AC-DA210-HDBT

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

Operation Manual

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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

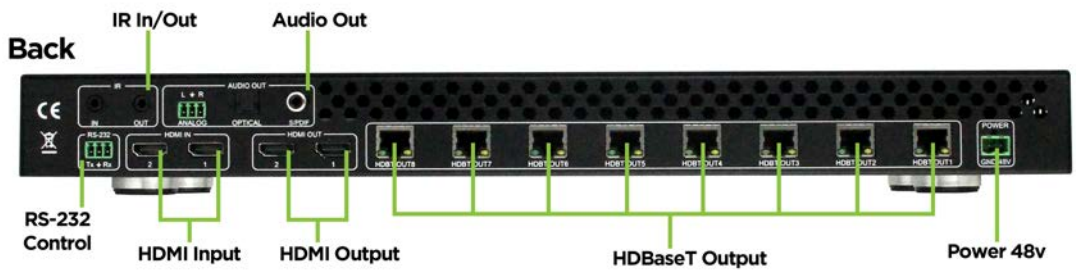
The AC-DA210-HDBT is a 2 HDMI in, 8 HDBaseT out + 2 HDMI local output switch splitter. This switch splitter allows any source (Blu-ray, UHD Blu-ray, satellite receiver, game consoles, PCs, etc...) to be shown on any of the connected displays.

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



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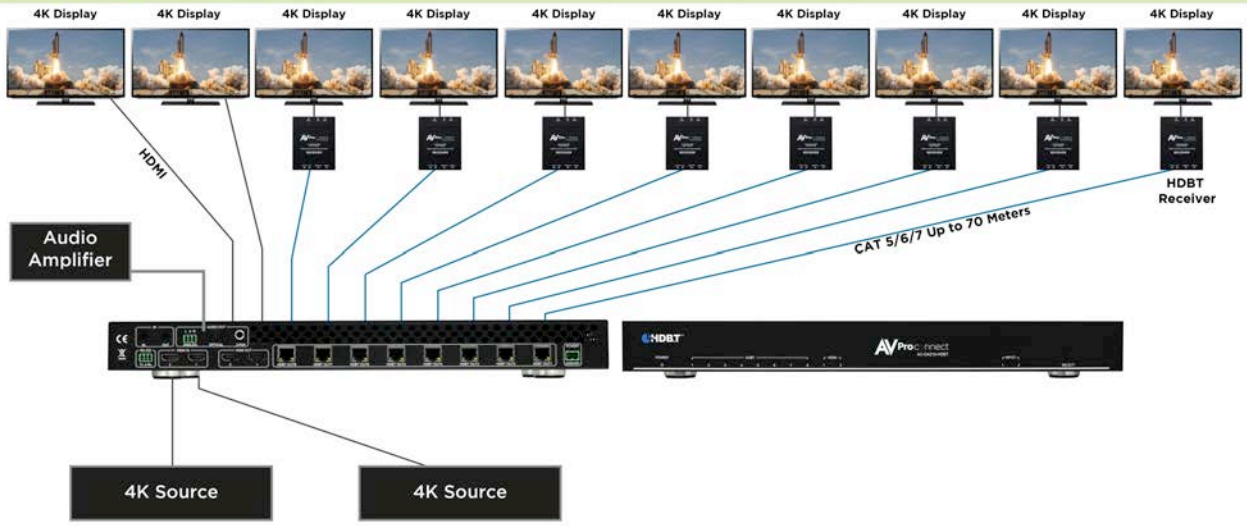
APPLICATION DIAGRAM

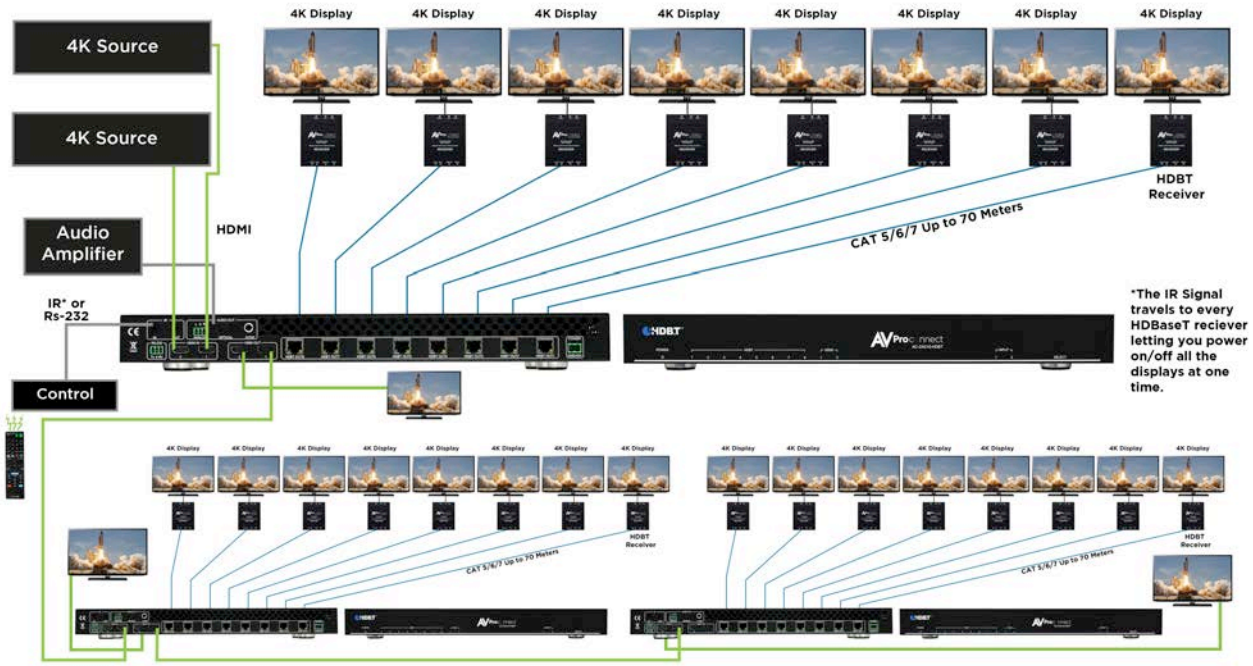
AC-DA210-HDBT



CASCADING SIGNAGE APPLICATION

AC-DA210-HDBT

In this application we are able to see how the AC-DA210-HDBT can cascade to give you the amount of outputs you are looking for. You can do this for an almost unlimited amount of displays making this product the perfect solution for digital signage, stadiums, retail stores and so much more.



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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
- 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

4. Specifications

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 (max.)	26 Watts (not include about 5 Watts for every HDBT receiver)
Housing	Metal
Dimension (mm)	438mmx138mmx43.6mm
Weight (g)	2.11 Kg

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5. Package contents:

1. 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.

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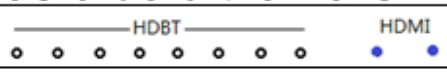
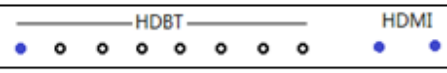
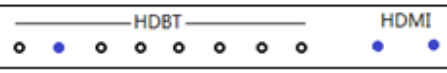
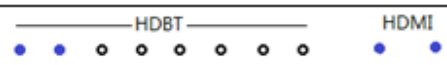
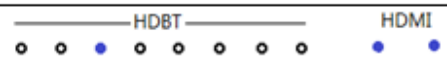
1 2 3 4 5 6 7 8 HDBT — HDMI 1 2	
	Embedded EDID 0:1080P 2ch PCM
	Embedded EDID 1:1080P_6CH
	Embedded EDID 2:1080P_8CH
	Embedded EDID 3:1080P_3D_2CH
	Embedded EDID 4:1080P_3D_6CH
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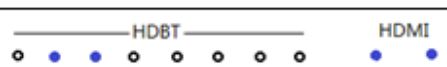
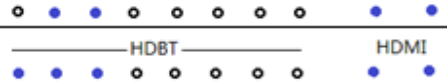
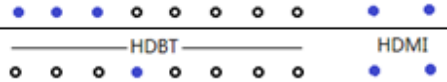
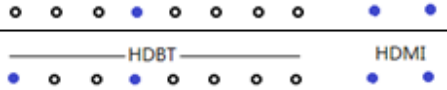
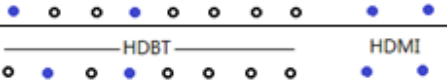
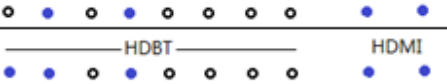
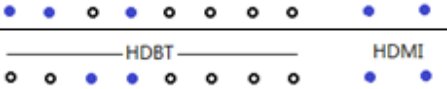
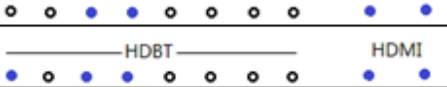
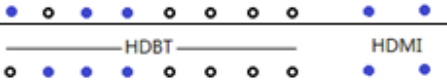
	Embedded EDID 6:4K30HZ_3D_2CH
	Embedded EDID 7:4K30HZ_3D_6CH
	Embedded EDID 8:4K30HZ_3D_8CH
	Embedded EDID 9:4K60HZ_3D_2CH
	Embedded EDID 10:4K60HZ_3D_6CH
	Embedded EDID 11:4K60HZ_3D_8CH
	Embedded EDID 12:USER1_EDID
	Embedded EDID 13:USER2_EDID
	Embedded EDID 14:USER3_EDID
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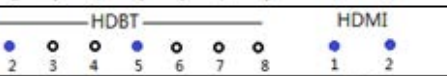
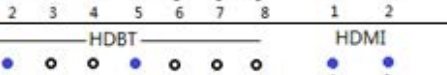
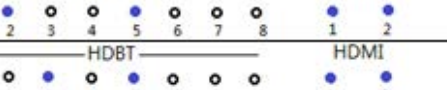
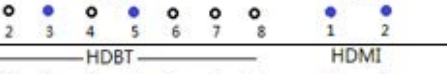
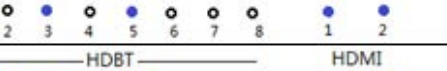
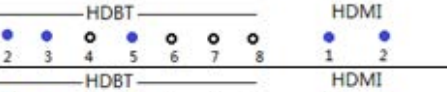
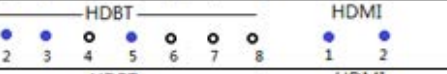
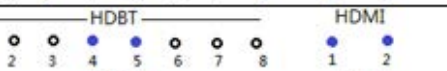
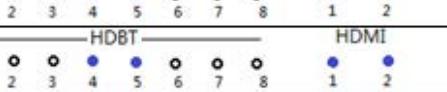
	Copy EDID from HDBT out2
	Copy EDID from HDBT out3
	Copy EDID from HDBT out4
	Copy EDID from HDBT out5
	Copy EDID from HDBT out6
	Copy EDID from HDBT out7
	Copy EDID from HDBT out8
	Copy EDID from HDMI out1
	Copy EDID from HDMI out2

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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.

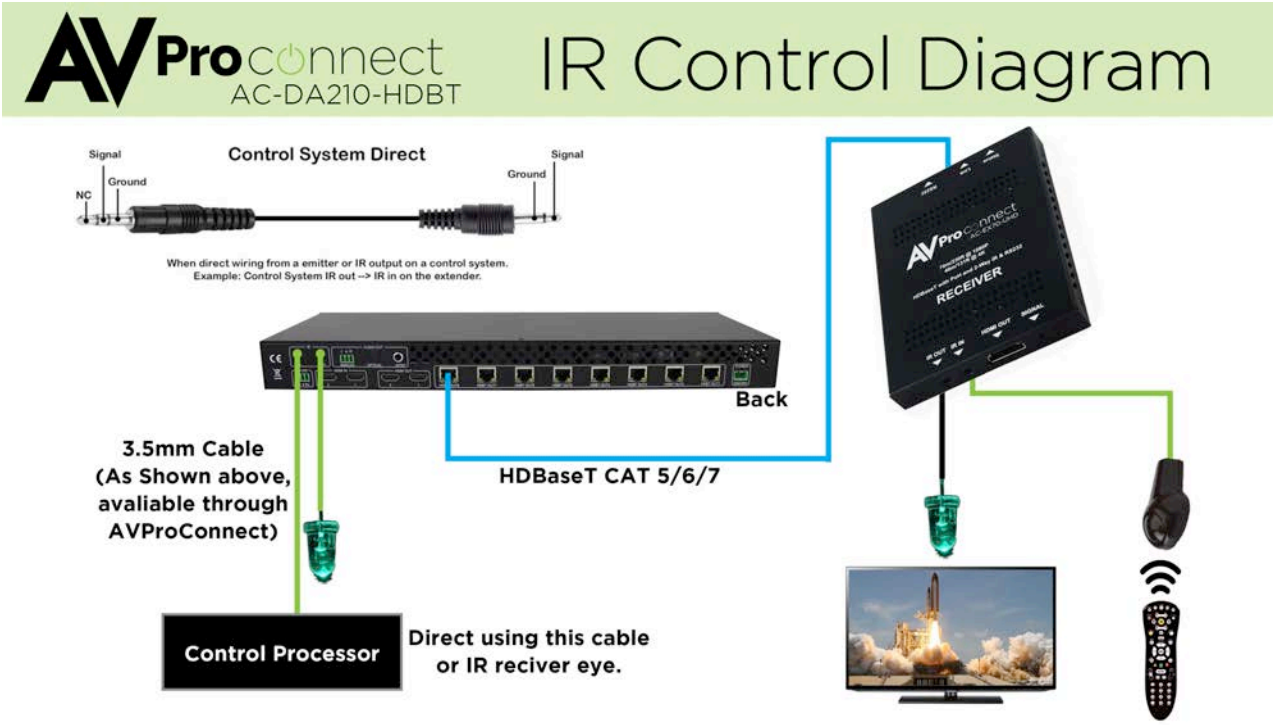
IR Routing:

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.



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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**
H	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 INx EDID y	Set Input x EDID == == {x=[0~2](0=ALL), y=[0~14]} == == 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 == == 9:4K60HZ_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)}

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7. Maintenance, Service, Cleaning and Warranty

■ Maintenance

Clean this unit with a soft, dry cloth. Never use alcohol, paint thinner or benzine to clean this unit.

■ Product Service

• Provided Service

1) 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 cabinet damaged.

2) Servicing Personnel: Do not attempt to service the unit beyond that described in these operating instructions. Refer all other servicing to authorized servicing personnel.
3) Replacement parts: When parts need replacing ensure the service uses parts specified by the manufacturer or parts that have the same characteristics as the original parts. Unauthorized substitutes may result in fire, electric shock, or other hazards.
4) Safety check: After repairs or service, ask the service to perform safety checks to confirm that the unit is in proper working condition.

● Mail-In Service

When shipping the unit, carefully pack and send it prepaid, adequately insured and preferably in the original carton. Include a letter detailing the complaint and provide a daytime phone and/or email address where you can be reached. If repair is needed during the limited warranty period, the purchaser will be required to furnish a sales receipt/proof of purchase indicating date of purchase, amount paid and place of purchase. Customer will be charged for the repair of any unit received without such proof of purchase.

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■ Warranty

If your product does not work properly because of a defect in materials or workmanship, AVProConnect (referred to as "the warrantor") will, for the length of the period indicated as below, （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.

● Warranty Limits and Exclusions

1) This Limited Warranty ONLY COVERS failures due to defects in materials or workmanship, and DOES NOT COVER normal wear and tear or cosmetic damage. The Limited Warranty ALSO DOES NOT COVER damages which occurred in shipment, or failures which are caused by products not supplied by the warrantor, or failures which result from accidents, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, set-up adjustments, misadjustment of consumer controls, improper maintenance, power line surge, lightning damage, modification, or service by anyone other than a Factory Service Center or other Authorized Service, or damage that is attributable to acts of God.
2) There are no express warranties except as listed under "limited warranty coverage". The warrantor is not liable for incidental or consequential damages resulting from the use of this product, or arising out of any breach of this warranty. (As examples, this excludes damages for lost time, cost of having someone remove or re-install an installed unit if applicable, travel to and from the service location, loss of or damage to media or images, data or other recorded content. The items listed are not exclusive, but are for illustration only.)

■ Safety Instructions:

After Sale Service
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.

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1. 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.
2. Do not operate these products outside the specified temperature and humidity range given in the above specifications.
3. Ensure there is adequate ventilation to allow this product to operate efficiently.
4. Repair of the equipment should only be carried out by qualified professionals as these products contain sensitive devices that may be damaged by any mistreatment.
5. Only use this product in a dry environment. Do not allow any liquids or harmful chemicals to come into contact with these products.

■ After Sale Service

1. Should you experience any problems while using this product, firstly refer to the Troubleshooting section in this manual before contacting Technical Support.
2. When Calling Technical Support, the following information should be provided:

- Product name and model number
- Product serial number
- Details of the fault and any conditions under which the fault occurs.

3. This Product has a ten-year standard warranty, beginning from the date of purchase as stated on the sales invoice.
4. Product warranty is automatically void under any of the following conditions:
The product is already outside of its warranty period

- Damage to the product due to incorrect usage or storage
- Damage caused by unauthorized repairs
- Damage caused by mistreatment of the product

5. Only use this product in a dry environment. Do not allow any liquids or harmful chemicals to come into contact with these products.

Thanks for Using AVProConnect

If you have any questions just call us at 1-877-886-5112

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