HDMI Extender

User Manual

Model : HE01ERK

Passive HDMI CAT5e Extender

Introduction

HE01ERK is an HDMI extender that uses an Ethernet cable to extend HDMI signal with transmission distance up to 70 meters and resolution up to 1080p. The RX unit has a built-in HDMI connector that allows the receiver to directly connect to an HDMI display without any external power required.

Features

- Supports HD-TVI, AHD, HDCVI, PAL, NTSC, SECAM video formats.
- Resolution up to 1080p@60Hz.
- Signal extension up to 70M.
- No external power required.
- Built-in micro USB port as a redundant power supply.

Installation
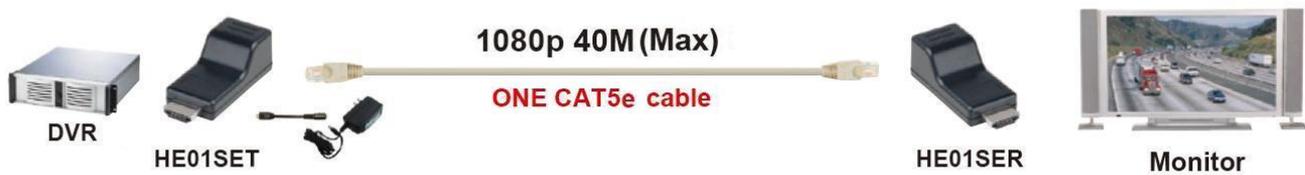
Panel Review
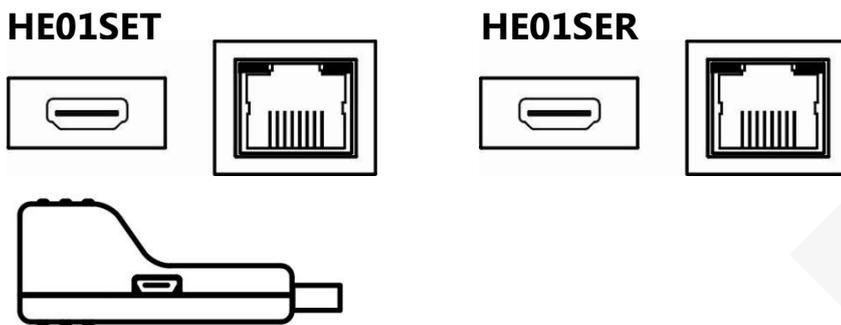
HE01SET

HE01SER

Connect 5V power adapter via HE01SET built-in micro USB when HDMI source doesn't provide enough power to the receiver.

LED Indication:

Green: Power on/off
Yellow: Reserve

Transmission Chart

The transmission distance will be affected by DVR/NVR or cable quality.

HE01SET to HE01SER	
Resolution	Distance based on CAT5e
1920x1200	40M
1920x1080	40M
1280x1024	60M
1280x 720	70M
1024 x768	70M

Supported Resolution

- 1920x1200@60Hz
- 1920x1080@60Hz
- 1680x1050@60Hz
- 1600x1200@60Hz
- 1600x900@60Hz
- 1440x900@60Hz
- 1280x1024@60Hz
- 1280x960@60Hz
- 1280x800@60Hz
- 1280x720@60Hz
- 1024x768@60Hz
- 800x600@60Hz

Cable

1. It is recommended using high quality CAT5e/6 UTP cable, especially when transmission range over 30M.
2. It is not recommended using STP or flat cable, which may cause video loss.

RJ45 Define

Video Link (use TIA/EIA-568-B)

1. Orange-white	TMDS DATA2 +
2. Orange	TMDS DATA2 -
3. Green-white	TMDS CLOCK + / HDMI 5V
4. Blue	TMDS DATA1 +
5. Blue-white	TMDS DATA1 -
6. Green	TMDS CLOCK - / GND
7. Brown-white	TMDS DATA0 +
8. Brown	TMDS DATA0 -

Caution:

1. The cabling must away from any equipment with electromagnetic wave, i.e.: microwave, ovens, mobile phones, radio equipment, high voltage, power line.
2. Working distance will be variety based on different equipment.
3. The wiring must be straight through, do not circle the cable to avoid crosstalk interference.
4. HDCP is not supported.
5. HE01ERK isn't networking product, thus please do not connect with any Ethernet device to avoid any damage.

Package Contents:

1 x HE01SET (Transmitter)
1 x HE01SER (Receiver)
1 x Micro USB to DC plug cable

Specification

ITEM NO.	HE01SET	HE01SER
Support		
Video Bandwidth	2.25 Gbps (HDMI 1.3)	
Resolution	Up to 1920x1200@60hz	
Input TMDS Video Signal	1.2 Vp-p	
Input DDC Signal	5 Vp-p (TTL)	
Transmission Distance	40M@1920x1200, 70M@1280x720	
Ports & Interfaces		
HDMI Connector	HDMI Type A	
Link Connector	RJ45 x 1	
Power		
Power Connector	Micro USB x 1	
Power Supply	5V 1Amp (Optional)	
Ambient Temperature		
Operation	-10 to 65℃	
Storage	-20 to 85℃	
Humidity	up to 85%	
Physical Characteristics		
Dimensions	57.5 × 24 × 20.2mm	
Weigh	20g	

RoHS CE FC