avgear

USER MANUAL

AVG-HDWP70RX
HDBaseT Wallplate Receiver

Features

- High bandwidth: 10.2Gbps
- Wide resolution range (from 480p to 4Kx2K)
- Compliant with HDMI 1.4, supports 1080p 3D
- HDCP compliant, equipped with HDCP auto-tracking
- Bi-directional IR& RS232 control
- Powered by local power pack or power sourcing equipment via PoC/ PoE solution
- Aluminum design for efficient cooling

AVG-AVG-HDWP100RX Wall Plate Receiver is a Decora style HDBaseT receiver that installs in a double-gang wall plate to provide a convenient interface for HDMI / DVI output.

**PLEASE READ THIS PRODUCT MANUAL CAREFULLY
BEFORE USING THIS PRODUCT.**

This manual is only for operation instruction only, and not to be used in a maintenance capacity. The functions described in this version are current as at March 2015. Any changes of functions and operational parameters will be updated in future manual versions. Please refer to your dealer for the latest product details.

Version 1.0 1/3/15

SAFETY OPERATION GUIDE ⚠️

In order to guarantee the reliable operation of the equipment and safety of the user, please abide by the following procedures in installation, use and maintenance:

1. The system must be earthed properly. Please do not use two blade plugs and ensure the AC power supply ranges from 100v to 240v and from 50Hz to 60Hz.

2. Do not install the switcher in an environment where it will be exposed to extreme hot or cold temperatures.

3. This unit will generate heat during operation, please ensure that you allow adequate ventilation to ensure reliable operation.

4. Please disconnect the unit from mains power if it will be left unused for a long time.

5. Please DO NOT try to open the casing of the equipment, DO NOT attempt to repair the unit. Opening the unit will void the warranty. There are high voltage components in the unit and attempting to repair the unit could result in serious injury.

6. Do not allow the unit to come into contact with any liquid as that could result in personal injury and product failure.

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1. Introduction

1.1. Introduction to the AVG-HDWP70RX

AVG-HDWP70RX Wall Plate Receiver is a Decora style HDBaseT receiver that installs in a double-gang wall plate to provide a convenient interface with HDMI / DVI output. It has 1 HDMI OUT, 1 HDBT IN with PoC & PoE, 2 IR IN and 1 IR OUT. It supports HDMI 1.4& HDCP for reliable transmission. HDBT IN is capable of receiving the AV& control signal from up to 70min distance, of which the IR & RS232 control signals can travel bi-directionally.

With its PoC/ PoE solution, HDBaseT Wall Plate Receiver can be powered by a far-end device which supports PoC/ PoE.
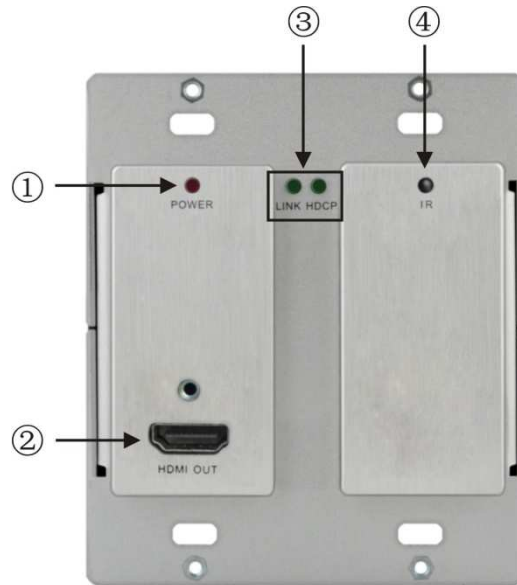
1.2. Features

- High bandwidth: 10.2Gbps
- Wide resolution range (from 480p to 4Kx2K)
- Compliant with HDMI 1.4, supports 1080p 3D
- HDCP compliance, equipped with HDCP auto-tracking
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2. Package List

- 1 x AVG-HDWP70RX Wall Plate Receiver
- 2 x Screws (for AVG-HDWP70RX Wall Plate Receiver)
- 1 x Face Plate (2 gang)
- 2 x Screws (for face plate)
- 4 x Pluggable Terminal Blocks (2 2-pin block, 2 3-pin block)
- 1 x Power Adapter (DC 12V 1A, selectable)
- 1 x User Manual

Note: Please confirm if the product and the accessories are all included, if not, please contact your dealer.

3. Product Appearance

3.1. Front Panel

No.	Name	Description
①	Power indicator	Illuminates red when powered on
②	HDMI OUT	Connect with HDMI display
③	LINK &HDCP	✓ LINK: Twisted Pair Link status indicator, illuminates green when successfully connected. ✓ HDCP: HDCP compliance indicator, illuminates green when the source signals contains HDCP; blinks when HDCP not present. Turns off when there is no source signal.
④	IR	In-built IR sensor

Note: Pictures shown in this manual are for reference only.

3.2. Rear Panel
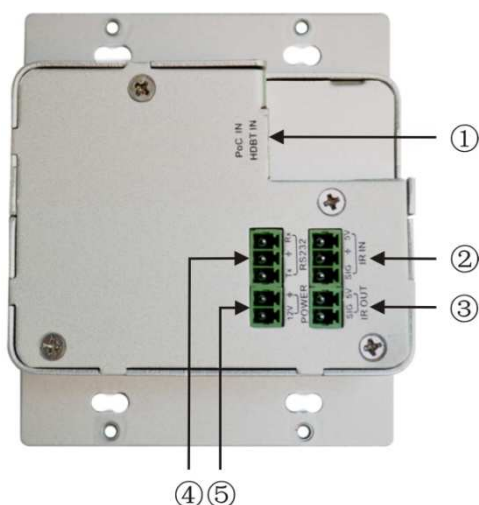
No.	Name	Description
①	PoC IN& HDBT IN	RJ45 port, connect with transmitter via a CAT5e/6 cable to deliver AV& control signals, supports PoC.
②	IR IN	Connect with IR receiver, receives IR signals sent from the IR Emitter connected to the far-end receiver
③	IR OUT	Connect with IR Emitter, IR signals emitted from the IR emitter are received by the IR receiver connected to the far-end receiver.
④	RS232	Serial port, connects with a far-end receiver, supports bi-directional RS232 control (send control signal from local or receive control signal sent from far-end devices).
⑤	Power	Connect with DC 12V power adapter

Note: Pictures shown in this manual are for reference only.

Note:

1. AVG-HDWP70RX Wall Plate Receiver can be powered via standard PoC & PoE, i.e. it can be powered by a far-end device.

2. When connecting an IR Receiver to the **IR IN** socket, both the in-built IR sensor and the extended IR Receiver is capable to receive IR signal.

3. Pictures shown in this manual are for reference only, different models and specifications are subject change.

4. System Connection

4.1. System Applications

Reliable performance for control and transmission makes the AVG-HDWP70RX ideal in the IT computer space, signal monitoring, big screen displays, conference systems, television broadcast, education, banking and security institutions etc.

4.2. Usage Precautions

1. System should be installed in a clean environment with temperature and humidity maintained to within equipment specification.

2. All of the power switches, plugs, sockets and power cords should be insulated and safe.

3. All devices should be connected before power is turned on.

4.3. Connection Diagram
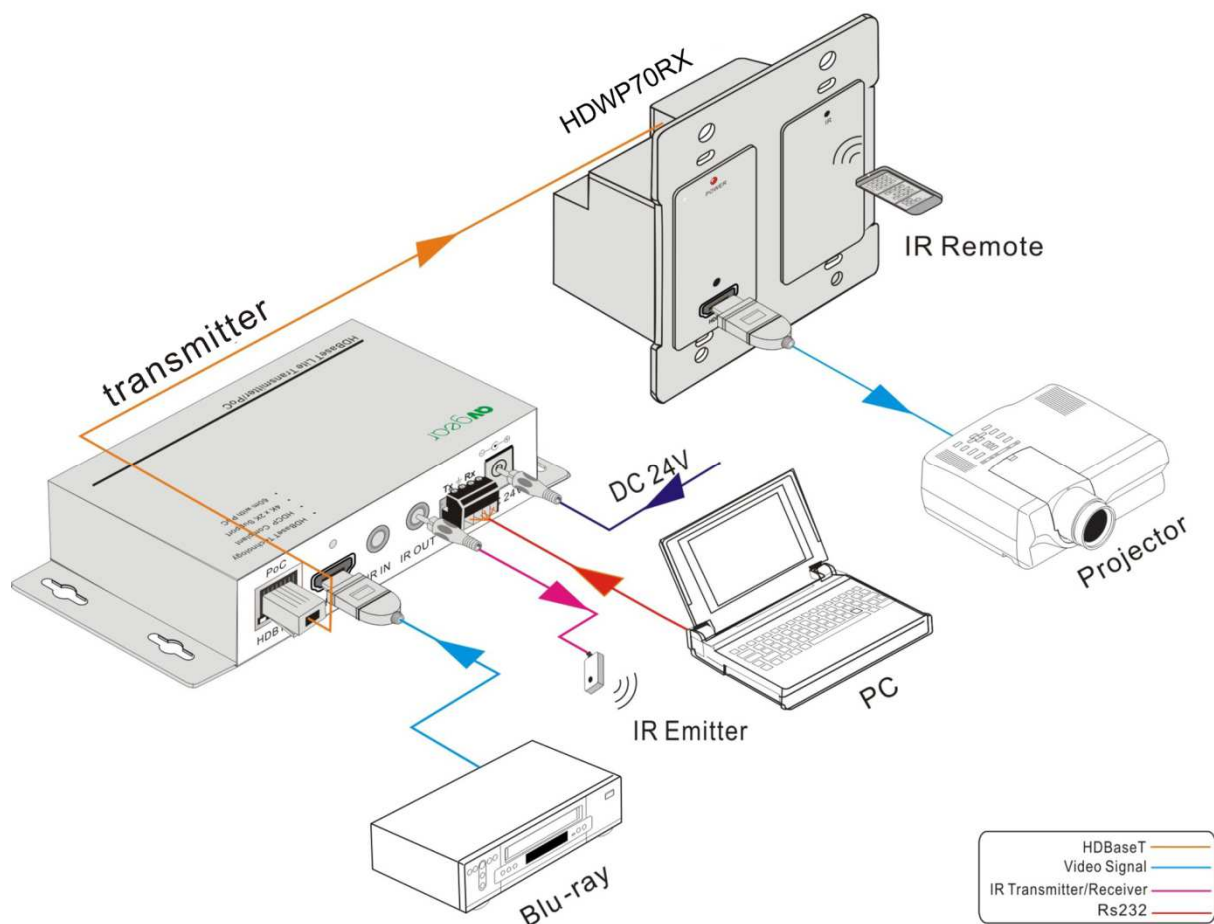
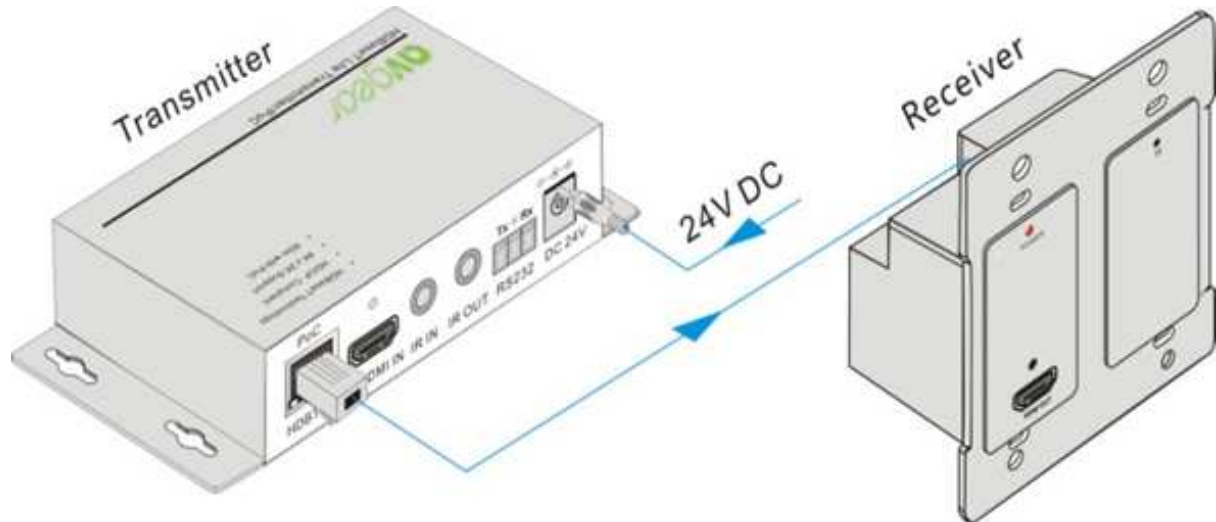**Note:** Pictures shown in this manual are for reference only.

4.4. Connection Procedure

Step 1. Connect HDMI source device (e.g. Blu-ray DVD) to **HDMI IN** socket of the HDBaseT Twisted Pair PoC Transmitter with HDMI cable.

Step 2. Connect the HDBT ports of HDBaseT Twisted Pair PoC Transmitter and HDBaseT Wall Plate Receiver.

Step 3. Connect a HDMI display to the **HDMI OUT** port of HDBaseT Wall Plate Receiver.

Step 4. Connect a control device (e.g. a PC) to the RS232 port of either HDBaseT Twisted Pair PoC Transmitter or HDBaseT Wall Plate Receiver.

Step 5. Both HDBaseT Twisted Pair PoC Transmitter and HDBaseT Wall Plate Receiver have IR IN and IR OUT sockets. When one model is used as the IR signal receiver, the IR signal must be sent out by the other model.

For example: When "IR IN" of HDBaseT Wall Plate Receiver connects with an IR receiver, the IR emitter must connect to IR OUT of HDBaseT Twisted Pair PoC Transmitter.

Step 6. Connect a DC 24V power adaptor to the power port of HDBaseT Twisted Pair PoC Transmitter.

Note: IR& RS232 signal can be transmitted bi-directionally between HDBaseT Wall Plate Receiver and HDBaseT Twisted Pair PoC Transmitter.

4.5. PoC/ PoE Solution

Apart from power supply, AVG-HDWP70RX Wall Plate Receiver can be energized by far-end devices that support PoC/ PoE, which increases the system flexibility.

Connect the receiver and far-end device (exampled by HDBaseT Twisted Pair PoC Transmitter) via a CAT5e/6 cable as below:

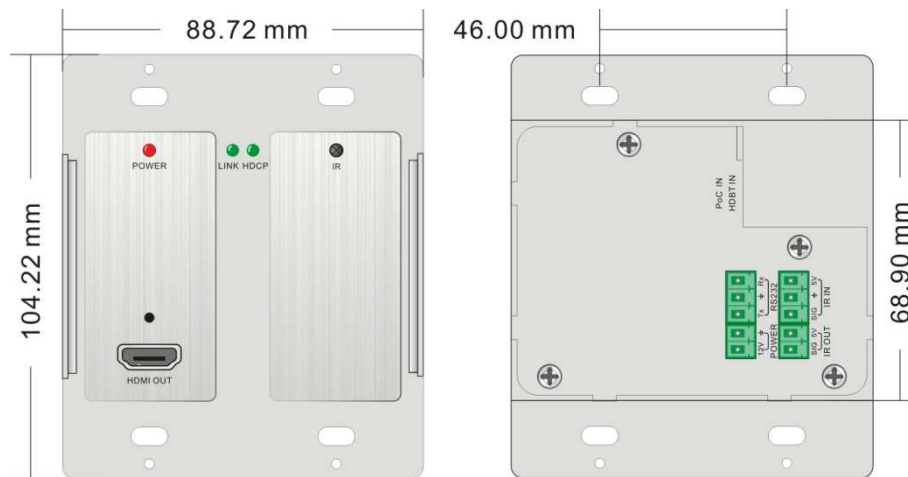**Note:** Pictures shown in this manual are for reference only.

AV, IR& RS232 control signals can also be transmitted via the cable.

Note: AVG-HDWP70RX Wall Plate Receiver supports **unidirectional** PoC/ PoE, i.e, AVG-HDWP70RX Wall Plate Receiver can get power from a far-end PoC/ PoE device.

6. Specification

Video			
Input	1 HDBT	Output	1 HDMI
Input Connector	1 RJ45	Output Connector	1 19-pin Type A HDMI female
Transmission Distance	1080P≤20M 4Kx2K≤15M		
Control Parts			
Control Ports	1 RS232 2 IR IN (1 in-built IR sensor on front panel, 1 3.5mm IR IN on rear panel 1 IR OUT		
General			
Resolution	HDMI:4Kx2K, 1080P 3D, 1080P, 1080i, 720P, 576P, 576i, 480P, 480i		
	DVI:1920x1200@60Hz, 1920x1080@60Hz, 1600x1200@60Hz, 1280x1024@75Hz, 1280x1024@60Hz, 1024x768@75Hz, 1024x768@70Hz, 1024x768@60Hz, 800x600@75Hz, 800x600@72Hz, 800x600@60Hz, 640x480@75Hz, 640x480@72Hz, 640x480@60Hz		
Transmission Distance	1080P≤70M (PoC) 4Kx2K≤40M (PoC)		
Bandwidth	10.2Gbps		
HDMI Standard	Supports HDMI1.4 and HDCP		
Chassis Dimension	Decora style two gang		
Power Consumption	7w (Max)	Power Supply	DC 12V 1A
Temperature	0 ~ 55℃	Reference Humidity	10% ~ 90%
Dimension (W*H*D)	89x 104 x 35 mm	Weight	0.24Kg

7. Panel Drawing

Note: Pictures shown in this manual are for reference only.

8. Troubleshooting & Maintenance

Problems	Causes	Solutions
Color loss or no video signal output in the HDMI display	The cables may be incorrectly connected or faulty	Check whether the cables are connected correctly and in good working condition.
No HDMI signal output in the device while local HDMI input is in normal working state		
Output image is noisy		
POWER indicator doesn't work or respond to any operation	Loose or failed power cord connection	Ensure the power cord connection is good
Cannot control the device by control device (e.g. a PC) through RS232 port	Wrong RS232 communication parameters	Make sure the RS232 communication parameters are correct.
	The unit is faulty	Send it to authorized dealer for repairing.
Static becomes stronger when connecting the video connectors	Poor grounding	Check the grounding and make sure it is connected well.

If your problem persists after following the above troubleshooting steps, seek further help from authorized dealer.