



User Manual

4K HDMI Extender w/IR & RS232
Model PT-HDBT-100

Designed in Germany

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V1.0

Preface

Read this user manual carefully before using this product. Pictures shown in this manual are for reference only. Different model layouts and specifications are subject to the physical product.

This manual is for operation instructions only, not for any maintenance usage.

In the constant effort to improve our product, we reserve the right to make changes in functions or parameters without prior notice or obligation.

Trademarks

Product model and logo are trademarks. Any other trademarks mentioned in this manual are acknowledged as the properties of the trademark owner. No part of this publication may be copied or reproduced without the prior written consent.

FCC Statement

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. It has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation.

Operation of this equipment in a residential area is likely to cause interference, in which case the user at their own expense will be required to take whatever measures may be necessary to correct the interference.

Any changes or modifications not expressly approved by the manufacture would void the user's authority to operate the equipment.



REACH | 1907/2006/EU

ROHS | 2011/65/EU

PureLink hereby declares that this product **PureTools PT-HDBT-100** complies with Directives 1907/2006/EU und 2011/65/EU.

EMC / LVD (Electro Magnetic Compatibility / Low Voltage Directive)

PureLink GmbH hereby declares that this product **PureTools PT-HDBT-100** complies with Directives 2014/30/EU and 2014/35/EU. The full text of the EU Declaration of Conformity is available at the following Internet address:

http://www.purelink.de/ce/4251364730966_CE.pdf



SAFETY PRECAUTIONS

To ensure the best from the product, please read all instructions carefully before using the device. Save this manual for further reference.

- Unpack the equipment carefully and save the original box and packing material for possible future shipment.
 - Follow basic safety precautions to reduce the risk of fire, electrical shock and injury to persons.
 - Do not dismantle the housing or modify the module. It may result in electrical shock or burn.
 - Using supplies or parts not meeting the products' specifications may cause damage, deterioration or malfunction.
 - Refer all servicing to qualified service personnel.
 - To prevent fire or shock hazard, do not expose the unit to rain, moisture or install this product near water.
 - Do not put any heavy items on the extension cable in case of protrusion.
 - Do not remove the housing of the device as opening or removing the housing may expose you to dangerous voltage or other hazards.
 - Install the device in a place with sufficient ventilation to avoid damage caused by overheat.
 - Keep the module away from liquids.
 - Spillage into the housing may result in fire, electrical shock, or equipment damage. If an object or liquid falls or spills on to the housing, unplug the module immediately.
 - Do not twist or pull by force ends of the optical cable. It can cause malfunction.
 - Do not use liquid or aerosol cleaners to clean this unit. Always unplug the power to the device before cleaning.
 - Unplug the power cord when left unused for a long period of time.
 - Information on disposal for scrapped devices: do not burn or mix with general household waste, please treat them as normal electrical wastes.
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Product Introduction

This PT-HDBT-100 is an HDBaseT Extender set consisting of a transmitter (TX) and receiver (RX). It distributes HDMI signals via CAT5e/CAT6a cable at a range of up to 70m/PoC, and enables IR and RS232 pass-through to control local source device from remote or far-end display.

Features

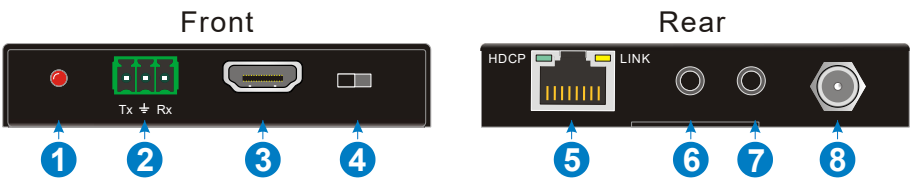
- Supports HDMI1.4 & HDCP2.2.
- Maximum transmission distance is up to 40m for 4Kx2K, and 70m for 1080p.
- Supports bi-directional 5V IR and RS232 pass-through for long-distance control.
- Supports bi-directional PoC for simplified wiring.
- Supports CEC.
- Features DIP switcher for choosing Control or Update mode.


Package List












- | | |
|--------------------------------------|--------------------------------------|
| • 1 x Transmitter (TX) | • 1 x Receiver (RX) |
| • 2 x TX Mounting Ears with 2 Screws | • 2 x RX Mounting Ears with 2 Screws |
| • 4 x TX Plastic Cushions | • 4 x RX Plastic Cushions |
| • 1 x Power Adaptor (12VDC, 1A) | • 1 x User Manual |

Note: Please contact your distributor immediately if any damage or defect in the components is found.

Panel Description



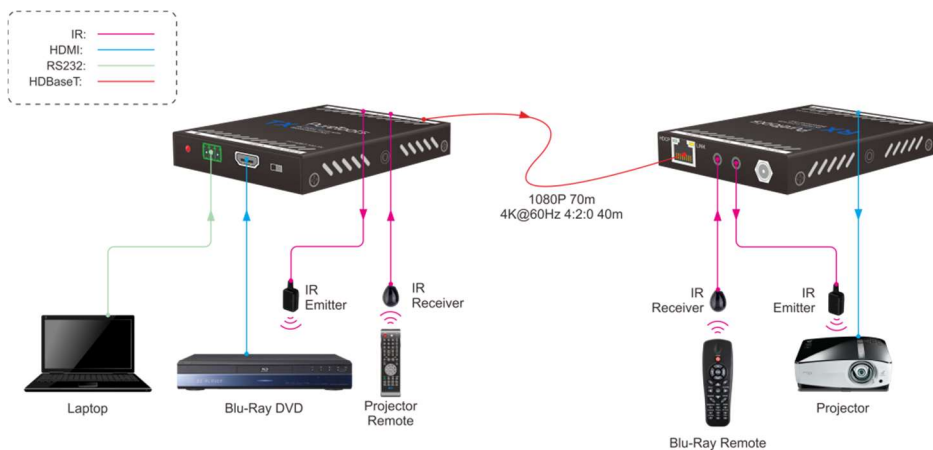
No.	Name	Description
①	Power LED	Illuminates red when power is applied.
②	RS232	Euroblock/Phoenix connector for connecting an RS232 data device.
③	HDMI IN (TX)	HDMI port for connecting the video source device (e.g. Blu-ray DVD)
	HDMI OUT (RX)	HDMI port for connecting the video display.
④	CTRL/UPDATE	<p>Switch for determining the behavior of the RS232 connection.</p> <p>When in the CTRL position, it serves as an RS232 serial extender.</p> <p>When in the UPDATE position, it allows you to update the Valens IC program by connecting to a PC and running the batch file.</p> <p>Update:</p> <ol style="list-style-type: none">Dial TX/RX switch to "Update"; connect the PC to Tx/RX RS232 ports with serial cable ; Power on TX/RX unit.Double click the file "UpdateTX_23123-3.bat/UpdateRX_23123-3.bat" in the "Valens update" folder , it will automatically run upgrade; <p>Note: Copy the entire folder to the local computer first;</p> <p> Valens update</p>

		<div>名称</div> <div><div> Correct feedback for Rx.bmp</div><div> Correct feedback for Tx.bmp</div><div> EpromCmd.exe</div><div> lhexLib.dll</div><div> msvcm80.dll</div><div> msvcp80.dll</div><div> msxcr80.dll</div><div> UpdateRX_23123-3.bat</div><div> UpdateTX_23123-3.bat</div><div> VS010RX_23123-3.hex</div><div> VS010TX_23123-3.hex</div></div>
⑤	HDBT OUT (TX)	RJ45 jack for connecting the Cat5e/6 cable to the Receiver.
	HDBT IN (RX)	RJ45 jack for connecting the Cat5e/6 cable to the Transmitter.
⑥	IR IN	3.5mm jack for connecting an IR Receiver (not included).
⑦	IR OUT	3.5mm jack for connecting an IR Emitter (not included).
⑧	DC 12V	DC barrel connector for connecting the included AC power adaptor.

Specification

	Transmitter	Receiver
Input	HDMI IN	HDBT IN
Output	HDBT OUT	HDMI OUT
Control	IR IN, IR OUT, RS232	IR IN, IR OUT, RS232
General		
Maximum Video Resolution	4K×2K@60Hz 4:2:0, including 1080p@60Hz	
Transmission Mode	HDBaseT	
Transmission Distance	1080p signal to 70m, 4K signal to 40m	
Bandwidth	10.2Gbps	
Video Standard	HDMI1.4 with HDCP2.2	
Power Consumption	10 watts	
Operating Temperature	0 ~ +40℃	
Storage Temperature	-10 ~ +55℃	
Operating Humidity	0% ~ 90%	
Power Supply	Input Power: 12VDC 1A or Power over Cable (PoC); AC Adaptor Input Power: 100~240VAC, 50/60Hz	
Dimension (W*H*D)	106mm x 16mm x 84mm	
Net Weight (g)	250g	

System Diagram



Note: This picture is for reference only, the specific scheme is subject to real devices.

After-Sales Service

If problems appear when using the product, please deal with the problems referring to this user manual. During the warranty period, any transport costs are borne by the customer.

- 1) **Product Limited Warranty:** The product will be free from defects in materials and workmanship for **two years** (The purchase invoice shall prevail).
Proof of purchase in the form of a bill of sale or receipted invoice which is evidence that the unit is within the Warranty period must be presented to obtain warranty service.
- 2) **What the warranty does not cover (servicing available for a fee):**
 - Warranty expiration.
 - Factory applied serial number has been altered or removed from the product.
 - Damage, deterioration or malfunction caused by:
 - Normal wear and tear.
 - Use of supplies or parts not meeting our specifications.
 - No certificate or invoice as the proof of warranty.
 - The product model shown on the warranty card does not match with the model of the product for repairing or had been altered.
 - Damage caused by force majeure.
 - Servicing not authorized by distributor.
 - Any other causes which does not relate to a product defect.
 - Delivery, installation or labor charges for installation or setup of the product.
- 3) **Technical Support:** For any questions or problems, contact your distributor or reseller and tell them the respective product name and version, the detailed failure situation as well as the formation of the cases.

Asking for Assistance

Technical Support:

Phone: +49 5971 800299 - 0

Fax: +49 5971 800299 - 99

Technical Support Hours:

8:30 AM to 5:00 PM Monday thru Thursday

8:30 AM to 4:00 PM Friday

Write to:

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