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## **Introduction**

Thank you for purchasing KVM switch. KVM switch can save your MONEY, TIME, SPACE, EQUIPMENT and POWER. You can control multiple PCs from a single Keyboard, Mouse and VGA monitor. KVM switch is loaded with features such as 19" Rack Mount Size, Hot key Control, Front Panel Push Button and Auto Scan Control. It has complete keyboard and mouse emulation for simultaneous PCs boot-up process.

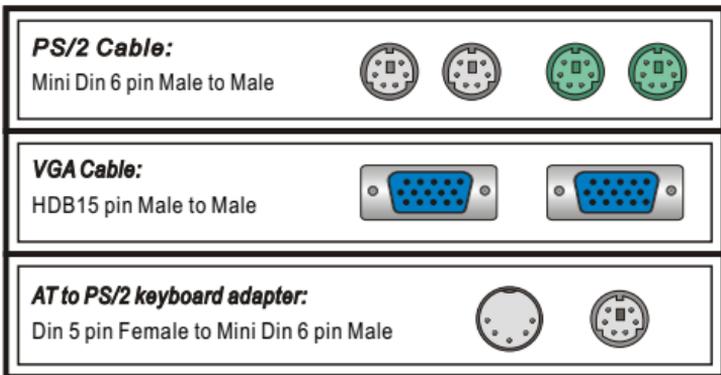
## **Features**

- ▶ 4/8/16 port KVM switch is 19" rack mount size design.
- ▶ Support Microsoft Intellimouse, Microsoft Intellimouse Explorer, Logitech Net Mouse or the other fully compatible MS mouse.
- ▶ Support DOS, Win3.X, Win95/98/98SE/2000/XP, WinXP, WinNT, Netware, Unix, Linux.
- ▶ Hot Pluggable: Add/remove any PC without powering down the switch or other PCs.
- ▶ Support Ultra High Video Resolution Up To 1920X1440 resolution.
- ▶ LED Display: Two LEDs for each port
- ▶ No Software Required - PC selection via "Select" Buttons on the switch or "Hot Keys."
- ▶ Auto Scan Mode for monitoring PCs and flexible Scan time from 5~99 seconds. Keyboard status restored when switching PCs.
- ▶ Buzzer sound for switching port confirmation.
- ▶ Using Standard Keyboard, VGA, and Mouse cable.

## **Package Contents**

<b>Model No.: TK-401R</b>	
4 port KVM Switch	1 <i>pcs</i>
User's Guide	1 <i>pcs</i>
AC to DC Power Adapter	<i>optional</i>
Rack Mount Kit	<i>optional</i>
<b>Model No.: TK-801R</b>	
8 port KVM Switch	1 <i>pcs</i>
User's Guide	1 <i>pcs</i>
AC to DC Power Adapter	1 <i>pcs</i>
Rack Mount Kit	1 <i>set</i>
<b>Model No.: TK-1601R</b>	
16 port KVM Switch	1 <i>pcs</i>
User's Guide	1 <i>pcs</i>
AC to DC Power Adapter	1 <i>pcs</i>
Rack Mount Kit	1 <i>set</i>

## Cable Diagrams



## System Requirements

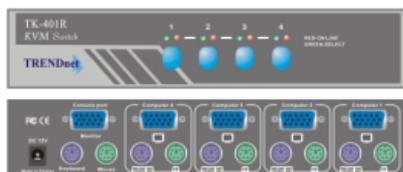
Model No	Console side	Computer side
<b>TK-401R</b>	One VGA Monitor One PS/2 Keyboard One PS/2 Mouse	4 HDB 15 pin male to male VGA cables 4 PS/2 cable male to male for Keyboard 4 PS/2 cables male to male for Mouse
<b>TK-801R</b>	One VGA Monitor One PS/2 Keyboard One PS/2 Mouse	8 HDB 15 pin male to male VGA cables 8 PS/2 cable male to male for Keyboard 8 PS/2 cables male to male for Mouse
<b>TK-1601R</b>	One VGA Monitor One PS/2 Keyboard One PS/2 Mouse	16 HDB 15 pin male to male VGA cables 16 PS/2 cable male to male for Keyboard 16 PS/2 cables male to male for Mouse

## Technical Specifications

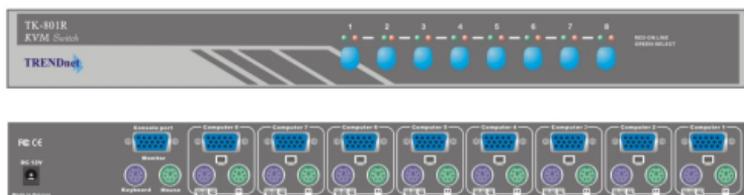
Model No.	TK-401R	TK-801R	TK-1601R
PC Port	4	8	16
Console Port	1	1	1
PC Port Connector	PS/2 Keyboard mini Din 6 pin		
(All Female Type)	PS/2 Mouse Mini Din 6 pin		
	VGA HDDB 15pin		
Console Port Connector	PS/2 Keyboard mini Din 6 pin		
(All Female Type)	PS/2 Mouse Mini Din 6 pin		
	VGA HDDB 15pin		
PC selection	Hot Key, Push Button		
LED	8	16	32
On Screen Display Control	NO		
Scan Intervals	5~99 Sec.		
Keyboard Emulation	PS2		
Mouse Emulation	PS2		
Mouse Conversion	Console PS/2 to each PC port serial mouse		
(Only Console port to PC port)			
VGA Resolution	1920X1440	1920X1440	1920X1440
Bandwidth	200MHz	200MHz	200MHz
Daisy Chain and Levels	NO	NO	NO
Max PC Connection	4	8	16
Housing	Metal	Metal	Metal
Power Adapter	DC 12V 1A or DC 9V 1A		
Operation Temperature	0~40℃		
Storage Temperature	-20~60℃		
Humidity	0~80%, Non-Condensing		
Size (19" Rack Mount)	1RU	1RU	2RU
Weight (kg)	1.0kg	2.2kg	3.5kg
Dimension (cm) (LxWxH)	22 X 10 X 4.45	41 X 16.5 X 4.45	41 X 16.5 X 8.4

## Product Details

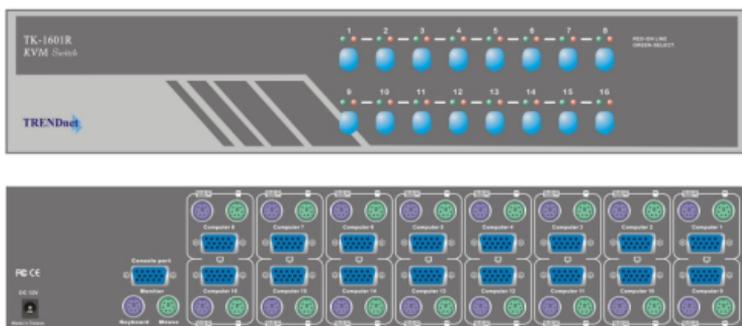
### **Front Panel & Rear Panel of TK-401R:**



### **Front Panel & Rear Panel of TK-801R:**



### **Front Panel & Rear Panel of TK-1601R:**



## **Hardware Installation**

Before installation, please make sure all of peripherals and computers have been turned off.

1. Install the Switch in a fairly cool and dry place; see the Technical Specifications section for the acceptable operating temperature and humidity ranges. The installation site must be free from strong electromagnetic field generators, vibration, dust, and direct exposure to sunlight. Install the Switch on a sturdy, level surface that can support its weight, or in a standard EIA 19" equipment rack. To mount the Switch on the rack, install the included mounting brackets to the sides of the Switch, secure them with the screws, and then mount the Switch to the rack with the hardware provided by the rack manufacturer.
2. Connect the Keyboard, VGA, Mouse cables to the console ports of KVM switch
3. Connect the Keyboard, VGA monitor, and Mouse to the computer port of KVM switch
4. In some cases, KVM switch gets the power from computer port by PC's Keyboard or Mouse port. However, we recommend using the AC Adapter as the power source.
5. After Powering on computers and finishing the boot-up process, you can start operating the KVM switch.

### ***Note:***

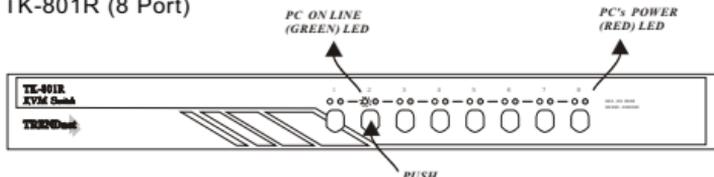
***Please don't switch the PC port (i.e. Don't press the push button of KVM switch or run "Hot-Key") when the computers are booting up.***

## Usage

### The Push Buttons:

Pressing the button to change the ports.

TK-801R (8 Port)



### LED Indication:

Red LED light - KVM cable is connected and PC power support KVM switch.

Green LED light - the selected PC port in Active (On Line) mode.

Green LED flash - the selected PC port under scan mode.

- or, No PC power support

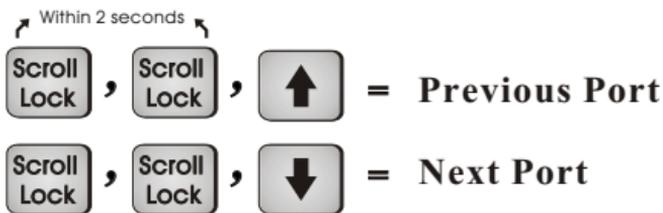
### Note:

**In some cases, when you connected the computer to the KVM Switch, even if the computer is not powered on, the RED LED will still light.**

### Keyboard Hot Key Commands:

You can also conveniently command KVM switch by switching ports through simple key sequences. To send commands to KVM switch, the **Scroll Lock (ScrLk)** key must be pressed twice within 2 seconds. You will hear a beep for confirmation and the keyboard is in "Hot-Key" mode. If you have not pressed any key in "Hot-Key" mode within 2 seconds, the keyboard will return to the operation system control state.

*Below are the available "Hot-Key" commands:*



(Note: You can also press up arrow key or down arrow key longer time to speed up selecting the destination port)

*To select specific PC port:*



To cancel out of Auto Scan Mode, press any key or SPACE bar.



## Troubleshooting

Ensure that all cables are well seated. Label all of cables with the number for each respective computer to avoid confusion.

1.The Power Jack polarity is center positive and you can use power adapter with DC12V, 1A or DC9V, 1A output.

2.Don't press any keys on the keyboard while the selected computer is booting up. Otherwise, it might cause the keyboard error or keyboard is not detected at PC side.

3.If The computer boots up fine, but the keyboard doesn't work, make sure the keyboard works when it is directly plugged into the computer. You can also try a different keyboard, but use only 101, 102 or 104-key keyboard.

4.If the Mouse is not detected during PC boot up, make sure the mouse works when directly plugged into the computer. Also, make sure the mouse is a true PS/2 mouse. A combomouse will work, as long as it is set to PS/2 mode with the correct adapter. If possible please try a different mouse.

5.Avoid moving the mouse or pressing the mouse buttons when switching ports.

6.Avoid switching ports when the PC is shutting down. In auto scan mode, it is better to set the scan interval to at least 5 seconds.

7.Normally, it takes one or two seconds for the VGA monitor to change from one resolution mode to another. So, we do not recommend setting the scan interval below 5 seconds.

## Certifications

This equipment has been tested and found to comply with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference.
- (2) This device must accept any interference received.  
Including interference that may cause undesired operation.

This equipment is in compliance with the requirements of the following regulations: EN 55 022: CLASS B

