# HDMI FHD Digital KVM Extender over Fiber/Cat5

# (KFH262S)

# **User Manual**

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#### Product Description

The KFH262S HDMI digital KVM extender delivers FHD dual HDMI video, USB2.0, keyboard, mouse and stereo audio signals up to a remote desk over fiber optic cable or Cat5 cable.

A complete set of KFH262S including Transmitter (KFH262S-TX) and Receiver (KFH262S-RX). The Transmitter is connected to a computer or server, and the receiver is connected to a display, keyboard, mouse, audio player and other USB devices.

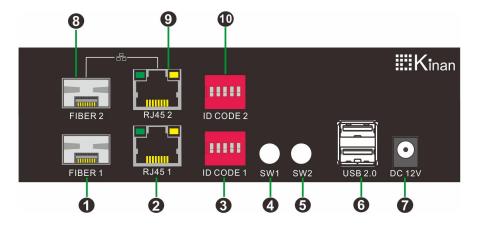
The KFH262S supports signal transmission over fiber optic cable or Cat5 cable, it supports single-mode and multi-mode optical fiber, the maximum transmission distance of single mode is 10km, for multimode the transmission distance is up to 300m. If you connect the KFH262S-TX and KFH262S-RX with a Cat5 cable, the transmitting distance is up to 150m. It supports the transmission of 2 channel high-quality HDMI signals and has a wide range of applications.

### \*Note: The bandwidth of the optical module must reach 1.25Gbit/sec.

#### **Product Features**

- FHD HDMI video transmission, resolution is up to 3840x2160@30Hz
- Point-to-point protocol for ultra-low latency
- Supports 1000M LAN port
- Supports optical fiber transmission
- When using CAT5E cable for direct connection, the transmitting distance can reach 150m
- Supports USB 2.0 transparent transmission Supports a wide range of USB peripherals, such as encrypted U disk, face recognition and other USB devices, connect via the built-in 4 USB hub
- Bidirectional Analog Audio: line in/out with microphone and headphone support
- Supports 1-channel asynchronous serial transmission
- Supports connect to a switch (1000M)
- Supports point-to-point dial-up connection
- Built-in ESD protection circuit, can effectively prevent static electricity

# KFH262S\_RX front panel



| No. | Components     | Description                                      |
|-----|----------------|--|
| 1   | Оптика 1       | Optical port, plug this port with an SFP+ module |
| 2   | CAT-X1         | RJ45 port, plug this port with a CAT5E cable     |
| 3   | ID CODE1       | DIP switch for point-to-point DIP connection     |
| 4   | SW1            | Pushbutton 1                                     |
| 5   | SW2            | Pushbutton 2                                     |
| 6   | USB            | Connect to USB peripherals                       |
| 7   | 12B <b></b> 2A | 12V power connection port                        |
| 8   | Оптика 2       | Optical port, plug this port with an SFP+ module |
| 9   | CAT-X2         | RJ45 port, plug this port with a CAT5E cable     |
| 10  | ID CODE2       | DIP switch for point-to-point DIP connection     |

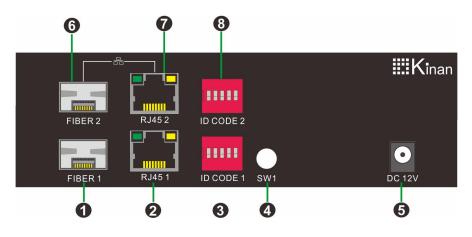
### KFH262S\_RX rear panel

| Φ          | 00                                    |
|------------|---------------------------------------|
|            | RX                                    |
|            | LINK 2 PWR 2                          |
| HDMI OUT 2 |                                       |
|            |                                       |
| HDMI OUT 1 | LINK 1 PWR 1                          |
|            | 89                                    |
|            | HDMI OUT 2<br>USB2.0 T G R HDMI OUT 1 |

| No. | Components | Description                      |  |
|-----|------------|----------------------------------|--|
| 1   |            | Connect the device to the ground |  |
| 2   | IR         | Reserved port                    |  |
| 3   | ●))        | Audio output                     |  |
| 4   | Ŷ          | MIC input                        |  |
| 5   | USB2.0     | Connect to USB peripherals       |  |
| 6   | TGR        | Serial port                      |  |
| 7   | HDMI OUT1  | Connect to a HDMI monitor        |  |
| 8   | LINK1      | Connection status indicator      |  |
| 9   | PWR1       | Power Indicator                  |  |
| 10  | HDMI OUT2  | Connect to a HDMI monitor        |  |
| 11  | LINK2      | Connection status indicator      |  |
| 12  | PWR2       | Power Indicator                  |  |

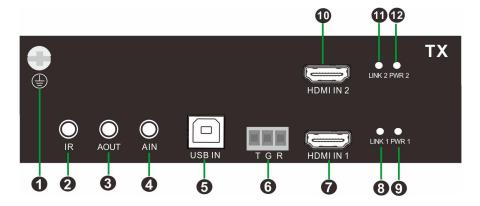
# KFH262S\_TX front panel

KFH262S



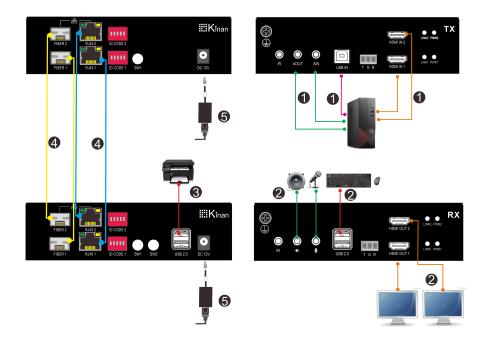
| No. | Components | Description                                      |
|-----|------------|--|
| 1   | FIBER1     | Optical port, plug this port with an SFP+ module |
| 2   | RJ452      | RJ45 port, plug this port with a CAT5E cable     |
| 3   | ID CODE1   | DIP switch for point-to-point DIP connection     |
| 4   | SW1        | Pushbutton                                       |
| 5   | DC12V      | 12V power connection port                        |
| 6   | FIBER2     | Optical port, plug this port with an SFP+ module |
| 7   | RJ451      | RJ45 port, plug this port with a CAT5E cable     |
| 8   | ID CODE2   | DIP switch for point-to-point DIP connection     |

### KFH262S\_TX rear panel



| No. | Components | Description                      |  |
|-----|------------|----------------------------------|--|
| 1   |            | Connect the device to the ground |  |
| 2   | IR         | Reserved port                    |  |
| 3   | AOUT       | MIC out                          |  |
| 4   | AIN        | Audio in                         |  |
| 5   | USB IN     | USB in                           |  |
| 6   | TGR        | Serial port                      |  |
| 7   | HDMI IN1   | HDMI video input                 |  |
| 8   | LINK1      | Connection status indicator      |  |
| 9   | PWR1       | Power Indicator                  |  |
| 10  | HDMI IN2   | HDMI video input                 |  |
| 11  | LINK2      | Connection status indicator      |  |
| 12  | PWR2       | Power Indicator                  |  |

#### **Connection Diagram**



- Connect the KFH262S\_TX to the HDMI video port, USB port and audio port of a computer. (See (1) in the above diagram)
- Connect the KFH262S\_RX to keyboard, mouse, monitor and audio device. (See 2) in the above diagram)
- 3. Connect the USB peripherals to the KFH262S\_RX. (See ③ in the above diagram)
- 4. Connect the transmitter and receiver interfaces via optical fiber or CAT5E cable. (See ④ in the above diagram)
- Power on the transmitter and receiver. (See (5) in the above diagram)

# Specifications

|                                  | Model       | KFH262S_TX                          | KFH262S_RX                                |  |
|----------------------------------|-------------|-------------------------------------|---|--|
|                                  | HDMI in     | 2                                   | NA  |  |
|                                  | HDMI out    | NA                                  | 2   |  |
|                                  | Power       | 12V                                 | 12V                                       |  |
|                                  | SFP         | SFP x 2                             | SFP x 2                                   |  |
| Interfaces                       | Microphone  | 3.5mm Stereo<br>Jack (Pink)         | 3.5mm Stereo Jack<br>(Pink)               |  |
|                                  | Speaker     | 3.5mm Stereo<br>Jack (Green)        | 3.5mm Stereo Jack<br>(Green)              |  |
|                                  | LAN         | RJ45 x 2                            | RJ45 x 2                                  |  |
|                                  | USB Type B  | 1                                   | N/A                                       |  |
|                                  | USB 2.0     | N/A                                 | USB x 4                                   |  |
| Resolution                       |             | 3840x2160@30Hz                      |   |  |
| Connection Cable                 |             | Fiber optical cable or Cat5/6 cable |   |  |
| Power Input                      |             | DC12V /2A                           | DC12V / 2A                                |  |
| Power Consumption                |             | 5.8W                                | 5.3W<br>(USB peripherals not<br>included) |  |
| Operating <sup>-</sup>           | Temperature | 0–50 °C                             |   |  |
| Storage Ter                      | mperature   | -20–60 ℃                            |   |  |
| Humidity                         |             | 0–80% RH, Non-condensing            |   |  |
| Material                         |             | Metal                               |   |  |
| Net Weight                       | t (kg)      | 0.5 kg                              | 0.5kg                                     |  |
| Product Dimension<br>(W × D × H) |             | 158 mm x 80 mm x 44mm               |   |  |
| Package Dimension<br>(W × D × H) |             | 395 mm x 274 m                      | 395 mm x 274 mm x 110mm                   |  |