

**5/8/16/24 Ports**  
**Fast Ethernet Switch**

**User's Guide**

**VER:1.0**

# TABLE OF CONTENTS

## 1 INTRODUCTION

1.1	Unpacking.....	2
1.2	Front Panel. ....	2
1.3	Rear Panel ....	2
1.4	LED Indicators.....	2
1.5	Features.....	3

## 2 PERFORMANCE FEATURES

2.1	Performance Features.....	5
-----	---------------------------	---

## 3 INSTALLATION

3.1	Installation.....	6
3.2	SWITCH to PC.....	6
3.3	HUB(SWITCH) With UP Link (MDI-II) to switch.....	7
3.4	HUB(SWITCH) Without UP Link (MDI-II) to switch.....	7

## 4 APPENDIX

# 1 INTRODUCTION

## 1.1 Unpacking

Open the box and carefully unpacks its contents. The box should contain the following items:

- One Switch
- 4 rubber pads
- One external power adapter (only 5/8 ports switch)
- User's Guide.

If any item is found missing or damaged, please contact your dealer for replacement.

## 1.2 Front Panels

For detail of the LED indicators in the front panel of the switch, refer to the LED Indicator section for detailed information about each of the 5/8/16/24 ports switch's LED indicators.

## 1.3 Rear Panel

There are 24/16/8/5 10/100Mbps MDI-X port Jacks and one DC Power Jack in.

## 1.4 LED Indicators

The LED indicators of the Switch include Power 、 Link/ACT and 100M. The LED indicators are used to facilitate monitoring and troubleshooting of the Switch. The following shows the LED indicators for the Switch along with explanation of each indicator.

LED Indicator	Color	Status	Description
POWER	Green	Light	This indication op when the Switch is turned on
	—	Extinguish	If this indicator is not light, check the AC power connector to ensure proper insertion of the power cord and the power switch is turned on.
LINK/ACT	Green	Light	The port is connected to a Ethernet station
	Green	Blinking	The port is transmitting or receiving data
100M	Green	Light	The port is connected to a 100Mbps Fast Ethernet station or MDI-II
	—	Extinguish	The port is connected to a 10Mbps Fast Ethernet station or MDI-II

### 1.5 Features

The 5/8/16M/24 ports switch combines large dynamic memory allocation with store-and-forward switching to ensure that the buffer is effectively allocated for each port, while controlling the data flow between the transmit and receive nodes to guarantee against all

possible packet loss. The 5/8/16/24 ports switch can detect 10M/100M and full duplex/half duplex mode.

The 5/0/16/24 ports switch is not a managed switch, but it is very easy to use, and it can accelerate small Ethernet workgroup bandwidth.

## 2 PERFORMANCE FEATURES

- 1、 24/16/8/5 UTP/STP ports, and auto-negotiation for any port. This allows for auto sensing of speed (10/100Mbps) there by providing you with automatic and flexible solutions in your network connections.
- 2、 Store-and-forward switching to ensure that the buffer is effectively allocated for each port.
- 3、 Data filtering rate eliminates all error packets. Packet Filtering/Forwarding Rate is 148800bps per port at 100% 100Mbps wire-speed and 14880bps per port at 100% 10Mbps wire-speed.
- 4、 5K MAC address entries table per device for the 5/8/1/24 ports switch.
- 5、 2MB RAM buffer.
- 6、 Support IEEE802.3x for full duplex mode operation, support backpressure for half duplex mode operation.

## 2.1 Performance Features

Generally features	
Criterion	IEEE802.3 10BASE-T Ethernet IEEE802.3u 100BASE-TX/FX Fast Ethernet IEEE802.3 frame type: Translucent
Protocol	CSMA/CD
Data transfer	Ethernet: 10Mbps(semi duplex) 20Mbps(full Duplex) Fast Ethernet: 100Mbps(semi duplex) 200Mbps(full duplex)
Topological structure	Star-network
Network Twisted-pair	10BASE-T: 2-pair UTP Cat3, 4,5(100m) EIA/TIA-568 100-ohm STP (100m) 100BASE-TX: 2-pair UTP Cat5 (100m) EIA/TIA-568 100-ohm STP (100m)
Port amount	8/5 10/100Mbps ports
Physics and setting features	
AC INPUT	7.5V
POWER	5 Watts maximum
Temperature	Operation:0°C~50°C Storage: 0°C~80°C
Humidity	5%~90% no coagulate
EMI	FCC Class A, CE Mark Class A, VCCI Class A, BSMI Class A, C-Tick Class A
Performance	
Transfer mode	Store and forward
EMI Buffer	2M
Filtering Address Table	8K
Packet Filtering/Forwarding Rate	14880pps (10Mbps) per port
	148800pps (100Mbps) per port
MAC Address learning	Max Automatic update time: 5min

### 3 INSTALLATION

- Convenience receptacle and equipment should be within 1.82 meters.

- Check power supply is confirmed the safe Connection.
- Affirms to have the ventilation that is enough, can be very good dissipates heat. Not lay up the heavy object on switch.

### **3.1 Desktop Installation**

When on the top of a table installing the switch, the rubber pad of equipment bottom touches ground first. There is the ventilation space that is enough between the body of equipment and vicinity.

### **3.2 SWITCH to PC**

A PC can be connected to the 5/8/16/24 via a two-pair Category 3, 4, 5 UTP/STP straight cable. The PC can be connected to any of the 8 ports (1x - 8x).

The LED indicators for PC connection depend on the LAN card's capabilities. If LED indicators are not lit after making a proper connection, check the PC LAN card, the cable and the switch conditions and connections.

The following are LED indicator possibilities for a PC to connection:

1. The "100" LED indicator lights green for hookup to 100Mbps speed or distinguish for 10Mbps speed.
2. The "Link/Act" LED indicator lights while connection established.

### 3.3 HUB to Switch

The switch can link with the hub (switch) by way of two (UTP/STP) straight cables twisting of a 3,4,5 and the connection is accomplished from the hub uplink (MDI-II) port to any of the 5/8/16/24 ports switch (MDI-X) ports.

#### **10BASE-TX HUB**

Connect to 10BASE-TX HUB , the LED indicator shows follow:

- 100M LED Extinguishes
- Link/Act LED lights

#### **100BASE-TX HUB**

Connect to 100BASE-TX HUB , the LED indicator shows follow:

- 100M LED lights
- Link/Act LED lights

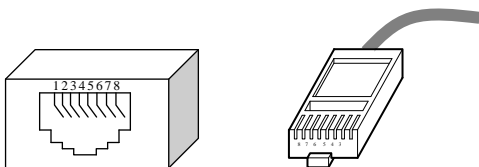
### 3.4 HUB (SWITCH) without Uplink (MDI-II) port

If a HUB or SWITCH is not equipped with an uplink (MDI-II) port, you can use straight cable and crossover cable (please refer the appendix).

## 4 APPENDIX

### • **RJ-45 PIN SPECIFICATION**

When connecting your switch to another switch, a bridge or a hub, a modified crossover cable is necessary. Please review these products for matching cable pin assignment.

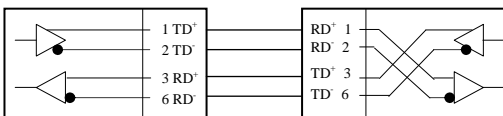


The standard RJ-45 receptacle/connector

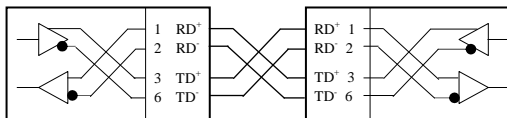
RJ-45 Connector pin assignment	
Contact	Contact
1	Tx + (Transmit)
2	Tx - (Transmit)
3	Rx + (receive)
4	Not used
5	Not used
6	Rx - (receive)
7	Not used
8	Not used

The standard cable, RJ-45 pin assignment

- The following shows straight cable and crossover cable connection:



Straight cable for the 5/8/16/24 ports switch (uplink MDI-II port) to switch/Hub or other devices connection



Crossover cable for 5/8S/16/24 ports switch (MDI-X port) to switch/hub or other network devices (MDI-X port) connection.