8/16-Port Combo KVM Switch

KVM-810 / KVM1610

User's Manual

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CE Mark Warning

This is a Class A product. In a domestic environment, this product may cause radio interference, in which case the user may be required to take adequate measures.

Revision

PLANET 8/16-Port Combo KVM Switch User's Manual For Model: KVM-810, KVM-1610

Revision: 1.0

Part No.: EM-KVM810 / EM-KVM1610

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Chapter 1 Inroduction

Thank you for purchasing PLANET KVM switch. KVM switch can save your MONEY, TIME, SPACE, EQUIPMENT and POWER. The KVM-810 and KVM-1610 allows you to control 8/16 different PCs using just one keyboard, monitor and mouse. Eight KVM-810 and Sixteen KVM-1610 switches (banks) can be Cascade chaining together to control up to 64 / 256 PCs by single console. Two buttons on the front panel allow you to select the witch (bank) and port. The on-screen display (OSD) feature provides a friendly interface for naming and selecting a specific PC. Planet's KVM fully supports various models of PS/2 and USB mice manufactured by Logitech, Microsoft and IBM as well as compatible PS/2 and USB mice of other brands. The KVM supports the PS/2 and USB Keyboard Port of the CODE SET1/2/3 and further allows you to use the KVM for all kinds of servers, PCs or their combination. It's the perfect choice for server room, Internet or testing site where need to manage multiple computers efficiently and easily.

1.1 Features

- Standalone machine controls up to 8/16 sets of PCs
- Cascade controls up to 64/256 computers from single console
- On Screen Display (OSD) supported – use the hot key, mouse clicking and push button on front panel to switch PCs.
- Supports Monitor resolution of up to 1920X1440, bandwidth 60Hz
- Auto scan mode for monitoring PCs
- Supports Logitech/Microsoft/IBM PS/2 mouse/trackball and compatible PS/2 and USB mouse/trackball.
- Front panel status LEDs give a clear indication of the active PC
- Complies with the height of the 1U chassis specification and installable with a hanging stand into a 19" chassis system
- Requires no additional software or hardware
- Supports HOT PLUG; not necessary to turn off the original system regardless of a newly installed PC or KVM

1.2 Package Contents

- 1 x 8/16-port KVM switch
- 1 x User's Manual
- 1 x Adaptor (for US. EU. UK. AU type)
- 2 x KVM Cable (3-in-1 KVM Cable for Computer side)
- 2 x Rack Mount Kit
- 6 x Rack Mount Screw
- 4 x Pad

1. If any of the above items are missing, please contact your dealer immediately.
2. Using the power supply that is not the one included in unit packet will cause damage and void the warranty for this product.

1.3 Technical Specifications

Model		KVM-810	KVM-1610
PC Port		8	16
Console		1	
Max. PC Connections		64	256
PC Port Connector (All Female Type)	Keyboard	3-in1 HDDB 15 pin Female	
	Mouse		
	Monitor		
Console Connection	Keyboard	Mini DIN 6 pin Female	
	Mouse	Mini DIN 6 pin Female	
	Monitor	HDDB 15 pin Female	
	Mouse USB	USB (TYPE A)	
	Keyboard USB (Female)	USB (TYPE A)	
Port Selection Keys		8	16
PC Selection		On Screen Display Menu / Hot Key / Button	
Video Resolution		Up to 1920 X 1440 60HZ	
Dimension (W x D x H)		440 x 185 x 42 mm	
Console Connection		2.75 KG	3 KG
Environmental Specification		Operating temperature: 5 ~ 40 Degree C Storage temperature: -20 ~ 60 Degree C Relative humanity: 0 ~ 80% (non-condensing)	
Power Requirement		12V DC, 1.5A	
On Screen Display Control		FCC, CE	

Chapter 2 Installation

2.1 System Requirements

KVM-810

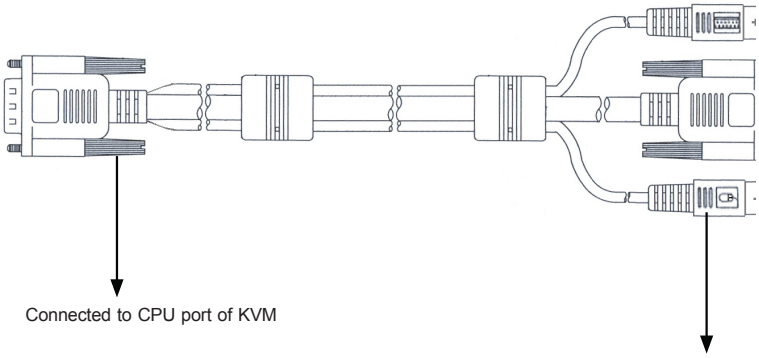
Description	8-Port Combo KVM Switch
Console side	One VGA Monitor One PS/2 Keyboard One PS/2 Mouse One USB Keyboard One USB Mouse
Computer side [Optional]	8 x 3-in-1 KVM Cable (VGA / Keyboard / Mouse)

KVM-1610

Description	16-Port Combo KVM Switch
Console side	One VGA Monitor One PS/2 Keyboard One PS/2 Mouse One USB Keyboard One USB Mouse
Computer side [Optional]	16 x 3-in-1 KVM Cable (VGA / Keyboard / Mouse)

2.2 Cable Diagrams

3-in-1 KVM Cable is for PS2 Computer or Server; connected USB PC or Server, Please use PS2 to USB Adapter



PS/2 Cable:

Mini Din 6 pin Male to Male

AT to PS/2 keyboard adapter: (Optional)

Din 5 pin Male to Mini Din 6 pin Female

VGA Cable:

HDB15 pin Male to Male

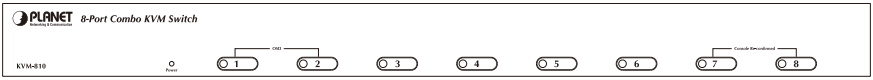
PS2 to DB9 adapter: (Optional)

Mini Din 6 pin Female to DB 9 pin Female

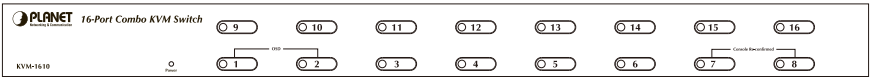
2.3 Product Details

Front panel

8-port KVM Switch



16-port KVM Switch

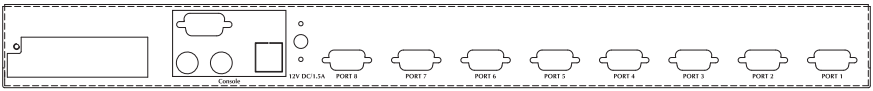


LEDs	Color	Description
Power	Blue	An blue light indicates that the KVM is operating
Port	Green	The PC or KVM connected to the corresponding port is on and operating
	Red	The situation of being connected to the port.

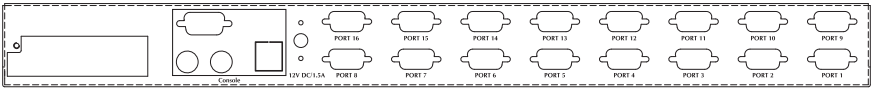
Button	Description
OSD	OSD Control Mode
Console-Reconfirmed	The keyboard and mouse will be reconnected, and the EDID in the screen will be read again.

Real panel

8-port KVM Switch



16-port KVM Switch



Port	Description
CPU	Install the cable connected to a PC here
Console	♦ In the Master KVM, connect the monitor, keyboard and mouse here. ♦ In the Slave KVM, connect the cable come from the Master CPU port here

2.4 Hardware Installation

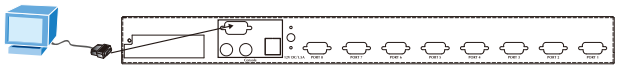
Before installation, please make sure all of peripherals and computers have been turned off.

Step 1: Rack Installation

Find a convenient place to put your KVM Switch. Its 19" rack mount form factor makes it ideal stackable on 19" rack. When stacking to a rack, attach the included brackets to the sides of the KVM Switch. Take note of the length of your cables so that your computers, KVM Switch, keyboard, mouse and monitor are distanced properly.

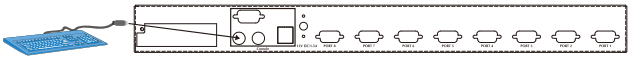
Step 2 Connecting Monitor to the KVM Switch

Connect the monitor to the KVM Switch. Using the attached cable, or the one included with your monitor, connect it to the HDDB-15 female port on the back of the KVM unit labeled with the monitor symbol at the CONSOLE port connector.



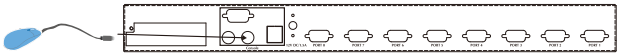
Step 3: Connecting Keyboard to the KVM Switch

Connect the keyboard and mouse to the KVM Switch. If you have an AT type keyboard, you will need an AT to PS/2 adapter.



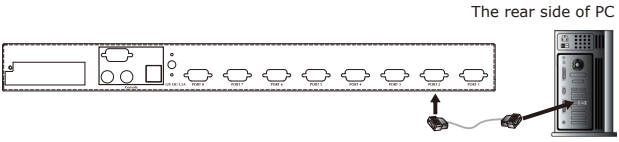
Step 4: Connecting Mouse to the KVM Switch

Connect the mouse to the KVM Switch.



Step 5: Connecting VGA/Mouse/Keyboard port of PC(s) to the KVM Switch

Install the Master KVM to the 3-in-1 cable (same as the cable for connecting the KVM to the PC) in the middle of the Slave KVMs.



Step 6: Check Again

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 7: Connecting Other PCs

Repeat step 5 for the remainder of the computers.

Step 8: Connecting KVM Power

Attach the power supply to the KVM 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. Switch on your monitor.

Note

It is not necessary to power down the whole system for install a new PC Or KVM thereafter. All you need is to make sure that the new PC or KVM is OFF during the installation. If the KVM powers down due to external Factors (such as power failure or the power of the KVM is turned off), we recommend you to reinstall the whole system.

2.5 Cascade Chain Connection Diagram

Step 1: Rack Installation

Find a convenient place to put your KVM Switch. Its 19" rack mount form factor makes it ideal stackable on 19" rack. When stacking to a rack, attach the included brackets to the sides of the KVM Switch. Take note of the length of your cables so that your computers, KVM Switch, keyboard, mouse and monitor are distanced properly.

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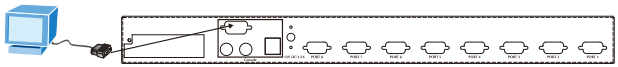
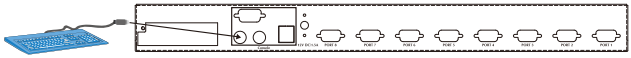
Connect the monitor to the KVM Switch. Using the attached cable, or the one included with your monitor, connect it to the HDDB-15 female port on the back of the KVM unit labeled with the monitor symbol at the CONSOLE port connector.



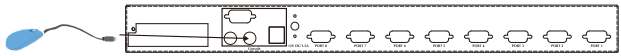
Step 3: Connecting Keyboard to the KVM Switch

Connect the keyboard and mouse to the KVM Switch. If you have an AT type keyboard, you will need an AT to PS/2 adapter.



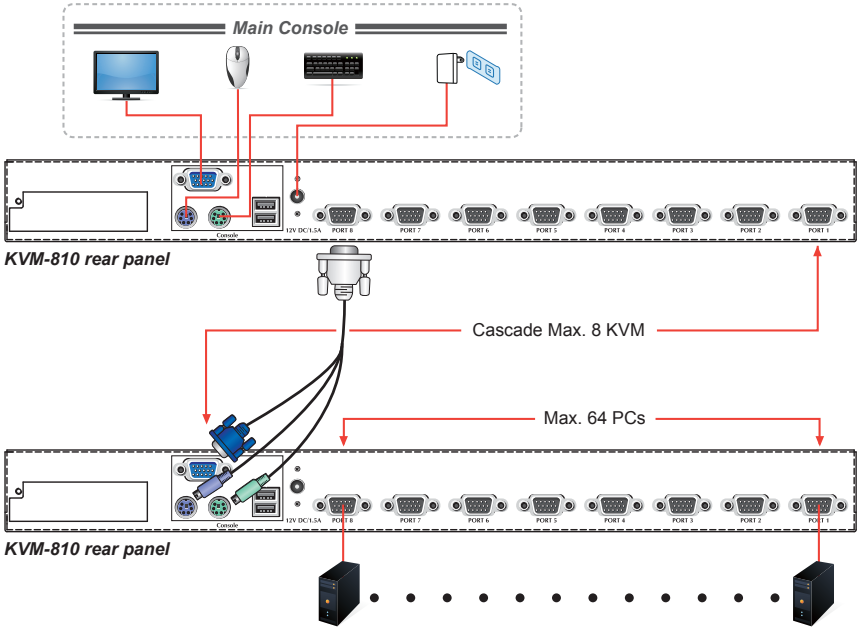
Step 4: Connecting Mouse to the KVM Switch

Connect the mouse to the KVM Switch.



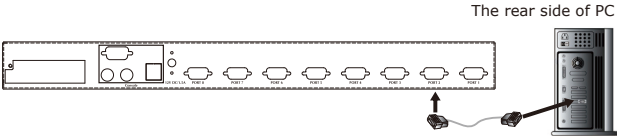
Step 5: Connecting console port of KVM to the KVM Switch

Use the 3-in-1 cable(or with PS2 to USB Adaptor) to connect the CPU port of the master KVM in parallel to the console port of the slave KVM.



Step 6: Connecting VGA/Mouse/Keyboard port of PC(s) to the KVM Switch

Install the Master KVM to the 3-in-1 cable (same as the cable for connecting the KVM to the PC) in the middle of the Slave KVMs.



Step 7: Check Again

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 8: Connecting Other PCs

Repeat step 5 - 6 for the remainder of the computers.

Step 9: Connecting KVM Power

Attach the power supply to the KVM 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. Switch on your monitor.

Chapter 3 Operations

3.1 Manual Key

It is the simplest switching method. You just need to press the Port Selection Switch on the front panel of the KVM. The Selection LED (Red) is on, indicating that you are switching to the corresponding port.

Note

1. The Port Selection Switch functions only when connected to a PC.
2. If the Offline Skip of the OSD System Setting is Auto, then you can not make any switch when pressing an offline Port Selection switch.
3. For Auto Scan Mode, none of the Port Selection Switches functions

3.2 Hot Key and Mouse Clicking

Hot key and mouse clicking are applicable for switching a small section. You can select the SVS (Smart View Setting) from the OSD of the PC first (for a quick switch of PC) and use the keyboard (press the Ctrl key twice) or the mouse (press and hold the middle button while pressing the left or right button) to switch to the previous or next set of PC.

The mouse must have at least 3 keys. As far as you select a PC with the SVS, you can use this method for the switch.

3.3 OSD (On Screen Display)

Press the NumLock on the keyboard twice or simultaneously press the Push Buttons 1 and 2 of the Port Selection Switch on the KVM panel to start the OSD. Use the key Up, Down and Enter keys on the keyboard to switch or directly move the mouse to the target PC, and then double click the left button.

Additionally, you also can use the numeric keys to enter the direct switch. For example, if you want to switch a PC to the Slave KVM port 04 under the Master KVM port 03, then you can start the OSD and then directly enter 0304. If you are using a standalone machine, then just enter the first two digits.

More OSD related information is given in the following OSD sections.

Start

Press the NumLock twice or the Port Selection Switches 1 and 2 on the panel to enter the OSD.

Note

If you have modified the Hot Key for starting the OSD and are unable to enter the OSD by pressing NumLock, and then you can start the OSD by using Port Selection Switch first, and then press F9 to enter into the System Setting to modify the options of the OSD Entry Hot Key.

If you have modified the Hot Key for starting the OSD and are unable to enter the OSD by pressing NumLock, then you can start the OSD by using the Port Selection Switch first, and then press F9 to enter into the System Setting to modify the options of the OSD Entry Hot Key.

Operation

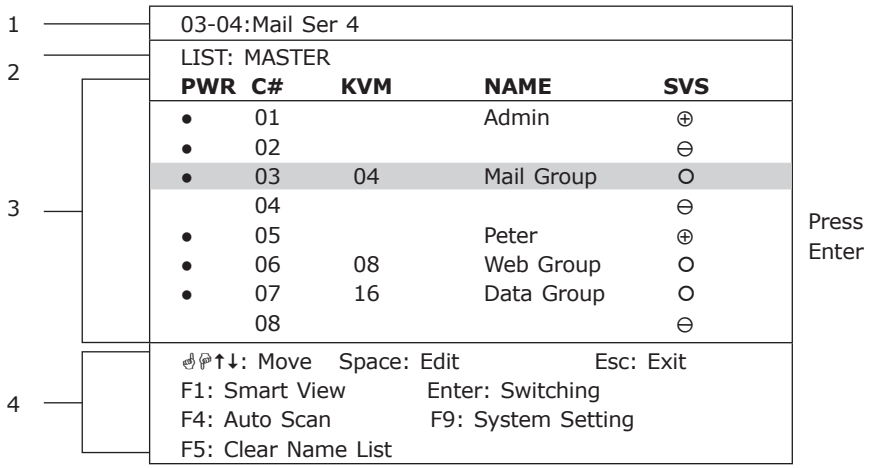
You can operate the options by keyboard or mouse. For the keyboard operation, besides the common Up and Down keys, there are special function keys such as Enter, Space Bar, Function Key (F1, F4…) under the OSD remark field. For the mouse operation, the left key refers to Enter and the right key refers to Exit. For example, move the mouse point to your desired PC, and click the left key. The selection bar will move to that position and then click the left key again for the execution.

Note

You must use the keyboard to complete the two functions: Name Edit and Password.

Switch Menu

Master List



Slave List

03-04:Mail Ser 4			
LIST: Mail Group			
PWR	**C#**	**KVM**	**NAME**	**SVS**
●	01		Mail Ser 1	⊖
●	02		Mail Ser 2	⊖
●	03		Mail Ser 3	⊕
●	04		Mail Ser 4	⊕
☝☟↑↓: Move Space: Edit Esc: Exit				
F1: Smart View Enter: Switching				
F4: Auto Scan F9: System Setting				
F5: Clear Name List				

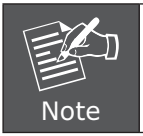
1. This field provides the information of the currently connected PC. As shown in the figure above, 03 refer to the Port Number of the Master; 04 refer the Port Number of the Slave; and Mail Ser 4 is the name of this PC defined by Users. If a PC connects to the Master, then the number consists of the first two digits. If a User has not given a name for the PC, the name field will be blank.

2. This field shows the list of the Master KVM or a certain set of Slave KVM currently displayed on the OSD. We recommend you to give a name to the Slave KVM, or else the display after LIST: will be blank.

3. This field shows the list of connections to the KVM, and the fields are described below: PWR: It shows the status of power supply and indicates a normal power supply for the equipment (PC or KVM) connected to the CPU port.

C#: It shows the channel number; the CM-1204 will display 01~04; the CM-1208 will display 01~08 and the CM-1216 will display 01~08; 09~16 (Since the screen cannot display all at a time, therefore you can use PgUp/PgDn to switch the pages).

KVM: It shows the KVM model. If there is a number in this field, it shows that a set of KVM connects to this port. The number 04 indicates Port 4 and 08 indicates Port 8 and 16 indicates Port 16 and so on.



If the connected KVM is not on, there will have no number in this field.

NAME: It shows the name of the equipment, and users can name the Slave KVM or PC on their own. There are a total of 12 characters selected from the group of "A~Z", "a~z", "0~9" , "+" , "–" , "*" , "/" , "=" , "[" , "]" , "'" , "." , ":".

Please use the CapsLock to toggle the upper and lower cases.

SVS: It shows the Smart View Setting; use ⊕ to open and ⊖ to close. The SVS is blank and not clickable if the KVM is connected in parallel. If this option is set to open, then you can make the switch by operating the Hot Key Switch or Mouse Clicking or selecting the option by Auto Scan. You also can use mouse to click this field.

Selection BAR: It shows the selection bar **(Green)**; you can use the ↑↓ keys on the board to move the selection bar, and the situated position indicates the selected target for giving instructions. For example, if the selection bar points at C#05 and you press Enter, then the system will switch to that particular PC or press the "Space BAR" to start editing the name. Press F4 to enable/disable the SVS option.

4. Instruction Hint Field:

☝☞↑↓: **(Move)**	Use the ↑↓ keys on the keyboard or the mouse to move the selection bar
SPACE: (Edit)	The "Space BAR" on the keyboard is used to start editing the name of the PC or KVM.
ESC: (Exit)	Use the "Esc" key on the keyboard to exit the current option or exit OSD.
F4: (Auto Scan)	Use the F4 key to run Auto Scan, and you can set the residing time, channel display time and mode of the Auto Scan from System Setting.
F9: (System Setting)	Use the F9 key to enter into the System Setting Menu.
F5: (Clear Name List)	Use the F5 key to clear the values of all Name fields. If you clear the name list under the Master screen, then you will also clear the name lists under all slaves. If you clear the name list under a certain slave, then you only clear the name list under that particular Slave KVM.
F1: (Smart View)	It switches the Smart View Setting.

System Setting Menu

System Setting	
Channel Display Mode	Full
Channel Display Tim	5 Sec
Auto Scan Time	5 Sec
OSD Entry Hot Key	Number Lock
Hot Key Switching	OFF
Mouse Clicking	OFF
Beeper Sound	ON
Offline Skip	Manual
OSD Language	English
Security Level	None
Console Lock Time	5 Min
↑↓	Move
Space	Change
Esc	Exit
F1	Information
F4	OSD Position
F8	Restore Default Setting

Item	Description	Default	Other Selection
Channel Display Mode	For Port Switching, Auto Scan and OSD Close, the Monitor will show the Channel information and mode selection.	Full	Number, Name
Channel Display Time	It shows the time for displaying channel information.	5 Sec	10Sec, Always, None
Auto Scan Time	For Auto Scan, it shows the residing time for each port.	5 Sec	10Sec, 20Sec, 30Sec, 60Sec
OSD Entry Hot Key	Select to turn on the hot keys of the OSD control screen.	NumLock	Scroll Lock, Shift, None
Hot Key Switching	Turn on/off the "Ctrl" hot keys on the keyboard for switching computer functions.	OFF	ON

Mouse Clicking	Turn on/off the keys of the mouse for switching computer functions.	OFF	ON
Beeper Sound	Turn on/off the beeper sound function.	ON	OFF
Offline Skip	Set the offline skip function to auto or manual.	Manual	Auto
OSD Language	Select the language for the OSD.	English	Francis, Deutsch, Italian, Espino
Security Level	Select the security mode and level.	None	Low, High
Console Lock Time *1	The lock time of console port.	5 Min	1Min, 3Min, 10Min, 30Min, 60Min

*1: You can select this option only if the Security Level is not "None".

F1: Information; It provides the model name and F/W version information, which is helpful for users to understand the updated version.

F4: OSD Position; you can enter the OSD position to make adjustments; we recommend you to unify the resolution for all computer display mode, and use this function again to adjust the OSD position. You can use the Up, Down, Left or Right keys on the keyboard or a mouse to move the OSD position.

F8: Restore Default Setting; Restore the factory default settings. Please note that all name lists will be cleared and the system settings are set to the default settings as shown in the table above.

Esc: Exit; Exit the system setting and close the OSD. If you have made changes in this option, the system will ask whether or not you want to save the setting before the selected option is effective.

Auto Scan Mode: You can start the OSD first and press "F4" to enter the Auto Scan Mode. If you want to scan the PC, you must use the Smart View Setting to select the Auto Scan Time in the System Setting for the residing time, which includes 5 sec, 10 sec, 20 sec, 30 sec and 60 sec. You can adjust the Channel Display Mode and Channel Display Time from the Channel Display mode. By then, all keys on the panel, keyboard and mouse are not operable. You can only use the ESC key to exit the Auto Scan Mode.

Security Mode: Switch the Security Level from "None" to "Low" in the System Setting, and enter your Password ("A~Z", "0~9", a maximum of 12 characters), and the security will be effective after you confirm the Password. The use of the Console Lock Time is to set the time to enter a security mode after the keyboard and mouse has idled for a predetermined time. Once you enter into the security mode, you need to enter the correct password before you can move the mouse or enter any key from the keyboard. You need a correct password to operate the whole system normally.

Important Note: What should I do if I forgot my Password?
After you enter a wrong password for 5 consecutive times, a time delay bar will appear, and a set of "Magic Numbers" will show up at the bottom.
Record the magic numbers and contact with your distributor.

Console - Reconfirmed: Simultaneously press the largest two numbered Port Selection Switches on the panel to start the Console-Reconfirmed. If you change the Console equipment, please use this function to let KVM reconfirm the equipment at the Console end once.

EDID & DDC: A vast majority of computer monitors supports the Extended Display Identification Data (EDID) and allows data access by Display Data Channel (DDC). The KVM also supports these two specifications, but the KVM only reads the EDID of the Monitor when the KVM is on. If it is necessary to change monitors during an operation, please use the Console Reconfirmed function to read the EDID again.

Chapter 4 Troubleshooting

Confirm whether or not the cable is good and connected properly

Q1: What should we do if the keyboard has no response?

A: (1) Reinstall the keyboard by unplugging the keyboard from the control end and then plugging it back.

(2) Reboot the PC.

(3) For Auto Scan Mode, press [Esc] to exit.

(4) Try another keyboard.

Q2: What should we do if the mouse has no respond?

A: (1) Reinstall the mouse by unplugging the mouse from the control end and then plugging it back.

(2) Reboot the PC.

(3) For Auto Scan Mode, press [Esc] to exit.

(4) Try another mouse.

If you are using a special mouse, we recommend you to install the mouse driver provided by the original manufacturer to maximize its functionality.

Q3: What should we do if the OSD cannot display normally?

A: (1) If the setting for resolution exceeds 1920 x 1440, 60Hz, then set the resolution within the specified range.

(2) If the KVM switch is a standalone, then power off the PC. Unplug the special cable of the KVM switch and then power on the KVM switch. Connect the special cable of the KVM switch and power on the PC.

(3) If the KVM switch is connected in series, then power off the PC. Unplug the special cable of the KVM switch. Power on the master KVM switch and then start the slave KVM switch. Connect the special cable to the KVM switch and power on the PC.

Q4: What should we do if there is a video problem?

A: (1) Check whether or not the setting of resolution is too high. The Smart View supports VGA, SVGA, Multisync and XGA (interlaced) resolutions up to 1920 x 1440, 60Hz.

(2) The quality of cable is not good enough. Please use high-quality Smart View cables.