ATEN

Simply Better Connections

ATEN VanCryst™

VS261 / VS461

DVI Video Switch
User Manual

Compliance Statements

FEDERAL COMMUNICATIONS COMMISSION INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital service, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. Any changes or modifications made to this equipment may void the user's authority to operate this equipment. This equipment generates, uses, and can radiate radio frequency energy. If not installed and used in accordance with the instructions, may cause harmful 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 to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

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.

KCC Statement

유선 제품용 / B 급 기기 (가정용 방송 통신 기기)
이 기기는 가정용 (B 급) 전자파적합기기로서 주로 가정에서 사용하는 것을 목적으로 하며 , 모든 지역에서 사용할 수 있습니다 .

RoHS
This product is RoHS compliant.

VS-261 / VS-461 User Manual

Online Registration

International	http://support.aten.com

Telephone Support

International	886-2-8692-6959
China	86-400-810-0-810
Japan	81-3-5615-5811
Korea	82-2-467-6789
North America	1-888-999-ATEN ext 4988 1-949-428-1111

Technical Support

- For international online technical support – including troubleshooting, documentation, and software updates: **http://support.aten.com**
- For North American technical support:

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

Package Contents

The DVI Video Switch package contains the following items:

- ◆ 1 VS-261 or VS-461 DVI Video Switch
- ◆ 1 IR remote control handset
- ◆ 1 power adapter
- ◆ 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.

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* Features may have been added to the VS261 / VS461 since this manual was printed. Please visit our website to download the most up-to-date version of the manual.

Overview

The 2 port VS261 and 4 port VS461 chart a revolutionary new direction in multimedia functionality by combining a Digital Visual Interface (DVI) Video Switch with stereo quality audio. It is not necessary to have a separate display and set of speakers for each source. Users can switch among two (VS261) or four (VS461) media sources, and enjoy their output on a single display and set of speakers.

The VS261 / VS461 improves on previous video switch designs by incorporating DVI connectors. DVI supports both digital video (flat panel displays, data projectors, plasma displays, digital TVs and set-top boxes) and analog video (traditional monitors and TVs).

The VS261 / VS461 works on both PC compatible and Mac systems. Setup is fast and easy; simply plug cables into their appropriate ports. There is no software to configure, no installation routines, and no incompatibility problems. Two convenient methods are available to switch among media input sources: port selection pushbuttons located on the unit's front panel; and an IR remote control.

Features

- DVI video switch with stereo audio support
- Output sound and video signals from 2 (VS261) or 4 (VS461) DVI or analog video sources
- Compliant with the DVI specification
- Video source selection via front panel pushbuttons or IR remote control
- LED display for easy status monitoring
- Superior video quality – 1920 x 1200; DDC2B
- Easy installation
- Hot pluggable – add or remove video inputs without powering down the switch
- Supports Windows and Mac host systems
- HDCP compatible

System Requirements

Consoles

- A DVI display capable of the highest resolution that you will be using on any DVI output
- Stereo speakers for audio output

Computers

The following equipment must be installed on each computer that is to be connected to the system:

- A DVI port

  Note: The quality of the display is affected by the quality of the DVI display card. For best results, we recommend you purchase a high quality product.

- An audio out port (optional – for audio accompaniment to the display)

Cables

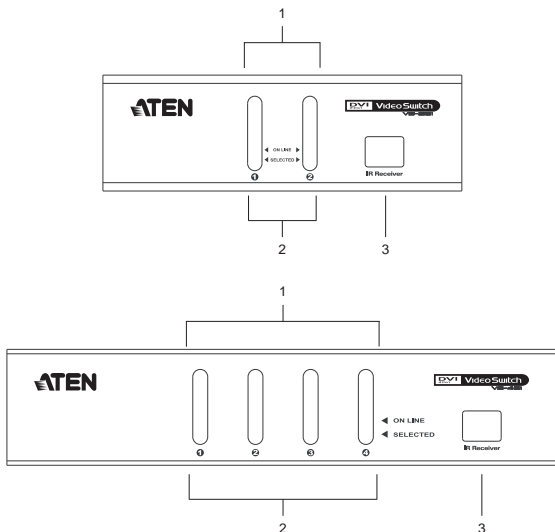Two (VS261) or four (VS461) sets of DVI cable are required to properly operate this DVI Switch (not included).

Note: 1. Cables are not included in this package. Since the quality of the display is affected by the quality and the length of the cables, we strongly recommend that you purchase high quality cables. Contact your dealer to purchase the correct cable sets for your switch.

2. There are three types of DVI signals (DVI-I, DVI-A, DVI-D). The cable type must match the type of signal being used by the DVI source and the DVI display.

Operating Systems
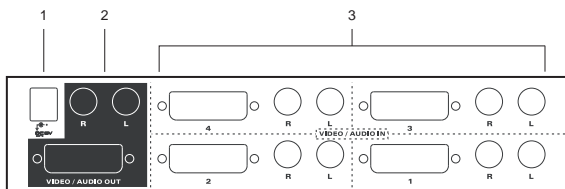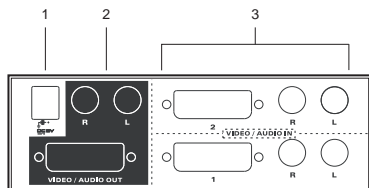
Supported operating systems are shown in the table, below:

OS		Version
Windows		2000 or above
Linux	RedHat	6.0 or later
	SuSE	8.2 or later
	Mandriva (Mandrake)	9.0 or later
UNIX	AIX	4.3 or later
	FreeBSD	3.51 or later
	Sun	Solaris 8 or later
Novell	Netware	5.0 or later
Mac		OS 9 or later
DOS		6.2 or later

Front View

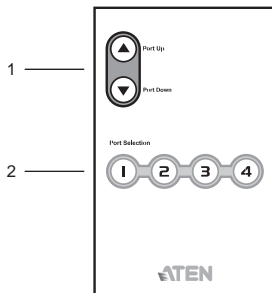| No.	Component	Description
1	port selection pushbuttons	Press a pushbutton to display video (playback audio) from the device attached to the corresponding port.
2	port LEDs	The port LEDs are built into the Port Selection Switches. - The **ON LINE** LED lights to indicate that the device attached to the corresponding port is on. - The **SELECTED** LED lights to indicate that the video (audio) input is from the device attached to the corresponding port.
3	IR receiver	Receives port switching signals from the remote handset.

Rear View

No.	Compo-nent	Description
1	power jack	The power adapter cable plugs in here.
2	video / audio output	The output section is comprised of a DVI-I connector and two RCA audio jacks. The cables that connect to the video and audio input ports on the Video Display plug in here. L=left audio, R=right audio.
3	video / audio input	Each input section is comprised of a DVI-I connector and two RCA audio jacks. The cables that connect to the video and audio output ports on the source devices plug in here. Be sure that the cables from an individual source device all plug into the same input section (e.g. all in Port 1, etc.).

IR Remote Control Unit

No.	Compo-nent	Description
1	port up / port down	Press these buttons to cycle among the source devices.
2	port selection pushbuttons	Press a port selection pushbutton to switch the source device installed at the corresponding port.

Installation

> ⚠️
>
> 1. Make sure that the power to any device that you connect to the installation has been turned off. You must unplug the power cords of any computers that have the *Keyboard Power On* function.
>
> 2. Make sure that all devices you will be installing are properly grounded
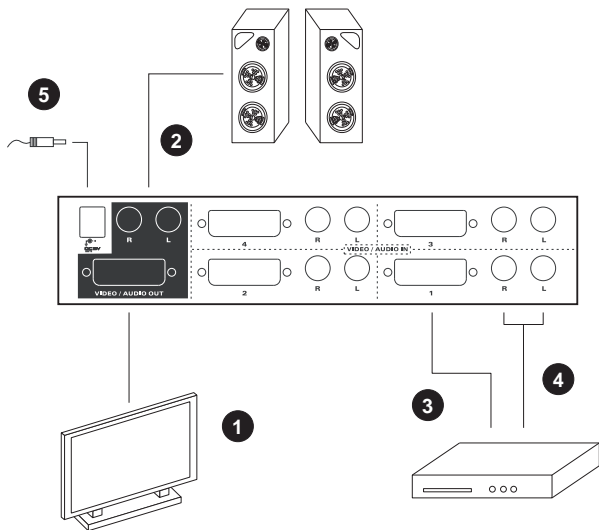
Refer to the installation diagram (the numbers in the diagrams correspond to the numbers of the steps) and do the following:

1. Plug your DVI display's connector into the video output port located in the output section on the unit's rear panel.

2. Plug your speakers into the audio jacks (left and right) located in the output section on the unit's rear panel.

3. Use a DVI cable to connect the source device's video out port to any available DVI socket on the input section of the switch.

4. Use audio cables to connect the source device's audio out ports into the VS261 / VS461's audio jacks.

   Note: Be sure that the audio cables plug into the jacks that correspond to the port that the DVI connector is plugged into (i.e., all cables are in Port 1 sockets, or all in Port 2 sockets, etc.).

5. Plug the power adapter that came with your switch into an AC power source, then plug the power adapter cable into the switch's power jack.

This completes the installation. Once the switch is powered up, you can power on the source devices.

Video Port Switching

There are two convenient methods for switching among video sources: Manual and the Remote Control.

Manual Selection

To select a source device, press and release the front panel pushbutton that corresponds to the port that the device is connected to.

Remote Control Selection

• Press the Port Up or Port Down button on the remote control unit to cycle among the source devices. Each time you press the button, the media focus switches from the current port to the next port (Port Up) or the previous port (Port Down).

- To switch directly to a source device, press the numerical button (1, 2, 3, or 4) that corresponds to the port that the device is connected to.

Note: 1. Pressing button 3 or 4 has no effect on the VS-261.

2. The infrared signal range is 6 meters (max.)

3. You must aim the remote control unit at the IR Receiver located on the switch's front panel (see p. 9). For optimum performance, make sure there is a clear line-of-sight between the control unit and the receiver.

Hot Plugging

The VS261 / VS461 supports hot plugging - devices can be added and removed from the installation by plugging and unplugging their cables to and from the VS261 / VS461's video input ports without the need to shut the switch down.

Powering Off and Restarting

If you power off the VS261 / VS461, before starting it back up you must do the following:

1. Shut down all the devices that are attached to it.

2. Unplug its power adapter cable.

3. Wait 10 seconds, then plug the power adapter cable back in.

4. After it is powered up, Power On the attached devices.

Specifications

Function		VS261	VS461
Video Input	Interfaces	2 x DVI-I Female (White)	4 x DVI-I Female (White)
	Impedance	100 Ω	
	Max. Distance	1.8 m	
Video Output	Interfaces	1 x DVI-I Female (White)	
	Impedance	100 Ω	
	Max. Distance	5 m	
Video	Max. Data Rate	6.75 Gbps (2.25 Gbps Per Lane)	
	Max. Pixel Clock	225 MHz	
	Compliance	HDCP Compatible	
	Max. Resolution	Up to 1920 x 1200 @ 60Hz	
	Max. Distance	Up to 5 m	
Port Selection		Pushbuttons; IR Remote Control	
Audio	Input	4 x Stereo RCA Jack Female (Red / White)	8 x Stereo RCA Jack Female (Red / White)
	Output	2 x Stereo RCA Jack Female (Red / White)	
LEDs	Online	2 (Orange)	4 (Orange)
	Selected	2 (Green)	4 (Green)
Connectors		1 x DC Jack	
Power Consumption		5.3V:1.7W:8BTU	5.3V:1.8W:8BTU

Function		VS261	VS461
Environment	Operating Temp.	0–50ºC	
	Storage Temp.	-20–60ºC	
	Humidity	0–80% RH, Non-condensing	
Physical Properties	Housing	Metal	
	Weight	0.50kg (1.1 lb)	0.75kg (1.65 lb)
	Dimensions (L x W x H)	14.00 x 8.80 x 5.55 cm (5.51 x 3.46 x 2.19 in)	21.00 x 8.80 x 5.50 cm (8.27 x 3.46 x 2.19 in)

Troubleshooting

Symptom	Possible Causes	Action
Erratic behavior.	Unit not receiving enough power.	Use a DC 9V power adapter if you are not already using one. If you are already using a power adapter, check that it matches the system specifications (DC 9V). and that it is plugged in and functioning properly.
Video doesn't display on some ports.	DVI specification of the source device doesn't match the DVI specification of the DVI cable and/or the DVI display device.	There are three DVI standards: DVI-A; DVI-D; and DVI-I. Make sure that the DVI specifications o the source device, cable and monitor all match. **Note:** Some monitors are able to support multiple DVI signals.

Limited Warranty

ATEN warrants its hardware in the country of purchase against flaws in materials and workmanship for a Warranty Period of two [2] years (warranty period may vary in certain regions/countries) commencing on the date of original purchase. This warranty period includes the LCD panel of ATEN LCD KVM switches. Select products are warranted for an additional year (see *A+ Warranty* for further details). Cables and accessories are not covered by the Standard Warranty.

What is covered by the Limited Hardware Warranty
ATEN will provide a repair service, without charge, during the Warranty Period. If a product is detective, ATEN will, at its discretion, have the option to (1) repair said product with new or repaired components, or (2) replace the entire product with an identical product or with a similar product which fulfills the same function as the defective product. Replaced products assume the warranty of the original product for the remaining period or a period of 90 days, whichever is longer. When the products or components are replaced, the replacing articles shall become customer property and the replaced articles shall become the property of ATEN.

To learn more about our warranty policies, please visit our website:
http://www.aten.com/global/en/legal/policies/warranty-policy/