS	: Get Output x Video Route{x=[0](0=ALL)}				
GET OUTX EXA	: Get Ex-Audio Output Enable/Disable Statu	s{x=[0](0=ALL)}			
GET OUTX TP POE	: Get HDBT Output x Power Mode{x=[0-8]}	•			
GET OUTX HP STREAM	: Get HDMI Output x Stream ON/OFF Status	s{x=[0~2](0=ALL)}			
GET OUTX TP STREAM	: Get HDBT Output x Stream ON/OFF Status	{x=[0~8](0=ALL)}			
GET OUTX HP EDID DATA	: Get HDMI Output x EDID DATA{x=[1~2]}				
GET OUTX TP EDID DATA	: Get HDBT Output x EDID DATA{x=[1~8]}				
Input Setup Commands:	(Note:input number(x)=HDMI(x),x=[1-2])				
SET INx EDID y	: Set Input x EDID $\{x=[0~8](0=ALL), y=[0~a](0=ALL), y=[0~a](0$	~32](None:[12~14],[27~29])			
0:1080P_2CH(PCM)	1:1080P_6CH	2:1080P_8CH			
3:1080P_3D_2CH(PCM)	4:1080P_3D_6CH	5:1080P_3D_8CH			
6:4k30Hz_3D_2CH(PCM)	7:4k30Hz_3D_6CH	8:4k30Hz_3D_8CH			
9:4K60HzY420_3D_2CH	10:4K60HzY420_3D_6CH	11:4K60HzY420_3D_8CH			
12:4K60HZ_3D_2CH	13:4K60HZ_3D_6CH	14:4K60HZ_3D_8CH			
15:1080P_2CH_HDR	16:1080P_6CH_HDR	17:1080P_8CH_HDR			
18:1080P_3D_2CH_HDR	19:1080P_3D_6CH_HDR	20:1080P_3D_8CH_HDR			
21:4K30HZ_3D_2CH_HDR	22:4K30HZ_3D_6CH_HDR	23:4K30HZ_3D_8CH_HDR			
24:4K60HzY420_3D_2CH_HDR	25:4K60HzY420_3D_6CH_HDR	26:4K60HzY420_3D_8CH_HDR			
27:4K60HZ_3D_2CH_HDR	28:4K60HZ_3D_6CH_HDR	29:4K60HZ_3D_8CH_HDR			
30:USER1_EDID	31:USER2_EDID	32:USER3_EDID			
SET INX EDID CY OUTY HP	: Copy HDMI Output y EDID To Input x(USE				
SET INX EDID CY OUTY TP	: Copy HDBT Output y EDID To Input x(USE				
SET INX EDID Uy DATAZZ	: Write EDID To User y Buffer of Input x{x				
GET INX EDID	: Get Input x EDID Index{x=[0-2](0=ALL)				
GET INX EDID Y DATA	: Get Input x EDID y Data{x=[1-2],y=[0~3]	2]}			
Network Setup Command: SET RIP xxx.xxx.xxx	( xxx=[000-255], zzzz=[0001~9999] : Set Route IP Address to xxx,xxx,xxx				
SET HIP XXX.XXX.XXX	: Set Host IP Address to xxx.xxx.xxx.xxx : Set Net Mask to xxx.xxx.xxx				
SET NMK xxx.xxx.xxx					
	: Set TCP/IP Port to zzzz				
SET DHCP y GET RIP	: Set DHCP {y=[0~1](0=Dis,1=Enable)}				
	: Get Route IP Address				
GET HIP GET NMK	: Get Host IP Address				
GET TIP	: Get Net Mask				
GET DHCP	: Get TCP/IP Port				
GET MAC	: Get DHCP Status				
GET MAC : Get MAC Address  S232 Route Setup Command:					
SET RS HRF Ox	: Set HDBT RS232 RX From HDBT output Port x{x=[1-8](I=Input,O=Output)				
SEI ROTINI OX					
SET RS PTH OUTx LENy BRz	Set RS232 Control Pass Through to HDBT Outputx {x=[1-8],y=[1~800], z=[0~5](0=9600,1=14400,2=19200,3=38400,4=57600,5=115200)}				
I	2-L0-31(0-3000,1-17700,2-13200,3=304	30,1-3,000,3-113200)5			



# **Troubleshooting**

- Verify Power Check that the power supply is properly connected and on an active circuit. The red power LED on the front should be illuminated along with any active Input(s) and Output(s).
- Verify Connections Check that all cables are properly connected.
- IR Issues Verify correct connections <a href="Page(s) 9">Page(s) 9</a> and <a href="mailto:10.">10</a>.
- Lights indicate everything is good but still not getting a picture, this may be a bandwidth limitation. See Bandwidth Chart below to verify the signal is not exceeding the bandwidth of the Extender kit. Example, the AC-EX70-R is limited to 10.2Gbps. This means a 4k 60Hz 4:4:4 signal (17.82Gbps) would not display but a 4k 60Hz 4:2:0 (8.91Gbps) signal would. See Bandwidth Chart below.

## **Bandwidth Chart**

ТҮРЕ	RESOLUTION	FRAME RATE (FPS)	COLOUR COMPRESSION	DEEP COLOUR BIT DEPTH	HDR	WIDE COLOR Gamut (BT2020)	HDMI Version	DATA RATE	AUHD SERIES
HD	1920x1080	24	4:2:2	8 BIT	NO	NO	1.4	0.75 GBPS	YES
HD	1920x1080	60	4:2:2	8 BIT	NO	NO	1.4	4.45 GBPS	YES
HD	1920x1080	60	4:4:4	16 BIT	NO	NO	1.4	5.91 GBPS	YES
UHD	3840x2160	24	4:2:0	8 BIT	NO	NO	1.4	8.91 GBPS	YES
UHD	3840x2160	24	4:4:4	8 BIT	NO	NO	1.4	8.91 GBPS	YES
4K	4096x2160	24	4:4:4	8 BIT	NO	NO	1.4	8.91 GBPS	YES
UHD OR 4K	3840x2160	60	4:2:0	8 BIT	NO	NO	1.4/2.0	8.91 GBPS	YES
UHD OR 4K	3840x2160	24	4:2:0	10 BIT	YES	YES	2.0(A/B)	8.91 GBPS	YES
UHD OR 4K	3840x2160	24	4:2:2	12 BIT	YES	YES	2.0(A/B)	11.14 GBPS	YES
UHD OR 4K	3840x2160	24	4:4:4	10 BIT	YES	YES	2.0(A/B)	11.14 GBPS	YES
UHD OR 4K	3840x2160	24	4:4:4	12 BIT	YES	YES	2.0(A/B)	13.37 GBPS	YES
UHD OR 4K	3840x2160	60	4:2:0	10 BIT	YES	YES	2.0(A/B)	11.14 GBPS	YES
UHD OR 4K	3840x2160	60	4:2:0	12 BIT	YES	YES	2.0(A/B)	13.37 GBPS	YES
UHD OR 4K	3840x2160	60	4:2:2	12 BIT	YES	YES	2.0(A/B)	17.82 GBPS	YES
UHD OR 4K	3840x2160	60	4:4:4	8 BIT	YES	YES	2.0(A/B)	17.82 GBPS	YES



## **Maintenance**

To ensure reliable operation of this product as well as protecting the safety of any person using or handling this device while powered, please observe the following instructions.

- Use the power supplies provided. If an alternate supply is required, check voltage, polarity and that it has sufficient power to supply the device it is connected to.
- Do not operate these products outside the specified temperature and humidity range given in the above specifications.
- Ensure there is adequate ventilation to allow this product to operate efficiently.
- Repair of the equipment should only be carried out by qualified professionals as these products contain sensitive components that may be damaged by any mistreatment.
- Only use this product in a dry environment. Do not allow any liquids or harmful chemicals to come into contact with these products.
- Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner or benzene to clean this unit.

# **Damage Requiring Service**

The unit should be serviced by qualified service personnel if:

- The DC power supply cord or AC adapter has been damaged
- Objects or liquids have gotten into the unit
- The unit has been exposed to rain
- The unit does not operate normally or exhibits a marked change in performance
- The unit has been dropped or the housing damaged



# **Support**

Should you experience any problems while using this product, first, refer to the Troubleshooting section of this manual before contacting Technical Support. When calling, the following information should be provided:

- Product name and model number
- Product serial number
- Details of the issue and any conditions under which the issue is occurring
- Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner or benzene to clean this unit.

## **Warranty**

#### THE BASICS.

AVPro Edge warranties its products that are purchased from all Authorized AVPro Edge Resellers or direct purchases. Products are guaranteed to be free from manufacturing defects and of sound physical and electronic condition.

AVPro Edge has developed a warranty that anyone can get behind. We really wanted to take all the "red tape" out of a warranty and just make is simple. Our 10 YEAR NO BS warranty hinges on 3 elements.

- 1. If you are having trouble, call us. We will attempt to troubleshoot your issue over the phone.
- 2. If it's broke We'll replace it in advance on our dime. (We'll cover return shipping too.) Repair is an option too, but it's YOUR call.
- 3. We know you know what you are doing. We will not make you go through unnecessary steps to troubleshoot an extender...

#### **COVERAGE DETAILS.**

AVPro Edge will replace or repair (at customer choice) the defective product. If the product is out of stock or on back order it can either be replaced with a comparable product of equal value/feature set (if available) or repair.

Your warranty begins at receipt of product (as confirmed by shipping firm tracking). If tracking information is unavailable for any reason, the warranty will commence 30 ARO (After Receipt of Order). The coverage continues for 10 YEARS.



#### RED TAPE.

AVPro Edge is not responsible for untraceable purchases or those that were made outside of an authorized channel.

If we conclude that a product or serial number has been tampered with as identified by warranty seal or physical examination the warranty will be void. Additionally, excessive physical damage (beyond normal wear & tear) the warranty may be voided or pro-rated based on the extent of the damage as examined by an AVPro Edge representative.

Damage caused by "acts of God" are not covered. They can include natural disasters, power surges, storms, earthquakes, tornadoes, sink holes, typhoons, tidal waves, hurricanes, or any other uncontrollable event related to nature.

Damage caused by incorrect installation will not be covered. Incorrect power supply, inadequate cooling, improper cabling, inadequate protection, static discharge are examples of this.

Products installed or sold by a third party to AVPro Edge will be serviced by the Authorized AVPro Edge Reseller.

Accessories (IR Cables, RS-232, Power Supplies, etc...) are not included in the warranty. We will make acceptable effort to source and supply replacements for defective accessories at a discounted rate as needed.

#### **OBTAINING AN RMA.**

Dealers, Re-sellers, and Installers can request an RMA AVPro Edge Tech Support Rep or their Sales Engineer. Or you may email support@avproedge.com or fill out the general contact form at www.avproedge.com

End users may not request and RMA directly from AVPro Edge and will be referred back to the Dealer, Re-seller or Installer.

#### SHIPPING.

For USA (not including Alaska and Hawaii). Shipping is covered on advanced replacements for FedEx Ground (some expressed exceptions may apply). Defective product return shipping is covered by AVPro Edge using an emailed return label. Item must be returned within 30 days of receipt of replacement product, after 30 days, the customer will be billed. Other return shipping methods will not be covered.

For International (and Alaska and Hawaii) return shipping costs will be the responsibility of the returnee. Once the unit is scanned for return shipping AVPro Edge will ship new unit for replacement.

#### **LEGAL STUFF.**

Limitation on Liability



The maximum liability of AVPro Global Holdings LLC under this limited warranty shall not exceed the actual purchase price paid for the product. AVPro Global Holdings LLC is not responsible for direct, special, incidental or consequential damages resulting from any breach of warranty or condition, or under any other legal theory to the maximum extent permitted by law.

Taxes, Duties, VAT, and freight forwarding service charges are not covered or paid for by this warranty.

Obsolescence or incompatibility with newly invented technologies (after manufacture of product) is not covered by this warranty.

Obsolescence is defined as:

"Peripherals are rendered obsolete when current technology does not support product repair or re-manufacture. Obsolete products cannot be re-manufactured because advanced technologies supersede original product manufacturer capabilities. Because of performance, price and functionality issues, product redevelopment is not an option."

Discontinued or out of production items will be credited at fair market value towards a current product of equal or comparable capabilities and cost. Fair market value is determined by AVPro Edge.

#### **Exclusive Remedy**

To the maximum extent permitted by law, this limited warranty and the remedies set forth above are exclusive and in lieu of all other warranties, remedies and conditions, whether oral or written, express or implied. To the maximum extent permitted by law, AVPro Global Holdings LLC specifically disclaims any and all implied warranties, including, without limitation, warranties of merchantability and fitness for a particular purpose. If AVPro Global Holdings LLC cannot lawfully disclaim or exclude implied warranties under applicable law, then all implied warranties covering this product, including warranties of merchantability and fitness for a particular purpose, shall apply to this product as provided under applicable law.

This warranty supersedes all other warranties, remedies and conditions, whether oral or written, express or implied.






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# Thank you for choosing AVProEdge!

# Please contact us with any questions, we are happily at your service!











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