

4K HDMI KVM Extender (KFH136S)

User Manual

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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.**

Overview

The KFH136S delivers 4K 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 KFH136S including Transmitter (KFH136S-TX) and Receiver (KFH136S-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.

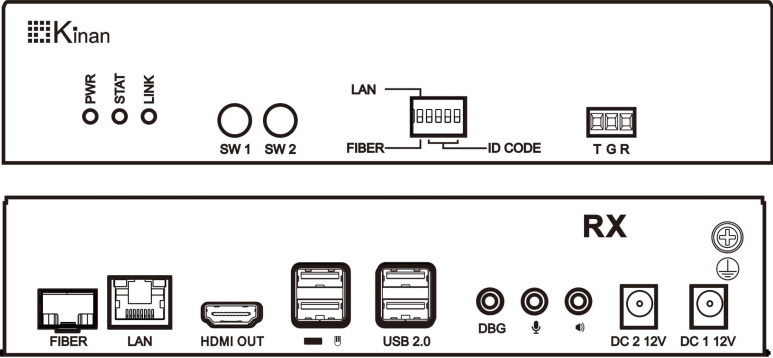
The KFH136S supports signal transmission over fiber optic cable or Cat5 cable, it supports single-mode and multi-mode optical fiber, the maximum transmission distance of single mode is 10km, for multimode the transmission distance is up to 300m. If you connect the KFH136S-TX and KFH136S-RX with a Cat5 cable, the transmitting distance is up to 150m. It supports the transmission of 1 channel 4K HDMI signals and has a wide range of applications.

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

Product Features

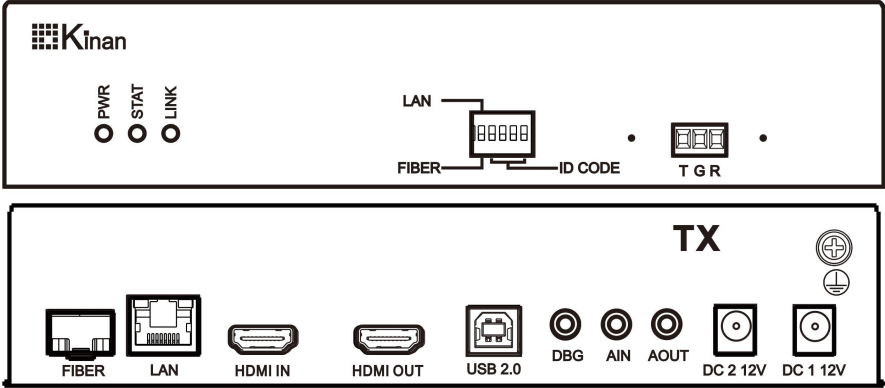
- FHD HDMI video transmission, resolution is up to 3840x2160@60Hz (YCbCr 4:4:4)
- Ultra-low latency: 8ms @ 60fps
- Transmission bandwidth: ~900Mbit/s
- Supports 1000M LAN port
- Supports optical fiber transmission
- The longest transmission distance is up to 150 meters with STP. (Cat5e supports 120 meters, Cat6a and above support 150 meters).
- Network cables must not be run alongside high-voltage power lines
- Supports USB 2.0 – Supports a wide range of USB peripherals, such as encrypted U disk, face recognition and other USB devices, connect via the built-in 2 USB hub
- Bidirectional Analog Audio: line in/out with microphone and headphone support
- Support HDMI built-in audio
- Supports HDMI interface loop-out on the transmitter (TX)
- Supports 1-channel asynchronous serial transmission
- Supports connect to a switch (1000M)
- Supports point-to-point dial-up connection
- Built-in ESD protection

KFH136S -RX



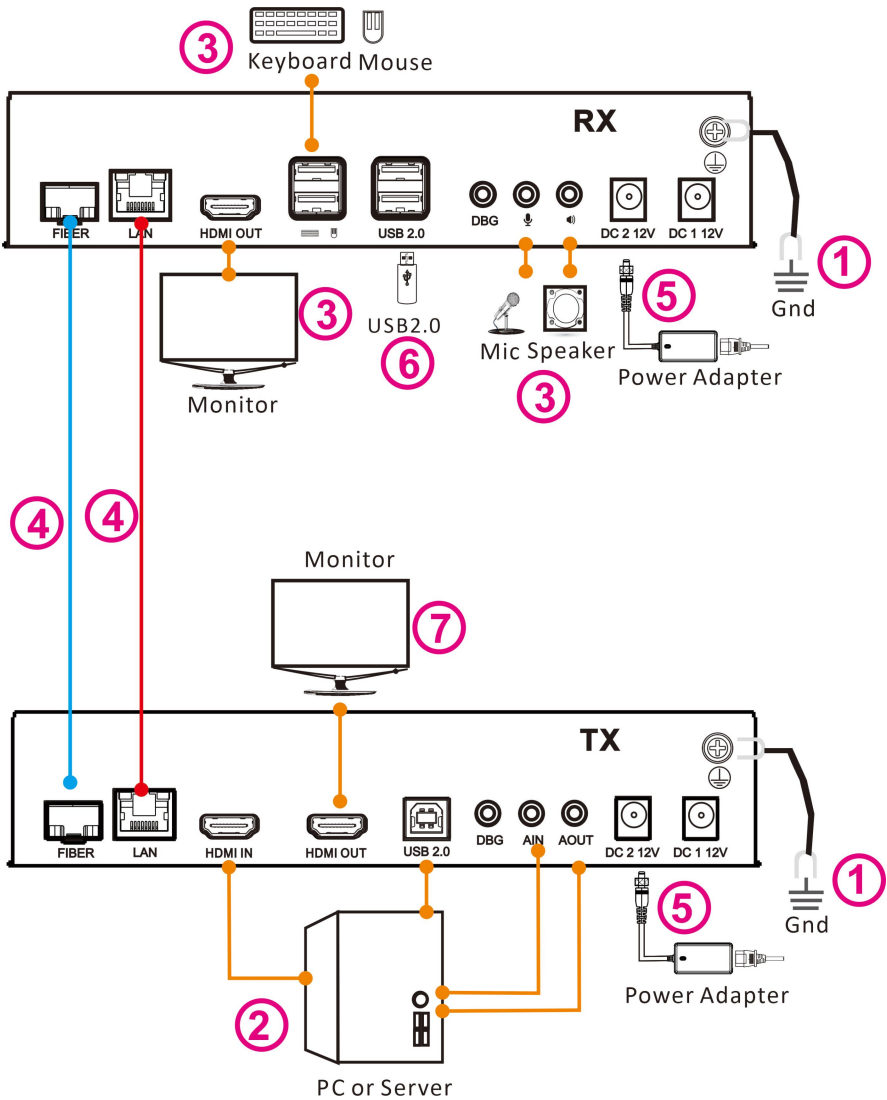
No.	Components		Description
1	LED	PWR	Power LED
		STAT	System Operation LED
		LINK	Link LED (Off: disconnected, on: connected, flashing: video signal is being transmitted)
2	SW1		Function menu button (baud rate selection, display MAC, display IP address)
3	SW2		Function key confirmation
4	ID CODE		Dip switch for point-to-point dip connection The dip switch on pin 1 is for FIBER/LAN connection
5	TGR		Serial Port
6	FIBER		Fiber port
7	LAN		LAN port
8	HDMI OUT		HDMI video output
9			USB port for keyboard and mouse
10	USB2.0		USB 2.0 port for USB peripherals
11	DBG		Debug port
12			MIC input
13			Audio output
14	DC2, DC1		DC12V power
15			Connect the device to the ground

KFH136S-TX



No.	Components		Description
1	LED	PWR	Power LED
		STAT	System Operation LED
		LINK	Link LED (Off: disconnected, on: connected, flashing: video signal is being transmitted)
2	ID CODE		Dip switch for point-to-point dip connection The dip switch on pin 1 is for FIBER/LAN connection
3	TGR		Serial Port
4	FIBER		Fiber port
5	LAN		LAN port
6	HDMI IN		HDMI video input
7	HDMI OUT		HDMI video output
8	USB2.0		USB 2.0 port for PC
9	DBG		Debug port
10	AIN		Audio Input
11	AOUT		MIC Output
12	DC2 ,DC1		DC12V power
13			Connect the device to the ground

Connection Diagram



1. Before connecting the cables, ground the transmitter (TX) and receiver (RX) (Figure ①).
2. Connect the transmitter (TX) to a PC or server (Figure ②).
3. Connect keyboard, mouse, monitor, and audio equipment to the receiver (Figure ③).
4. Connect the transmitter (TX) and receiver (RX) via optical fiber or network cable (Figure ④).

Note: The first pin on the ID CODE is for the FIBER / LAN connection		
	ID CODE Pin 1 is for FIBER connection	The ID CODE on TX and RX must be in the same section.
	ID CODE Pin 1 is for LAN connection	

5. Power on the transmitter and receiver (Figure ⑤).
6. Connect the USB peripheral to the receiver (RX) (Figure ⑥).
7. Connect an external monitor to transmitter (TX) (Figure ⑦).

Specifications

Model		KFH136S-TX	KFH136S-RX
Connectors	HDMI input	1	N/A
	HDMI output	1	1
	Power	12V x 2	12V x 2
	LAN	RJ45 x 1	RJ45 x 1
	SFP	SFP x 1	SFP x 1
	Microphone	3.5mm Stereo Jack (Pink) x 1	3.5mm Stereo Jack (Pink) x 1
	Speaker	3.5mm Stereo Jack (Green) x 1	3.5mm Stereo Jack (Green) x 1
	USB Type B	1	N/A
	USB Type A	N/A	4
Resolution		3840x2160@60Hz	
Connection Cable		Fiber optical or CAT5e/6/7 cable	
Power Input		DC12V / 2A	
Power Consumption		10W	12W
Operating Temperature		0–50 °C	
Storage Temperature		-20–60 °C	
Humidity		0–80% RH, non-condensing	
Net Weight		0.82kg	0.82kg
Material		Metal	
Product Dimension (W × D × H)		210mm x 132.2 mm x 44mm	
Package Dimension (W × D × H)		395 mm x 274 mm x 110mm	