

# LUXUL

*Simply Connected*

## User Guide

### XGS-1024

### Luxul Xen™

## 24-Port Gigabit Ethernet Switch



#### Use the XGS-1024 to:

- ▶ Expand Your Home or Office Network with 24-Ports (10/100/1000)
- ▶ Future Proof Your Network with Gigabit Speeds (10X Performance of Fast Ethernet)
- ▶ Create a VLAN for Optimizing VoIP, Video, Security, or Gaming Applications (requires XMS-1024)

[luxul.com](http://luxul.com)

## 24-PORT GIGABIT ETHERNET SWITCH

### MODEL NUMBER: XGS-1024

#### USER GUIDE

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### DOCUMENT CONVENTIONS

The following graphical alerts are used in this document to indicate notable situations:



**NOTE:** Tips, hints, or special requirements that you should take note of.



**CAUTION:** Care is required. Disregarding a caution can result in data loss or equipment malfunction.



**WARNING!** Indicates a condition or procedure that could result in personal injury or equipment damage.

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## 1: PRODUCT OVERVIEW

### 1.1 Product Introduction

The XGS-1024 Gigabit Ethernet Switch is designed to resolve data transfer bottlenecks in Small to Medium sized networks. It provides 24 10/100/1000Mbps ports with Auto-negotiation and Auto MDI/MDIX capability. All ports can be used for ordinary network traffic as well as for uplinks to connect with other networking devices (i.e. routers, switches, etc.). The XGS-1024 provides 10X the performance of a standard 10/100Mbps switch and can be a simple upgrade replacement for resolving performance bottleneck issues associated with the use of legacy Ethernet switch hardware. Each port within the XGS-1008 can deliver up to 2000Mbps in full-duplex mode, making it an excellent choice as a core switch for improving performance between devices on the local network. With easy XenConnect™ plug-and-play setup and no network management you will benefit from a seamless installation, whether you are setting up a new network or upgrading a legacy 10/100 switch.

### 1.2 XGS-1024 Features

- ▶ Compliance with IEEE802.3, IEEE802.3u and IEEE802.3ab Ethernet standards, supporting 10/100/1000 transfer modes.
- ▶ Auto MDI/MDIX on each port
- ▶ NWAY Auto-Negotiation functionality
- ▶ 24 10/100/1000Mbps RJ-45 ports
- ▶ IEEE802.3x flow control for full-duplex and Backpressure flow control for half-duplex
- ▶ 48Gbps backplane bandwidth and non-blocking wire speed forwarding
- ▶ Store-and-forward switching method
- ▶ 8kb MAC address table and MAC address auto-learning/auto-aging
- ▶ XenConnect “Plug and Play” Compatibility
- ▶ 1U steel chassis for standard 19-inch rack installation

## 1.3 Product Specifications

<b>Supported Protocols and Standards</b>	<ul style="list-style-type: none"> <li>▶ IEEE 802.3 10Base-T Ethernet</li> <li>▶ IEEE 802.3u 100Base-TX Fast Ethernet</li> <li>▶ IEEE 802.3ab 1000Base-T Gigabit Ethernet</li> <li>▶ IEEE 802.3 NWay Auto-negotiation</li> <li>▶ IEEE 802.3x Flow Control</li> <li>▶ CSMA/CD</li> <li>▶ HTTP</li> <li>▶ ARP</li> <li>▶ DNS</li> <li>▶ ICMP</li> <li>▶ TCP/IP</li> </ul>
<b>Features</b>	<ul style="list-style-type: none"> <li>▶ Number of Ports: Twenty-four 10/100/1000BASE-T</li> <li>▶ MAC Address Table: 8K</li> <li>▶ Switch Fabric: 16Gbps</li> <li>▶ Transmission Method: Store-and-forward</li> <li>▶ Auto uplink (MDI/MDI-X) detection and configuration</li> <li>▶ MAC Address Learning /Auto-learning, Auto-aging</li> </ul>
<b>Packet Filtering/ Forwarding Rate</b>	<ul style="list-style-type: none"> <li>▶ 14880pps (10Mbps) per port</li> <li>▶ 148800pps (100Mbps) per port</li> <li>▶ 1488000pps (1000Mbps) per port</li> </ul>
<b>Transmission Method</b>	Store-and-Forward
<b>Network Data Transfer Rate</b>	<ul style="list-style-type: none"> <li>▶ Ethernet: 10Mbps (Half-duplex)</li> <li>▶ Ethernet: 20Mbps (Full-duplex)</li> <li>▶ Fast Ethernet: 100Mbps (Half-duplex)</li> <li>▶ Fast Ethernet: 200Mbps (Full-duplex)</li> <li>▶ Gigabit Ethernet: 1000Mbps (Half-duplex)</li> <li>▶ Gigabit Ethernet: 2000Mbps (Full-duplex)</li> </ul>
<b>Interface Options</b>	<ul style="list-style-type: none"> <li>▶ RJ-45: <ul style="list-style-type: none"> <li>▶ 10 Base-T: Cat.5 UTP /STP</li> <li>▶ 100 Base-TX: Cat.5 UTP /STP</li> <li>▶ 1000Base-T: Cat.5, Cat.5e or Cat.6 UTP/STP</li> </ul> </li> <li>▶ Cable Recognition for Straight-through or Crossover Cables</li> </ul>
<b>Certifications</b>	FCC Class A, CE, RoHS
<b>Led</b>	<ul style="list-style-type: none"> <li>▶ Per unit: Power</li> <li>▶ Per port: Link/Activity</li> </ul>
<b>DC Input</b>	DC 9V 600mA
<b>Power Consumption</b>	27.5 Watts Maximum
<b>Power Supply</b>	Internal Switched Power, AC100-240V, 50-60Hz input

Operating Temperature	32°F to 104°F (0°C to 40°C)
Operating Humidity	10% to 90% (Non-condensing)
Dimensions	W: 17.3" x D: 8.3" x H: 1.7" (W: 439.5mm x D: 211mm x H: 43.2mm)
Weight	▶ Item: 4.5 lbs (2.1Kg) ▶ Packaging: 6 lbs (2.7Kg)

## 1.4 Package Contents

Please check the contents carefully after you open the packing:

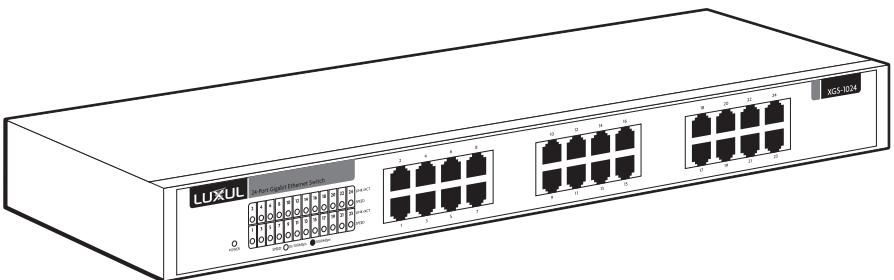
- ▶ One XGS-1024 24-Port Gigabit Ethernet switch
- ▶ Power Cord
- ▶ Two L-shaped rack mounting brackets and screws
- ▶ Four rubber pads
- ▶ Quick Installation Guide
- ▶ CD-ROM with User Documentation

If any of the listed items are missing or damaged, please contact the reseller from whom you purchased the XGS-1024 for return/replacement.

## 2: HARDWARE DESCRIPTION

### 2.1 Front Panel

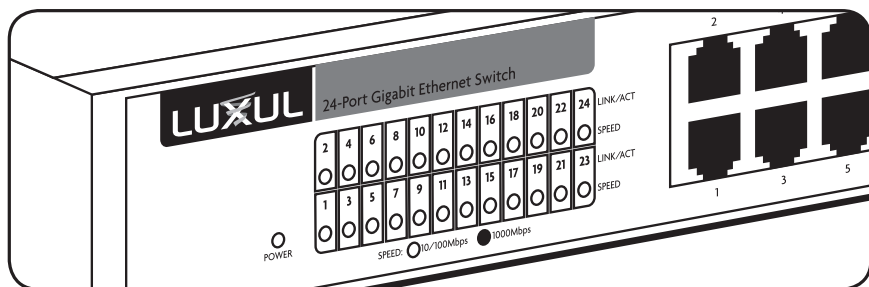
The front panel of the XGS-1024 includes 24 10/100/1000Mbps RJ45 ports on the right side and LED indicators on the left side. Each port has one Link/Activity LED and one 1000Mbps LED. There is also a power LED for indicating whether or not power is being applied to the XGS-1024.



*XGS-1024 Front Panel View*

## 2.2 LED Indicators

The LED indicators of the XGS-1024 include 1 Power indicator, 24 numbered Link/Activity indicators, and 24 1000Mbps indicators. These LED indicators show the operating status of the XGS-1024 and each switch connection.



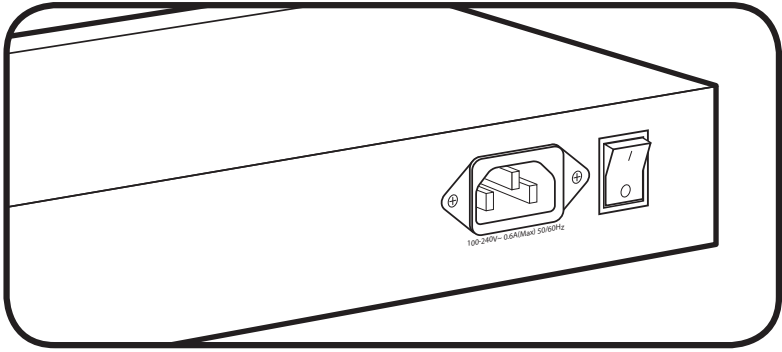
### LED Indicators

The following chart shows the LED indicators of the XGS-1024 along with an explanation of the indicator's properties:

LED	Status	Description
Power	ON	This indicator lights up when the XGS-1024 is properly powered.
	OFF	If this indicator is not lit, please check the AC power cord to ensure proper connection to the outlet and the XGS-1024.
Link/ Activity	ON	Indicates a device is connected to the port of the XGS-1024.
	Blinking	Indicates the port is transmitting or receiving data.
	OFF	Indicates the port is not connected to a device.
1000Mbps	ON	Indicates the XGS-1024 is connected to device at 1000Mbps.
	OFF	Indicates the device likely does not support 1000Mbps and is connected at something less than 1000Mbps.

## 2.3 Rear Panel Layout

The rear panel has 1 AC power port and power switch.



*XGS-1024 Rear Panel View*



**CAUTION:** Please use the correct power cord for your environment. If any voltage other than 100/240 is applied, it will result in damage to the XGS-1024.

## 3: PREPARING FOR INSTALLATION

### 3.1 System Requirements

- ▶ **Ethernet Cables** to connect the XGS-1008 to Ethernet enabled devices
- ▶ **Power** should be AC 100-240V- 0.6A(Max) 50/60Hz.

### 3.2 Before Connecting to the Network

The XGS-1024 can be rack-mounted or used as a desktop switch. Before connecting to the network, please be aware of the following requirements:

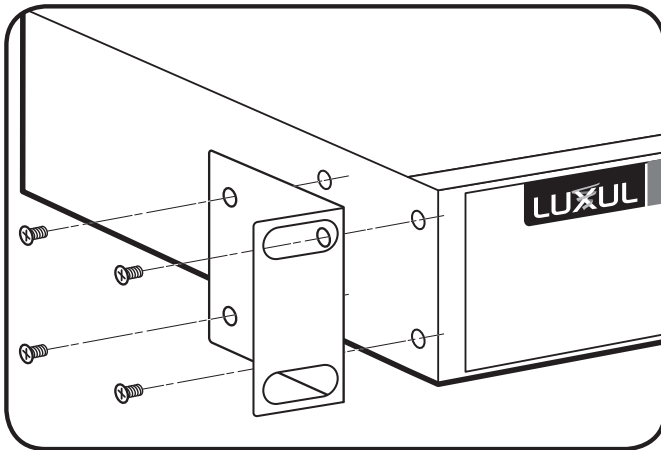
- ▶ Install the XGS-1024 in a stable/safe place to avoid any possible damage
- ▶ Make sure there is adequate space around the XGS-1024 for adequate ventilation and proper heat dissipation.
- ▶ Do not place heavy articles on the XGS-1024.
- ▶ Power outlets should be within 5 feet of the XGS-1024.
- ▶ Check the power cord to confirm a secure connection.

- ▶ Ensure there is sufficient space around the XGS-1024 for proper ventilation and heat dissipation. It is recommended to have at least 4-6 inches around all sides.
- ▶ When installing the XGS-1024 on a surface, attach the rubber feet to the bottom of the device to avoid scratching the surface.

## 4: XGS-1024 INSTALLATION

### 4.1 Installing the XGS-1024 in a Rack

The XGS-1024 can easily be installed in a standard 19" rack. The XGS-1024 includes two mounting ears for installing and stabilizing the switch. For attaching the mounting ears and installing the switch within a rack, please refer to the following illustration:

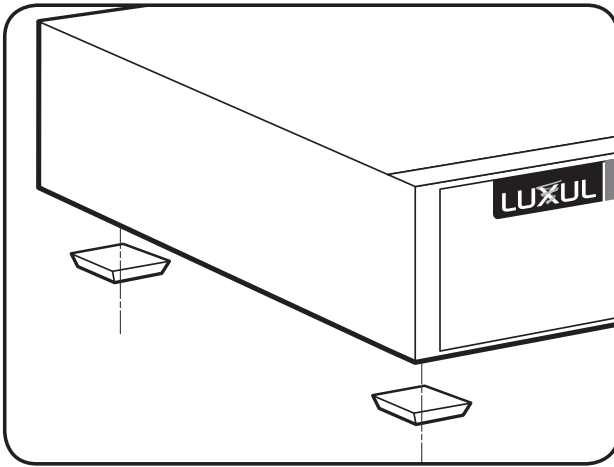


#### *Rack-Mounting the XGS-1024*

- ▶ Using the included screws, attach the mounting ears to each side of the switch.
- ▶ Mount the switch in the rack with the LEDs facing outwards. Be sure the switch is level and properly secured within the rack.

### 4.2 Desktop Setup

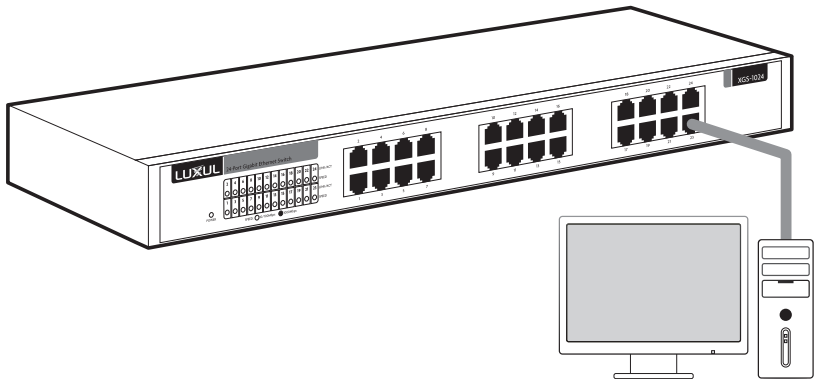
For use as a desktop device, position and apply the included rubber feet to the bottom of the XGS-1024.



*Attaching the Rubber Feet to the XGS-1024*

### 4.3 Connecting Devices

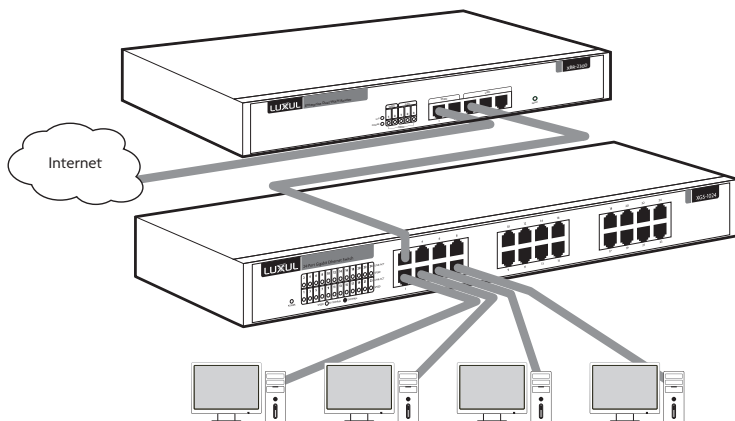
Use standard Ethernet CAT5, CAT5e, or CAT6 cable to connect the XGS-1024 to a device as described below (CAT6 must be used in order to achieve full Gigabit bandwidth). The XGS-1024 will automatically adjust to the characteristics (speed/duplex) of the device to which it is connected.



*Connecting the XGS-1024 to a Device*

When a device is properly connected, the Link/Activity LED for each port lights up green. Please refer to the LED Indicators section for indicator definitions and troubleshooting.

## 4.4 Connecting to a Router or other Switch



### *Connecting the XGS-1024 to Router or Switch*

When a device is properly connected, the Link/Activity LED for each port lights up green. Please refer to the LED Indicators section for indicator definitions and troubleshooting.

## 5: REGULATORY COMPLIANCE

This device is approved under the Luxul brand and designed to comply for use specifically with other approved Luxul devices. This device is designed to be compliant with rules and regulations in locations where they are sold and will be labeled as required. Any changes or modifications to Luxul equipment, not expressly approved by Luxul, could void the user's authority to operate the equipment. This Luxul device when used in conjunction with the approved Luxul Models should be professionally installed and the Radio Frequency Output Power will not exceed the maximum allowable limit for those countries that have regulatory approval.

### 5.1 Health and Safety Recommendations

Warnings for the use of Wireless Devices: Please observe all warning notices with regard to the usage of wireless devices

Potentially Hazardous Atmospheres: You are reminded of the need to observe restrictions on the use of radio devices in fuel depots, chemical plants etc. and areas where the air contains chemicals or particles (such as grain, dust, or metal powders).

Safety in Hospitals: Wireless devices transmit radio frequency energy and may affect medical electrical equipment. When installed adjacent to other equipment,

it is advised to verify that the adjacent equipment is not adversely affected.

Power Supply: Use only a Luxul approved power supply output rated at 100-240VDC and minimum 0.1A. The power supply shall be Listed to UL/CSA 60950-1; and certified to IEC60950-1 and EN60950-1 with SELV outputs. The device can also be powered from a compliant POE source. Use of alternative power supply will invalidate any approval given to this device and may be dangerous.

## 5.2 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 in a residential installation. This equipment 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.

## 6: CONTACT LUXUL

For sales questions  
please contact our  
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E: sales@luxul.com

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