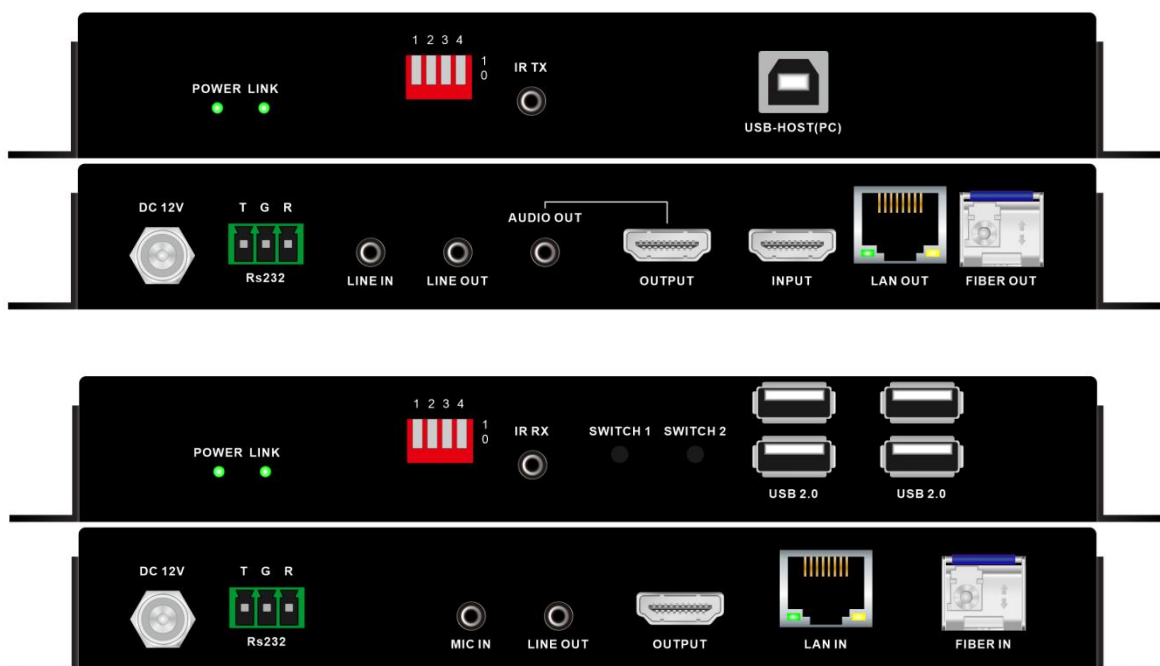


KH5500 4K60Hz KVM Broadcast Fiber & Network Cable Transmitter/Receiver

1. Product Introduction

The KH5500 is a high-performance 4K60Hz KVM broadcast transmission system designed for long-distance signal transmission scenarios such as large-scale commercial displays, enterprise command centers, education institutions, and remote monitoring. It strictly complies with HDMI 2.0 and HDCP 2.2 standards, adopting lossless and uncompressed transmission technology to ensure ultra-high-definition video quality. The product integrates a "transmitter + receiver" architecture, supporting both Cat5e/Cat6 network cables and single-core single-mode LC fiber for transmission. It realizes KVM extension function, full-featured USB 2.0 extension, and supports PoE power supply, serial port, infrared, and audio signal transmission. With flexible networking capabilities, it can be connected to switches to achieve point-to-point transmission, making it an ideal solution for high-end long-distance audio-visual transmission and control scenarios.



2. Core Product Highlights

√ 4K Ultra HD Lossless Transmission

Supports a maximum resolution of 4K@60Hz (4:4:4), backward compatible with various low-level resolutions, ensuring no loss of image details and delicate color reproduction. Fully compatible with HDR formats, delivering a stunning visual experience.

√ Dual Transmission Media Support

Supports both network cable and fiber transmission. The maximum transmission distance reaches 150 meters via Cat5e/Cat6 network cable, and up to 80 kilometers via single-core single-mode LC fiber (20km module as standard), meeting long-distance transmission needs in different scenarios.

√ KVM & Full-Featured USB 2.0 Extension

Realizes KVM extension function, allowing remote control of the signal source device from the receiver end via mouse and keyboard. Supports full-featured USB 2.0 extension, enabling the receiver to connect USB devices such as U disks, USB cameras, and USB headsets, with a read/write speed of 16MB/s and 3MB/s respectively.

√ PoE Power Supply (802.3AF)

Supports PoE power supply (802.3AF) and 12V DC power supply, facilitating construction, reducing wiring complexity, and improving system safety. The transmitter can supply power to the receiver through network cables, eliminating the need for additional power supplies at the remote end.

√ Comprehensive Audio Support

Supports full-format HDMI audio, including 2.1CH/5.1CH/7.1CH, DTS, and Dolby formats. Equipped with 3.5mm audio input and output interfaces, which can extract and separate audio signals, easily connecting to audio equipment such as power amplifiers and speakers.

√ Flexible Networking & Pairing

Can be connected to a switch to realize point-to-point transmission function. Equipped with 4PIN pairing DIP switches, the transmitter and receiver can communicate normally only when the DIP switches are consistent, ensuring stable signal transmission.

√ IR & Serial Port Extension

Supports infrared extension function, allowing remote control of signal source devices at the display end. Supports bidirectional RS232 serial port transmission, which can be customized to meet the needs of complex functional combinations.

√ Durable Design & 24/7 Operation

Adopts professional metal shell design, with excellent heat dissipation performance. The whole machine supports 7×24 hours of uninterrupted operation, ensuring stability and durability during long-term use.

3. Detailed Technical Specifications

Compatible Standards: HDMI 2.0, HDCP 2.2; PoE (802.3AF)

Video Specifications: Resolution: Maximum 4K@60Hz (4:4:4), backward compatible with 4K@30Hz, 1080p@60Hz/50Hz/30Hz, 720p@50Hz/60Hz, 480p@60Hz; HDR support (optional)

Audio Specifications: Supports 2.1CH/5.1CH/7.1CH, DTS, Dolby; 3.5mm audio input/output interfaces

Configuration	Details
Port Configuration	<p>Transmitter (Tx): 1×HDMI IN (Type A), 1×HDMI LOOP OUT (Type A), 1×RJ45 LAN OUT, 1×SFP Fiber OUT, 1×USB-HOST (PC), 1×3.5mm AUDIO IN, 1×3.5mm AUDIO OUT, 1×RS232, 1×IR-TX, 1×DC 12V Power Input</p> <p>Receiver (Rx): 1×RJ45 LAN IN, 1×SFP Fiber IN, 1×HDMI OUT (Type A), 4×USB 2.0, 1×3.5mm AUDIO IN, 1×3.5mm AUDIO OUT, 1×RS232, 1×IR-RX, 1×DC 12V Power Input</p>
Power Requirement	<p>Power Supply: PoE (802.3AF) or DC 12V/1.5A;</p> <p>Power Consumption: Transmitter: 6.18W, Receiver: 5.79W, T+R (Rx POC): 15.46W</p>
Dimensions & Weight	<p>Dimensions: 175×100.5×25mm;</p> <p>Weight: Transmitter: 0.52kg, Receiver: 0.52kg</p>

Operating Environment	Operating Temperature: 0°C ~ 40°C; Operating Humidity: 20% ~ 90% RH (non-condensing)
Pairing & EDID Management	4PIN DIP pairing switches (transmitter and receiver must be consistent); Supports EDID management to ensure perfect compatibility between signal source and display devices

4. Application Scenario Analysis

- Commercial Display Spaces: Exhibition halls, department store counters, brand experience stores, using long-distance transmission to realize multi-screen synchronous display of product promotion videos and brand information, covering more audiences and enhancing display effects.
- Enterprise Command Centers & Conference Rooms: Medium and large enterprises, transmitting meeting signals, command data to multiple screens and remote terminals in real time, realizing remote control and collaborative work, improving work efficiency.
- Education Institutions: Universities, middle and primary schools, transmitting teaching images to teacher's main screen and students' multi-screens, supporting USB teaching equipment connection, realizing interactive teaching.
- Remote Monitoring & Medical Institutions: Monitoring centers, clinics, small hospitals, transmitting monitoring images and inspection data to remote workstations in real time, ensuring timely communication and decision-making.
- Large-Scale Venues & Public Areas: Stadiums, shopping malls, transportation hubs, using fiber transmission to realize long-distance multi-screen synchronous display of public information, announcements and advertisements.
- Remote Office & Industrial Control: Industrial sites, remote office scenarios, realizing long-distance control of equipment and data transmission, ensuring stable operation of the system.

5. Package Contents

1×KH5500-Tx Transmitter Host

- 1×KH5500-Rx Receiver Host
- 1×12V/1.5A Power Adapter (for Transmitter and Receiver)
- 1×IR Transmitter Cable
- 1×IR Receiver Cable
- 1×1.5m USB Type-A to Type-B Cable
- 1×Mounting Ear Kit (for Transmitter and Receiver)
- 1×Multilingual User Manual (including English)