

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

# **Operation Manual**





**Revision History** 

VERSION NO.	DATE DD/MM/YY	SUMMARY OF CHANGES
RDV1	08/10/16	Preliminary Release
RDV2		Prior market Launch
RDV3		Final Version v1.0

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#### 1.Introduction

The AC-DA210-HDBT is a 2 HDMI in, 8 HDBaseT out + 2 HDMI local output switch splitter. This switch splitter allows any source (Blu-ray, UHD Blu-ray, satellite receiver, game consoles, PCs, etc...) to be shown on any of the connected displays.

IR input is routed to all of the HDBaseT output for controlling remote TV set. IR signal from HDBaseT can control Switch splitter to switch the source or control the source device from the IR out. RS232 signal also routed to all HDBaseT device.

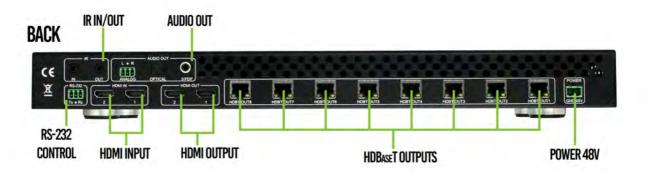
Two local HDMI output can be used to output to local monitor or cascade more AC-DA210-HDBT to set up big system.

There are 3 audio outputs for different requirements in field of application. They are analog L/R, Toslink and coaxial S/PDIF.

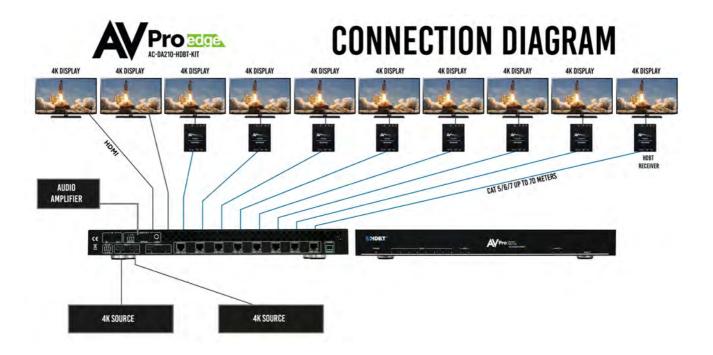
#### 2. Product overview

#### **FRONT**



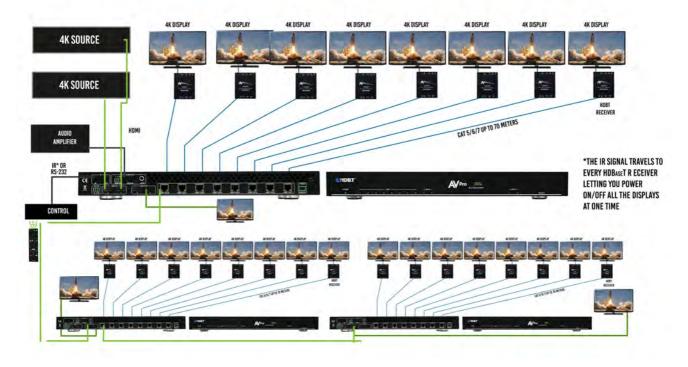








## **CASCADING SIGNAGE APPLICATION**





#### 3.Features

- Advanced Equalization and amplification of outputs for smooth switching
- 2 HDMI inputs, In2 supports HDCP2.2.
- · Advanced EDID Management
- Support HDMI 2.0 4K60 4:2:0
- IR, RS-232 Control Options
- Digital Toslink Out
- · L/R Analog Out
- Digital S/PDIF Out
- · Good little clear circuit ensure the cascading capability

## 4. Specifications

Б	4 O D 4 O 1 O LIDDT
Product	AC-DA210-HDBT
Input port	Two HDMI input
Out port	8 HDBaseT output + 2 HDMI output
HDMI Version	HDMI2.0(4K60YUV422)/DVI
HDCP	In1 HDCP1.x, In2 HDCP2.2/1.x
Video Bandwidth	Up to 9.0GHz(3.0GHz per channel)
Color Depth	24bits,30bits,36 bits,48bits
Audio de-embedded	Analog L/R, Toslink optical, Coaxial S/PDIF
EDID	11 embedded EDID,3 user EDID or Copy from
	any out port
POH	Controlable 48V POH
Power Consumption	26 Watts (not include about 5 Watts for every
(max.)	HDBT receiver)
Housing	Metal
Dimension (mm)	438mmx138mmx43.6mm
Weight (g)	2.11 Kg



## 5. Package contents:

- Main unit: AC-DA210-HDBT
- 2. 48V2A power supply for powering AC-DA210-HDBT

#### 6. Operation controls:

#### Switching:

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

#### EDID management:

- 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 7) shows the different EDID options.



	1	2	3	4 5	6	7	8		1 2	
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				-HD	BT-				HDMI	February FDID 6-4830H7 3D 20H
				-HD	BT -			=	HDMI	Embedded EDID 7:4K30HZ_3D_6CH
				0	0	0	0	0		Embedded EDID 1:4N3ON2_3D_6CH
	0	0	0	-HDI			0	0	HDMI	Embedded EDID 8:4K3OHZ_3D_8CH
	-	0		-HDI	-		0	-	HDMI	Embedded EDID 9:4K60HZ_3D_2CH
	_			HDB	1-			-	HDMI	Embedded EDID 10:4K60HZ_3D_6CH
	-			-HDB	T-			-	HDMI	Embedded EDID 11:4K60HZ_3D_8CH
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	0			HDE			0	•	HDMI	Embedded EDID 14:USER3_EDID
_			—HD	BT-					HDMI	
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		0	-HD		0		0		HDMI	Copy EDID from HDBT out2
1	2		-HDI			7	- 8		1 2 HDMI	
1	2		0	5		7	0 8		1 2	Copy EDID from HDBT out3
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•	2	• 3			0	0 7	0		HDMI 1 2	Copy EDID from HDBT out7
•	0	0	-HD	BT—	0	0	0		HDMI	Copy EDID from HDBT out8
1	2		4 —HD		6	- 1	8		1 2 HDMI	
1		0	4		0				1 2	Copy EDID from HDMI outl
			-HD	BT -			_		HDMI	The Section of the section is a section of the sect



#### Audio:

The extracted audio is always active by default, you may simply plug into any/all of the ports (Toslink, SPDIF, 2CH) and the audio will be output based on the active source. Additional audio commands can be sent by RS-232.

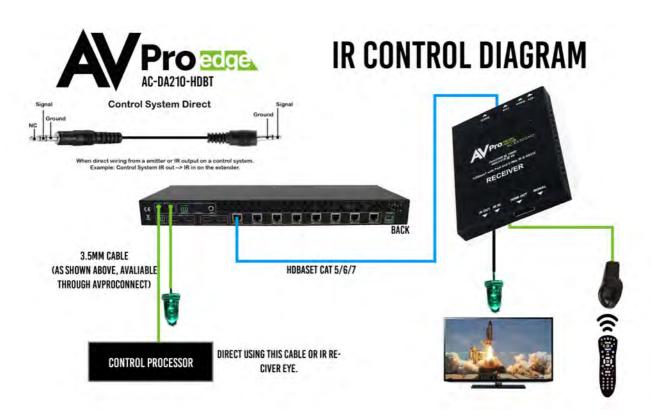
#### IR Routing:

IR can be routed in three ways

1. To the remote (HDBaseT Receiver) end by inserting an IR Receiving Eye into the IR In port on the AC-DA210-HDBT.



- 2. Back out of the IR Out port on the AC-DA210-HDBT by placing an IR Receiving Eye in the AC-EX70-UHD Receiver's IR In port
- 3. Directly from a control system using a cable as designed below.





#### RS-232 Control:

You may also control or configure the AC-DA210-HDBT with RS232.

RS232 setting:

Baudrate: 57600 Parity: None DataBit: 8 StopBit: 1

The available commands are as follows:

AC-DA210-HDBT Commands					
Command	Action				
Н	Help				
STA	Show Global System Status				
SET RST	Reset to Factory Defaults				
SET ADDR xx	Set System Address to xx [xx=[99~99](00=Single)}				
SET RS BP x	Set RS232 Bypass Enable/Disable {x=[0^1](0=En,1=Dis)}				
GET ADDR	Get System Address				
GET RS BP	Get RS232 Bypass Status				
GET STA	Get System Status				
AC-DA210-HDBT	Output Setup Commands				
Command	Action				
SET OUT 0 VS Inx	Set Output To Input x {x=[1~2]}				
SET OUT 0 EA x	Set External Audio Output x ON/OFF {x=[0~1](0=OFF,1=ON)}				
GET OUT 0 VS	Get Output Video Route				
GET OUT 0 EA	Get External Audio Output Status				
GET OUTX EDID DATA	Get Output x EDID DATA {x=[1~10]}				
AC-DA210-HDBT	Input Setup Commands				
Command	Action				
	Set Input x EDID == == {x=[0~2](0=ALL), y=[0~14]} == == 0:1080P_2CH 1:1080P_6CH 2:1080P_8CH ==				
SET INx EDID y	== 3:1080P_3D_2CH 4:1080P_3D_6CH 5:1080P_3D_8CH == 6:4K30HZ_3D_2CH 7:4K30HZ_3D_6CH 8:4K30HZ_3D_8CH == 9:4K60HZ_3D_2CH 10:4K60HZ_3D_6CH 11:4K60HZ_3D_8CH == 12:USER1 EDID 13:USER2 EDID 14:USER3 EDID				
SET INX EDID CY OUTY	Copy Output y EDID To Input x(USER1 BUF){x=[0~2](0=ALL), y=[1~10]}				
SET INx EDID Uy DATAz	Write EDID To User y Buffer of Input x{x=[0~2](0=ALL), y=[1~3],z=[EDID Data]}				
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=[0~14]}				
AC-DA210-HDBT	IR Code Setup Command				
Command	Action				
SET IR SYS x.y	Set IR Custom Code{xx=[00-FF],yy=[00-FF]}				
SET IR OUT 0 IN x Code y	Set Input x IR Control Code {x=[1-2],y=[00-FF]}				
GET IR SYS	Get IR System Code				
GET IR OUT 0 IN x Code	Get Inputx IR Control Code {x=[0-2](0=All)}				



#### Maintenance & Support

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 adaptor 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

#### Warranty

If your product does not work properly because of a defect in materials or workmanship, AVProEdge (referred to as "the warrantor") will, for the length of the period indicated as below, (Parts/Labor (10) Years), which starts with the date of original purchase ("Limited Warranty period"), at its option either (a) repair your product with new or refurbished parts, or (b) replace it with a new or a refurbished product. The decision to repair or replace will be made by the warrantor. During the "Labor" Limited Warranty period there will be no charge for labor. During the "Parts" warranty period, there will be no charge for parts. You must mail-in your product during the warranty period. This Limited Warranty is extended only to the original purchaser and only covers product purchased as new. A purchase receipt or other proof of original purchase date is required for Limited Warranty service.

This warranty extends to products purchased directly from AVPro or an authorized dealer. AVPro is not liable to honor this warranty if the product has been used in any application other than that for which it was intended, has been subjected to misuse, accidental damage, modification or improper installation procedures, unauthorized repairs or is outside of the warranty period. Please direct any questions or issues you may have to your local dealer before contacting AVPro.



Thank you for choosing AVProEdge!

Please contact us with any questions. We are happy to be of service!











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