8-Port VGA Switch with Auto Switching

VS0801A

User Manual

www.aten.com

FCC Information

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 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.

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	●	○	○	○	○	○
机构部件	○	○	○	○	○	○

○: 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。

●: 表示符合欧盟的豁免条款，但该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T 11363-2006的限量要求。

×: 表示该有毒有害物质至少在该部件的某一均质材料中的含量超出SJ/T 11363-2006的限量要求。

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

All information, documentation, and specifications contained in this manual are subject to change without prior notification by the manufacturer. The manufacturer makes no representations or warranties, either expressed or implied, with respect to the contents hereof and specifically disclaims any warranties as to merchantability or fitness for any particular purpose. Any of the manufacturer's software described in this manual is sold or licensed *as is*. Should the programs prove defective following their purchase, the buyer (and not the manufacturer, its distributor, or its dealer), assumes the entire cost of all necessary servicing, repair and any incidental or consequential damages resulting from any defect in the software.

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.

Installation

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

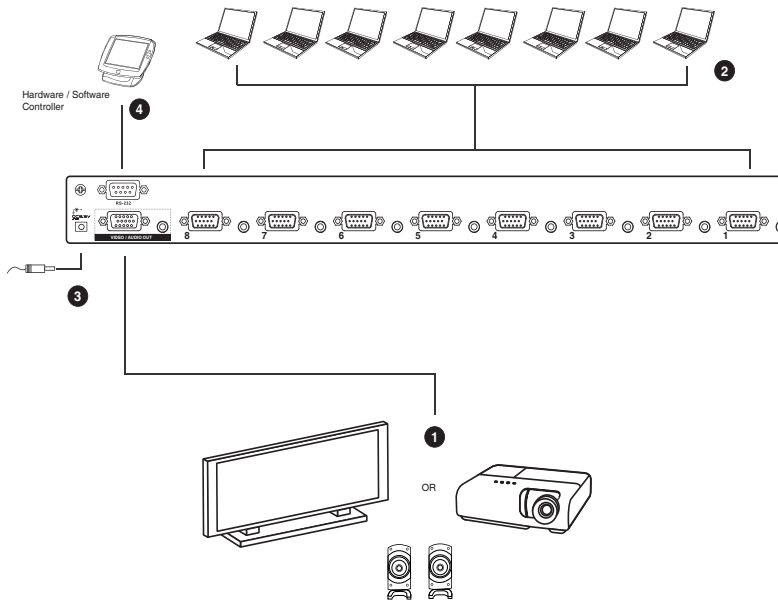
To install the switch, refer to the installation diagram on page 14 as you perform the following steps:

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.

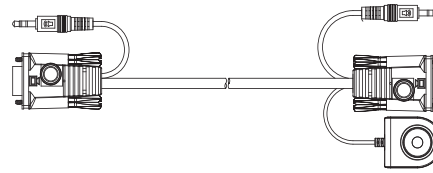
The installation is complete, you may power on the display and source devices.

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

Installation Diagram



Optional Port Swtiching 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.

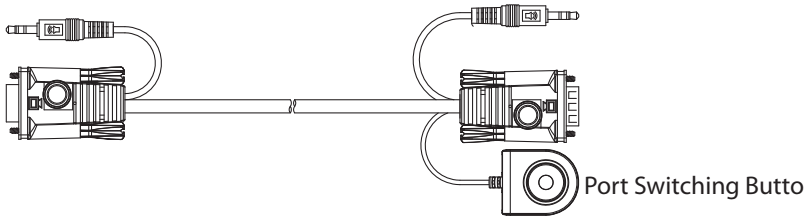
- Use the Port Up button to select the next port in ascending order (from left to right on the front panel display)
- Use the Port Down button to select the next port in descending order (from right to left on the front panel display)

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.

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.

You can use the front panel buttons to set Auto mode for port #1, Next mode, or Default mode. 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.

To set Auto Mode:

Press and hold the #3 port selection button for 3 seconds, then release.

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.

To set Next Mode:

Press and hold the #2 port selection button for 3 seconds, then release.

Default Mode:

To set Default Mode, and disable Auto Switch mode:

Press and hold the #1 port selection button for 3 seconds, then release.

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.

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 Resetcommand:

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.

Appendix

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 iii

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.		0–50ºC
	Storage Temp.		-20–60ºC
	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.

The direct vendor makes no warranty or representation, expressed, implied, or statutory with respect to the contents or use of this documentation, and especially disclaims its quality, performance, merchantability, or fitness for any particular purpose.

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.