# 5/8/16-Port 10/100Mbps Fast Ethernet Switch 

User's Manual

## FCC COMPLIANCE STATEMENT

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the instructions provided with the equipment, may cause interference to radio and TV reception. The equipment has been tested and found to comply with the limits for a Class B computing device in accordance with the specifications in Subpart B of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference in a commercial environment. However, there is no guarantee that interference will not occur in a particular installation.

If you suspect this equipment is causing interference, turn your switch on and off while your radio or TV is showing interference to determine the source of the interference.

You can try to correct the interference by one or more of the following measures:

1. Reorient the receiving radio or TV antenna where this may be done safely.
2. To the extent possible, relocate the radio, TV or the other receiver away from the equipment.
3. Plug the computer which has the equipment installed into a different power outlet so that equipment and the receiver are on different branch circuits.

If necessary, you should consult the place of purchase or an experienced radio/ television technician for additional suggestion.

CAUTION : The phone jack cannot be connected to telephone system.

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## 1 Introduction

Congratulations on your purchase of EUSSO's 5/8/16-port desktop Fast Ethernet Switch. This high performance switch provides five/eight/sixteen Fast Ethernet ports to segment network traffic, extend Fast Ethernet connection distance, and convert data packets between different transmission speeds. Importantly it provide the Auto MDI/MDI-X function on all of UTP ports, so you don't worry about whether the cable is straight or cross-over type that you can easily connect it to the other switch or hub.

This switch provides five/eight/sixteen shielded RJ-45 ports with 10Base-T/100BaseTX Auto-negotiation capability. All of UTP ports support full \& half duplex modes which are able to provide 200 Mbps of bandwidth, The auto-negotiation function providing smooth migration from Ethernet to Fast Ethernet.

This switch is typically used to segment network traffics that can improve the network performance by increasing the total bandwidth as illustrated in Figure 1-1.


Figure 1-1 Increase network bandwidth

This switch utilizes stored-and-forward switching architecture that filters and forwards data after the complete data packet is received and examined to be free of errors.

With one set of status LEDs for each individual port, the switch operation status can be easily monitored. Their slim and compact design allows direct placing on the desktop or conveniently mounted on the wall or the side of a desk to accommodate cabling consideration.

## 2 Features \& Specifications

## (1) Features

■ Comply with IEEE 802.3 10Base-T Ethernet and 802.3u 100Base-TX Fast Ethernet Standards.

■ Simple and economical way to bridge 10Base-T network and 100Base-TX network.

■ Easily connect and segment Fast Ethernet hubs or segments.
■All of RJ-45 ports support Auto-MDI/MDI-X function

■All of RJ-45 ports support 10Base-T/100Base-TX and Full-Duplex /Half-Duplex Auto-negotiation function.

■ Support store-and-forward switching architecture.

■ Slim and Compact design

## (2) Specifications

■ Standards : IEEE 802.3 and 802.3u
■ 10/100Mbps Ports :

$$
\begin{aligned}
& 5 \text { Port switch -- RJ-45 } \times 5 \text { Auto-MDI/MDI-X } \\
& 8 \text { Port switch -- RJ-45 } \times 8 \text { Auto-MDI/MDI-X } \\
& 16 \text { Port switch -- RJ-45 } \times 16 \text { Auto-MDI/MDI-X }
\end{aligned}
$$

■ Switching Architecture : Store and Forward
■ Filter/Forward Rate : 148,800 packets/sec.

- MAC Address :

5 Port switch -- 2 K
8 Port switch -8 K
16 Port switch -8 K
■ Buffer :
5 Port switch -- 128KByte
8 Port switch -- 256KByte
16 Port switch -- 512KByte

- Nway Auto-negotiation : all ports

■ Full-Duplex/Half-Duplex : all ports
■ LEDs:
System LED -- Power
Port LED -- Link/Activity, 100/10M

- Dimensions :

$$
\begin{aligned}
& 5 \text { Port switch -- } 127 \times 83 \times 30 \mathrm{~mm} / 5.0 \times 3.27 \times 1.18 \mathrm{in} \text {. } \\
& 8 \text { Port switch }-187 \times 100 \times 30 \mathrm{~mm} / 7.4 \times 3.94 \times 1.18 \mathrm{in} \text {. } \\
& 16 \text { Port switch }--290 \times 100 \times 30 \mathrm{~mm} / 11.4 \times 3.94 \times 1.18 \mathrm{in} \text {. }
\end{aligned}
$$

■ Weight :

$$
\begin{aligned}
& 5 \text { Port switch -- } 180 \mathrm{~g} / 0.401 \mathrm{~b} \text {. } \\
& 8 \text { Port switch -- } 370 \mathrm{~g} / 0.81 \mathrm{~b} \\
& 16 \text { Port switch -- } 480 \mathrm{~g} / 1.06 \mathrm{~b}
\end{aligned}
$$

- Power :

$$
\begin{aligned}
& \text { 5/8 Port switch -- 12V DC, } 0.5 \mathrm{~A} \\
& 16 \text { Port switch -- 12V DC, 1A }
\end{aligned}
$$

■ Operating Temperature : $32-131^{\circ} \mathrm{F}\left(0-55^{\circ} \mathrm{C}\right)$
■ Operating Humidity : 10-95\% (Noncondensing)
■ Emission : FCC Class B, CE Mark \& C-Tick

## 3 Package Contents

- One Fast Ethernet Switch

■ One external power adapter

■ User's manual


Figure 3-1 Package contents

## 4 Physical Description

(1) Panel

## 5-Port Fast Ethernet



Link/Activity LED
Switch


Power Connector


Switch


## 16-Port Fast Ethernet

## Switch



Figure 4-1 Panel description
(2) LED

| LED | Color | Status | Description |
| :---: | :---: | :---: | :---: |
| PWR <br> (Power) | Green | Lit | Power is supplied |
|  |  | Off | No power |
| LNK/ACT <br> (Link/Activity) | Green | Flash | Data packets received |
|  | Off | N valid link is established |  |
|  | Yellow is established |  |  |

Table 4-1 LED description

## 5 Installation

## 1. Operating Environment

This switching hub must be installed and operated within the limits of specified operating temperature and humidity (see previous section under Specifications). Do not place objects on top of the unit. Do not obstruct any vents at the sides of the unit. Do not position the unit near any heating source such as heater, radiator, or direct exposure to sun. Prevent entering of water and moisture into the unit. If necessary, use dehumidifier to reduce humidity.

## 2. Connecting to network devices

The RJ-45 ports on the switch are supported Auto-MDI/MDI-X function which one allow using straight-through or cross-over type to connect this switch to workstation or hub.

Connect one end of the network cable to the RJ-45 port on the rear panel, and connect the other end of the network cable to the RJ-45 port on the network device. Follow the same procedure to connect all the RJ- 45 ports of the switch. The UTP network cables must comply with EIA/TIA 568 specifications and Category 5 standard for 100 Mbps data transmission. Maximum length, using UTP cable, between the switch and connected device is 100 meters ( 300 ft ). Once the network cable is connected to both ends and the attached network device is powered on, the green LNK/ACT LED should be lit.

## 3. Connecting the power

Connect the output end of the power adapter to the power connector on the rear panel of the unit. Connect the power adapter to the power outlet. The green Power LED on the front panel should be lit.


Figure 5-1 Connect the AC power adapter

## 6 Trouble-shooting

## 1. Power LED is not lit

- Check if the power cord is properly connected to the external power adapter and the power outlet. Make sure the DC power jack is firmly plugged into the power socket of the switch.


## 2. Link/Activity is not lit when connect to 100 Mbps device

- Check the power switch of the network device attached to the switch; make sure it is turned ON .
- Check the network cable; make sure it is properly connected to the switch and the network device.
- Check the network cable; make sure the UTP cables comply with EIA/TIA 568 and Category 5 specification.
[!] Contact your dealer if problem persist.

