ST☆RVIEW

Server Sharer KVM Switch

User's Manual

SV821EM
SV1621EM

StarTech.com

REGISTERED ISO 9001

Packing List

- SV821EM (8-port) or SV1621EM (16-port) Multimedia StarView Server Sharer
- DB37 Male-to-Male Chain Cable
- User's Manual
- AC Power Adapter
- Rackmount Accessories
- Rubber Foot Pads

Please read this manual thoroughly and follow the installation procedures to prevent any damage to the StarView unit and/or the connecting devices.

Introduction

The StarView Multimedia Server Sharer CPU Switch, henceforth called "Multimedia StarView", is a control unit that allows access to multiple computers from a single console (keyboard, mouse, monitor, speakers and microphone). The Multimedia StarView provides the easiest and most cost-effective way to access more than one multimedia computer.

The Multimedia StarView provides three convenient methods to access connected computers: front panel pushbuttons, Hot-Keys, or user-friendly On Screen Display (OSD) menu. The StarView intercepts and processes Hot-Key commands directly from the keyboard, so there are no software programs to configure, no installation routines, and no incompatibility problems with various hardware platforms and operating systems. The control unit also includes built-in PS/2 and serial mouse conversion.

The Multimedia StarView can control up to 8/16 computers in standalone operation. Up to 128 computers can be controlled from a single console if several StarViews are combined. A powerful SCAN mode allows the user to automatically monitor all operational computers one-by-one.

There is no better way to save money than with a Multimedia StarView. By allowing a single console to manage multiple computers, the StarView switch eliminates the need to purchase a separate keyboard, monitor, mouse, microphone, and stereo speaker set for each computer. The Multimedia StarView also saves space and improves productivity, making it ideal for server rooms and multimedia control environments.

Features

- Multimedia Capable: Control many multimedia PCs from a single console (keyboard, mouse, monitor, stereo speakers and microphone).
- Easy-to-Install: No software is required. Use StarTech's custom all-in-one cables to connect computers to the StarView unit (refer to Hardware Requirements).
- Easy-to-Use: Includes user-friendly On Screen Display (OSD) menu interface with definable channel names.

- Multiple Channel Switching Modes: Select computers via Pushbutton Switches, Keyboard Hot-Keys, or On Screen Display (OSD) Menu.
- Built-in Mouse Conversion: A single PS/2 mouse controls any connected PC, whether those PCs use PS/2 or Serial mice.
- Supports PC-AT, PS/2 keyboard, PS/2 mouse, Microsoft IntelliMouse, etc.
- Great Video Quality: High 150 MHz video bandwidth to support SVGA, VGA, and Multisync monitors. Supports VESA DDC1/2B standard.
- Intelligent Switching: Keyboard states and typematic rates are automatically stored and restored when switching between computers. Keyboard and mouse emulation for all inactive channels.
- Auto-Scan Mode: Automatically switches between powered-on computers. Scan rate is selectable via OSD menu.
- Versatile Enclosure: Can be placed on a desktop or standard 19" equipment rack.
- Expandable: Chain up to 8 levels using the included Chain Cable, to control a maximum of 128 multimedia PCs from one console.

Hardware Requirements

Console

- One VGA, SVGA, or Multisync monitor capable of the highest resolution that you will be using on any PC in the installation
- One PS/2-style mouse
- One PS/2-style keyboard or AT-style keyboard plus keyboard adapter
- One stereo speaker set with 3.5mm stereo plug (if you want to use mulimedia capabilities)
- One microphone with 3.5mm mono plug (if you want to use multimedia capabilities)

PC

The following equipment must be installed on each PC that is to be connected to the system:

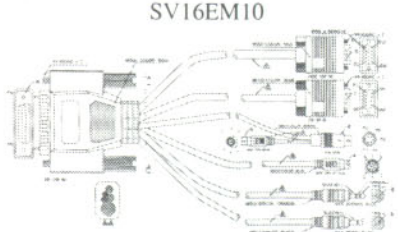
- A VGA, SVGA, or MultiSync video card
- A 6-pin mini-DIN (PS/2-style) or DB-9 (standard serial) mouse port
- A 6-pin mini-DIN (PS/2-style) or 5-pin DIN (AT-style) keyboard port

Cables

You will need one of the following cables for each PC-to-StarView connection. Each cable includes connectors for keyboard, mouse, video (HD DB15 connectors), stereo speakers, and microphone.

- SV16EM10 - for AT- and PS/2-style connections

SV16EM10



The function of each connector is clearly labeled for easy reference and installation.

Installation

Before you begin, make sure that power is turned off to all the devices.

Setting up one Multimedia StarView

- Set the bank address to 0, the master bank. (Refer to Appendix)
- Connect the console devices (keyboard, mouse, monitor, stereo speakers, and microphone) to the "CONSOLE" section in the Multimedia StarView's back panel.
- Connect the computers (using the appropriate StarTech cables) to the StarView's "PC" ports.
- Connect the AC power adapter to the StarView.
- Power on the StarView, then turn on the computers.

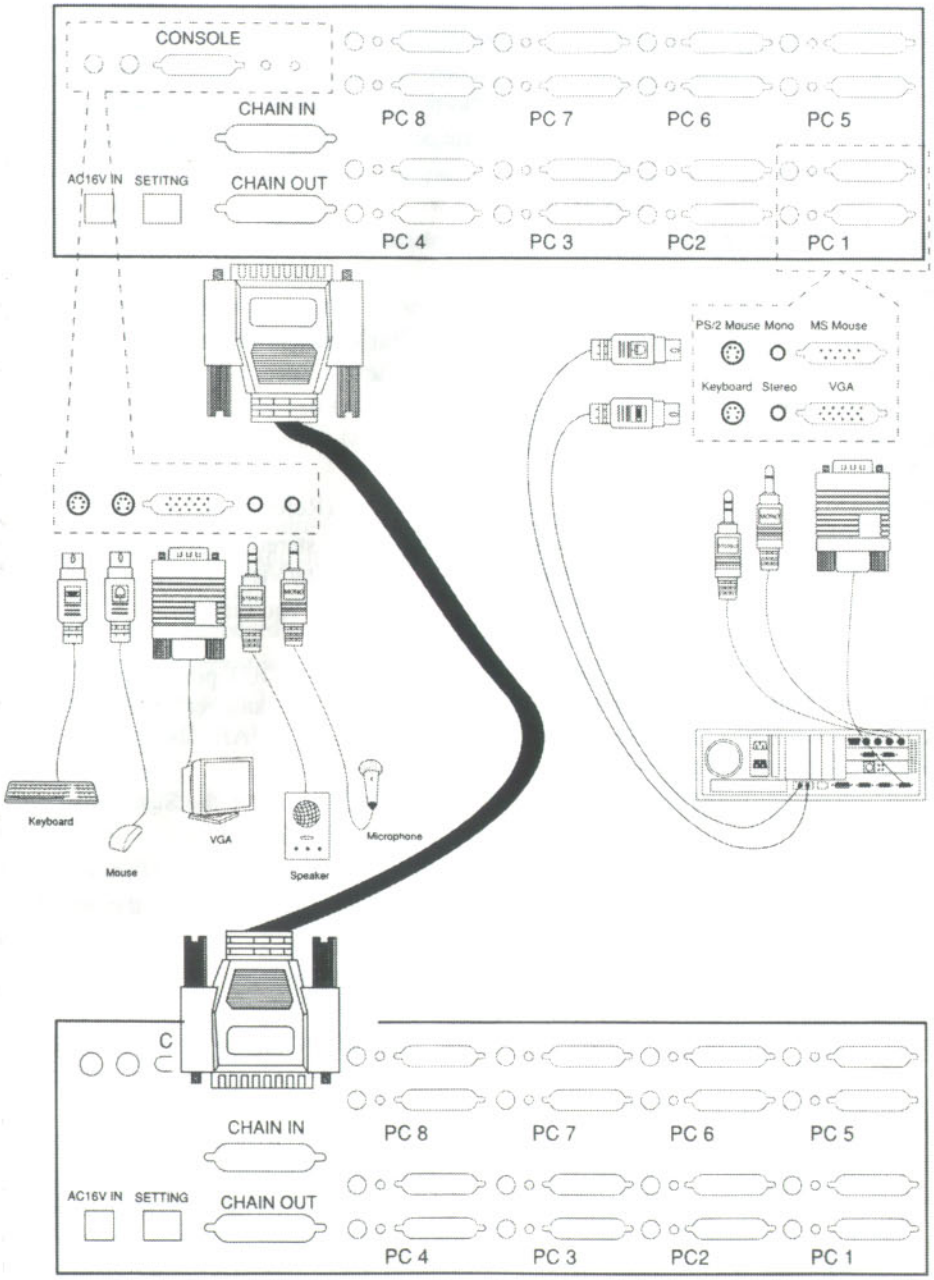
Setting up Multiple Multimedia StarViews

The "CHAIN OUT" port of one Multimedia StarView can be connected to the "CHAIN IN" port of another Multimedia StarView, in order to access more computers from a single console. By connecting up to eight 16-port Multimedia StarViews together (via the included Chain Cables), you can control as many as 128 separate multimedia PCs.

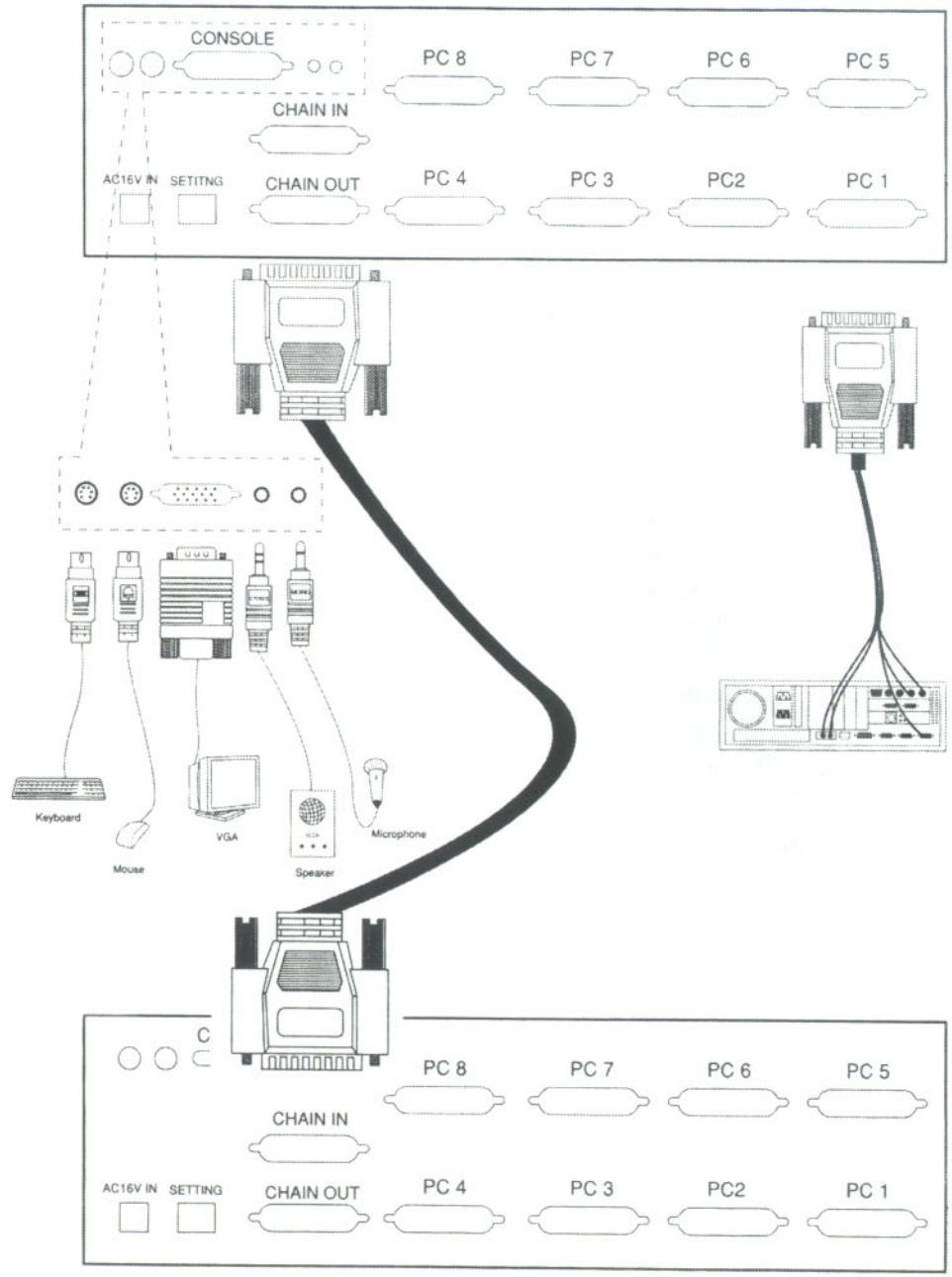
- Set one StarView's bank address to 0, the master bank. (Refer to Appendix)
- Connect the console devices (keyboard, mouse, monitor, stereo speakers, and microphone) to the "CONSOLE" section on the master StarView.
- Set other StarViews' bank address to 1-7, the slave banks. You may assign any number, as long as each StarView has a different bank address.
- Use the included DB37 Chain Cable to connect the CHAIN OUT port of the MASTER to the CHAIN IN port of the first slave blank. Use another Chain Cable to connect the CHAIN OUT port of the first slave bank to the CHAIN IN port of the second slave bank, and so forth.
- Connect the computers (using the appropriate StarTech cables) to the StarViews' "PC" ports.
- Connect an AC power adapter to each StarView.
- Power on the slave banks first, then the master bank, then finally turn on the computers.

Note: When Multimedia StarViews are chained together, only the front panel push buttons of the master bank will remain functional.

Master CPU Switch
StarView SV821EM



Master CPU Switch
StarView SV1621EM



Operation

The Multimedia StarView provides three (3) methods provide instant access to the connected PCs:

- Pushbutton switches
- Keyboard Hot-Keys
- On Screen Display (OSD) Menu

Pushbutton Switches:

There are two different modes of pushbutton functions corresponding to the setting of the MODE DIP Switch (refer to Appendix).

With MODE DIP Switch set to ON:

- The left button is BANK+. If the StarView is in chained operation, then this button will advance to the next available bank.
- The right button is CH+. Push this button to advance to the next powered-on PC within the specified bank. It will not cross the bank boundaries.

With MODE DIP Switch set to OFF:

- The left button is CH-. Push this button to go back to the previous powered-on PC. It will cross the bank boundaries.
- The right button is CH+. Push this button to advance to next powered-on PC. It will cross the bank boundaries.

If the CH+ button is pushed and held over 1 second, the SCAN LED will illuminate and the buzzer will beep twice. The StarView will enter SCAN mode, which automatically switches between PCs at regular intervals so that you can monitor their activity. To return to NORMAL mode, push the CH+ button and release within 1 second, or press the SPACE key on the keyboard.

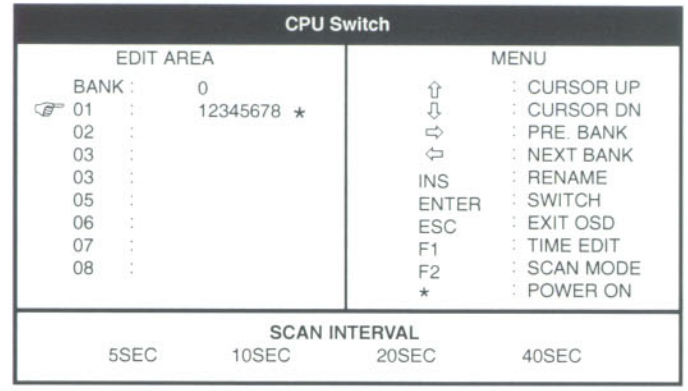
Keyboard Hot-Keys

Press the Scroll Lock key twice within 1 second to enter Hot-Key mode. The keyboard status LED will flash to indicate Hot-Key mode until the ESC key is pressed to exit this mode. During Hot-Key mode:

- Press the RIGHT SHIFT key to switch to the next powered-on PC.
- Press the LEFT SHIFT key to switch to previous powered-on PC.
- Press the 'b' key followed by a 1-digit number to select a bank directly (e.g. b0 will switch to BANK0, b2 will switch to BANK2).
- Press the 'c' key followed by a 2-digit number to select a PC directly (e.g. c01 will switch to PC01, c05 will switch to PC05).
- Press the 's' key to exit Hot-Key mode and enter SCAN mode.

On Screen Display (OSD)

Press the Scroll Lock key twice within 1 second to enter Hot-Key mode. Then press SPACE key to call out the OSD menu.



The OSD menu is divided into EDIT AREA, SCAN INTERVAL, and MENU.

Edit Area:

- 'BANK' indicates the currently selected BANK location. Use the LEFT/RIGHT arrow keys to switch to other available banks.
- The 'pointing hand' cursor indicates the currently selected PC. Use the UP/DOWN arrow keys to switch to other PCs.
- The area to the right of the PC number is used to edit or display the name of the PC. Press the INS key to edit the PC name (maximum length of 8 characters).
- An asterisk indicates powered-on PCs. Move the cursor and press ENTER key to switch to other powered-on PCs, or press ESC to exit the OSD menu without switching.
- Press F2 key to exit the OSD menu and enter SCAN mode.

Scan Interval:

- When the EDIT AREA is active, press F1 to switch to the SCAN INTERVAL area. Use the LEFT/RIGHT arrow keys to select a desired scan interval. Press ENTER to return to the EDIT AREA.

Appendix

DIP Switch Settings

MODE DIP Switch 4 is used to set Front Panel Push Button Mode.

DIP Switch Number			
1	2	3	
ON	ON	ON	BANK 0 MASTER
OFF	ON	ON	BANK 1 SLAVE
ON	OFF	OFF	BANK 2 SLAVE
OFF	OFF	OFF	BANK 3 SLAVE
ON	ON	ON	BANK 4 SLAVE
OFF	ON	ON	BANK 5 SLAVE
ON	OFF	OFF	BANK 6 SLAVE
OFF	OFF	OFF	BANK 7 SLAVE

LED Display

BANK LED:

For master bank, BANK LED displays the selected bank number.

For slave banks, BANK LED displays the bank address of the slave.

CHANNEL LED:

For master bank, CHANNEL LED displays the selected PC number.

For slave banks, CHANNEL LED is blank.

SCAN LED:

Indicates SCAN mode status.

Troubleshooting

Note: If you are experiencing problems, first check the cables and connections.

Symptom	Causes	Action
No response from hot keys	StarView is in SCAN mode	Press CH+ button or SPACE BAR to exit SCAN mode
	The selected PC currently does not accept keyboard input (often occurs during PC boot sequence)	Wait for PC to complete boot-up sequence, or change port by presing pushbutton.
	Improper keyboard reset	Unplug then re-plug the keyboard into the StarView
No response from push buttons	StarView currently in Hot-Key mode	Press ESC to exit Hot-Key mode
Mouse is not responding	StarView currently in Hot-Key mode	Press ESC to exit Hot-Key mode
	Improper reset	Turn off all PCs, then turn off StarView. Wait 3 seconds, turn on all PCs
StarView not responding at all	Incorrect bank address setting	Set correct bank address.

Specifications

Model	SV821EM	SV1621EM
Number of PC Ports	8	16
PC Selection Method	Pushbutton Switch / Kyboard Hot-Keys / OSD Menu	
Scan Interval	5 / 10 / 20 / 40 seconds	
Signal Type	VGA / Keyboard / Mouse / Stereo Audio / Microphone	
VGA Bandwidth	150 MHz	
Chain Capability	Up to 8 levels	
Console Connectors	Video: HDDB15 Female Keyboard: 6-pin miniDIN Mouse: 6-pin miniDIN Speakers: 3.5mm stereo socket Microphone: 3.5mm mono socket	
PC Port Connector	DB25 Female	DB25 Female
Chain Connector	DB37 Female	
Maximum Cable Length	PC-to-StarView: 115ft. (35m), Console-to-StarView: 164 ft. (50m)	
Power Supply	AC 16V 100mA	
Enclosure	Metal, Rackmountable	
Dimensions	W17.3xD7.9xH3.5" (44x20x9cm)	
Weight	7.55 lb (3425g)	8.38 lbs (3800g)

Accessories

Part Number	Description
SV16EM10	10 Ft. AT and PS/2-style cable for Multimedia StarView

Preventing Radio & TV Interference

WARNING! This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC Rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area is likely to cause interference in which case the user at his own expense will be required to take whatever measures may be required to correct the interference.

Limited Warranty

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