



**NEWSTAR 2/4PORT KVM SWITCH
One Keyboard, Monitor, and Mouse
Control 2/4PCs**

User Manual

www.newstar.nl

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Introduction

Thanks for purchasing the NEWSTAR KVM Switch. NEWSTAR's KVM Switch deliver a durable and high quality product at a competitive price. With the NEWSTAR KVM Switch, you can access multiple computers from a single console (keyboard, mouse, and monitor). NEWSTAR's NS-231 / 431 comes in various capacities suitable for all configurations. This Switch also comes with NEWSTAR's 3 years warranty and free technical support.

This manual provides you details about your new Switch, from installation, operation, to troubleshooting.

Package Contents

- ◆ NS-231 / 431 NEWSTAR 2/4-PORT KVM Switch.
- ◆ User Manual
- ◆ Cable X 2/4

Feature Overview

Hot Key Function

The Hot key feature allows you to use designated keyboard commands to select ports, start AutoScan, and enable/disable sound. You can control multiple computers by using a simple hot key sequence on your keyboard.

AutoScan

The AutoScan function allows you to automatically scan and monitor the active computers one by one.

Video Resolution

With a 400MHz video bandwidth, the NEWSTAR NS-231 / 431 is able to support video resolutions of up to 2048x1536. To preserve signal integrity at high resolutions, the 75-Ohm coaxial VGA cabling is required.

Front-Panel Push Buttons:

Push buttons conveniently located on the face of the NEWSTAR NS-231 / 431, The push buttons provide you simple manual port selection.

Light-Emitting Diode Display

LEDs are added to the front panel of the NEWSTAR 2/4-PORT KVM Switch for easy status monitoring. A lit LED indicates which computer the console has control of. The LED will light with the corresponding active port when using the front-panel push button,

Support PS/2 Interface

The Switch supports computers with PS/2 input devices (keyboard and mouse)

Equipment Requirements-Cables

You will need the following equipment for each PS/2 computer to connect to the NEWSTAR 2/4-PORT KVM Switch, one VGA cable, one PS/2 keyboard cable, and one PS/2 mouse cable. Keyboard and mouse cables must have PS/2 male to PS/2 male connectors.

To support resolutions of up to 2048x1536, a 75-Ohm coaxial VGA cable is required to preserve signal integrity. Cables must have HDBB 15 pin male to HDBB 15 pin male connectors.

The NEWSTAR's KVM 3-IN-ONE Cable offers the highest quality to ensure that your data is optimally transmitted. KVM 3-IN-ONE Cable is molded together for a clean and organized setup. It also includes PC99 color code for easier identification and connection. Double-shielded, strain-relief, ferrite-bead, KVM 3-IN-ONE cable kits include an industry-standard, 15-pin coaxial VGA cable and nickel-plated connectors for high-resolution applications. The KVM 3-IN-ONE Cable has a custom 15-pin coaxial VGA cable and gold-plated connectors for superior clarity and connectivity for maximum resolution.

Operating Systems

Your Switch is for use on PS/2-based computers.

Platforms

Window® 98/NT/ME/2000/XP

Mice

Microsoft compatible PS/2 mice

Keyboards

Supports 101, 102, and 104-key keyboards

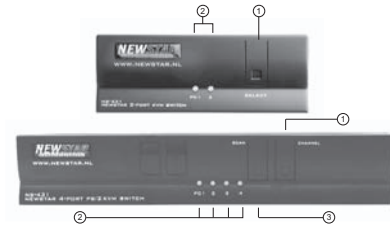
Monitors

VGA

SVGA

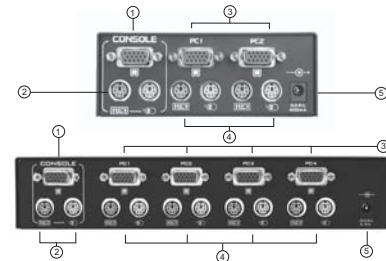
Unit Display Diagram

The Front Panel of the NEWSTAR NS-231 / 431



1. Push Button Port Selector
Press the push button to jump among ports.
2. Port LEDs
The LED lit up to indicate the active port.
3. Auto Scan
Press for the Auto Scan Function

The Back Panel of the NEWSTAR NS-231 / 431



1. Console VGA port
2. Console keyboard and mouse connectors.
3. Computer VGA ports
4. Computer Keyboard and Mouse combo connectors.
5. Power Jack (DC9V, 600mA)

Specifications

Part No.: NS-231 / 431

Powered By: PS/2 keyboard port or optional adapter.

NS-231 by DC9V, 600mA power supply

NS-431 by DC5V, 2.5A power supply

PCs Supported: 2 / 4

Keyboard/ Mouse Emulation: PS/2

Monitors Supported: VGA, SVGA, MultiSync, and LCD

Max. Resolution: 2048x1536

Keyboard Input: 6-pin miniDIN (PS/2)

Keyboard output: 6-pin miniDIN (PS/2)

Mouse Input: 6-pin miniDIN (PS/2)

Mouse output: 6-pin miniDIN (PS/2)

VGA Port: 15-pin HDDB type

LED Indicators: 2 / 4 x Dual color @ Top

Enclosure: Metal

Operating Temp: 32°F to 104°F(0~40°C)

Storage Temp: -4°F to 140°F(-20~60°C)

Humidity: 0-80% RH, non-condensing

Warranty: 3 years

NOTE: Specifications are subject to change without notice.

Pre-Configuration

Place the Switch

The NEWSTAR 2/4-PORT KVM Switch is small, portable, and designed to fit right on the desktop. The exact placement will depend on the location of your computers and the length of your cables.

Cable distance Requirements

For PS/2 computers: VGA signals are best retained when transmitted under 25 feet. Beyond 25 feet, the probability of video degradation increases with the increase of distance. Therefore, your PS/2 computer should be placed within 25 feet of the KVM Switch.

Cautions and Warnings

Avoid placing cables near machines that create electrical noise such as fluorescent lights, air conditioning equipment, vacuum cleaners, and etc.

Installation

Step-by-Step Installation

This manual provides you complete setup instruction for the NEWSTAR 2/4-PORT KVM Switch.

Please turn off all computers before connecting to the NEWSTAR 2/4-PORT KVM Switch. Unplugging and re-plugging cables while computers are powered on might damage your computers, data, and/or the KVM Switch. NEWSTAR will not be responsible for such damage. You will need the following items to install the switch.

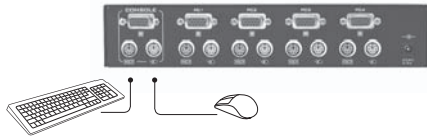
NEWSTAR 2/4-PORT KVM Switch.

One keyboard, monitor, and mouse.

One KVM cable kit per computer installed.

Connecting the console (Step. 1)

1. Turn off all computers.
2. Connect a PS/2-type keyboard to the PURPLE port on the rear panel keyboard port.



3. Connect a PS/2-type mouse to the GREEN port on the rear panel mouse port.
4. Connect the monitor to the Console VGA port on the rear panel of the 2/4-PORT KVM Switch.

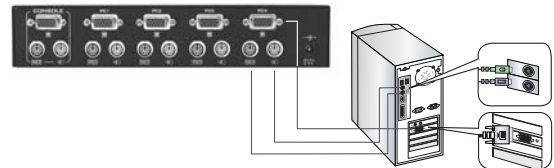


Installation

Connecting the computer (Step.2)

1. Connect the first computer's PS/2 keyboard and mouse cable to the back panel of the KVM Switch that labeled PC1.
2. Connect the first computer's VGA cable to the VGA port in the back panel of the 2/4-PORT KVM Switch that labeled PC1.
3. Repeat steps 1 and 2 for each additional computer you wish to connect to the KVM Switch.

Please turn on your computers. Your NS-231 / 431 is now ready to use.



Using Your Switch

Turn the power of the Systems on

Turn on your computers that attached to the Switch once all cables have been connected. All computers can be powered on simultaneously. The Switch emulates each port's mouse and keyboards' signals and allows your computer to boot up normally. The Switch should be ready to use now. Please wait patiently until all computers fully boot up.

You can access the computers through the Hot Key commands from the keyboard. (It will take 1-2 seconds for the video to display after Switching to refresh the video signal.) A re-synchronization of the mouse and keyboard signal also takes place. This is normal operation which ensures proper synchronization has been set up.

Selecting a Computer By Using Front-Panel Push Buttons

You can select a connected computer by pressing the Push Button on the switch. The LED will lit to indicate which port is currently selected.

Selecting a Computer By Using HotKey Sequence

You can easily use the "Ctrl" key to change ports on the Switch through the keyboard command sequence and up & down arrow keys. Pressing the "Ctrl" key twice within two seconds to send commands to the Switch. You will hear a beep for confirmation. Then you can press the up or down arrow keys to switch ports.

"Up arrow " for switch to next active port

"Down arrow" for switch to previous active port,

Enter the port number you wish to switch potr directly. The computer on port 2 will be selected if you press "**Ctrl**", "**Ctrl**", "**2**".

Using Your Switch

AutoScan Mode

NEWSTAR's 2/4-PORt KVM Switch offers AutoScan feature and allows you to monitor the activity of the connected computers without switching yourself.

In AutoScan mode, the Switch remains on one port for ten seconds . This time interval cannot be changed.

To start Auto Scan mode, press "**Ctrl**", "**Ctrl**", "**0**",

Note: In order to prevent errors, no mouse or keyboard control in this mode. If users move the mouse or use the keyboard while switching, it could interrupt the communication between the computer and the Switch, which might cause erratic mouse movement or result in errant display of characters when using the keyboard.

If you want to exit AutoScan Mode, press the Space Bar or ESC.

Enable/Disable Sound

NEWSTAR's Switch offers users to enable or disable the "beep" sound while changing port or during the AutoScan mode for comfortable working environments.

You can easily press "**Ctrl**" key twice within two seconds and then press the "S" key to enable or disable the speaker. With two "beeping", the speaker is now disabled. You can use this setting(Ctrl+Ctrl, "S") again to enable the "beeping" function.

Using Your Switch

Switch Hot Key Command

The following combinations are available for Hot Keys:

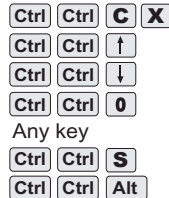
[Ctrl][Ctrl](default), **[Alt][Alt]**, **[Scroll Lock][Scroll Lock]**, **[Shift][Shift]**

1. Press the original command key twice within two seconds
2. Press the new command Hot key.

For example; **[Ctrl] + [Ctrl] + [Alt]**. Now the Hot Key will be changed to Alt

The Hot Key Command

- Switch to PC "X"
- Previous active PC
- Next active PC
- AutoScan mode
- Stop AutoScan
- Turn On/Off buzzer confirmation
- Switch the Hot Key



X = 1,2,3,4)

NOTE: After switching ports, there will be a delay of up to 1-2 seconds before the video displays. This is normal to refresh the rate of the video signal.

FAQs

Q: Do I have to install any software to use the Switch?

A: No, the Switch does not need any drivers or software. Simply connect all your computers to the PC ports on the Switch, attach one monitor, mouse, and keyboard to the corresponding console ports, then your Switch is ready for use.

Q: What operating system does the Switch support?

A: The Switch will support any operating system that runs on a PS/2 platform. It will also work with Sun and Mac operating systems by using the appropriate adapters (For more details, please call for Sun & Mac Adapters). Operating systems include, but not limited to, Windows[®] 98, 2000, ME, NT, XP, Linux, and Novell Netware 4.x/5.x.

Q: Does the Switch function with the Microsoft IntelliMouse?

A: Yes, the Switch function with Microsoft, Logitech, Kensington, as well as all other mice.

Q: How does the Switch allow the user to switch between ports?

A: The user can choose computers using special designated hot key function from the keyboard or using the push button in the front panel to switch port.

Q: What is the maximum video resolution the Switch supports?

A: The advanced video circuit in the Switch supports a maximum resolution of 2048x1536. This high resolution support is ideal for graphic artists and designers who depend on high-quality video.

FAQs

Q:What are the benefits of the NEWSTAR 2/4-PORT KVM Switch over a similar competitor product?

A:The NEWSTAR 2/4-PORT KVM Switch is an affordable solution, packed with features usually found in higher-priced units. The NEWSTAR KVM Switch offers hot key command switching, resolution support of up to 2048x1536, AutoScan function, and NEWSTAR 3 years Limited Warranty.

Q:Can I use the Switch on my Sun Computer?

A:Yes, the Switch works with Sun computers. (Please call for further information)

Q:Does the Switch support Linux?

A:Yes, the Switch supports Linux, but please remember to set up mouse type before you use the KVM switch.

Q:Does the Switch require an AC adapter?

A: Not necessary. The Switch can be powered by the PS/2 ports of your computer, but you can use the adapter.(DC9V 600mA)

Q:Can I use the Switch to switch video signals only?

A:No, you cannot use the Switch to switch video signals only. The Switch is powered by the PS/2 keyboard port.

Troubleshooting

Video

I am getting a black screen on my monitor.

- ◆ Check that all video cables are connected properly.
- ◆ Connect your monitor directly to the computer to verify that your monitor is function properly.
- ◆ Take your computer out of standby mode and restart it again.

I am getting ghosting, shadowing, or fuzzy images on my monitor.

- ◆ Check that all video cables are connected properly.
- ◆ Check that the monitor you are using supports the resolution and refresh-rate setting on your computer.
- ◆ Check that the graphics card you are using supports the resolution and refresh-rate setting on your computer.
- ◆ Connect the monitor directly into the computer you are having trouble with to see if the problem still appears.

Keyboard

Computer does not detect my keyboard and I get a keyboard error reported when booting up.

- ◆ Check that the keyboard cable between the Switch and the computer is connected properly. Tighten any loose connections.
- ◆ Try another cable.
- ◆ If you are using the keyboard software that was included with your keyboard, uninstall it and install the standard Microsoft keyboard driver.

Troubleshooting

Mouse

The Mouse is lost when I switch to a different channel.

- ◆ Check that the mouse you are using is connected properly to the console port of the Switch.
- ◆ If you are using a mouse driver that was included with your mouse, uninstall it and install the standard Microsoft mouse driver.
- ◆ Disconnect and reconnect the mouse cable with which you are experiencing problems with to re-synchronize the mouse connection.
- ◆ Connect the mouse directly to the computer with which you are experiencing mouse problems.
- ◆ Allow up to one minute following the computer's waking from standby mode for mouse function to return.
- ◆ Deactivate power management schemes on the PC with which you are experiencing problems.
- ◆ Try another mouse.

Mouse is not detected at booting up

- ◆ Check the cables and make sure that they are inserted properly.

The computer boots up fine but the mouse does not work.

- ◆ Make sure the mouse is plugged-in properly.
- ◆ Make sure the mouse works when directly plugged into the computer. Rebooting may be necessary when trying this.
- ◆ Try a different mouse.

Troubleshooting

When I switch from one port to another, mouse movement is completely erratic.

- ◆ Make sure you do not have more than one mouse driver installed.
- ◆ Make sure the driver is either for a standard PS/2 mouse or for a Microsoft compatible PS/2 mouse.
- ◆ Make sure you do not have any mouse drivers loaded in your CONFIG.SYS or AUTOEXEC.BAT files.
- ◆ Avoid moving the mouse or pressing the mouse button when switching port on the switch.
- ◆ You can reset the mouse and resume proper mouse movement simply by unplugging the mouse from the Switch and allow 2-3 seconds before replugging.

General

My computer does not boot up when connected to the Switch, but works fine when I connect the keyboard, monitor, and mouse directly to it.

- ◆ Make sure that the keyboard and mouse cables are connected tightly between the Switch and the computer.
- ◆ Check that the keyboard and mouse cables are not crossed.
- ◆ Make sure the connectors are plugged into the correct ports.

FCC Certifications

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 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 distance between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different than that of which the receiver is connected to.
- Consult the dealer or an experienced radio/TV technician for help.
- Shielded interface cables must be used in order to comply with emission limits.
- You are cautioned that changes or modifications not expressly approved by the party responsible for compliance could void your authority to operate the equipment.
- This 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.

CE Mark Warning

This is a Class B product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

VCCI Warning

注意

この装置は、情報処理装置等電波障害自主規制協議会(VCCI)の基準に基づく第一種情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

Limited Warranty

NEWSTAR offers limited warranty for its product only to the person or entity who originally purchased the product from NEWSTAR or its authorized reseller or distributor.

Limited Hardware Warranty:

NEWSTAR warrants that the hardware portion of the NEWSTAR products described below (Hardware) will be free from material defects in workmanship and materials from the date of original retail purchase of the Hardware, for the period set forth below applicable to the product type (Warranty Period) if the Hardware is used and serviced in accordance with applicable documentation; provided that a completed Registration Card is returned to an Authorized NEWSTAR Service Office within ninety (90) days after the date of original retail purchase of the Hardware. If a completed Registration Card is not received by an authorized NEWSTAR Service Office within such ninety (90) period, then the Warranty Period shall be ninety (90) days from the date of purchase.

Product Type	Warranty Period
Product (excluding power supplies and fans)	Three (3) Years
Power Supplies and Fans	One (1) Year
Spare parts and spare kits	Ninety (90) days

NEWSTAR's sole obligation shall be to repair or replace the defective Hardware at no charge to the original owner. Such repair or replacement will be rendered by NEWSTAR at an Authorized NEWSTAR Service Office. The replacement Hardware need not be new or of an identical make, model or part; NEWSTAR may in its discretion may replace the defective Hardware (or any part there of) with any reconditioned product that NEWSTAR reasonably determines is substantially equivalent (or superior) in all material respects to the defective Hardware. The Warranty Period shall extend for an additional ninety (90) days after any repaired or replaced Hardware is delivered. If a material defect is incapable of correction, or if NEWSTAR determines in its sole discretion that it is not practical to repair or replace the defective Hardware, the price paid by the original purchaser for the defective Hardware will be refunded by NEWSTAR upon return to NEWSTAR of the defective

Hardware.

All Hardware (or part thereof) that is replaced by NEWSTAR, or for which the you specific legal rights, and you may also have other rights that vary from state to state.

Governing Law:

This Limited Warranty shall be governed by the Haarlem, city of The Netherlands. Some states do not allow exclusion or limitation of incidental or consequential damages, or limitations on how long an implied warranty lasts, so the foregoing limitations and exclusions may not apply. This limited warranty provides specific legal rights and the product owner may also have other rights which vary from state to state.

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Registration Card

Print, type or use block letters.

Your name:Mr./Ms _____
 Organization: _____ Dept. _____
 Your title at organization: _____
 Telephone: _____
 Fax: _____
 Organization's full address: _____
 Country: _____
 Date of purchase (Month/Day/Year): _____

Product Model	Product Serial Number	* Product installed in type of Computer (E.g., Compaq(486)	* Product installed Incomputer seria

(* Applies to adapters only)

Product was purchased from:

Reseller's name: _____

Telephone: _____ Fax: _____

Reseller's full address: _____

Answers to the following questions help us to support your product:

1. Where and how will the product primarily be used?

Home Office Travel Company Business Home

2. How many employees work at installation site?

1 employee 2-9 10-49 50-99 100-499 500-999 1000 or more

3. What network protocol(s) does your organization use ?

XNS/IPX TCP/IP DECnet Others _____

4. What network operating system(s) does your organization use ?

NEWSTAR LANsmart Novell NetWare NetWare Lite SCO Unix/Xenix PC NFS 3Com

3+Open Banyan Vines DECnet Pathwork Windows NT Windows NTAS

Windows '95 Others _____

5. What network management program does your organization use ?

D-View HP OpenView/Windows HP OpenView/Unix SunNet Manager

Novell NMS NetView 6000 Others _____

6. What network medium/media does your organization use ?

Fiber-optics Thick coax Ethernet Thin coax Ethernet 10BASE-T UTP/STP

100BASE-TX 100BASE-T4 100VGAnyLAN Others _____

7. What applications are used on your network?

Desktop publishing Spreadsheet Word processing CAD/CAM

Database management Accounting Others _____

8. What category best describes your company?

Aerospace Engineering Education Finance Hospital Legal

Insurance/Real Estate Manufacturing Retail/Chainstore/Wholesale

Government Transportation/Utilities/Communication VAR

System house/company Other _____

9. Would you recommend your NEWSTAR product to a friend?

Yes No Don't know yet

10. Your comments on this product?