PureTools

User Manual

HDBaseT 3.0 4K (60Hz 4:4:4) USB-C Video, Data and PD

Model PT-HDBT-1020CPD-TX
Designed in Germany

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 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.

FC

REACH | 1907/2006/EU

ROHS | 2011/65/EU

PureLink hereby declares that this product **PureTools PT-HDBT-1020CPD-TX** 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-1020CPD-TX** 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/ 4251364735787 _CE.pdf

PureTools

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 extrusion.
- Do not remove the housing of the device as opening or removing housing may expose you to dangerous voltage or other hazards.
- Install the device in a place with fine ventilation to avoid damage caused by overheating.
- 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 scrap devices: do not burn or mix with general household waste, please treat them as normal electrical wastes.

PureTools

1.Product Introduction

1.1 Introduction

The PT-HDBT-1020CPD-TX is a USB-C KVM Extender transmitter. The transmitter features one USB-C input and one HDBaseT3.0 output. For the USB-C input, it provides ideal interface for connecting to any modern laptop or USB-C video and data source. It also provides up to100W Power Delivery to the source device via the unique USB-C PD injector port.
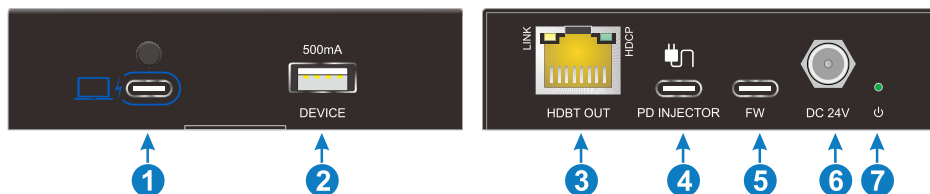
1.2 Feature

- 18Gbps high bandwidth, HDMI V2.0, HDCP2.2.
- Supports up to 4K/60 4:4:4 video transmission and USB2.0 data transmission for peripherals.
- HDBaseT 3.0 transmission technology, uncompressed 18G signal.
- Transmits 4K/1080p signal up to 328ft(100m).
- Two-way PoC, 24V PoC output and 24V PoC input.

1.3 Package List

- 1 x Transmitter
- 2 x mounting ears &2x screws
- 4 x Rubber feet

- 1 x Power Adapter (24V, 1.5A)
- 1 x Manual

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

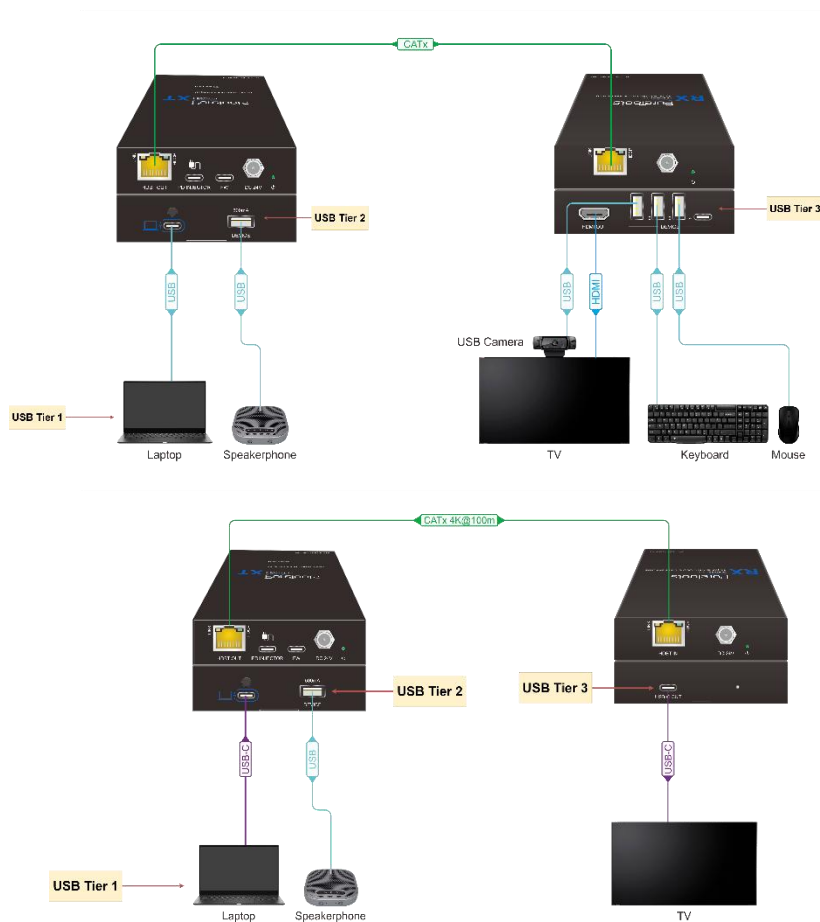## 2. Panel Description

No.	Name	Description
①	USB-C IN	Input source, connects to any modern laptop or USB-C video and data source.
②	DEVICE	USB 2.0 Ports for connecting device.
③	HDBT OUT	1 x RJ45 connector. Connects to the receiver over CATx cables. The LED illuminates green when HDMI video transmit with HDCP. The LINK LED illuminates yellow when there is a valid HDBaseT link between the transmitter and the receiver.
④	PD Injector	Connects to power adapter to charge the USB-C IN, supports up to 100W adaptor.
⑤	FW	1 x USB-C port for firmware upgrade
⑥	DC 24V	Connect to the 24V 1.5A power adapter to power up the whole system
⑦	LED	The LED illuminates green when the power is connected

3. Specification

Transmitter	
Video	
Input	(1) USB-C IN (1) DEVICE
Input Connector	(1) USB Type-C, (1) USB-A
Input Resolution	Up to 4K@60Hz 4:4:4
Output	(1) HDBaseT OUT
Output Connector	(1) RJ45
Output Resolution	Up to 4K@60Hz 4:4:4
General	
HDCP Version	Input: HDCP 2.2, HDCP 1.4 compliant
PoC	Supported bi-directional 24V PoC
USB Data	USB data Max 272Mbps
Transmission Distance	4K/1080p ≤ 328 feet (100 meters)
Operation	-5 to +55℃(+23° to +131°F)
Storage Temperature	-25 to +70℃(-13° to +158°F)
Relative Humidity	10% to 90%, Non-condensing
Power Supply	24V DC 1.5A
Power Consumption	12W(Max)
Dimension (W*H*D)	90 x 24 x 140 mm
Net Weight	300g

4. System Diagram

The following diagram illustrates typical input and output connections that can be utilized with the KVM extender.

5. Supported Resolution

The resolution of input is supports up to 4K@60Hz 4:4:4, the tested resolutions are as follow:

4096x2160@60Hz RGB 8bit
3840x2160@60Hz RGB 8bit
3840x2160@60Hz 4:4:4 8bit
3840x2160@60Hz RGB 10bit
3840x2160@60Hz 4:2:0 10bit
3840x2160@60Hz 4:2:0 8bit
3840x2160@59Hz 4:2:0 8bit
3840x2160@30Hz RGB 8bit
3840x2160@30Hz 4:4:4 8bit
3840x2160@30Hz RGB 8bit
3840x2160@30Hz 4:2:0 8bit
1080p@60Hz RGB 8bit
1080p@60Hz 4:4:4 10bit

6. After-Sales Service

If there appear some problems when running the product, please check and deal with the problems referring to this user manual. Any transport costs are borne by the users during the warranty.

1) **Product Limited Warranty:** This product will be free from defects in materials and workmanship for **three 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 showed 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.

PureTools

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:
PureLink GmbH
Von-Liebig-Straße 10
D - 48432 Rheine
www.purelink.de
info@purelink.de