

KVM Console Extender over Cat5 UTP

SV565UTP



*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

- SV565UTP Host Unit
- SV565UTP Remote Unit
- Instruction Manual
- Power Adapter
- Set of rubber mounting feet

System Requirements

- Integrated KVM cable for the host and remote computers (not provided) StarTech.com ID:SVECONx (PS/2), SVECONUSx (USB)
- Standard 104-key PS/2 keyboard
- Standard 3-button PS/2 mouse
- VGA capable display

Installation

This product is composed of two different units: the Host Unit and the Remote Unit. The Host Unit takes input controls from a computer (using a PS/2 or USB integrated KVM cable) and allows access to them via the Remote Unit over Category 5 UTP cable. The remote computer also connects to the Remote Unit using an integrated KVM cable (again, either PS/2 or USB) and allows the user at the remote site to control that computer or the host computer using keyboard hotkey commands.

A PS/2 mouse and keyboard and a VGA monitor are connected to the Remote Unit (the console). You can also connect console peripherals to the Host Unit if you need direct as well as remote access to that computer.

Preparing Your Site

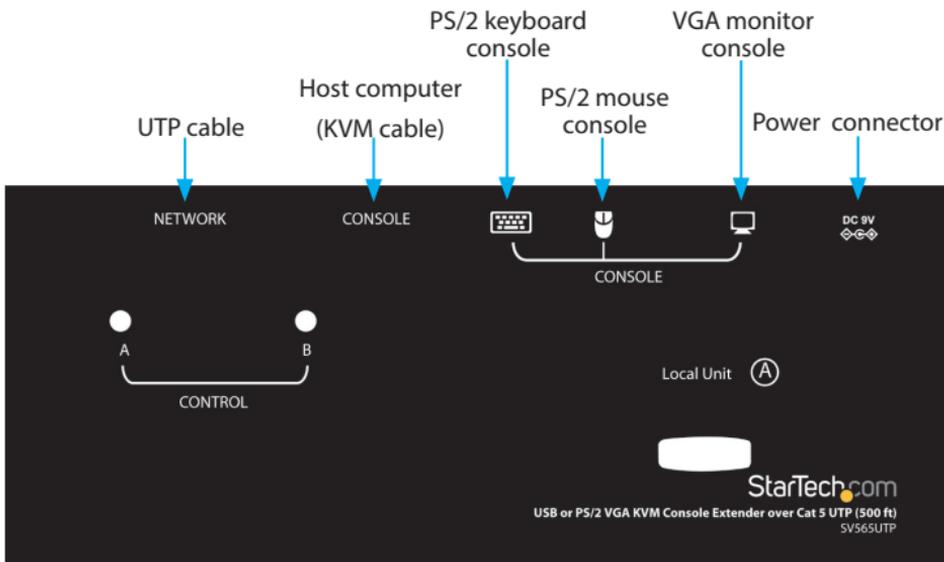
Before you can install the the product, you need to prepare your site.

1. Determine where the host computer will be located and set up the computer.
2. Determine where the console devices (mouse, keyboard, monitor) will be located and place them appropriately
3. If you are using surface cabling, ensure you have enough Category 5 unshielded twisted pair (UTP) network cabling to connect the Host Unit to the Remote Unit's location, and that each end is terminated with RJ-45 connector.

OR

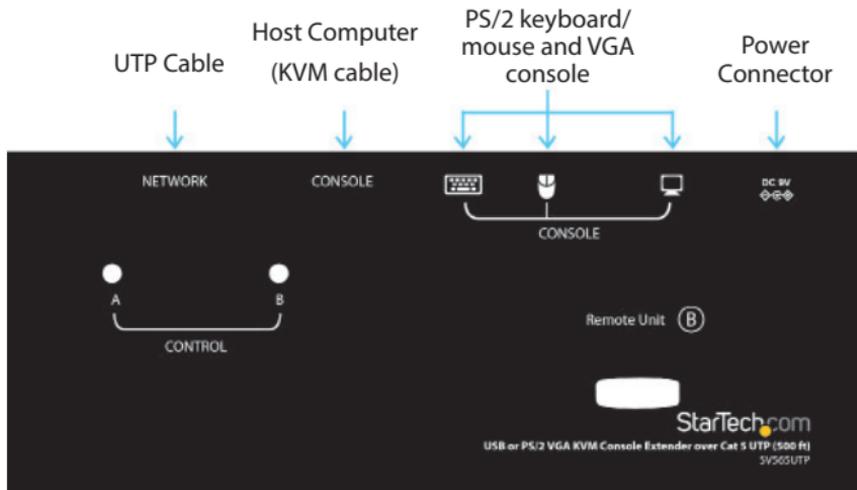
4. If you are using premisses cabling, ensure that the category 5 unshielded twisted pair (UTP) network cabling between the Host Unit and the Remote Unit has been properly terminated in a wall outlet in each location and there is a patch cable long enough to connect the Remote Unit and the Host Unit to their respective outlets

Installing the Host Unit



1. Place the Host Unit near the computer.
2. Switch off the computer and disconnect any existing VGA and input connections.
3. Using a StarTech.com integrated KVM cable (see page 8 for part numbers), connect the end of the cable that has two (USB) or three (PS/2) connectors to the VGA Out connector and the USB or mouse and keyboard PS/2 connectors on the computer as appropriate (The PS/2 version of the cable is color coded.) Connect the opposite end of the cable with a single connector to the gray coded connector marked COMPUTER on the Host Unit of the KVM extender.
4. If you wish to have console access to the host computer, connect a PS/2 mouse, keyboard and VGA monitor indicators marked as CONSOLE on the Host Unit.
5. Connect the UTP cable connection for the Remote Unit to the NETWORK RJ-45 connector on the Host Unit. Connect the opposite end to a terminated wall outlet (if you are using premises cabling).

Installing the Remote Unit



1. Place the Remote Unit near the computer.
2. Switch off the computer and disconnect any existing VGA and input connections.
3. Using a StarTech.com integrated KVM cable (see page 8 for part numbers), connect the end of the cable that has two (USB) or three (PS/2) connectors to the VGA Out connector and the USB or mouse and keyboard PS/2 connectors on the computer as appropriate (The PS/2 version of the cable is color coded.) Connect the opposite end of the cable with a single connector to the gray coded connector marked COMPUTER on the Remote Unit of the KVM extender.
4. Connect a PS/2 mouse, keyboard, and VGA monitor to the indicators marked as CONSOLE on the Remote Unit.
5. Connect the UTP cable connection for Remote Unit to the NETWORK RJ-45 connector on the Remote Unit. Connect the opposite end to a terminated wall outlet (if using premises cabling).

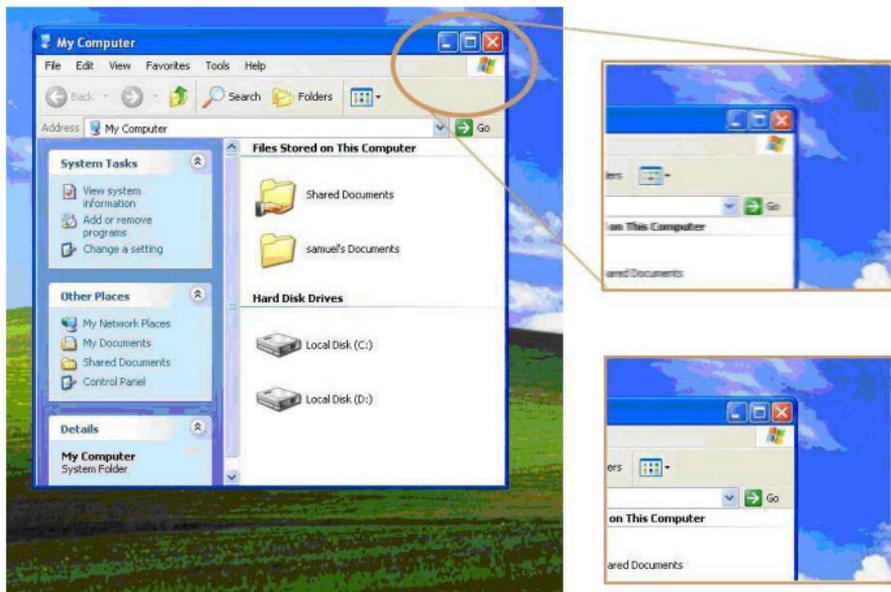
CAUTION: The UTP network cables that connect the Host and Remote Units carry electrical current and should not be plugged in to other devices, as they may cause damage. We strongly recommend marking the cables the cables you are using with this product at both locations for easy identification.

Driver Installation

No driver installation is required as the SV565UTP uses standard keyboard/mouse drivers.

Video Compensation

Video Compensation allows the user to adjust the equalization on the Remote Unit to optimize video performance based on the length of cable being used, as well as other factors that may affect. There are five segments of various lengths of CAT 5 cables from which to choose; to achieve the best visibility, please refer to the section titled Keyboard Shortcut Command Sequences, to adjust the video compensation.



First, note the length of CAT 5 cable you used. Then, use the hotkeys to adjust the video compensation accordingly. You can use the hotkey sequence as outlined in the section titled Keyboard Shortcut Command Sequences.

Using the SV565UTP KVM Extender

This section details how to use your KVM extender at both the host and remote locations.

Using the Host Unit

The Host Unit performs two functions: it allows a user at the Remote Unit to assume control of the computer on the Host Unit (Computer A), and it also permits the user at the Host Unit to use Computer A. It has three modes that control which user may access the system at a given time: Auto (the KVM extender looks for keyboard or mouse activity from both Host and Remote and automatically accepts input from the active console), Local (only the user seated at the Host Unit can access the system), and Remote (only the user at the Remote Unit can access Computer A).

You can use either keyboard shortcuts (if there is a keyboard and mouse attached) or the mode switch on the top of the Host Unit to control which user has access to Computer A. By default, the Host Unit operates in Auto mode, and switches to the next mode in the sequence each time the switch is pressed as follows:



Having a keyboard and mouse attached to the console ports on the Host Unit is recommended since it offers access to a number of extended features.

LED Indicators

Mode	'A' Indicator	'B' Indicator
Auto (Auto senses activity)	Flashing	Flashing
Local (User at Host Unit has control)	ON	OFF
Remote (User at Remote Unit has control)	OFF	ON

Keyboard Shortcut Command Sequences

Standard Hotkey	Hotkey with Compatibility Mode	Description
[Ctrl] - [Ctrl] - [T]	[Ctrl] - [Ctrl] - [T]	Toggles control of Computer A between Auto, Local, Remote modes
[Ctrl] - [Ctrl] - [Esc]	[Ctrl] - [Ctrl] - [Esc]	Cancels the hotkey sequence
[Ctrl] - [Ctrl] - [Alt]+[E]	[Ctrl] - [Ctrl] - [Alt]+[E]	Enables (2 beeps) or disables (1 beep) Compatibility Mode so that the KVM extender will work with a KVM switch that also uses a [Ctrl] hotkey sequence
[Ctrl] - [Ctrl] - [1]	[Ctrl] - [Ctrl] - [E] - [1]	Local Mode: Allows the user at Host Unit exclusive access to Computer A; remote access from Remote Unit is disabled
[Ctrl] - [Ctrl] - [2]	[Ctrl] - [Ctrl] - [E] - [2]	Remote Mode: Allows the console at Remote Unit exclusive access to Computer A; access to Computer A from the Host Unit is disabled
[Ctrl] - [Ctrl] - [3]	[Ctrl] - [Ctrl] - [E] - [3]	Auto Mode : Wait for console activity
[Ctrl] - [Ctrl] - [F3]	[Ctrl] - [Ctrl] - [E] - [F3]	Sets the interval of inactivity in seconds that the Host Unit will wait before returning to Auto Mode
[Ctrl] - [Ctrl] - [F4]	[Ctrl] - [Ctrl] - [E] - [F4]	Adjusts the typematic rate for improved keyboard responsiveness

Standard Hotkey	Hotkey with Compatibility Mode	Description
		<p>Privacy Setting:</p> <p>A. Host Unit in Local mode (LED B: Off, LED A: On)</p> <p>1 beep: Reset to Factory Default.</p> <p>2/3 beeps: Disable the Host Unit video output signal.</p> <p>B. Host Unit in Auto mode (LED A&B flashes alternately)</p> <p>1 beep: Reset to Factory Default</p> <p>2 beeps: Upon keyboard/mouse activation, disables the Host Unit video output temporarily. (Set for 5,15,30 or 60 second interval)</p> <p>3 beeps: Upon keyboard/mouse activation the Remote Unit or Host Unit users can disable the output video signal temporarily.</p> <p>(The user can protect their privacy for 5, 15, 30,60 seconds)</p>
[Ctrl] - [Ctrl] - [F6]	[Ctrl] - [Ctrl] - [E] - [F6]	Resets PS/2 mouse synchronization

Beep Codes

Some of the keyboard command sequences you issue to the Host Unit have multiple possible settings. The Unit will beep to indicate what setting you have selected for the command you issued. (A short beep followed by a long beep indicates an invalid command.)

[Ctrl] - [Ctrl] - [Alt]+[E] (Compatibility Mode)

1 beep: disabled

2 beeps: enabled

[Ctrl] - [Ctrl] - [F3] (Inactivity Interval for Auto Mode)

1 beep: 5 seconds

2 beeps: 15 seconds

3 beeps: 30 seconds

4 beeps: 60 seconds

[Ctrl] - [Ctrl] - [F4] (Typematic Rate)

1 beep: 6 characters/sec.

2 beeps: 12 characters/sec.

3 beeps: 20 characters/sec.

4 beeps: 30 characters/sec.

Note: Commands described in the [Key] - [Key] format are keys that must be pressed in order on the keyboard. Commands described in the [Key]+[Key] format must be pressed simultaneously.

Note: If the Num Lock, Caps Lock, and Scroll Lock lights are flashing in unison on the keyboard, the other Unit has control of Computer A. You will not be able to use the computer or issue commands until the other unit has finished using the computer.

Note: If the Extender is operating in Compatibility Mode ([Ctrl] - [Ctrl] - [E] (hotkey sequence), you must enter [Ctrl] - [Ctrl] - [E] - [E] to access port E on the attached KVM switch.

Using Remote Unit

Like the Host Unit, the Remote Unit performs two functions: it allows a user at the Remote Unit to assume control of Computer A if the Host Unit is set to Auto or Remote mode, and it also permits the user seated at the Remote Unit to use a locally connected computer (Computer B) as though the SV565UTP KVM extender was transparent.

You can use either keyboard shortcuts or the mode switch on the top of the Remote Unit to alternate control between A and B. Unlike the Host Unit, however, the switch on top of the Remote unit only offers two selectable modes:



Mode	'A' Indicator	'B' Indicator
Remote Access (Computer A)	ON	OFF
Local Access (Computer B)	OFF	ON

Keyboard Shortcut Command Sequences

Standard Hotkey	Hotkey with Compatibility Mode	Description
[Ctrl] - [Ctrl] - [T]	[Ctrl] - [Ctrl] - [T]	Toggles console control between Local Access and Remote Access
[Ctrl] - [Ctrl] - [Esc]	[Ctrl] - [Ctrl] - [Esc]	Cancels the hotkey sequence
[Ctrl] - [Ctrl] - [Alt]+[E]	[Ctrl] - [Ctrl] - [Alt]+[E]	Enables (2 beeps) or disables (1beep) Compatibility Mode so that the KVM extender will work with a KVM switch that also uses a [Ctrl] hotkey sequence

Standard Hotkey	Hotkey with Compatibility Mode	Description
[Ctrl] - [Ctrl] - [1]	[Ctrl] - [Ctrl] - [E] - [1]	Switches control to Computer B
[Ctrl] - [Ctrl] - [2]	[Ctrl] - [Ctrl] - [E] - [2]	Switches control to Computer A (input allowed only if the Host Unit is in Remote or Auto mode)
[Ctrl] - [Ctrl] - [F2]	[Ctrl] - [Ctrl] - [E] - [F2]	Toggles console control between Computer A and Computer B
[Ctrl] - [Ctrl] - [F4]	[Ctrl] - [Ctrl] - [E] - [F4]	Adjusts the typematic rate for improved keyboard responsiveness (PS/2 keyboard only)
[Ctrl] - [Ctrl] - [F11]	[Ctrl] - [Ctrl] - [E] - [F11]	Adjusts remote video quality based on length of UTP cabling between the two computers (available only when switched to Computer A)
[Ctrl] - [Ctrl] - [F12]	[Ctrl] - [Ctrl] - [E] - [F12]	Resets PS/2 mouse synchronization

Beep Codes

Some of the keyboard command sequences you issue to the Remote Unit have multiple possible settings. The Unit will beep to indicate what setting you have selected for the command you issued. (A short beep followed by a long beep indicates an invalid command.)

[Ctrl] - [Ctrl] - [Alt]+[E] (Compatibility Mode)

1 beep: disabled

2 beeps: enabled

[Ctrl] - [Ctrl] - [F11] (Remote Image Quality Adjustment)

1 beep: 0 ~ 100 feet (0 ~ 30 meters) of UTP cable length

2 beeps: 100 ~ 200 feet (30 ~ 60 meters) of UTP cable length

3 beeps: 200 ~ 300 feet (60 ~ 90 meters) of UTP cable length

4 beeps: 300 ~ 400 feet (90 ~ 120 meters) of UTP cable length

5 beeps: 400 ~ 500 feet (120 ~ 150 meters) of UTP cable length

[Ctrl] - [Ctrl] - [F4] (Typematic Rate)

1 beep: 6 characters/sec.

2 beeps: 12 characters/sec.

3 beeps: 20 characters/sec.

4 beeps: 30 characters/sec.

Note: Commands described in the [Key] - [Key] format are keys that must be pressed in order on the keyboard. Commands described in the [Key]+[Key] format must be pressed simultaneously.

Note: If the Num Lock, Caps Lock, and Scroll Lock lights are flashing in unison on the keyboard, the other Unit has control of Computer A. You will not be able to use A until the other Unit releases access to that computer.

Note: If the Extender is operating in Compatibility Mode ([Ctrl] - [Ctrl] - [E] hotkey sequence), you must enter [Ctrl] - [Ctrl] - [E] - [E] to access port E on the attached KVM switch.

Troubleshooting

How do the A and B modes work for the local and remote units?

In order to properly control the local computer at the remote end, it is useful to understand the different possible states the two units can be in.

Note: In the following descriptions, “console” refers to the mouse, keyboard, and monitor plugged into the local or remote units.

Local unit is set to A + remote unit is set to A

- The local console has control over the local computer.
- The remote console can see what is happening on the local computer. This functionality can be changed so that when the local unit has control over the local computer, the remote console sees a black screen, and vice versa.

Local unit is set to A + remote unit is set to B

- The local console has control over the local computer.
- The remote console has control over the remote computer.

Local unit is set to B + remote unit is set to A

- The local console can see what is happening on the local computer. This functionality can be changed so that when the local unit has control over the local computer, the remote console sees a black screen, and vice versa.
- The remote console has control over the local computer.

Local unit is set to B + remote unit is set to B

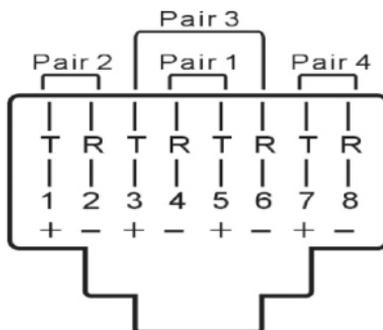
- The local console can see what is happening on the local computer. This functionality can be changed so that when the local unit has control over the local computer, the remote console sees a black screen, and vice versa.
- The remote console has control over the remote computer.

Specifications

Connectors (Host Unit)	1 x DE - 15 VGA video 2 x PS/2 keyboard/mouse 1 x RJ45 port 1 x DE-15 KVM cable port
Connectors (Remote Unit)	1 x DE-15 VGA video 2 x PS/2 keyboard/mouse 1 x RJ45 port 1 x DE-15 KVM cable port
Maximum Distance	150m/500ft
Maximum Video Resolution	1024x768
Power Adapter	9V DC, 600mA, center positive
Dimensions (per unit)	75.0mm x 155.0mm x 20.0mm
Weight (per unit)	299g

RJ-45 Connector Pinout

Pin	Color	Pair	Function
1	White/Orange	2	T
2	Orange	2	R
3	White/Green	3	T
4	Blue	1	R
5	White/Blue	1	T
6	Green	3	R
7	White/Brown	4	T
8	Brown	4	R



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Warranty Information

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