WST-PEX016

100M 4K30Hz HDMI over Cat.6 Extender



4K30 | 100M | Bidirectional PoC

Safety Instructions



1. Keep Dry | 防水防潮

Do not expose this apparatus to rain, moisture, dripping or splashing. Do not place objects filled with liquids, such as vases, on the apparatus.

請勿將本設備暴露於雨水、濕氣、滴水或濺水之下，亦不得在設備上放置盛有液體的物品，例如花瓶。



2. Ventilation | 保持通風

Do not install or place this unit in a bookcase, built-in cabinet or other confined space. Ensure the unit is well ventilated.

請勿將本設備安裝或放置於書櫃、內置櫃或其他密閉空間。請確保設備通風良好。



3. Ventilation Openings | 勿遮擋散熱孔

To prevent electric shock or fire due to overheating, do not obstruct ventilation openings with newspapers, tablecloths, curtains or similar items.

為避免過熱造成觸電或火災，請勿以報紙、桌布、窗簾或類似物品遮擋設備的通風孔。



4. Heat Sources | 遠離熱源

Do not install near heat sources such as radiators, heat registers, stoves or other apparatus, including amplifiers, that produce heat.

請勿安裝於暖氣設備、暖氣出風口、火爐或其他會產生熱量的設備（包括擴大機）附近。



5. Open Flames | 遠離明火

Do not place sources of naked flames, such as lighted candles, on the unit.

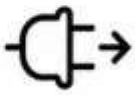
請勿在設備上放置明火，例如點燃的蠟燭。



6. Cleaning | 清潔方式

Clean this apparatus only with a dry cloth.

僅可使用乾布清潔本設備。



7. Disconnect Power | 拔除電源

Unplug this apparatus during lightning storms or when unused for long periods of time.

雷雨期間或長時間不使用時，請拔除本設備的電源插頭。



8. Power Cord | 保護電源線

Protect the power cord from being walked on or pinched, particularly at plugs.

請避免電源線遭到踩踏或夾壓，尤其是插頭處。



9. Accessories | 指定配件

Only use attachments and accessories specified by the manufacturer.

僅可使用製造商指定的附件及配件。



10. Servicing | 專業維修

Refer all servicing to qualified service personnel.

所有維修作業均應交由合格的專業人員進行。

Introduction

WST-PEX016 is an HDMI 4K@30Hz extender designed to deliver reliable long-distance AV transmission up to 100 meters. It is ideal for meeting rooms, presentation spaces, and professional AV applications, providing a stable and efficient solution for extending high-quality HDMI signals over long distances.

Using a single CAT6 / 6A cable, the WST-PEX016 can extend 4K@30Hz HDMI signals up to 100 meters, effectively overcoming the distance limitations of conventional HDMI cabling. It also supports bi-directional PoC, bi-directional IR control, and EDID pass-through, helping reduce additional power supplies and cabling requirements while simplifying system installation and infrastructure deployment. The result is a clean, reliable, and easy-to-integrate professional AV environment

Key Features

- Supports resolutions up to 4096x2160@30Hz 4：4：4 8-bit
- Compatible with HDCP1.4
- Transmission distance up to 100 meters via Cat.6 cable
- Supports bi-directional PoC, allowing power to be supplied from either the transmitter or receiver side
- Supports pass-through IR signal extension
- Supports EDID pass-through
- Transmitter features a local display loop-out for convenient on-site monitoring

Package Contents

Transmitter x 1 | Receiver x 1 | 12V/1A Multi-Country Power Adapter x 1 | IR Emitter cable x 1 | IR Receiver cable x 1

Panel Overview

TRANSMITTER



NAME	DESCRIPTION
HDMI INPUT	Connects to an HDMI source device.
HDMI OUTPUT	HDMI loop-out port.
POWER LED	The green LED illuminates constantly when the unit is powered on.
12V DC JACK	Connects to the included power adapter. Supports bi-directional PoC (Power over Cable), allowing power to be supplied from either the transmitter or receiver side to power the other unit via twisted pair cable.
RJ-45 EXTENSION PORT	Connects to the transmitter's CAT6 port using a Cat.6 or higher cable. LED Indicators: ● Green LED illuminates constantly when an HDMI input signal is detected. ● Yellow LED flashes when a proper link is established between the transmitter and receiver.
IR IN	IR in port; connects to the IR receiver cable.
IR OUT	IR out port; connects to the IR emitter cable.

RECEIVER



NAME	DESCRIPTION
HDM OUTPUT	Connects to an HDMI display device.
POWER LED	The green LED illuminates constantly when the unit is powered on.
12V DC JACK	Connects to the included power adapter. Supports bi-directional PoC (Power over Cable), allowing power to be supplied from either the transmitter or receiver side to power the other unit via twisted pair cable.
RJ-45 EXTENSION PORT	Connects to the Receiver's CAT6 port using a Cat.6 or higher cable. LED Indicators: ● Green LED illuminates constantly when an HDMI input signal is detected. ● Yellow LED flashes when a proper link is established between the transmitter and receiver.
IR IN	IR input port; connects to the IR receiver cable.
IR OUT	IR output port; connects to the IR emitter cable.

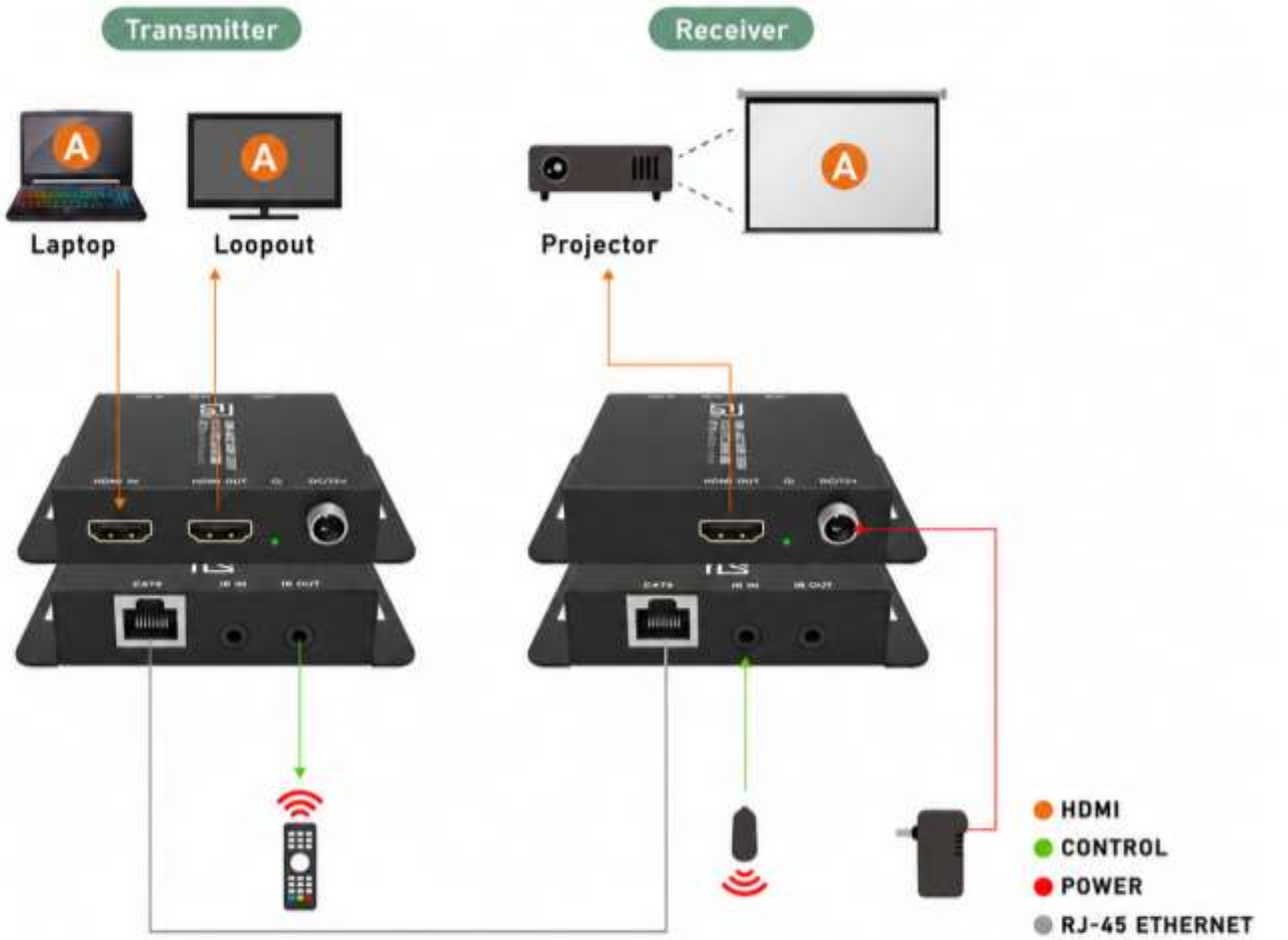
Installation

⚠ Before starting the installation, please ensure that all devices are powered off.

1. Connect the source device to the transmitter using an HDMI cable.
2. Connect one end of a Cat.6 network cable to the transmitter's RJ-45 OUT port and the other end to the receiver's RJ-45 IN port.

   Note: Using U/UTP or F/UTP solid installation cable is recommended.
3. Connect the display device to the receiver's HDMI output port using another HDMI cable.
4. Connect the DC power adapter to either the transmitter or the receiver, then turn on the power.
5. Power on both the source device and the display device to complete the installation.

Connection Diagram



Specifications

Interface	Transmitter	Receiver
Video Input	HDMI Type-A（Female）x 1	Extension Port（RJ-45）x 1
Video Output	Extension Port（RJ-45）x 1 Loop out：HDMI Type-A（Female）x 1	HDMI Type-A（Female）x 1
Control I/O	IR IN（3.5mm Jack）x 1 IR OUT（3.5mm Jack）x 1	IR IN（3.5mm Jack）x 1 IR OUT（3.5mm Jack）x 1
Power	12V/1A（DC Plug：5.5 / 2.1mm with Locking）	12V/1A（DC Plug：5.5 / 2.1mm with Locking）
Transmission		
HDMI Compliant	HDMI1.4b	
HDCP Compliant	1.4	
Bandwidth	10.2Gbps	
Output Resolution	4096x2160@30Hz / 3840x2160@30Hz / 1920x1200@60Hz / 1920x1080@60Hz	
IR Frequency	20 ~ 60kHz	
Power		
Power Supply	12V/1A DC（Select one side for power-on） PoC	12V/1A DC（Select one side for power-on）PoC
Max. Power Consumption	3.24W	
Environment		
Operating Temperature	0˚C ~ 40˚C	
Storage Temperature	-20˚C ~ 70˚C	
Product Structure		
Main Material	TX：Metal	RX：Metal
Size W x D x H	TX：74 x 68 x 20mm	RX：74 x 68 x 20mm
Weight	TX：162g	RX：159g
Barcode EAN	4710582481581	
Country of Origin	China	
Certification		
Safety & Emission	CE / FCC / RoHS / REACH	