

VIDEO MATRIX SWITCH



USER MANUAL

VS-0404

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 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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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-0404 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 four input sources (computers), and routes them to up to four output devices (monitors, projectors, etc.).

The VS-0404 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

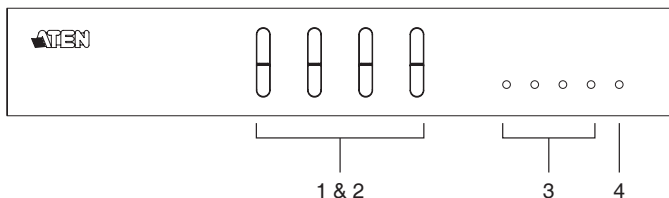
- ◆ Front panel push button switches select the combination of video input to video output.
- ◆ Duplicates and enhances video signals up to 65 m (max.)
- ◆ Cascadable
- ◆ Audio enabled

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.
- ◆ 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.

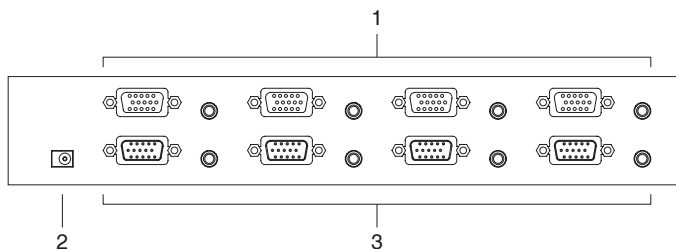
HARDWARE OVERVIEW

VS-0404 FRONT VIEW



No.	Description	Function
1	Input Select Switches	Each switch corresponds to an output port. Pressing the switch cycles through the input sources to select which input source's signal will be sent to the switch's corresponding output port.
2	Input Port LEDs	The input source LEDs are built into the Selection Switches. Each switch has four numbered LEDs that correspond to the four input source ports. A lit LED indicates which input source is the currently selected one.
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.

VS-0404 REAR VIEW



No.	Description	Function
1	Video / Audio Output Ports	The video and audio cables from the monitor and speakers plug in here (bottom row).
2	Power Jack	The Power Adapter cable plugs in here.
3	Video / Audio Input Ports	The video and audio cables from the computer's video and audio output ports plug in here (top row).

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 VS-0404 is simply a matter of plugging in the cables. Refer to the *Single Stage Installation Diagram*: (the numbers in the diagram correspond to the numbered steps) and do the following:

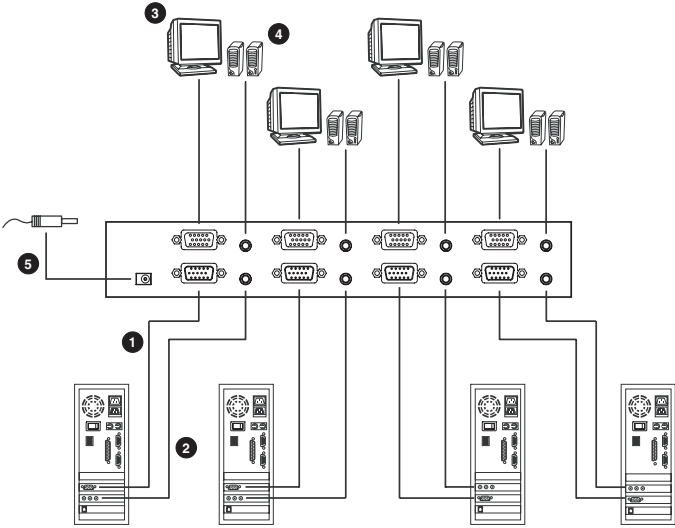
1. Use a high density HDB-15 male/female VGA cable to connect the computer's video port to any available video input source port on the VS-0404.
2. Use a male/male audio cable to connect the computer's speaker port to the audio input source port that corresponds to the video input source port you connected in step 1.
3. Connect the monitor to any available video output port on the VS-0404.
4. Connect the speakers to the audio output port that corresponds to the video output port you connected in step 3

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

2. When connecting computers to the switch, we strongly recommend you use custom VGA/Audio Combination Cables like the one provided with this package – see *Installation Requirements*, p. 4, for details.

- 5. Plug the power adapter that came with the VS-0404 into an AC power source, then plug the power adapter cable into the switch's Power Jack.
- 6. Power on the attached equipment.

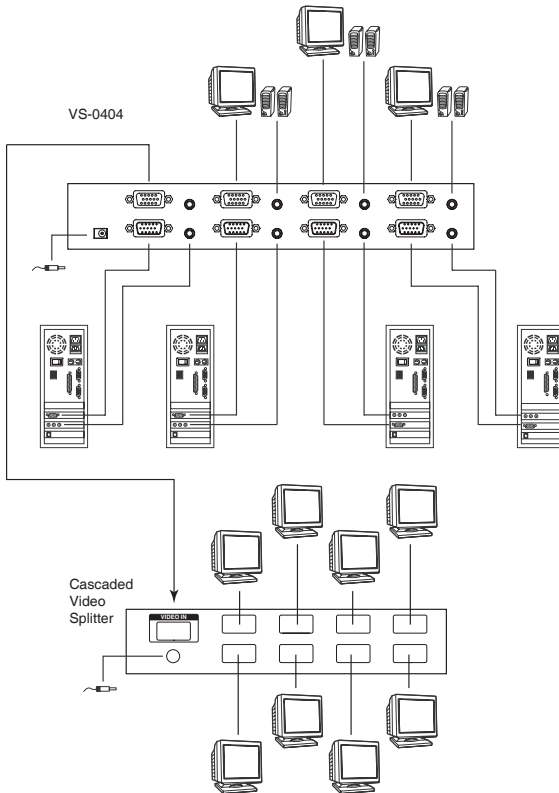
Single Stage Installation Diagram:



CASCADING

To provide video display to additional monitors, up to four additional video splitters can be cascaded from the VS-0404'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 VS-0404 to the video in port of the cascaded video splitter, as shown in the diagram below:



OPERATION

The VS-0404 operates according to the following parameters:



- ◆ Each front panel switch corresponds to an output port.
- ◆ Each switch selects the input source that will display on the device connected to its corresponding output port.
- ◆ Pressing a switch takes you from the currently selected input port to the next one (1 to 2; 2 to 3; 3 to 4; 4 to 1). Press a switch as many times as necessary to select the desired input port.
- ◆ The built-in LEDs light to indicate which input port is the selected one.

For example, if you want the data from *Input Port 2*, to be output to *Output Port 4*, press the switch that corresponds to *Output Port 4* until the switch's **LED 2** lights to indicate that it is receiving data from *Input Port 2*.

SPECIFICATIONS

Model		VS-0404
PC - Monitor Connection		4 - 4
Connectors	Out	4 x HDB-15 (female) 4 x 3.5mm Mini Stereo (female)
	In	4 x HDB-15 (male) 4 x 3.5mm Mini Stereo (female)
	Power	DC Jack
LEDs	Power	1 (blue)
	Source	4 (green)
	Input	4 x 4 (green)
Port Selection Switches		4
VGA Resolution		1920 x 1440@60Hz
VGA DDC2B Support		All Ports
Signal Type		VGA / SVGA / XGA
Sync Range		Sync Positive/Negative
Power Supply		DC 5.3V; 2.4A
Power Consumption		DC 5.3V; 12W
Cable Distance		65 meters maximum (VS-0404 to monitor)
Environment	Operating Temp	0°~ 50°C
	Storage Temp	-20°~ 60°C
	Humidity	0 ~ 80% RH, Non-condensing
Physical Properties	Housing	Metal
	Weight	0.89 kg
	LxWxH	26.0 x 7.5 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 THE DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE PRODUCT, DISK OR ITS DOCUMENTATION.

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