AXP-HVD-TR-1

User Guide

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Preface

Thank you for choosing this AXP-HVD-TR-1 HDBaseT multiformat video transmitter/receiver set.

This manual introduces the function, installation and operation of the equipment. Prior to installation and usage, please read the manual thoroughly.

Precautions

This product can only be used in the specified conditions in order to avoid any damage to the units:

• Don't subject the unit to rain or moisture.

• Don't remove the cover. Otherwise, you may get an electric shock. In case of abnormal operation, contact the authorized engineer.

• Never operating under unspecified temperature , humidity and power supply.

• Please use a soft dry cloth to clean the unit. If the unit is very dirty, clean it with diluted neutral detergent; do not use any type of solvents, which may damages the surface.

Note

This is class A product. Electromagnetic radiation at the specific frequency may affect the image quality of TV in a home environment.

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Quick Start Introduction

The AXP-HPV-TR-1 is multi-format switcher with HDMI, VGA and Display Port inputs to HDBT output. The audio port is independent and can be embedded into any of the video signals and sent to the far end Receiver. The product also supports a web server and it can therefore be controlled by the button, LAN, RS-232 and contact closure. IR and RS-232 can pass through.
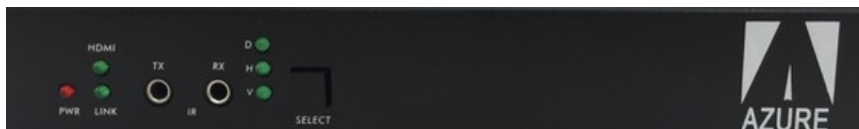
Package Contents
- 1 × AXP-HPV-T-1
- 1 x AXP-HPV-R-1
- 1 × 24V 1A DC power adapter
- 2 × Wall mounting bracket

Features
- Transmit Audio/Video/Control up to 70m over one Cat 6/Cat 6A/Cat 7 cable;
- Supports VGA with WUXGA resolution;
- Supports HDMI 4K x 2K and 3D;
- Supports DP1.2 with 4K@30Hz;
- Supports Auto/Manual switching;
- Suppoirts Auto-sensing;
- Supports EDID management;
- Supports field Firmware upgrade;
- Support web server for management, monitoring and configuration;
- HDCP 1.4 compliant;
- LAN for local control and web server access;
- Control switching through button/RS-232/contact closure or web server;
- Independent audio input;
- Remotely or locally powered;
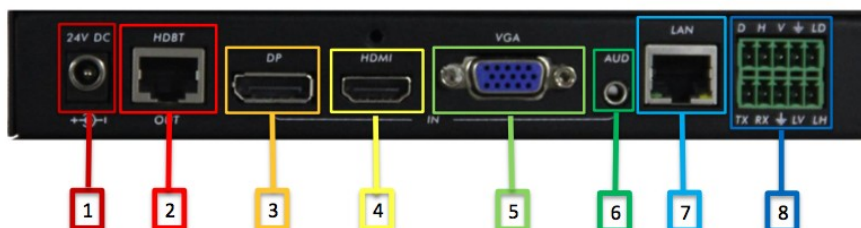- Status LED for all connections on front.

Panel Description

Front Panel

1. PWR: Solid red when power on;

2. HDMI: LED solid when with HDCP, flashing when without HDCP;

3. Link: flashing when HDBT connected without video signal, solid when video presented;

4. IR Tx: IR emitter port;

5. IR Rx: IR sensor port;

6. D: LED solid when DP selected, flashing when signal presented, off means no input signal;

7. H: LED solid when HDMI selected, flashing when signal presented, off means no input signal;

8. V: LED solid when VGA selected, flashing when signal presented, off means no input signal;

9. SELECT: Button for switching input signal.

Rear Panel

1. Power: 24V DC Power;

2. HDBT Out: HDBT output;

3. DP: Display Port input;

4. HDMI: HDMI input;

5. VGA: VGA input;

6. AUD: Independent audio input;

7. LAN: LAN for local control or web serve access;

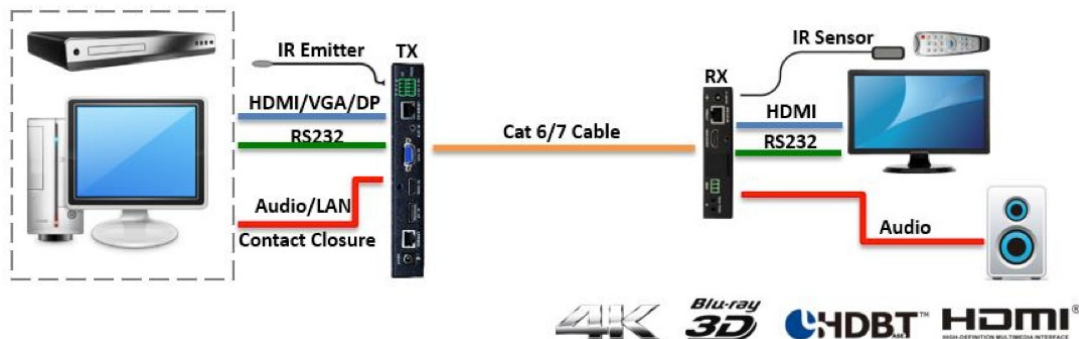8. Phoenix Port: RS232 and Contact Closure with LED indicator.

Product Specification

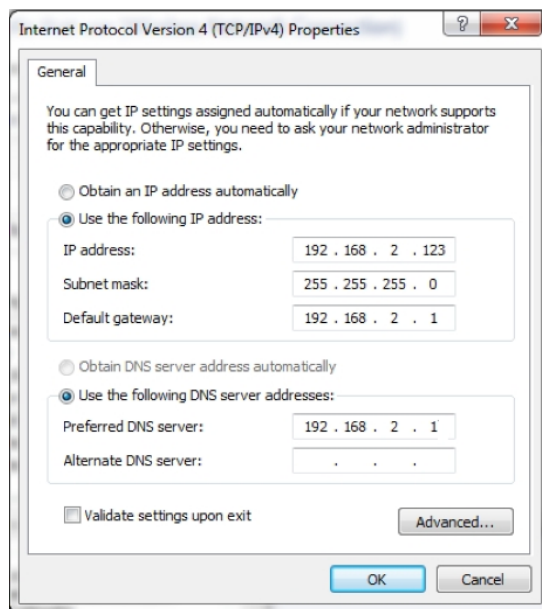| Video	
HDMI Compliance	HDMI 1.4, 3D, 4K
VGA Compliance	VESA
DP Compliance	DP 1.2
HDCP Compliant	HDCP 1.4
Distance	Up to 70m
Max Resolution	Up to 4K + 2K@30Hz
Control	Control RS232, IP, IR, Contact Closure
Mechanical	
Dimensions	190 x103 x 29 mm (L/W/H)
Gross Weight	880g
Power	
Power Supply	24V 1A DC
Power Consumption	12W
Environmental	
Operation Temperature	14~131°F [-10~55°C]
Relative Humidity 5~95% RH [no condensation]	

Connection & Installation
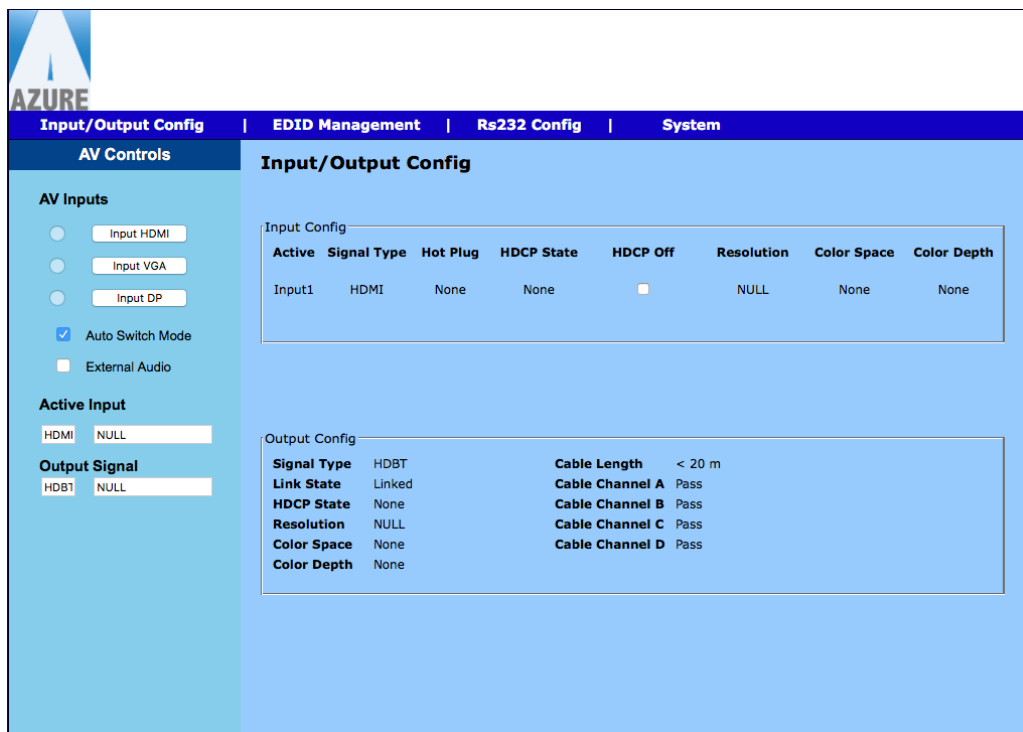
Web Server

The factory default IP: 192.168.2.175

To access the units web server, a user can directly connect their PC LAN port to the AXP-HPV LAN port with a straight-through RJ45 cable. After making the connection, go to the network connection of the PC and change the IP property to static IP as below. Once done, open a web browser and enter 192.168.2.175 to access the web server.

To connect the AXP-HVD-TR1 to the local area network, please update the AXP-HVD product IP to match the LAN network setting from the web server.

For example if the LAN IP is set as 192.168.88.xxx, then please revise the product to 192.168.88.1xx. Once the IP is set, then you could access to the device from any PC in the same network.

Input/Output Configuration

The page above shows the switching control and also the connection input signal information and HDBaseT output connection status.

AV Inputs – Select to switch the input to Auto-switch the video – check to make the device is set in auto switching mode, if unticked the unit will operate in manual switching mode.

External Audio – If the box is checked, the 3.5mm audio input is embedded in the input video. If unchecked, the audio will only follow VGA.

Input Config – Input port information

HDCP Unauthorized - When checked, AXP-HPV will request no HDCP compliant source

Output Config – HDBT connection status

Active Input – Showing the Input signal format and resolution

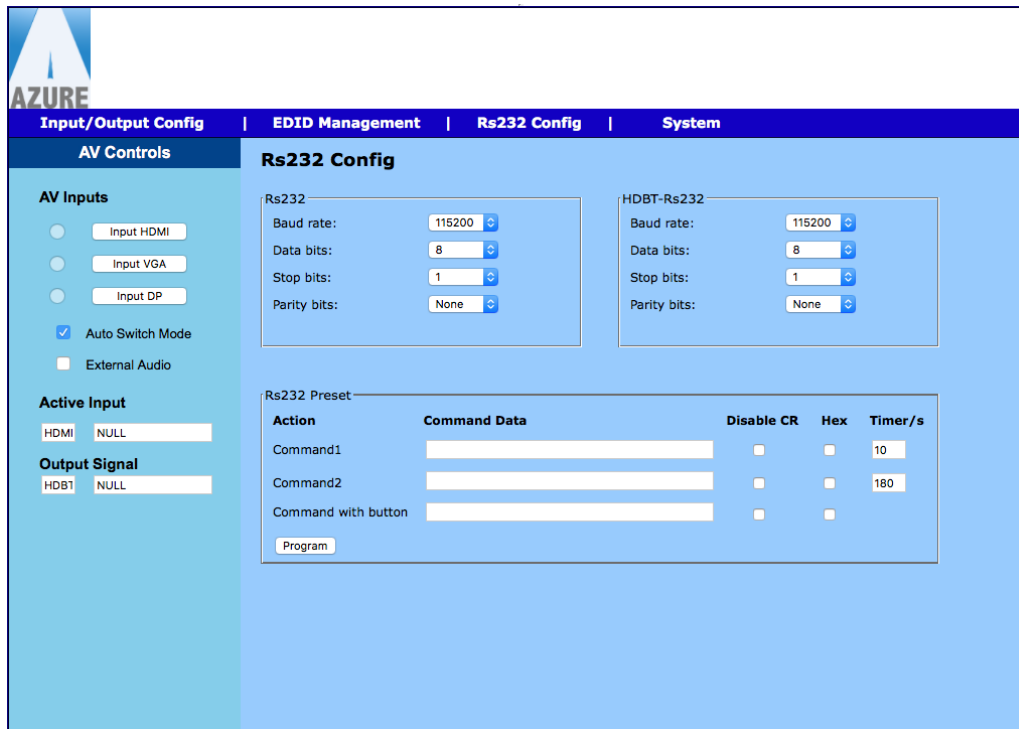**Active Output** – Showing output signal format and resolution

EDID Management

The page provides switching and EDID management.

Follow Output – EDID from Display EDID – Internal Preload EDID.

IR RS-232 Configuration

RS-232 Preset

Command1 – When the unit detects an active signal, it sends the RS-232 command in the preset timing

Command2— When no active signal is present, it sends the command in the preset timing Button – Press and hold the button for 3-5 seconds and it will send the preset command.

To set the preset to RS-232, please click the program button to program the code to the unit.

System

System and Firmware information

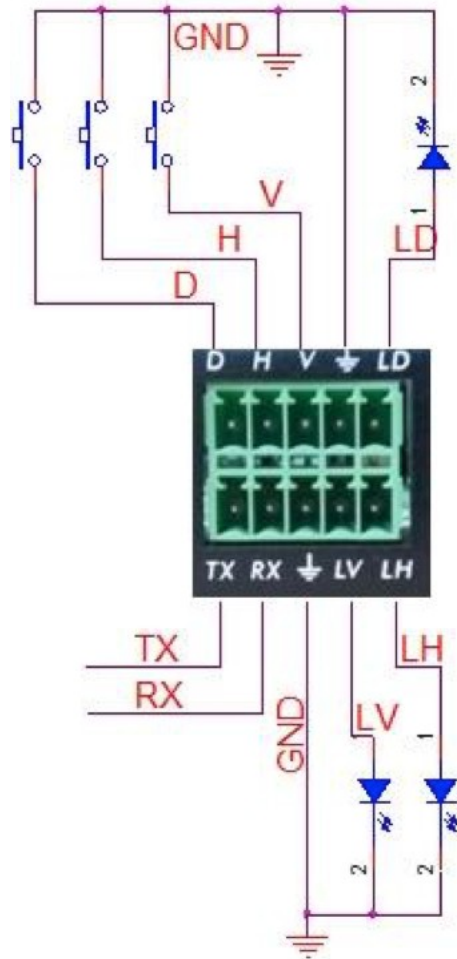The User can modify the IP setting from this page. Please remember to click on Apply to save the changes.

RS-232 Command Table

Local RS-232 Setting	Protocol Command Example	Query Command Ex	Note:
Baud Rate	>MBaud:115200<0D 0A>	#MBaud<0D 0A>	Support 9600, 19200, 38400, 115200 (default)
Data Bits	>MDBits:8<0D 0A>	#MDBits<0D 0A>	Support 8&9
Stop Bits	>MSBits:1<0D 0A>	#MSBits<0D 0A>	Support 1&2
Parity Bits	>MParity:None<0D 0A>	#MParity<0D 0A>	Support 0DD, Even, None
Far End RS-232 Setting	**Protocol Command Example**	**Query Command Ex**	**Note:**
Baud Rate	>HDBaud:115200<0D 0A>	#HDBaud<0D 0A>	Support 9600, 19200, 38400, 115200 (default)
Data Bits	>HDDBits:8<0D 0A>	#HDDBits<0D 0A>	Support 8&9
Stop Bits	>HDSBits:1<0D 0A>	#HDSBits<0D 0A>	Support 1&2
Parity Bits	>HDParity:None<0D 0A>	#HDParity<0D 0A>	Support 0DD, Even, None
Network Setting			
DHCP	>DHCP:ON<0D 0A>	#DHCP<0D 0A>	
IP	>IP:192.168.2.175<0D 0A>	#IP<0D 0A>	
Net Mask	>Mask:255.255.255.0<0D 0A>	#Mask<0D 0A>	
Gateway	>Gate:192.168.2.175<0D 0A>	#Gate<OD OA>	
TCP Protocol	>TCP Protocol : Server<0D 0A>	#Tcp Protocol<0D 0A>	
TCP Port	>TCP Port:1001<0D 0A>	#Tcp Port<0D 0A>	
TCP Host IP	>HsIP:192.168.2.200<0D 0A>	#HsIP<0D 0A>	
Video Switching			
Switching	>C2to1<0D 0A> >V0<0D 0A>	#C	1:DP 2:HDMI 3:VGA
Output Port	>M0<0D 0A>		
Query Resolution		#R	0:Output On 1:Output Mute
Switching Mode			1:Auto 0:Manual
Audio Setting			
Audio	>A1<0D 0A>		0:Internal Audio 1:External Audio
Pass through command	>CS2TX05Hello<0D 0A>		Command pass through (control port) : Destination port : 1-Lan 2-Far End Rs232 3-Local Rs232
	Ex : Passing command to far end RS-232 port for 5 character "Hello"		
Note: The default baud rate 115200.			

PHOENIX Contact Connection Diagram

V : D : H :

VGA Input DP Input HDMI Input

LV: LED indicator for VGA LD: LED indicator for DP LH: LED indicator for HDMI

TX: RS-232 Tx RX: RS-232 Rx GND: Ground

Safety Information

To reduce the risk of electric shock, do not expose this product to rain or moisture Do not modify the wall plug. Doing so will void the warranty and safety features.

If the wall plug does not fit into your local power socket, hire and electrician to replace your obsolete socket. This equipment should be install near the socket outlet and the device should be easily accessible in the case it requires disconnection.

Warranty

The products are supported by a two year Warranty from the date of the original shipment. This warranty shall be void if a serial number has been removed from the product.

Upon determination of a legitimate defect covered by this warranty and at NetworkTV's sole discretion, the user should bear the transport cost during the warranty.

If product is out of warranty then a repair charge is required. Minimum repair charge: 10% of the retail price plus the cost of failed components. We will repair the failed product after repair cost has been approved by customer and proper financial arrangement is made. The Customer must cover shipping expenses.

Return & RMA Policies

Shipments will not be accepted and processed for warranty repair/replacement without an NetworkTV RMA (Return Materials Authorization).