



## **User Guide**

**TL-SL1210**

**8-Port 10/100Mbps + 2-Port Gigabit Switch**

**TL-SL1117**

**16-Port 10/100Mbps + 1-Port Gigabit Switch**

**TL-SL1226**

**24-Port 10/100Mbps + 2-Port Gigabit Switch**

**TL-SL1351**

**48-Port 10/100Mbps + 3-Port Gigabit Switch**

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## FCC STATEMENT



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.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- 1) This device may not cause harmful interference.
- 2) This device must accept any interference received, including interference that may cause undesired operation.

Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

## EC DECLARATION OF CONFORMITY (EUROPE)

In compliance with the EMC Directive 89/336/EEC, Low Voltage Directive 73/23/EEC, this product meets the requirements of the following standards:

- EN55022
- EN55024
- EN60950

## 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.

## SAFETY NOTICES



### Cautions:

Do not use this product near water, for example, in a wet basement or near a swimming pool.

Avoid using this product during an electrical storm. There may be a remote risk of electric shock from lightning.

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## Package Contents

The following items should be found in your box:

- One Switch
- One power cord
- This User's Guide
- Rubber footpads for Desk-mount
- Rack-mount kit for installing the switch in a 19-inch rack

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### Note:

Make sure that the package contains the above items. If any of the listed items are damaged or missing, please contact with your distributor.

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## Chapter 1 Introduction of the Product

This chapter describes the features of the TL-SL1210 / TL-SL1117 / TL-SL1226 / TL-SL1351 Gigabit Switch. TL-SL1210, TL-SL1117, TL-SL1226 and TL-SL1351 just differ in the number of LED indicators and ports, and all figures in this user guide are of TL-SL1351.

### 1.1 Overview of the product

The TL-SL1210/TL-SL1117/TL-SL1226/TL-SL1351 Gigabit Switch provides you with a high-performance, low-cost, easy-to-use, seamless and standard upgrade to boost your old network to 1000Mbps. Increase the speed of your network server and backbone connections, make Gigabit connection to a server or uplink a network necessarily.

The TP-LINK TL-SL1210/TL-SL1117/TL-SL1226/TL-SL1351 features a non-blocking switching architecture that forwards and filters packets at full wire-speed for maximum throughput. MAC address auto-learning and auto-aging, IEEE802.3x flow control for Full Duplex mode and backpressure for Half Duplex mode. It is compatible with all 10,100, and 1000Mbps Ethernet devices because it is standard-based.

The TL-SL1210/TL-SL1117/TL-SL1226/TL-SL1351 is plug-and-play and no configuration is required. Auto MDI/MDIX cable detection on all ports eliminate the need for crossover cable or Uplink port. Each port can be used as general ports or

Uplink ports, and any port can be simply plugged into a server, a hub, a router or a switch, using the straight cable or crossover cable. Diagnostic LEDs which display link status and activity, allowing you to quickly detect and correct problems on the network.

## 1.2 Features

- Complies with IEEE802.3, IEEE802.3u, IEEE802.3ab, IEEE802.3z (for TL-SL1351 only) standards
- 8/16/24/48 10/100Mbps Auto-Sense RJ45 ports supporting Auto-MDI/MDIX
- 2/1/2/2 10/100/1000Mbps Auto-Sense RJ45 ports supporting Auto-MDI/MDIX
- 1 SFP(Small Form Pluggable) module interface (For TL-SL1351 only)
- Supports Auto MDI / MDIX cable detection on all ports eliminate the need for crossover cable or Uplink port
- Non-blocking switching architecture that forwards and filters packets at full wire -speed for maximum throughput
- Supports MAC address auto-learning and auto-aging
- Supports IEEE802.3x flow control for full-duplex model and backpressure for half-duplex transfer model
- LED indicators for monitoring power, link, activity, speed
- Internal power supply

## Chapter 2 Installation

### 2.1 Mounting the Switch on a Desk

Before place the Switch on a desk, attach four rubber footpads to the flutes on the Switch bottom, then lay the Switch on the desktop, where can be have as much as 5kg placed on top.

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**Note:**

Make sure there is a grounded AC outlet within 1.5 meters, and working well. Make sure there is free space for radiating heat and air. Make sure not to place anything too heavy on top of the switch.  
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## 2.2 Mounting the Switch in a Rack

The dimension of TL-SL1210/TL-SL1117/TL-SL1226/TL-SL1351 is designed according to the standard 19" rack-mountable steel case of Electronic Industries Association.

Turn off all the equipment connected to the Switch before mounting it in the rack, then rivet the two “L” brackets onto each side of the Switch, fasten it with screws in the rack.

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**Note:**

For TL-SL1210, the “L” brackets will differ in size.

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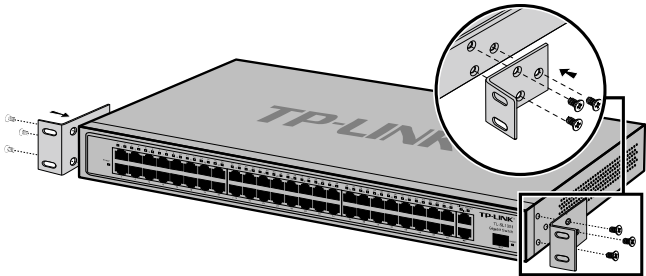


Figure 2-1 Rivet the 'L'brackets onto the Switch

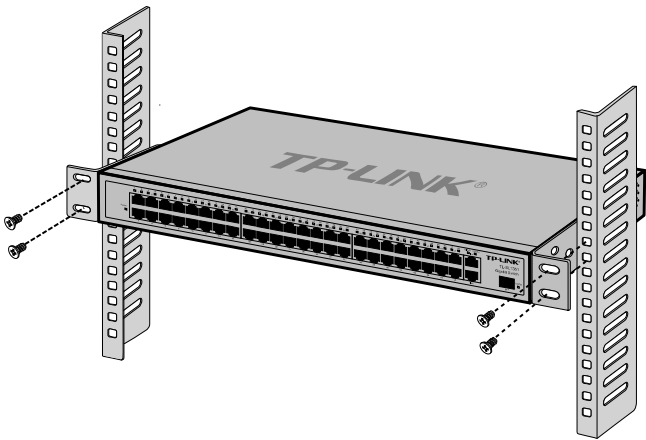


Figure 2-2 Fasten the Switch in the rack

## 2.3 Mounting the SFP Module (for TL-SL1351 Only)

The front panel of the TL-SL1351 consists of a SFP module, which support The Hot Plug- And- Draw. Should fixed the SFP into SFP pluggable when use the SFP module. The switch could identify and configure the SFP module automatically.

## 2.4 Power on

TL-SL1210/TL-SL1117/TL-SL1226/TL-SL1351 Gigabit Switch is powered by AC power supply. Powering on the Switch, it will automatically initialize and its LED indicators should respond as follows:

- 1) All of the LED indicators will flash momentarily for one second, which represents a resetting of the system.
- 2) The power LED indicator will remain ON.

# Chapter 3 Identifying External Components

This Chapter describes the front panel, rear panel and LED indicators of the Switch (here takes TL-SL1351 for example).

## 3.1 Front Panel

The front panel of TL-SL1351 consists of switch LED indicators, 48 10/100Mbps RJ-45 ports, 2 10/100/1000Mbps RJ-45 ports and 1 SFP module.

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**Note:**

The SFP module is only for TL-SL1351.  
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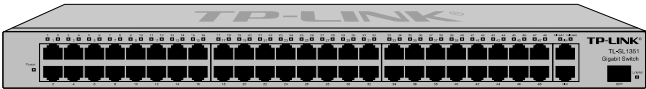


Figure 3-1 TL-SL1351 Switch Front Panel sketch

The LED indicators include Power, Link/Act, 1000Mbps and 100Mbps LED indicators, which are used for monitoring and pre-troubleshooting of the Switch. The following section explains the status of LED indicators for the Switch along with an explanation of each indicator.

- **Power LED:** This indicator will light solid red when the Switch powers up. If the LED is not lit, please check the power supply and connection.

- **1000M LED:** The corresponding gigabit port LED indicator will light solid green when the gigabit port connected to a 1000Mbps device. It flashes green when data is being transmitted or received on the working connection.
- **100M LED:** The corresponding 100M port LED indicator will light solid green when the 10/100M port connected to a 100Mbps device. It flashes green when data is being transmitted or received on the working connection.
- **Link/Act LED:** This indicator will light solid green when the corresponding port is connected correctly. It flashes green when data is being transmitted or received on the working connection.

## 3.2 Rear Panel

The rear panel of the TL-SL1351 features a power receptacle, which is an AC power receptacle. Connect the female of the power cord head here, and the male head to the AC power outlet.



Figure 3-2 TL-SL1351 Switch Rear Panel sketch

# Appendix A: Specifications

| General               |                                                             |                                              |
|-----------------------|-------------------------------------------------------------|----------------------------------------------|
| Standards             | IEEE802.3 10Base-T                                          |                                              |
|                       | IEEE802.3u 100Base-TX                                       |                                              |
|                       | IEEE802.3ab 1000Base-T                                      |                                              |
|                       | IEEE802.3z 1000Base-X (for TL-SL1351 only)                  |                                              |
|                       | ANSI/IEEE Std 802.3 Nway                                    |                                              |
|                       | IEEE802.3x                                                  |                                              |
| Protocol              | CSMA/CD                                                     |                                              |
| Data Transfer Rate    | Ethernet: 10Mbps (Half Duplex), 20Mbps (FullDuplex)         |                                              |
|                       | Fast Ethernet: 100Mbps (Half Duplex), 200Mbps (Full Duplex) |                                              |
|                       | Gigabit Ethernet: 2000Mbps (Full Duplex)                    |                                              |
| Topology              | Star                                                        |                                              |
| Network Media (Cable) | 10Base-T:                                                   | UTP category 3, 4, 5 cable (maximum 100m)    |
|                       |                                                             | EIA/TIA-568 100Ω STP (maximum 100m)          |
|                       | 100Base-TX:                                                 | UTP category 5, 5e cable (maximum 100m)      |
|                       |                                                             | EIA/TIA-568 100Ω STP (maximum 100m)          |
|                       | 1000Base-T: UTP category 5, 5e cable (maximum 100m)         |                                              |
|                       | 1000Base-SX (for TL-SL3151 only):                           | 62.5 u m multi mode fiber (maximum 275m)     |
|                       |                                                             | 50 u m multi mode fiber (maximum 550m)       |
|                       | 1000Base-LX (for TL-SL3151 only):                           | 62.5 u m multi mode fiber (maximum 550m)     |
|                       |                                                             | 50 u m multi mode fiber (maximum 550m)       |
|                       |                                                             | 9 u m/10 u m single mode fiber (maximum 5km) |
| Number of Ports       | 8/16/24/48 10/100Mbps Auto-Negotiation RJ-45 ports          |                                              |
|                       | 2/1/2/2 10/100/1000Mbps Auto-Negotiation RJ-45 ports        |                                              |
|                       | 1 SFP module Interface (for TL-SL1351 only)                 |                                              |

|                    |                                                                                 |
|--------------------|---------------------------------------------------------------------------------|
| Uplink Ports       | Auto MDI/MDI-X cable detection, Each port can be used Uplink ports              |
| Transfer Method    | Store-and-Forward                                                               |
| MAC Address Table  | 8k, Automatically learning, automatically Update                                |
| Frame Filter Rate  | 10Base-T: 14880pps/Port                                                         |
|                    | 100Base-TX: 148810pps/Port                                                      |
|                    | 1000Base-T: 1488095pps/Port<br>1000Base-X: 1488095pps/Port (for TL-SL1351 only) |
| Frame Forward Rate | 10Base-T: 14880pps/Port                                                         |
|                    | 100Base-TX: 148810pps/Port                                                      |
|                    | 1000Base-T: 1488095pps/Port<br>1000Base-X: 1488095pps/Port (for TL-SL1351 only) |
| Safety & Emissions | FCC, CE                                                                         |

| Environmental and Physical |                        |
|----------------------------|------------------------|
| Operating Temperature      | 0°C ~40°C              |
| Storage Temperature        | -40°C ~70°C            |
| Operating Humidity         | 10%~90% non-condensing |
| Storage Humidity           | 5%~90% non-condensing  |



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