TP-LINK® User's Guide

TL-SG1005D
TL-SG1008D

5/8-Port Gigabit Ethernet Switch

Package Contents

The following contents should be found in your box:

One Switch
One AC power Adapter
This User Guide
Wall-mounting screws

Note:

If any of the above contents is damaged or missing, please contact the retailer from whom you purchased the Switch for assistance.

Chapter 1: Introduction

1.1 Overview of the product

The TL-SG1005D/TL-SG1008D 5/8-port Gigabit Ethernet 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, or make Gigabit to the desktop a reality. Power users in the home, office, workgroup, or creative production environment can now move large, bandwidth-intensive files faster. Transfer graphics, CGI, CAD, or multimedia files and other applications that have to move large files across the network almost instantly.

The TP-LINK TL-SG1005D/TL-SG1008D 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, it protects your existing network investments while providing you with a straightforward migration path to faster Gigabit speeds.

The TP-LINK TL-SG1005D/TL-SG1008D is plug-and-play and no configuration is required. Auto MDI/MDI-X 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

Fully Complies with IEEE802.3, 802.3u and 802.3ab standards
5/8 10/100/1000Mbps Auto-Negotiation RJ45 ports supporting Auto-MDI/MDIX
Supports IEEE802.3x flow control for Full Duplex mode and backpressure for Half Duplex mode
Non-blocking switching architecture that forwards and filters packets at full wire-speed for maximum throughput
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 Installation

To install the Switch, please follow these steps:

1. You can place the Switch on a flat table or a vertical wall if you wish to hang it.
2. Please inspect the Power Adapter carefully and make sure that it is properly connected to a power source.
3. Be sure to leave enough space for heat dissipation and good ventilation in the Switch. Do not place heavy objects on the Switch.

2.2 Power on

After the Switch powers up, it will be automatically initialized and the LED indicators should respond as follows:

1) All of the Link/Act LED indicators will flash momentarily, which 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. The sketches of the front panel, rear panel and LED indicators are very similar to the TL-SG1005D and TL-SG1008D models. The following sketches are for TL-SG1008D.

3.1 Front Panel

The front panel of the Switch consists of several LED indicators.

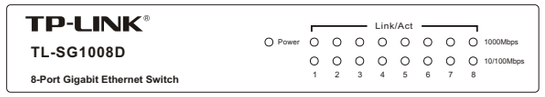

Figure 3-1 TL-SG1008D Switch Front Panel sketch

3.2 Rear Panel

The rear panel of the Switch consists of 8 10/100/1000Mbps RJ45 Ports and one power jack. All ports can work as the Uplink port.

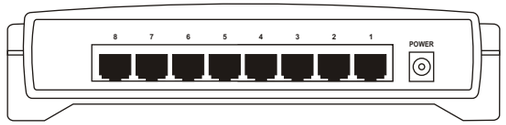

Figure 3-2 TL-SG1008D Switch Rear Panel sketch

3.3 LED indicators

The LED indicators include Power LED and Link/Act LEDs (See Figure 3-1). The LED indicators are used for monitoring and troubleshooting of the Switch. The following section shows the LED indicators for the Switch along with an explanation of each indicator.

Power LED: This indicator will light up when the Switch powers up. If the LED is not lit, please check the power adapter and connection.

1000M LINK/ACT LEDs: These LEDs indicate Link/Active status. One LED will light green when a 1000Mbps device is connected to the corresponding port. It flashes when data is being transmitted or received on the connection.

10/100M LINK/ACT LEDs: These LEDs indicate Link/Active status. One LED will light green when a 10Mbps or 100Mbps device is connected to the corresponding port. It flashes when data is being transmitted or received on the connection.

Appendix A: Specifications

General	
Standards	IEEE802.3 , IEEE802.3u , IEEE802.3ab
Topology	Star
Protocol	CSMA/CD
Data Transfer Rate	Ethernet: 10Mbps (Half Duplex), 20Mbps (Full Duplex) Fast Ethernet: 100Mbps (Half Duplex), 200Mbps (Full Duplex) Gigabit Ethernet: 2000Mbps (Full Duplex)
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)
Number of Ports	5/8 10/100/1000Mbps Auto-Negotiation ports
LED indicators	Power, Link/Act
Transfer Method	Store-and-Forward
MAC Address Learning	Automatically learning, automatically Update
Frame Filter Rate	10Base-T: 14880pps/Port 100Base-Tx: 148800pps/Port 1000Base-T: 1488000pps/Port
Frame Forward Rate	10Base-T: 14880pps/Port 100Base-Tx: 148800pps/Port 1000Base-T: 1488000pps/Port

71030420
Rev: 1.0

Environmental and Physical	
Dimensions(W×D×H)	7.3×5.7×1.7 in. (186mm×146mm×44mm)
Power Supply Output:	AC12V~ 1.0A
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%~95% non-condensing

Appendix B: Troubleshooting

1. The Power LED is not lit

Make sure the AC power Adapter is plugged into an outlet properly and it's connector is plugged into the power jack of the switch .

Make sure the power source is ON.

Make sure you are using the TP-LINK power adapter supplied with your switch.

2. 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 its adapter is installed correctly and is working.

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-SG1005D/TL-SG1008D Switch, please contact us.

E-mail: support@tp-link.com
Website: http://www.tp-link.com

COPYRIGHT & TRADEMARKS

Specifications are subject to change without notice. TP-LINK® is a registered trademark of TP-LINK Technologies Co., Ltd. Other brands and product names are trademarks or registered trademarks of their respective holders.

No part of the specifications may be reproduced in any form or by any means or used to make any derivative such as translation, transformation, or adaptation without permission from TP-LINK Technologies Co., Ltd. Copyright © 2005 TP-LINK Technologies Co., Ltd. All rights reserved.

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.

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.