PIXELHUE

EP4T Pro
Fiber Extender

Specifications

Change History

File Version	Release Date	Description
V1.0.0	2025-12-12	First release

Introduction

The EP4T Pro fiber extender employs advanced fiber optic technology to achieve lossless, long-distance transmission of audio and video signals via optical fiber. Unlike traditional cables, it effectively addresses limitations in length and signal degradation.

Featuring lossless compression technology, the EP4T Pro ensures optimal video signal quality, providing users with a clear and detailed visual experience. Its compact design and straightforward installation offer plug-and-play convenience, eliminating the need for complex setup. This allows users to effortlessly extend audio and video signals to their desired location.

The EP4T Pro is versatile and can be employed in various settings, including home theaters, conference systems, and monitoring centers. Suitable for both commercial and personal use, it delivers stable and reliable video transmission, making it an ideal choice for high-definition video transmission over long distances.

Certifications

TBD

If the product does not have the relevant certifications required by the countries or regions where it is to be sold, please contact PIXELHUE to confirm or address the problem. Otherwise, the customer shall be responsible for the legal risks caused or PIXELHUE has the right to claim compensation.

Features

- Ultra-HD lossless transmission

  Supports 8-bit/10-bit/12-bit transmission, utilizing advanced encoding technology to optimize video signals, ensuring clear and smooth image quality during transmission.
    - 8-bit 4:4:4, max 4096×2160@60Hz
    - 10-bit 4:4:4, max 4096×2160@30Hz
    - 12-bit 4:2:2, max 4096×2160@60Hz
- Long-distance transmission

  Transmit video signals over long distances via optical fiber without concerns about signal degradation.
- Neutrik etherCON for firmware update
- Integrated etherCON and opticalCON, plus powerCON connectors for professional-grade connectivity
- Input source copy function
- Embedded audio input support
- EDID and 3D passthrough
- HDR support
- Zero latency video transmission
- KVM

  Support remote control of multi-platform PC hosts via KVM roaming.
- Ethernet signal passthrough via DIP switch
- Clear signal indicators for easy device status monitoring
- Simple operation, plug and play
- HDCP-encrypted video transmission
- 24/7 operation

Appearance

Note:

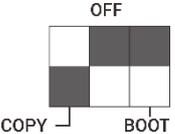The pictures shown are for illustration purpose only. Actual product may vary due to product enhancement.

Front Panel

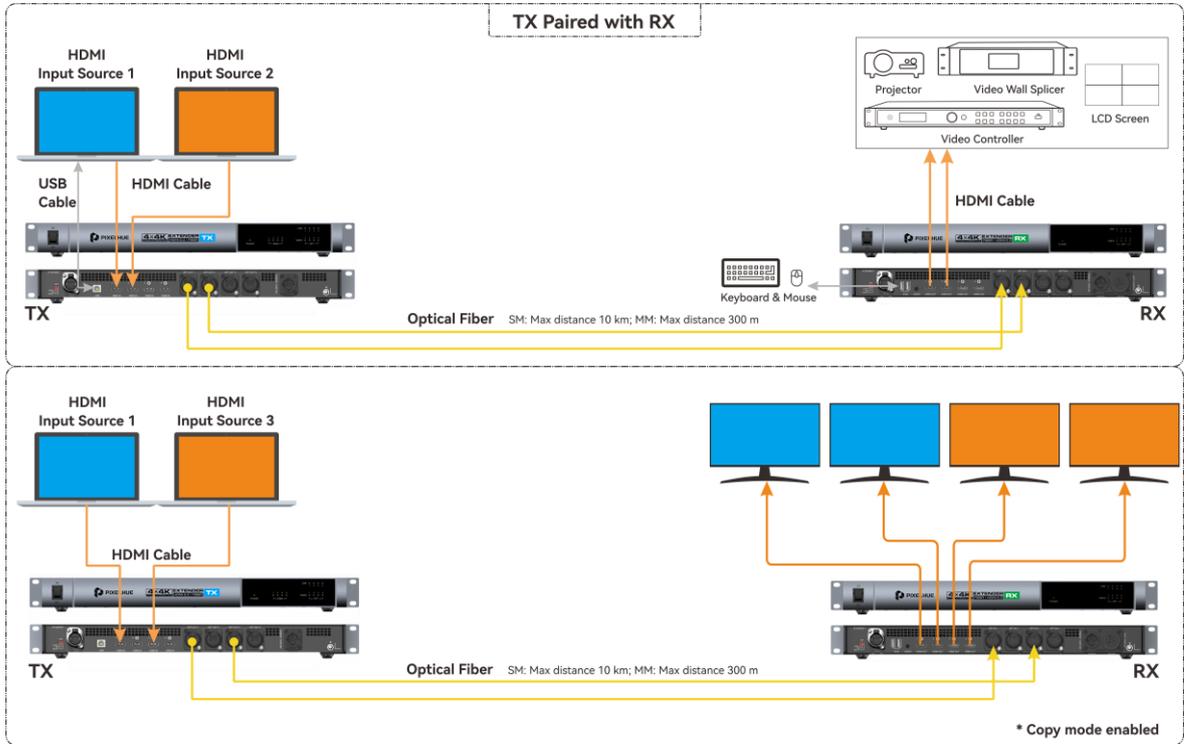| Area		Description
Rocker switch		Power on or power off the device.
Indicators	POWER	1x LED indicator (red), showing power status ● On: The device is powered on. ● Off: The device is powered off.
	HDMI	4x LED indicators, showing input connection status ● Green: The input connector has signal accessed. ● Blue: The input connector has signal accessed and is transmitting HDCP-encrypted video. ● Off: No signal is accessed.
	LINK	4x LED indicators, showing real-time link status ● Green: A normal OPT link connection is established. ● Off: OPT link failure or no connection ● Four indicators flash slowly (1 Hz/s, green): Enter the BOOT mode. ● Four indicators flash quickly (2 Hz/s, green): Update is in progress.
	VIDEO	4x LED indicators, mirroring the status of the corresponding OPT ports of RX end ● Green: Non-HDCP signal is successfully recognized. ● Blue: HDCP signal is successfully recognized. ● Off: Signal is not recognized or absent.

Rear Panel

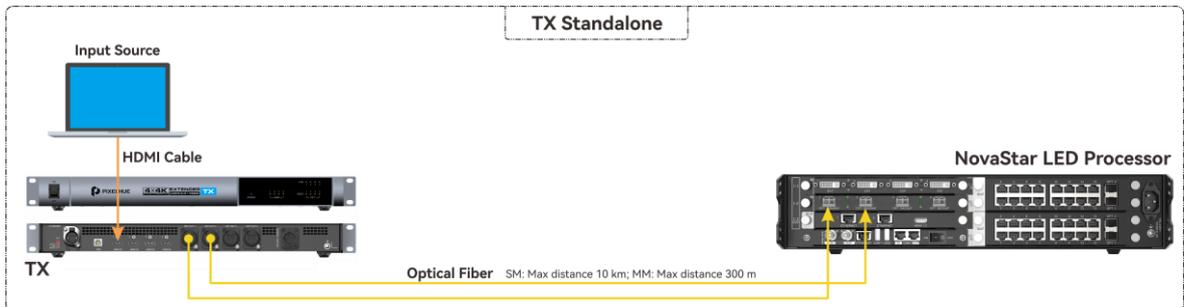| Connector	Description

DIP switch
 	
OFF
 	
COPY ⌐ BOOT
	• DIP switch 1: Enable or disable the input source copying function.
	  – OPT 1 and OPT 2 output the identical content from HDMI 1 or HDMI 2.
	  – OPT 3 and OPT 4 output the identical content from HDMI 3 or HDMI 4.
	• DIP switch 2: Reserved
	• DIP switch 3: Enable or disable the BOOT mode for firmware update.
	• Set DIP switches 1 and 2 to down position to enable forced lossless transmission.
	  – OPT 1 and OPT 2 together (left and right) output the HDMI 1 input image. HDMI 2 input is not supported.
	  – OPT 3 and OPT 4 together (left and right) output the HDMI 3 input image. HDMI 4 input is not supported.
	  – When using forced lossless transmission, it works with the RX end.
	• Set DIP switches 1, 2 and 3 to down position to enable the Ethernet passthrough feature.
	Note
	After enabling or disabling BOOT mode, the device must be restarted.

ETHERNET	1x Neutrik etherCON • Connect a control computer for firmware update. • Connect a control computer for updating the paired RX end. • The paired use of TX and RX allows for Ethernet signal passthrough.
USB	1x USB 2.0 (type-B) Connect a control computer for KVM control or firmware update.
HDMI IN — HDMI	4x HDMI 2.0, downward compatible with HDMI 1.4 and HDMI 1.3 • Max input resolution per connector: 4096×2160@60Hz • Single connector width range: 800 to 8192 pixels • Single connector height range: 600 to 8188 pixels • Max bit depth: 12-bit, compatible with 10-bit and 8-bit • Color space/sampling rate: RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2 • Support YCbCr 4:2:0 when the input resolution exceeds 4096×2160@30Hz. • Support embedded audio input, with a sampling rate of 48 kHz. • EDID and 3D passthrough • HDR support • Support progressive and interlaced video signal transmission. • HDCP 2.2 compliant, compatible with HDCP 1.4 • Copy/backup support HDMI 1 and 2 form a backup pair, as do HDMI 3 and 4.

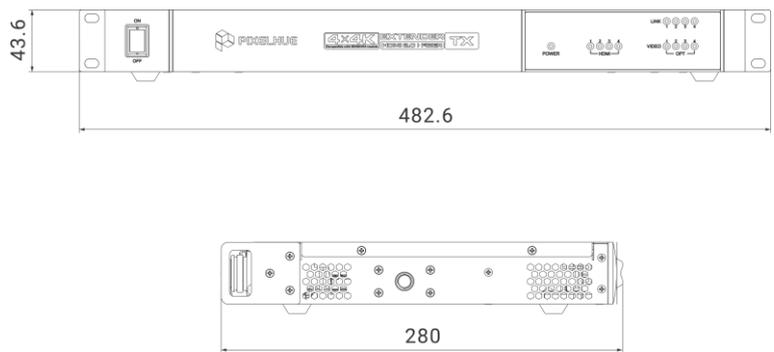| Connector		Description

OPT OUT	OPT	4x Optical ports
		• Paired:
		   – Max resolution per port: 4096×2160@60Hz
		   – Single device supports 4x 4096×2160@60Hz
		• Standalone:
		   – Max resolution of two ports: 4096×2160@30Hz
		   – Single device supports 2x 4096×2160@60Hz or 4x 4096×2160@30Hz
		• Single connector width range: 800 to 8192 pixels
		• Single connector height range: 600 to 8188 pixels
		• Max bit depth: 12-bit, compatible with 10-bit and 8-bit
		• Color space/sampling rate: RGB 4:4:4, YCbCr 4:4:4, YCbCr 4:2:2, YCbCr 4:2:0
		• Support embedded audio output, with a sampling rate of 48 kHz.
		• EDID and 3D passthrough
		• HDR support
		• Support progressive and interlaced video signal transmission.
		• HDCP 2.2 compliant, downward compatible with HDCP 1.4
		• Support single-mode transmission.
		Recommended optical module: EOLP-1396-10-I, with a maximum distance of 10 km
		• Support multimode transmission.
		Recommended optical module: EOLP-8596-02-I, with a maximum distance of 300 m
		• Dual-core LC fiber optic cables must be used to ensure stable signal transmission and system reliability.
		Note
		• The OPT ports are equipped with built-in 10G optical modules.
		• The 25G optical modules are not supported.
		• The product includes 4x EOLP-1396-10-I modules.

Power	-	PowerCON connector 100−240V~, 50/60Hz

Applications
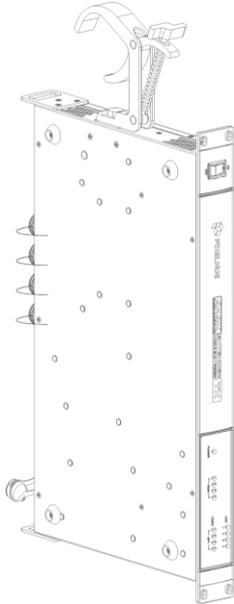
Paired Use

Standalone Use

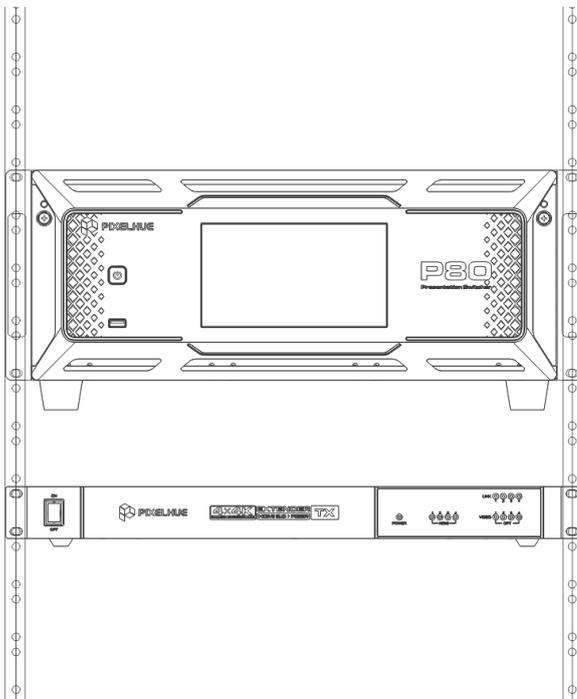# Dimensions

Tolerance: ±0.3   Unit: mm

Installation

C-Clamp

Mount the device with a c-clamp.

Rackmount

Mount the device into a cabinet.

Note
For the specific installation dimensions, please contact PIXELHUE technical support.

Specifications

Electrical Specifications	Power	100−240V~, 50/60Hz
	Max power consumption	28 W
Operating Environment	Temperature	−10°C to +55°C
	Humidity	5% RH to 85% RH, non-condensing
Storage Environment	Temperature	−10°C to +60°C
	Humidity	5% RH to 95% RH, non-condensing
Physical Specifications	Dimensions	482.6 mm × 43.6 mm × 280 mm
Noise Level (Typical at 25°C/77°F)		31 dB (A)
Packing Information	Accessories	1x Power cable 1x Ethernet cable 1x HDMI cable 1x Certificate of Approval 1x Safety Manual
	Net weight	3.6 kg
	Gross weight	6.2 kg
	Packing size	565 mm × 450 mm × 175 mm

Input Specifications

Input Connector	Bit Depth		Max Resolution
HDMI	8-bit	RGB 4:4:4	8192×1080@60Hz 4096×2160@60Hz
		YCbCr 4:4:4	
		YCbCr 4:2:2	
		YCbCr 4:2:0	4096×2160@60Hz
	10-bit	RGB 4:4:4	4096×2160@30Hz
		YCbCr 4:4:4	
		YCbCr 4:2:2	4096×2160@60Hz
		YCbCr 4:2:0	
	12-bit	YCbCr4:2:2	4096×2160@60Hz
		YCbCr4:2:0	

Notes and Cautions

This is Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

Official website
www.pixelhue.com

Technical support
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