



TL-SF1016

TL-SF1024

TL-SF1048

16/24/48-port 10/100M Fast Ethernet Switch



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## **FCC STATEMENT**

The 16/24/48-port 10/100M Fast Ethernet Switch 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 in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

Reorient or relocate the receiving antenna.

Increase the separation between the equipment and receiver.

Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.

Consult the dealer or an experienced radio/TV technician for help.

## **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

## **SAFETY NOTICES**



#### Caution

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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TL-SF1016/TL-SF1024/TL-SF1048 10/100M Fast Ethernet Switch User's Guide

# **Package Contents**

The following contents should be found in your box:

One TL-SF1016/TL-SF1024/TL-SF1048 Switch

One power cord

This User's Guide

Mounting screws and two "L" planks

Note: If any of the above contents are damaged or missing, please contact the retailer from whom you purchased the TL-SF1016/TL-SF1024/TL-SF1048 16/24/48-port 10/100M Switch for assistance.

# **Chapter 1: Introduction of the Product**

This chapter describes the features of the model of TL-SF1016/TL-SF1024/TL-SF1048 16/24/48-port10/100M Switch. TL-SF1016, TL-SF1024, and TL-SF1048 just differ in the number of LED indicators and ports, all figures in this guide are of TL-SF1024.

## 1.1 Overview of the product

TL-SF1016/TL-SF1024/TL-SF1048 16/24/48-port 10/100M Switch provides 16/24/48 10/100Mbps Auto-Negotiation RJ45 ports. Each port of the TL-SF1016/TL-SF1024/TL-SF1048 supports auto MDI/MDI-X function, eliminating the need for crossover cables or Uplink ports. The Switch is Plugand-Play and any port can be simply plugged into a server, a hub or a switch, using straight cable or crossover cable.

The TP-LINK TL-SF1016/TL-SF1024/TL-SF1048 16/24/48-port 10/100M

switch provides you with a low-cost, easy-to-use, high-performance, seamless and standard upgrade to improve your old network to a 100Mbps network. It will boost your network performance up to full duplex data transfer.

### 1.2 Features

Complies with IEEE802.3, IEEE802.3u standards

16/24/48 10/100Mbps Auto-Negotiation RJ45 ports supporting Auto-MDI/MDIX

Supports IEEE802.3X flow control for full-duplex mode and backpressure for half-duplex mode

LED indicators for monitoring power, link, activity, speed (TL-SF1024)

Standard 19" rack-mountable steel case

Internal power supply

# **Chapter 2: Installation**

## Mounting the Switch on a Desk

Before placing the Switch on a desk, attach four rubber feet to the flutes on the Switch bottom, then lay the Switch on the desktop, where it is able to withstand 5kg of weight.



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 airflow.

Be sure not to lay anything heavy on top.

## Mounting the Switch in a Rack

The dimension of TL-SF1016/TL-SF1024/TL-SF1048 is designed according to the standard 19" rack-mountable steel case of Electronic Industries Association.

Power 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, and fasten it with screws in the rack.



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

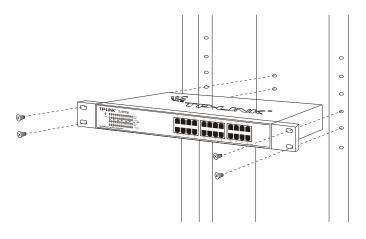


Figure 2-2 Fasten the Switch in the Rack

#### 2.3 Power on

The TL-SF1016/TL-SF1024/TL-SF1048 16/24/48-port 10/100M Switch is powered by an AC Power Supply. Connect the Switch and power outlet by power cord. Powering on the Switch, it will be automatically initialized and the LED indicators should respond as follows:

- All of the LED indicators will flash momentarily for one second, which 1) represent a resetting of the system.
- 2) The Power LED indicator will light up.

# **Chapter 3: Identifying External Components**

This Chapter describes the front panel, rear panel and LED indicators of the Switch.

#### Front Panel

The front panel of TL-SF1024 consists of switch model, switch LED indicators, and 24 10/100Mbps RJ-45 ports.

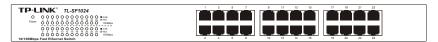


Figure 3-1 TL-SF1024 Switch Front Panel sketch

#### Rear Panel 3.2

The rear panel of TL-SF1024 only features an electrical outlet, which is an AC electrical outlet. Connect the female of the power cord head here, and the male head to the AC power.



Figure 3-2 TL-SF1024 Switch Rear Panel sketch

### LED indicators

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

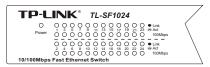


Figure 3-3 TL-SF1024 Switch LEDs sketch

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.

LINK/ACT LED: The LED indicates Link/Active status. The corresponding LED indicator will light solid green when connected to a network device. It flashes green when data is being transmitted or received on the working connection.

100Mbps: The corresponding gigabit port LED indicator will light solid green when it's working on 100Mbps speed, not lit when working on 10Mbps speed.



Note: Because of the difference of among the mode of switch, Some switch don't include the 100Mbps indicator, such as TL-SF1048 and a few of TL-SF1016 switch.

# **Appendix A: Specifications**

General				
Standards	IEEE802.3 10Base-T			
	IEEE802.3u 100Base-TX			
Topology	Star			
Protocol	CSMA/CD			
Data Transfer Rate	Ethernet: 10Mbps (Half Duplex)			
	20Mbps (Full Duplex)			
	Fast Ethernet: 100Mbps (Half Duplex)			
	200Mbps (Full Duplex)			
Number of Ports	16/24/48 10/100Mbps Auto-Negotiation RJ-45 ports			
LED indicators	Power, Link/Act, 100M(TL-SF1024)			

Environmental and Physical			
Dimensions(W $\times$ D $\times$ H)	TL-SF1016:11.57 $\times$ 7.1 $\times$ 1.73 in.(294 $\times$ 180 $\times$ 44 mm)		
	TL-SF1024:17.3 $\times$ 7.1 $\times$ 1.73 in. (440 $\times$ 180 $\times$ 44 mm)		
	TL-SF1048:17.3 $\times$ 10.2 $\times$ 1.73 in.(440 $\times$ 260 $\times$ 44 mm)		
Power Supply Output	100-240V~ 50-60Hz (Internal universal power supply)		
Operating Temperature	0°C~40°C (32°F~104°F)		
Storage Temperature	-40~70°C (-40°F~158°F)		
Operating Humidity	10%~90% non-condensing		
Storage humidity	5%~95% non-condensing		

# **Appendix B: Troubleshooting**

#### The Power LED is not lit

Make sure the AC power cord connected the Switch with power source properly.

Make sure the power source is ON.

## The Link/Act LED is not lit when a device is connected to the corresponding port

Make sure that the cable connectors are firmly plugged into the Switch and the device.

Make sure the connected device is turned on and working well.

The cable must be less than 100 meters long(328 feet).

# **Appendix C: Contact Information**

For help with the installation or operation of the TP-LINK TL-SF1016/TL-SF1024 /TL-SF1048 16/24/48-port 10/100M Switch, please contact us.

E-mail: support@tp-link.com

Website: http://www.tp-link.com