Sylphit-MP

KVM Drawer

User Guide

Version 1.3

Table of Content

Rackit Technology Corporation – www.rackittechnology.com – (800)636-3434

Items Included in Shipment

- Sylphit-MP KVM Drawer/Switch
- (1) or (8) or (16) Sylphit Integrated USB KVM Cables (HDD 15-pin male [for Sylphit connection] to USB/VGA [for computer connection])
- Power cord
- (2) Extension mounting brackets
- (8) Extension brackets' mounting screws

# System Compatibility

| System	Video	Keyboard	Mouse
Sylphit-MP	Built-in VGA flat-panel LCD display	Built-in Windows USB keyboard	Built-in USB mouse
External Console	HD15 (VGA)	USB	USB
Connected Computers	HD15 (VGA)	PS/2*	PS/2*
		USB (one connector for both)	

* Requires Sylphit Integrated PS/2 KVM Cable

Rack-Mount Installation

1. Measure the depth of the rack (the distance between the front and the rear mounting rails) into which you are installing Sylphit.

2. Using the extension brackets' mounting screws that came with the unit, attach one extension bracket to each side of the unit with four (4) screws, so that the unit's depth will (approximately) match the rack's depth. Keep the screws somewhat loose to allow some depth adjustment of the extension brackets.
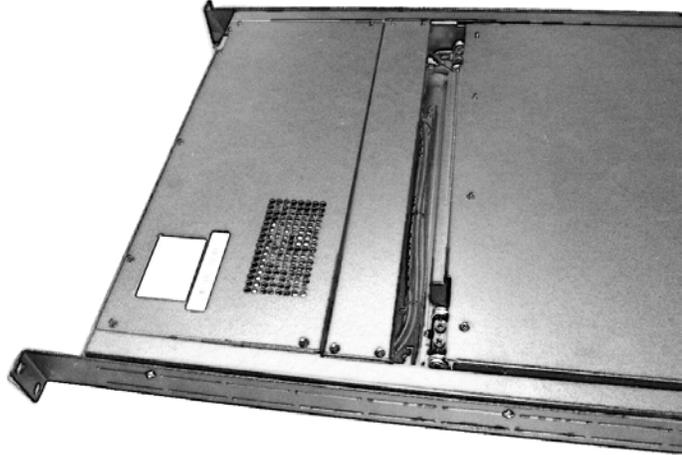
3. Using mounting screws that came with your rack, mount Sylphit onto the rack's mounting rails, using 2 screws on each one of the four mounting corners. Adjust the depth of the extension brackets while mounting the rear section of Sylphit by sliding the extension brackets, to match the depth of the rack.
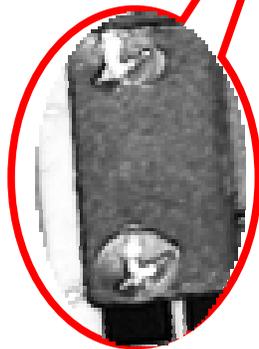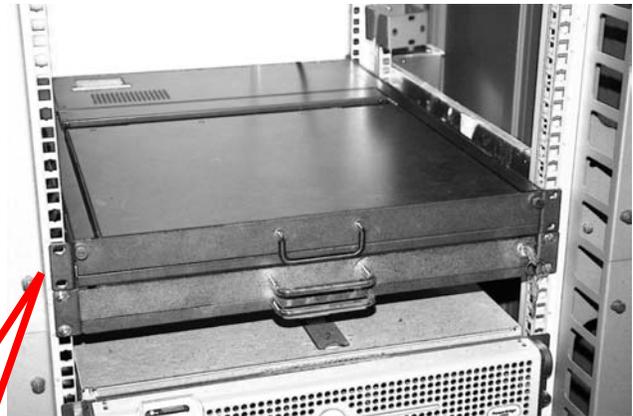
4. Once Sylphit's two front mounting ears and two rear extension brackets are firmly installed onto the rack's rails, tighten the four screws connecting each extension bracket to each side of Sylphit.

Product Detail

Self-locking Rails
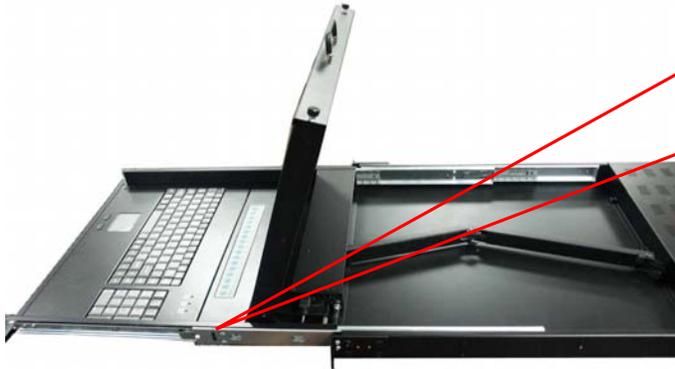
Press the lever to unlock

Back View

8-Port model

16-Port model

AC Power Plug

Local Console Ports

Daisy Chain Port

KVM Ports for Connected Computers
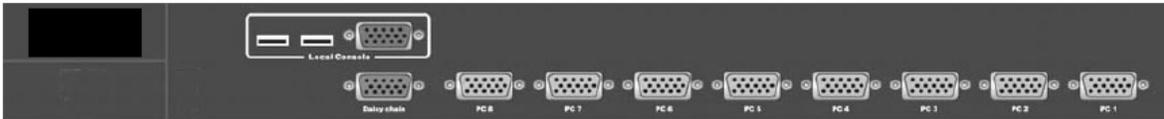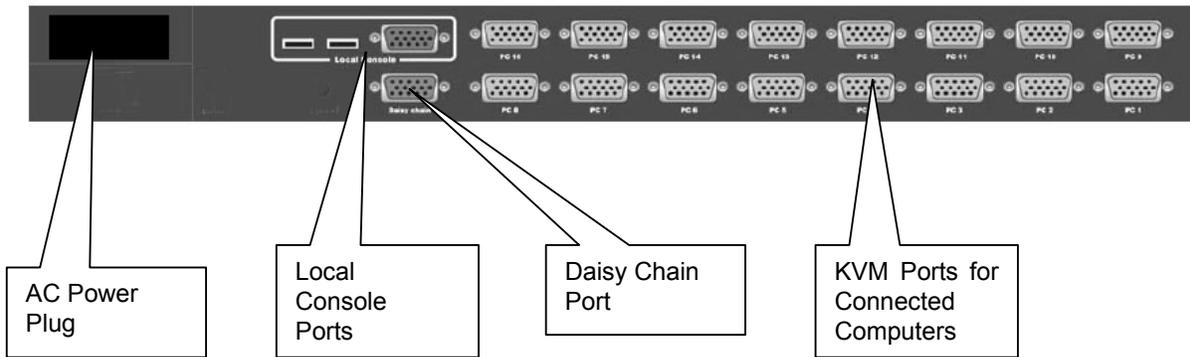
Local Console ports are used to connect an external monitor (to the HD15 VGA female port) and external keyboard and mouse (to the two USB ports).   The external monitor will display video identical to the one displayed on Sylphit's screen.   The external keyboard and mouse will control the selected server just as Sylphit's built-in keyboard and mouse would.

Daisy Chain port is used to daisy-chain another bank of KVM switch, to serve as means of expanding Sylphit's port capacity, allowing Sylphit to control more than its original eight (or sixteen) ports.

Connecting Computers to Sylphit

Sylphit ships with Sylphit Integrated USB KVM Cable(s) (the cable count matches the port count of the Sylphit unit).

Each Sylphit Integrated USB KVM Cable consists of one (1) blue HDD 15-pin male connector [for Sylphit connection] on one end and one (1) blue HDD 15-pin male VGA connector with a USB pigtail [for computer connection] on the other end.

1. Confirm that the Sylphit unit is powered down.

2. Confirm that the computer/server you are connecting is powered down.

3. Connect the USB connector of the Sylphit Integrated USB KVM Cable to the keyboard/mouse USB port on the server.

4. Connect the blue VGA connector that is attached to the USB pigtail to the server's VGA video port.   Secure the connection with the thumb-screws.

5. Connect the single blue HDD 15-pin connector (on the other end of the cable) to anyone of the 1-8 (or 1-16) ports on the back of the Sylphit unit.   Secure the connection with the thumb-screws.
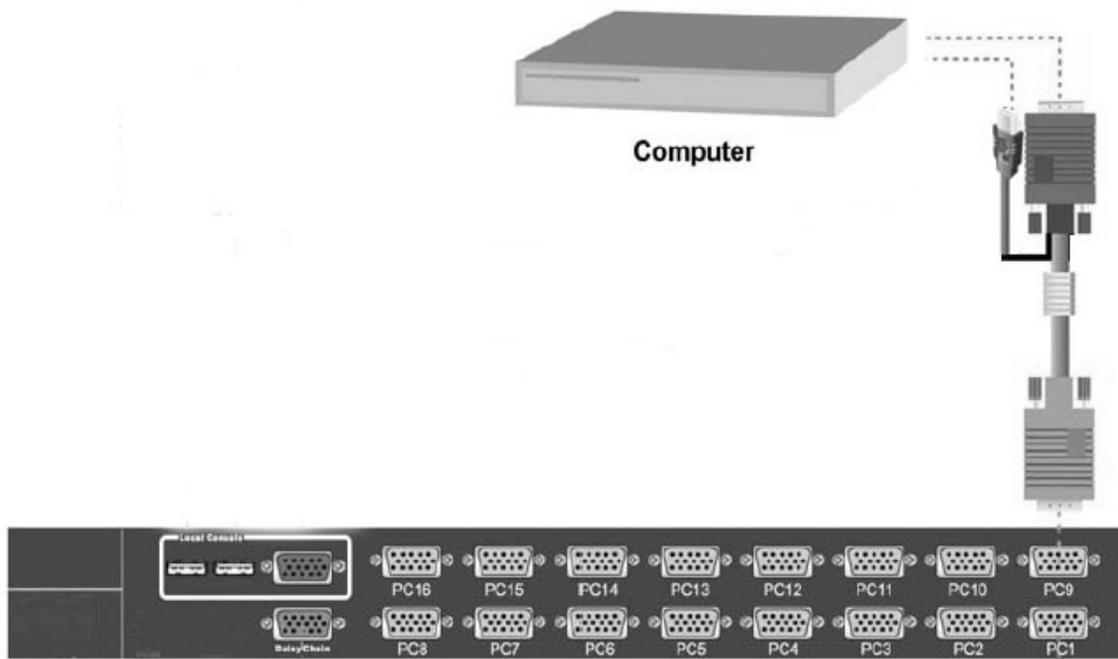
6. Repeat steps 2 through 5 for each server to be connected to Sylphit.

To connect a PS/2 computer/server to Sylphit, use a Sylphit Integrated PS/2 KVM Cable (purchased separately) and follow the same steps. In step 3. you will need to connect the purple PS/2 connector to the computer's keyboard port and the green PS/2 connector to the computer's mouse port.
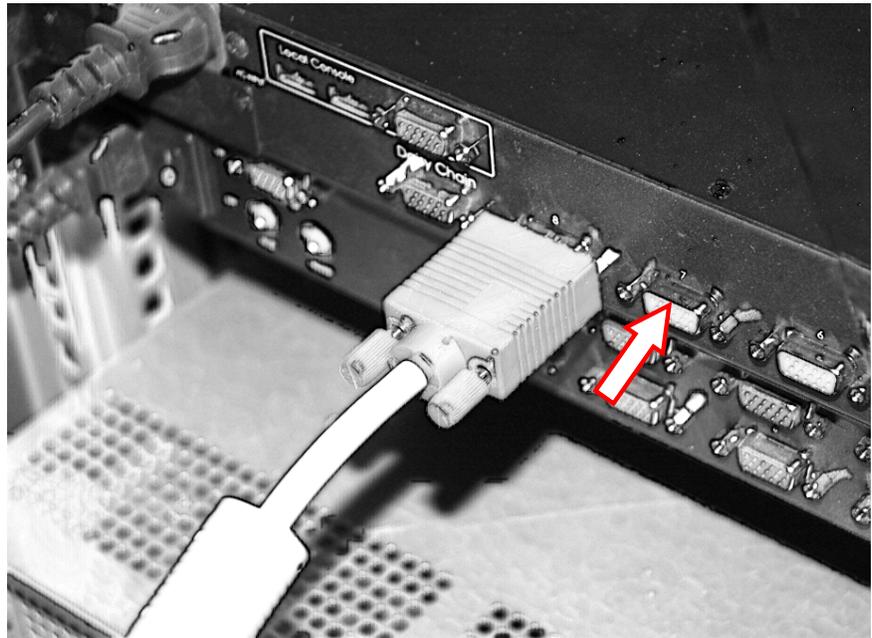

Connecting an External Console

You can connect an external console to operate Sylphit bypassing the built-in keyboard, touchpad and screen. The external console connects to Local Console ports.

Connect the external monitor to the VGA D-Sub connector.

Connect the USB keyboard and USB mouse to the two USB ports.

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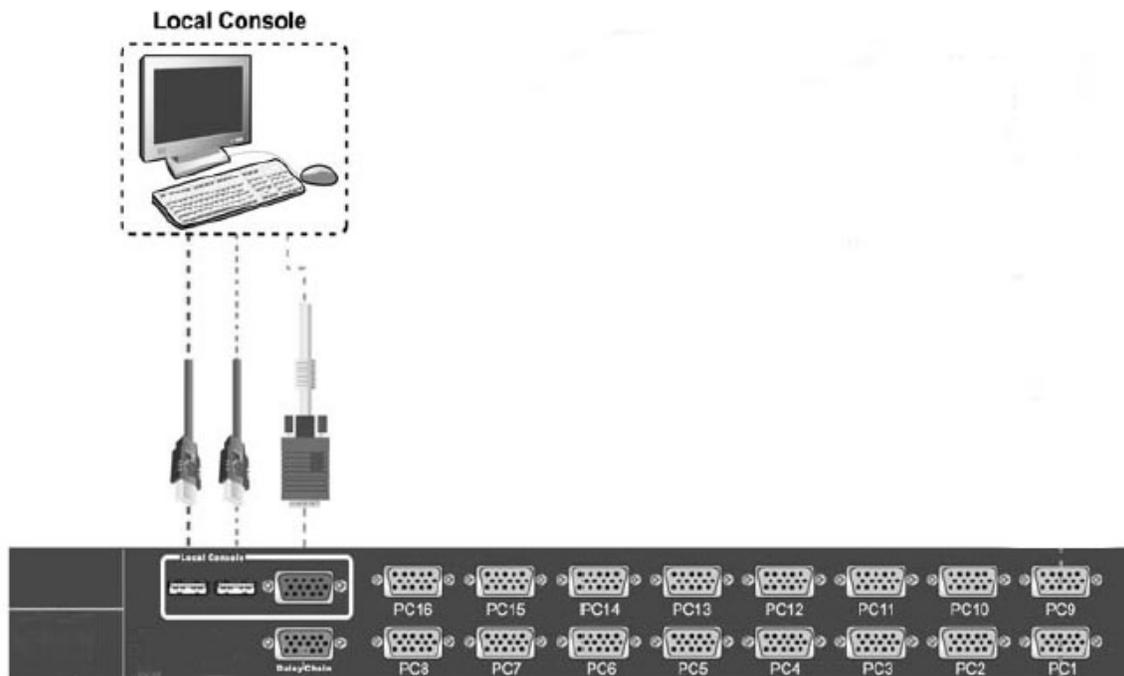
Adding Ports to Control More Computers

You can expand the Sylphit KVM port-count by daisy-chaining additional Sylphit KVM switches, connecting between them with a daisy chain cable.   Each additional KVM switch is considered by the switching system as an additional "Bank".   The daisy chain cable connects to the primary Sylphit Daisy Chain port.   Control, switching and server access is maintained from the primary Sylphit console.

Daisy Chain Cable
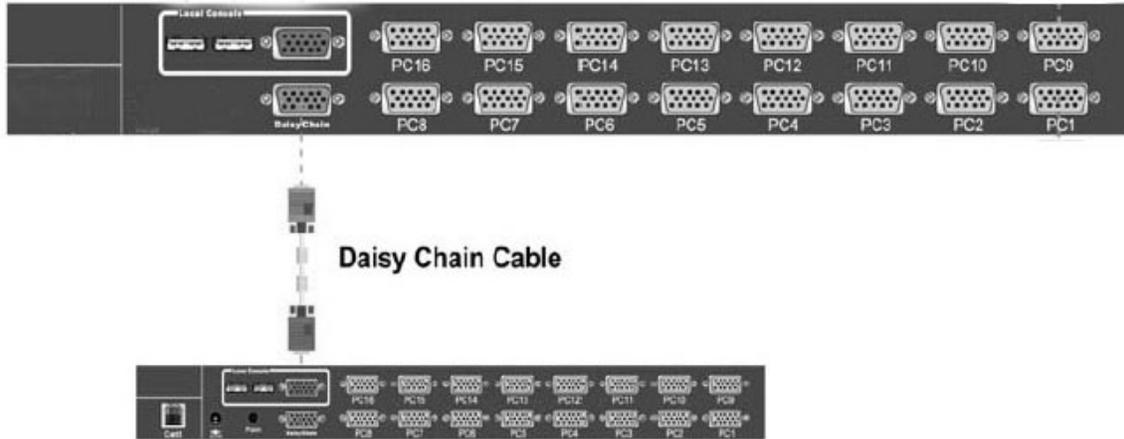
Powering Up the System

1. Connect the AC power cord to the EIC power outlet at the back of the unit.

2. Turn on the power to the Sylphit unit. The On/Off Power switch is located on the back of the unit, by the EIC power outlet.

3. A beep will sound. The "Power Light" on the LCD Display Control Panel will light up in solid green, indicating the monitor is turned on.
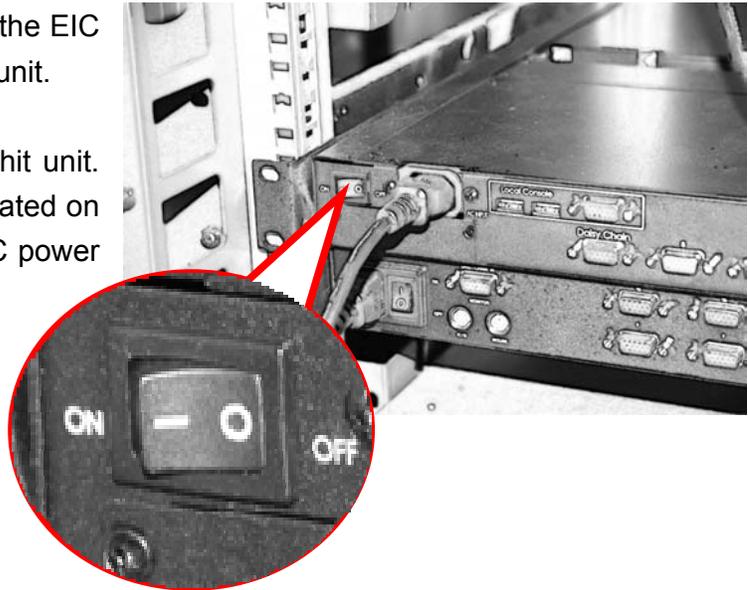
NOTE: If the "Power Light" on the LCD Display Control Panel lights up in amber, it is an indication that the monitor is turned off. Press the "Power" (On/Off) button on the LCD Display Control Panel. The "Power Light" will light up in solid green.

4. The "Operation" blue light of port 1 on the Switching Indication Panel will flash.
5. Power up the servers.   You may power all connected servers regardless of which may be selected by Sylphit.

   NOTE: A solid green "Power" LED on the Switching Indication Panel indicates that the server connected to the corresponding port is powered up.

   A solid blue "Operation" LED on the Switching Indication Panel indicates that the server connected to the corresponding port is selected and now controlled through the Sylphit console.

LCD Display Control Panel

Power Light – Lights up when the monitor is turned on:

- Green – Video signal is available
- Amber – Video signal is not available
- Red – Monitor is powering down.

On/Off Power Button – Turns the monitor on or off.

Auto Button – Press to have the monitor automatically adjust to the incoming video signal.

Menu Button – Press to bring up the LCD On Screen Display (OSD) menu for screen-display adjustments.
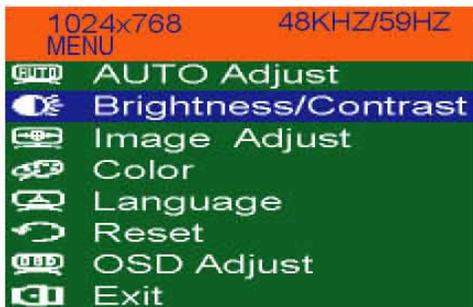
Arrows Selector Buttons – Used to navigate up or down on the LCD's OSD.
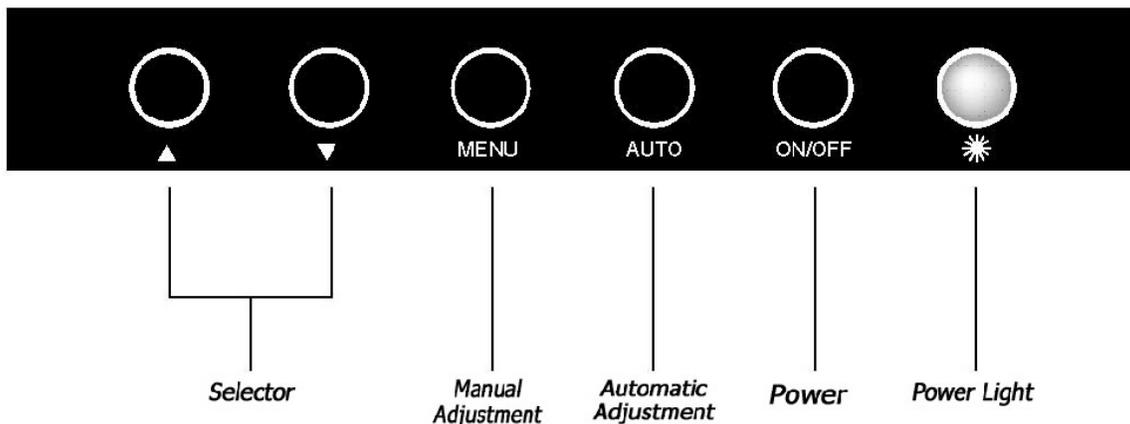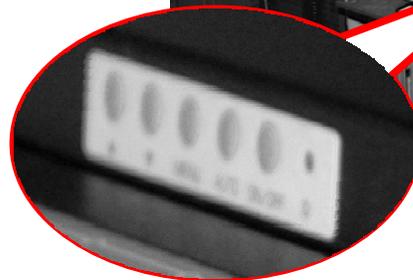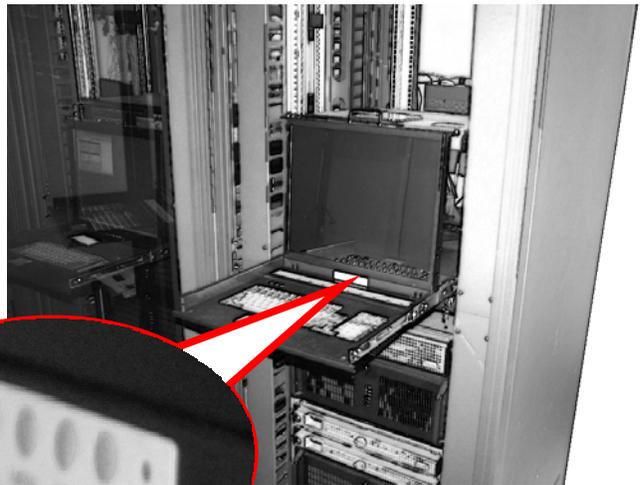
Auto Adjustment

1.Press the "MENU" key, then it will show up the picture of OSD

2.Press "MENU" key again, the monitor will according to the visual signal be the best mode automatically.

3. Press the "AUTO" key will save the course then exit the OSD.

Bright & Contrast

1.Press the "MENU" key, then it will show up the picture of OSD.

2.Press the "Down" key to select the "Brightness/Contrast" item.

3.Press the "MENU" key again to enter into the "Brightness/ Contrast" mode.

Adjust the Brightness :

Use the "Down" key may reduce the brightness;
Use the "Up" key may increase the brightness.

Adjust the Contrast :

1.Press the "MENU" key, then select the contrast.

2.Use the "Down" key may reduce the contrast;
Use the "Up" key may increase the contrast.

3.Adjust the property degree then press "Select" twice to save the course and exit.

Image Adjustment

1. Press the "MENU" key, then it will show up the picture of OSD.

2. Press the "Down" key, and choose "Image Adjust".

3. Press "MENU" key again, go into "Image Adjust" for adjustment.

Horizontal Position :

According to the procedure, it would change the horizontal position of the monitor.

Use the "Up" & "Down" keys to adjust the position.

Vertical Position :

According to the procedure, it would change the vertical position of the monitor.

1. Press the "MENU" key, and select the vertical one.

2. Use the "Up" & "Down" keys to adjust the position.

Picture Quality Adjustment :

It may improve the flashing & flicker from the different sources' signal.

1. Press "MENU" key, and select picture quality.

2. Use the "Up" & "Down" keys to adjust the position.

Frequency Adjustment :

It may also improve the flashing & flicker from the different sources' signal.

1.Press "MENU" key, and select picture quality.

2.Use the "Up" & "Down" keys to adjust the position.

Color Adjustment

1.Press the "MENU" key, then it will show up the picture of OSD.

2.Press the "Down" key, and choose "Color".

By these procedure, you may adjust individually the red, green and blue colors.

1.Press the "MENU" key, then go into the "Color Adjust".

2.Press the "Up" & "Down" keys, and adjust the "Red".

3.Press the "MENU" key, then go into the "Green".

4.Press the "Up" & "Down" keys, and adjust the degree of "Green".

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5.Press the "MENU" key, then go into the "Blue".

6.Press the "Up"&"Down" keys, and adjust the degree of "Blue".

1.Press the "MENU" key, then choose "6500K EUROPE".

2.Press the "Down" key, and the picture will be closer to the blue tone.

1.Press the "MENU" key, then choose "9300K ASIA".

2.Press the "Down" key, and the picture will be closer to the red tone.

1.Press the "MENU" key, then choose "RECALL".

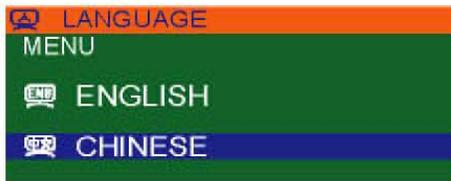2.Press "Down" key again, and the picture will be reset to the default tone.

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Language Selection

1.Press the "MENU" key, then it will go into OSD mode.

2.Press "Down" key, and select "Language".

* It refer to the screen.
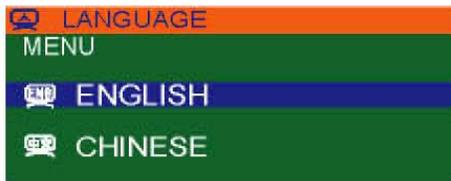
1.Press the "MENU" key, then it will go into the language mode.

2.Press "MENU" again, and the letter will be showned in English.

1.Press the "Down" key, then select "CHINESE" mode.

2.Press "MENU" again, the words on OSD is shown in Chinese.

Reset
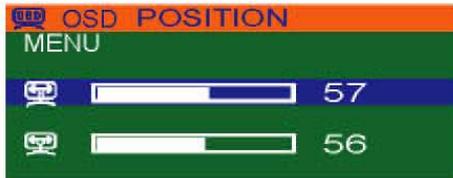
Use the default setting :

1.Press the "MENU" key, then it will go into OSD mode.

2.Press "Down", and select "RESET".

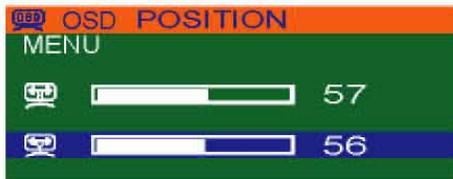3.Press "MENU" again, the picture will reset to default setting.

OSD Adjustment

1. Press the "MENU" key, then the picture will go into OSD mode.

2. Press "Down", and select "OSD Adjust".

OSD Position Horizontal Adjustment :

1. Press the "MENU" key, then the picture will go into OSD Position mode.

2. Use the "Up" & "Down" keys to adjust the OSD horizontal position.

OSD Position Vertical Adjustment :

1. Press the "MENU" key, then select the vertical OSD lower case mode.

2. Use the "Up" & "Down" keys to adjust the OSD vertical position.

Exit

After the OSD Position adjustment, the procedure for exit of OSD :

1. Press the "Down" & "Up", and select "Exit".

2. Press "MENU" to exit the OSD screen.

Operating Sylphit's KVM Switch

User Name / Password

Should you want to be able to authenticate users and prevent unauthorized access to Sylphit console, Sylphit supports one (1) Supervisor and eight (8) additional Users.
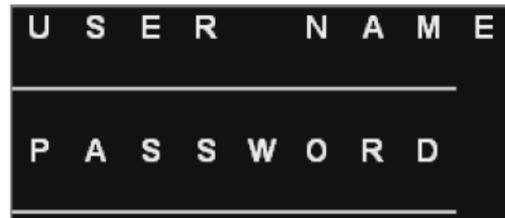
The factory-set default user is "Supervisor".

A "Supervisor" has access to all ports and is privileged to edit all settings and options.

A "User" can only switch to ports to which the "User" has been granted access rights, as well as use the "Port Search" function from Sylphit's OSD Main menu.

Depending on its settings, Sylphit may prompt you to enter a user name and password in order to gain access to the console. User Security is originally factory-set to be disabled.

The Login window

The factory-set default Supervisor's user-name is eight zeros (00000000).
The factory-set default password is eight zeros (00000000).

To enter the factory-set defaults, use the "0" key located on the top row of the keyboard.

**Note:** <u>Do not</u> use the zero key on the numeric keypad.

At the login prompt:
- Type in the user's name and hit the "Enter" key.
- Type in the password and hit the "Enter" key.

<u>Warning:</u> If you are not familiar with the OSD menu operation, you should disable User Security (see: Hot-Key Settings) and you should refrain from changing the factory-set user name and password – i.e. keep the eight zero (00000000) default values. Once the user name/password has been changed, should the new password get unfortunately forgotten, Sylphit unit will need to be shipped back to Rackit's labs for a password reset.

Status Indicator

Status Indicator appears on the screen right after a successful login and after switching ports. Status Indicator displays Sylphit's current settings and provides information regarding the active port which is currently displayed and being controlled.
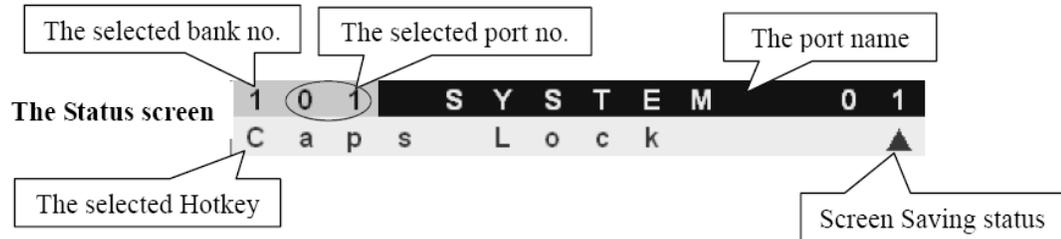
Switching Indication Panel

Each port on Sylphit's KVM switch is represented on the Switching Indication Panel with:

- A button
- Blue "Operation" LED
- Green "Power" LED

Push-Buttons are used to select a server that is connected to the corresponding port.

A solid green "Power" LED indicates that the server connected to the associated port is powered up.

A flashing blue "Operation" LED indicates that the associated port is selected but that the server connected to the associated port is powered down or disconnected from Sylphit.

A solid blue "Operation" LED indicates that the server connected to the corresponding port is selected, powered up and now controlled through the Sylphit console.

Press on any button to switch to the server connected to the associated port. Upon switching, the port's name will appear on the screen for a few seconds.
The "Bank" indicator at the top right corner of the *Switching Indication Panel* indicates the active KVM switch's bank number, in case there are additional KVM switches cascaded off the main Sylphit unit.   The "Bank" indicator will always show "1" when there are no additional KVM switches cascaded off the integrated Sylphit KVM switch.

Sylphit-MP User Guide   17

Keyboard Hot-Key Operation

You can control Sylphit's KVM switch by invoking commands via a sequence of keyboard hot-keys.

Tap the "Caps Lock" key twice in succession (within 2 seconds) to enter into "Hot Key" mode. A beep will sound indicating you are in "Hot Key" mode.
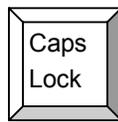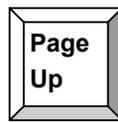
Tap a "Command" key (see below a list of command keys and their corresponding action) within 2 seconds of entering into "Hot Key" mode. If you haven't tapped any "Command" key in "Hot Key" mode within 2 seconds, Sylphit will exit "Hot Key" mode and revert to normal state in which the keyboard is controlling the selected server.
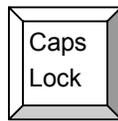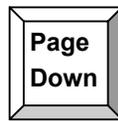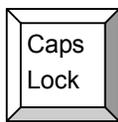
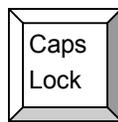Following are some hot-key sequences:

Within 2 seconds
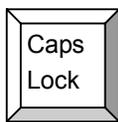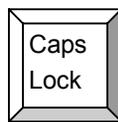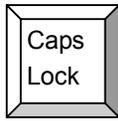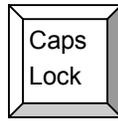
| Caps Lock | + | Caps Lock | + | ↑ | = | **Previous Port** |

| Caps Lock | + | Caps Lock | + | ↓ | = | **Next Port.** You can continuously press the "Up Arrow" key or "Down Arrow" key to speed up selecting the destination port. |

| Caps Lock | + | Caps Lock | + | Page Up | = | **Previous Bank** |

| Caps Lock | + | Caps Lock | + | Page Down | = | **Next Bank** |

| Caps Lock | + | Caps Lock | + | B | = | **Beeper** (Enable/disable beep-sound) |

| Caps Lock | + | Caps Lock | + | L | = | **Screen Saving** and **Auto Logout.** Disabled by default, "L" enables/disables screen saving function and a 10-minute auto-logout function. |
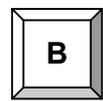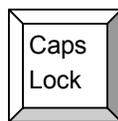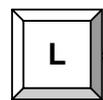
Sylphit-MP User Guide   18

| Caps Lock | + | Caps Lock | + | P | = | **Log Out of OSD.** |
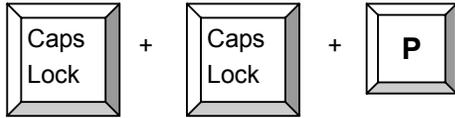
If User Security is enabled – Login prompt will show.

If User Security is disabled – Status Indicator will show.

To select a port:

| Caps Lock | + | Caps Lock | + | Bank # | | Port # |
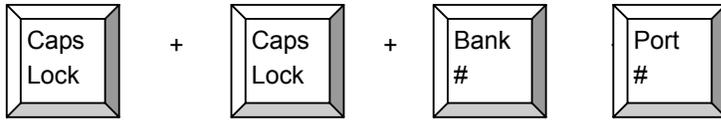
Bank numbers: [1, 2, ... 8]

Port numbers: [01, 02, ...16]

Example: To select port #6 in bank #1 type: 1 0 6

Note: Use the number keys on the top row of the keyboard – <u>Do not</u> use the numeric keypad keys.

Note: Bank #1 is designated to the primary Sylphit console. A stand-alone Sylphit unit with no daisy-chained KVM switches is designated as Bank #1.

To bring up the On Screen Display (OSD) menu:

| Caps Lock | + | Caps Lock | + | Space Bar |

please enter next key in **2 seconds** in the Hotkey sequence

On Screen Display (OSD) for KVM Switch

On Screen Display (OSD) is used for selecting and activating some of Sylphit's KVM switch's options and features.
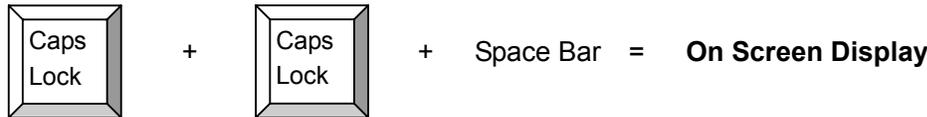
To bring up the OSD menu:

Caps Lock   +   Caps Lock   +   Space Bar   =   **On Screen Display**

Tap the "Caps Lock" key twice in succession (within 2 seconds) to enter into "Hot Key" mode.   A beep will sound indicating you are in "Hot Key" mode.

Tap the "Space Bar".   Sylphit's On Screen Display (OSD) will show on the screen.
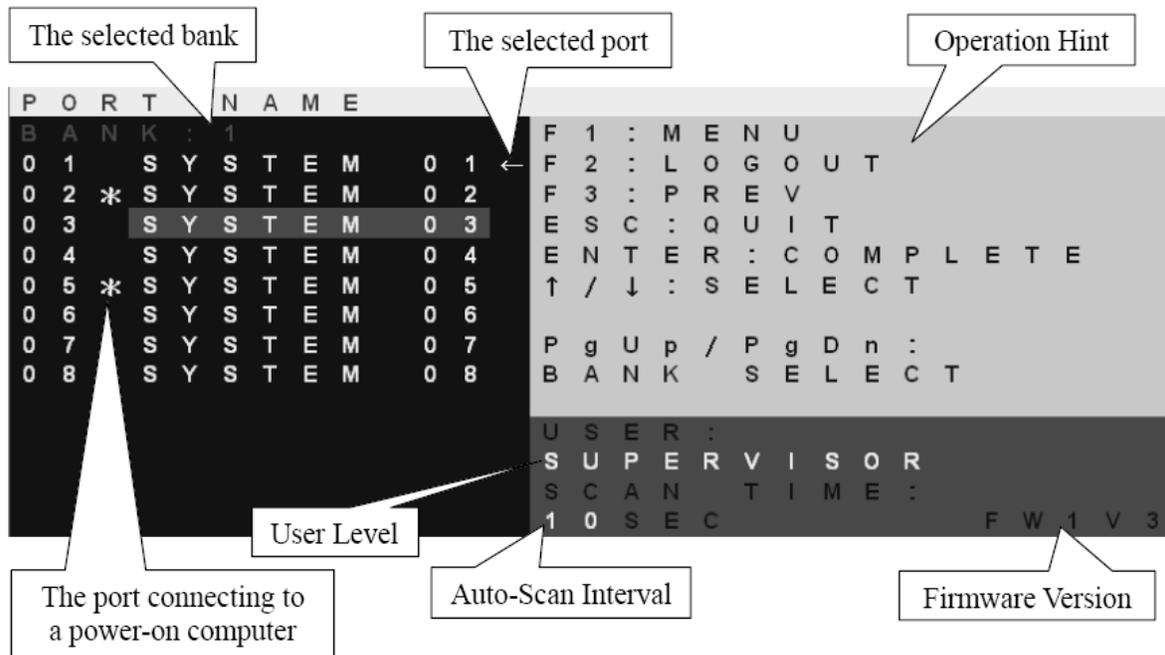
OSD consists of three (3) sections:

- A list of available computers (on the left), identified by Bank #, Port # and Port Name, along with indications as to which computers are powered up and which computer is currently selected.

- A "Help" section (on the top right)

- Information regarding the User's Name and the Scan settings (at the bottom right).

Following is a list of functions available from the OSD:

OSD Function Key	Description
F1	Go to the Main Menu
F2	To log out the OSD. If Security is enabled it will show up the Login window waiting for username and password. If Security is disabled it will show up the Status window
F3	Previous Menu
Enter	Switch to the selected port
↑ or ↓	Moving Up or Down
PgUp	Previous Bank
PgDn	Next Bank
Esc	Exit
1	Show ports 01 ~ 08
2	Show ports 09 ~ 16
3	Show ports 17 ~ 24
4	Show ports 25 ~ 32

Selecting (Switching to) a Computer (Port)

As Sylphit's OSD is showing, use the "Up" and "Down" arrow keys to highlight the computer (port) you want to switch to and hit the "Enter" key.
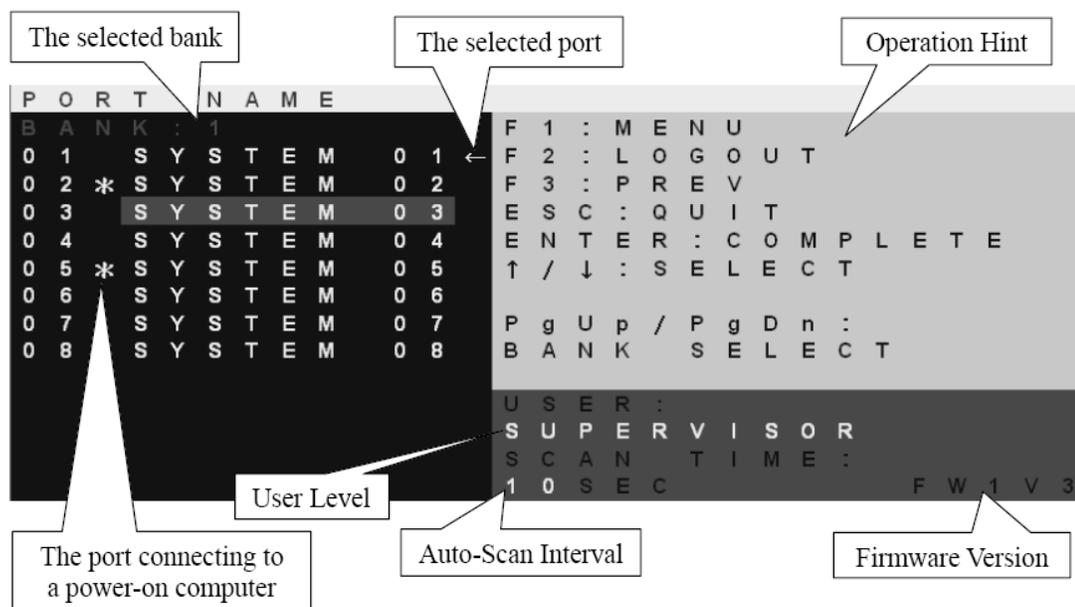
Sylphit will now switch to the desired computer/port. The Status Indicator will briefly show, displaying the port's number and name.

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Main Menu

As Sylphit's OSD is showing, tap the "F1" key to bring up Sylphit's OSD Main Menu.

```
MAIN      MENU
SELECT      OPTION :
0 1     LANGUAGE
0 2     PORT    NAME    EDIT
0 3     PORT    SEARCH
0 4     USER    SECURITY
0 5     ACCESS    LIST
0 6     HOTKEY
0 7     TIME    SETTINGS
0 8     OSD    MOUSE
```

NOTE: Settings and options available for editing through "Main Menu" are available only to the Supervisor.   A User (who isn't a Supervisor) can only activate the "Port Search" function.

Language

The language selection allows choosing the desired display language.

```
LANGUAGE
CHOOSE      A    LANGUAGE :
0 1     ENGLISH
0 2     FRENCH
0 3     GERMAN
0 4     ITALIAN
0 5     SPANISH
0 6     SIMPLIFIED    CHINESE
0 7     JAPANESE
0 8     RUSSIAN
```

NOTE: Non-Latin based languages are for display purposes only and not for editing.

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Port Name Edit

Port Name Edit facilitates assigning a name to each port, which in effect may be the name of the computer connected to the port.

The assigned computer-name then gets displayed on Sylphit's OSD list of available computers/ports to switch to, making it easier to identify, select and switch to the desired computer by name rather than by port number.

Port Search

Port Search facilitates finding a computer by the name it has been assigned so that it can be switched to.

Port Search is particularly useful when the system consists of multiple banks (daisy-chained KVM switches supporting additional ports beyond the primary 8 or 16 ports).

Searching a wildcard [*] is supported and will result with displaying all matches.

User Security

User Security facilitates assigning user names and passwords to one (1) Supervisor and up to eight (8) Users.

```
U  S  E  R       S  E  C  U  R  I  T  Y
         N  A  M  E                           P  A  S  S  W  O  R  D
   S     0  0  0  0  0  0  0  0               0  0  0  0  0  0  0  0
   1
   2
   3
   4
   5
   6
   7
   8
```

The top-left "S" referrers to "Supervisor".
The "1", "2", "3",....."8" refer to Users 1 through 8.

The maximum length of a User Name and a Password is eight (8) characters (A~Z, 0~9).

Tap the "Enter" key or click the left-button touchpad to start editing. Tap any alpha-numeric keyand the cursor will move to the next cell, awaiting your key-input.

When done editing, tap the "Enter" key to save the entry.
Tap the "Esc" key to cancel the editing.

NOTE: "Blank" shows an underscore while "Space" does not.

NOTE: "Space" is treated as a valid character.

NOTE: By default, all "Users" user-name is Spaces and all "Users" password is Space. Being that a Space is invisible – anyone can use Space Space as their user credentials.

Access List

The Access List facilitates assigning users' access-rights to each port.

Use the "Enter" key to toggle the port rights:

- O – Enables user's rights to access a port.
- X – Disables user's rights to access a port.

Port name

users

Port no.

HotKey

The HOTKEY menu facilitates setting the hot-key used to bring up the OSD.

The factory-set default is "Caps Lock".

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Time Settings

Time Settings facilitates setting the intervals (in seconds) for the Auto-Scan function. In Auto-Scan mode, this setting determines how long will a port show before automatically moving to the next port.

The factory-set default is 10 seconds.

```
T  I  M  E      S  E  T  T  I  N  G  S


S  C  A  N      T  I  M  E  :
1  0  S  E  C
```

OSD Mouse

OSD selections are typically being made by using the arrow keys to highlight a selection. Such selections, however, can also be made using the mouse.

Using the mouse you can position the white square cursor over your selection, then press "Enter" key to activate your selection.

The OSD Mouse facilitates setting the speed in which the OSD cursor moves.
The factory-set default is "Middle".

```
O  S  D    M  O  U  S  E
S  E  L  E  C  T    A    P  O  I  N  T  E  R    S  P  E  E  D  :

F  A  S  T

M  I  D  D  L  E

S  L  O  W
```

Hot-Key Settings

You can enable or disable Sylphit's KVM switch options by invoking commands via a sequence of keyboard hot-keys.

Tap the "Caps Lock" key twice in succession (within 2 seconds) to enter into "Hot Key" mode.   A beep will sound indicating you are in "Hot Key" mode.
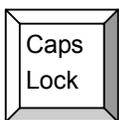
Tap a "Command" key (see below a list of command keys and their corresponding action) within 2 seconds of entering into "Hot Key" mode.   If you haven't tapped any "Command" key in "Hot Key" mode within 2 seconds, Sylphit will exit "Hot Key" mode and revert to normal state in which the keyboard is controlling the selected server.
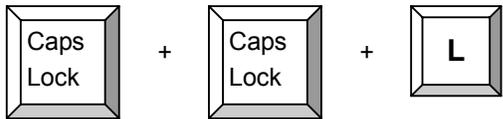
Following is a list of available hot-key setting (some only available to the Supervisor):

|				
Caps Lock	+ Caps Lock	+ **U**	=	**U**ser Security (For <u>Supervisor</u> only!) Disabled by default, "U" enables/disables the need to enter a "User Name" and "Password" to gain access to computers connected to Sylphit console.
Caps Lock	+ Caps Lock	+ **S**	=	**Auto S**can (For <u>Supervisor</u> only!) Activates the Auto Scan function. Sylphit will show video of 1st active computer for the duration setup under "Time Settings", then will automatically move to display the video of the next active computer.
Caps Lock	+ Caps Lock	+ **R**	=	**R**eset of OSD (For <u>Supervisor</u> only!) Resets all OSD settings (except "User Security" back. to default factory settings.
Caps Lock	+ Caps Lock	+ **B**	=	**Beeper** (Enable/disable beep-sound)

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Caps Lock	+	Caps Lock	+	L	=	**Screen Saving** and **Auto Logout.**

Disabled by default, "L" enables/disables screen

saving function and a 10-minute auto-logout function.

Caps Lock	+	Caps Lock	+	P	=	**Log Out of OSD.**
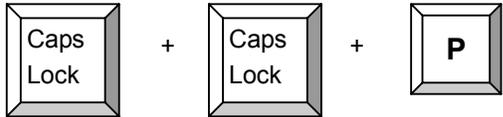
If User Security is enabled – Login prompt will show.

If User Security is disabled – Status Indicator will show.

General Precautions

1. Ensure that all cables are well seated, both on Sylphit's end and on the computer's end.

2. The maximum recommended length of KVM cable connecting Sylphit to a computer is 15 feet.   This will ensure good performance without any ghosting or video degradation. If the distance between Sylphit and a connected computer needs to be greater than 15 feet, an extender should be used.

3. Don't press any keys on the keyboard while the selected computer is booting up, since it might cause a keyboard error, or may prevent the keyboard from being detected by the computer.

Certificates

FCC Class-A

This equipment has been tested and found to comply with Part 15 of the FCC Rules.

CE

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

UL

This equipment has been tested and found to comply with UL requirements for safety.

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