

# HDMI FHD Digital KVM Extender over Fiber/Cat5 (KFH162S)

## User Manual



[www.kinankvm.com](http://www.kinankvm.com)

@All right reserved Shenzhen Kinan Technology Co., Ltd.

Date: 2024/02

Version: V2.0

## User Notification

All information, documentation, and specifications contained in this manual are subject to change without prior notice. The manufacturer does not make any explicit or implied statement or guarantee about the contents of this document, especially for merchantability or fitness for any specific purpose. Any manufacturer's equipment described in this manual is sold or licensed as it is.

If the equipment is damaged artificially after purchase, the buyer (not the manufacturer) shall bear all costs for necessary repair and any losses caused by equipment defects.

If the correct operating voltage setting is not selected before operation, the manufacturer will not be responsible for any damage caused by system operation. **Please make sure the voltage has been set correctly before use.**

## Product Description

The KFH162S HDMI digital KVM extender delivers FHD 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 KFH162S including Transmitter (KFH162S-TX) and Receiver (KFH162S-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.

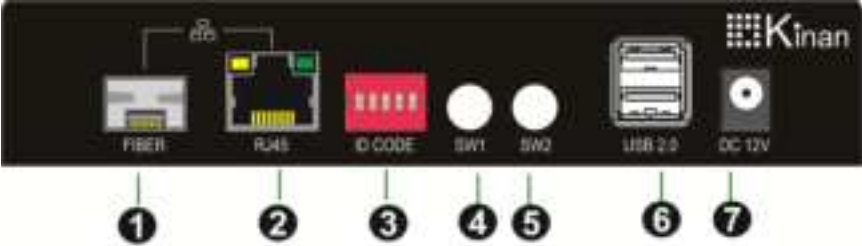
The KFH162S supports signal transmission over fiber optic cable or Cat5 cable, it supports single-mode and multi-mode optical fiber, the maximum transmission distance of single mode is 80km, for multimode the transmission distance is up to 300m. If you connect the KFH162S-TX and KFH162S-RX with a Cat5 cable, the transmitting distance is up to 150m. It supports the transmission of 1 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

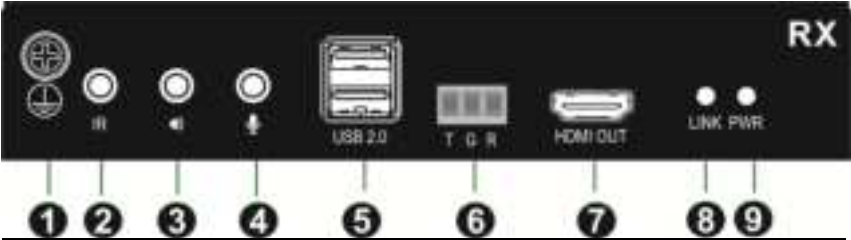
- FHD HDMI video transmission, resolution is up to 3840x2160@30Hz
- Point-to-point protocol for ultra-low latency
- Supports 1000M LAN port
- Supports optical fiber transmission
- When using CAT5E cable for direct connection, the transmitting distance can reach 150m
- Supports USB 2.0 transparent transmission – 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

KFH162S\_RX front panel



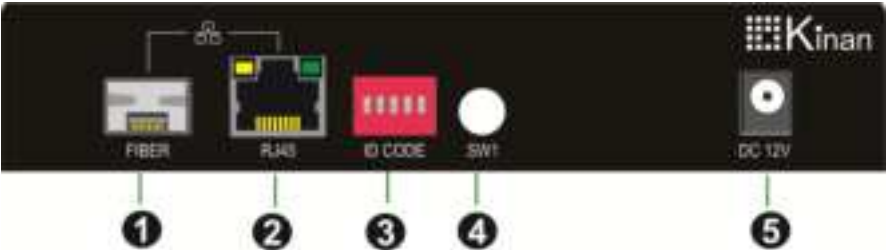
No.	Components	Description
1	FIBER	Optical port, plug this port with an SFP+ module
2	RJ45	RJ45 port, plug this port with a CAT5E cable
3	ID CODE	DIP switch for point-to-point DIP connection
4	SW1	Pushbutton 1
5	SW2	Pushbutton 2
6	USB2.0	Connect to USB peripherals
7	DC 12V	12V power connection port

KFH162S\_RX rear panel



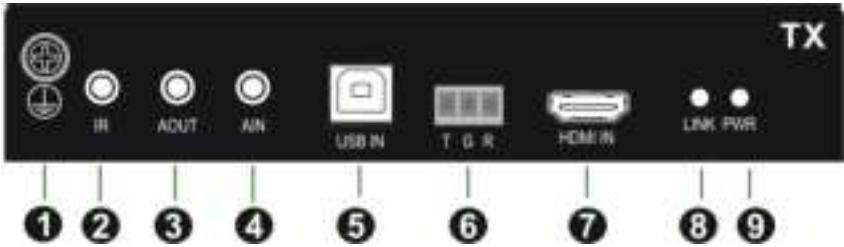
No.	Components	Description
1	Ground connection	Connect the device to the ground
2	IR	Reserved port
3	Audio	Audio output
4	Microphone	MIC input
5	USB2.0	Connect to USB peripherals
6	TGR	Serial port
7	HDMI OUT	Connect to a HDMI monitor
8	LINK	Connection status indicator
9	PWR	Power Indicator

KFH162S\_TX front panel



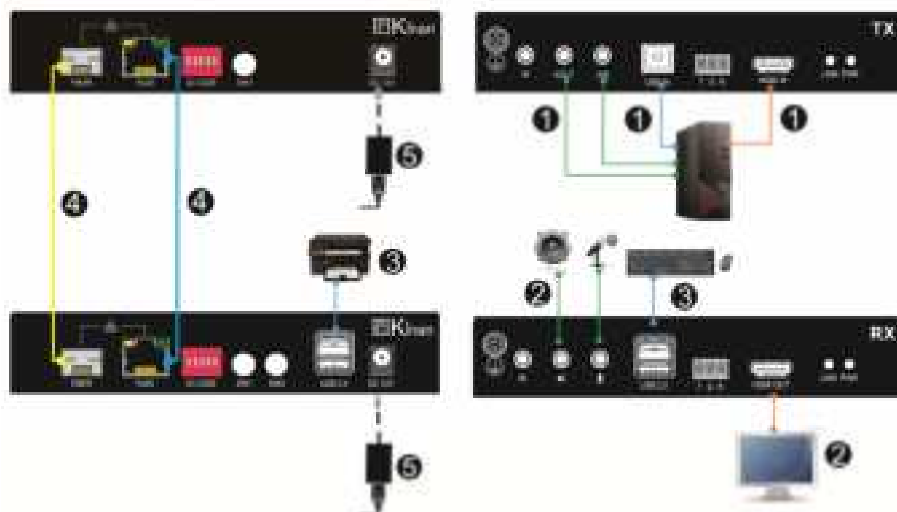
No.	Components	Description
1	FIBER	Optical port, plug this port with an SFP+ module
2	RJ45	RJ45 port, plug this port with a CAT5E cable
3	ID CODE	DIP switch for point-to-point DIP connection
4	SW1	Pushbutton
5	DC 12V	12V power connection port

KFH162S\_TX rear panel



No.	Components	Description
1	Ground connection	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 IN	HDMI video input
8	LINK	Connection status indicator
9	PWR	Power Indicator

## Connection Diagram



1. Connect the KFH162S\_TX to the HDMI video port, USB port and audio port of a computer. (See ① in the above diagram)
  2. Connect the KFH162S\_RX to keyboard, mouse, monitor and audio device. (See ② in the above diagram)
  3. Connect the USB peripherals to the KFH162S\_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)
- Notice: the ID code on TX and RX must be in the same segment.
5. Power on the transmitter and receiver. (See ⑤ in the above diagram)

**Specifications**

Function		KFH162S_TX	KFH162S_RX
Interfaces	HDMI in	1	NA
	HDMI out	NA	1
	Power	12V	12V
	SFP	SFP x 1	SFPx 1
	Microphone	3.5mm Stereo Jack (Pink)	3.5mm Stereo Jack (Pink)
	Speaker	3.5mm Stereo Jack (Green)	3.5mm Stereo Jack (Green)
	LAN	RJ45	RJ45
	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		3W	2.5W (USB peripherals not included)
Operating Temperature		0–50 °C	
Storage Temperature		-20–60 °C	
Humidity		0–80% RH, Non-condensing	
Material		Metal	
Net Weight (kg)		0.4 kg	0.4kg
Product Dimension (W × D × H)		158 mm x 80 mm x 30mm	
Package Dimension (W × D × H)		525 mm x 226 mm x 106mm	