VIDEO MATRIX SWITCH

USER MANUAL

VS-0202
VS-0204

Read this guide thoroughly and follow the installation and operation procedures carefully in order to prevent any damage to the units and/or any devices that connect to them.

This package contains:

- 1 VS-0202 or VS-0204 Video Matrix Switch
- 1 VGA/Audio Cable (1.8m)
- 1 Power Adapter
- 1 Quick Start Guide
- 1 User Manual

If anything is damaged or missing, contact your dealer.

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Manual Part No. PAPE-1268-100G
Printing Date: 03/2006

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Note: 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 instruction manual, may cause 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 which the receiver is connected;
- Consult the dealer or an experienced radio/television technician for help.

This product is RoHS compliant.

Overview

The VS-0202 / VS-0204 Video Matrix Switch combines the capability of a video switcher and signal splitter. It duplicates and enhances the video and audio signals from up to two input sources (computers), and routes them to two / four output devices (monitors, projectors, etc.).

The VS-0202 / VS-0204 provides fast, flexible, reliable solutions for installations that require audio-visual information from multiple sources to be delivered to multiple destinations – such as:

- Broadcasting information to public locations (news, airline and train schedule and arrival/departure information).
- Sporting events
- Theater and lecture overflow rooms
- Classroom and company training facilities

Clearly marked front panel switches and LED indicators make it easy to link sources with desired output devices, creating a matrix of presentation possibilities.

Features

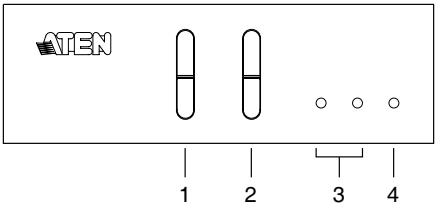
- Front panel push button switches select the combination of video input to video output
- Duplicates and enhances video signals up to 65 m (max.)
- Cascadable
- Seamless electronic switching
- No additional hardware or software needed

Installation Requirements

- A VGA, SVGA, XGA or Multisync monitor capable of the highest resolution that you will be using on any computer in the installation for each output port you will be using.
- Speakers for each output port you will be using (optional).
- A video cable with HDB-15 connectors (male on one end and female on the other end) for each computer you will be installing.
- An audio cable for each computer you will be installing.

Hardware Overview

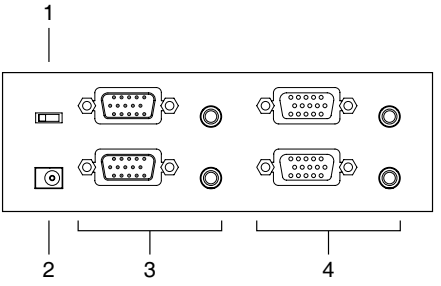
VS-0202 Front View*



No.	Description	Function
1	Display 1 Input Select Switch	This switch selects the input that will be sent to output 1. ◆ Green LED On indicates display from Input 1 ◆ Orange LED On indicates display from Input 2
2	Display 2 Input Select Switch	This switch selects the input that will be sent to output 2. ◆ Green LED On indicates display from Input 1 ◆ Orange LED On indicates display from Input 2
3	Source LEDs	Each of these LEDs corresponds to an input port. A lit LED indicates data transmission from the source connected to its corresponding input port.
4	Power LED	Lights to indicate that the unit is receiving power.

* The front panel of the VS-0204 is identical to that of the VS-0202, except that it has two additional Input Select Switches.

VS-0202 Rear View*



No.	Description	Function
1	Video Gain Switch (VS-0202 only)	Adjust this three position switch to improve video signal strength. It is especially useful when the monitor cable is longer than a few meters or when cascading the video signal to other video splitters.
2	Power Jack	The Power Adapter cable plugs in here.
3	Video / Audio IN Ports	The video and audio cables from the computer's video (monitor) and audio (speaker) output ports plug in here.
4	Video / Audio OUT Ports	The video and audio cables from the monitors and speakers plug in here.

* The rear panel of the VS-0204 is identical to that of the VS-0202, except that it has two additional Video/Audio OUT ports.

Hardware Installation

Before you Begin

1. Make sure that the power to all the devices you will be connecting up has been turned off.
2. Make sure that all devices you will be connecting up are properly grounded.

Single Stage

Setting up the Video Matrix Switch is simply a matter of plugging in the cables. Refer to the installation diagram on the next page (the numbers in the diagram correspond to the numbered steps) and do the following:

1. Use a high density HDB-15 male/female VGA cable to connect the computer's video port to any available video input port on the Video Matrix Switch.
2. Use a male/male audio cable to connect the computer's speaker port to the audio input port that corresponds to the video input port you connected in step 1.
3. Connect the monitor to any available video output port on the Video Matrix Switch.
4. Connect the speakers to the audio output port that corresponds to the video output port you connected in step 3.

Note: Repeat steps 1 - 4 for any other ports you wish to set up.

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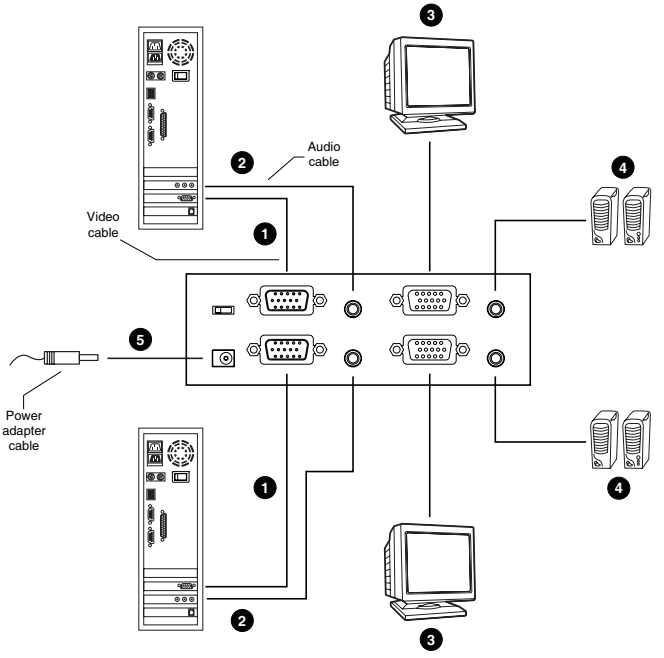
5. Plug the power adapter that came with the Video Matrix Switch into an AC power source, then plug the power adapter cable into the switch's Power Jack.
6. Power on the attached equipment.

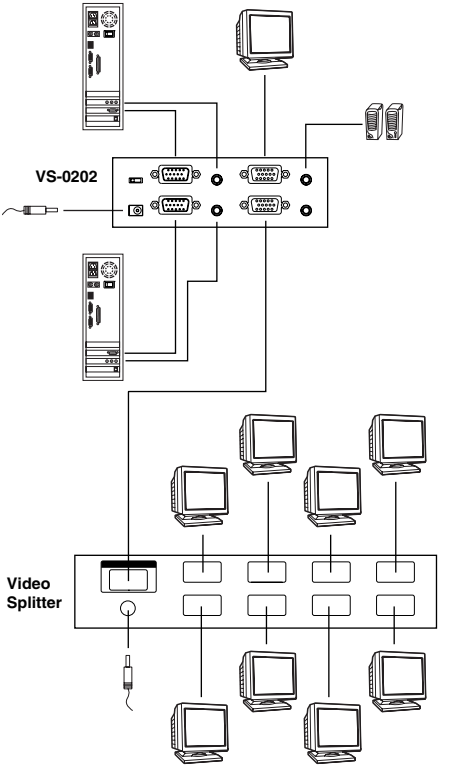
Single Stage Installation Diagram:



Cascading

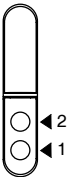
To provide video display to additional monitors, up to two / four additional video splitters can be cascaded from the VS-0202 / VS-0204's video output ports.

To cascade a video splitter, use a high density HDB-15 male/ female VGA cable to connect any available video out port on the Video Matrix Switch to the video in port of the cascaded video splitter, as shown in the diagram below:



Operation

The Video Matrix Switch operates according to the following parameters:



- Each front panel switch corresponds to an output port.
- Press the switch to select the input source for display on the device connected to the corresponding output port.
- Pressing a switch toggles between the two input ports. Continue pressing a switch until the desired input source is selected.
- The built-in LEDs indicate which input source is selected:
  - Green LED On indicates display from Input 1.
  - Orange LED On indicates display from Input 2.

For example, if you want the signal from *Input Port 1* to be displayed on the device connected to *Output Port 2*, press the switch that corresponds to *Output Port 2* until the switch's **IN 2** LED lights to indicate that it is receiving the signal from *Input Port 1*.

Specifications

Model		VS-0202	VS-0204
PC - Monitor Connection		2 - 2	2 - 4
Connectors	Out	2 x HDB-15 (f) 2 x 3.5mm Mini Stereo (f)	4 x HDB-15 (f) 4 x 3.5mm Mini Stereo (f)
	In	2 x HDB-15 (m) 2 x 3.5mm Mini Stereo (f)	2 x HDB-15 (m) 2 x 3.5mm Mini Stereo (f)
	Power	DC Jack	
LEDs	Power	1 (blue)	
	Source 1	1 (green)	
	Source 2	1 (orange)	
	In 1	2 (green)	4 (green)
	In 2	2 (orange)	4 (orange)
Toggle Switches		2	4
VGA Resolution		1920x1440@60Hz	
VGA DDC2B Support		Port 1	Ports 1 and 3
Slide Switch		1	N/A
Signal Type		VGA / SVGA / XGA	
Sync Range		Sync Positive/Negative	
Power Supply		DC 5.3V, 2.4A	
Power Consumption		DC 5.3V 8W	DC 5.3V 9W
Cable Distance		65 meters maximum (Video Matrix Switch to monitor)	
Environment	Operating Temperature	0°~50°C	
	Storage Temperature	-20°~60°C	
	Humidity	0~80% RH, Non-condensing	
Physical Properties	Enclosure	Metal	
	Weight	0.47 kg	0.69 kg
	Dimensions (LxWxH)	13 x 7.7 x 4.5 cm	20 x 7.7 x 4.5 cm

VGA Pin Assignments

Pin	Signal	Pin	Signal	Pin	Signal
1	Red Video	6	Analog Ground	11	ID0
2	Green Video	7	Analog Ground	12	ID1
3	Blue Video	8	Analog Ground	13	Horizontal Sync
4	ID2	9	NC	14	Vertical Sync
5	Ground	10	Ground	15	ID3

Getting Help

If you need to contact ATEN technical support with a problem, visit our website at *www.aten.com*.

Limited Warranty

IN NO EVENT SHALL THE DIRECT VENDOR'S LIABILITY EXCEED THE PRICE PAID FOR THE PRODUCT FROM DIRECT, INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE PRODUCT, DISK, OR ITS DOCUMENTATION.

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