

# Smart-AM

SMART AUDIO VIDEO INNOVATION

## SKM-08

**8-Port Keyboard and Mouse Switch  
with USB 2.0 Sharing**



**Allows sharing a single keyboard & mouse on  
up to eight computers with multiple displays**

**USER MANUAL**  
(rev 2.0)

## TECHNICAL SPECIFICATIONS

USB	
Signal Type	USB 2.0, 1.1, and 1.0 w/ internal hub
CPU Ports	(8) USB Type B (female)
User Console Interface	(2) USB Type-A for keyboard and mouse connection only
	(2) USB Type-A for USB 2.0 Transparent

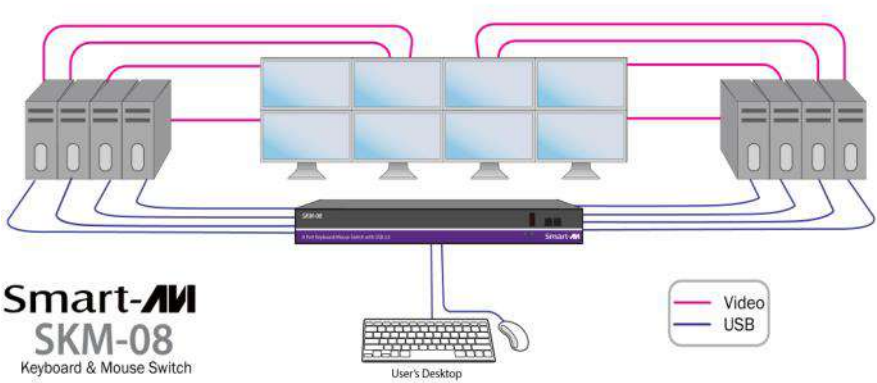
CONTROL	
Front Panel	Tactile Switch (for port selection)
RS-232	Via Control @ 9600 bps
Hotkeys	Via Keyboard
Mouse	Progressive Automatic Port Switching and Mouse Gesture Switching

OTHER	
Power	External 5VDC4A
Dimensions	12.6" W x 1.75" H x 6.6" D
Weight	1.5 lbs.
Approvals	UL, CE, ROHS Compliant
Operating Temp.	32-131 °F (0-55 °C)
Storage Temp.	-4-185 °F (-20-85 °C)
Humidity	Up to 95%
Emulation	Keyboard and Mouse

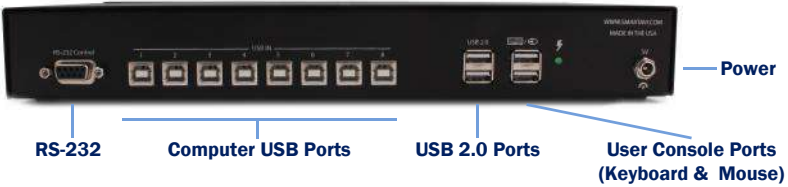
## WHAT'S IN THE BOX?

PART NO.	QTY	DESCRIPTION
SKM-08S	1	SKM-08 (8-Port Keyboard and Mouse Switch)
PS5VDC4A	1	5VDC4A Power Supply
User Manual	1	

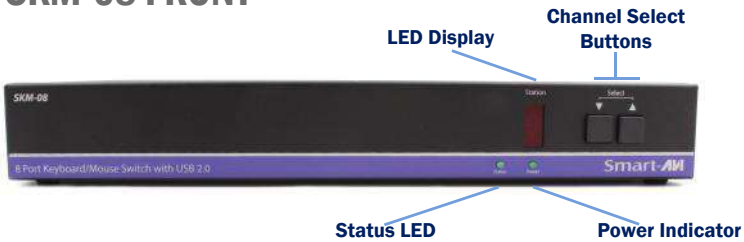
# APPLICATION DIAGRAM



# SKM-08 REAR



# SKM-08 FRONT



# CONNECTING THE SKM-08

1. Ensure that power is disconnected from SKM-08.
2. Each PC must have at least 1 display connected.
3. Use a USB cable (Type-A to Type-B) to connect a USB port on the computer to the respective port of the SKM-08. Do this for each of the computers.
4. Optionally connect RS-232 for control functions.
5. Connect the USB keyboard and mouse to the two USB ports right-hand ports on the SKM-08.
6. Optionally connect up to two USB 2.0 devices (flash drive, printer, etc.) to the two USB ports on the left .
7. Power on the SKM-08

*Selecting a channel using the two front panel buttons will control all devices (keyboard, mouse, and USB 2.0 peripherals)*

## SKM-08 INITIAL SETUP

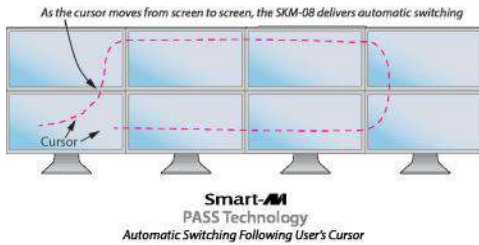
After connecting all devices to the SKM-08, a display topology configuration and display mode must be chosen. By default, SKM-08 is configured to Single-Head mode and a topology with 8 screens arranged horizontally starting with port 1 on the most left-hand side.

1. The installation setup must match one of SKM-08's predefined display topology configuration. This can be selected through keyboard hotkey commands or through RS-232. Please refer to the "Display Topology Configuration" for the available display topologies.
2. If one or more of the input computers have multiple displays, Multi-Head Display Mode must be selected. Otherwise, select Single-Head mode. Please refer to the table below for the commands:

COMMANDS	HOTKEYS	RS-232 CONTROL
Single-Head Display Mode	CTRL + CTRL + k + s	//ks
Multi-Head Display Mode	CTRL + CTRL + k + m	//km

## SINGLE-HEAD MODE KM SWITCHING

SmartAVI's new **PASS** (Progressive Automatic Screen Switching) technology allows seamless switching between computers by moving the mouse cursor from one display to another. With PASS, users can effortlessly switch computers for faster productivity.

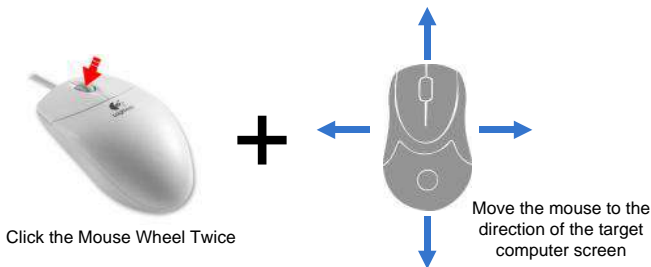


*\*PASS only works in Single-Head mode.*

## MULTI-HEAD MODE KM SWITCHING

When using computers with multiple displays, SmartAVI developed a new feature called **Mouse Gesture Switching** technology that allows switching between computers through the use of simple mouse clicks and gestures. No device driver is required.

Simply press the scroll wheel twice and then move the mouse in the direction of the channel you desire to switch.



*\*This feature only works in Multi-Head display mode.*

## OTHER METHODS TO CONTROL SKM-08

### Front Panel Control

To switch ports using the front panel, press the *UP* button to increase the port number and *DOWN* button to decrease the port number.

### Hotkey Commands

The Hotkey command is a keyboard sequence used to trigger an action on the SKM-08 through the use of the keyboard connected on the USB port of the SKM-08. To activate the hotkey sequence, press the **CTRL** key twice and then enter the desired hotkey commands.

### RS-232 Control

Use a male-to-female serial cable to connect a computer to the RS-232 port of the SKM-08. Use terminal client software such as the **HyperTerminal** to connect to the SKM-08. Make sure to use the standard communication mode of **9600 bps, 8, N, 1, No Flow Control**. This port can also be used for software upgrade.

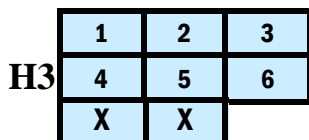
# RS-232 and HOTKEY COMMANDS

\*\* All commands can use upper and/or lower case characters

COMMANDS	HOTKEYS	RS-232 CONTROL
Switch Keyboard and Mouse <b>only</b>	CTRL + CTRL + M + Port# + ENTER	//M [port #]<CR>
Navigate to Next Channel	CTRL + CTRL + ▲ (arrow key)	*(N/A)
Navigate to Previous Channel	CTRL + CTRL + ▼ (arrow key)	*(N/A)
Switch USB 2.0 <b>only</b>	CTRL + CTRL + U + Port# + ENTER	//U [port #]<CR>
Software Reset	CTRL + CTRL + R	//R
Factory Default Settings	CTRL + CTRL + F	//F
Single-Head Display Mode	CTRL + CTRL + K + S	//KS
Multi-Head Display Mode	CTRL + CTRL + K + M	//KM
Display Topology (* <b>multiple rows</b> )	CTRL + CTRL + H(1–8)	//H (1-8)
Limit Input Ports (* <b>one row only</b> )	CTRL + CTRL + W(1–8)	//W (1-8)
Cursor Rolling (roll past display borders up, down, left, and right)	CTRL + CTRL + O (0–OFF) or (1–ON)	//O (0–OFF) or (1–ON)

\*\* Display Topology specifies the number of horizontal columns. The number of vertical rows is calculated in the software by 8/n columns.

For example: CTRL + CTRL+ H3 makes **three columns**, and 8/3 makes **2 rows**.



# DISPLAY TOPOLOGY CONFIGURATION

The SKM-08 has a configurable display topology configuration that can be easily activated through keyboard hotkeys or through RS-232 commands. No software or drivers are required to configure display topology.

**Note:** Hotkey CTRL+CTRL command allows for multiple rows.

(1) Hotkey Command: "CTRL + CTRL + H + 8 + ENTER"

RS-232 Command: //H8<CR>

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

(2) Hotkey Command: "CTRL + CTRL + H + 4 + ENTER"

RS-232 Command: //H4<CR>

1	2	3	4
5	6	7	8

(3) Hotkey Command: "CTRL + CTRL + H + 2 + ENTER"

RS-232 Command: //H2<CR>

1	2
3	4
5	6
7	8

(4) Hotkey Command: "CTRL + CTRL + H + 1 + ENTER"

RS-232 Command: //H1<CR>

1
2
3
4
5
6
7
8

Each of the cells shown represents a display or multiple displays from a computer.

Notes:

- PASS Technology can only be used in Single-Head display mode.

- Multi-Head display mode switching must be used if any of the eight computers have multiple displays.



# DISPLAY TOPOLOGY CONFIGURATION (CONT.)

Hotkey Commands: CTRL+CTRL H(X) commands (allows for **multiple rows**):

RS-232 Command: //H(X)

H7<CR>

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Show ports 1-7 (H7)

H6<CR>

1	2	3	4	5	6
---	---	---	---	---	---

Show ports 1-6 (H6)

H5<CR>

1	2	3	4	5
---	---	---	---	---

Show ports 1-5 (H5)

H3<CR>

1	2	3
4	5	6

Show ports 1-6 (H3)  
*\*Note: Ports 7 + 8 N/A*

# LIMIT INPUT PORTS CONFIGURATION

Hotkey Commands: CTRL, CTRL W(X) commands (allows **one row only**):

RS-232 Command: //W(X)

W8<CR>

1	2	3	4	5	6	7	8
---	---	---	---	---	---	---	---

W7<CR>

1	2	3	4	5	6	7
---	---	---	---	---	---	---

*\*Note: Port 8 N/A*

W6<CR>

1	2	3	4	5	6
---	---	---	---	---	---

*\*Note: Port 7, 8 N/A*

W5<CR>

1	2	3	4	5
---	---	---	---	---

*\*Note: Port 6-8 N/A*

W4<CR>

1	2	3	4
---	---	---	---

*\*Note: Port 5-8 N/A*

W3<CR>

1	2	3
---	---	---

*\*Note: Port 4-8 N/A*

W2<CR>

1	2
---	---

*\*Note: Port 3-8 N/A*

W1<CR>

1
---

*\*Note: Port 2-8 N/A*

*\*\* Limit Input Ports commands reset Display Topology configuration*

*\*\* Display Topology commands reset configuration to limit input ports*

## INDEPENDENT USB 2.0 SWITCHING

The USB 2.0 Hub on the SKM-08 may be used for USB 2.0 devices such as printers, web cams, flash drives, and so on. Devices plugged in to the SKM-08's USB 2.0 hub may be switched independently from keyboard and mouse user control via hotkey or RS-232 commands:

Hotkey Command: *CTRL + CTRL + U + port# + ENTER*

or

RS-232 Command: *//U [port #]<CR>*.

### **NOTE:**

Switching using PASS technology or Multi-Head mouse switching will not switch USB 2.0 devices.

You can copy files to a flash drive on a computer using the USB 2.0 hub while controlling another target computer.

# Smart-AVI

SMART AUDIO VIDEO INNOVATION

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