

Owner's Manual

Secure KVM Switches, NIAP Protection Profile Version 4.0

DisplayPort Models:

B002-DP1A2-N4, B002-DP2A2-N4, B002-DP1A4-N4, B002-DP2A4-N4

HDMI Models:

B002-H1A2-N4, B002-H2A2-N4, B002-H1A4-N4, B002-H2A4-N4

DP to HDMI Models:

B002-HD1A2-N4, B002-HD2A2-N4, B002-HD1A4-N4, B002-HD2A4-N4

DVI:

B002-DV1A2-N4, B002-DV2A2-N4, B002-DV1A4-N4,
B002-DV2A4-N4

Este manual está disponible en español en la página de Tripp Lite: tripplite.com

Ce manuel est disponible en français sur le site Web de Tripp Lite : tripplite.com

Русскоязычная версия настоящего руководства представлена на веб-сайте
компании Tripp Lite по адресу: tripplite.com

Dieses Handbuch ist in deutscher Sprache auf der Tripp Lite-Website verfügbar:
tripplite.com

WARRANTY REGISTRATION

Register your product today and be
automatically entered to win an ISOBAR®
surge protector in our monthly drawing!

tripplite.com/warranty



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Package Includes

- B002-Series Secure KVM Switch
- 12V 3A External Power Supply*
- Owner's Manual

* Includes NEMA 1-15P (North America), CEE 7/16 Schuko (Europe), BS 1363 (UK) and AS/NZS 3112 (Australia) plugs.

Optional Accessories

- P312-Series 3.5 mm Stereo Audio Cables
- P569-XXX-CERT Premium High-Speed HDMI Cables
- P782-XXX-HA HDMI/USB KVM Cable Kit
- P782-XXX-DH HDMI/DVI/USB KVM Cable Kit
- P783-Series DisplayPort KVM Cable Kit
- P580-Series DisplayPort Cables
- U022-Series USB 2.0 A/B Device Cables

*XXX refers to length (e.g. 006 = 6 ft., 010 = 10 ft., and so on)

System Requirements

- DisplayPort, DVI or HDMI monitor

Note: *The number of displays needed can be determined from the model name. The number directly preceding the “A” in the model name indicates how many monitors can be connected to the KVM switch.*

- Wired USB mouse and keyboard without internal hub or composite device functions*
- Computer with a DisplayPort, DVI or HDMI port
- Computer with an available USB port
- Computer with an available 3.5 mm stereo audio port
- Speakers with a 3.5 mm stereo audio port
- Compatible with all major operating systems

*Wireless keyboard and mouse are not supported

Features

- Certified to NIAP / Common Criteria Protection Profile for Peripheral Sharing Switches, Version 4.0.
- Safely switch between computers (up to 8) with varying security levels.
- DisplayPort models support video resolutions up to 3840 x 2160 @ 30 Hz. HDMI models support resolutions up to 3840 x 2160 @ 60 Hz.
- **Anti-Tampering Protection** – Internal Anti-Tamper switches disable the KVM if the housing is opened, causing it to become inoperable. When disabled, the front-panel LEDs will flash repeatedly and the internal buzzer will sound repeatedly. This is also caused by the exhaustion of the internal battery, which has a life rating of over 10 years. Opening the housing will disable the unit and void the warranty.
- **Tamper-Evident Seals** – The enclosure of the unit is protected with tamper-evident seals to provide visual evidence if the unit has been tampered with or compromised. Removing these labels will void the warranty.
- **Protected Firmware** – The unit features special protection that prevents reprogramming or reading firmware, protecting against attempts to alter the logic of the KVM.
- **High Isolation on USB Channels** – Opto-isolators are used to keep USB data paths electrically isolated from each other, preventing data leakage between ports.
- **Secure EDID Emulation** – Secure EDID learning and emulation prevents unwanted and unsecure data from being transmitted through the DDC line.
- **Automatic Keyboard Buffer Clearing** – The keyboard buffer is automatically cleared after data transmission, so no information is left stored in the switch.
- **No Memory Buffer** – The only way to access connected computers is via push button. Port switching methods such as On-Screen Display (OSD) and Hotkey Commands have been excluded to further ensure data integrity.

Important Safety Instructions

- Read all instructions and 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 contains 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 power source type indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power utility.
- 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 the total ampere rating of all products used on the cord does not exceed the extension cord ampere rating. Make sure the total rating of all products plugged into the wall outlet does not exceed 15 amperes.
- Position system cables and power cables carefully. Make sure nothing rests on any cables.
- To help protect your system from sudden transient increases and decreases in electrical power, it is recommended you plug your devices into a Tripp Lite Surge Protector, Line Conditioner or Uninterruptible Power Supply (UPS).

Important Safety Instructions

- When connecting or disconnecting power to hot-pluggable power supplies, observe the following guidelines:
 - o Install the power supply before connecting the power cable to the power supply.
 - o Unplug the power cable before removing the power supply.
 - o If the system has multiple power sources, disconnect power from the system by unplugging all power cables from the power supplies.
- 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 electrical shock or fire.
- If the following conditions occur, unplug the device from the wall outlet and bring it to qualified service personnel for repair.
 - o The power cord or plug has become damaged or frayed.
 - o Liquid has been spilled into the device.
 - o The device has been exposed to rain or water.
 - o The device has been dropped or the cabinet has been damaged.
 - o The device exhibits a distinct change in performance, indicating a need for service.
 - o 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.
- This device is designed for IT power distribution systems with up to 230V phase-to-phase voltage.
- To prevent damage to your installation, it is important that all devices are properly grounded.

Important Safety Instructions

- This device is equipped with a three-wire grounding-type plug. This is a safety feature. If you are unable to insert the plug into the outlet, contact an electrician to replace your outlet with one that will accept this type of plug. Do not attempt to defeat the purpose of the grounding-type plug. Always follow your local/national wiring codes.
- **Warning! There is a risk of explosion if the battery is replaced with an incorrect battery type. Do not attempt to service the device yourself. Refer all servicing to qualified service personnel.**

Installation

Note: Before proceeding with installation, make sure all devices being connected to the KVM switch are turned off.

1. Using audio/video cables appropriate for your switch model, connect the video output port of each computer you are adding to the video input ports of the KVM Switch.

Note: Models with Dual Monitor capability require two available video ports per computer.

2. Using USB A/B device cables, connect a USB port on each computer being added to the USB input port of the KVM Switch.
3. Using 3.5 mm stereo audio cables, connect the audio output of each computer you are adding to the audio input ports of the KVM Switch.
4. Using the appropriate audio/video cable, connect a monitor appropriate for your switch model to the console video output port of the KVM switch.
5. Connect a wired USB keyboard and mouse to the console USB keyboard and mouse ports of the KVM Switch.

Note: Keyboards and mice with internal USB hub or composite device functions are not supported. Wireless keyboards and mice are not supported.

6. Connect a set of speakers to the console audio output port of the KVM Switch using a 3.5 mm stereo audio cable.

Note: Microphones or headsets with microphones are not supported.

7. Power on the KVM by connecting the included external power supply and plugging it into a Tripp Lite Surge Protector, Power Distribution Unit (PDU) or Uninterruptible Power Supply (UPS).

8. Power on all connected computers and monitors. The front-panel LEDs will begin to flash.

Note: The computer connected to port 1 will always be selected by default after power-up.

9. To switch among the connected computers, simply push the desired input button on the front panel of the KVM. If an input port is selected, the LED of that port will turn on.

Note: The KVM will terminate an open session upon switching to a different computer.

KVM LEDs

Port-Selection LEDs

- When the LED is off, the corresponding port is not currently selected.
- When the LED is on, the corresponding port is currently selected.
- When the LED is flashing, the EDID Learn process is occurring.

Push-Button LEDs

- When the push-button LED of a non-selected port is off, the corresponding port is not currently selected.
- When the push-button LED is on, the corresponding port is currently selected.
- When the push-button LED is flashing, the EDID Learn process is occurring.

Port-Selection and Push-Button LEDs

- When all Port-Selection and Push-Button LEDs are flashing simultaneously, the USB peripheral connected to the console keyboard or mouse port has been rejected.

Console Video Port LED

- When the LED is off, a monitor is not connected.
- When the LED is illuminated, a monitor is connected.
- When the LED is flashing, there is a problem with EDID. Reset the power of the KVM to resolve these issues.

Miscellaneous KVM Functionality

Note: The following steps are intended for the system administrator only.

AUDITING: Dumping the Event Log

Note: The following steps are intended for the system administrator.

The Event Log is a detailed report of critical activities stored in the KVM or KVM memory. To view or dump the Event Log, follow the instructions below.

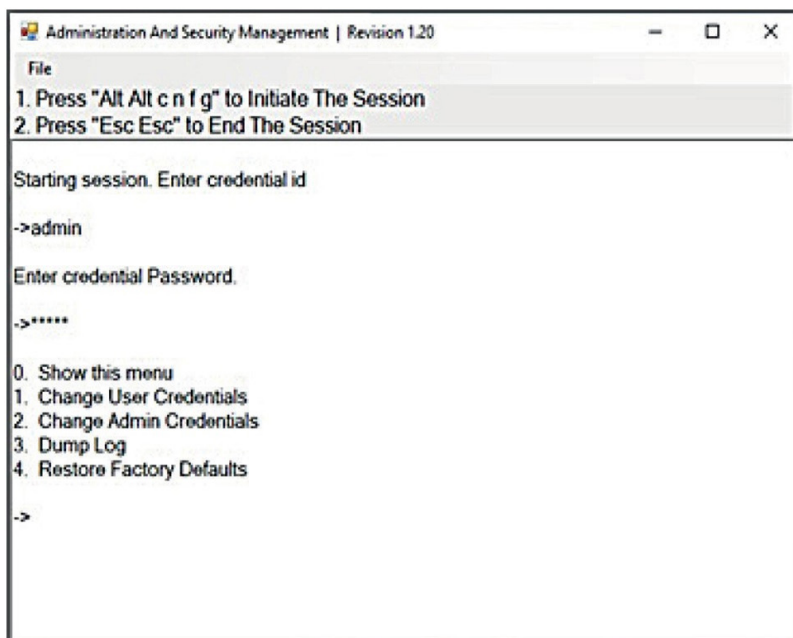
Note: Only one computer connected to port 1 is required for this operation.

1. From the connected computer, download the Administration and Security Management Tool from triplite.com/support.
2. Once downloaded, run the Administration and Security Management Tool executable file. The Administration and Security Management screen will appear.
3. Initiate the session by pressing the following hotkey command. Hit each key one after another.

[Alt][Alt][c][n][f][g]

4. Upon completing the command, the mouse connected to the KVM will stop functioning. A prompt will appear to enter the Credential ID.
5. Log in by entering the default username “admin” and pressing Enter.
6. Enter the default password “12345” and press Enter.
7. Request a Log Dump by selecting option 3 in the menu.

Miscellaneous KVM Functionality



The screenshot shows a window titled "Administration And Security Management | Revision 1.20". The window has a "File" menu bar and a main content area. The content area displays the following text:

```
1. Press "Alt Alt c n f g" to Initiate The Session
2. Press "Esc Esc" to End The Session

Starting session. Enter credential id
->admin

Enter credential Password.
->*****

0. Show this menu
1. Change User Credentials
2. Change Admin Credentials
3. Dump Log
4. Restore Factory Defaults

->
```

RESET: Restore Factory Defaults

Note: The following steps are intended for the system administrator. Restore Factory Defaults will reset all settings on the KVM to their original state:

- KVM settings will be reset to factory defaults

To restore Factory Defaults, follow the steps below.

Note: Only one computer connected to port 1 is required for this operation.

1. Open the Administration and Security Management Program (See the Auditing Section for download instructions). The Administration and Security Management screen will appear.
2. Initiate the session by pressing the following hotkey command, one key after another.

[Alt][Alt][c][n][f][g]

3. Upon completing the command, the mouse connected to the KVM will stop functioning. A prompt will appear to enter the Credential ID.
4. Log in by entering the default username "admin" and pressing Enter.
5. Enter the default password "12345" and press Enter.

Miscellaneous KVM Functionality

6. Select option 3 from the menu on your screen and press Enter to restore the KVM to its factory default settings.

Note: A comprehensive feature list and instructions for the Administration and Security Management Utility can be found in the Administrator's Guide available at tripplite.com/support.

Power Up Self-Test

If all front-panel LEDs are on and **not flashing**, the Power Up Self-Test failed and all functions are disabled. Check if any of the front-panel power selection buttons are jammed. In this case, release the jammed button and recycle power. If Power Up Self-Test continues to fail, contact Tripp Lite Technical Support at tripplite.com/support.

Front Panel Control

To switch to an input port, simply push the desired input button on the front panel of the KVM. If an input port is selected, the LED of that port will turn on. An open session is terminated upon switching to a different computer.

Warranty and Product Registration

3-Year Limited Warranty

TRIPP LITE warrants its products to be free from defects in materials and workmanship for a period of three (3) years from the date of initial purchase. TRIPP LITE's obligation under this warranty is limited to repairing or replacing (at its sole option) any such defective products. To obtain service under this warranty, you must obtain a Returned Material Authorization (RMA) number from TRIPP LITE or an authorized TRIPP LITE service center. Products must be returned to TRIPP LITE or an authorized TRIPP LITE service center with transportation charges prepaid and must be accompanied by a brief description of the problem encountered and proof of date and place of purchase. This warranty does not apply to equipment which has been damaged by accident, negligence or misapplication or has been altered or modified in any way.

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Visit tripplite.com/warranty today to register your new Tripp Lite product. You'll be automatically entered into a drawing for a chance to win a FREE Tripp Lite product!*

* No purchase necessary. Void where prohibited. Some restrictions apply. See website for details.

Tripp Lite has a policy of continuous improvement. Specifications are subject to change without notice.



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