

# LevelOne User Manual

GSW-0509 / GSW-0809

5/8-Port Gigabit Switch w/ Internal Power

#### **FCC Certifications**

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 when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

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, and (2) this device must accept any interference received; including interference that may cause undesired operation.

#### CE Marking Warning

This equipment complies with the requirements relating to electromagnetic compatibility, EN 55022 class A for ITE, the essential protection requirement of Council Directive 89/336/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

Company has an on-going policy of upgrading its products and it may be possible that information in this document is not up-to-date. Please check with your local distributors for the latest information. No part of this document can be copied or reproduced in any form without written consent from the company.

#### Trademarks:

All trade names and trademarks are the properties of their respective companies.

Copyright © 2008, All Rights Reserved.





#### Introduction

The device is a powerful, high-performance Gigabit Ethernet switch, with all ports capable of 10, 100 or 1000Mbps auto-negotiation operation (NWay), which means the switch could automatically negotiate with the connected partners on the network speed and duplex mode. It is ideal for micro-segmenting large networks into smaller, connected subnets for improved performance, enabling the bandwidth demandling multimedia and imaging applications. Moreover, the 10/100/1000Mbps auto-sensing ability provides an easy way to migrate 10/100Mbps to 1000Mbps network with no pain. Compared to the shared 10Mbps or 1000Mbps networks, the switch delivers a dedicated 10/100/1000Mbps connection to every attached client with no bandwidth congestion issue. This switch also supports auto MDI / MDI-X function. Each port could be used to connect to another switch or hub with no crossover RJ-45 cable.

Store-and-forward switching mode promises the low latency plus eliminates all the network errors, including runt and CRC error packets. To work under full-duplex mode, transmission and reception of the frames can occur simultaneously without causing collisions as well as double the network bandwidth.

The switch provides 9K bytes jumbo frames, which means the frames size is larger than normal 1.5K. With the Jumbo frame function, you can get better network performance, because the switch can send more data at the same time.

The switch is plug-n-play without any software to configure and also fully compliant with all kinds of network protocols.

Before you start to install the switch, check the following contents in this package:

- GSW-0509/GSW-0809 Switch
- One power cord
- User's manual

#### LED Definition

#### GSW-0509 Front Panel



#### GSW-0809 Front Panel



LED	Status	Operation
Power	Steady Green	Power is on
	Off	Power is off
Link/ACT	Steady Green	Port connected
	Blinking Green	The port is transmitting/receiving data

#### Rear Panel

The rear panel of the GSW-0509/GSW-0809 switch consists of a DC power connector and 5/8 10/100/1000Mbps RJ45 Ports. The following figure shows the rear panel of the Switch.

#### GSW-0509



#### GSW-0809



#### Stations Connection

Connect each station to the switch by twisted-pair cable. Plug one RJ-45 connector into a RJ-45 port of the switch, and plug the other RJ-45 connector into the station's network adapter. Power on the switch and then system is ready. For cable selection, refer to the following table.

### Switches Connection

In making a switch interconnection, you could use any port to connect another switch with straight or crossover cable. As all the ports support auto MDI / MDI-X function, using a straight cable to make a switch-to-switch connection is allowed. For cable selection, refer to the following table:

Network Speed	Cable Type	Max. Length
10Mbps	Cat. 3, 4, 5 UTP/STP	100 meters
100Mbps	Cat. 5 UTP/STP	100 meters
1000Mbps	Cat. 5e/6 UTP/STP	100 meters

# Specification

Standard	• IEEE 802.3 10BASE-T
	<ul> <li>IEEE 802.3u 100BASE-TX</li> </ul>
	IEEE 802.3ab 1000BASE-T
	IEEE 802.3x Full Duplex Operation & Flow
	Control
Interface	5/8 * 10/100/1000Mbps RJ-45 Gigabit Ethernet
	Ports (GSW-0509/GSW-0809)
NWay Protocol	10Mbps: Full/Half duplex
Support	100Mbps: Full/Half duplex
	1000Mbps: Full duplex only
MAC Address	1K MAC Address entries (GSW-0509)
Table	4K MAC Address entries (GSW-0809)
Buffer Memory	• 104KBytes (GSW-0509)
	128KBytes (GSW-0809)
Jumbo Frame	9K Byte (GSW-0509/GSW-0809)
Power Supply	Internal Power Supply 100-240 VAC 5V/2A
Temperature	Operating Temperature: 0°C ~40°C
	Storage Temperature : -10°C~70°C
Humidity	Operating Humidity: 10%~90% (non-condensing)
	Storage Temperature: 5%~95%
ЕМІ	CE and FCC class A

## **Technical Support**

Thank you for selecting LevelOne products. LeveOne's website contains the latest user documentation and soft-ware updates for LevelOne products.

Please contact LevelOne Technical Support through our website.

World Wide Web http://global.level1.com/