

HDMI KVM EXTENDER OVER CAT6

HDMI KVM Extender over CAT6 (60m) 4K30Hz



Where every Moment comes Alive

ER2863KVM

HDMI[®]
HIGH-DEFINITION MULTIMEDIA INTERFACE

Introduction:

EIRA ER2863KVM HDMI Extender — Utilizes a single CAT6 cable in place of a traditional HDMI cable to transmit high-definition signals up to 60 meters, significantly reducing installation costs. Engineered for reliable long-distance transmission, it ensures superior image and audio quality, making it ideal for professional AV setups and extended connectivity requirements.

Features:

- **HDCP 1.4** compliant for secure content transmission.
- **Local HDMI loop-out** for simultaneous local monitoring.
- **Long-distance transmission up to 60m** over a single CAT6 cable.
- Low power consumption design with minimal heat generation for enhanced safety.
- **3.5mm stereo audio output** available on both transmitter (TX) and receiver (RX).
- IR remote control support for convenient operation from a distance.
- **USB extension for mouse and keyboard**, ideal for KVM applications.
- **EDID key switch and power-off memory function** for reliable and consistent performance.

Uses:

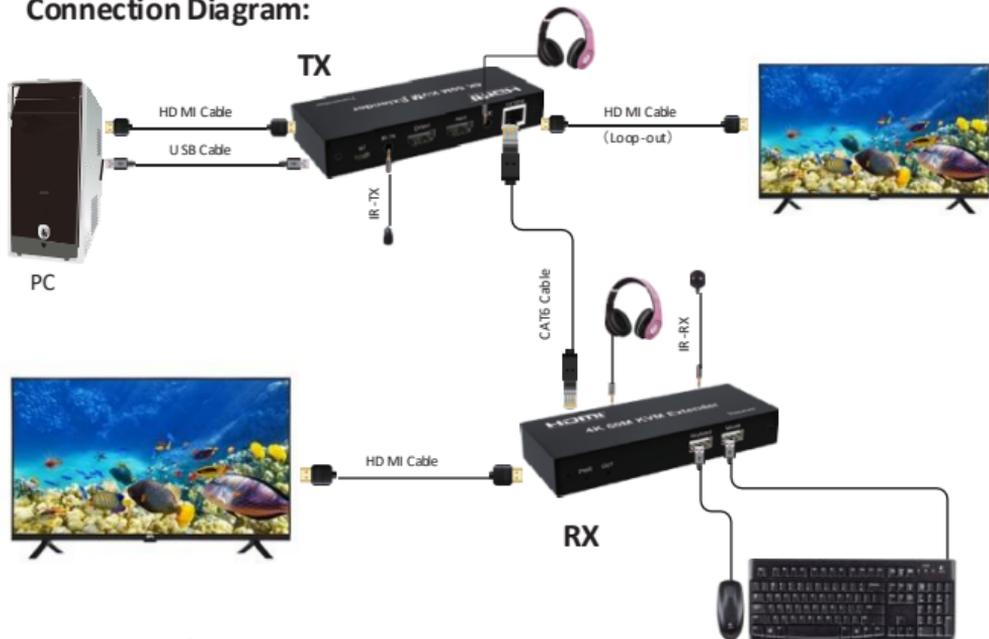
- **Conference rooms** – Extend HDMI signals from laptops or media players to distant displays while controlling remotely.
- **Control rooms** – Operate computers from a different location using USB KVM functionality.
- **Retail & digital signage** – Distribute content from a central media source to remote screens up to 60m away.
- **Education & training centers** – Share high-definition video and audio to distant projectors or monitors.
- **Home entertainment setups** – Connect and control media devices across rooms without HDMI cable clutter.

Specification	Details
CAT6 Cable Length (Between RX & TX)	60 meters
HDMI Input Resolutions	4K / 1080p / 720p / 576p / 576i / 480p / 480i
HDMI Output Resolutions	4K / 1080p / 720p / 576p / 576i / 480p / 480i
Max Bandwidth	340 MHz
Max Baud Rate	3 × 3.4 Gbps
Input Video Signal	0.5 ~ 1.5 Volts p-p
Output DDC Signal	5 Volts p-p (TTL)
Input HDMI Cable Distance	≤ 10 m (AWG26 HDMI standard cable)
Output HDMI Cable Distance	≤ 10 m (AWG26 HDMI standard cable)
TX Max Working Current	350 mA
RX Max Working Current	200 mA
Power Adapter	Input: AC (50Hz/60Hz) 100V~240V Output: DC 5V / 1A
Operating Temperature Range	-15°C to +55°C
Operating Humidity Range	5% to 90% RH (No Condensation)
Dimensions (L × W × H)	122 × 50 × 19 mm
TX Weight	108 g
RX Weight	108 g

Connection and Operation:

- **HDMI Source to Transmitter (TX):** Connect an HDMI cable from the source device to the TX Extender. Maximum HDMI cable length: **10 meters**.
- **Receiver (RX) to Display:** Connect an HDMI cable from the RX Extender to the display device. Maximum HDMI cable length: **10 meters**.
- **TX to RX via CAT6:** Use a single CAT6 cable instead of an HDMI cable to connect the TX and RX Extenders. Maximum CAT6 cable length: **60 meters**.
- **Power Connection:** Connect the supplied **5V power adapters** to both the TX and RX units.
- **USB KVM Control (Optional):** Plug the mouse and keyboard into the **USB ports** on the RX unit. Connect the **USB port** on the TX unit to the computer.
- **IR Control (Optional):** Connect the IR RX cable to the **3.5mm IR RX port** on the receiver, and the IR TX cable to the **3.5mm IR TX port** on the transmitter, if remote IR control is required.
- **EDID Switch:** Press the EDID button to toggle between **4K** and **1080P** output modes as per display requirements.

Connection Diagram:



Product Interface:

TX:



- 1 : 5V --- 5V DC Power input part ;
- 2 : IR-TX --- IR-TX port ;
- 3 : Output --- HDMI Loop-out port ;
- 4 : Input --- HDMI Input port ;
- 5 : L/R --- Stereo output ;

- 6 : CAT6E/6 --- Cat6e / 6 cable connection port ;
- 7 : PWR --- Power indicator light ;
- 8 : IN --- HDMI IN indicator light ;
- 9 : OUT --- HDMI OUT indicator light ;
- 10 : USB-PC --- Connect with the usb of device (PC) ;
- 11 : EDID --- 4K and 1080P switch button ;

RX:



1 : 5V ---- 5V DC Power input port ;

2 : IR-RX ---- IR-RX port ;

3 : Output ---- HDMI Out port ;

4 : L/R ---- Stereo output ;

5 : CAT6E/6 ---- Cat6e / 6 cable connection port ;

6 : PWR ---- Power indicator light ;

7 : OUT ---- HDMI OUT indicator light ;

8 : Mouse ---- Mouse port ;

9 : Keyboard ---- Keyboard port ;

Application Industries:

HDMI extender is used in audio-visual conference, command and control center, ticketing platform, home theater, multi-media teaching, conference system and so on.



Conference Halls



Command & Control Centers



Home Theatre

Package Contents:

1. TX Extender

1PC

2. RX Extender

1PC

3. IR cable

1 Pair

4. Power adapter 5V1A

2PCS

5. User Manual

1PC