# **DVI Video Switch**

**USER MANUAL** 

VS-261 / VS-461

## FCC INFORMATION

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.

### RoHS

This product is RoHS compliant.

#### SJ/T 11364-2006

The following contains information that relates to China.

有毒有害				<b>毒有害物质</b>	害物质或元素	
部件名称	铅	汞	镉	六价铬	多溴联苯	多溴二苯醚
电器部件	•	0	0	0	0	0
机构部件	0	0	0	0	0	0

- 〇: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。



# VS-261 / VS-461 User Manual

# **ONLINE REGISTRATION**

You can register your product at our online support center:

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

# ONLINE SUPPORT

## INTERNATIONAL

Email Support		support@aten.com
Online	Technical Support	http://support.aten.com
Support	Troubleshooting Documentation Software Updates	http://www.aten.com
Telephone Sup	port	886-2-8692-6959

#### NORTH AMERICA

Email Support		ATEN TECH	support@aten-usa.com	
		ATEN NJ	sales@aten.com	
Online	Technical	ATEN TECH	http://www.aten-usa.com/support	
Support	Support	ATEN NJ	http://support.aten.com	
	Troubleshooting Documentation SW Updates	ATEN TECH	http://www.aten-usa.com	
		ATEN NJ	http://www.aten.com	
Telephone Support		ATEN TECH	1-888-999-ATEN	
		ATEN NJ	1-732-356-1703	

## 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 Manual\*

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 VS261 / VS461 since this manual was printed. Please visit our website to download the most up-to-date version of the manual.

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## **OVERVIEW**

The 2 port VS-261 and 4 port VS-461 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 (VS-261) or four (VS-461) media sources, and enjoy their output on a single display and set of speakers.

The VS-261 / VS-461 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 VS-261 / VS-461 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 (VS-261) or 4 (VS-461) 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

# 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 (VS-261) or four (VS-461) sets of DVI cable are required to properly operate this DVI Switch (not included).

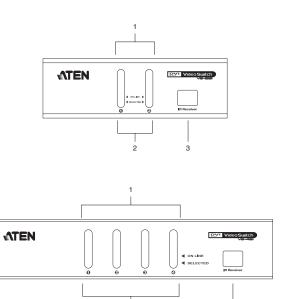
- Note: 1. Cables are not included in this package. Since the quality of the display is affected by the quality and the length of the cables, we strongly recommend that you purchase high quality cables. Contact your dealer to purchase the correct cable sets for your switch.
  - There are three types 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 and higher
Linux RedHat		6.0 and higher
	SuSE	8.2 and higher
	Mandriva (Mandrake)	9.0 and higher
UNIX	AIX	4.3 and higher
	FreeBSD	3.51 and higher
	Sun	Solaris 8 and higher
Novell	Netware	5.0 and higher
Mac		OS 9 and higher
DOS		6.2 and higher

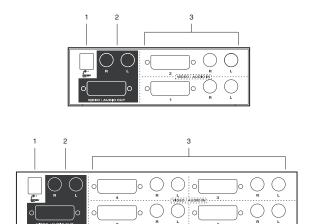
# FRONT VIEW



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.

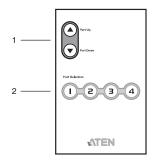
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# REAR VIEW



No.	Component	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.	Component	Description	
1	Power Jack	The power adapter cable plugs in here.	
2	Media Output Section	The cables from your DVI Video Display and Audio jacks plug in here. Each connector is marked with an appropriate icon to indicate itself.	
3	Media Input Section	The cables that link your media source devices to the VS-261 / VS-461 plug into the ports in this section. Each section is comprised of a DVI-I connector and two speaker jacks. When connecting DVI and audio cables from your sources, be sure that the DVI cable and audio cables from a device all plug into the same port section (e.g. all in Port 1, etc.).	

#### INSTALLATION



- 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.
- Make sure that all devices you will be installing are properly grounded

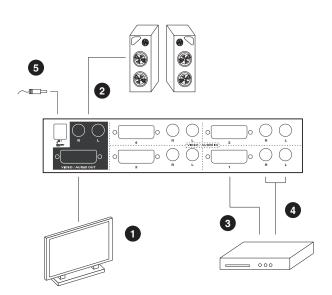
Refer to the installation diagram (the numbers in the diagrams correspond to the numbers of the steps) and do the following:

- 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 VS-261 / VS-461'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.).

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.)
- 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 VS-261 / VS-461 supports hot plugging - devices can be added and removed from the installation by plugging and unplugging their cables to and from the VS-261 / VS-461's Video Input ports without the need to shut the switch down.

## POWERING OFF AND RESTARTING

If you Power Off the VS-261 / VS-461, 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

Functi	on	VS-261	VS-461	
Computer Con	nections	2	4	
Port Selection		Front Panel Pushbuttons; IR Remote Control		
Connectors	Video In	1 x DVI-I port (F)		
	Audio Out	2 x Stereo RCA jacks		
	Video In	2 x DVI-I ports (F)	4 x DVI-I ports (F)	
	Audio Out	4 x RCA jacks	8 x RCA jacks	
LEDs	Selected	2 (Green)	4 (Green)	
	On Line	2 (Orange)	4 (Orange)	
Power Adapter		1 x DC 9V jack		
Resolution		Up to 1920 x 1200; DDC2B		
Environment Operating Temp.		0-50°C		
Storage Temp.		-20-60°C		
Humidity		0–80% RH, Non-condensing		
Housing		Metal		
Weight		0.6kg	0.8kg	
Dimensions (L	x W x H)	14.0 x 8.8 x 5.55 cm	21.0 x 8.8 x 5.55 cm	

# 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

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.

The direct vendor makes no warranty or representation, expressed, implied, or statutory with respect to the contents or use of this documentation, and specially 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 inquires please contact your direct vendor.