SMK585 1U rackmount Monitor – Keyboard Drawer
With 8 Ports KVM Switch

TABLE OF CONTENTS

Content

Features

l   8-port KVM switch for standard 19" rack mount design.

l   Support DOS, Win3.X, Win95/98/98SE/2000/ME/XP, WinNT, Netware, SCO Unix, HP Unix,
   Linux

l   Hot Plug - Add PCs or Remove Connected PCs for Maintenance without Powering down
   the SMK-585 or PCs.

l   High Video Quality - Up To 1024x768, Bandwidth: 200MHz

l   No Software Required - easy PC selection via On Screen Display Manual, Push Buttons,
   Hot Keys

l   Support eight characters password protection and search PC server name

l   Auto Scan Mode for monitoring PCs and flexible Scan time from 5~99 seconds

l   Keyboard status restored when switching PCs

l   LED Display for easy status monitoring

l   Buzzer sound for switching port confirmation.

l   Compatible with standard PS/2 Keyboard, PS/2 Mouse, and VGA.

l   Built-in one extra daisy chain port and no waste any PC port

l   No DIP switch setting needed and auto detect daisy chain bank

Basic Specification

Size:	1U 19″ Rackmount Type
Keyboard:	Mechanical type ,108 Keys
Mouse:	Touchpad
Dimension:	442.4 x 44 x 550 mm (WxHxD)
Weight:	10.5 kg
Power Supply:	100/240V autoswitching
Protection:	Front panel with keylock
	Rail with self-locking device
	LCD back-light will be turned-off when the screen set is turned down
Operating Temperature:	0-50°C (32-122°F)
KVM switch	Build-in 8 ports KVM switch

Display

Diagonal Size:	15″
Resolution:	1024 x 768
Contrast Ratio:	350:1
Brightness:	250 nts
Frequency:	60Hz
Color: Native	16.7M colors
Control:	OSD

Package Contents

KVM Drawer Unit	x 1
Extension Bracket	x 2
Power Cord	x 1
D-Sub 15 VGA-PS/2 Cable (3 in 1)	x 1
Screws package	x 1
User Manual	x 1

Technical Specifications

	KVM Unit
PC Port	8
Console Port	1
PC Port Connector (All Female Type)	PS/2 Keyboard mini Din 6 pin PS/2 Mouse Mini Din 6 pin VGA HDDB 15pin
Daisy Chain Port Connector (All Female Type)	PS/2 Keyboard mini Din 6 pin PS/2 Mouse Mini Din 6 pin VGA HDDB 15pin
PC selection	On Screen Display Menu, Hot Key, Push Button
7 segment LED	One Bank LED, Two PC Port LEDs
On Screen Display Control	Yes
Scan Intervals	5~99 Sec.
Keyboard Emulation	PS2
Mouse Emulation	PS2
VGA Resolution	1024x768
Bandwidth	200MHz
Daisy Chain MAX Level	8 levels
MAX PC Connection	120
Housing	Metal
Power	110/220 AC
Operation Temperature	0~40℃
Storage Temperature	-20 ~ 60℃
Humidity	0~90%, Non-Condensing
Size	19" Rack Mount / 1U
Weight (kg)	33lb
Dimension (cm)	23"(L) X 19(W) X 1U(H)

System Requirements

Specifications:

	KVM Unit
Console	Built-in VGA Monitor Built-in PS/2 Keyboard Built-in PS/2 Touchpad
To Computers	8 HDB 15 pin male to male VGA cables 8 PS/2 cables male to male for Keyboard 8 PS/2 cables male to male for Mouse

Connector Diagrams

PS/2 Cable:
Mini Din 6 pin Male to Male

VGA Cable:
HDB15 pin Male to Male

AT to PS/2 keyboard adapter: (Optional)
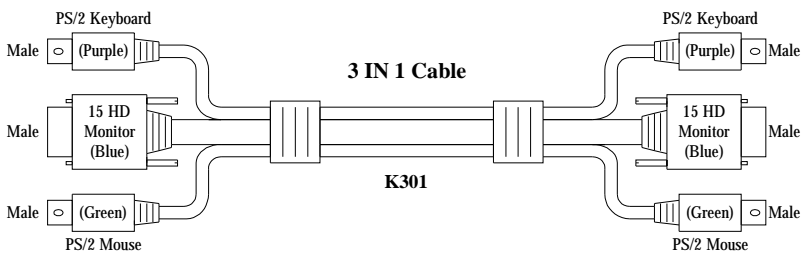Din 5 pin Male to Mini Din 6 pin Female

PS2 to DB9 adapter: (Optional)
Mini Din 6 pin Female to DB 9 pin Female

Accessories:
K301 Cable：6 Feet 3 IN 1 Cable.

Hardware Installation

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

Step 1
When mounting to a rack, attach the included brackets to the sides of the unit. Take note of the length of your cables so that your computers keyboard, mouse and monitor are distanced properly.


Step 2
Now the PC connections can be made with the monitor (VGA) connections first. Connect a VGA cable (15-pin HDDB Male / Male) with the Male side to both of the PC and the rear panel of the KVM switch to the connector labeled VGA. Repeat this for all PCs.
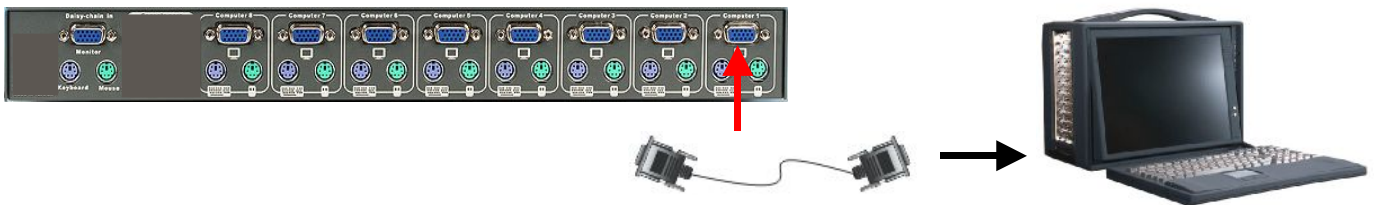

Step 3
Connect the first computer's mouse cable to the KVM unit. If using a PS/2 cable, connect one end to the PS/2 mouse port on the computer, and the other end to the PC1 PS/2 mouse port on the back of KVM unit. If using a serial mouse cable (optional), connect one end to a DB-9 serial port on the computer, and the other end to the PC1 DB-9 serial mouse port on the back of the KVM unit. If you need Serial DB-9 to PS2 Mini Din 6 pin adapter, please contact your supplier.

5
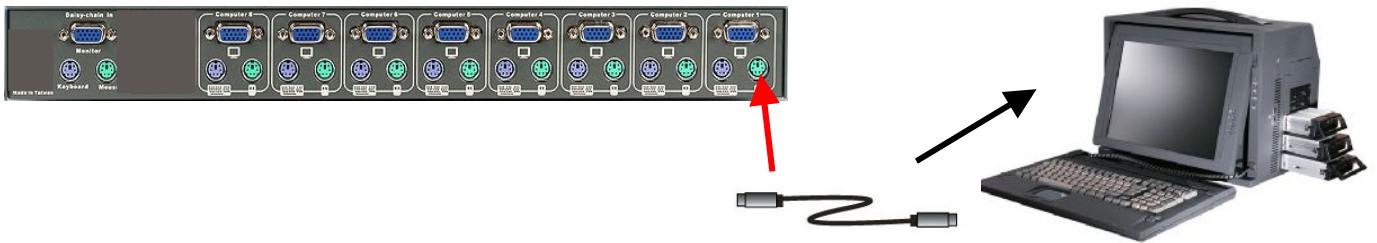
Step 4

Connect the first computer's keyboard cable to the KVM Switch. Using another PS/2 cable connect one end to PS/2 keyboard port on the computer, and the other end to the PC1 keyboard port on the back of unit. If your computer has an AT type keyboard port, you will need a PS/2 to AT keyboard adapter.
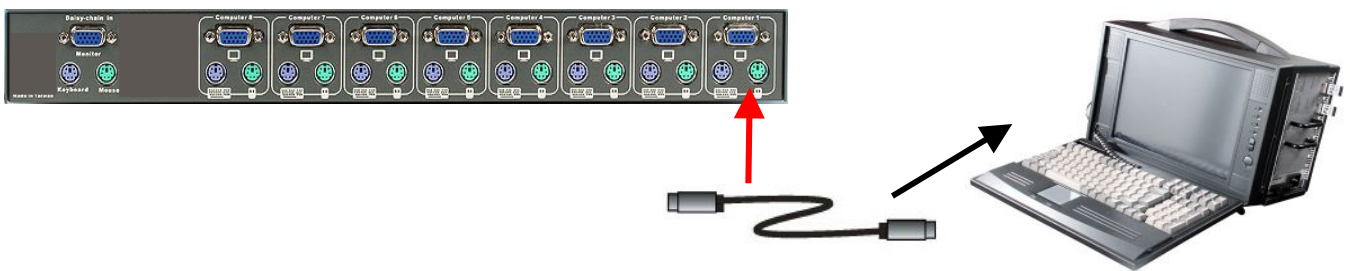
Step 5

Double-check all of the connections. You can check the color of keyboard and mouse connector to make sure the keyboard and mouse cables go to the correct ports.

Step 6

Repeat step 2 to 5 for the remainder of the computers.

Step 7

Attach the power supply to the unit and plug the other end into an electrical receptacle. Now you will see the LED for Port 1 light up, and you will hear a beep.

Usage

The power on state of 8-port unit:
When you power on the unit, it will ask you for the password, **the default password value is eight zero –" 00000000 "**. Please key in eight zero and enter the same value at retype field.
Note: If you are not familiar with the operation of OSD menu, please don't change the password – i.e. keep default eight zero (00000000) value. Otherwise, if you have set the password and unfortunately forget the password, you need send it back to your distributor for maintaining the password.

7-Segment LED Indication :
When you select one of eight PC ports and this PC is shut down or this PC port is disconnected to the PC, the selected port LED will flash. When you select one of eight PCs ports and this PC is powered on, the selected port LED is lit.

KVM unit

1 → 2 → 3 → 4 → 5 → 6 → 7 → 8
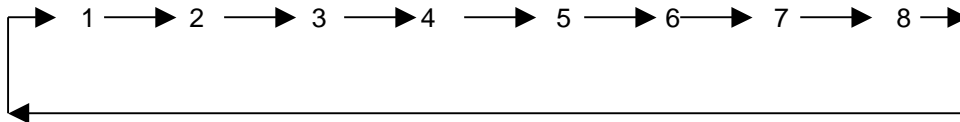
Keyboard Hot Key Commands:
You can also conveniently command unit by switching ports through simple key sequences. To send commands to the unit, **the "SCROLL LOCK" key must be pressed twice within 2 seconds.** You will hear a beep for confirmation and the keyboard is in hot key mode. If you have not pressed any key in hot key mode within 2 seconds, the keyboard will go back to normal Operation System control state.

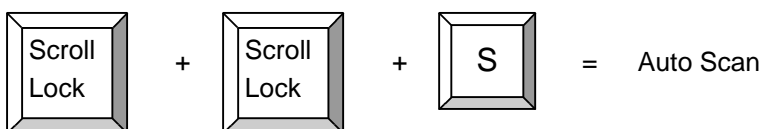**Below are the different hot key commands:**

within 2 seconds

| Scroll Lock | + | Scroll Lock | + | ↑ | = | Previous Channel |

| Scroll Lock | + | Scroll Lock | + | ↓ | = | Next Channel |

(Note: You also could press "up arrow key" or "down arrow key"

longer time to speed up selecting the destination port)

| Scroll Lock | + | Scroll Lock | + | Page Up | = | Previous Bank |

| Scroll Lock | + | Scroll Lock | + | Page Down | = | Next Bank |

To select PC port:

| Scroll Lock | + | Scroll Lock | + | Bank No | | Port No |

| Scroll Lock | + | Scroll Lock | + | B | = | Beeper |

(Note: The default Beeper function is ON and beeper

control is only for available for Scan Mode)

| Scroll Lock | + | Scroll Lock | + | S | = | Auto Scan |

To get out of Auto Scan Mode, Press any key or SPACE bar.

| Scroll Lock | + | Scroll Lock | + | R | = | OSD default value |

(Note: Not including password)

ROM   REFLASH

Scroll Lock	+	Scroll Lock	+	F	=	Search the same PC name

(Note: Search PC name starting from 1st PC port)

F I N D : ▮

Scroll Lock		Scroll Lock	

+ Space bar = On Screen Display Menu
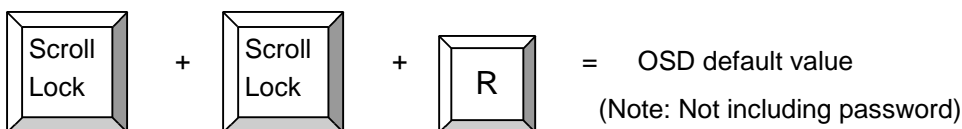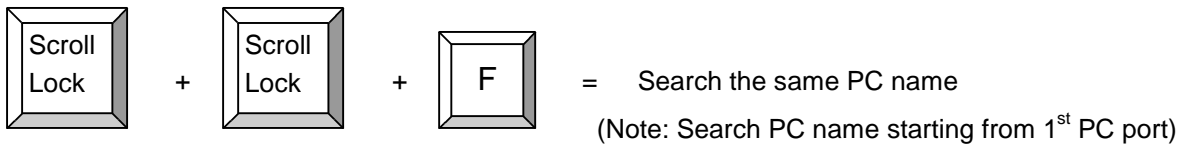
Example：

A. To access a computer attached to Port 6 of the fifth Bank. You can press through hot key as below:

Scroll lock + Scroll lock + "5" + "0" " 6"

B. To access a computer attached from Bank 3 to Bank 4, You can press through hot key as below:

Scroll lock + Scroll lock + Page Down

Note:

Bank no. and Port no. selection must be made using the numeric keys on the keyboard. Numeric keys on the keypad are not available as a hot key command.

Daisy Chain Connection Diagram

Please use the attached 3 feet 3-in-one daisy chain Cable Kit to daisy chain the KVM unit.

A. Connect Keyboard, Mouse and Monitor to the console port (white color block) of bank 1 KVM unit.

B. Use one end of 3-in-one Cable Kit to connect the daisy chain port of bank 1 and the other end for the console port (white color block) of bank 2 KVM unit.

C. Please repeat item B to daisy chain more bank as you want. But, the maximum daisy chain bank is eight.

D. Before chaining the slave bank up to six banks, you need a VGA extender (Model No. VGA-100, Max. 100 feet) between the fifth bank and the sixth bank to enhance the VGA signal.

Bank 2

Bank 3

Bank 8

Maximum 8 Levels
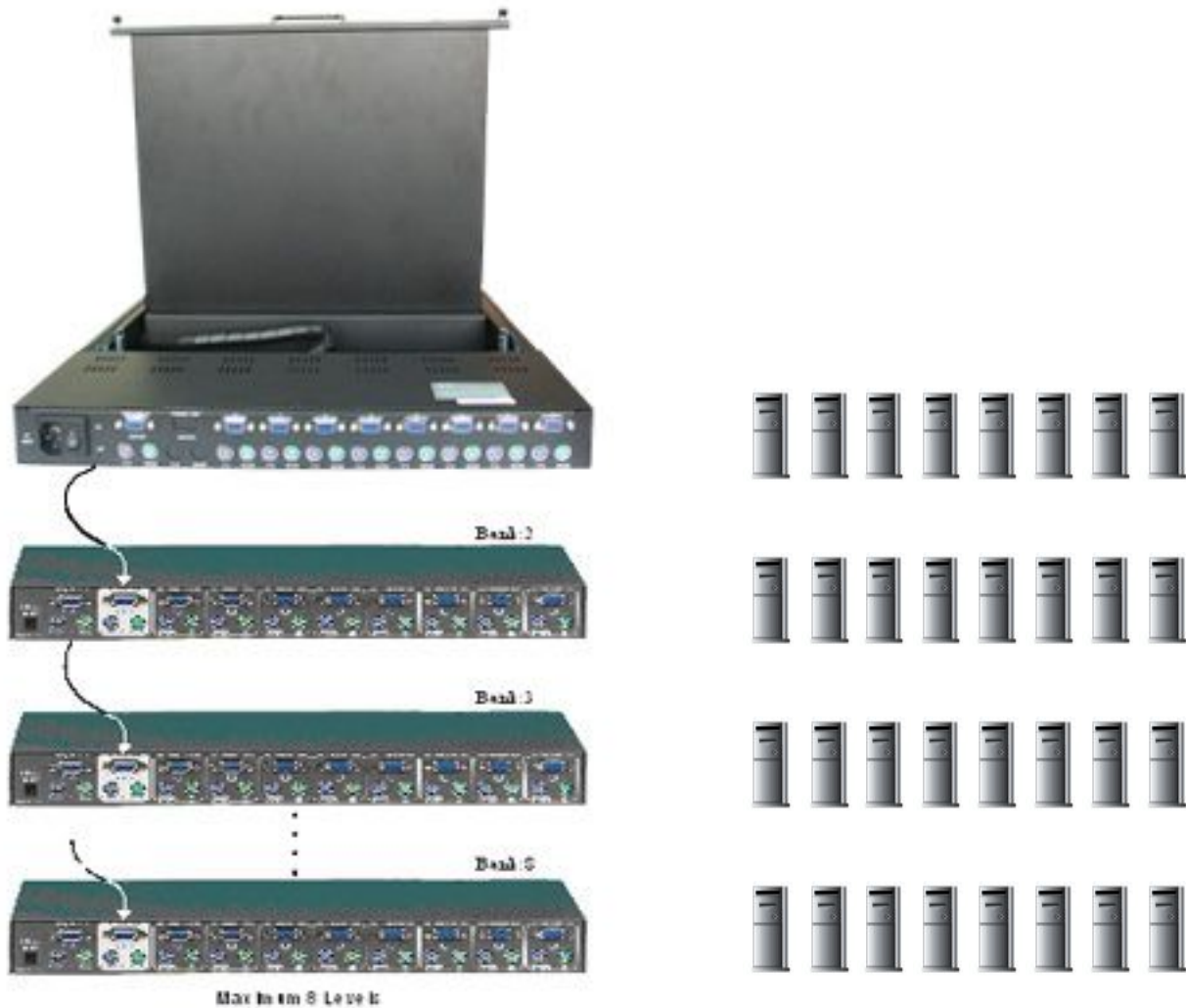
Hot Plug

The KVM unit 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 unit without having to power it off as long as it is not the Daisy-chain port or pass through port.
b. 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 software driver supports the "Hot Plug" function.**

KVM On Screen Display Operation

When you pop up the OSD menu window go through the hot key, you will see the following small window on your monitor.

BANK : 1

01	**SYSTEM 01**	**02** ☼**SYSTEM**	**02 E**
03 ☼**SYSTEM**	**03**	**04** ☼**SYSTEM**	**04**
05 ☼**SYSTEM**	**05**	**06** **SYSTEM**	**06**
07 **SYSTEM**	**07**	**08** ☼**SYSTEM**	**08**

a. The 1ST line bar is Bank no.

b. The 2nd block is your PC system name list. You will find the system number list from 01 to 8. You can define your PC name in maximum 8 characters. The factory default names for all ports is "SYSTEM 01", to "SYSTEM 08". Besides, the sun symbol " ☼ " near to the PC name represents the PC system is powered on.

To use up arrow key " — " or down arrow key " ˜ " to select port for destination PC name. After you have selected the PC port already, you can press the ENTER Key to switch the PC port you want immediately

Ç/È: **SELECT   PORT**

To use " PgUp " key or " PgDn" key for selecting previous or next Bank no. (or Box No.)

PgDn/PgUp: BANK   SELECT

To press " INS" key for editing PC name.   After finishing the edit, please press " Enter " key for saving information.
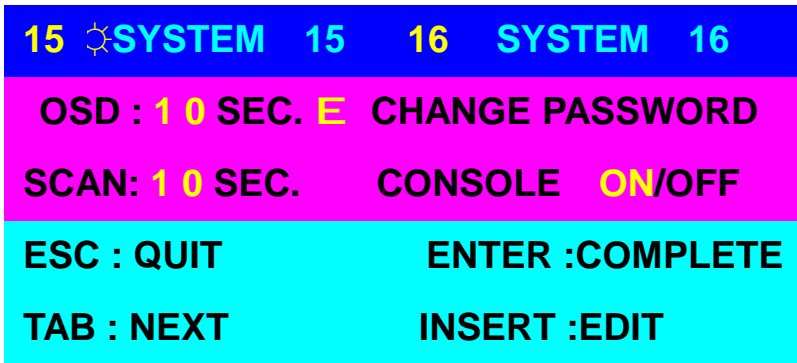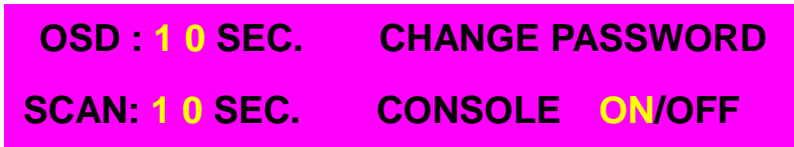
ESC : QUIT   **ENTER :COMPLETE**

**TAB : NEXT**   **INSERT :EDIT**

To use " Tab " key to select items like Bank, OSD, SCAN, CHANGE PASSWORD, CONSOLE ON/OFF, etc…

```
OSD : 1 0 SEC.      CHANGE PASSWORD

SCAN: 1 0 SEC.      CONSOLE   ON/OFF
```

```
15 ☼SYSTEM  15   16   SYSTEM  16

 OSD : 1 0 SEC. E  CHANGE PASSWORD

SCAN: 1 0 SEC.      CONSOLE   ON/OFF

ESC : QUIT              ENTER :COMPLETE

TAB : NEXT             INSERT :EDIT
```

a. The " OSD: 10 SEC" means that the OSD windows display or PC system name exists 10 sec. on your monitor. You can modify it from 05 sec to 99 sec. The factory default value is 10 sec..

b. The " SCAN TIME" means that 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.

c. The " CHANGE PASSWORD" is for user to avoid all PC systems to be intruded by the other person. The default password is 8 digits " 00000000 ".

```
ENTER  PASSWORD : █
ESC : QUIT          ENTER : COMPLETE
```
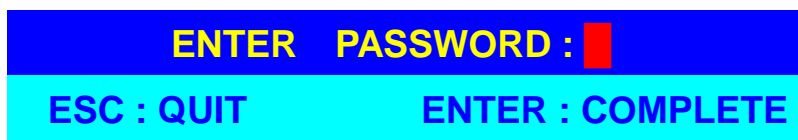
There is an enter password window showed out when you select this item and then press the Enter. The maximum password is eight digits. After you key in the password already and press the Enter key, there is another window for confirming your typed password.

```
ENTER  NEW  PASSWORD : █
ESC : QUIT            ENTER : COMPLETE
```

```
RETYPE  NEW  PASSWORD : █
ESC : QUIT            ENTER : COMPLETE
```
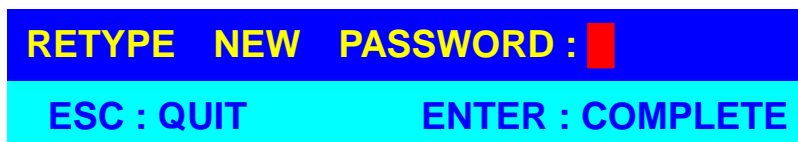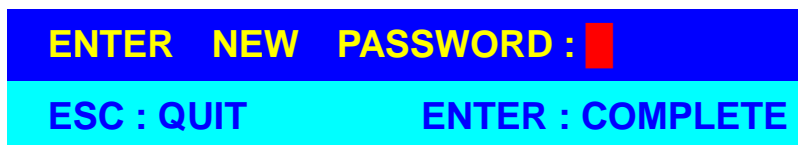
You need to retype the password again for rechecking your previous key-in password is matched or not.

<div style="text-align: center;">

NEW   PASSWORD   COMPLETE

ESC : QUIT   ENTER : COMPLETE

</div>

d. The " CONSOLE ON/OFF " means to manage the SMK-585. If you select " CONSOLE ON ", it means that any user can use the console. If you select " CONSOLE OFF "(factory default OFF state), it means that any user will not be allowed to use the console unless you enter the password. When you enter the password already and pass the SMK-585 authentication, the CONSOLE will be set to ON.   After you finish using SMK-585, please don't forget to set CONSOLE ON state to OFF state. Besides, if current CONSOLE is ON state and you reset SMK-585, the CONSOLE will be set from ON state back to OFF state.

e. When you finish the setting up of PC name and exiting the OSD setting mode, you will find the PC name showed at the up-left corner of monitor. Now, you can use "ESC" key to clear the message right away if you don't need it.

<div style="text-align: center;">

102   ☼SYSTEM   02

</div>

f. If you want OSD returning back to factory default value, you can execute "SCROLL LOCK", "SCROLL LOCK", "R" keys in this order. The Seven segment LEDs on the front panel will be flashed during the refresh process.

<div style="text-align: center;">

ROM   REFLASH

</div>

When the OSD value back to default setting, the seven segment LEDs on the front panel will stop flashing

LCD Display OSD Parameter Setting

Display OSD Illustration
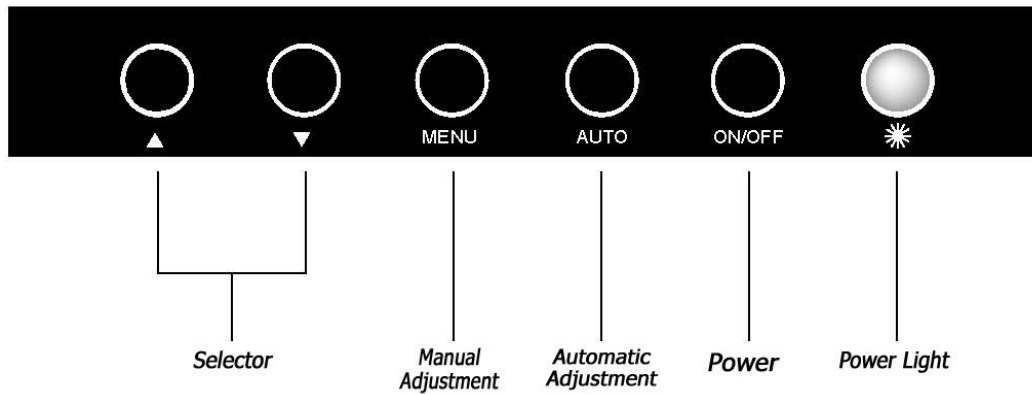
1. Manu Key : Use this key into the manual mode.

2. Auto Key : Use this key into the automatic mode.

3. Selector Key : To adjust the items in the manual mode.

4. Power Key : "Turn-on" or "Turn-off " the monitor.

5. Power Light : It shows the monitor is on when green;
   it shows the monitor is turning off when red.

● 自動調整(AUTO Adjust)

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 vusual signal be the best mode automatically.

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

● 亮度/對比調整(Brightness/Contrast)

1.Press the "MANU" key, thenit 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 into the "Brightness/ Contrast" mode.

Adjust the Brightness :

Use the "Down" key may reduce the brightness;
*Use the "Up" key may upgrade the brightness.*

Adjust the Contrast :

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

2.Use the "Down" key may reduce the brightness;
Use the "Up" key may upgrade the brightness.

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

5

1024x768	48KHZ/59HZ

MENU

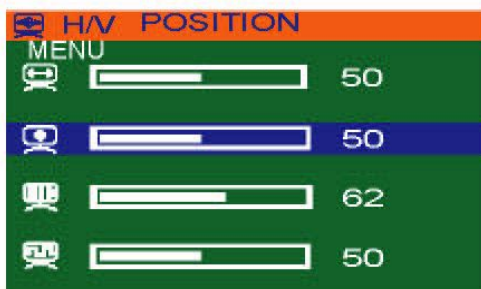|	AUTO Adjust
	Brightness/Contrast
	Image Adjust
	Color
	Language
	Reset
	OSD Adjust
	Exit

顯示畫面調整(Image Adjust)

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.

H/V POSITION

MENU

		50
		50
		62
		50
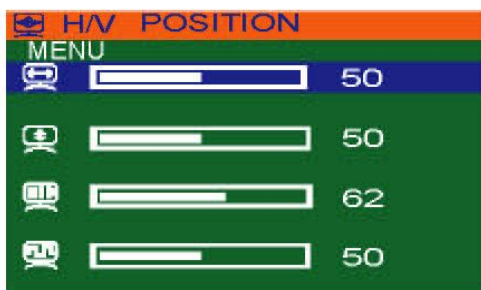
Horizontal Position :

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

Just use the "Up" & "Down" keys to adjust the position.

H/V POSITION

MENU

		50
		50
		62
		50

Vertical Position :

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

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

2.Just use the "Up" & "Down" keys to adjust the position.

H/V POSITION

MENU

		50
		50
		62
		50
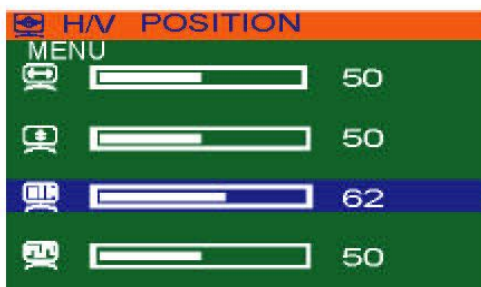
Picture Quality Adjustment :

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

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

2.Just use the "Up" & "Down" keys to adjust the position.
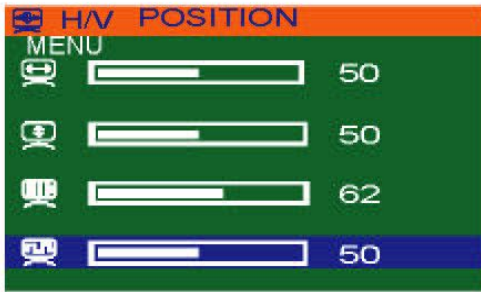
Frequency Adjustment :

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

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

2.Just use the "Up" & "Down" keys to adjust the position.

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".

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".

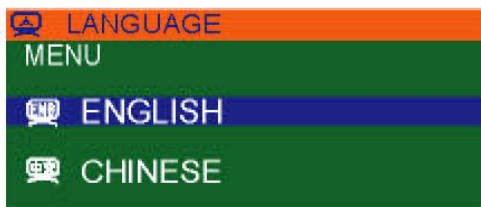2.Press the "Down" key, and the picture will be closer
 to the red tone.

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

2.Press "Down" key again, and the picture will be
 return the default tone as before.

8

1024x768　48KHZ/59HZ	
MENU	
AUTO Adjust	
Brightness/Contrast	
Image Adjust	
Color	
Language	
Reset	
OSD Adjust	
Exit	

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

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

LANGUAGE	
MENU	
ENGLISH	
CHINESE	

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

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

LANGUAGE	
MENU	
ENGLISH	
CHINESE	

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

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

1024x768　48KHZ/59HZ	
MENU	
AUTO Adjust	
Brightness/Contrast	
Image Adjust	
Color	
Language	
Reset	
OSD Adjust	
Exit	

Use the default setting :

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

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

3.Press "MANU" again, the picture will returned into default setting.

9

1024x768	48KHZ/59HZ
MENU	
[AUTO] AUTO Adjust	
[icon] Brightness/Contrast	
[icon] Image Adjust	
[icon] Color	
[icon] Language	
[icon] Reset	
[OSD] OSD Adjust	
[icon] Exit	

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

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

OSD POSITION

MENU

[icon]	[bar]	57
[icon]	[bar]	56

OSD Position Horizontal Adjustment :

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

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

OSD POSITION

MENU

[icon]	[bar]	57
[icon]	[bar]	56
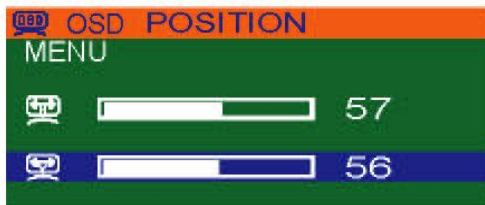
OSD Position Vertical Adjustment :

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

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

1024x768	48KHZ/59HZ
MENU	
[AUTO] AUTO Adjust	
[icon] Brightness/Contrast	
[icon] Image Adjust	
[icon] Color	
[icon] Language	
[icon] Reset	
[OSD] OSD Adjust	
[icon] 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 picture.

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 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 to accomplish your applications.

4. 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.

5. The computer boot up fine, but keyboard doesn't work
l Make sure the keyboard port works on the computer.
l Try a independent keyboard with the computer

6. The Mouse is not detected during PC boot up.
l Make sure the mouse port works on the computer.
l Try a independent mouse with the computer.
l Avoiding moving the mouse or pressing the mouse buttons when switching ports.
l Avoiding switching ports during shutting down the PC process.
l When you switch one PC port to another PC port, the best scan time setting need to be set at 5 sec. or more. Normally, the VGA monitor change one resolution mode to another will take a few seconds.

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

Compliance

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

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