TP-Link TL-SG116

TP-Link TL-SG116 16-Port Gigabit Ethernet Unmanaged Switch Instruction Manual

Model: TL-SG116

1. INTRODUCTION

The TP-Link TL-SG116 is a 16-port 10/100/1000Mbps unmanaged desktop switch designed to provide an easy and efficient way to expand your network. It facilitates a seamless transition to Gigabit Ethernet, enhancing the speed of network server and backbone connections. Featuring a plug-and-play design, this switch requires no configuration, making it user-friendly for both home and office environments. The TL-SG116 also incorporates energy-efficient technology to reduce power consumption.

2. PACKAGE CONTENTS

Verify that your package contains the following items:

- TP-Link TL-SG116 16-Port Gigabit Ethernet Unmanaged Switch
- Power Adapter
- Instruction Manual (this document)

Image: The retail packaging for the TP-Link TL-SG116 switch, showing the device and its key features.

3. Physical Overview

The TL-SG116 features a sturdy metal casing with 16 Gigabit Ethernet ports. It is designed for both desktop placement and wall-mounting.

Image: Front view of the TP-Link TL-SG116 switch, displaying 16 shielded Gigabit Ethernet ports and a power LED indicator.

LED Indicators:

- **Power LED:** Indicates the power status of the switch.
- **Link/Act LEDs (per port):** Indicates a network connection (Link) and data activity (Act) on the respective port.

4. Installation

4.1 Desktop Placement

Place the switch on a flat, stable surface. Ensure adequate ventilation around the device to prevent overheating.

4.2 Wall-Mounting

The TL-SG116 can be mounted on a wall using the integrated mounting slots on the underside of the device. Use appropriate screws (not included) for your wall type, ensuring they are securely fastened before mounting the switch.

5. CONNECTING THE SWITCH

The TL-SG116 is a plug-and-play device, requiring no software configuration. Follow these steps to connect your switch:

1. **Connect Power:** Plug the provided power adapter into the switch's power port and then into a standard electrical outlet. The Power LED on the switch should illuminate.

2. **Connect Network Devices:** Use Ethernet cables to connect your network devices (e.g., computers, printers, gaming consoles, routers, other switches, smart TVs) to any of the 16 Gigabit Ethernet ports on the switch.

3. **Verify Connection:** Once a device is connected, the corresponding Link/Act LED on the switch will light up, indicating an active connection. It will blink to show data activity.
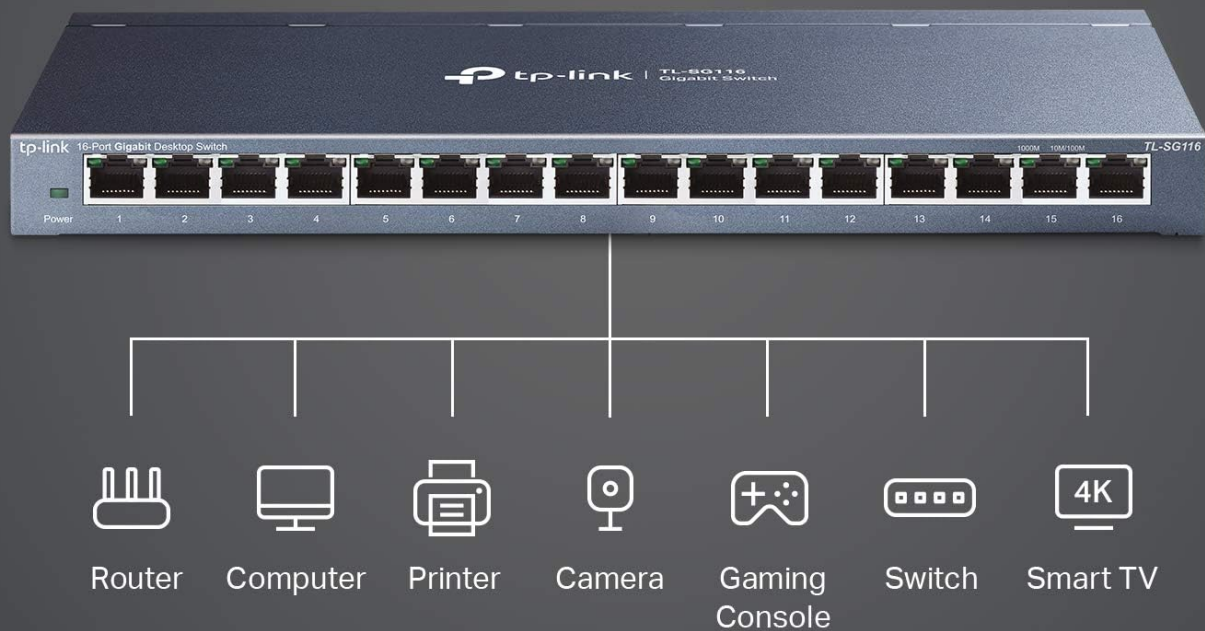

Image: An illustration demonstrating how to connect various devices such as a router, computer, printer, camera, gaming console, another switch, and a smart TV to the 16 ports of the TL-SG116 switch.

6. OPERATION

The TL-SG116 operates as an unmanaged switch, meaning it automatically handles network traffic without requiring user

configuration. Key operational features include:

- **Auto-Negotiation:** Each port automatically detects the link speed of the connected network device (10/100/1000Mbps) and intelligently adjusts for compatibility and optimal performance.
- **Auto MDI/MDIX:** Eliminates the need for crossover cables, simplifying network setup.
- **IEEE 802.3X Flow Control:** Provides reliable data transfer by preventing packet loss during periods of high network traffic.
- **Port-based 802.1p/DSCP QoS:** Prioritizes traffic to ensure high quality for video or voice data transmission, reducing lag.
- **IGMP Snooping:** Optimizes multicast applications, such as IPTV, by efficiently managing multicast traffic.
- **Energy-Efficient Technology:** The switch incorporates innovative technology to reduce power consumption, contributing to energy savings.

Image: A visual representation of the switch's advanced functions, including QoS for fluent online experience and IGMP Snooping for traffic optimization in IPTV applications.

7. MAINTENANCE

The TL-SG116 is a fanless device, ensuring quiet operation and minimizing maintenance requirements. To ensure optimal performance and longevity:

- Keep the switch in a well-ventilated area, free from dust and direct sunlight.
- Periodically clean the exterior of the switch with a soft, dry cloth.
- Avoid blocking the ventilation holes.

8. TROUBLESHOOTING

If you encounter issues with your TL-SG116 switch, refer to the following common troubleshooting steps:

1. **No Power LED:**

   - Ensure the power adapter is securely connected to the switch and a working electrical outlet.
   - Verify the power outlet is functional by plugging in another device.

2. **No Link/Act LED for a connected device:**

   - Check that the Ethernet cable is securely plugged into both the switch port and the network device.
   - Ensure the connected device is powered on and its network adapter is enabled.
   - Try a different Ethernet cable.
   - Try connecting the device to a different port on the switch.
   - Verify the network device itself is functioning correctly.

3. **Slow Network Speed:**

   - Ensure all connected devices and cables support Gigabit Ethernet (Cat5e or higher cables are recommended for Gigabit speeds).
   - Check for excessive network traffic or bandwidth-intensive applications running on your network.
   - Verify that your internet service provider (ISP) is delivering the expected speeds to your router.

9. SPECIFICATIONS

Model	TL-SG116
Number of Ports	16 x 10/100/1000Mbps RJ45 Ports
Data Transfer Rate	1000 Mbps (Gigabit Ethernet)
Interface Type	Auto-Negotiation, Auto-MDI/MDIX
Standards and Protocols	IEEE 802.3i, IEEE 802.3u, IEEE 802.3ab, IEEE 802.3x, IEEE 802.1p
Power Consumption (On-mode)	10 Watts
Power Supply	12V / 1A External Power Adapter
Dimensions (W x D x H)	11.3" x 4.4" x 1" (287 x 112 x 25 mm)
Item Weight	2.1 Pounds (0.95 kg)

Case Material	Metal
Operating Temperature	0°C to 40°C (32°F to 104°F)
Operating Humidity	10% to 90% non-condensing
Fanless Design	Yes

10. WARRANTY AND SUPPORT

TP-Link products are backed by an industry-leading 3-year warranty. For technical assistance or further inquiries, please contact TP-Link support.

Contact Information:

- **Phone Support:** (866) 225-8139
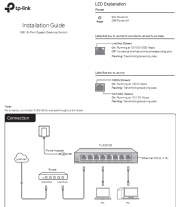- **Product Registration/Information:** myproducts.tp-link.com/us
- **Email Support:** support.USA@tp-link.com

Technical support is available from 6 AM to 6 PM PST, Monday to Friday.
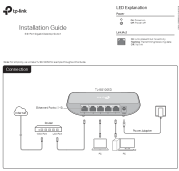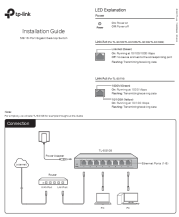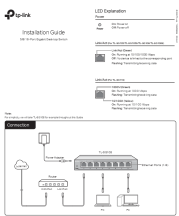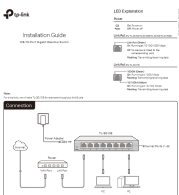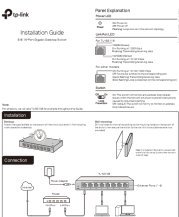

Image: A graphic displaying TP-Link's support phone number, product registration website, and email address.

Related Documents - TL-SG116

TP-Link Gigabit Desktop Switch Installation Guide: TL-SG105, TL-SG108, TL-SG116
Installation guide for TP-Link's 5/8/16-Port Gigabit Desktop Switches (TL-SG105, TL-SG108, TL-SG116). Covers LED explanations, connection setup, technical specifications, FAQs, safety information, and compliance.

	TP-Link 5/8-Port Gigabit Desktop Switch Installation Guide
	Comprehensive installation guide for TP-Link 5/8-Port Gigabit Desktop Switches, including models TL-SG1005D and TL-SG1008D. Covers connection setup, LED indicator explanations, frequently asked questions, detailed specifications, and safety information.
	TP-Link Gigabit Desktop Switch Installation Guide
	Installation guide for TP-Link 5/8/16-Port Gigabit Desktop Switches, covering LED explanations, specifications, connection details, and FAQs.
	TP-Link TL-SG108 Gigabit Desktop Switch Installation Guide
	Installation guide for the TP-Link TL-SG108 5/8/16-Port Gigabit Desktop Switch, covering LED explanations, connection diagrams, specifications, and frequently asked questions.
	TP-Link Gigabit Desktop Switch Installation Guide and Specifications
	Comprehensive installation guide, specifications, and FAQs for TP-Link's 5/8/16-Port Gigabit Desktop Switches (TL-SG105, TL-SG105S, TL-SG108, TL-SG108S, TL-SG116). Learn about connections, LED indicators, technical details, safety, and compliance.
	TP-Link 5/8/16-Port Gigabit Desktop Switch Installation Guide
	Installation guide for TP-Link 5/8/16-Port Gigabit Desktop Switches, detailing panel explanations, connection setup, specifications, troubleshooting, and safety information.