QUICK START GUIDE

LIG1014A, LIG1080A, LIG1082A

INDUSTRIAL SWITCH

STEP 1 - Hardware Description

LIG1014A
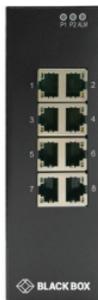
LIG1080A

LIG1082A

TABLE 1. COMPONENTS

COMPONENT	LIG1014A	LIG1080A	LIG1082A
RJ-45 ports	10	8	6
SFP cages	4	None	2
P1 LED	1	1	1
P2 LED	1	1	1
ALM LED	1	1	1
Ethernet Port Link LED	10	8	6
Ethernet Port Speed LED	10	8	6
SFP Port Link LED	4	None	2
SFP Port Speed LED	4	None	2

WHAT'S INCLUDED

- **(1) INDUSTRIAL MANAGED GIGABIT ETHERNET SWITCH**
- **(2) WALLMOUNT PLATES**
- **(1) DIN RAIL CLIP**

- **(1) DC POWER TERMINAL BLOCK**
- **RJ-45 PORT DUST COVERS**
- **SFP PORT DUST COVERS**
- **THIS QUICK START GUIDE**

TABLE 2. LED STATUS INDICATORS

| LED NAME	STATUS	DESCRIPTION
P1/P2	ON Green	P1/P2 power line has power
	OFF	P1/P2 power line is disconnected or does not have power
Alarm	ON Red	Ethernet link fails, alarm or power failure alarm occurs
	OFF	No Ethernet link fails and no power failure alarm
Copper port Link/Act	ON Green	Ethernet link up but no traffic is detected
	Flashing Green	Ethernet link up and traffic is detected
	OFF	Ethernet link down
Copper port Speed	ON Yellow	A 1000-Mbps connection is detected
	OFF	No 1000-Mbps link, a 10-Mbps or 100-Mbps connection is detected
SFP port Link/Act	ON Green	Ethernet link up
	OFF	Ethernet link down
SFP port Speed	ON Yellow	SFP port speed 1000-Mbps connection is detected
	OFF	No link or an SFP port speed 100-Mbps connection is detected

STEP 3A - Install on DIN Rail

INSTALL THE UNIT ON A DIN RAIL

1. Attach the screws to the DIN clip.

2. Hook the unit onto the DIN rail.

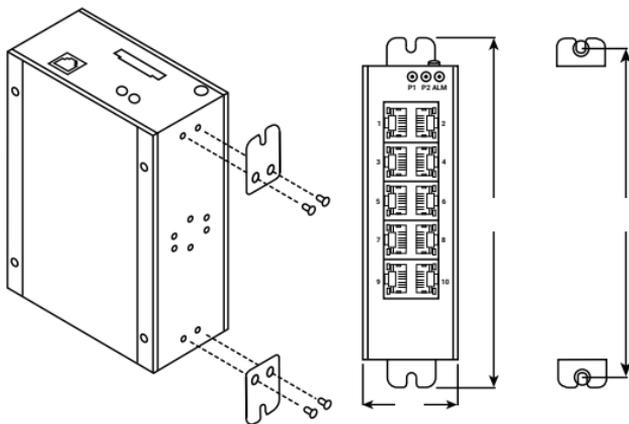3. Push the bottom of the unti towards the DIN rail until it locks into place.
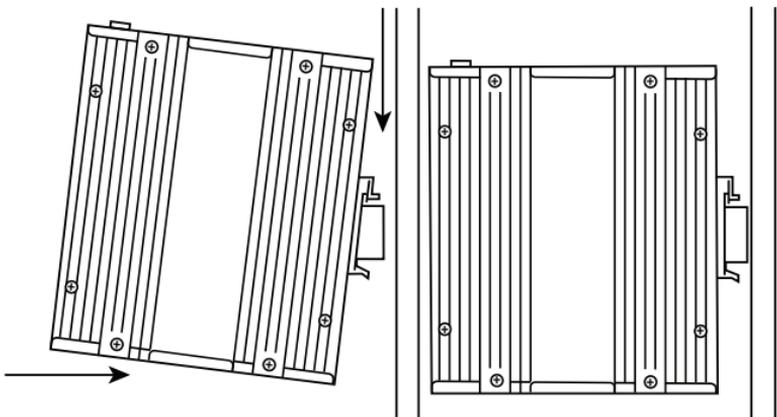
STEP 3B - Mount on a Wall

INSTALL THE UNIT ON A WALL

1. Attach the screws to the wallmount brackets.

2. Using M4 screws, attach the unit and bracket assembly to the wall.

STEP 4A - Connect the RJ-45 Ethernet Interface

CONNECT THE SWITCH TO PC OR DEVICE

1. To connect the switch to a PC, use a straight-through Ethernet or crossover cable.

2. To connect the switch to an Ethernet device, use unshielded twisted-pair (UTP) or shielded twisted-pair (STP) Ethernet cables.

NOTE: The pin assignments of the 10BASE-T, 100BASE-TX and 1000BASE-T connector (RJ-45) are shown in the diagram at right and the table below.
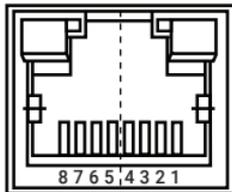

8 7 6 5 4 3 2 1

TABLE 3. 10/100/1000 PORT PINOUTS

PIN	REGULAR PORTS
1	TP0+
2	TP0 -
3	TP1 +
4	TP2 +
5	TP2 -
6	TP1 - -
7	TP3 +
8	TP3 -

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STEP 4B - Connect the Fiber SFP Ethernet Interface

1001000BASE-FX CONNECTIONS

For both 100/1000 Mbps fiber speed connections, the SFP slots are available. The SFP slot accepts the SFP transceivers shown in the table below.

DANGER! Never look directly at optical connectors that might be emitting optical energy. YOUR EYES MIGHT BE DAMAGED!

TABLE 4. COMPATIBLE SFPS

PART NUMBER	DESCRIPTION
LFP411	SFP/1250 Extended Diagnostics, LC multimode, 850 nm, 550 m
LFP412	SFP/1250 Extended Diagnostics, LC multimode, 1310, 2 km
LFP413	SFP/1250 Extended Diagnostics, LC single-mode, 1310 nm, 10 km
LFP414	SFP/1250 Extended Diagnostics, LC single-mode, 1310 nm, 40 km
LFP401	SFP/155 Extended Diagnostics, LC multimode, 850 nm, 2 km
LFP403	SFP/155 Extended Diagnostics, LC single-mode, 1310 nm, 30 km
LFP404	SFP/155 Extended Diagnostics, LC single-mode, 1310 nm, 60 km
LFP402	SFP/155 Extended Diagnostics, LC multimode, 1310 nm, 2 km
LFP418	SFP/1250 Extended Diagnostics, LC single-mode, 1550 nm, 80 km
LFP420	Simplex SFP/1250, Extended Diagnostics, single-mode, 1550 nm TX, 1310 nm RX

STEP 5 - Connect the Power

CONNECTING POWER TERMINAL BLOCK

The switch can be powered from two DC power supplies (input range 12 VDC to 58 VDC).

1. Insert the positive and negative wires into the V+ and V- contacts on the terminal block.

2. Tighten the wire clamp screws to prevent the wires from becoming loose.

ALARM RELAY AND GROUND

The alarm relay output contacts are in the middle of the DC terminal block connector as shown in the diagram below.

The alarm relay out is "Normal Open" and will close when it detects a power or Ethernet link failure.

The relay has a current carrying capacity of 0.5 A at 24 VDC.

12–48 VDC POWER INPUT

+ − ⌐ ⌐ − +
PWR1 ALM PWR2

CONSOLE   RESET   GROUND
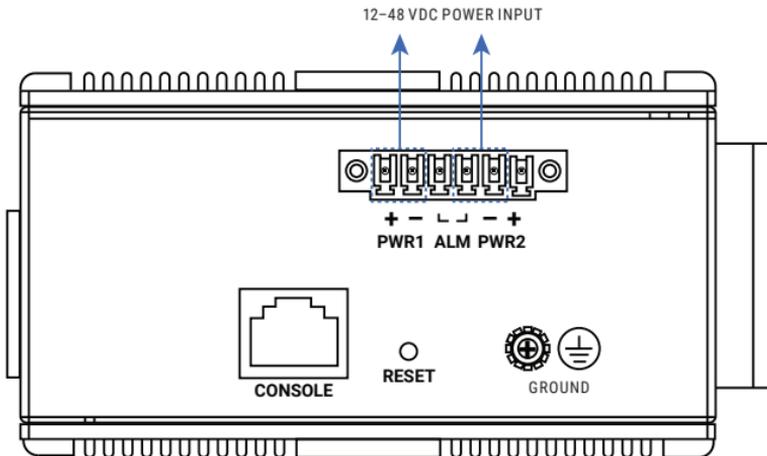
CONSOLE CONNECTION

Use the console port to manage the switch locally via a terminal emulator or a computer with terminal emulation software.

Connect the switch's DB9 connector to a computer's COM port with the following properties:
• Baud rate: 115200 bps
• 8 data bits
• 1 stop bit
• No Priority
• No Flow Control

To connect the host PC to the console port, you need an RJ-45 male to RS-232 DB9 female connector cable.

1. Connect the RJ-45 end of the cable to the switch's console port.

2. Connect the DB9 end of the cable to the PC's COM port.
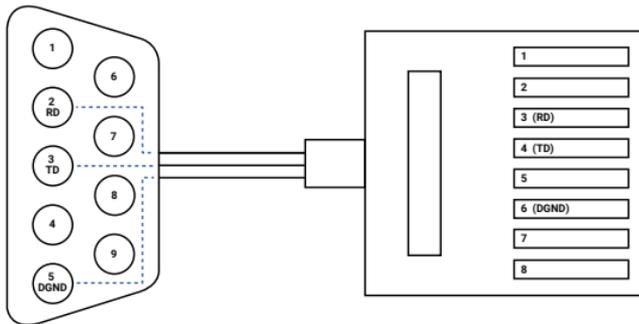
STEP 7 - Connect and Login to the Switch

CONNECT TO THE ETHERNET PORT

1. Connect to the Ethernet port of the managed switch.

Factory Default IP: 192.0.2.1

2. Log in with the default username and password:

Username: admin

Password: (blank) (Just press the Enter key.)

OPTIONAL: DOWNLOAD USER MANUAL

For product specifications and regulatory information, refer to the User Manual. You can download this document from our web site.

1. Go to www.blackbox.com

2. Enter the part number (LIG1014A, LIG1080A or LIG1082A) in the search box.

3. Click on the product in the "Product Results" page.

4. Click on the "Support" tab on the product page, and select the document you wish to download.

If you have any trouble accessing the Black Box site to download the manual, you can contact our Technical Support at 877-877-2269 or INFO@BLACKBOX.COM.

STEP 8 - CLI Initialization and Configuration (Optional)

COMMAND-LINE INTERFACE (CLI)

1. Connect to the Ethernet port of the managed switch.

2. Type in the command: telnet 192.0.2.1

3. Log in with the default username and password:

Username: admin

Password: (none) (Just press the Enter key.)

4. Change the IP with the commands listed below.

CLI command:
enable
configure terminal
interface vlan 1
ip address xxx.xxx.xxx.xxx.xxx.xxx.xxx.xxx
exit