1RU 17.3” LCD Console Drawer with Integrated HDMI KVM Switch - Part# RM-F117A-HDMI8

User Manual

Contents

1. Introduction 3
1.1 Main Features 3
1.2 Package Contents 3
1.3 LED Panel 4
1.3.1 Buttons and Operations 4
1.4 Back Panels 4
1.5 USB2.0 Hub (at Front) 5
2. Hardware Installation 6
2.1 Computer/Server Installation 6
2.1.1 Connecting KVM switch to the host system 6
2.2 Power Up Sequence 7
3. Usage 8
3.1 Hotkey Commands 8
3.2 Auto-scan function 8
3.3 Hot Plug 9
4. Technical Specifications 10
5. Troubleshooting 11
6. Glossary 12
7. Certifications 13

1. Introduction

The 8-port HDMI LCD KVM Switch including HDMI, USB 2.0 and stereo audio. The HDMI KVM Switch allows you to control up to 8 computers with HDMI display output from a single keyboard, mouse and monitor.

It supports 1920 x 1200 resolution for your maximum convenience in adapting to your display requirements. It also offers two USB 2.0 device hub ports for high-speed USB device sharing. We also offer various hotkey alternatives for free configuration.
This KVM Switch also allows its user to upgrade firmware contents whenever needed to enhance compatibility or functionality.

1.1 Main Features

- One USB console controls 8 Single Link HDMI computers and 2 additional USB 2.0 devices
- 2 port USB 2.0 hub built in; 1 located on rear and 1 located on front
- Built in 2 x 2 watts stereo speaker
- Supported video resolution up to 1920x1200
- Support Microsoft Windows, Netware, Unix, and Linux
- Support iMAC, Power MAC and Sun Micro Systems with USB port
- No Software Required – easy computer selection via Push Buttons, Hotkeys
- Provide various Hotkey (Scroll-Lock) for switching computer ports and other control functions, so Hotkey function can be used in various types of keyboards, and will avoid Hotkey duplicate problems
- Keyboard status restored when switching computers
- Support Mac/Sun keyboard emulation

1.2 Package Contents

1 x LCD Console Drawer with Rack Mounting Sliding Rails
1 x AC Power Cable
1 x CD-ROM with User Manuals, Quick Installation Guides and Utilities

1.3 LED Panel

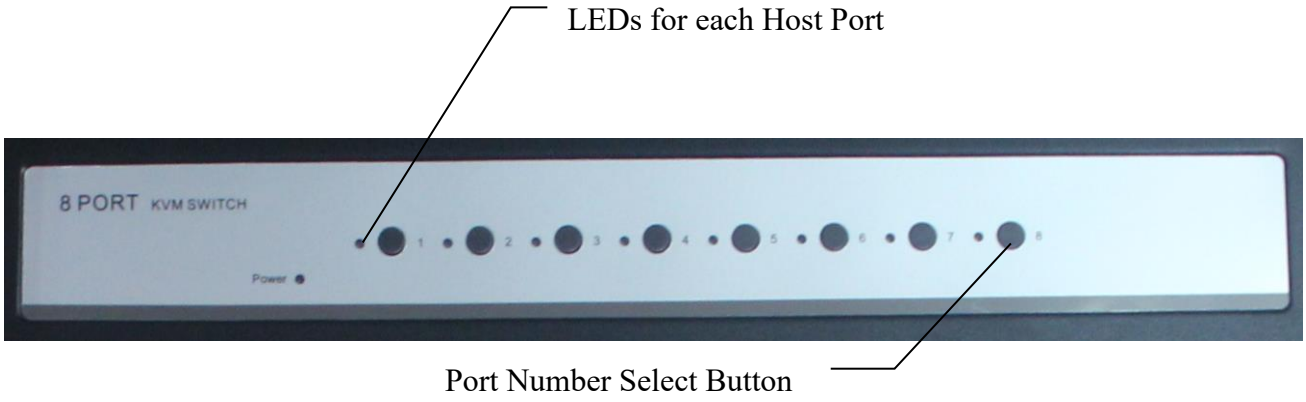


Figure 1. LED Panel View

1.3.1 Buttons and Operations

There are 8 push buttons on the LED panel. The operations described in below.

(1) The “1”, “2”, “3”, “4”, “5”, “6”, “7”, “8” are the port number select buttons
You can select to the required port number by press the port number to switch the port directly. The current operating computer port will be displayed at the 7-Segment LED.

(2) If you pressed the invalid operation, the system will stay at the previous selected port.

1.4 Back Panels

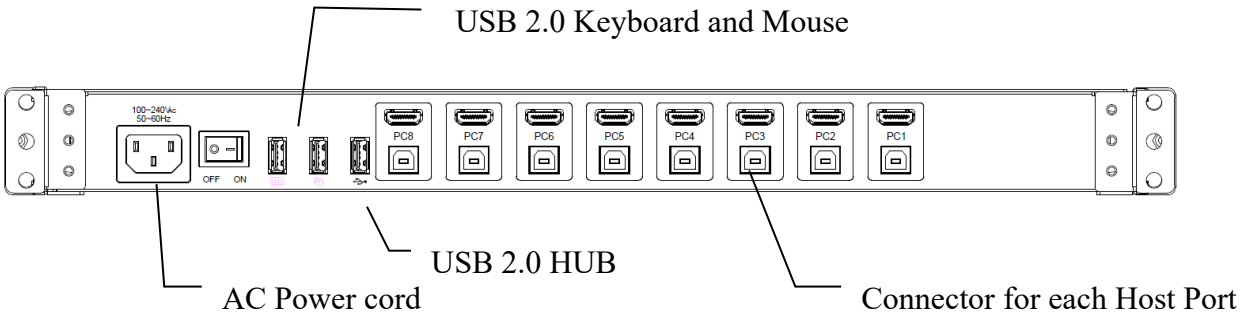


Figure 2. Back Panel View

1.5 USB2.0 Hub (at Front)

It provides a front port USB2.0 HUB for convenient access the USB devices at front.

2. Hardware Installation

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

2.1 Computer/Server Installation

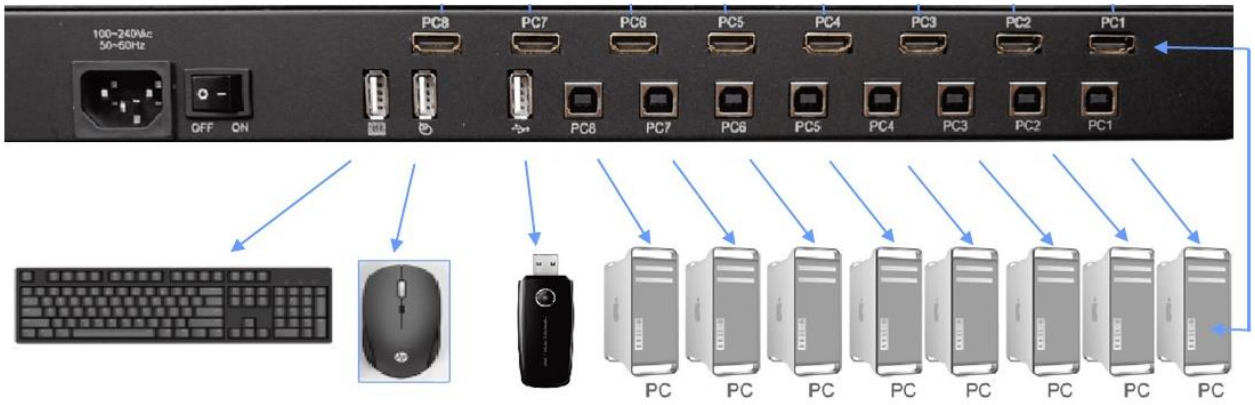


Figure 3. Computer/Server Installation

2.1.1 Connecting KVM switch to the host system

In order to connect the KVM switch of the host system perform the following steps:

Step 1. Turn Power ON to the KVM Switch

Step 2. Connect the shared USB keyboard, mouse and other shared USB devices to the KVM switch.

Step 3. Connect each of your computers to the KVM switch, using the HDMI video cable and USB (Type A-to-Type B) cable.

Step 4. Power up the connected computers one by one. After your computers are powered up, the keyboard and mouse will be recognized and now you can begin operating the KVM switch.

2.2 Power Up Sequence

Double check whether all cables/connectors are properly connected. You can check the keyboard and mouse connectors to ensure the connectors and cables are connected correctly.

The recommended Power Up sequence is as follows: Monitor, KVM Switch, finally the Computers.

Verify that all servers connected to the KVM Switch are powered on. If any connected servers have not been powered on, it is okay to do so at this time (servers can be powered on simultaneously). The KVM Switch emulates both a mouse and keyboard on each port and allows your server to boot normally.

3. Usage

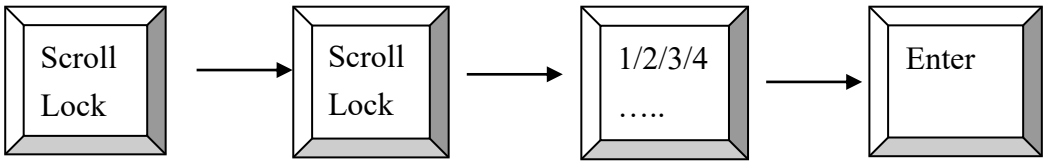
Now that you have connected your console and servers to your KVM Switch, it is ready for use. You can control the KVM switch by two methods:

1. Using push buttons located on the LED panel of the KVM Switch
2. Using hot-key commands through the console keyboard

It takes few seconds for the video signal to refresh after switching servers. Re-synchronization of the mouse and keyboard signals also occurs. This is normal operation and ensures that proper synchronization is established between the console and the connected servers.

3.1 Hotkey Commands

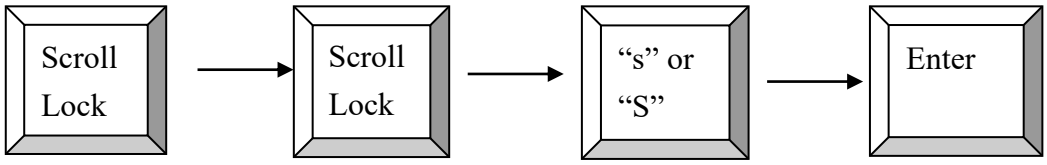
To switch port 1 ~ port 8, press “Scroll Lock” twice and press “1~8” to the target port, then press “Enter” to switch.



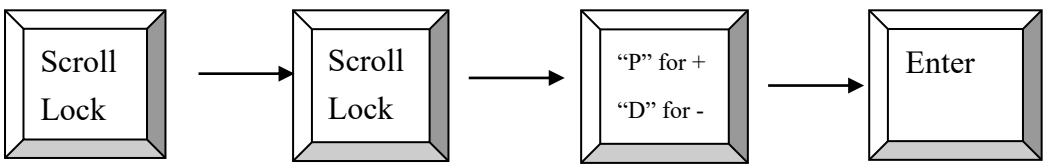
3.2 Auto-scan function

Auto Scan: A mode of operation where the KVM switch scans from one port to another, on an ongoing basis, as configured by the user

To activate auto-scan function, press “Scroll Lock” twice and press “s” or “S”, then press enter to trigger the order.



There are seven time-intervals – 5s, 10s, 20s, 30s, 50s, 100s, 200s. To increase the time interval, hotkey is “P”, to decrease the time interval, hot key is “D”.



3.3 Hot Plug

The KVM Switch supports “Hot Plug” function for USB keyboard and mouse connectors.

Note:

- Normally, USB port is Hot pluggable, but some OS (Operation Systems), do not support USB Hot Plug function. If you apply Hot Plug to this kind of OS, it will cause unpredictable behavior or shut down the Computer. Before attempting to use Hot Plug, please make sure OS and mouse software driver support the Hot Plug function.

4. Technical Specifications

Feature	Specification
Host Port Connector	KB/MS: USB B Type Video: HDMI (digital)
Host Ports	8
Video Resolution	Up to 1920 x 1200
USB 2.0 HUB port	1 x USB2.0 Type-A connector (front) 2 x USB2.0 Type-A connector (rear)
Computers Selection	(1) Hotkey (2) Push button
Hotkey	Scroll Lock
Auto-Scan Intervals	Fixed time (5s, 10s, 20s, 30s, 50s, 100s, 200s)
Housing	Metal
Operation Temperature	0 ~ 50℃
Storage Temperature	-20 ~ 60℃
Humidity	0 ~ 95%, Non-Condensing
Mechanical	19” Rack mount ,1U
Dimension (W x H x D)	443 x 42 x 457.2 (mm)

5. Troubleshooting

1. No LED display on KVM Switch
   - Make sure the power adapter plugged into the KVM Switch. If the LED's still won't light, perform soft reset to KVM switch.
   - Power cycle KVM switch.
2. The computer has started up, but keyboard or mouse won't work
   - Make sure your keyboard and mouse work fine if directly plugged into the computer.
   - Please unplug and plug in the USB connector, wait few seconds for USB bus emulations and start up process to cmplete.
   - Do not 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 Host side.
   - Try a different keyboard, but use only 101/102/104-key keyboard.
   - Power cycle KVM switch.
   - Avoid moving the mouse or pressing the mouse buttons when switching ports.
3. No video signal is displayed on the LCD monitor.
   - Connect another monitor directly to the server to verify that your monitor is functioning properly.
   - Please check if all connectors are connected properly
   - The power adapter is not connected to the KVM switch.
   - See next item, make sure the computer VGA output resolution match with the monitor's resolution
4. The computer resolution does not match the monitor's resolution
   - Make sure the resolution works fine if directly connect the monitor to the computer.
   - Please turn off the computer, wait few seconds then turn on again. Notice that during computer startup, it will try to obtain the information of the connected monitor resolution from its related port. So before computer startup, the monitor and KVM switch should be already ON and running.
   - The recommended Power ON sequence is as follows: monitor, KVM Switch, finally the computers.

6. Glossary

The following definitions are used throughout this User Manual.

- **Auto-Scan:** A mode of operation where the KVM switch scans from one port to another, on an ongoing basis, as configured by the user.
- **Console:** The all-in-one term for the keyboard, video monitor, mouse, and audio connected to a KVM switch.
- **Console Port:** An interface receptor on the KVM switch for the console to connect to the KVM switch via cables.
- **Control:** When discussing switching between ports, control means that the console is capable of sending input to the server. Control requires that the console also has focus on the port, and is viewing it.
- **HID:** Human Interface Device, the USB device class that includes keyboards and mice.
- **Host/Computer Port:** An interface receptor on the KVM switch for the computer/server to connect to the KVM switch via cable.
- **KVM:** Literally “Keyboard Video Mouse”, this term refers to technology that allows two or more computers to be controlled by one keyboard, video monitor, and mouse; some switches that use KVM technology enable sharing of other peripherals such as audio speakers, microphones, and printers.
- **KVM Switch:** A device that allows a user to access and control multiple servers from a single console. It has at least one console port and multiple server ports.

7. Certifications

FCC

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. Include interference that may cause undesired operation.

CE

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

RoHS

All contents of this package, including products, packing materials and documentation comply with RoHS.

Crystal Image Technologies, Inc. 800-542-2489 sales@rackmountsales.com