



# TP-LINK<sup>®</sup>

## User Guide

TL-SF1005D

TL-SF1008D

TL-SF1016D

10/100Mbps Desktop Switch



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## FCC STATEMENT



This equipment has been tested and found to comply with the limits for a Class B 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.

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.

## CE Mark Warning



This is a class B 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.

## Package Contents

The following items should be found in your box:

- One TL-SF1005D/TL-SF1008D/TL-SF1016D Switch
- One Power Adapter
- This User Guide

 **Note:**

Make sure that the box 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

Thank you for choosing the TL-SF1005D/TL-SF1008D/TL-SF1016D 10/100Mbps Desktop Switch.

## 1.1 Overview of the Product

TL-SF1005D/TL-SF1008D/TL-SF1016D 10/100Mbps Desktop Switch provides 5/8/16 10/100Mbps Auto-Negotiation RJ45 ports. All ports support Auto MDI/MDIX function, eliminating the need for crossover cables or Uplink ports. The Switch is Plug-and-Play and each port can be used as general ports or Uplink ports and can be simply plugged into a server, a hub, a switch or a router and so on, using straight cable or crossover cable.

The TL-SF1005D/TL-SF1008D/TL-SF1016D 10/100M Desktop 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. Its wire-speed switching that forwards packets can be as fast as the speed that your network delivers those packets to them.

## 1.2 Convention

The Switch or TL-SF1005D/TL-SF1008D/TL-SF1016D mentioned in this User Guide stands for TL-SF1005D/TL-SF1008D/TL-SF1016D 10/100Mbps Desktop Switch without any explanation.

### Note:

The three devices of TL-SF1005D, TL-SF1008D and TL-SF1016D are sharing this User Guide. For simplicity, we will take TL-SF1016D for example throughout this Guide,

The differences between them are:

- TL-SF1005D Switch with 5 10/100Mbps Auto-Negotiation RJ45 ports.
- TL-SF1008D Switch with 8 10/100Mbps Auto-Negotiation RJ45 ports.
- TL-SF1016D Switch with 16 10/100Mbps Auto-Negotiation RJ45 ports.

## 1.3 Features

- Complies with IEEE 802.3, IEEE 802.3u standards
- 5/8/16 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
- Supports MAC address auto-learning and auto-aging
- LED indicators for monitoring power, link, activity

- Plastic case, desktop or wall-mounting design
- External Power Adapter supply

## Chapter 2. Installation

### 2.1 Mounting the Switch on a Desk

To install the Switch, please follow the steps:

- 1) You can place the Switch on a flat desk.
- 2) Please inspect the Power Adapter carefully and make sure that it is properly connected to a power source.
- 3) Ensure adequate ventilation space around the switch for dissipating heat and air.

 **Note:**

Please avoid any heavy thing placed on the switch.

### 2.2 Power On

Powering on the Switch, it will automatically initialize and its LED indicators will respond as follows:

- 1) All of the Link/Act LED indicators will flash momentarily, which represents a resetting of the system.
- 2) The Power LED indicator will light all the time.

 **Note:**

If the LED indicators don't respond as described above, please check the power supply and its connection.

## Chapter 3. Identifying External Components

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

### 3.1 Front Panel

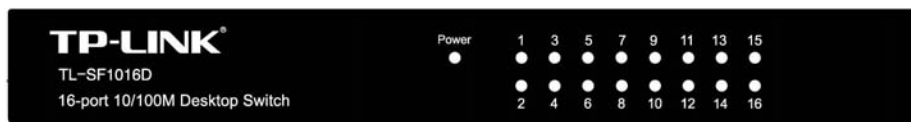


Figure 3-1 TL-SF1016D Switch Front Panel

The Switch's LEDs are located on the front panel.

- **Power LED:** This indicator will light up when the Switch powers on.
- **LEDs (1-16):** One LED indicator will light green when a device is connected to the corresponding port. It flashes when data is being transmitted or received on the connection.

### 3.2 Rear Panel



Figure 3-2 TL-SF1016D Switch Rear Panel

The following parts are located on the rear panel:

- **Power:** The Power socket is where you will connect the power adapter. Please use the power adapter provided with this TL-SF1016D Switch.
- **Port (1-16):** The TL-SF1016D Switch is equipped with 16 10/100Mbps Auto-Negotiation RJ45 ports where you will connect your network devices. The working status can be indicated by the corresponding LEDs on the front panel.



## 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)
Network Media(Cable)	10Base-T: UTP category 3, 4, 5 cable (maximum 100m) EIA/TIA-568 100 $\Omega$ STP (maximum 100m)
	100Base-TX: UTP category 5, 5e cable (maximum 100m) EIA/TIA-568 100 $\Omega$ STP (maximum 100m)
Number of Ports	5/8/16 10/100Mbps Auto-Negotiation RJ45 ports
LED indicators	Power, 10/100Mbps Link/Act
Transfer Method	Store-and-Forward
MAC Address Learning	Automatically learning, automatically aging
Frame Filter Rate	10Base-T: 14880pps/Port
	100Base-Tx: 148800pps/Port
Frame Forward Rate	10Base-T: 14880pps/Port
	100Base-Tx: 148800pps/Port

Environmental and Physical	
Operating Temperature	0°C ~40°C (32°F~104°F )
Storage Temperature	-40°C ~70°C (-40°F ~158°F)
Operating Humidity	10%~90% non-condensing
Storage Humidity	5%~90% non-condensing

## **Appendix B: Troubleshooting**

### **1. The Power LED is not lit**

Check to see if the power cord is connected to the Switch properly, and make sure the power source is ON.

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

Check to see if the cable connectors are firmly plugged into the Switch and the device, and verify the connected device is turned on and working well. Make sure the cable is not longer than 100 meters (328 feet).