

# Quick Start Guide

## NetDirector Console KVM Switch (8- or 16-Port) or Rackmount KVM Switch (8-Port)

Models: B020-U08-19-K, B020-U08-19KTAA, B020-U16-19-K or B022-U08

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# 1. Package Contents

- (1) B020-U08-19-K, B020-U08-19KTAA, B020-U16-19-K or B022-U08 KVM Switch
- (8) P778-006 USB/PS2 Combo KVM Cable Kits\*
- (1) USB/PS2 Combo Console Cable Kit
- (1) RJ45 to DB9 Firmware Upgrade Cable
- (1) C13 to 5-15P Power Cord\*
- (1) AC Power Adapter (Input: 100-240V, 50/60 Hz, 0.5A/Output: 5.3V, 2.4A)\*\*
- (1) CD with Owner's Manual
- (1) Quick Start Guide
- (1) Grounding Wire
- (1) Rackmount Hardware Kit
- (1) Set of Rubber Feet\*\*

\*B020-U08-19-K, B020-U08-19KTAA or B020-U16-19-K only

\*\*B022-U08 only

Check to see that the unit arrived undamaged and with all of its contents. Contact your dealer if there is a problem.

# 2. System Requirements

## 2.1 Computer

- A VGA, SVGA or MultiSync computer with a HD15 port

**Note:** The max resolution for the B020-U08-19-K, B020-U08-19KTAA or B020-U16-19-K is 1280 x 1024, and 2048 x 1536 for the B022-U08. The resolutions of the connected computers must not exceed these limits.

Either:

1. A Mini-DIN 6 (PS/2) keyboard and mouse port.
2. A USB Type-A port.

## 2.2 Console\*

- A VGA, SVGA, or MultiSync monitor capable of the highest resolution on any system in the installation
- A PS/2 or USB-style mouse
- A PS/2 or USB-style keyboard

\*Optional external console ports are included on the NetDirector Console KVM Switches.

## 2.3 Cables

This KVM switch requires the following custom-wired premium cables:

Function	Tripp Lite Part
To Connect a PS/2 or USB Computer to the KVM	P778-Series PS/2 or USB Combo KVM Cable Kit
Daisy-Chain Cables	P772- Series Daisy-Chain Cables

## 2. System Requirements

### 2.4 Operating Systems

OS	Version
Windows	2000 and higher
Linux RedHat	7.1 and higher
Linux SuSE	9.0 and higher
Linux Mandriva (Mandrake)	9.0 and higher
UNIX AIX	4.3 and higher
UNIX FreeBSD	4.2 and higher
UNIX Sun	Solaris 8 and higher
Novell Netware	5.0 and higher
Mac	OS 9 and higher
DOS	6.22

## 3. Installation

### 3.1 Rackmounting Instructions for Console KVMs

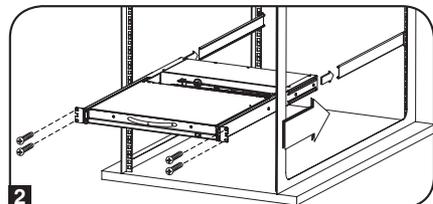
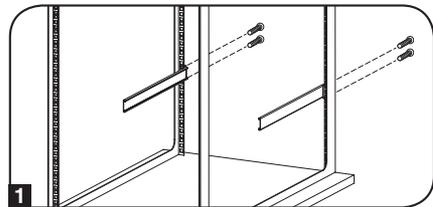
The NetDirector Console KVM Switch is designed for mounting in a 1U rack system. For convenience, a rack mounting kit is included with your KVM for quick installation. The mounting options are explained in the sections that follow:

**Note:**

1. It is recommended that the unit be installed by two people; one to hold it in place and the other to attach it to the rack.
2. The rackmounting kit that comes with the unit does not include screws or cage nuts. Contact your rack dealer for this hardware.
3. Allow at least 5.1 cm on each side for proper ventilation, and at least 12.7 cm at the rear of the unit for the power cord and cable kits.

#### Standard Rackmounting

- 1 Slide out the rear mounting brackets from the console and mount both brackets (separate from the console) to the inside rear of a standard 1U rack system using user-supplied screws.
- 2 Take the console and gently slide it into the two rear-mounted brackets in the rack and secure the console in place by inserting user-supplied screws.



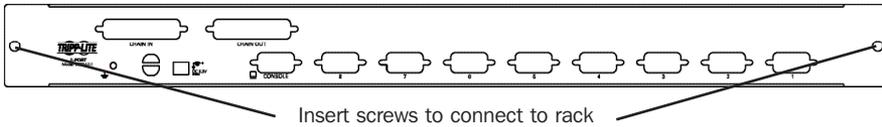
#### 2-Post Rackmounting

The NetDirector Console KVM Switch can also be mounted in a 2-post rack installation using the optional 2-Post Rackmount Kit (model #: B019-000). The mounting hardware allows for the console to be opened

with the drawer in any position. Heavy-duty, 14-gauge steel provides stability and prevents the console frame from twisting. See the B019-000 instructional manual for detailed mounting instructions.

## 3. Installation

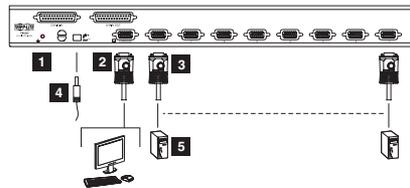
### 3.2 Rackmounting for B022-U08



Fasten the rackmount brackets to the rack with user-supplied screws to install in a rack.

### 3.3 Single-Station Installation

1. Ensure that power to all the connected devices has been turned off.
2. Connect the included USB/PS2 Combo Console Cable Kit to the console connector on the back of the unit, then connect a monitor, mouse and keyboard to the appropriate connectors on the cable kit. The distance between the external console and the KVM switch must not exceed 66 ft. (20 m).



**Note:** This step is mandatory for B022-U08 KVM switches, but is optional for Console KVM Switches.

3. Use a P778-Series USB/PS2 Combo KVM Cable Kit to connect each CPU port to a computer/server. The distance between the KVM switch and each connected computer must not exceed 33 ft. (10 m).
4. Plug the power cord or power adapter cable into the KVM's power jack, then plug into a UPS, surge protector or other AC power source. Turn on the power switch for the console KVM. (Not required for the B022-U08.)
5. Turn on the power to the computers.

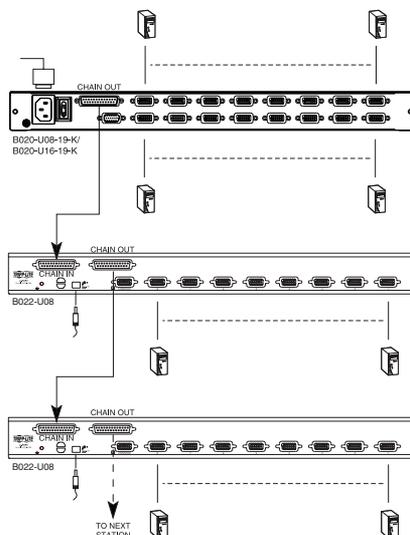
### 3.4 Multiple Station (Daisy-Chained) Installation

To control even more computers, up to 31 B022-U08 KVM Switches can be daisy-chained down from the first station.

**Note:** As many as 264 computers can be controlled from the unit's integrated console in a complete installation.

#### To set up a daisy-chained installation:

1. Ensure that power to all the connected devices has been turned off.
2. Connect the included USB/PS2 Combo Console Cable Kit to the console connector on the back of the unit, then connect a monitor, mouse and keyboard to the appropriate connectors on the cable kit. The distance between the external console and the KVM switch must not exceed 66 ft. (20 m).



## 3. Installation

3. Use a daisy-chain cable (described in the **Cables** section) to connect the **Chain Out** port of the parent unit to the **Chain In** port of the child unit. The distance between any two KVM switches in a daisy-chain must not exceed 49 ft. (15 m). The distance between the first KVM switch and the last KVM switch in a daisy-chain must not exceed 328 ft. (100 m), regardless of the number of KVM switches in the entire chain.
4. Use a KVM cable kit (described in the **Cables** section) to connect the keyboard, video and mouse ports of a computer to any available port on the KVM switch. The distance between the KVM switch and each connected computer must not exceed 33 ft. (10 m).
5. Repeat the above steps for any additional KVM switches and computers you wish to add to the chain.
6. To power up the installation:
  - a. Plug in the power adapter for the first station. Wait a few seconds to allow the unit to determine its Station ID.
  - b. Plug in the power adapters for each subsequent station in the installation (i.e. second station, third station, etc.). Each KVM switch has an LED display on its front panel to indicate its Station ID (the Station ID for the first station is **01**, the ID for the second station is **02**, the ID for the third station is **03**, etc.).

In each case, wait for the Station ID to be displayed on the Station ID LED before plugging in the next station.

### 3.5 Multiple Station (Cascaded) Installation

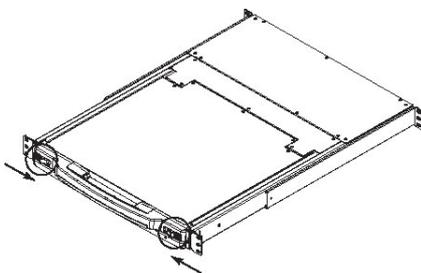
The B022-U08 KVM Switch can be cascaded off of a B020-016-17-IP Console KVM Switch to expand the number of connected computers. Before you can start a cascaded installation, you must upgrade the B022-U08 firmware to be cascade compatible. (See **Firmware Upgrade** for details.) For cascaded installation details, see the owner's manual for the B020-016-17-IP Console KVM Switch.

## 4. Basic Operation

### 4.1 Opening the NetDirector Console KVM

The console is located under the top cover. To access the console, slide the console module out and raise the cover.

**Note:** As a safety precaution, to keep the console from accidentally sliding out, the console is locked into the "in" position. Before you can pull the console module out, first must release it by pushing the catches on the unit's front panel toward the center of the switch.

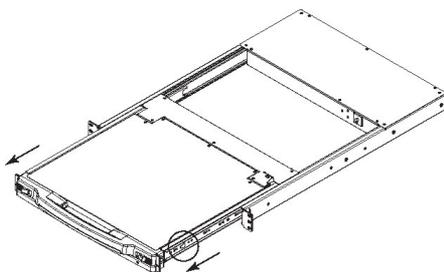


### 4.2 Closing the NetDirector Console KVM

To slide the console module back in, close the cover and do the following:

1. Pull the safety catches on the unit's side rails toward you and push the module in until it stops.
2. Release the catches; pull the module slightly toward you; then push it all the way in.

**Note:** The purpose of the two-step procedure is to minimize the chances of pinching your fingers when sliding the module in.



## 5. OSD (On-Screen Display) Operation

### 5.1 OSD Overview

The On-Screen Display (OSD) is a text-based interface that allows for control and administration of the KVM switch. When logging onto the KVM switch, the OSD Main Menu is the first screen you will see after entering your username and password.

### 5.2 Logging In For The First Time

The KVM switch features two-level security, with one Administrator and four User accounts. If you are an Administrator accessing the KVM switch for the first time, leave the Username and password field blank and hit the [Enter] key twice to access the OSD Main Menu. Once logged into the KVM switch as Administrator, you will be able to access all OSD features and customize KVM settings. At this point, it is highly recommended that you change the Administrator username and password.

## 5. OSD (On-Screen Display) Operation

### 5.3 OSD Invocation Sequence

Once logged into the KVM switch, you will need to use one of two sequences to open the OSD Main Menu; [**Scroll Lock, Scroll Lock**] or [**Ctrl, Ctrl**]. The default OSD invocation sequence is [**Scroll Lock, Scroll Lock**].

**Note:** When using the [**Scroll Lock, Scroll Lock**] OSD invocation sequence, you must hold down the [**Fn**] key, as the [**Scroll Lock**] key is part of the [**Num Lock**] key.

F1:GOTO	F3:SET	F5:SKP	F7:SCAN	X
F2:LIST	F4:ADM	F6:BRC	F8:LOUT	zZ
ADMINISTRATOR				
LIST:ALL				
SN.PN	QV	X	NAME	
02 • 14			ABC COMP1	▲
02 • 15	◀	X	ABC COMP2	↑
02 • 16		X	ABC COMP3	
03 • 01			WEB SERVER 1	
03 • 02			WEB SERVER 2	
03 • 03	◀	X	FAX SERVER 1	
03 • 04		X	FAX SERVER 2	
03 • 05	◀	X	MAIL SERVER 1	▼

When you invoke the OSD, a screen similar to the one above appears:

Note:

1. The diagram depicts the Administrator's Main Screen. The User Main Screen does not have the F4 and F6 functions, since they can't be accessed by ordinary Users and are reserved for the Administrator.
2. OSD always starts in List view, with the highlight bar at the same position it was when it was last closed.
3. Only the ports that have been set accessible by the Administrator for the currently logged in User are visible.
4. If the port list is collapsed into stations, simply click on the plus sign next to the desired station number, or highlight the desired station number and hit the [**Enter**] key.

### 5.4 OSD Navigation

- To close the menu and deactivate OSD, click the [**X**] at the upper right corner of the OSD Window or press [**Esc**].
- To logout, press [**F8**], click **F8** on the OSD Menu Bar or click the **zZ** symbol at the upper right hand corner of the OSD Screen.
- To move up or down one line at a time, click the Up and Down Triangle symbols (▼ ▲) or use the Up and Down Arrow Keys. If there are more entries than appear on the screen the screen will scroll.
- To move up or down one screen at a time, click the Up and Down Arrow symbols (▲▼), or use the [**Pg Up**] and [**Pg Dn**] keys. If there are more entries than appear on the screen, the screen will scroll.
- To activate a port, double-click it or move the Highlight Bar to it, then press [**Enter**].
- After executing any action, you automatically go back to the menu one level above.

## 6. Warranty and Product Registration

### 1-Year Limited Warranty

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- Send old equipment for recycling on a one-for-one, like-for-like basis (this varies depending on the country)
- Send the new equipment back for recycling when this ultimately becomes waste

### Warning!

Use of this equipment in life support applications where failure of this equipment can reasonably be expected to cause the failure of the life support equipment or to significantly affect its safety or effectiveness is not recommended. Do not use this equipment in the presence of a flammable anesthetic mixture with air, oxygen or nitrous oxide.

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



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