SICOM2024L Series Industrial Ethernet Switches Hardware Installation Manual

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SICOM2024L Series Industrial Ethernet Switches Hardware Installation Manual
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Notice for Safety Operation

The product performs reliably as long as it is used according to the guidance. Artificial damage or destruction of the device should be avoided. Before using the device, read this manual carefully for personal and equipment safety. Please keep the manual for further reference. Kyland is not liable to any personal or equipment damage caused by violation of this notice.

- Do not place the device near water sources or damp areas. Keep the ambient relative humidity within the range from 5% to 95% (non-condensing).
- Do not place the device in an environment with high magnetic field, strong shock, or high temperature. Keep the working and storage temperatures within the allowed range.
- Install and place the device securely and firmly.
- Please keep the device clean; if necessary, wipe it with a soft cotton cloth.
- Do not place any irrelevant materials on the device or cables. Ensure adequate heat dissipation and tidy cable layout without knots.
- Wear antistatic gloves or take other protective measures when operating the device.
- Avoid any exposed metal wires because they may be oxidized or electrified.
- Install the device in accordance with related national and local regulations.
- Before power-on, make sure the power supply is within the allowed range of the device.
 High voltage may damage the device.
- Power connectors and other connectors should be firmly interconnected.
- Do not plug in or out the power supply with wet hands. When the device is powered on, do not touch the device or any parts with wet hands.
- Before operating a device connected to a power cable, remove all jewelry (such as rings, bracelets, watches, and necklaces) or any other metal objects, because they may cause electric shock or burns.
- Do not operate the device or connect or disconnect cables during an electrical storm.
- Use compatible connectors and cables. If you are not sure, contact our sales or technical support personnel for confirmation.

- Do not disassemble the device by yourself. When an anomaly occurs, contact our sales or technical support personnel.
- If any part is lost, contact our sales or technical support personnel to purchase the substitute. Do not purchase parts from other channels.
- Dispose of the device in accordance with relevant national provisions, preventing environmental pollution.

In the following cases, please immediately shut down your power supply and contact your Kyland representative:

- Water gets into the equipment.
- Equipment damage or shell damage.
- Equipment operation or performance has abnormally changed.
- The equipment emits odor, smoke or abnormal noise.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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1 Product Overview

SICOM2024L includes a series of managed industrial Ethernet switches tailored for power, rail transit, and coal mining industries. Capable of working properly in rugged environment, SICOM2024L conforms to IEC61850-3 and IEEE1613 standards.

The series switches support 19 inch 1U rack mounting by front/rear panel.

Table 1 SICOM2024L Models

Model	SICOM2024L-Ports-PS		
Code definition Code option			
	4GX24GE, 4G12GX12GE		
	Note:		
	4G12GX12GE:		
	four 1000Base-X, 10/100/1000Base-T(X)Combo ports;		
Ports	twelve 1000Base-X,10/100/1000Base-T(X) SFP slots;		
	twelve 10/100/1000Base-T(X) ports		
	4GX24GE:		
	four 1000Base-X,10/100/1000Base-T(X) SFP slots;		
	twenty-four 10/100/1000Base-T(X) ports		
	L2-L2 (24-48VDC, redundant power input)		
DC:	HV-HV (100-240VAC,50/60Hz;110-220VDC, redundant power input)		
PS: power input	L2: 24-48VDC		
	HV: 100-240VAC,50/60Hz;110-220VDC		



Note:

We reserve the right to amend the product information listed in this table without notice. To obtain the latest information, you can contact our sales or technical support personnel.

2 Structure and Interface



Caution:

It is recommended to purchase the port dustproof shield (optional) to keep ports clean and ensure switch performance.

2.1 Front Panel

● 4G12GX12GE

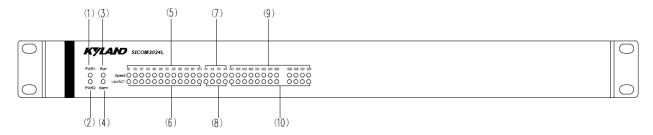


Figure 1 4G12GX12GE Front Panel

Table 2 4G12GX12GE Description of the Front Panel

No.	Identifier	Description	
(1)	PWR1	Power 1 LED	
(2)	PWR2	Power 2 LED	
(3)	Run	Running LED	
(4)	Alarm	Alarm LED	
(5)	(GE1-GE12) Speed	10/100/1000Base-T(X) RJ45 Ethernet Port speed LED	
(6)	(GE1-GE12) Link/ACT	10/100/1000Base-T(X) RJ45 Ethernet Port connection status LED	
(7)	(G13-G16)Speed	1000Base-X,10/100/1000Base-T(X) Combo port speed LED	
(8)	(G13-G16)Link/ACT	1000Base-X,10/100/1000Base-T(X) Combo Port connection status	
(9)	(GX17-GX28) Speed	100/1000M SFP Port speed LED	
(10)	(GX17-GX28) Link/ACT	100/1000M SFP Port connection status LED	

4G24GE

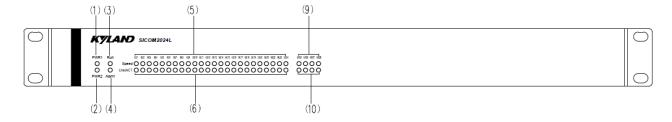


Figure 2 4GX24GE Front Panel

Table 3 4GX24GE Description of the Front Panel

No.	Identifier	Description	
(1)	PWR1	Power 1 LED	
(2)	PWR2	Power 2 LED	
(3)	Run	Running LED	
(4)	Alarm	Alarm LED	
(5)	(GE1-GE24)Speed	10/100/1000Base-T(X) RJ45 Ethernet Port speed LED	
(6)	(GE1-GE24)Link/ACT	10/100/1000Base-T(X) RJ45 Ethernet Port connection status LED	
(9)	(GX25-GX28)Speed	100/1000M SFP Port speed LED	
(10)	(GX25-GX28)Link/ACT	100/1000M SFP Port connection status LED	

2.2 Rear Panel

• 4G12GX12GE

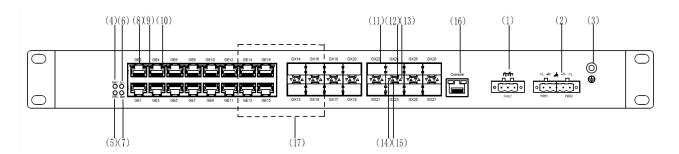


Figure 3 4G12GX12GE Rear Panel

Table 4 4G12GX12GE Description of Rear Panel

No.	Identifier	Description
(1)	FAULT	Alarm terminal block
(2)	+/L -/N 🚜 -/N +/L	Power terminal block PWR1/PWR2

(3)	⊕	Grounding screw
(4)	PWR1	Power 1 LED
(5)	PWR2	Power 2 LED
(6)	Run	Running LED
(7)	Alarm	Alarm LED
(8)	GE1-GE12	10/100/1000Base-T(X) Ethernet Port
(9)	GE1-GE12	10/100/1000Base-T(X) Ethernet Port connection status LED (green)
(10)	GE1-GE12	10/100/1000Base-T(X) Ethernet Port connection status LED (green)
(11)	GX17-GX28	1000Base-X, 10/100/1000Base-T(X) SFP slot
(40)	CV47 CV00	1000Base-X, 10/100/1000Base-T(X) SFP slot connection status LED
(12)	GX17-GX28	(green, indicating the status of the upper slot)
(12)	GX17-GX28	1000Base-X, 10/100/1000Base-T(X) SFP slot speed LED (yellow,
(13)	GA17-GA26	indicating the speed of the upper slot)
(1.1)	CV17 CV20	1000Base-X, 10/100/1000Base-T(X) SFP slot connection status LED
(14)	GX17-GX28	(green, indicating the status of the lower slot)
(15)	CV17 CV29	1000Base-X, 10/100/1000Base-T(X) SFP slot speed LED (yellow,
(15)	GX17-GX28	indicating the speed of the lower slot)
(16)	Console	Console port
(17)	GE/GX(13-16)	1000Base-X, 10/100/1000Base-T(X)Combo port

4GX24GE

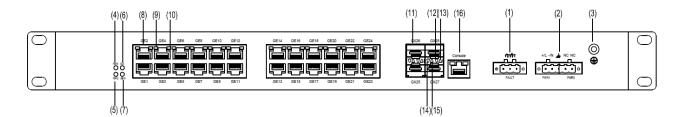


Figure 4 4GX24GE Rear Panel

Table 5 4GX24GE Description of Rear Panel

No.

(1)	FAULT	Alarm terminal block	
(2)	+/L -/N 👍 -/N +/L	Power terminal block PWR1/PWR2	
(3)	⊕	Grounding screw	
(4)	PWR1	Power 1 LED	
(5)	PWR2	Power 2 LED	
(6)	Run	Running LED	
(7)	Alarm	Alarm LED	
(8)	GE1-GE24	10/100/1000Base-T(X) Ethernet Port	
(9)	GE1-GE24	10/100/1000Base-T(X) Ethernet Port connection status LED (green)	
(10)	GE1-GE24	10/100/1000Base-T(X) Ethernet Port connection status LED (green)	
(11)	GX25-GX28	1000Base-X, 10/100/1000Base-T(X) SFP slot	
(12)	GX25-GX28	1000Base-X, 10/100/1000Base-T(X) SFP slot connection status LED	
(12)	ONZO ONZO	(green, indicating the status of the upper slot)	
(13)	GX25-GX28	1000Base-X, 10/100/1000Base-T(X) SFP slot speed LED (yellow,	
(13)	GAZU-GAZU	indicating the speed of the upper slot)	
(14)	GX25-GX28	1000Base-X, 10/100/1000Base-T(X) SFP slot connection status LED	
(14)	GA25-GA28	(green, indicating the status of the lower slot)	
(15)	GX25-GX28	1000Base-X, 10/100/1000Base-T(X) SFP slot speed LED (yellow,	
(15) GX25-GX28		indicating the speed of the lower slot)	
(16)	Console	Console port	

KYLAND Switch Installation

3 Mounting

3.1 Dimension Drawing

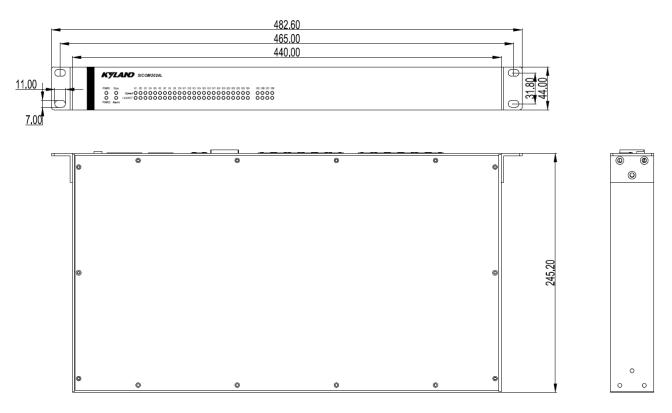


Figure 5 Dimensions (unit: mm)



Caution:

- As part of the heat dissipation system, the switch housing becomes hot during operation.
 Please use caution when coming in contact and avoid covering the switch housing when the switch is running.
- The figures in this manual are only for reference.

3.2 Mounting Modes and Steps

The series switches support rack mounting by front/rear panel. The following uses mounting by front panel as an example to describe mounting steps. The steps for mounting by rear panel are similar to those for mounting by front panel. Before installation, make sure that the following requirements are met.

1) Environment: temperature (-40°C to 85°C), ambient relative humidity (5% to 95%, non-

condensing)

- 2) Power requirement: The power input is within the voltage range of the switch.
- 3) Grounding resistance: $<5\Omega$
- 4) No direct sunlight, distant from heat source and areas with strong electromagnetic interference.
- 5) Devices are to be installed in an authority certified enclosure and accessible only by the use of a tool.
- 6) Devices should be installed and accessed by service personnel or users who have been instructed about the reasons for the restrictions applied to the location and about any precautions that shall be taken.
- Installing Mounting Brackets

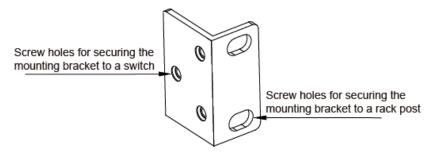


Figure 1 Mounting Bracket

You can select the screw holes for front or rear panel mounting to install the mounting brackets. If you select front panel mounting, If there are screws inserted in the screw holes, remove the screws and keep them for future use.

As shown in the following figure, use three screws to secure two mounting brackets to the switch respectively.

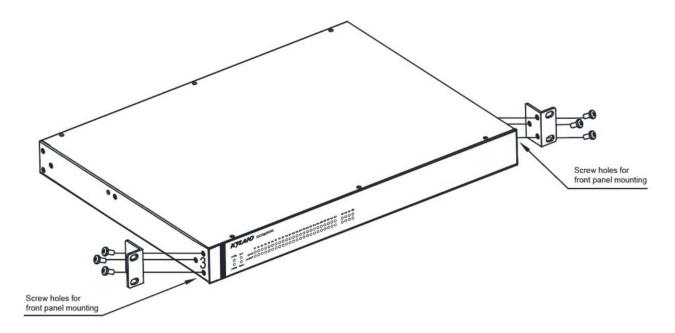


Figure 2 Installing Mounting Brackets

Mounting

- Step 1: Select the mounting position for the device and guarantee adequate space and heat dissipation for it (dimensions: 440mm×44mm×245.2mm).
- Step 2: Move the switch in direction 1 until the screw holes for securing the mounting brackets to rack posts are in alignment with the corresponding holes in the rack posts. Then use four screws and supporting captive nuts to secure the mounting brackets to the rack posts.

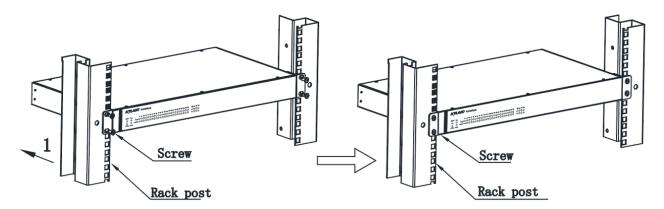


Figure 3 Mounting by Front Panel

Dismounting

Step 1: Remove the four screws and supporting captive nuts securing the mounting brackets to the rack posts.

Step 2: Remove the switch from the rack posts. Then unscrew the mounting brackets to complete dismounting.

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4 Connection

4.1 10/100/1000Base-T(X) Ethernet Port

10/100/1000Base-T(X) Ethernet port is equipped with RJ45 connector. The port is self-adaptive. It can automatically configure itself to work in 10M, 100M, or 1000M state, full or half duplex mode. The port can also adapt to MDI or MDI-X connection automatically. You can connect the port to a terminal or network device with a straight-through or cross-over cable.

Pin Definition

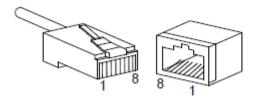


Figure 6 RJ45 Port

Table 6 Pin Definitions of 10/100/1000Base-T(X) RJ45 Port

Pin	MDI-X	MDI
1	Transmit/Receive Data (TRD1+)	Transmit/Receive Data (TRD0+)
2	Transmit/Receive Data (TRD1-)	Transmit/Receive Data (TRD0-)
3	Transmit/Receive Data (TRD0+)	Transmit/Receive Data (TRD1+)
4	Transmit/Receive Data (TRD3+)	Transmit/Receive Data (TRD2+)
5	Transmit/Receive Data (TRD3-)	Transmit/Receive Data (TRD2-)
6	Transmit/Receive Data (TRD0-)	Transmit/Receive Data (TRD1-)
7	Transmit/Receive Data (TRD2+)	Transmit/Receive Data (TRD3+)
8	Transmit/Receive Data (TRD2-)	Transmit/Receive Data (TRD3-)



Note

"+" and "-" indicate level polarities.

Wiring Sequence

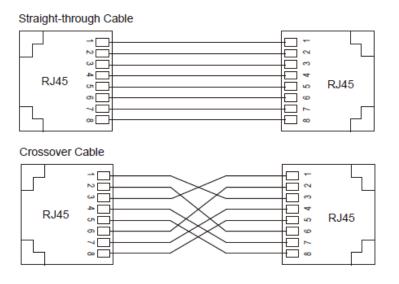


Figure 7 Connection Using Straight-through/Cross-over Cable



Note:

The color of the cable for RJ45 connector meets the 568B standard: 1-orange and white, 2-orange, 3-green and white, 4-blue, 5-blue and white, 6-green, 7-brown and white, and 8-brown.

4.2 1000Base-X, 10/100/1000Base-T(X) SFP slot

1000Base-X, 10/100/1000Base-T(X) SFP slot (gigabit SFP slot) requires an SFP optical/electrical module to enable data transmission. The following table lists the gigabit SFP optical/electrical modules (optional) supported by the series switches.

Table 7 Gigabit SFP Optical/Electrical Modules

Model	Dort	MM/SM Connector	Commonton	Central	Transmissio
Model	Port		Connector	Wavelength	n Distance
IGSFP-M-SX-LC-850-0.55	1000Base-X port	MM	LC	850nm	0.55km
IGSFP-S-LX-LC-1310-10	1000Base-X port	SM	LC	1310nm	10km
IGSFP-S-LH-LC-1310-40	1000Base-X port	SM	LC	1310nm	40km
IGSFP-S-ZX-LC-1550-80	1000Base-X port	SM	LC	1550nm	80km
IGSFP-10/100/1000BASE-	10/100/1000Base-		D ME		
T-RJ45	T(X) port	-	RJ45		

KYLAND Switch Installation

4.2.1 Gigabit SFP Optical Module

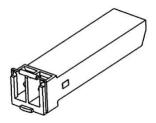


Figure 8 Gigabit SFP Optical Module

An SFP optical module is equipped with LC connector, and each port consists of a TX (transmit) port and an RX (receive) port. To enable communication between Device A and Device B, connect the TX port of Device A to the RX port of Device B, and the RX port of Device A to the TX port of Device B, as shown in the following figure.



Figure 9 Fiber Connection of an SFP Optical Module

How to Connect the SFP Optical Module

Insert the SFP optical module into the SFP slot in the switch, and then insert the fibers into the TX port and RX port of the SFP module.

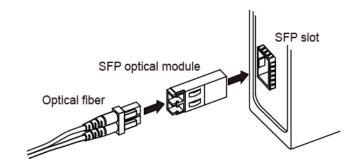


Figure 10 Connecting the SFP Optical Module

Identify the RX port and TX port of an SFP optical module:

- 1. Insert the two connectors in one end of two fibers into the SFP module, and those in the other end into the peer module.
- View the corresponding connection status LED:

If the LED is on, the connection is correct. If the LED is off, the link is not connected. This may be caused by incorrect connection of the TX and RX ports. In this case, swop the two connectors at one end of the fibers.



Caution:

- The device uses laser to transmit signals in fibers. The laser meets the requirements of level
 1 laser products. Routine operation is not harmful to your eyes, but do not look directly at the fiber port when the device is powered on.
- If the defined transmission distance of an SFP module is longer than 60km, do not use a short fiber (<20km) for connection. If such a short fiber is used, the module will be burned.

4.2.2 Gigabit SFP Electrical Module

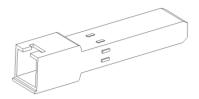


Figure 11 Gigabit SFP Electrical Module

How to Connect the SFP Electrical Module

Insert the SFP electrical module into the SFP slot in the switch, and then insert the RJ45 connector of the twisted pair into the SFP module.

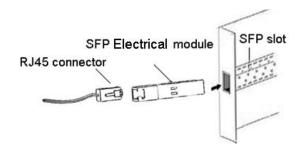


Figure 12 Connecting the SFP Electrical Module

4.3 1000Base-X, 10/100/1000Base-T(X) Combo port

As shown in following table, the 1000Base-X, 10/100/1000Base-T(X)Combo port consists of one 1000Base-X SFP port(GX) and one 10/100/1000Base-T(X) Ethernet port, and only one of the two ports can be used at one time, and the 1000Base-X SFP port has priority over

10/100/1000Base-T(X) Ethernet port. Plug the optical fiber and the twisted pair into GX and GE respectively; GX can communicate normally and the GE will be disabled automatically.

The following table lists the relation of Gigabit SFP ports of Combo port and the corresponding 10/100/1000 Base-T(X) Ethernet port.

Combo Port GE		
Combo port	1000Base-X SFP port	10/100/1000Base-T(X) Ethernet port
(1)	GX1	GE1
(2)	GX2	GE2
	•••••	

Table 8 Combo port corresponding relation

4.4 Console Port

There is a Console port on the front panel of the switch. This console port is an RJ45 interface. You can configure, maintain, and manage the device in two ways.

Way1:

Connect the 9-pin serial port of a PC to the console port of the switch with a DB9-RJ45 console cable. You can configure, maintain, and manage the switch by running Hyper Terminal in the Windows OS of a computer.

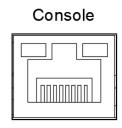


Figure 13 Console Port

DB9-RJ45 Console Cable

One end of a DB9-RJ45 console cable is the DB9 connector to be inserted into the 9-pin

serial port of a PC, and the other end is crimped RJ45 connector to be inserted into the console port of the switch.

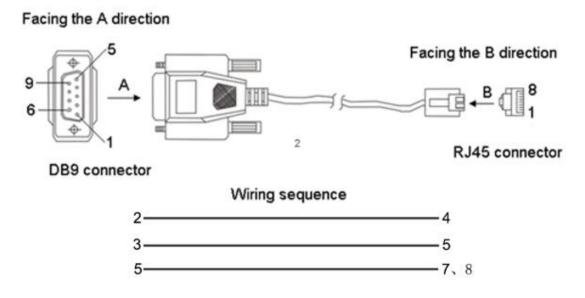


Figure 14 Wiring Sequence of DB9-RJ45 Console Cable

Table 9 Pin Definitions of DB9 Port (9-Pin Serial Port) and RJ45 Port (Console Port)

DB9 Port (9-Pin Serial Port)		RJ45 Port (Console Port)	
Pin	Signal	Pin	Signal
2	RXD (Receive data)	4	TXD (Transmit data)
3	TXD (Transmit data)	5	RXD (Receive data)
5	GND (Grounding)	7、8	GND (Grounding)

Way2:

Use a standard RJ45 network cable to connect the network port of the PC and the console port of the device, and configure and manage the device through the web.

4.5 Grounding

Grounding protects the device from lightning and interference. Therefore, you must ground the device properly. You need to ground the device before it is powered on and disconnect the grounding cable after the device is powered off.

There is a grounding screw(see Figure 3. Figure 4) on the Front panel of the device. The screw is for chassis grounding. After crimping one end of the grounding cable to a cold pressed terminal, secure the end to the grounding screw and firmly connect the other end to ground.



Note:

Cross-sectional area of the chassis grounding cable>2.5mm²; Grounding resistance<5Ω

4.6 Power Terminal Block

There is a power terminal block on the Rear panel of the switch. You need to connect the power cable to the terminal block to provide power for the switch.

The device supports single (PWR1) and redundant (PWR1 and PWR2) power supply with a 5-pin 5.08mm-spacing plug-in terminal block. When the redundant power supply is used and one power supply is faulty, the switch can continue operating properly, thereby improving network reliability.



Note:

0.75mm²<Cross-sectional area of the power cable<2.5mm²; Grounding resistance: <5Ω

5-pin 5.08mm-spacing plug-in terminal block

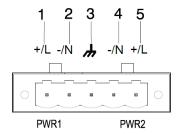


Figure 15 5-Pin 5.08mm-Spacing Plug-in Terminal Block

Table 10 Pin Definitions of 5-Pin 5.08mm-Spacing Plug-in Terminal Block

No.	Signal	DC Definition	AC Definition
1	+/L	PWR1: +	PWR1: L
2	-/N	PWR1: -	PWR1: N
3	"	PGND	PGND
4	-/N	PWR2: -	PWR2: N

5 +/L PWR2: + PWR2: L



Caution:

For single power supply, only pins 1, 2, and 3 (PWR1) of the terminal block can be connected. Do not use pins 4 and 5.

Wiring and mounting

- Step 1: Ground the switch properly according to section 4.5.
- Step 2: Remove the power terminal block from the switch.
- Step 3: Insert the power cable into the power terminal block according to Table 10 to fix the power cable.
- Step 4: Insert the terminal with the connected cable into the terminal block on the device.
- Step 5: Connect one end of the power cable to an external power supply system (with the allowed power range). If the power LED on the front panel of the switch turns on, the power supply is connected properly.



Caution:

Before connecting the device to power supply, make sure that the power input meets the power requirement. If connected to an incorrect power input, the device may be damaged.



Warning:

- Do not touch any exposed conducting wire, terminal, or component with a voltage warning sign, because it may cause personal injury.
- Do not remove any part or plug in or out any connector when the device is powered on.

4.7 Alarm Terminal Block

The alarm terminal block is used for alarm output. When the switch works properly, the normally-open contacts of the alarm relay are closed and the normally-closed contacts are open. When an alarm occurs, the normally-open contacts are open and the normally-closed contacts are closed. The alarm is outputted through a 3-pin 5.08mm spacing terminal block, as shown in Figure 16.

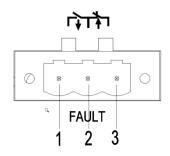


Figure 16 Alarm Terminal Block

Electrical parameters of the relay:

Max Switch Voltage: 250VAC/220VDC

Max Switch Current: 2A

Max Switch Power: 60W

Maximum dielectric voltage withstand: 2KV



Note:

Pin 1 and pin 2 are normally-open contacts; pin 2 and pin 3 are normally-closed contacts. When the switch works properly, pin 1 and pin 2 are closed, pin 2 and pin 3 are open; when an alarm occurs, pin 1 and pin 2 are open; pin 2 and pin 3 are closed.

5 LEDs

Table 11 Front Panel LEDs

LED	State	Description
	On	The power 1 is connected and operates properly.
Power 1 LED-PWR1	0"	The power 1 is not connected or operates
	Off	abnormally.
	On	The power 2 is connected and operates properly.
Power 2 LED-PWR2	Off	The power 2 is not connected or operates
	Oii	abnormally.
Punning LED Pun	On	The device is starting up
Running LED-Run	Blinking	The CPU operates properly.

	Off	The device does not start up	
Alarm LED-Alarm	On	An alarm occurs.	
Alaim Led-Alaim	Off	No alarm occurs.	
10/100/1000Base-T(X) RJ45 Port	On	Effective port connection	
, ,	Blinking	Ongoing network activities	
connection status LED	Off	No effective port connection	
40/400/4000Page T/V) D IAE Dort	On	1000M working state (1000Base-T)	
10/100/1000Base-T(X) RJ45 Port	Off	10/100M working state (100Base-T(X)) or no	
speed LED		connection	
Gigabit SFP slot connection status	On	Effective port connection	
LED	Blinking Ongoing network activities		
	Off	No effective port connection	
Gigabit SFP slot speed LED	On	1000M working state (1000Base-X)	
Olyabit SFF Slot speed LED	0#	100M working state (100Base-FX) or no	
	Off	connection	

Table 12 Rear Panel LEDs

LED	State	Description	
Connection status (green) Connection status (green)			
10/100/1000Base-T(X) RJ45 Port	On	Effective port connection	
connection status LED	Blinking	Ongoing network activities	
CONTIECTION Status LLD	Off	No effective port connection	
speed (yellow) Connection status (green)			

Circleit CED alet assume ation at ation	On	Effective port connection
Gigabit SFP slot connection status	Blinking	Ongoing network activities
LED (green)	Off	No effective port connection
Gigabit SFP slot speed LED	On	1000M working state (1000Base-X)
(yellow)	Off	no connection

6 Switch Access

You can access the switch in any of the following ways:

6.1 Access through Console Port

The console port is an RJ45 interface, and you can access the device in two ways.

- DB9-RJ45 console cable
- Step 1: Connect the console port of the switch to the 9-pin serial port of a PC with the delivered DB9-RJ45 console cable.
- Step 2: Open the Hyper Terminal in the Windows OS. On the desktop, click Start → All Programs → Accessories → Communications → Hyper Terminal.
- Step 3: Create a connection "Switch", as shown in Figure 17.



Figure 17 Creating a Connection

Step 4: Connect the communication port in use, as shown in Figure 18.



Figure 18 Selecting the Communication Port in Use



Note:

To confirm the communication port in use, right-click [My Computer] and click [Property]→
[Hardware]→[Device Manager]→[Port] to view the communication port.

Step 5: Set port parameters (Bits per second: 115200, Data bits: 8, Parity: None, Stop bits: 1, and Flow control: None), as shown in Figure 19.

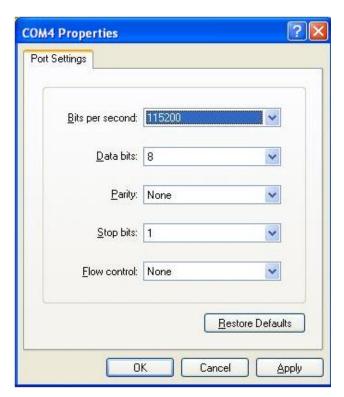


Figure 19 Setting Port Parameters

Step 6: Click OK to enter the switch CLI. Then you can run the following commands to perform operations.

Table 13 CLI Commands

View	Command	Description
User view	SWITCH>enable	Enter the management view.
Management view	SWITCH#show interface	Query the IP address of the switch.
Management view	SWITCH#show version	Query the version of the switch.
Management view	SWITCH#reboot	Restart the switch.
Management view	SWITCH#load default	Restore the factory default settings
Management view	SWITCH#config terminal	Enter the configuration view.

• RJ45 console cable

- 1. The PC and the switch can communicate normally;
- 2. Input "IP address" in the browser address bar (Default IP: 192.168.0.2). After opening the login dialog box, enter the default user name (admin) and default password (123) to successfully log in to the device Web management page.

6.2 Access through Telnet

- Step 1: Connect the network port of a PC to the Ethernet port of the switch with a network cable.
- Step 2: Enter "telnet IP-address" in the Run dialog box, as shown in Figure 20. The default IP address of a Kyland switch is 192.168.0.2.

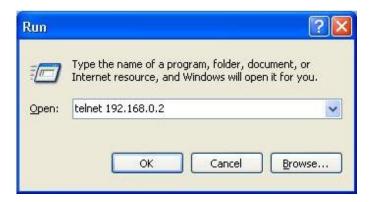


Figure 20 Access through Telnet

Step 3: Click OK. The Telnet CLI is displayed. Then you can enter commands (as shown in Table 13) to perform operations.

6.3 Access through Web

- Step 1: Connect the network port of a PC to the Ethernet port of the switch with a network cable.
- Step 2: Enter the IP address of the switch in the address box of the browser. The user login interface is displayed. You can log in to the Web UI by default user name "admin" and password "123".



Note:

- IE8.0 or a later version is recommended.
- For details about how to access the switch and other operation, refer to the Web operation manual.

7 Basic Features and Specifications

Power Requirements		T	
Power Identifier	Rated Voltage Range Maximum Voltage Ran		
L2	24-48VDC	18-72VDC	
HV (220AC/DCW)	100-240VAC,50/60Hz;110-220VDC 85-264VAC/77-300VDC		
Terminal Block	5-pin 5.08mm spacing terminal block		
Rated Power Consum	ption		
Rated Power	2214/ (MAY)		
Consumption	33W (MAX)		
Physical Characterist	ics		
Housing:	Metal, fanless		
Installation	1U rack mounting		
Dimensions(WxHxD)	440mm×44mm×245.2mm		
	(Including the power supply protruding from the casing surface)		
Weight:	< 3.4Kg		
Environmental Limits			
Ambient temperature	-40℃~+85℃		
Storage temperature	-40℃~+85℃		
Ambient relative	5% \sim 95% (non-condensing)		
humidity			
MTBF			
MTBF	525494.28h		
Warranty			
Warranty	Five years		