User Manual

RK-S801 / S1601

1U Rackmount Keyboard Drawer with USB KVM Switch

# 1. Table Of Content

1.	Table of Content	P.1
2.	Introduction	P.2
3.	Features	P.2
4.	Package Content	P.3
5.	Optional Accessories	P.4
6.	Peripheral Products	P.4
7.	Important Safeguards	P.5
8.	Structure Diagram	P.6
9.	Dimension Diagram	P.7
10.	Keyboard Layout	P.8
11.	KVM Session	
	Front View	P.9
	Rear View	
	Installation Steps	
	Cascading	
12.	Start Up	P.13
	HotKey Command	
	HotKey Command Operation	
	KVM On Screen Display Control	
	OSD Structure Diagram	P.16
	OSD Menu Operation	P.16-22
13.	FAQ	P.23
14.	Technical Specification	P.24

### 2. Introduction

RK Series is a combination of keyboard and mouse with USB KVM switch into a drawer, with features such as adjustable brackets, built in KVM OSD controls to provide effective assistant for an administrator to control multiple PCs.

RK Series provides cost effective for your limited IT budget over using a full set of keyboard and mouse and rack mounting. Also, it will be space saving for your compact environment rack and effective assistant for an administrator to control multiple PCs.

### 3. Features

- Rugged metal Construction
- Standard 19", 1U height rackmount keyboard drawer
- Adjustable mounting brackets from 390 to 740mm (front to rear 19" mounts)
- Lockable drawer to secure the keyboard and mouse
- Slide rails have two fixed positions to prevent movement of the keyboard
- Three keyboard selections supporting multiple languages
- Directly compatible with SUN Microsystems with resolution 1192 x 900
- Built-in SUN Hot Key without any converter
- Built-in KVM switch function for easy controlling and monitoring up to 16 residing servers / platforms
- Support eight characters password protection and search PC server name
- Auto scan mode for monitoring PCs and flexible scan time from 5 ~ 99 seconds
- Hot Pluggable—Add or remove computers without powering down the switch
- Easily switch individual button to select the PC channel using the push-button channel selector switches, Hot Keys, or via the On-Screen Display (OSD) Menu.

#### **Disclaimer**

This information is subject to change without notice. The producer of this manual accepts no responsibility for damage or claims, resulting from misuse or misinterpretation

### 4. Package Contents

Keyboard Drawer with USB KVM Switch	1 Piece
User's manual	1 Piece
DC Power Adapter	1 Piece
Mounting Bracket	1 Pair
Fasteners	4 Pieces
Key for front access lock	2 Pieces
CB-6 2-in-1 KVM cable	8 Pieces for RK-S801/S1601

### **Before Unpacking**

It is very important to locate the Keyboard Drawer with USB KVM switch in a suitable environment.

- The surface for placing and fixing the Keyboard Drawer with USB KVM switch should be stable and level or mounted into a suitable cabinet.
- Make sure the place is ventilated and out of direct sunlight, away from sources of excessive dust, dirt, heat, water, moisture and vibration.
- Convenience for connecting the Keyboard Drawer with USB KVM switch to the related facilities should be well considers too.

### **Unpacking**

The Keyboard Drawer with USB KVM switch comes with the standard parts shown as above. Check and make sure they are included and in good condition. If anything is missing, or damage, contact the supplier immediately.

# 5. Optional Accessories

#### **KVMCable**

CB-6/10/15

6ft/10ft/15ftUSB2-in-1 cable

### Cascade Cable

# 6. Peripheral Products

Model	Description
RP115	1U 15" LCD Monitor Drawer
RP615/717/819	6U(15") / 7U(17") / 8U(19") LCD Monitor
CV-S801	1U 8-Port USB KVM switch
CV-S1601	1U 16-Port USB KVM switch
CV-S101	CAT.5 USB KVM extender

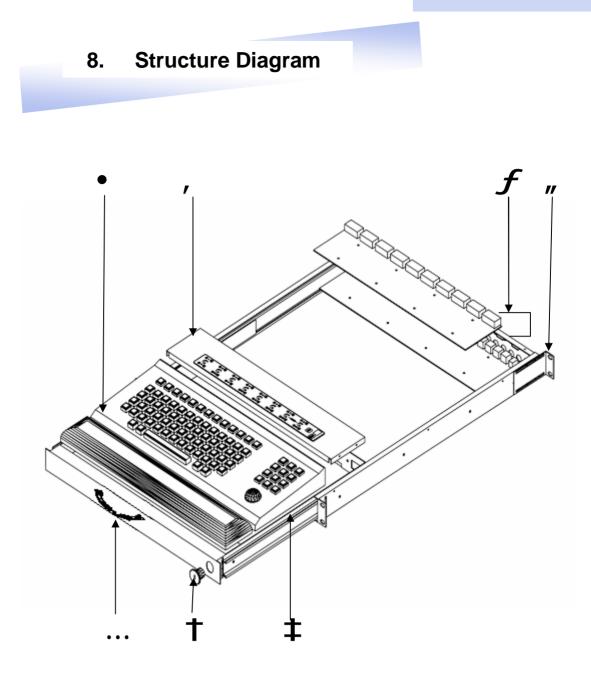
## 7. Important Safeguards

Please read all of these instructions carefully before you use the device. Save this manual for future reference.

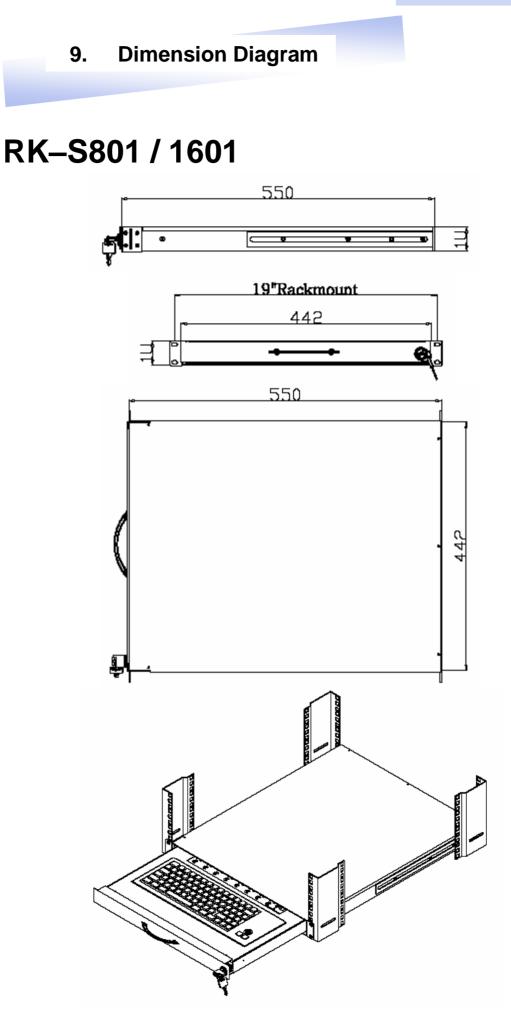
- Unplug the Keyboard Drawer with USB KVM switch from the power outlet before cleaning.
- Do not spray liquid cleaners or aerosol directly on the device. Wet a cloth with a neutral detergent (e.g. clean water) and squeeze it tight, then clean the screen slightly with it.
- Do not expose the Keyboard Drawer with USB KVM switch directly to rain, water, moisture or sunlight.
- Do not attempt to service the device yourself. Improper operation may void your warranty. Refer all servicing to qualified service personnel.
- Safe storage environment of the Keyboard Drawer with USB KVM switch is ranging between -20°C and 60°C. Permanent damage could occur if the Keyboard Drawer with USB KVM switch is stored outside the safe range.
- Unplug the Keyboard Drawer with USB KVM switch immediately and call a qualified service personnel under the following conditions:
  - 1. If the Keyboard Drawer with USB KVM switch has been exposed to rain, liquid or water.
  - 2. If the Keyboard Drawer with USB KVM switch has been dropped or the casing has been damaged.

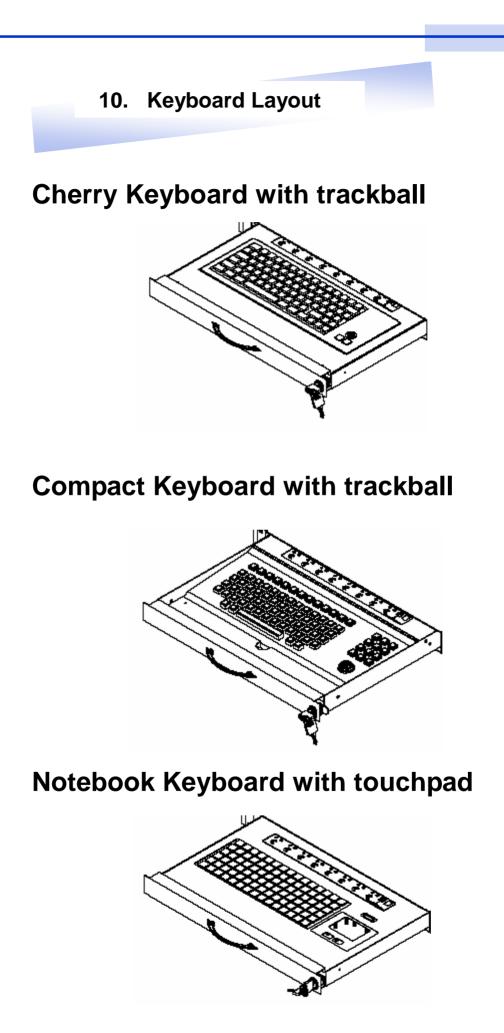
#### What the warranty does not cover

- 1. Any product, on which the serial number has been defaced, modified or removed.
- 2. Damage, deterioration or malfunction resulting from:
  - a) Accident, misuse, neglect, fire, water, lightning, or other acts of nature, unauthorized product modification, or failure to follow instructions supplied with the product.
  - b) Repair or attempted repair by anyone not authorized by us.
  - c) Any damage of the product due to shipment.
  - d) Removal or installation of the product.
  - e) Causes external to the product, such as electric power fluctuation or failure.
  - f) Use of supplies or parts not meeting our specifications.
  - g) Normal wear and tear.
  - h) Any other causes which does not relate to a product defect.
- 3. Removal, installation, and set-up service charges.

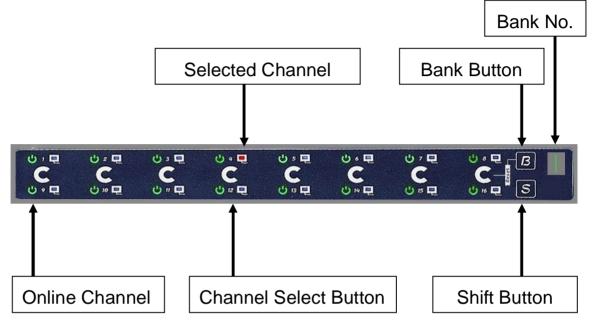


- 1. Keyboard with trackball
- 2. KVM membrane
- 3. KVM boards
- 4. Adjustable mounting bracket
- 5. Front handle
- 6. Security lock
- 7. Ball bearing telescopic slides with stopper





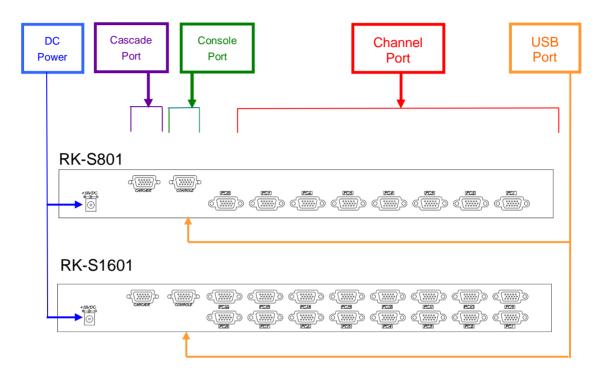
# **Front View**



# **LED** Indication

Selected Channel	<ul> <li>Displayed channel on monitor &amp; red in LED.</li> </ul>
Channel select button	- Press to select channel from $1 - 8$ .
Shift button	<ul> <li>Press &amp; Hold follow with a channel button to select channel from 9 – 16.</li> </ul>
Online Channel	- Green LED state the PC has connected and power on.
Bank No	- Display the Bank no. from $1 - 8$ .
Bank button	<ul> <li>Select the bank from 1 – 8 (for cascade only)</li> </ul>

## **Rear View**

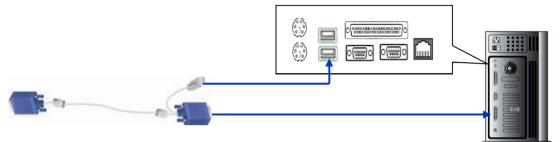


DC Power	<ul> <li>connect to external 12V DC power adapter.</li> </ul>
Cascade Port	<ul> <li>connect to additional KVM switch for channel expansion.</li> </ul>
Console Port	- connect to monitor, USB keyboard & mouse.
Channel Port	- connect to PC computer with CD-6 3-in-1 KVM cable.
USB Port	- connect to USB mouse & keyboard

## Installation Steps

Before installation, please make sure all computers are turned on and its operating system are running properly with keyboard and mouse.

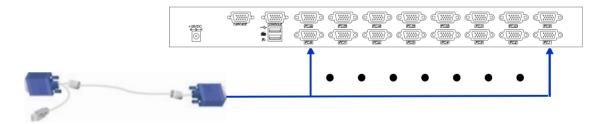
- 1. Connect the 2-in-1KVM cable to the one of your server.
  - USB Type A Male connector to the USB Port
  - HDDB 15-pin Male connector to the VGA Port



2. Plug the power adapter included to the switch.

DC Power	+14/2C				0 <b>E</b> <b>E</b> <b>E</b> <b>E</b> <b>E</b> <b>E</b>	0	() ) ) ) ) ) ) ) ) ) ) ) ) )	()))) ()))) ())))) ()))))		0 <b>E</b> <b>E</b> <b>E</b> <b>E</b> <b>E</b> <b>E</b> <b>E</b>	
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4. Connect the another end of the 2-in-1 cable to the USB KVM switch



5. Connect a monitor to the console port of the USN KVM Switch.

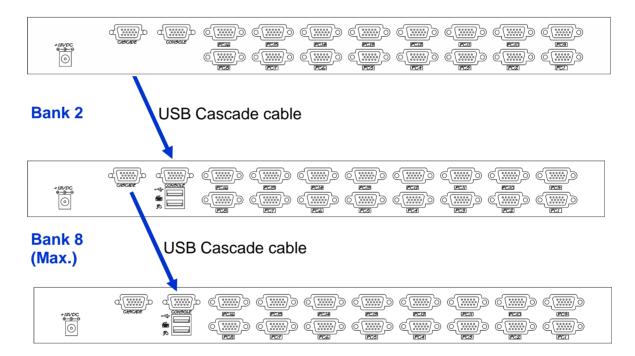
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*/2/DC						E23 ())))))))))))))))))))))))))))))))))))			

6. Reset USB KVM Switch by membrane

# Cascading

Using USB KVM cable to connect from Bank 1's "Cascade port" to Bank 2's "Console port". After connected please press "Bank" & "Channel" button on the front of the USB KVM switch to reset the KVM switch.

#### Bank 1



### Cascade level Max. : 8 level

- Max. PC connection is 128 or with additional 122 PCs.
- All USB KVM switch is compatible & can cascade with each other.
- Using USB KVM cable to cascade.
- Normal distance from one USB KVM to another is 15 feets.

- 1. The channels that have PC connected and it is switch on will have a green LED on that channel.
- 2. The red LED will indicate the selected channel.
- 3. 7 segments LED will display the bank number.
- 4. Press channel button to select the channel.
- 5. Enter the password, default is "00000000" eight zeros. Otherwise the keyboard & mouse will be locked.
- 6. If you forget your password, send back to Manufacturer.

## Hot Key Command

- Simple key sequence.
- Press " Scroll Lock" twice within 2 seconds.
- Follow with a beep sound, going into the hot key mode.
- Need to key in the hot key within 2 seconds.
- Go back to Operation System Control state.

**Hot-key Command Operation** 

#### **Calling OSD Menu** 1.



Scroll + Space Bar

#### Switch to Previous Port (powered on PC only) 2.



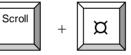
Scroll + £	
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3. Switch to Next Power On Port (powered on PC only)

Pg

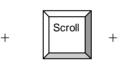
Up



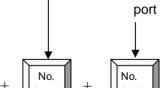


#### Switch to Previous Bank 4.

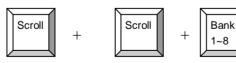




First digit of Port Number: 0 for Port 0-9 1 for Port 10-16



Second digit of port Number

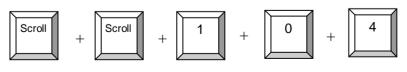


Switch to Specific Port ++0 or 1 0 - 9

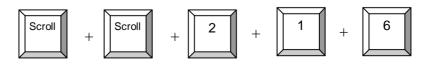
### Example :

5.

Bank 1 Port 4 a)



Bank 2 Port 16 b)

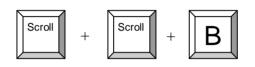


## **HotKey Command Operation**

## 6. Switch to Next Bank

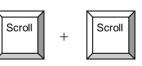


## 7. Enable / Disable beeper sound



Note: The default Beeper function is ON and beeper control is only for

## 8. Auto Scan for Powered on PC



## 9. Reset to factory Default Setting

Scroll + R R ROM REFLASH

Note: Not available for password reset.

## 10. Find Port by name



**Note:** When the above dialogue appear, type the PC name and the OSD Menu will search PC name starting from 1<sup>st</sup> powered on PC port.

## **OSD** Operation

**Note:** When using the keyboard arrow key to move the cursor, the keypad arrow key (Up, Down, Right, Left) is unable to work at this menu.

### 1. "MAIN CONTROLS" - OSD Menu of USB KVM switch

- To pop up MAIN CONTROLS—OSD menu of USB KVM switch, please use hot keys command .
- To operate MAIN CONTROLS, please use keyboard and mouse.
  - Mouse Operating: You may also simply use mouse, twice clicking left button, to choose a category. Clicking "?" will bring up HELP window and click "X" for exiting.
  - Keyboard Operating: In MAIN CONTROLS window, use the Up "é" or the Down "ê" Key to select a category and press "Enter" Key to get into designated option. Pressing "F1" Key brings up HELP window and Esc key to exit.
- To enter the sub menu e.g. LANGUAGE or PORTNAME, please use keyboard or mouse to move the highlight bar cursor.
- When you reach the sub menu you want to activate press "Enter" or double click the highlight bar cursor.

MAIN CONTROLS	?Х
ENTER A CHOICE :	
01 LANGUAGE	
02 PORTNAME	
03 TIMEVIEW	
04 SECURITY	
05 FINDPORT	
06 PASSWORD	
07 CONSOLE	

# LANGUAGE Menu



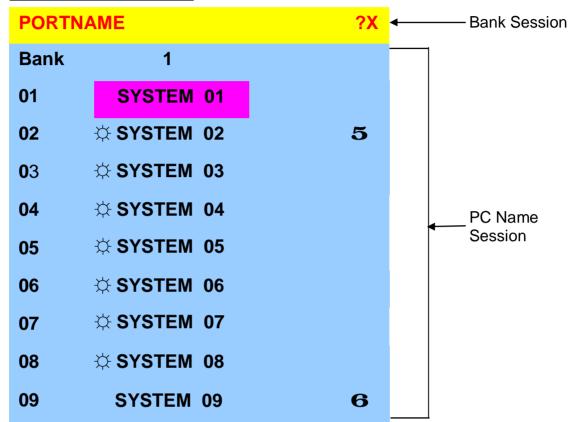
#### Mouse Operation :

• Move mouse and click the left button to choose a language, and click left key again to save.

#### **Keyboard Operation :**

• Press é / ê to choose a language and press ENTER to save.

### **PORTNAME Menu**



Use "*Tab*" key to select session like Bank, PC, OSD, SCAN, CHANGE PASS-WORD, CONSOLE ON/OFF, etc...

#### **Bank Session**

Use Page Up & Page Down to switch previous or next bank

#### PC Name Session

1. " $\dot{\mathfrak{P}}$ " next to the PC name represents the PC system is powered on

#### **Mouse Operation :**

- 1. Click the arrow key "**5**" or down arrow key "**6**" to scroll upward or downward of the PC name list.
- 2. Right click the highlighted PC name for editing PC

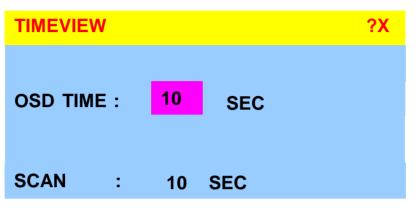
#### **Keyboard Operation :**

- Use up key "é" or the down key "ê" from the keyboard to select port for destination PC name
- 2. Press "**Ins**" key or for editing PC name

Note: PC name should not be more than 8 characters.

3. When editing is finished press "Enter".

### **TIMEVIEW Menu**



- 1. **OSD TIME** means the display period of OSD windows or PC system name on your monitor. You can modify it from 05 sec to 99 sec. The factory default value is 10 sec...
- 2. **SCAN TIME** means the scan interval from one PC port to next PC port. The default SCAN time is 10 sec and the maximum scan time is 99 sec.

#### **Mouse Operation :**

 Click the right button of mouse to select and modify OSD and SCAN TIME

#### **Keyboard Operation :**

 Use "é" and "ê" key or press the "INS" key to select and modify OSD and SCAN TIME

**SECURITY Menu** 



- To CHANGE PASSWORD for avoiding all PC systems to be intruded by the others. The default password is 8 digits "00000000".
- Please follow the steps below to cahnge the password.
  - 1. Enter the factory default password "00000000" in the first row **"ENTER PASSORD"** and press the "Enter".

ENTER PASSWORD

2. Enter your new password in the second row "ENTER NEW PASWORD" and press the "Enter".

ENTER NEW PASSWORD

•••••

3. Retype the new password in last row "**RETYPE NEW PASSWORD**" and press the "Enter" for confirmation

**RETYPE NEW PASSWORD** 

#### •••••

**Note:** The OSD menu will return back to MAIN CONTROLS if the retyped password matched with the new password

**FINDPORT Menu** 

FINDPORT	<b>?X</b>
ENTER NAME:	

"FINDPORT" option helps you to find the PC system by its name.

• Enter PC system name and press ENTER, it will search the matching PC system and given the message for searching result.

Note: PC system name is defined in PORTNAME function

#### Example :

a) When you enter "SYSTEM 01" and press ENTER, if there is matching PC systems, the window will show the PC system name "SYSTEM 01" and which BANK it belongs to.

**Note:** Enter wild card "\* " and combine the other characters from A~Z and 0~9 to search all of system name lists matched the same format .

FINDPORT ?				
BANK : 1				
01	SYSTEM 01			

b) If there is no match PC system name were found, the window will show "PORTNAME NO FOUND!" message displayed.

FINDPORT	?X
BANK : 1	
PORTNAME NO	FOUND !

Note: To use " PgUp " key or " PgDn" for searching at the previous or next Bank

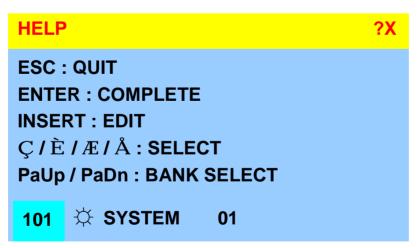
**CONSOLE Menu** 

CONSOLE ?X ENABLE DISABLE

- ENABLE any user can use the console
- DISABLE user is not allowed to use the console port, unless password is entered.When password is entered already and pass the KVM switch authentication, the CONSOLE will be set to ENABLE.
- Default ENABLE no password is required

**Note:** After finish the usage of KVM switch, please don't forget to set up CONSOLE ENABLE state to DISABLE state.

### **HELP Menu**



- To call the HELP menu, please click the "?" at the right corner of the OSD
- To operate the options in HELP menu by using **Esc**, **Enter**, **Ins**, arrows, and **Page Up** / **Page Down** keys on keyboard.

## 13. FAQ

1. **Keyboard or mouse dose not work or not be compatible with the PC.** Please make sure the keyboard or mouse works when directly plug into the computer. If the problem persists, please try another keyboard or mouse.

#### 2. Mouse doesn't work in Auto Scan mode.

You can press any key on the keyboard or the front button on the face plate for returning standard mode and then use the Keyboard or Mouse again.

- 3. The recommended VGA cable distance is 5 meters maximum without ghosting and degradation. Normally, the cable length is based on driver capacity of your VGA card. Ensure that all cables are well seated. Label all of cables with the number for each respective computer to avoid confusion.
- 4. The maximum keyboard or mouse cable is 5 meters feet maximum.
- When you use Japanese windows OS with 106 key keyboard, there are some special keys like "¥" need 106 key driver (Microsoft native driver in O.S. CD-ROM). Please follow procedures below and click the mouse to add new driver.

#### For Win98/SE/ME :

Control panel → Add new hardware → Next → Next → Select "No, the device isn't in the list" → Select → "No, I want to select the hardware from a list" → Select keyboard → Select standard keyboard → Select (日本語) Japanese 106 key keyboard → Reboot PC

#### For Win2000 :

Control panel → System → Hardware → Device manager → Keyboards → Standard keyboard → Click mouse right key → Properties → Driver → Update driver → Display a list of the known drivers → For this device so that I can choose a specific driver → Standard keyboard → Standard (日本語)Japanese 106 key keyboard → Reboot PC

#### For WinNT :

Control panel → Keyboard → General → Change → Show all devices → Standard ( $\Box$ 本語) Japanese 106 key keyboard → Reboot PC

#### For WinXP :

Control panel → System → Hardware → Device manager → Keyboards → Standard keyboard → Click mouse right key → driver → Update driver → Install from a list or specific location (advanced) → Don't search. I will choose the driver to install → Deselect show compatible hardware → Standard keyboard → Standard( $\Box$ 本語)Japanese 106 key keyboard → Reboot PC

# 14. Technical Specification

ltem	Specification
KVM Channel Port	RK-S801: 8 port / RK-S1601: 16 port
KVM Channel Interface	HDDB 15 pin Female
PC Computer Interface	USB Port : Type A Female
	VGA : HDDB 15pin Female
Cascade Port Connector	HDDB 15pin Female
KVM Cable Connection	2-in-1 HDDB 15-pin KVM Cable (CB-6/ 10/ 15)
PC selection	On Screen Display, Hot Key & Push Button
LED	1 Bank LED
	8 / 16 Online LED (Green) & Selected LED (Red)
On Screen Display Control	Yes
Scan Mode Intervals	5~99 Sec.
VGA Resolution	1,920 x 1,440
Bandwidth	200MHz
Cascade MAX. Level	8 levels with addition 120 / 128 PCs connection
Housing	Metal
Power Adapter	DC 12V 1A
Operation Temperature	0~40°C
Storage Temperature	-20 ~ 60°C
Humidity	0~80%, Non-Condensing
Dimension	449 W x 44H x 110D mm
Product Dimension	439 W x 44H x 55D mm
Net Weight	RK-S801 : 9 Kg / RK-S1601 : 10 Kg