

# User's Manual

**5 / 8 Ports**

**10 / 100 Mbps**

**N-Way Auto MDIX**

**Ethernet Switch**

**Wall mount/Desktop**



The Brightest Choice of Networking & Communication

**Fast Ethernet Switch (SOHO)**  
**MIGRATION TO HIGH SPEED NETWORKING**

PM-BM830201

[www.baylan.com](http://www.baylan.com)

## Introduction

This newly redesigned 5Port & 8Port 10/100 Switch can significantly increase your network traffic speed. A switch serves the same function as a hub in a network design tying your network equipment together. But unlike a simple-minded hub, which divides the network's bandwidth among all the attached devices, a switch delivers full network speeds at each port. Installing this cost-effective 5/8Port 10/100 Switch can potentially increase your network speed by five, eight times! It's the perfect way of integrating 10Mbps Ethernet & 100Mbps Fast Ethernet devices too. All ports are auto speed negotiating, & have automatic MDI/MDI-X crossover detection, so you don't have to worry about the cable type. Each port independently negotiates for best speed and half-or full-duplex mode, for up to 200Mbps of bandwidth per port. Fast store-and-forward switching prevents damaged packets from being passed on into the network. The new ultra-compact case design is sure to fit into your workgroup environment. Let the 5/8Port 10/100 Switch kick your 10/100 network into high gear.

## Features

- Complies with the IEEE802.3 10Base-T Ethernet, IEEE802.3u 100Base-TX
- 5/8 ports 10/100Mbps TX Auto-Negotiation Ethernet Switch
- Full/Half-Duplex capability on every TX port
- Supports TP interface Auto MDIX function for auto TX/RX swap
- Automatic Source MAC Address Learning and Aging
- Supports Store & Forward architecture & performs forwarding & filtering
- Broadcast Storming Filter function
- IEEE802.3x flow control for Full-duplex
- Back Pressure function for Half-duplex operation
- Runt and CRC Filtering eliminates erroneous packets to optimize the network bandwidth
- Support to handle up to 1522 bytes packet
- LED indicators for simple diagnostics and management
- Plug and Play

## Specifications

- **Standard**  
IEEE802.3 10Base-T Ethernet  
IEEE802.3u 100Base-TX Fast Ethernet
- **Network Media**  
10Base-T-UTP/STP category 3 or above high grade cable  
100Base-TX-UTP/STP category 5 or above high grade cable
- **Connector:**  
UTP/STP RJ-45 port for 10/100Mbps TX
- **LED indicators:**  
System - Power LED  
Individual port - Link/Activity LEDs

- **Dimensions:**  
135mm(L) x 88mm(W) x 34mm(H) 5 Port  
165mm(L) x 88mm(W) x 34mm(H) 8 Port
- **Temperature:**  
Operating -0°C to 50°C Storage -20°C to 70°C
- **Humidity:**  
Operating -10% to 90%RH Storage -5% to 90% RH
- **Input Power Requirement:**  
9V DC 0.5A
- **Registrations:**  
FCC Part 15 Class A, CE

All brand names are registered trademarks and are properties of their respective companies

## Hardware Description

This section describes the hardware features of the 5/8 Port Switch. Familiarize yourself with its display indicators & ports. Front panel illustrations in this chapter display the unit LED indicators. Before connecting any network device to the Switch read this chapter carefully.

### LED indicators

LED Functions	Color	Descriptions
PWR	Green	Lit: Power on
LNK/ACT	Green	Lit: Indicates the adapter is connected to switch Flash: Indicates data in or out the port

## Hardware Installation

- 1) Place the Switch on a smooth surface
- 2) Connect the output of power cord to the AC-inlet of the Switch
- 3) Connect other IEEE802.3 compatible network device (Hub, Switch, PC) to one port of the Switch using Category 3/4/5 or high grade UTP/STP cabling
- 4) Connect another IEEE802.3 compatible network device (Hub, Switch, PC) to another port of the Switch by following the same process as described in Step3

### Notice:

The cable distance between the Switch and other IEEE802.3 compatible network device should not exceed 100 meters. Make sure the wiring is correct. It can be used category 3/4/5 or high-grade cable in 10 Mbps operation. To reliably operate your network at 100Mbps, you must use an Unshielded/shielded Twisted-Pair (UTP/STP) Category 5 or high grade cabling. While a category 3 or 4 cable may initially seem to work, it will soon cause data loss.

All kinds of IEEE802.3 compatible network devices (Hub, Switch, PC) can connect to the Switch by using straight-through wires or crossover wires because of Switch's auto MDIX function.

## Hardware Troubleshooting

This chapter contains information to help you solve problems. If the Switch is not functioning properly, make sure the Switch was set up according to instructions in this manual.

### 1. **The Power LED is not lit**

#### *Solution:*

- a. Check if the AC power cord is well connected. Try to unplug and plug back the power cord to the LAN Switch or try another power cord.
- b. Check if the AC power source is in good condition.

### 2. **The Link LED is not lit**

#### *Solution:*

- a. Make sure the Switch configuration is consistent with the connecting device.
- b. Check the cable connections.
- c. Make sure the cable distance between the Switch and other IEEE802.3 compatible network device should not exceed 100 meters.

### 3. **Performance is bad**

#### *Solution:*

- a. Check the full duplex status of the Ethernet Switching. If the Ethernet Switching is set to full duplex and the partner is set to half duplex, then the performance will be poor.
- b. Make sure the cable between the switch and other IEEE802.3 compatible network device is Category 5 or high-grade cable UTP/STP at 100Mbps operation.

### 4. **Some stations can't talk to other stations located on the other port**

#### *Solution:*

- a. Check status of the Link LED to make sure the link is correct.
- b. Make sure that the workstation's network configuration is correct, modify the network configuration of workstation if needed.
- c. Please reset the switch if needed.

## FCC Statement

Every 10/100 Switch has been tested and complies with the limits for a Class B 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 generates, uses, and can radiate radio frequency energy and, if not installed and used according to 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 is found 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:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment/devices.
3. Connect the equipment to an outlet other than the receiver.
4. Consult a dealer or an experienced radio/TV technician for assistance.