

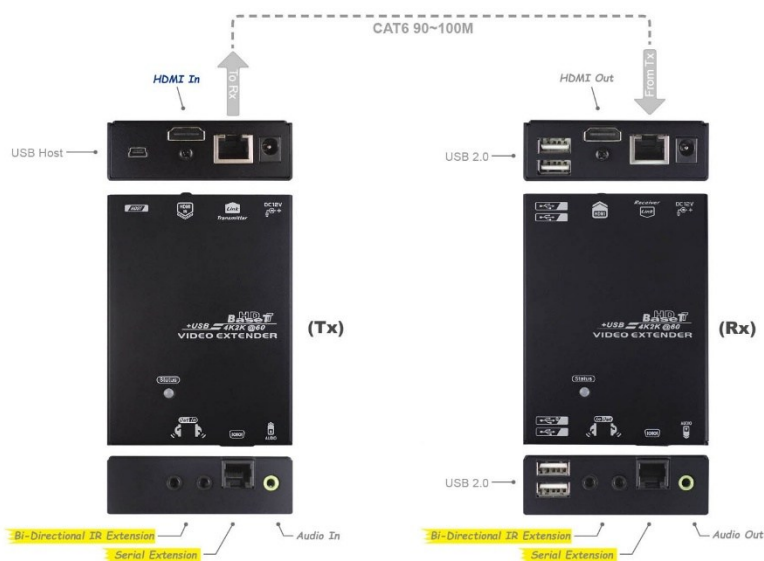
# KVM Extender

## 1080P HDMI KVM Extender over CATx with SPK Out, IR, RS-232 and USB 2.0 Extension, 100m

Model: KEX-HBT-SH100

### PRODUCT OVERVIEW

The KEX-HBT-SH100 HDMI KVM Extender consists of a transmitter (host) and a receiver (console) that extend HDMI, Speaker Out, USB 2.0, IR, and RS-232 signals over CATx cabling. It transmits uncompressed 4K HDMI video up to 70–90 meters and 1080p video up to 100 meters through a single CAT6 cable.



### USB 2.0 Extension

The receiver unit provides four USB 2.0 ports located on the front and rear panels, supporting both permanent and temporary USB peripheral connections. The system extends four USB signals up to 100 m over a single CATx cable.

USB 2.0 extension is compatible with Windows, Linux, and macOS. No software or drivers are required; simply plug and play. It is backward compatible with USB 1.1 and USB 1.0 devices to ensure reliable data communication.

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## Bi-directional IR Extension

The bi-directional IR extension supports a full frequency range from 38 kHz to 56 kHz. The distance between the emitter head and the IR port can be extended for flexible installation. An optional IR extension cable (up to 3 meters) is available separately.

## RS-232 Extension

Full-duplex RS-232 communication between the transmitter and receiver is supported over a single CATx cable. This hardware-based solution enables remote access and control of RS-232 devices without additional setup or configuration. It is suitable for applications such as digital signage, industrial and commercial environments, smart classrooms, and smart home systems.

## Applications

The HDMI KVM Extender is ideal for broadcasting, exhibitions, retail stores, courtrooms, transportation hubs, and other professional AV environments. It is easy to install and requires no software or drivers. The system is compatible with major operating systems and supports most USB devices, including webcams, hard drives, scanners, audio devices, touch screens, digital cameras, and game controllers.

## KEY FEATURES

- Provides reliable remote access to an HDMI-equipped computer over a CATx cable up to 100 meters (328 feet)
- Supports HDMI video resolutions up to 4K @ 30 Hz (4:4:4)
- HDBaseT 2.0 uncompressed video extension ensures clear image quality with low latency
- Audio extension facilitates connection to audio amplifiers or AV receivers
- USB 2.0 extension supports keyboard, mouse, USB storage, cameras, and other USB devices
- Bidirectional IR extension enables remote control of source devices or displays
- RS-232 serial extension supports advanced control and automation applications

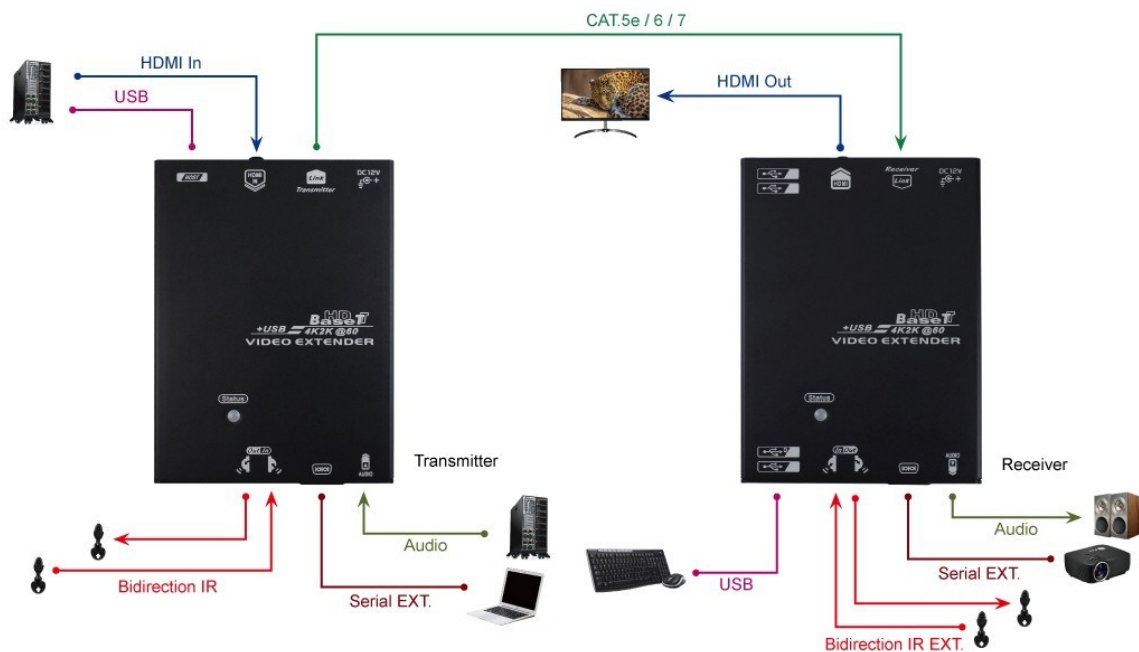
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## PRODUCT SPECIFICATIONS

KEX-HBT-SH100	Transmitter	Receiver
<b>Max. Resolution</b>	3840 x 2160 @30Hz (4:4:4) 3840 x 2160 @60Hz (4:2:0)	
<b>Video Extension</b>	HDMI 1.4 x 1 (In)	HDMI 1.4 x 1 (Out)
<b>USB 2.0 Extension</b>	Mini-USB x 1 (Host)	USB Type A x 4 (Device)
<b>Speaker Extension</b>	3.5mm SPK Jack x 1 (In)	3.5mm SPK Jack x 1 (Out)
<b>Bidirectional IR Extension</b>	3.5mm IR Jack x 1 (In) 3.5mm IR Jack x 1 (Out)	3.5mm IR Jack x 1 (Out) 3.5mm IR Jack x 1 (In)
<b>Serial Extension</b>	To Serial Host (RJ11) x 1	To Serial Device (RJ11) x 1
<b>HDCP Compliance</b>	HDCP 1.4	
<b>HDBaseT Link Port</b>	RJ45 x 1 (HDBaseT 2.0 Certified cabling is recommended. STP cabling is necessary for environments with high EMI or RFI.)	
<b>Extension Range</b>	Max. 90 Meters@4K30 Max. 100 Meters@1080P	
<b>Power Supply</b>	DC 12V	DC 12V
<b>Operating Environment</b>	0 ~ 40°C, Humidity < 80%	
<b>Storage Temperature</b>	-20 ~ 60°C	
<b>Material</b>	Metal	
<b>H x W x D (mm)</b>	25 x 75 x 102	
<b>Weight (g)</b>	300	300

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## CONNECTION DIAGRAM



### Connection Interfaces of the Transmitter and Receiver:



# KVM Extender

## PACKAGE CONTENTS

- 1 × KEX-HBT-SH100 Transmitter Unit
- 1 × KEX-HBT-SH100 Receiver Unit
- 2 × Power Adapter
- 1 × USB Cable
- 2 × RJ-11 to DB9 Adapter
- 1 × User Manual
- 2 × Foot Pad Set

## WARRANTY

- Standard 1-Year Limited Warranty, unless otherwise specified by Sales.
- Optional Advance Replacement Warranty is available upon request

## ORDERING INFORMATION

Part Number	Descriptions
<b>KEX-HBT-SH100</b>	1080P HDMI KVM Extender over CATx with SPK Out, IR, RS-232 and USB 2.0 Extension, 100m
<b>(OPTIONAL)</b>	
<b>RXN-ACC-IRK</b>	IR Extension Kit (Blaster and Sensor)
<b>VDC-HCL20-001M</b>	Premium High Speed HDMI 2.0 Type A (Male) to Type A (Male) Cable with Ethernet, 4K60, 18Gbps, LSZH, 1m
<b>VDC-HCL20-002M</b>	Premium High Speed HDMI 2.0 Type A (Male) to Type A (Male) Cable with Ethernet, 4K60, 18Gbps, LSZH, 2m
<b>VDC-HCL20-003M</b>	Premium High-Speed HDMI 2.0 Type A (Male) to Type A (Male) Cable with Ethernet, 4K60, 18Gbps, LSZH, 3m

## CONTACT INFORMATION

For more information, please visit our website or contact our customer service team:

- **Website:** [www.dsgio.com](http://www.dsgio.com)
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