

## Model: FS-HD2103E-KVM

### Features

#### HDMI & KVM Extender

- FS-HD2103E-KVM-TX/RX consists of a transmitter and a receiver, it's used in pairs
- Support HDMI signal up to 1080p@60Hz
- Transmit HDMI signal through Cat5e/6 or above cable, extend distance up to 100meters
- Support infrared transmission, realize remote control function
- Support USB2.0 Mouse, realize KVM remote control function
- UTP cable transmitting power are supported. When used in pairs, only need to power for TX side, the RX side starts working automatically after connection
- Support PoE power supply, no need extra power at RX side
- Easy to operate, plug and play, no need to configure



### Overview

The FS-HD2103E-KVM is a HDMI cable extender with the new generation of the extension technology. By using FS-HD2103E-KVM, the HDMI Signal and KVM controlling Signal can be extended to 100 meters over Cat5e/6 or above. Consisting of FS-HD2103E-KVM-TX as transmitter and FS-HD2103E-KVM-RX as receiver are used in pairs. The FS-HD2103E-KVM supports hot-plug and transmits the optimizing HDMI signal to the display device after matching with the relative display device automatically. Supporting infrared remote controlling and USB2.0 Keyboard Mouse remote controlling function which can extend the distance by connecting the HDMI signal source. As the FS-HD2103E-KVM supports PoE power supply, you do not need extra power at the RX side, which simplified the progress, saved the cost of the connection and solved the wrong-connection problem that may cause any abnormal thing or waste in electricity, and surely improved the efficiency of the product. FS-HD2103E-KVM is widely used in the situations such as Home Theater, Exhibition, Multimedia classrooms, Large Internet cafes, etc. It will lead a broad market demand and prospects in the public information field which has protection requirements for HDMI video source devices.

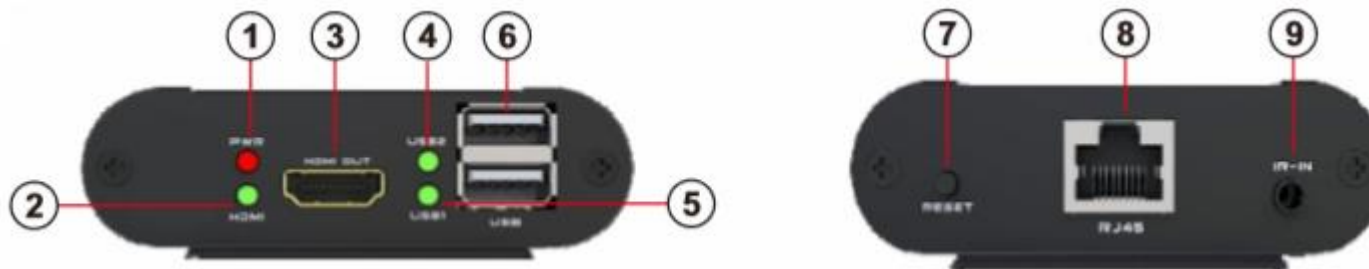
Panel View

Transmitter



- 1. Power input-DC 12V
- 2. Power on indicator
- 3. HDMI link indicator
- 4. HDMI video input
- 5. USB connection indicator
- 6. USB signal input port
- 7. TX reset button
- 8. RJ45 port, connects with Cat5e/6 cable
- 9. IR remote control signal output interface

Receiver



- 1. Power on indicator
- 2. HDMI link indicator
- 3. HDMI video output
- 4. UBS2 connection indicator
- 5. UBS1 connection indicator
- 6. USB ports, connect with keyboard and Mouse
- 7. Reset button, to reset the whole device
- 8. RJ45 port, connects with Cat5e/6 cable
- 9. IR remote control signal input interface



## Quick Setup Guide

### Package Contents

- |  |                     |
|--|---------------------|
| 1) FS-HD2103E-KVM-TX/FS-HD2103E-KVM-RX: 1 set          | 4) User manual: 1pc |
| 2) Infrared module (receiving and transmitting): 1 set | 5) USB cable: 1pc   |
| 3) 12V/1A power adaptor: 1pc                           |                     |

### Installation Steps

1. Connect the male end of HDMI cable to video source.

Connect the female end of HDMI cable to “**HDMI IN**” of FS-HD2103E-KVM-TX.

Connect UTP cable to RJ45 port of FS-HD2103E-KVM-TX.

Connect the other end of UTP cable to RJ45 port of FS-HD2103E-KVM-RX.

2. Use another HDMI cable, connect the male end to “**HDMI OUT**” of FS-HD2103E-KVM-RX,

then connect the other end to a display device which has an HDMI interface;

According to different video source devices, please insert the keyboard and mouse which are with USB interface into the USB port or insert an IR receiver module to the “**IR-IN**” port.

3. Make sure the connections mentioned above are finished properly.

Then please power up to the FS-HD2103E-KVM-TX with 12VDC.

The power indicator of the relative equipment & FS-HD2103E-KVM-RX will be red.

The HDMI link indicator for both side of the devices will be green.

If the display device works with good image, that means the whole connection is successful.



4. If the HDMI source device supports IR remote control function, connecting the matching infrared transmitting component to the FS-HD2103E-KVM-TX “IR OUT” port and the matching infrared receiving component to the FS-HD2103E-KVM-RX “IR IN” port.  
By aligning the remote control with the infrared receiving window of the receiving component, the remote control and operation of the HDMI source device can be realized, just like the direct remote control of the HDMI source device.
  
5. If the HDMI source device supports USB keyboard & mouse remote control function, connecting a USB A forehead cable to the FS-HD2103E-KVM-TX “USB” port and the USB LINK green indicator lights up, at the same time, connecting a universal USB keyboard or USB mouse to the FS-HD2103E-KVM-RX “USB 1 or USB 2” port and the corresponding USB LINK green indicator lights up accordingly. When the connection is successful, the terminal displays the picture and sound of the device normally, you can use the keyboard or the mouse to remotely control and operate the HDMI source device, just like the direct remote control of the HDMI source device.

**Note:**

If the HDMI source device with mouse and keyboard, using the equipped USB cable to connect the USB port of FS-HD2103E-KVM-TX and HDMI source device, then inserting the keyboard or mouse which is compatible with USB protocol to the USB port of FS-HD2103E-KVM-RX.



## Technical Specifications

Description	Parameter
Model Number	FS-HD2103E-KVM
HDMI Version	1080p@60Hz
HDMI Port	Transmission distance max up to 100m via Cat5e/6 or above
USB Port	USB2.0 keyboard, mouse, compatible with USB1.1
IR Interface	Support 38k carrier infrared remote control
PoE Function	Support PoE power supply, no need extra power at RX side Maximum transmission distance is 100m
Power Indicator	Red, ON: powered on; OFF: no power
Red Indicator	DC+12V power indicator
HDMI Indicator	Green, ON: HDMI port linked; OFF: no link
USB Indicator	Green, ON: USB port linked; OFF: no link
Working Temperature	0°C ~ 70°C
Power Supply	DC12V/1A
Power Consumption	TX≤5W; RX≤5W
ESD protection	Contact discharge: ±2KV    Air discharge: ±4KV    Standard: IEC61000-4-2
Humidity	0 ~ 95°C
Housing Material	Aluminum
Body Color	Black
Dimension	TX: 102mm x 81.4mm x 24.5mm    RX: 102mm x 81.4mm x 24.5mm

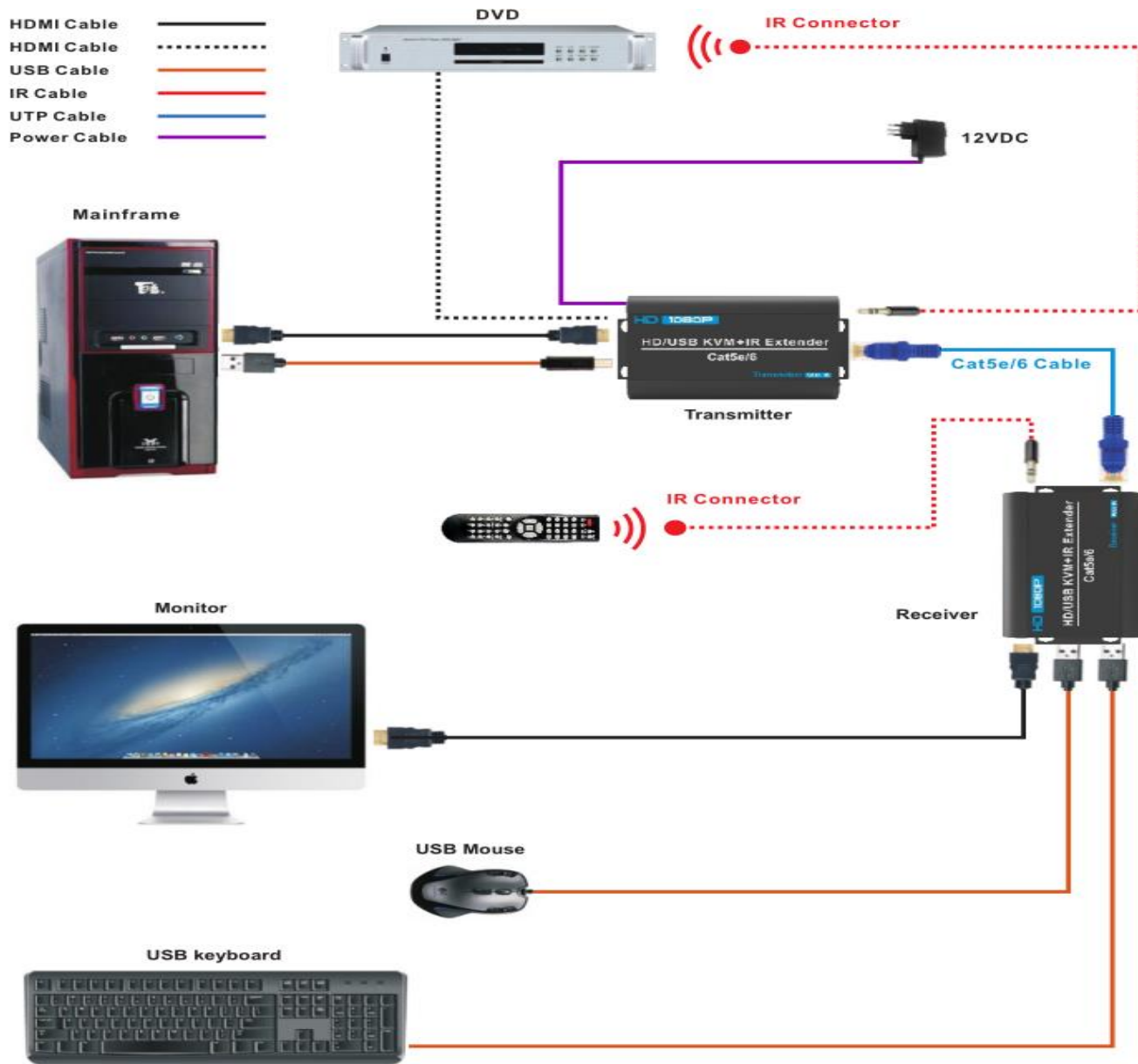


## Applications

- Home Theater system
- Venue display system
- Media classroom system
- LCD and plasma flat panel multimedia advertising project
- Big screen LED curtain wall display project
- The large projection equipment display system
- The industrial automation and control system
- Audio/Video meeting system
- Security monitoring system
- Multimedia network education system
- Long-distance network server monitoring
- Central control system
- Military exercises command system



### Application Diagram



## Warning!

### Important Product Warnings:

1. Please fix in the final position after testing is finished normally.
2. Before powering the items, please make sure the connection is correct.

### Safety Instructions:

1. Before using the items, please read and keep the instruction carefully.
2. Before powering the items, please make sure the connection is correct in advance.
3. Do not use the product near water, heat, etc.
4. Please clean with the dry cloth only.
5. It is forbidden to open the machine by the laypeople.
6. If any quality problem of product, please contact the maintenance personnel in time.

