



ROCKET *LINX* ES9528

Industrial Managed Switch



Quick Installation Guide

ES9528 | ES9528-XT

Introduction

The RocketLinX ES9528 switch is a rackmount 24+4G managed Ethernet ring switch that is equipped with 24 10/100 Base-TX ports plus four gigabit RJ45 / mini GBIC combo ports. It is a special design for control rooms where high-port density and performance are required. The four gigabit combo port design allows 10/100/1000 triple speed, and the SFP ports accept all types of gigabit SFP transceivers, including gigabit SX, LX, LHX, ZX, and XD for several connection types and distances.

See the Control web site for detailed product specifications of your model.

Installation Overview

You can use the following overview and if you need more detailed information, you can refer to the *RocketLinX ES9528 User Guide*, which contains detailed installation and configuration information to install the RocketLinX ES9528.

1. Connect the power cord to the AC power input connector. The available AC power input range is from 90 to 264VAC.
2. Mount the RocketLinX ES9528 into the rack.
 - a. Attach the brackets to the RocketLinX ES9528 by using the screws provided in the rack mount kit.
 - b. Mount the RocketLinX ES9528 in a 19-inch rack by using four rack-mounting screws provided in the kit.

Note: *When installing multiple switches in high temperature environments, reserve 0.5U-1U of free space between the switches. It is important to disperse*

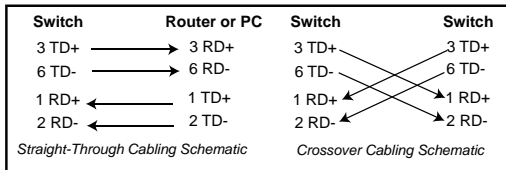
Temperature: Verify that the rack environment temperature conforms to the specified operating temperature range.

Mechanical Loading: Do not place any equipment on top of the switch. In a high vibration environment, additional rack mounting protection is necessary.

Grounding: Rack-mounted equipment should be properly grounded. On the back panel of the RocketLinX ES9528, there is one earth ground screw. Loosen the earth ground screw with a screwdriver; then tighten the screw after earth ground wire is connected.

3. Connect standard Ethernet cables between the RocketLinX ES9528 10/100BASE-TX Ethernet port and the network nodes.

The fast Ethernet ports support 10BASE-T and 100BASE-TX, full- or half-duplex modes. All the fast Ethernet ports auto-detect the signal from connected devices to negotiate the link speed and duplex mode. Auto MDI/MDIX allows you to connect another switch, hub, or workstation without changing straight-through or crossover cables. Crossover cables cross-connect the transmit lines at each end to the received lines at the opposite end.



The Ethernet cables use Pins 1, 2, 3, and 6 of an 8-pin RJ45 connector. The signals of these pins are converted by the automatic MDIX function, as shown in the following table.

Pin MDIX	Signals	MDI Signals
1	RD+	TD+
2	RD-	TD-
3	TD+	RD+
6	TD-	RD-

Connect one side of an Ethernet cable into any switch port and connect the other side to your attached device. The LNK LED lights up when the cable is correctly connected. Always make sure that the cables between the switches and attached devices (for example, switch, hub, or workstation) are less than 100 meters (328 feet).

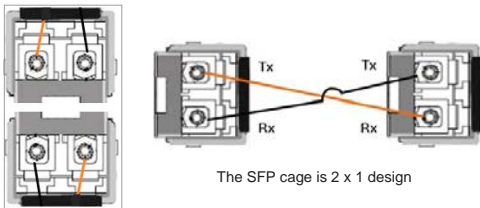
The wiring cable types are as follows:

- ▶ 10BASE-T: 2-pair UTP/STP Category 3, 4, 5 cable, EIA/TIA-568 100-ohm (100m)
- ▶ 100BASE-TX: 2-pair UTP/STP Category 5 cable, EIA/TIA-568 100-ohm (100m)
- ▶ 1000BASE-TX: 4-pair UTP/STP Category 5 cable, EIA/TIA-568 100-ohm (100m)

4. Connect appropriate network cables between the RocketLinX ES9528 combo 1000BASE-TX (gigabit, Auto MDI/MDIX)/SFP ports and the network.
5. Optionally, connect SFP transceivers.

The RocketLinX ES9528 equips four gigabit SFP ports combined with gigabit Ethernet ports. The SFP ports accept standard mini GBIC SFP transceivers that support 1000BASE-SX/LX/LHX/XD/ZX. To ensure system reliability, Control recommends using a Control certified gigabit SFP Transceiver. The certified SFP transceiver includes 1000BASE-SX/LX single/multi mode range from 550m to 80km. The certified SFP transceiver includes 100BASE-FX single/multi mode, 100/gigabit BIDI/WDM, 1000BASE-SX/LX single/multi mode ranger from 550m to 80km. The speed of the SFP port supports 1000 full-duplex. 100BASE-FX is not supported in gigabit combo ports.

- a. Plug the SFP transceiver into the SFP fiber transceiver.
- b. Connect the transmit channel to the receive channel at each end.
- c. Check the direction/angle of the fiber transceiver and the fiber cable.



Note: This is a Class 1 Laser/LED product. Do not stare at the Laser/LED beam. The SFP port does not function until the fiber cable is linked to another active device. The SFP and corresponding RJ45 ports work in an exclusive mode. Traffic sent or received through the SFP module will have priority thus no traffic will be sent or received over the corresponding RJ45 connection. To use the RJ45 connection, remove the corresponding SFP.

RocketLinX ES9528 Configuration

You can configure the RocketLinX ES9528 network information (IP address, subnet mask, and gateway or DHCP) using one of the following methods:

- ▶ NetVision
- ▶ Web browser
- ▶ Command Line Interface (CLI) using one of these methods:
 - Serial console port by connecting the RS-232 console cable that was shipped with the RocketLinX ES9528 to a system COM port
 - Telnet
 - Secure shell (SSH)

The default IP address of the RocketLinX ES9528 is **192.168.250.250**.

This document discusses using NetVision to program the network information into the ES9528 and a web browser to begin feature configuration. You can refer to the *RocketLinX ES9528 User Guide*, if you want to use one of the other configuration methods.

1. If necessary, install the latest version of the **Java Runtime Environment**.
2. Copy the NetVision application to a host system with a Windows operating system. Make sure that you note the location as there is no installation wizard or process for NetVision.
Note: *NetVision is available on the RocketLinX Software and Documentation CD or you can download the latest version from the Control ftp site.*
3. Start NetVision.
4. Configure the RocketLinX ES9528 IP address for your network.
 - a. In NetVision, click the **Discovery** button, after five seconds the RocketLinX ES9528 should be listed.
 - b. Highlight the RocketLinX ES9528.
 - c. To configure a static IP address, double-click the **IP Address** field and enter a desired IP address.
 - d. Double-click the **Netmask** field and enter a desired subnet mask.
 - e. Select the **IP Settings/Modify IP** menu item to commit the IP address and Netmask change to the RocketLinX ES9528 switch.

5. Open a web browser and enter the IP address of the RocketLinX ES9528.
6. For example: **http://192.168.250.250** or **https://192.168.250.250**.
7. Click **Run** when Java prompts you to run the applet.
8. Enter **admin** for both the user name and the password when prompted.
You can refer to the *RocketLinX ES9528 User Guide* or help system for detailed feature configuration information.

Control Customer Service

You can use one of the following methods to contact Control Corporation.

Contact Method	Web Address or Phone Number
Support	http://www.comtrol.com/pub/en/support
Downloads	ftp://ftp.comtrol.com/html/ES9528_main.htm
Web Site	http://www.comtrol.com
Phone	763.957.6000

