WKP120 Series

1U Rackmount KVM Switch

USER MANUAL

ROHS COMPLIANT

Rev 1.0

TABLE OF CONTENTS

i-Tech Company, LLC   www.i-techcompany.com

Introduction

The WKP series rackmount KVM is only 1U -- 4 in 1 control center (KEYBOARD, LCD,Touchpad and KVM).

The WKP120 series KVM is only 1U Four in one control center (KEYBOARD, LCD,MOUSE and KVM). The Displays are 20" TFT LCD Panel Resolution is support 1600x1200(Analog VGA Input). Touchpad is compatible with PS/2 mouse interface. The keyboard is 105 key Keyboard (English,Germany, French, Chinese, Japanese ….optional).

Features

- WKP series rackmount KVM is 1U-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/ME/XP, WinNT, Netware, Unix, Linux
- Support iMAC, Power MAC and Sun Microsystems with USB port (Need work with USB-PS2 adapter)
- Hot Plug - Add PCs or Remove Connected PCs for Maintenance without Powering Down the KVM switch or PCs.
- Very High Video Quality - Up To 1920X1440, Bandwidth: 200MHz. (But limited by monitor)
- No Software Required - easy PC selection via On Screen Display Manual, Push Buttons, Hot Keys
- Support eight characters password protection and search PC server name
- Auto Scan Mode for monitoring PCs and flexible Scan time from 5~99 seconds
- Keyboard status restored when switching PCs
- LED Display for easy status monitoring
- Buzzer sound for switching port confirmation.
- One personal to Easy-Installation

i-Tech Company, LLC   www.i-techcompany.com

Package Contents

Model No.: WKP120-8e   (8 port Slim Rack Mount KVM Switch)

8 port PS2 Control Center	1 PCS
User's manual	1 PCS
AC to DC Power Adapter	1 PCS
Rack Mount Kit	1 SET
CB-K15P Cable(options)	0 SET
CB-K15UP Cable(options)	0 SET

Model No.: WKP120-16e   (16 port Slim Rack Mount KVM Switch)

16 port PS2 Control Center	1 PCS
User's manual	1 PCS
AC to DC Power Adapter	1 PCS
Rack Mount Kit	1 SET
CB-K15P Cable(options)	0 SET
CB-K15UP Cable(options)	0 SET

i-Tech Company, LLC   www.i-techcompany.com

Technical Specifications

WKP120		
Model No.	**WKP120-8e** **8 Port KVM Switch**	**WKP120-16e** **16 Port KVM Switch**
PC Port	8	16
Console Port	1	1
PC Port Connector (All Female Type)	HDDB 15pin (shared with VGA,PS2 keyboard and Mouse)	
Console Port Connector (All male Type)	VGA DB 15pin (For test only)+PS/2*2(Keyboard+Mouse)	
PC selection	On Screen Display Manual, Hot Key	
On Screen Display Control	Yes	
Scan Intervals	5~99 Sec.	
Keyboard Emulation	PS2	
Mouse Emulation	PS2	
VGA Resolution	Max 1920X1440 (Limited by TFT LCD monitor)	
Bandwidth	200MHz	
MAX PC Connection	64	256
Housing	Metal	
Power in	DC 12V 4A (with one AC to DC power Adapter)	
Operation Temperature	0~50℃	
Storage Temperature	-20 ~ 60℃	
Humidity	10~90%, Non-Condensing	
Size	19" Rack Mount / 1U	19" Rack Mount/ 1U

LCD Monitor Specifications

WKP120	
Model No.	**20.1"**
Resolution	1600x1200
Display Color	16,7M
Contrast	700
Luminance	250cd/m^2
Viewing Angle	H 85/85 V 85/85
Operation Temperature	0~50℃
Storage Temperature	-20 ~ 60℃
Humidity	8~95%

Cable Diagrams

PC Port Special Cable:
HDB15 pin Male to   15 pin male to one HDDB 15 pin and Mini Din 6 pin special cables

------------→

5

i-Tech Company, LLC   www.i-techcompany.com
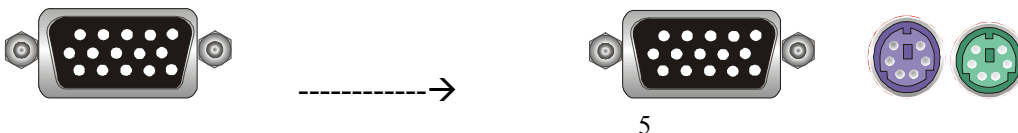
Installation

Rack Mount Accessories

shows how to one personal to Easy-installation Kit for WKP series rackmount KVM with standard 19-inch cabinet.
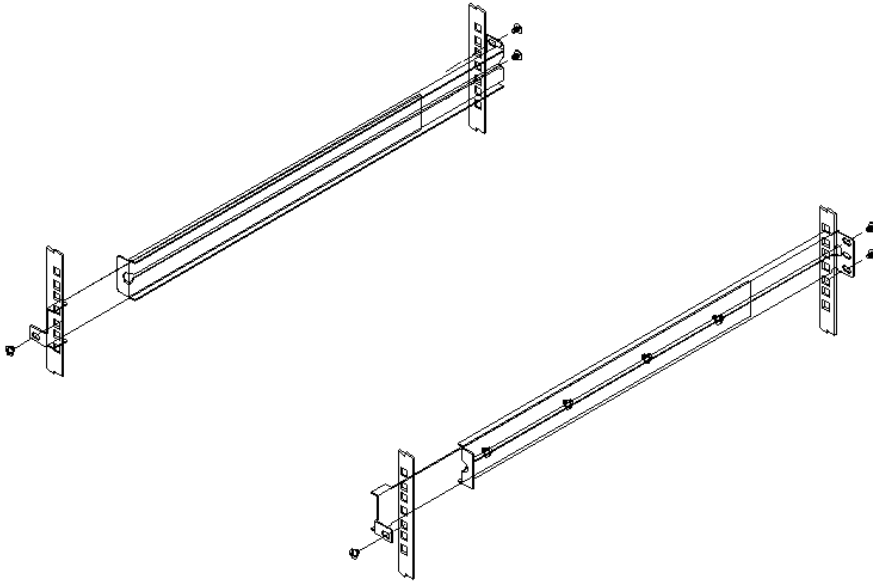
Step 1:

Figure 1: Attaching left and right easy-installation mounting rails to inside of the rack
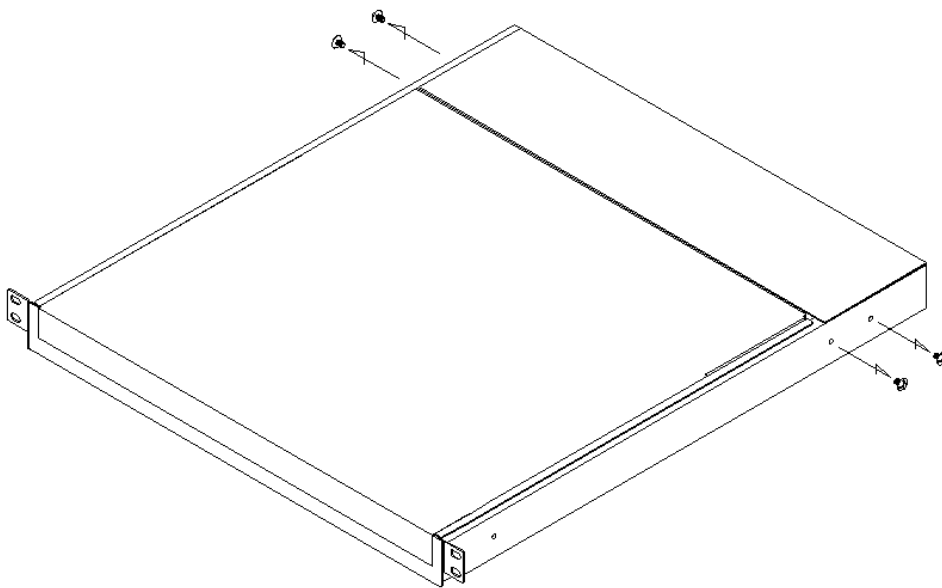
Step 2:

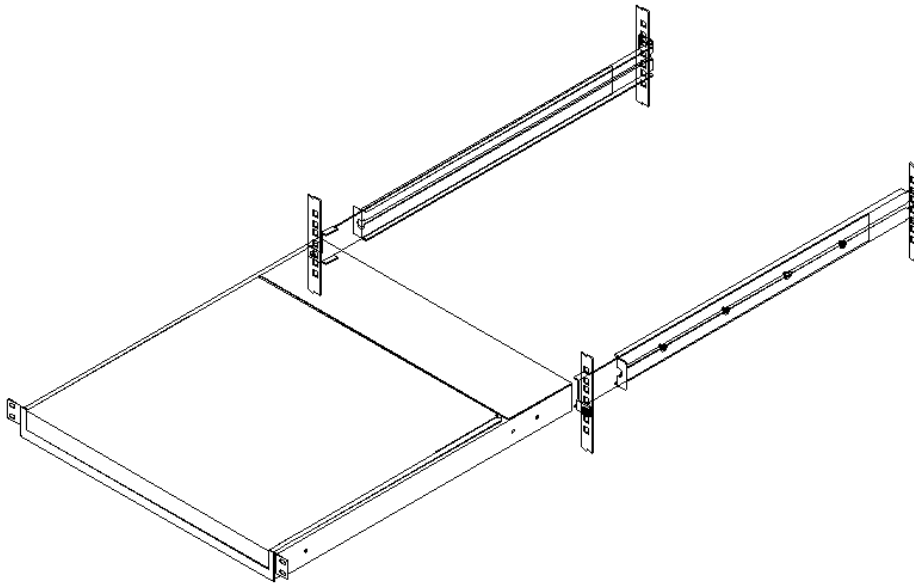i-Tech Company, LLC   www.i-techcompany.com

Step 3:

Figure 3: take WKP series rackmount KVM slide-in rack mount bracket

Step 4:
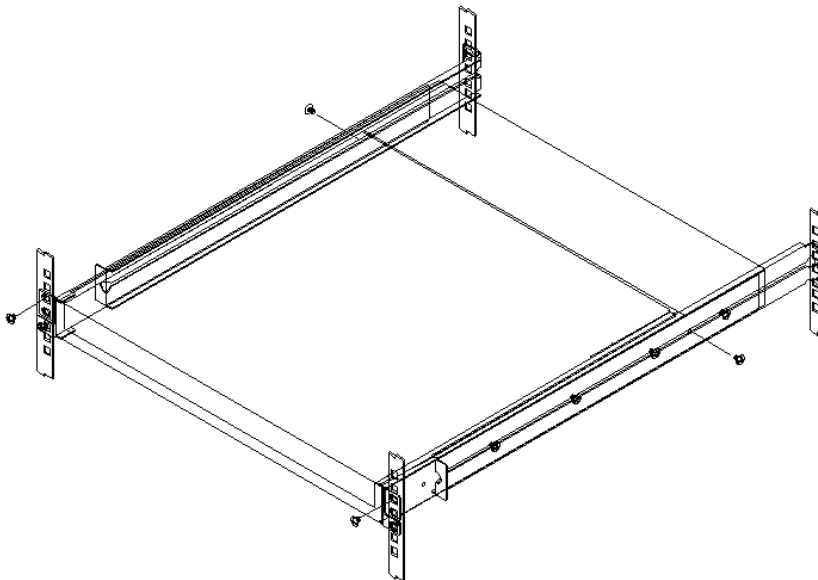
Figure 4: screw–in hold WKP series rackmount KVM in left/right position

i-Tech Company, LLC   www.i-techcompany.com

LCD Monitor OSD Setting

Down / Right (+):

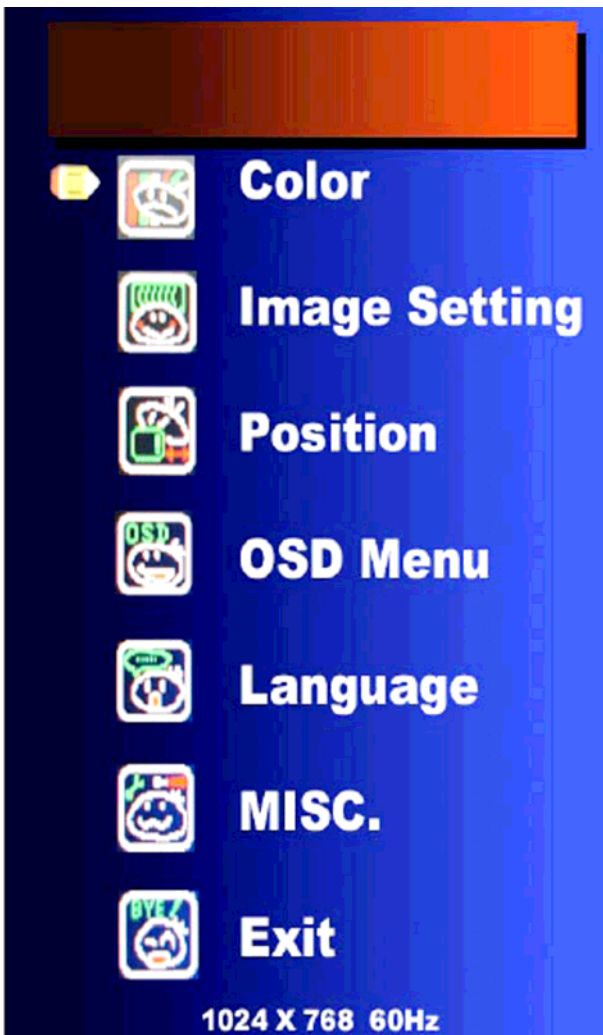　　Decrease setting or scroll down the menu bar

Up / Left (-):

　　increase setting or scroll up the menu bar

MENU: Activate OSD menu

Power: Turn on or off the main board

AUTO: auto setting all funtions

LCD OSD Funtions

1. Color
   - a. Contrast
   - b. Brightness
   - c. Color Adjust
   - d. Color Temp
   - e. Back
2. Image Setting
   - a. Clock
   - b. Phase
   - c. Gamma
   - d. Sharpness
   - e. Back
3. Position
   - a. H.Position
   - b. V.Position
   - c. Back
4. OSD Menu
   - a. OSD H.Pos
   - b. OSD V.Pos
   - c. OSD Timer
   - d. Back
5. Language
   - a. English
   - b. Francais
   - c. Deutsch
   - d. Espanol
   - e. 繁體中文
   - f. 简体中文
   - g. 日本語
6. Misc
   - a. Signal Source
   - b. Reset
   - c. Factory Mode
   - d. Back
7. Exit

i-Tech Company, LLC   www.i-techcompany.com

Touch Pad

FUNCTION

Basic Function

	Cursor Move This function is enabled when the finger moving on touchpad device.

Scroll Function

	Vertical Scroll vertical scrolling is enabled when tap right side of touchpad then move finger.

	Horizontal Scroll horizontal scrolling is enabled when tap down side of touchpad then move finger.

Multiple Finger

	1 Finger (Left Button) It's same as the left button of mouse. And it could be setup as the function as selected. for example: Click/Select, Content Menu, Run ...etc.

	2 Finger (Middle Button) It's same as the middle button of mouse. And it could be setup as the function as selected but expect Click/Select. for example: Content Menu, Run, Zoom in ...etc.

	3 Finger (Right Button) It's same as the right button of mouse. And it could be setup as the function as selected. for example: Click/Select, Content Menu, Run ...etc.

i-Tech Company, LLC   www.i-techcompany.com

KVM Switch

1. Introduction

The 8/16-Port KVM switch provides efficient solution to control over many computers. Powerful model-detection design will enable all connected PCs to identify KVM model correctly to meet server versatility and reach optimum setup. Stackable function enables you to link other KVM switches at any time to expand connected computers. With the on-screen display (OSD), you can view all computer situation and able to name and set password for each computer.

2. Features

- Use One KVM Console to control 8/16 PCs
- Automatic KVM signal simulation, able to boot-up PC simultaneously
- Support advanced function of Logitech and Microsoft mouse
- Support Plug & Play, Software free
- Support DDC2B, correct Monitor type detection for each port at any time
- Compatible with MS-DOS, Windows, Linux, Unix, FreeBSD
- VGA resolution up to 2048x1536
- Front panel, hot-key, and full-function OSD menu for PC selection
- Cascadable to expand the connected PCs
- Keyboard/Video Monitor/Mouse signal RESET function
- Automatic KVM type detection for optimum setup
- Auto Scan monitoring function
- Integrated HD15 3-in-1 KVM cable, easy connect and save space

i-Tech Company, LLC   www.i-techcompany.com

3. Installation and Power-Up

(1) **First Time Set-up:** Please turn off all computers and then plug the power adapter into the switch.

(2) Connect KVM cable CB-K15P-xxx, plug HDB-15 end to a selected switch channel and the other end of the cable to a PC's keyboard/mouse/video ports. Then power on the PCs.

(3) <u>For PC's Hot Plug-and Play, please connect mouse connecter first, then connect keyboard and video connecter</u>.

(4) During installation or operation, if you face any signal problem, you can press <Scroll Lock> + <Scroll Lock> + <R> to reset from the keyboard. The keyboard led and front-panel LEDs will blink to make sure the action of reset.

> Scroll Lock   +   Scroll Lock   +   R   = RESET KVM
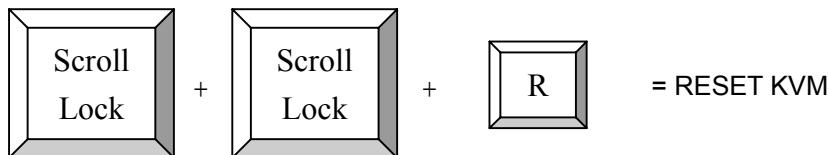
(5) **Stack additional OSD KVM Switch:** Please setup first-tier switch according to step (1) to (4), and connect KVM cable CB-K15P-xxx, plug HDB-15 end to a selected switch channel and the other end of the cable to the second-tier's user console – keyboard, mouse, and monitor ports and then plug the adapter into the switch. Then follow step (3) and (4) to connect PCs.

i-Tech Company, LLC   www.i-techcompany.com

(6) If you want to link more switches, please follow step (5) to setup. After connected switches, the switch system will auto identify and assign ID for each PC.

(7) Only the first-tier's switch needs to connect user console.

4. KVM Switch Operation

(1) Hot-key Commands

A. You may start with two <Scroll Lock> keystrokes followed by number keystroke <1> to <8>or<A> to <H> switch over 8/16 computers. After you activate hot-key function, the OSD menu will show on the screen and then followed by typing the channel number to switch. If you connected additional tier of switches, you should input two-digit number to switch. Ex: Press <Scroll Lock>+<Scroll Lock>+<1>+<8> to switch to PC No. 8 of second-tier switch No. 1.

| Scroll Lock | + | Scroll Lock | + | 1~8 or A~H | = Switch to selected channel |
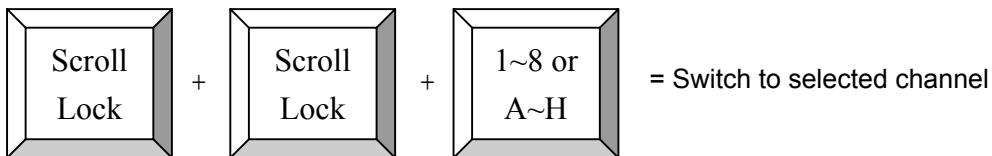
B. **Auto Scan:** Press <Scroll Lock>+<Scroll Lock>+<F4> to automatically scan power-on computers. You may change scan rate by go to the OSD screen and press <→> to change scan interval from 1-255 secs.

| Scroll Lock | + | Scroll Lock | + | F4 | = Auto scan |

i-Tech Company, LLC   www.i-techcompany.com
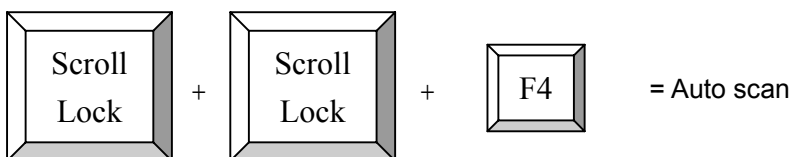
You may press two <Scroll Lock> + <Esc> to stop Auto Scan

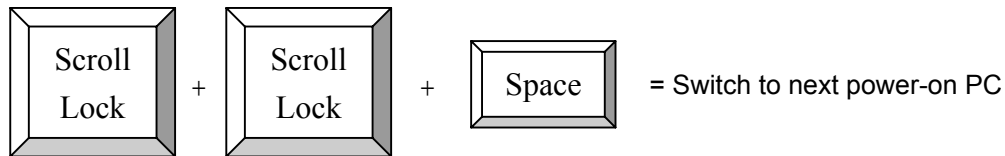| Scroll Lock | + | Scroll Lock | + | Esc | = Auto scan |
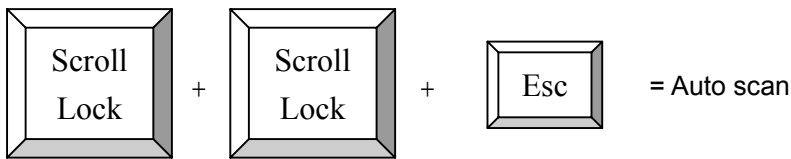
C. **Manual Scan:** Press <Scroll Lock>+<Scroll Lock>+<Space> to switch to the next power-on computer.

| Scroll Lock | + | Scroll Lock | + | Space | = Switch to next power-on PC |

D. **Use alternative Hot-Key command:** You can use another hot-key initial command to control. <Scroll Lock>+<Scroll Lock>+<R> to reset the system, then press "Caps Lock" or "Scroll Lock" twice as the initial hot-key, and followed by channel number to switch over different computers.

(2) On-Screen-Display Operation

A. You may start with two <Scroll Lock> keystrokes to activate OSD (On-Screen-Display) function. You can press <↑> or <↓> to move to preferred computer and press <Enter>. If a channel is connected to a second-tier switch, its front will show a " ▸ " to indicate a switch, you may press <Enter> to go to second-tier switch to select its connected PCs. You can press <Esc> to leave OSD menu.

| Scroll Lock | + | Scroll Lock | = To activate OSD menu |

13
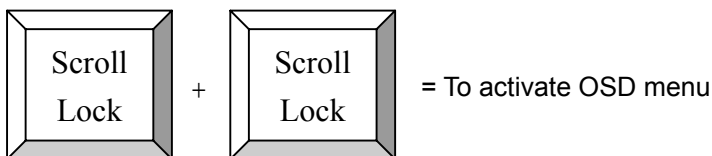
OSD Menu of 8-Port KVM Switch

B. **F1(EDIT):** After you activated OSD function, you can use <↑> or <↓> to move to preferred computer and press <F1> to edit, you can use character A~Z, 0~9, "-", "、", and ".". You can use <F5> to clear or <Enter> to go to next computer. After editing, you can press <F1> to save change.

C. **Setup the Password for Administrator:**

a. Under OSD function, press <→> + <F2> to setup the password for Administrator.   Please be noted that you need to setup this password before setting the password for general users.

Password Setup

b. After setting the password for Administrator, you will need to assign the password for general users in each channel, and it can be different in each channel.

c. For the channel without setting the password for general users, it will be required to input the Administrator password.

d. By skipping the setup of Administrator password, you can refer to the next section D. to setup general password.

D. **F2(PSW):** After you activated OSD function, you can use <↑> or <↓> to move to preferred computer and press <F2> to set general password.   For a password protected computer, it will show a "☞" symbol. When you go to the computer next time, it will show a small window for you to enter password.   If you want to cancel or change the password, please enter OSD menu and press <F2> in that computer channel.   By not entering any character, you can cancel the password or enter new password to activate password protect.


Entering Password

E. **F3(Scan Set):** After you activate OSD function, you can use <↑> or <↓> to move to preferred

14

computer and press <F3> to set the computer you want to scan. It will show a clock symbol to identify the computer

F. **F4(Auto-Scan):** After you activate OSD function, you can press <→> to set the scan rate from 1-255 seconds and press <←> to save change.

G. **RESET:** Press <Scroll Lock>+<Scroll Lock>+<R> to RESET KVM signal

| Scroll Lock | + | Scroll Lock | + | R | = RESET KVM |
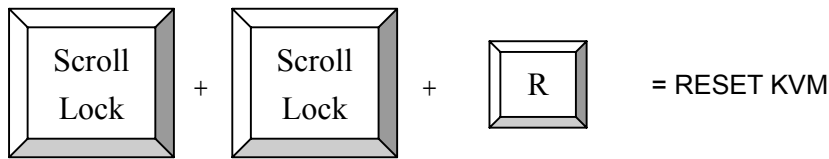
H. **Channel Display:** When you switch to different computer, it will show the channel ID and computer name on the screen and disappeared after 3 seconds.

7 SERVER07

Channel Display

I. During operation, if the computer has power-off or added, the status will also change in your next-enter OSD menu.

5. Remarks

(1) Before operating this KVM switch, please read operation manual carefully.

(2) Please plug KVM switch adapter and use high quality 3-in-1 KVM cable for optimum operation.

(3) To prevent potential power damage, please don't use 2-wire extension cord and ensure AC outlets at PCs and monitors are on the same phase and have correct grounding.

(4) Limited Warranty:

A. In no events shall the direct vendor's liability for direct or indirect, special, incidental or consequential damages, loss of profit, loss of business, or financial loss which hay be caused by the use of the product exceeds the price paid for the product.

B. The direct vendor makes no warranty or representation, expressed or implied with respect to the contents or use of this documentation, and especially disclaims its quality, performance, merchantability, or fitness for any particular purpose.

C. The direct vendor also reserves the right to revise or update the product or documentation without obligation to notify any user of such revisions or updates. For further information, please contact your direct vendor.

i-Tech Company, LLC   www.i-techcompany.com

Hot Plug

The KVM Switch supports "Hot Plug" function for easy addition or removal of PCs. The user can arrange or maintain PCs as follows:

a. A PC can be disconnected and reconnected to the same or different port of the KVM unit without having to power it off as long as it is not the Daisy-chain port or pass through port.

b. The pass through port PC (i.e. The pass through port means the console port is connected to PC directly) is powered on. Before you go hot plug function, please switch to this pass through port to next port (or say emulation port) and then switch back to the pass through port.

c. You may unplug the mouse or the keyboard from the console port and plug it back in at any time.

> **NOTE:**
> **Some O.S. (Operation Systems) like SCO Unix are unable to support " Hot Plug " function. If you apply "Hot Plug" to this kind of O.S., it will cause unpredictable behavior or shut down the PC. Before attempting to use " Hot Plug " , please make sure your O.S. and mouse software driver supports the "Hot Plug" function.**

Troubleshooting

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

2. 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. If you need longer VGA cable, please use VGA extender (Model No. VGA-100, MAX. 100) to accomplish your applications.

3. The recommended PS2 cable distance is 5 meters maximum. Normally, the cable length is based on driver capacity of your motherboard PS2 port. If you need longer PS2 cable, please use PS2 extender (Model No. PS-100, MAX. 100 feet) to accomplish your applications.

4. The Power Jack polarity is center positive and the power adapter need be DC12V, 1A or DC9V, 1A.

5. 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.

6. The computer boot up fine, but keyboard doesn't work

● Make sure the keyboard works when directly plugged into the computer.

i-Tech Company, LLC   www.i-techcompany.com

- Try a different keyboard, but use only 101, 102 or 104-key keyboard.

7. The Mouse is not detected during PC boot up.
- Make sure the mouse works when directly plugged into the computer.
- Make sure the mouse is a true PS/2 mouse. A combo mouse will work just as long as it is set for PS/2 mode with the correct adapter. Try a different mouse.
- Avoiding moving the mouse or pressing the mouse buttons when switching ports.
- Avoiding switching ports during shutting down the PC process.
- When you switch one PC port to another PC port, the best scan time setting need to be set to 5 sec. or more. Normally, the VGA monitor change one resolution mode to another will take one or two seconds. So, the scan time is not recommended to below 5 seconds.

8. The power switch is off, but the switch still works fine or power adapter is unplugged from the switch, but the switch still works fine.
   KVM Switch unit draws the power source from power adapter and all PC's PS2 port. Some PC's PS2 port can support enough power for the switch, but some PC's PS2 port (like laptop, notebook computer…etc.) is unable to supply enough power for the switch. In order to make sure the system can work steadily, please do not set power switch to off state or remove the power adapter from the switch.

   Although the PCs connected to KVM Switch unit are able to support enough power to the stand alone switch, KVM Switch unit still needs a power adapter for daisy chain more banks.

9. If forgetting the " password " you typed, please contact your supplier.

Accessories

HDDB15 Male to DB15 Male + Mini Din*2

CDB-6-PS2---→PS/2

CDB-6-PS2-USB---→USB+PS/2

Ordering information:

xxx = 180:180cm cable
      300:300cm cable
      500:500cm cable
      1000:10M cable
      1500:15M cable
      2000:20M cable
      3000:30M cable

i-Tech Company, LLC   www.i-techcompany.com

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. Including interference that may cause undesired operation.

CE – Certificate

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

i-Tech Company, LLC   www.i-techcompany.com