LCD KVM Switch

4/8/16 port

User Manual

CE FC RoHS ISO9001-2015 CERTIFIED

Declaration

This is class A product, which may cause radio interference in the living environment.

In this case, the user may need to take practical measures against its interference.

CONTENTS

Overview

LCD Combo KVM switch (*hereafter called the 'KVM switch'*) can control the connected server or computer from the local control terminal. The LCD KVM switch is controlled by local control terminal, on-screen menu, password security, hotkey control, buttons, and automatic scanning. This KVM switch can fully emulates the keyboard and mouse signals of a computer that are powered on simultaneously.

1. Product Features

◆ 4/8/16 port KVM switch

◆ Support a local control terminal

◆ Support multiple system: Microsoft Windows, Netware, Unix, Linux, Kylin

◆ Not need to install software, and you can simply select your computer through on-screen menus, buttons, or hotkeys.

◆ Provide multiple hotkey combinations for switching computer ports and other control functions. So the hotkey function can be used on multiple types of keyboards and also prevent the hotkey duplication problem.

◆ Support two levels password security

◆ Provides ACL (Access Control List) security functions, can store eight independent control lists

◆ Hot pluggable: add or remove connected computers without shutting down the KVM switch or computer.

◆ Support display plug and play

◆ When switching computers, the keyboard state can be restored.

1.1 Package Contents

◆ 1 * LCD KVM Switch

◆ 1 * AC to DC Adapter (internal power supply without configuration)

◆ 2 * Rack Mounting

◆ 1 * Warranty Card

◆ 1 * Qualified Certificate

◆ 1 * AC Power Cord

2. LCD KVM Hardware Profile

2.1 LCD KVM Front View

2.2LCD KVM Front Panel Lights and Buttons

2.3 Port Status Indicator

Indicator	Color	Status	Describe
Select	Blue	Digital Display	Indicates that on line current port
On line	Blue	Bright	Indicates that the computer is connected to this port
		Flash	Indicates that this port has been selected

2.4 Port shortcut key debugging and selection

❖ KVM OSD debug and select port

Enter the OSD menu through hotkeys and use the number keys 01 (0+1 combination) ---- 16 (1+6 combination) on the keyboard to quickly select the port for editing and current server operation.

❖ The front panel buttons allow you to select the desired port operation as follows:

Model	Buttons	Describe
KVM-04	01-04	Port key 01 (0+1) -- 16 (1+6) digit combination. The combination lasts for 1 second
KVM-08	01-08	

KVM-016	01-16	
	RESET	Support system reset

Note: On the OSD and password login menu, the port selection button on the front panel is invalid.

2.5 Rear Panel Port

3. LCD KVM Hardware Installation

3.1 Connect the display to the HDDB15 female port on the local control end of the KVM rear panel. Connect the keyboard to one USB interface and the mouse to another USB interface.

3.1.1 2-in-1 VGA cable, one end is HDDB15 male connector, another end is two connector.

3.1.2 If connect to USB computer, please use 2-in-1 VGA cable to connect the controlled port on the KVM to the computer. 2-in-1 VGA cable, one end is HDDB15 male connector, another end is two connector. Please connect one connector to the port of the controlled port, and connect two connectors to the VGA interface and USB interface of the computer. This single USB port can communicate with keyboard and mouse signals. This works with standard HID (Human Machine Interaction Device) and requires no additional drivers.

3.1.3 Please confirm that you have connected the cables correctly. You can check the color of the keyboard and mouse connector to ensure that the keyboard and mouse cable are connected to the correct port.

3.1.4 Connect the power supply to the KVM and the other end to the power socket. Now you can see the indicator light on and hear a beep.

3.1.5 Turn on the display and computer. The first computer will be displayed on the screen. You can check if the mouse and keyboard can work properly after the system is powered on. If it works, press the port selection button to select the next port and confirm that it also works. If any errors occur, please recheck that all cables are connected correctly before using the troubleshoot section of this manual.

3.1.6 When switching servers, it takes about 1-2 seconds to reorganize the image signals and

resynchronize the mouse and keyboard signals. This is part of normal operating procedure to

ensure that proper synchronization can be established between the control side and the

connected server.

3.1.7 When you turn on KVM power, if the security mechanism function is enabled (the default is

off), it will prompt you to enter your account and password in a login window. You need to

be certified to control this KVM.

Please note: Do not switch computer ports when the computer is in the process of turning on (for example: do not press the port selection button or hotkeys of the KVM switch), and if you use the PS2 interface to connect to the computer, you need to connect the computer before turning on or restart the system. If you switch the computer port of KVM at this time, it may cause communication error or initialization failure between the computer and the keyboard or mouse.

4. KVM Panel Key OSD Hotkey Setting Operation Use

4.1 Multi-mode Control of KVM

4.1.1 Using the front panel buttons of this KVM switch

4.1.2 Using the menu (on-screen display menu)

4.1.3 Using Hot Key Commands via the Control Side Keyboard

4.2 Hotkey to Enter the OSD Setting Interface

You can easily control the KVM switch with simple hotkey commands. To send a command to the KVM switch, you must press the hotkey (Caps Lock by default) twice within 2 seconds. You will hear a beep to confirm entering the hot key OSD mode. The default hotkey is Caps Lock, but you can change the hotkey to make it easier for your application. Selectable keyboard hotkeys (KVM OSD: NUM LOCK; Scroll LOCK)

4.3 Explanation List of KVM OSD Function Settings

4.3.1 KVM OSD Main Interface

Command Key	Main Menu	Function
F1	PARM SETUP	Function parameter setting
F2	PORT EDIT	Edit the port name
F3	SCAN OFF	Scan switch
F4	ENERGY OFF	LCD power switch
F5	PWD OFF	Password setting switch
F6	RESET	KVM system reset
ESC	EXIT	OSD exit
ENTER	SAVE	OSD parameter save exit

4.3.2 KVM OSD Secondary Interface

No.	Main Menu	Function
1	PWD SETUP	8-digit password settings
2	HOTKEY SETUP	OSD Hotkey Keyboard Function Key Settings
3	SCAN TIME	Scanning time setting
4	ENERGY TIME	LCD KVM Power Save Time Settings

4.3.3 KVM Port Display

No.	Display Information	Function
1	KVM PORT: 01	Online display 1 port
2	SERVER 01	Server 1 (client editable port name can be displayed)

4.3.4 KVM Password Login Window

No.	Display information	Function
1	KVM PWD：	KVM Password:
2	********	8-digit login (default is 00000000)

4.4 Operating Instructions for KVM OSD Settings

4.4.1 Port Server Custom Editing

In the KVM OSD home page interface, press the F2 keyboard function key EDIT PORT to enter the column of the port to be changed by the user. The port supports uppercase and lowercase letters and numbers. If the uppercase letters are displayed, press and hold the SHIFT key on the keyboard first, and then select the corresponding letters. If the lowercase letters are displayed, directly select the required letters and numbers. Edit the port number in turn, and press the up and down cursor keys or number shortcut keys to select the corresponding port for editing. After editing, return to the home page OSD interface and press Enter to save and exit automatically. Entering the OSD menu again and selecting the corresponding port will display the user edit server number.

4.4.2 KVM User Password Setting

Press F1 on the OSD home page to enter the OSD parameter setting page, select the first item: PWD SETUP, press Enter, the red box appears below, in which there are 8 zeros by default. Press the left cursor key on the keyboard to delete one by one. The user prepares the 8-digit password that is commonly used and easy to remember. Press Enter after editing to return to the home page OSD interface. Select and click the F5 PWD OFF password switch function on the keyboard, and change it to ON. Press Enter to save and exit automatically. When the KVM is powered off and reset, the KVM PWD window will be displayed on the display screen. When the KVM is in the password protection state, the manual keys and port indicators on the panel are unavailable and information is displayed. Enter the correct 8-digit password edited by the user in the password dialogue window column to enter all functions of the KVM for normal operation. Turn off the password setting. Repeat F5 on the OSD home page to change ON to OFF. Press Enter to save and exit. The password function is turned off.

Password loss and misoperation, resulting in failure to enter the KVM system, try the initial password 8 0. Unable to log in the system due to incorrect password. Please contact the dealer engineer.

4.4.3 KVM OSD Hotkey Options

Press F1 on the OSD homepage to enter the OSD parameter setting page, select the second item: HOTEKEY SETUP, press Enter, and the red box below is CAPS LOCK by default. Press the up and down cursor keys, and there are CAPS LOCK, NUM LOCK and SCROLL LOCK in the red bar. The four hot keys of KVM OSD are available for selection. The user can edit the required hot key function and select Enter according to the actual application and preference. ESC returns to the OSD interface of the home page. After pressing Enter to save, the user needs his own hot key to enter the OSD interface again. Pay special attention to "KVM OSD". This option should be especially careful. A dedicated keyboard is required to support this function. Selecting this option is not supported by the keyboard and will render the KVM unusable. As a result, the VGA signal of the first port is unplugged, the

KVM is powered on again, and the OSD main interface will pop up automatically. Enter the OSD settings and select the OSD hot key as the other key.

4.4.4 KVM Port Server Scanning Time Setting

Press F1 on the OSD home page to enter the OSD parameter setting page, select the third item: SCAN TIME, press Enter, the default time in the red box below is 20 seconds, press the left cursor key to delete the default time, change it to the scanning tour time required by the user, support 255 seconds at most, press Enter after editing, and return to the home page OSD interface F3; Select SCAN ON and press Enter to start the function. The KVM switch will start. The countdown will be set according to this time, and the port will be automatically scanned one by one. Note: If the port is not connected to a computer or server, the scan will be skipped. This interval ranges from 10 to 255 seconds. Close the scanning function. Select SCAN OFF, ENTER on the main OSD interface F3 to close the function.

4.4.5 KVM Display Screen Automatic Closing Time Setting

Press F1 on the OSD homepage to enter the OSD parameter setting page, select the fourth item: ENERGY TIME, press Enter, the default value in the red box below is 2 hours, press the left cursor key to delete it and change it to the automatic closing time required by the customer, which supports 12 hours at most, and press Enter after editing the required time. Return to the home page OSD interface F4 to open the energy-saving function, select "ON", and press Enter to save and exit automatically. The KVM switch will be set according to this time. If the customer forgets to turn off the LCD display after maintaining the machine room, the KVM will automatically turn off the power supply of the LCD display within the specified time. Achieve energy saving and long service life of LCD. The screen is awakened, and the screen display can be awakened by tapping any key of the keyboard and mouse. Turn off this setting. Repeat F4 on the OSD home page to change ON to OFF. Press Enter to save and turn off the function.

4.4.6 KVM OSD System Reset

KVM is abnormal during use, which affects the use of functions. You can enter the OSD home page and press F6 RESET on the keyboard. KVM will restart the system and automatically restore all KVM functions.

5. DDC Function

The KVM switch supports DDC (Display Data Channel). DDC is a VESA (Video Electronics Standards Association) that sets standards for communication between displays and graphics cards. Using the DDC, the display can inform the display card of its attributes, such as maximum resolution and color depth. The graphics card will then use this information to ensure that the computer can display the correct item.

Please note: the DDC function of KVM will dynamically detect and copy the DDC data to the local control end, and this information will be provided to each port so that the computer can correctly obtain this information.

6. Troubleshooting

Make sure that all wires are connected. The wire can be marked with the corresponding computer name and number to prevent confusion.

6.1 The front button of the KVM switch has no lamp display and the button has no function.

◆ In the KVM password login state, there is no display on the front key panel. The front key panel can be displayed and operated normally only after the password is entered on the keyboard.

◆ When entering the KVM OSD main interface, it can only be displayed on the current port. The front manual key panel cannot select other port display.

◆ Please make sure that the power supply is connected to the KVM switch. If the light is still not displayed, please perform soft boot (press the reset button on the front panel of the KVM) to restart the KVM switch.

6.2 When the computer is turned on, but the keyboard and mouse do not work.

◆ Make sure that your keyboard and mouse work correctly when connected directly to this computer

◆ Make sure the USB cable is connected, and then restart this computer.

◆ Do not press any keys on the keyboard while the selected computer is turning on. Failure to do so may result in a computer-side keyboard error or a keyboard detection failure.

◆ Try a different keyboard, but please use a 101/102/104-key keyboard.

◆ When switching ports, please avoid moving the mouse or pressing any mouse button.

◆ Press the reset button (0 + 5) on the front panel of the KVM to restart the KVM switch.

6.3 The display screen has no image signal.

◆ Connect your display screen directly to the server to confirm whether it can display normally.

◆ Please check that all connectors are properly connected.

◆ Please make sure that the power supply is connected to the KVM switch.

◆ Use the hotkey and space bar to call up the on-screen menu and make sure the ports are selected and connected to the server.

◆ Please see the next item to confirm that the VGA output resolution of the computer matches the resolution of the display

◆ Whether the LCD screen power button is on

6.4 The VGA resolution of the computer does not match the resolution of the display.

◆ Please confirm that the VGA resolution is normal when the display is directly connected to the

computer.

◆ Please turn off your computer and turn it back on after a while. Please note that when the computer is turned on, it will try to get the connected display resolution again. Therefore, before the computer is turned on, make sure that both the display and the KVM are turned on.

◆ The DDC function of KVM will dynamically detect and copy the DDC to the local control end, and this information will be provided to each port so that the computer can correctly obtain this information.

◆ When you want to replace the display, turn off the KVM switch first. Then connect the new display to the KVM switch and turn on the display. You must turn on the display before turning on the KVM switch so that the KVM switch can detect the display and send the settings to the computer.

◆ The recommended power-on sequence is: display > KVM switch > computer.

6.5 Forgot the OSD menu login password.

◆ Please try the default password 8 first 0

◆ If you forget your changed password, please contact your local supplier

7. LCD KVM Series Parameters

Port connector	USB&PS2/VGA
Number of ports	4/8/16
Control port type	USB/VGA
Longest VGA Cable	1.8-10m
Image resolution (local control end)	1920 x 1440
Computer selection	On-screen menus, hotkeys, buttons
Hotkeys	Multiple hotkeys (Scroll-Lock/Caps-Lock/Num-Lock/KVM OSD)
Computer port light	LED light for each port: digital display and blue LED signal light
Auto scan time	10-255 seconds
Keyboard	USB&PS2 notebook 104 keyboard, mechanical life: 1 million times
Mouse	PS2 Notebook Touchpad
Maximum number of cascade	Up to 256 computers 16-port model
LCD displays parameters	Display specification: 15"/15.6"/17"/17.3"/18.5"/19"/21.5"
	Display ratio: 4:3; 16:9

	Display type: XVGA -- FHD TFT LCD
	Display brightness: 300--1000 (can customized)
	Display contrast ratio: 1000:1
	Display resolution: 1024 * 768 -- 1920 * 1080 Full HD
	Display color: 16.7 M
	Display backlight: LED life, working 30,000-40,000 hours
	Display pixels: see Appendix A for details.
	Display visual surface: see Appendix Form A for details
Power supply type	DC 12V adapter (built-in power supply random)
Power supply input	AC 100-240V, 50/60HZ, DC12V 3.33A.
Model structure	1U 19" Rack,
Enclosure material	Aluminum alloy + electrolytic plate
Case color	Industrial paint black sprinkle dot (color can be customized)
Model power	About 19 W
Operating humidity	0-80%, no condensation
Operating temperature	0~60℃
Storage temperature	-20~60℃
Gross weight of the model	17-20KG
Model size (mm)	See Appendix Table A

Appendix A: Model Correspondence Table: (The following model dimensions correspond to the cabinet for reference, and the dimensions do not represent all models)

Model size: MM	Model display resolution:
15" Series Size: 445 x440 x44	Display: 1024 * 768 60/75HZ
15.6" Series Size: 445 X 440 44	Display: 1920 * 1024 60HZ
17" Series Size: 445 x520 X 44	Display: 1280 * 1024 60/75HZ
17.3" Series Size: 445 X 475 X 44	Display: 1920 * 1080 60HZ
19" Series Size: 445 x585 x44	Display: 1280 * 1024 60/75HZ
18.5" Series Size: 445 x530 x44	Display: 1366 * 768 60/75HZ
21.5" series size: 445 x668 x44	Display: 1920 * 1080 60HZ
18.5" HD Series Size: 445 x530 x44	Display: 1920 * 1080 60HZ
23.8" HD Series Size: 445 x705 x44	Display: 1920 * 1080 60HZ
Model display screen:	Display visual type: MM
15" Series	305 * 203 4:3 Pixels: 0.264 * 0.264
15.6" Series	346 * 194 16:9 Pixels: 0.180 * 0.180
17" Series	338 * 269 4:3 Pixels: 0.264 * 0.264
17.3" Series	380 * 215 16:9 Pixels: 0.198 * 0.198
19" Series	377 * 300 4:3 Pixels: 0.293 * 0.293
18.5" HD Series	408 * 230 16:9 Pixels: 0.213 * 0.213
18.5" SD series	408 * 230 16:9 Pixels: 0.299 * 0.299

8. Certification

FCC

This device has been tested and complies with FCC Part 15. Operation meets the following two conditions:

(1) This equipment may not cause harmful interference.

(2) This device must accept reception of any interference, including abnormal operation that may be caused by interference.

CE

This equipment complies with the following specifications: EN 60950-1:2011 + A2

Declarations

Industrial products are Class A products, which may cause radio interference in the living environment. In this case, the user may need to take practical measures against their interference.