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## 1080p Uncompressed HDMI<sup>®</sup> over Cat5e/6 KVM Extender - 330ft (100m)

SV565UTPHDU



\*actual product may vary from photos

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This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver
   is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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## Introduction

## **Packaging Contents**

- 1 x Local Extender Unit
- 1 x Remote Extender Unit
- 1 x HDMI Cable
- 1 x USB Cable
- 2 x Universal Power Adapters (NA/EU/UK)
- 1 x Instruction Manual

## System Requirements

- A USB-compatible computer with an HDMI output
- USB 1.1 or 2.0 Keyboard / Mouse
- An HDMI display
- A minimum of Cat 5e (UTP) cable with two Cat 5e RJ45 connectors (if using surface cabling)

#### OR

• A minimum of Cat 5e UTP cabling with two information outlets and two Cat 5e patch cords with Cat 5e RJ45 connectors (if using premise cabling).

**NOTE:** While Cat 5e UTP is the minimum category of twisted pair cabling, for the best experience, and to minimize interference and cross-talk, Cat 6 STP or better is strongly recommended. When using Cat 5e cabling, the layout and quality of your cable runs and connections become extremely important. Please refer to the Cabling section on page 5 for more detailed information. Any reference to Cat 5e cabling should be read as Cat 5e or better.



## **Product Overview**

### **Front View**



### **Rear View - Local Unit**



### **Rear View - Remote Unit**





### **LED Indicators**

Power LED (Green)	<b>On:</b> The system is powered and ready to use <b>Off:</b> The system is not powered	
Link LED (Green)	<b>On:</b> Local and Remote extenders are able to communicate across the link <b>Off:</b> There is no communication between the local and remote extenders	
USB LED (Green)	On: The local extender and the host computer are communicating with each other and working Flashing: The host has suspended communication with the local extender Off: The host and the local extender are not communicating or not connected	
Video LED (Green)	<b>On:</b> HDCP (digital rights management) content is being transmitted <b>Flashing:</b> Video (non-HDCP) content is being transmitted <b>Off:</b> No video is being transmitted	

## Cabling

Solid core Category 6 STP cable with Category 6 RJ45 connectors is recommended for best performance. Using Cat 5e or unshielded Cat 6 cabling may leave your signal more susceptible to interference and noise which may result in poor video performance or reduced extension distance.

Cable Type	Maximum Distance		Notes
Cable Type	Uncoiled	Coiled	Notes
Solid Core Cat 5e UTP	100m (330 ft)	70m (229 ft)	High susceptibility to electrical interference
Solid Core Cat 5e STP	100m (330 ft)	80m (262 ft)	Moderate susceptibility to electrical interference
Solid Core Cat 6 UTP	100m (330 ft)	100m (330 ft)	High susceptibility to electrical interference
Solid Core Cat 6 STP	100m (330 ft)	100m (330 ft)	Recommended
Solid Core Cat 7 STP	100m (330 ft)	100m (330 ft)	Recommended



## Installation

### **Hardware Installation**

#### Preparing your site

- 1. Determine where the computer is to be located and set up the computer.
- 2. Determine where you want to locate the remote desktop, including the monitor, keyboard, mouse and any other USB device(s).
- 3. If you are using surface cabling, the product supports a maximum distance of 100m (330 ft).

#### OR

If you are using premise cabling, ensure Cat 5e cabling is installed between the two locations with Cat 5e information outlets located near both the computer and the USB device(s), and the total length, including patch cords, is no more than 100m.

#### Installing the Local Extender Unit

- 1. Place the local extender unit near the computer.
- 2. Connect the supplied USB cable to the USB port on the local extender, and an available USB 2.0/1.1 Type A Port on the computer.
- 3. Connect the supplied HDMI cable to the local extender (HDMI In), and an available HDMI Port on the computer.

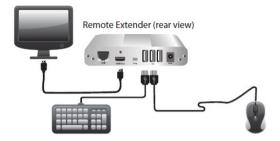


Local Extender (rear view)



#### Installing the Remote Extender Unit

- 1. Place the remote extender unit near the monitor and USB device(s) in the desired remote location.
- 2. Connect an HDMI cable (not included) to the remote extender (HDMI Out) to the monitor.
- 3. Plug your USB Device(s) into the USB ports on the remote extender.



#### Connecting the Local Extender to the Remote Extender

With Surface Cabling

- 1. Plug one end of the Cat 5e cabling (not included) into the Link port (RJ45) on the local extender.
- 2. Plug the other end of the Cat 5e cabling into the Link port (RJ45) on the remote extender.

With Premise Cabling

- 1. Plug one end of a Cat 5e patch cord (not included) into the Link port (RJ45) on the local extender.
- 2. Plug the other end of the patch cord into the Cat 5e information outlet near the host computer.
- 3. Plug one end of the second Cat 5e patch cord (not included) into the Link port (RJ45) on the remote extender.
- 4. Plug the other end of the second patch cord into the Cat 5e information outlet near the USB device(s).





#### **Connecting Power to the Local and Remote Extenders**

- 1. Plug the supplied 5V, 3A power adapter into a suitable AC outlet near the local extender.
- 2. Connect the power adapter to the local extender.
- 3. Plug the supplied 5V, 3A power adapter into a suitable AC outlet near the remote extender.
- 4. Connect the power adapter to the remote extender.



#### **Connecting a USB Device**

- 1. Install any software required to operate the USB device(s). Refer to the documentation provided for your USB device(s).
- 2. Connect the USB device to the device port on the remote extender.
- 3. Check that the USB device is detected and installed properly in the operating system.

## **Verifying Installation**

1. On the local and remote extender units, check that the Power, Link, USB, and Video LEDs are on. If the Link LED is off, then the cabling between the local and remote extenders is not installed properly or is defective.



- Check to see if the USB LED is on and the Video LED is blinking or on, if they are not, this indicates there is no USB data or video data. Check the HDMI and USB connections to the host computer, and the HDMI connection to the monitor. Check to see if any USB devices are connected to the remote extender.
- 3. If the product is not displaying video or your USB device fails to be detected by your operating system, consult the Troubleshooting section in this guide.

PROBLEM	CAUSE	SOLUTION
All LEDs on local extender are off.	The local extender is not receiving power from the power adapter.	<ol> <li>Ensure that the power adapter is properly connected to the local extender.</li> </ol>
		<ol><li>Check that the power adapter is connected to a live source of electrical power.</li></ol>
All LEDs on remote extender are off.	The remote extender unit is not receiving power from the power	<ol> <li>Ensure that the power adapter is properly connected to the local extender.</li> </ol>
	adapter.	<ol> <li>Check that the power adapter is connected to a live source of electrical power.</li> </ol>
Link LEDs on local extender and remote extenders are off.	nder and between the local and ote extenders remote extenders.	<ol> <li>Ensure a Cat 5e cable is connected between the local and remote extenders. Ensure Cat 5e STP or better cabling with conductor RJ45 connectors is used.</li> </ol>
		<ol> <li>Connect a new short Cat 5e patch cord between the local and remote extenders to determine if the original Cat 5e cable is defective.</li> </ol>
		<ol> <li>Ensure the Cat 5e cable is as straight as possible (i.e. not coiled).</li> </ol>

## Troubleshooting



PROBLEM	CAUSE	SOLUTION
Link LED on local extender is on, USB LED on local extender is off	<ul> <li>The host computer is not powered on.</li> </ul>	1. Disconnect all USB devices from the remote extender.
	<ul> <li>The local extender is not connected to the</li> </ul>	2. Disconnect the local extender from the computer.
	computer.	3. Disconnect the local and remote
	The computer does	extenders from the power adapters.
	not support USB hubs.	<ol> <li>Reconnect the local extender to the power adapter.</li> </ol>
	<ul> <li>The USB cable is defective.</li> </ul>	5. Reconnect the remote extender to the power adapter.
	<ul> <li>The unit is malfunctioning.</li> </ul>	<ol><li>Reconnect the USB devices to the remote extender.</li></ol>
		<ol><li>Reconnect the local extender to the computer.</li></ol>
		<ol> <li>If the USB LED continues to stay off, contact Technical Support.</li> </ol>
	•	



PROBLEM	CAUSE	SOLUTION
All LEDs on both the local and remote extenders are on, but the USB device does not operate correctly or is detected	<ul> <li>The USB device is malfunctioning.</li> <li>The computer does not recognize the USB device.</li> <li>The application</li> </ul>	<ol> <li>Disconnect the KVM extender product from the computer.</li> </ol>
		2. Connect the USB device directly to the USB port on the computer.
		<ol> <li>If the device does not operate properly, consult the user documentation for the USB</li> </ol>
as an "Unknown Device" in the	software for the device is not	device. 4. Update your system BIOS,
operating system	operating system operating. • The KVM extender product is malfunctioning.	chipset or USB Host controller drivers from your System/ Motherboard manufacturer's website.
	-	<ol> <li>Make sure the operating system has all the latest updates installed.</li> </ol>
		6. If the device operates properly when directly connected to the computer, connect another device (of a different type) to the KVM extender product. Connect the KVM extender product to the computer.
		<ol> <li>If the second device does not operate, the KVM extender product may be malfunctioning. Contact Technical Support for assistance.</li> </ol>
		<ol> <li>If the second device does operate properly, the first device may not be</li> </ol>
Blinking Video on the Sink (Monitor)		1. Remove all loops in the Cat 5e cable.
•		2. Confirm extender operation with a Cat 5e patch cable.



PROBLEM	CAUSE	SOLUTION
Video frames are being dropped	The extender is not compatible with HDMI.	1. Contact Technical Support.
Video LED is off	One or both of the HDMI cables are not connected, are of	1. Confirm extender operation with HDMI cables that are less than 5m (16'4") in length.
	poor quality or are malfunctioning.	<ol><li>Confirm extender operation with a Cat 5e patch cable.</li></ol>
	<ul> <li>The sink or source is not supported.</li> </ul>	3. Contact Technical Support.
	<ul> <li>The KVM extender product is malfunctioning.</li> </ul>	



## Specifications

Video Signal	HDMI
	Local Extender Unit:
	1 x HDMI (19-pin) female
	1 x USB type B female
	1 x RJ45 female
Connectors	1 x DC Power
Connectors	Remote Extender Unit:
	1 x HDMI (19-pin) female
	3 x USB type A female
	1 x RJ45 female
	1 x DC Power
Compatible Cabling	Cat 5e or better UTP / STP
Maximum Cable Length	100m / 330ft
Maximum Video Resolution	1080p, 1920x1200, 4k
Maximum Data Transfer Rate	USB 2.0: 30Mbps
Power Adapter(s)	5V DC, 3A
Enclosure Material	Aluminum
Operating Temperature	0°C to 40°C (32°F to 104°F)
Storage Temperature	-20°C to 70°C (-4°F to 158°F)
Humidity	20~80% RH (Non-Condensing)
Dimensions	112 x 175 x 30 mm



## **Technical Support**

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For the latest drivers/software, please visit www.startech.com/downloads

## Warranty Information

This product is backed by a two year warranty.

In addition, StarTech.com warrants its products against defects in materials and workmanship for the periods noted, following the initial date of purchase. During this period, the products may be returned for repair, or replacement with equivalent products at our discretion. The warranty covers parts and labor costs only. StarTech.com does not warrant its products from defects or damages arising from misuse, abuse, alteration, or normal wear and tear.

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