



8-Port VGA Switch with Auto Switching

VS0801A

User Manual



www.aten.com

FCC Information

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

The device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

FCC Caution: Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

CE Warning: This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures.

KCC Statement

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RoHS

This product is RoHS compliant.



SJ/T 11364-2006

The following contains information that relates to China.

部件名称	有毒有害物质或元素					
	铅	汞	镉	六价铬	多溴联苯	多溴二苯醚
电器部件	●	○	○	○	○	○
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- : 表示该有毒有害物质在该部件所有均质材料中的含量均在SJ/T 11363-2006规定的限量要求之下。
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User Information

Online Registration

Be sure to register your product at our online support center:

International	http://support.aten.com
North America	http://www.aten-usa.com/product_registration

Telephone Support

For telephone support, call this number:

International	886-2-8692-6959
China	86-10-5255-0110
Japan	81-3-5615-5811
Korea	82-2-467-6789
North America	1-888-999-ATEN ext 4988
United Kingdom	44-8-4481-58923

User Notice

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The manufacturer of this system is not responsible for any radio and/or TV interference caused by unauthorized modifications to this device. It is the responsibility of the user to correct such interference.

The manufacturer is not responsible for any damage incurred in the operation of this system if the correct operational voltage setting was not selected prior to operation. **PLEASE VERIFY THAT THE VOLTAGE SETTING IS CORRECT BEFORE USE.**

Package Contents

The VS0801A package consists of:

- ◆ 1 VS0801A 8-Port VGA Switch with Auto Switching
- ◆ 1 IR Remote Control
- ◆ 1 Power Adapter
- ◆ 1 Mounting Kit
- ◆ 1 User Instructions*

Check to make sure that all the components are present and that nothing got damaged in shipping. If you encounter a problem, contact your dealer.

Read this manual thoroughly and follow the installation and operation procedures carefully to prevent any damage to the unit, and/or any of the devices connected to it.

* Features may have been added to the VS0801A since this manual was published. Please visit our website to download the most up-to-date version.

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About this Manual

This User Manual is provided to help you get the most from your system. It covers all aspects of installation, configuration and operation. An overview of the information found in the manual is provided below.

Chapter 1, Introduction, introduces you to the VS0801A system. Its purpose, features and benefits are presented, and its front and back panel components are described.

Chapter 2, Hardware Setup, describes how to set up your VS0801A installation.

Chapter 3, Operation, explains the fundamental concepts involved in operating the VS0801A manually, remotely, and using RS-232 commands.

Chapter 4, The Firmware Upgrade Utility, explains how to download the VS0801A's firmware and upgrade the device using the utility.

An Appendix, provides specifications and other technical information regarding the VS0801A.

Conventions

This manual uses the following conventions:

- | | |
|---|--|
| Monospaced | Indicates text that you should key in. |
| [] | Indicates keys you should press. For example, [Enter] means to press the Enter key. If keys need to be chorded, they appear together in the same bracket with a plus sign between them: [Ctrl+Alt]. |
| 1. | Numbered lists represent procedures with sequential steps. |
| ◆ | Bullet lists provide information, but do not involve sequential steps. |
| → | Indicates selecting the option (on a menu or dialog box, for example), that comes next. For example, Start → Run means to open the <i>Start</i> menu, and then select <i>Run</i> . |
|  | Indicates critical information. |

Product Information

For information about all ATEN products and how they can help you connect without limits, visit ATEN on the Web or contact an ATEN Authorized Reseller. Visit ATEN on the Web for a list of locations and telephone numbers:

International	http://www.aten.com
North America	http://www.aten-usa.com

Chapter 1

Introduction

Overview

With eight VGA/Audio input ports, the VS0801A 8-Port VGA Switch with Audio allows you to conveniently display the video output of eight separate computer systems on a VGA monitor or multimedia projector. Rack mountable in only 1U of space, and with full audio support, the VS0801A is perfect for server room applications that require monitoring via high quality audio and video, allowing you to monitor harsh work environments from a safe location.

The IR remote control, convenient front panel pushbuttons, RS-232 controls, and *new* port switching VGA cable* allow you to quickly toggle between VGA/Audio sources, while the front panel LEDs indicate the source device at a glance. The optional port switching VGA cable offers- “at the source” port selection via pushbutton built into a high quality VGA cable.

In addition, with support for up to 300 MHz bandwidth, the VS0801A provides a high resolution with a crystal clear image quality. The VS0801A features Dynamic DDC which allows non-active source ports to receive updated EDID information from the display for faster optimized switching.

Furthermore, RS-232 control is standard through the VS0801A's built-in bi-directional RS-232 serial port that allows the switch to be controlled through a serial connected PC. RS-232 commands provide additional easy to use functions with your VS0801A. In addition, you can download** the free RS-232 Control Tool application with easy to use GUI (Graphical User Interface) to manage and control all RS-232 commands from a computer to your switch.

Designed for enterprise use, the VS0801A eliminates the cost of purchasing a separate monitor for each computer, saving space and power in the server room. The VS0801A is perfect for providing audio and video for a wide range of commercial applications, and is a perfect fit for any meeting room where multiple computers need to be displayed on a single monitor or projector.

Note: 1. Port Switching VGA Cables are sold separately.

2. The VS0801A RS-232 GUI and instructions can be downloaded from the ATEN website: www.aten.com.

Features

- ◆ Displays the video output of up to eight computers on a single VGA display
- ◆ Quick and easy switching between VGA/Audio sources via front panel pushbuttons, Port Switching VGA Cable*, RS-232 commands, or IR remote control
- ◆ Supports stereo audio
- ◆ Built-in bi-directional RS-232 serial port for high-end system control, and advanced RS-232 functions**
- ◆ RS-232 Functions:
 - ◆ Power On Detection – if one VGA source is powered off, the VS0801A will automatically switch to the next powered-on source
 - ◆ Auto Switching – sets the priority for auto switching to a connected port
 - ◆ Pushbutton Lock – locks use of the front panel pushbuttons
- ◆ Pushbutton Lock – locks use of the front panel pushbuttons
- ◆ Supports up to 300 MHz bandwidth for optimal video quality
- ◆ Superior video quality – 2048x1536@60Hz; DDC; DDC2; DDC2B
- ◆ Long-distance transmission – up to 65 m
- ◆ Supports – VGA, SVGA, UXGA, WUXGA, and multisync
- ◆ Video DynaSync™ – Exclusive ATEN technology eliminates boot-up display problems and optimizes resolution when switching between ports
- ◆ Supports Dynamic DDC to monitor and receive updated EDID information from displays
- ◆ All-metal casing provides durability and protection
- ◆ Designed for server rooms, meeting rooms, industrial, commercial, and media applications
- ◆ Rack Mountable

Note: 1. Port Switching VGA Cables are sold separately.

2. The VS0801A RS-232 GUI and instructions can be downloaded from the ATEN website: www.aten.com.

Requirements

Source Device

The following equipment must be installed on the source device or computer that acts as a source of VGA/Audio content:

- ◆ VGA video card with HDB-15 connector
- ◆ Audio source with stereo output

Display Device

- ◆ A VGA, SVGA, UXGA, WUXGA or multisync monitor or multimedia projector with an HDB-15 connector
- ◆ Stereo speakers

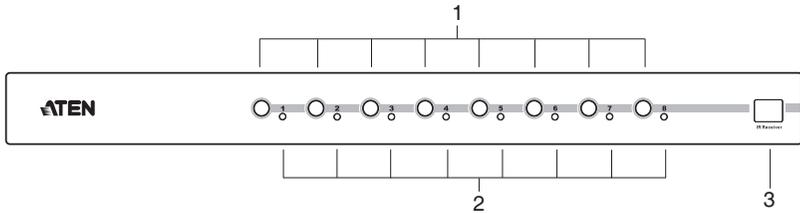
Cables

- ◆ 1 VGA/Audio cable or Port Switching VGA Cable* for each source device
- ◆ 1 VGA/Audio cable for your display and audio device

Note: *Port Switching VGA Cables* (Part No. 2L-5203B) are available and sold through authorized ATEN dealers. We strongly recommend that you purchase high-quality cables of appropriate length since this will affect the quality of the audio and video display.

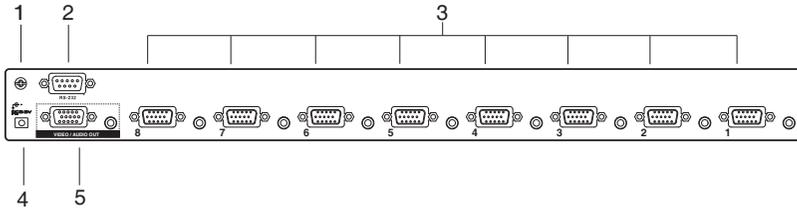
Components

VS0801A Front View



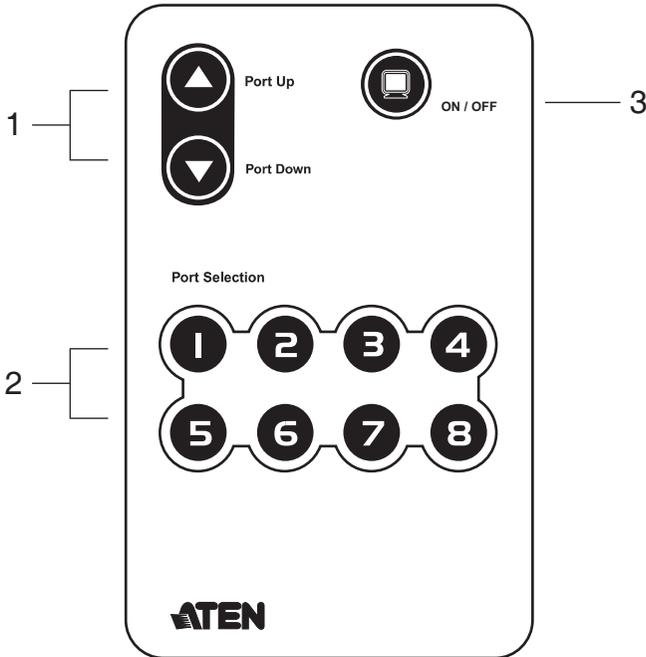
No.	Component	Function
1	Port Selection Pushbuttons	Pressing a port selection pushbutton routes the VGA/Audio source from the corresponding input port to the output port for display.
2	Port LEDs	There is one port LED next to each port selection pushbutton. This lights green to indicate that the corresponding port has been selected. The connected port LEDs will flash when the front panel pushbuttons are manually locked or when auto switch mode has been activated. (See <i>Operation</i> , page 15, for details)
3	IR Receiver	This receives signals from the IR remote control.

VS0801A Rear View



No.	Component	Function
1	Grounding Terminal	The grounding wire used to ground the unit attaches here.
2	RS-232 Port	This is the serial port for input source selection and high-end system control.
3	Video / Audio Input	Each input section is comprised of a VGA connector and stereo audio jack. The cables that connect to the video and audio output ports on the computers / source devices plug in here.
4	Power Jack	The power adapter cable plugs in here.
5	Video / Audio Output	The cables that connect to the video and audio input ports on the video display/audio device plug in here.

IR Remote Control



No.	Component	Function
1	Port Up / Port Down Buttons	Press the Port Up button to cycle forward through the source devices (1 to 2; 2 to 3; ... 8 to 1). Press the Port Down button to cycle backward through the source devices.(8 to 7; 7 to 6; ... 1 to 8).
2	Port Selection Buttons	Press a button to bring the focus directly to the source device attached to its associated port.
3	On / Off Button	This button enables / disables the video output.

Chapter 2

Hardware Setup



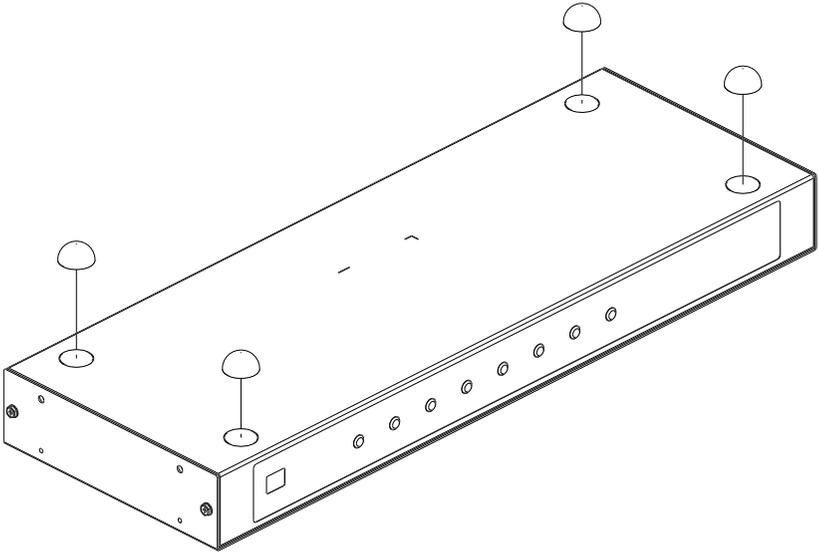
1. Important safety information regarding the placement of this device is provided on page 36. Please review it before proceeding.
2. Make sure that the power to all devices you will be installing have been turned off and that all devices are properly grounded.

Stacking and Rack Mounting

The VS0801A can be stacked on a desktop or rack mounted in a variety of ways. The following sections take you through the procedures for each method.

Stacking

The VS0801A can be placed on any appropriate level surface that can safely support its weight with cables attached. To stack units, remove the cover material from the bottom of the rubber feet that came with your package, and stick them to the bottom panel at the corners, as shown in the diagram on the following page:



Note: To ensure adequate ventilation, allow at least 5.1 cm on each side, and 12.7 cm behind the unit for power cord and cable clearance.

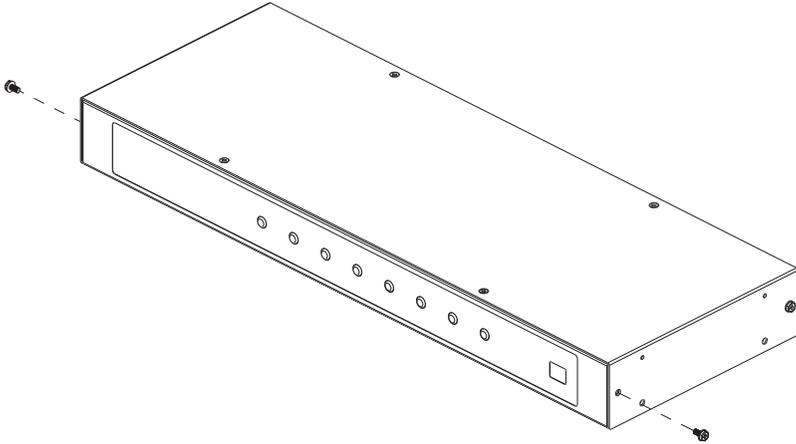
Rack Mounting

The VS0801A can be mounted in a 19" (1U) rack. The mounting brackets can screw into either the front or the back of the unit so that it can attach to the front or the back of the rack.

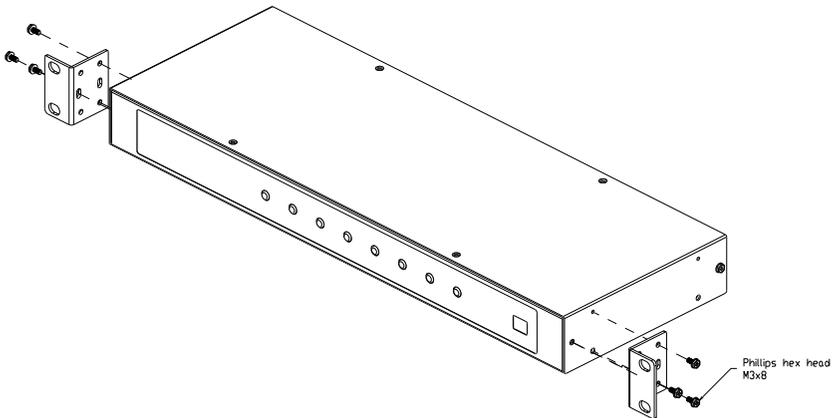
Rack Mounting - Front

To mount the unit from the front, do the following:

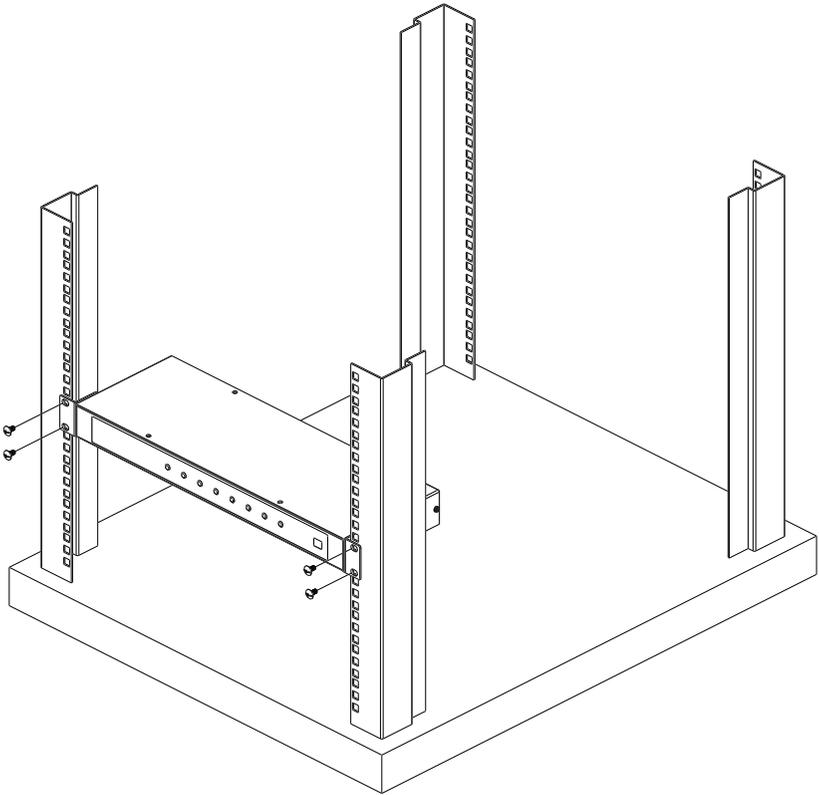
1. Remove the two screws at the front of the unit.



2. Use the M3 x 8 Phillips head hex screws supplied with the rack mount kit to screw the rack mounting brackets into the front of the unit.



3. Position the device in the front of the rack and align the holes in the mounting brackets with the holes in the rack.
4. Screw the mounting brackets to the rack.

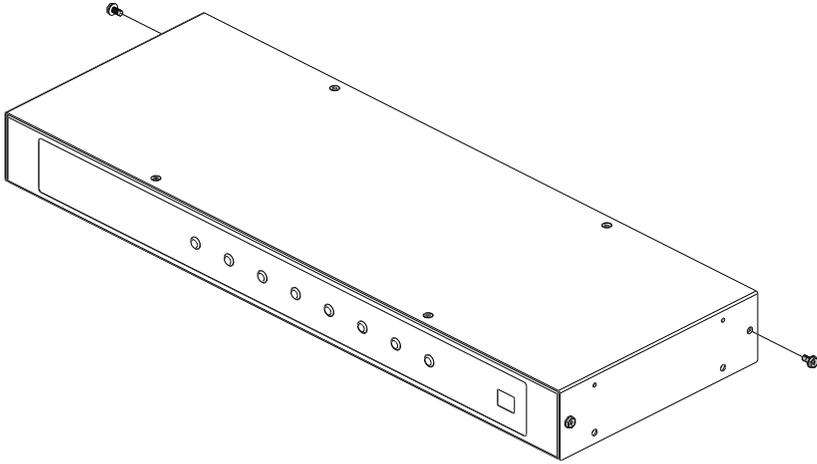


Note: Cage nuts are provided for racks that are not prethreaded.

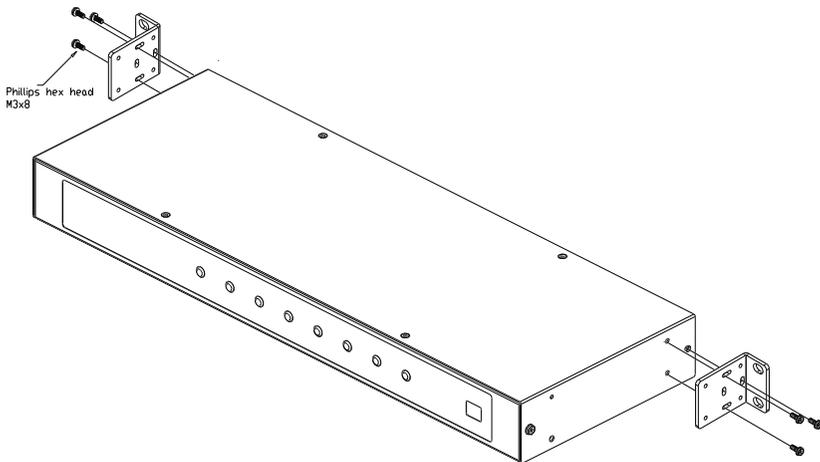
Rack Mounting - Rear

To mount the unit from the rear, do the following:

1. Remove the two screws at the rear of the unit.

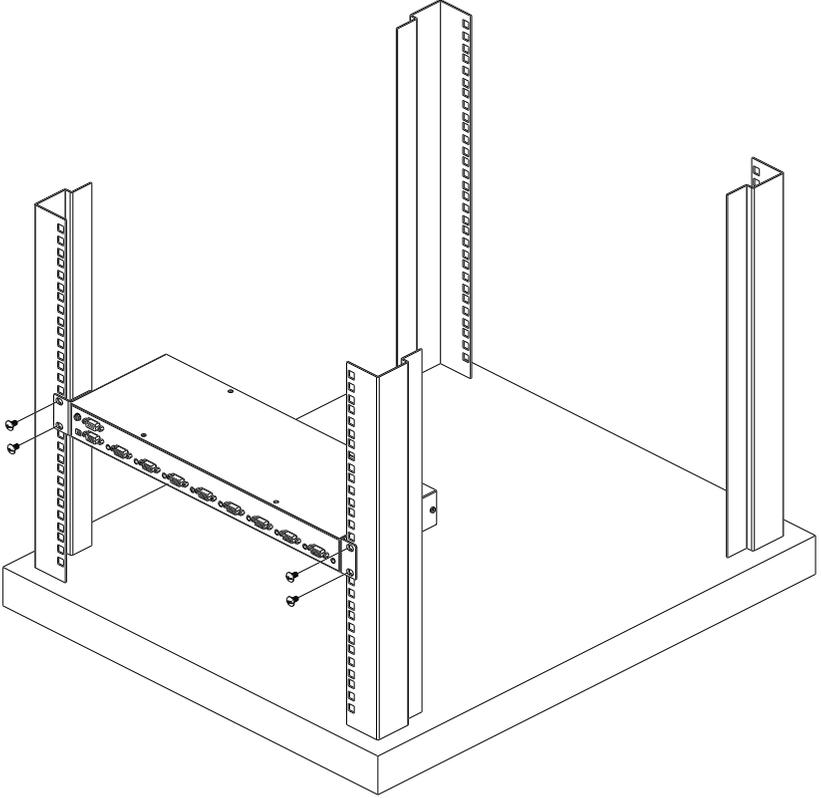


2. Use the M3 x 8 Phillips head hex screws supplied with the rack mounting kit to screw the rack mounting brackets into the rear of the unit.



3. Position the device in the rack and align the holes in the mounting brackets with the holes in the rack.

4. Screw the mounting brackets to the rack.



Note: Cage nuts are provided for racks that are not prethreaded.

Installation

Installation of the VS0801A is simply a matter of plugging in the appropriate cables.

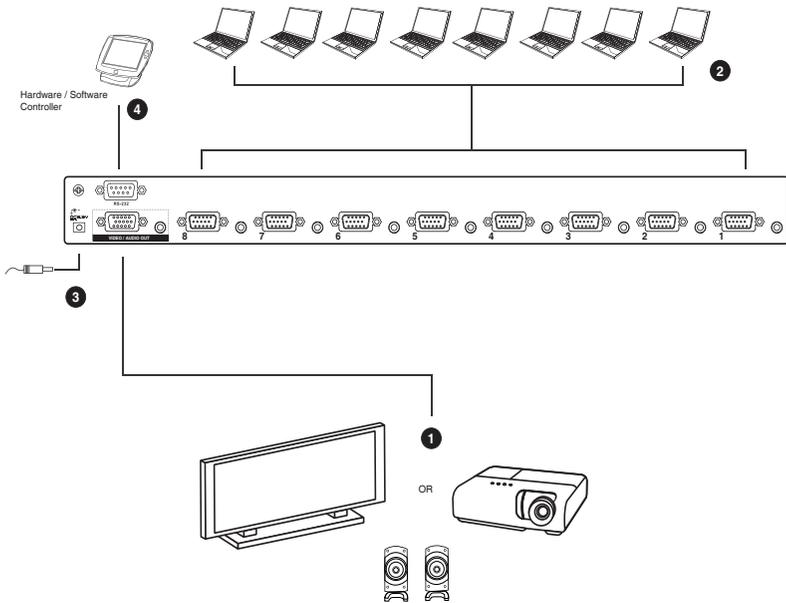
To install the switch, refer to the installation diagram on page 14 as you perform the following steps:

1. Use a VGA cable to connect the VGA input port on the video display device to the VGA output port on the rear of the VS0801A, and connect the speakers to the Audio output port.
2. Use VGA/Audio cables* to connect the VGA/Audio output ports on the source device(s) to the VGA/Audio input ports on the VS0801A. Eight VGA/Audio input ports are located on the rear of the switch.
3. Plug the provided power adapter into an appropriate AC power source; plug the power adapter cable into the Power Jack on the VS0801A.
4. To connect an RS-232 serial controller (such as a PC), use a serial cable to connect the VS0801A's RS-232 port to the RS-232 device. To configure the serial port and use RS-232 commands, see page 18.

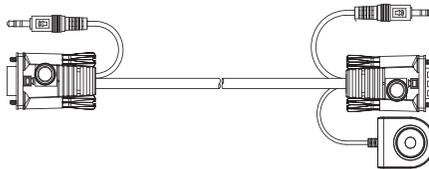
The installation is complete, you may power on the display and source devices.

Note: *Port Switching VGA Cables* are available and sold through authorized ATEN dealers (See *Installation Diagram*, page 14, for details).

Installation Diagram



Optional Port Switching VGA Cable*



*The optional *Port Switching VGA Cable* shown above provides a high quality VGA cable with port switching button to switch the VS0801A to the source device it is connected to when pressed. This optional accessory is installed between the VS0801A and a source device, as shown in step 2. The *Port Switching VGA Cable* can be purchased separately from your local ATEN dealer.

Chapter 3

Operation

Overview

The VS0801A 8-Port VGA Switch with Audio offers easy operational control via Front Panel Pushbuttons, Remote Control, Port Switching VGA Cable, or RS-232 Serial Control. All operational functions are discussed in this chapter including; Source Selection, Pushbutton Lock, Auto Switch, RS-232 serial configuration and commands, and Power Off/Restarting.

Source Selection

Manual Source Selection

To manually select a source device, press the front panel pushbutton (1~8) that corresponds to the port that it is connected to. The port LED lights green to indicate which port is currently selected for use.

Remote Source Selection

To select a source device with the remote control, press the number button on the remote that corresponds to the port it is connected to.

Alternatively, you can cycle through the source devices by pushing the Port Up and Port Down buttons on the remote control.

- ◆ Use the Port Up button to select the next port in ascending order (from left to right on the front panel display)
- ◆ Use the Port Down button to select the next port in descending order (from right to left on the front panel display)

Note: For optimum performance, make sure there is a clear line-of-sight between the remote control and IR receiver, and aim the remote control directly at the IR receiver located on the front panel.

IR Code

If you purchased a new IR remote control with the need to control multiple switches separately, you need to change the IR code of the switch to match that of the new remote. Try all three codes until the new IR remote control works with the switch.

To change the IR code on the switch, press and hold the port selection pushbuttons for 3 seconds:

Pushbutton **1 & 2**: IR Code: 00FF (default)

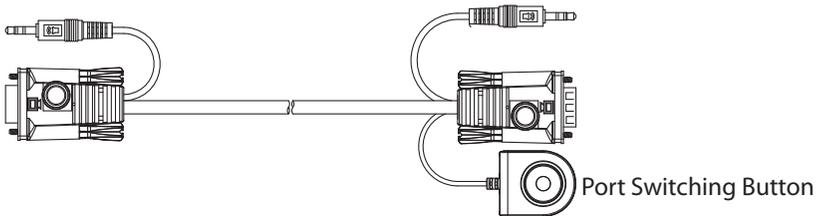
Pushbuttons **1 & 3**: IR Code 00FD

Pushbutton **1 & 4**: IR Code 8A75

VGA Cable Source Selection

An optional *Port Switching VGA Cable* can be purchased separately which provides a high quality VGA connection that allows you to use a port switching button to switch the VS0801A to the connected device. This optional accessory is installed between the VS0801A and a source device (See *Installation Diagram*, page 14, for details). Simply press the port switching button located on the VGA cable to switch the VS0801A to that device.

Port Switching VGA Cable



To purchase Port Switching VGA Cables, please contact your local ATEN dealer.

Pushbutton Lock

The pushbutton lock allows you to secure the VS0801A by locking use of the front panel pushbuttons. To lock/unlock the front panel pushbuttons, do the following:

Press and hold both the **1** and **8** port selection buttons for 3 seconds, then release.

-
- Note:** 1. The front panel port LEDs will flash at a one second interval to indicate the pushbutton lock feature is enabled.
2. Repeat the steps above to unlock the front panel pushbuttons.
-

Auto Switch

Auto Switch places priority on a port, so that when a source device is connected to that port the VS0801A will automatically switch to it. There are two types of auto switching- **Auto**: switch priority is placed on a particular port, and **Next**: switch priority is placed on the next port with a new source connected to it. Once Auto Switch is set it stays on that port until the device is disconnected or *Default* mode is enabled. To set **Auto** mode for the other ports, you must use RS-232 commands (see *Auto Switch Commands*, page 20).

Auto Mode:

This sets Auto mode for port #1, so that when a device is connected to port #1 the VS0801A will automatically switch to it. When *Auto* mode is enabled the VS0801A will not switch ports until that port's video signal is disconnected, or *Default* mode is turned on.

Next Mode:

With *Next* mode switch priority is placed on the next port that has a new source connected to it. To disable *Next* mode, *Default* mode must be enabled.

Default Mode:

The switch behaves normally without the automatic switching operation.

Note: When a mode is successfully enabled the port LED will flash for 3 seconds.

RS-232 Serial Interface

The VS0801A's built-in bi-directional RS-232 serial interface allows system control through a high-end controller, PC, and/or home automation / home theater software package.

Configuring the Serial Port

The controller's serial port should be configured as follows:

Baud Rate	19200
Data Bits	8
Parity	None
Stop Bits	1
Flow Control	None

RS-232 control commands for Switch Port, Auto Switch, Power on Detection, Dynamic DDC, Pushbutton Lock, Cable Button, Read Firmware and Reset are discussed on the pages that follow.

Verification

In the steps below, after entering a command, a verification message appears at the end of the command line as follows:

- ◆ **Command OK** - indicates that the command is correct and successfully performed by the switch.
- ◆ **Command incorrect** - indicates that the command has the wrong format and/or values.

Switch Port Commands

The formulas for Switch Port commands are as follows:

1. Switch Command + Input Command + Port Number [Enter]

For example, to switch to input port 02, type the following:

sw i02 [Enter]

2. Switch Command + Control [Enter]

For example, to switch to the next input port, type the following:

sw + [Enter]

The following tables show the possible values for the **Switch**, **Input**, **Port Number** and **Control** commands:

Command	Description
sw	Switch command

Input Command	Description
i	Input command

Port number	Description
xx	01-08 port (default is 01)

Control	Description
on	Turn on the display
off	Turn off the display
+	Next Port
-	Previous Port

The following table shows the available command list:

Command	Input	Port	Control	Enter	Description
sw	i	xx		[Enter]	Switch to Input Port xx
sw			on	[Enter]	Turn on Display
			off	[Enter]	Turn off Display
sw			+	[Enter]	Switch to the next input
			-	[Enter]	Switch to the previous input

Note: 1. Each command string can be separated with a space.

2. If the **Port Number** string is skipped, the default value is used.

Auto Switch Commands

The Auto Switch command places priority on a port, so that when a source is connected to that port the VS0801A will automatically switch to it. There are two types of auto switching- **Auto**: switch priority is placed on a particular port, and **Next**: switch priority is placed on the next port that has a new source device connected to it. By default, Auto Switch is disabled. For more detailed descriptions of Auto Switch modes, see *Auto Switch*, page 17.

The formulas for Auto Switch commands are as follows:

1. Switch Command + Input Command + Port Number + Control [Enter]

For example, to enable auto switching for port 02, type the following:

swmode i02 auto [Enter]

2. Switch Command + Control [Enter]

For example, to enable the auto switch next mode, type the following:

swmode next [Enter]

3. Switch Command + Control [Enter]

For example, to turn auto switching off, type the following:

swmode default [Enter]

The following tables show the possible values for the **Auto Switch**, **Input**, **Port Number** and **Control** commands:

Command	Description
swmode	Auto Switch command
Input Command	Description
i	Input command
Port Number	Description
xx	01-08 port (default is 01)
Control	Description
auto	Turn auto switch on
next	Turn auto switch next on
default	Turn auto switch off

The following table shows the available command list:

Command	Input	Port	Control	Enter	Description
swmode	i	xx	auto	[Enter]	Enable Auto Switching for port xx
swmode			next	[Enter]	Enable Auto Switch Next
swmode			default	[Enter]	Disable Auto Switching

Note: 1. Each command string can be separated with a space.

2. If the **Port Number** string is skipped, the default value is used.

Power on Detection Commands

When Power on Detection is turned on, it does the following:

- ◆ Automatically switches to the next port with a powered on source device, when the current active port device is powered off.
- ◆ When the VS0801A is turned on, the last port connected when the device was turned off will be automatically selected.

The formula for the Power on Detection command is as follows:

1. POD Command + Control Command [Enter]

For example, to turn off Power on Detection, type the following:

pod off [Enter]

The following tables show the possible values for the **Power on Detection, and Control** commands:

Command	Description
pod	Power on Detection command

Control	Description
on	Turn on
off	Turn off (default)

The following table shows the available command list:

Command	Control	Enter	Description
pod	on	[Enter]	Enable Power on Detection
pod	off	[Enter]	Disable Power on Detection (default)

Note: Each command string can be separated with a space.

Dynamic DDC Commands

The Dynamic DDC command is used to monitor the connected display and provide the correct updated EDID information to the source devices so that the display is optimized. With Dynamic DDC off, source devices do not receive updated EDID data which can cause display issues. If there is a problem with your display quality when Dynamic DDC is on, it is recommended that Dynamic DDC be turned off.

The formula for the Dynamic DDC command is as follows:

1. Dynamic DDC Command + Control Command [Enter]

For example, to turn Dynamic DDC on, type the following:

ddc on [Enter]

The following tables show the possible values for the **Dynamic DDC**, and **Control** commands:

Command	Description
ddc	Dynamic DDC command

Control	Description
on	Turn on
off	Turn off (default)

The following table shows the available command list:

Command	Control	Enter	Description
ddc	on	[Enter]	Enable Dynamic DDS
ddc	off	[Enter]	Disable Dynamic DDS (default)

Note: Each command string can be separated with a space.

Pushbutton Lock Commands

The Pushbutton Lock command allows you to secure your device by locking use of the front panel pushbuttons.

The formula for the Pushbutton Lock command is as follows:

1. Button Command + Control Command [Enter]

For example, to lock the front panel pushbuttons, type the following:

button off [Enter]

The following tables show the possible values for the **Button** and **Control** commands:

Command	Description
button	Pushbutton lock command

Control	Description
on	Unlock pushbuttons (default)
off	Lock pushbuttons (Port LEDs flash every 1 second to indicate pushbuttons are locked)

The following table shows the available command list:

Command	Control	Enter	Description
button	on	[Enter]	Unlock front panel pushbuttons (default)
button	off	[Enter]	Lock front panel pushbuttons

Note: Each command string can be separated with a space.

Cable Button Commands

The Cable Button command allows you to turn on and off the Port Switching VGA Cable button function (see *VGA Cable Source Selection*, page 16) for the VS0801A.

The formula for the Cable Button command is as follows:

1. Cable Command + Control Command [Enter]

For example, to turn off the VGA Cable Button function, type the following:

cable off [Enter]

The following tables show the possible values for the **Cable** and **Control** commands:

Command	Description
cable	Cable Button command

Control	Description
on	Enable Cable Button function
off	Disable Cable Button function

The following table shows the available command list:

Command	Control	Enter	Description
cable	on	[Enter]	Enable Cable Button function (default)
cable	off	[Enter]	Disable Cable Button function

Note: Each command string can be separated with a space.

IR Code Commands

If you purchased a new IR remote control you may need to change the IR code of the switch to match that of the new remote. Try all three codes until the IR remote control works with the switch.

The formula for the IR Code command is as follows:

1. IR Code Command + Control Command [Enter]

For example, to change the IR code to 00FD, type the following:

```
ircode 00fd [Enter]
```

The following tables show the possible values for the **Cable** and **Control** commands:

Command	Description
ircode	IR Code command

Control	Description
00ff	Change IR code to 00ff (default)
00fd	Change IR code to 00fd
8a75	Change IR code to 8a75

The following table shows the available command list:

Command	Control	Enter	Description
ircode	00ff	[Enter]	Changes the switches IR code to 00ff (default)
ircode	00fd	[Enter]	Changes the switches IR code to 00fd
ircode	8a75	[Enter]	Changes the switches IR code to 8a75

Note: Each command string can be separated with a space.

Read Firmware Command

The Read Firmware command allows you to read the firmware information.

The formula for the Read Firmware command is as follows:

1. Read Command + Control Command [Enter]

For example, to display the firmware information, type the following:

read version [Enter]

The following tables show the possible values for the **Read** and **Control** commands:

Command	Description
read	Read Firmware command

Control	Description
version	Firmware version

The following table shows the available command list:

Command	Control	Enter	Description
read	version	[Enter]	Read firmware version of device

Note: Each command string can be separated with a space.

Reset Command

The Reset command sets the device back to the factory default settings.

The formula for the Rest commands is as follows:

1. Reset Command [Enter]

For example, to reset the device, type the following:

reset [Enter]

The following tables show the possible values for the **Reset** command:

Command	Description
reset	Reset command

The following table shows the available command list:

Command	Enter	Description
reset	[Enter]	Reset device to factory default settings

Note: Each command string can be separated with a space.

Powering Off and Restarting

If you power off the VS0801A, follow these steps before powering it on again:

1. Power off the attached devices.
2. Unplug the power adapter cable from the VS0801A.
3. Wait 10 seconds, and then plug the power adapter cable back in.

After the VS0801A is powered on, power on the attached devices.

Chapter 4

The Firmware Upgrade Utility

Introduction

The purpose of the Windows-based Firmware Upgrade Utility is to provide an easy process for upgrading the VS0801A. The program comes as part of a Firmware Upgrade Package that is specific for each device.

As new firmware versions become available, new firmware upgrade packages are posted on our website. Check the website regularly to find the latest information and packages.

Downloading the Firmware Upgrade Package

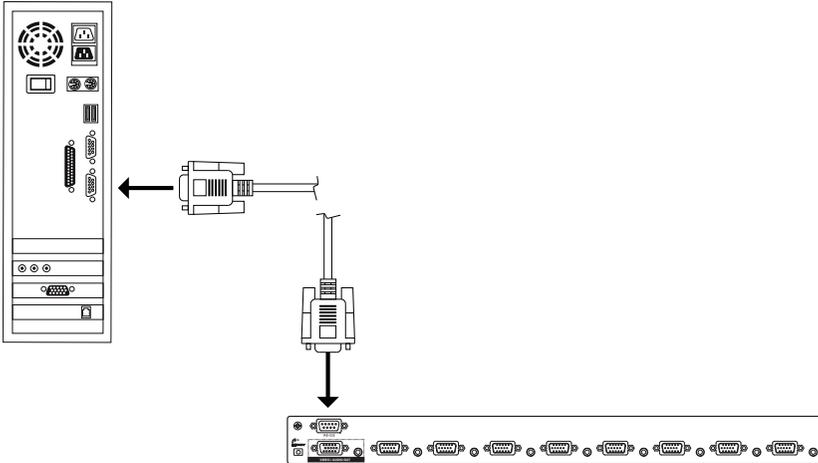
To download the firmware upgrade package:

1. On our Website go to: *Download - Firmware* and choose the device model, or from the VS0801A product page under the *Resources* tab, select *Firmware*. A list of available firmware upgrade packages appears.
2. Choose the firmware upgrade package that you wish to install (usually the most recent) and download it to your computer.

Preparation

To prepare for the firmware upgrade, do the following:

1. Use an RS-232 cable to connect a COM port on your computer to the *RS-232 Serial Port* of your VS0801A.



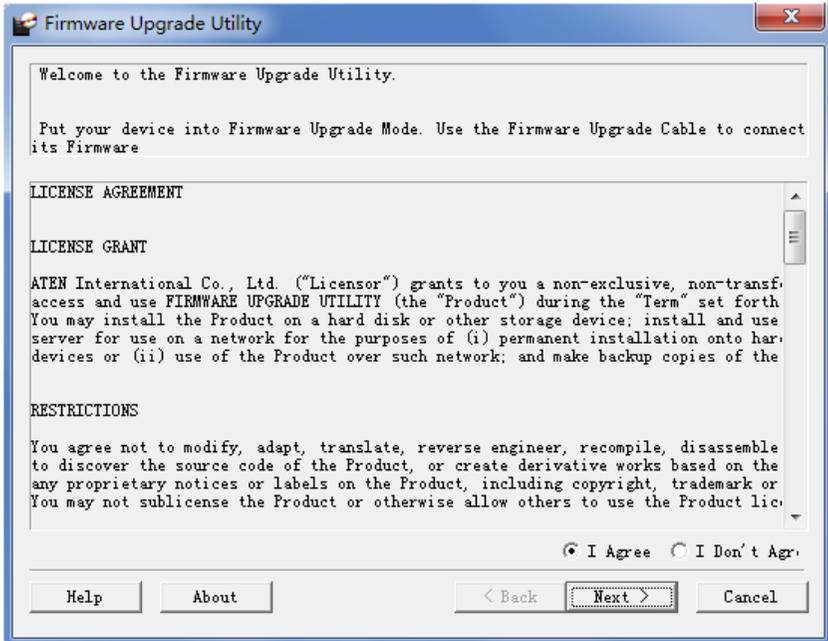
2. Unplug the VS0801A's power adapter.
3. Hold-down front panel pushbutton 1 and plug the power adapter into the VS0801A to power the unit.
4. If successful, the port 1 LED will start flashing and you can start the upgrade process as explained on the next page.

Starting the Upgrade

To upgrade the firmware:

1. Run the downloaded firmware upgrade package file either by double-clicking the file icon, or by opening a command line and entering the full path to it.

The *Firmware Upgrade Utility* welcome screen appears:



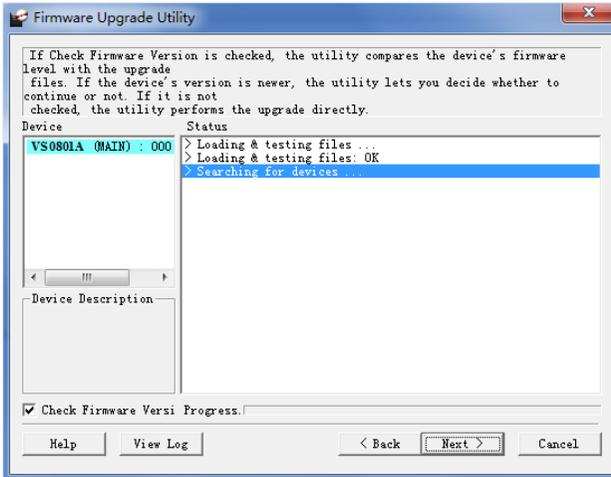
Note: The screens shown in this section are for reference only. The wording and layout of the actual screens put up by the *Firmware Upgrade Utility* may vary slightly from these examples.

2. Read and *Agree* to the License Agreement (click the **I Agree** radio button).

(Continues on next page.)

(Continued from previous page.)

- Click **Next** to continue. The *Firmware Upgrade Utility* main screen appears. The devices capable of being upgraded are listed in the *Device List* panel:



- Click **Next** to perform the upgrade. The Port LEDs 1, 3, and 4 will flash while the upgrade is in process.

If you enabled *Check Firmware Version*, the Utility compares the device's firmware level with that of the upgrade files. If it finds that the device's version is higher than the upgrade version, it brings up a dialog box informing you of the situation and gives you the option to continue or cancel.

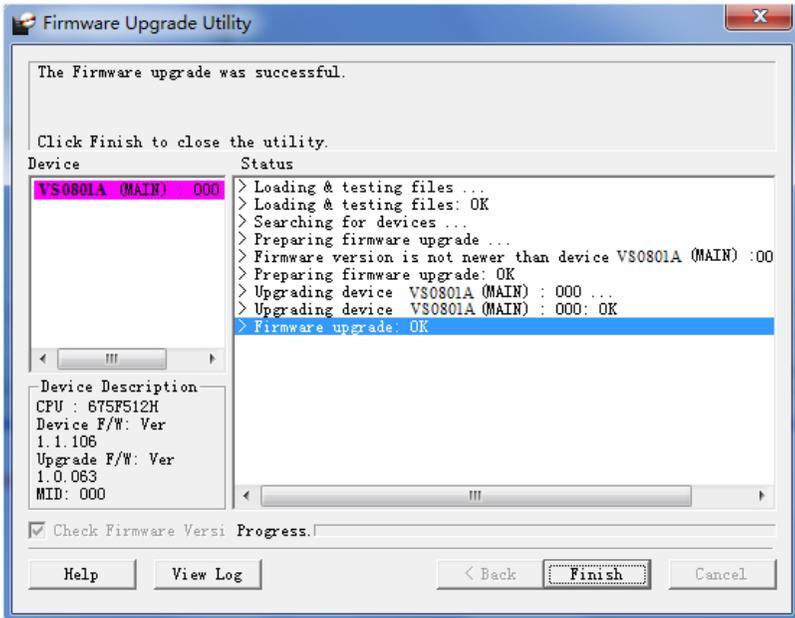


If you didn't enable *Check Firmware Version*, the Utility installs the upgrade files without checking whether they are a higher level, or not.

Status messages appear in the *Status Messages* panel, and the progress toward completion is shown on the *Progress* bar.

Upgrade Succeeded

After the upgrade has completed, all port LEDs will stop flashing and a screen appears to inform you that the procedure was successful:



Click **Finish** to close the *Firmware Upgrade Utility*.

Upgrade Failed

If the *Upgrade Succeeded* screen doesn't appear, it means that the upgrade failed to complete successfully. See the next section, *Firmware Upgrade Recovery*, for how to proceed.

Firmware Upgrade Recovery

There are three conditions that call for firmware upgrade recovery:

- ◆ When a firmware upgrade is manually aborted.
- ◆ When the mainboard firmware upgrade fails.
- ◆ When the I/O firmware upgrade fails.

To perform a firmware upgrade recovery, do the following:

1. Power off the device.
2. Connect the RS-232 cable to the *RS-232 Serial Port*.
3. Repeat the upgrade procedure.

Safety Instructions

General

- ◆ Read all of these instructions. Save them for future reference.
- ◆ Follow all warnings and instructions marked on the device.
- ◆ Do not place the device on any unstable surface (cart, stand, table, etc.). If the device falls, serious damage will result.
- ◆ Do not use the device near water.
- ◆ Do not place the device near, or over, radiators or heat registers.
- ◆ The device cabinet is provided with slots and openings to allow for adequate ventilation. To ensure reliable operation, and to protect against overheating, these openings must never be blocked or covered.
- ◆ The device should never be placed on a soft surface (bed, sofa, rug, etc.) as this will block its ventilation openings. Likewise, the device should not be placed in a built in enclosure unless adequate ventilation has been provided.
- ◆ Never spill liquid of any kind on the device.
- ◆ Unplug the device from the wall outlet before cleaning. Do not use liquid or aerosol cleaners. Use a damp cloth for cleaning.
- ◆ The device should be operated from the type of power source indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
- ◆ The device is designed for IT power distribution systems with 230V phase-to-phase voltage.
- ◆ To prevent damage to your installation it is important that all devices are properly grounded.
- ◆ The device is equipped with a 3-wire grounding type plug. This is a safety feature. If you are unable to insert the plug into the outlet, contact your electrician to replace your obsolete outlet. Do not attempt to defeat the purpose of the grounding-type plug. Always follow your local/national wiring codes.
- ◆ Do not allow anything to rest on the power cord or cables. Route the power cord and cables so that they cannot be stepped on or tripped over.

- ◆ If an extension cord is used with this device make sure that the total of the ampere ratings of all products used on this cord does not exceed the extension cord ampere rating. Make sure that the total of all products plugged into the wall outlet does not exceed 15 amperes.
- ◆ To help protect your system from sudden, transient increases and decreases in electrical power, use a surge suppressor, line conditioner, or un-interruptible power supply (UPS).
- ◆ Position system cables and power cables carefully; Be sure that nothing rests on any cables.
- ◆ Never push objects of any kind into or through cabinet slots. They may touch dangerous voltage points or short out parts resulting in a risk of fire or electrical shock.
- ◆ Do not attempt to service the device yourself. Refer all servicing to qualified service personnel.
- ◆ If the following conditions occur, unplug the device from the wall outlet and bring it to qualified service personnel for repair.
 - ◆ The power cord or plug has become damaged or frayed.
 - ◆ Liquid has been spilled into the device.
 - ◆ The device has been exposed to rain or water.
 - ◆ The device has been dropped, or the cabinet has been damaged.
 - ◆ The device exhibits a distinct change in performance, indicating a need for service.
 - ◆ The device does not operate normally when the operating instructions are followed.
- ◆ Only adjust those controls that are covered in the operating instructions. Improper adjustment of other controls may result in damage that will require extensive work by a qualified technician to repair.

Technical Support

International

- ◆ For online technical support – including troubleshooting, documentation, and software updates: **<http://support.aten.com>**
- ◆ For telephone support, *Telephone Support*, page iv

North America

Email Support		support@aten-usa.com
Online Technical Support	Troubleshooting Documentation Software Updates	http://www.aten-usa.com/support
Telephone Support		1-888-999-ATEN ext 4988

When you contact us, please have the following information ready beforehand:

- ◆ Product model number, serial number, and date of purchase.
- ◆ Your computer configuration, including operating system, revision level, expansion cards, and software.
- ◆ Any error messages displayed at the time the error occurred.
- ◆ The sequence of operations that led up to the error.
- ◆ Any other information you feel may be of help.

Specifications

Function		VS0801A	
Display Connections		1	
Connectors	Device	Video In	8 x HDB-15 Male (Blue)
		Audio In	8 x Stereo Jack Female (Green)
	Display	Video Out	1 x HDB-15 Female (Blue)
		Audio Out	1 x Stereo Jack Female (Green)
	RS-232 Port		1 x DB-9 Female (Black)
	Power		1 x DC Jack
LEDs	Selected		8 (Green)
Video		2048 x 1536@60 Hz	
Power Consumption		DC5.3V, 1.01W	
Environment	Operating Temp.		0–50°C
	Storage Temp.		-20–60°C
	Humidity		0–80% RH, Non-condensing
Physical Properties	Housing		Metal
	Weight		2.10 kg
	Dimensions (L x W x H)		43.2 x 15.4 x 4.4 cm

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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The direct vendor also reserves the right to revise or update the device or documentation without obligation to notify any individual or entity of such revisions, or update. For further inquiries, please contact your direct vendor.