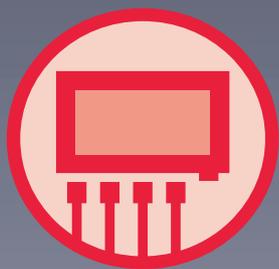


16 Port Nway Fast Ethernet Web Smart Switch

Model: 065-7532



Active

User's Guide

SIGNAMAX[™]
CONNECTIVITY SYSTEMS

FCC Warning

This device has been tested and found to comply with limits for a Class B digital device, pursuant to Part 2 and 15 of 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 and radiates radio frequency energy and, if not installed and used in accordance with the user's manual, it may cause interference in which case users will be required to correct interference at their own expenses.

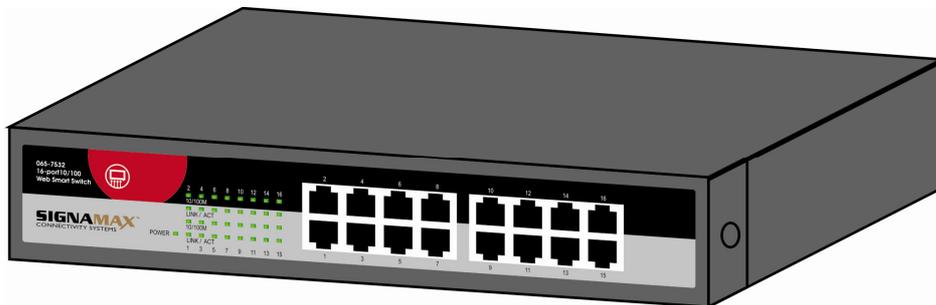
CE Warning

This is a Class B product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.

Introduction

065-7532 switch provides 16 10/100M ports. 065-7532 switch was designed for easy installation and high performance in an environment where traffic is on the network and the number of users increases continuously.

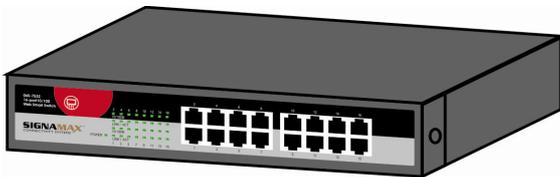
The compact rigid desktop size was specifically designed for small to medium workgroups. 065-7532 switch can be installed where space is limited; moreover, it provides smooth network migration and easy upgrade to network capacity.



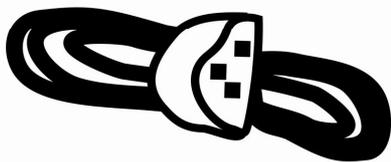
Package Contents

Before you start to install this switch, please verify your package that contains the following items:

- One 065-7532 Fast Ethernet Switch
- One Power Cord
- One CD with User's Manual



16 Port Switch



Power Cord



CD with
User's Manual

Note: If any of these items is found missing or damaged, please contact your local supplier for replacement.

Key Features

- 16 Port 10/100M Nway (Auto-negotiation) Switch
- 11" Desktop size with metal case
- Can be installed in a 19" cabinet by rack-mount kits
- Auto-learn of networking configurations
- Auto-detect full/half-duplex modes for any port
- Dedicated full-duplex 200Mbps bandwidth
- Store-and-Forward switching methods
- IEEE 802.3x flow control for full-duplex and back-pressure flow control for half-duplex
- Non-blocking & Non-head-of-line blocking full wire speed forwarding
- Auto-MDI/MDI-X function for any port
- Smart plug & play

Front Panel (LEDs)

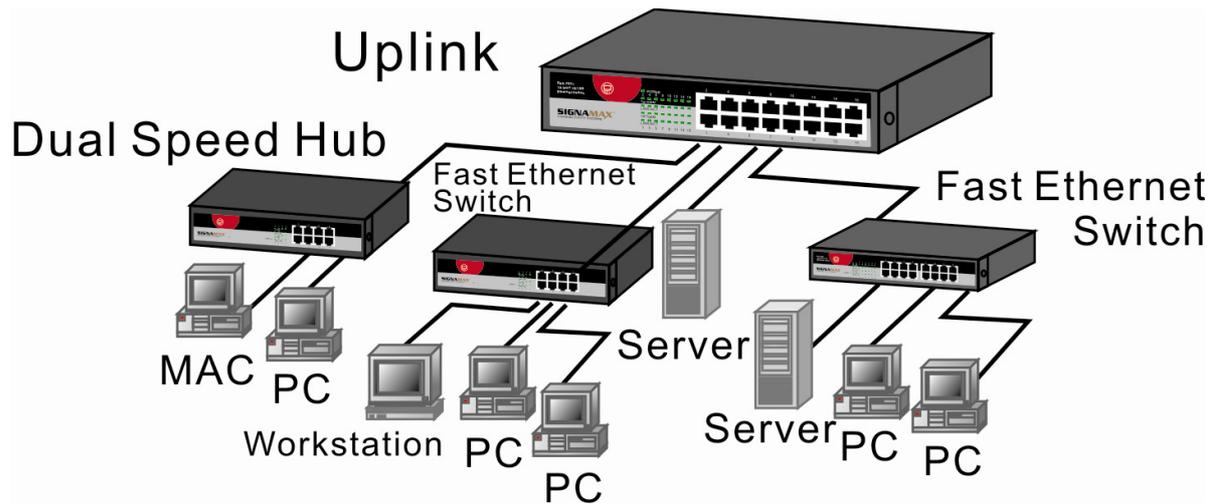
LED Indicators of 16 Port 10/100M Switch

LED	Status	Description	No. Of LED
Power	On	Power on	Power
10/100M	On	Port is on the 100M status	16 (1~16)
	Off	Port is on the 10M status	16 (1~16)
LINK/ACT.	On	10/100Mbps port for connection	16 (1~16)
	Flashing	10/100Mbps for data activating	16 (1~16)

Connections

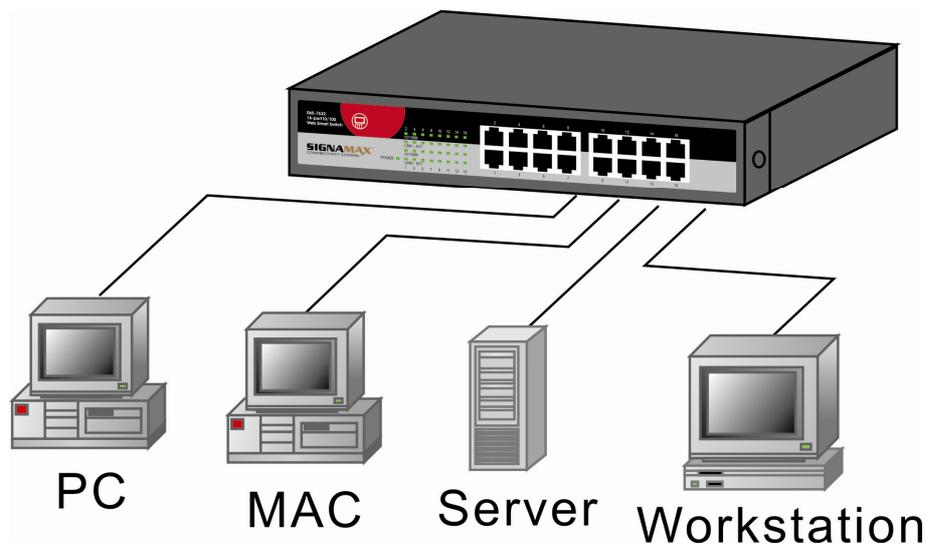
Switch/Hub to 065-7532 Fast Ethernet Switch

065-7532 switch provides automatic crossover detection functionality for any port. It is simple and friendly to up-link to another switch without crossover cable.



PC/Other devices to 065-7532 Fast Ethernet Switch

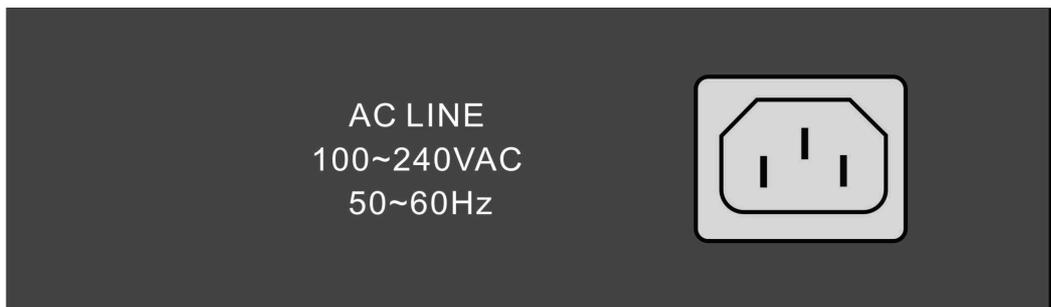
Via a twisted pair cable straight through, 065-7532 switch can be connected to PCs, servers and other network devices.



Rear Panel (Power)

AC input

AC input (100~240V/AC, 50~60Hz) UL Safety



Technical Specifications

Standards	IEEE 802.3 10BaseT IEEE 802.3u 100BaseTX IEEE 802.3x Flow control
Features	Number of Ports: 16 MAC Address: 4K Buffer Memory: 1.5 Mb Method: Store and Forward
Filtering/ Forwarding Rates	100Mbps port – 148,800pps 10Mbps – 14,880pps
Transmission Media	10BaseT Cat. 3, 4, 5 UTP/STP 100BaseTX Cat. 5 UTP/STP
LED Indicators	Per Port: LINK/ACT, 10/100M Per Unit: Power
Power Requirement	100~240V/AC, 50~60Hz
Power Consumption	9.2 Watts (Max)
Dimensions	266 × 160 × 44 mm (L x W x H)
Weight	1.40 kg

Operating Temperature	0 to 55°C
Storage Temperature	-20 to 90°C
Humidity	10 to 90% RH (non-condensing)
Certifications	FCC Class B, CE

Web Smart Switch

Configure

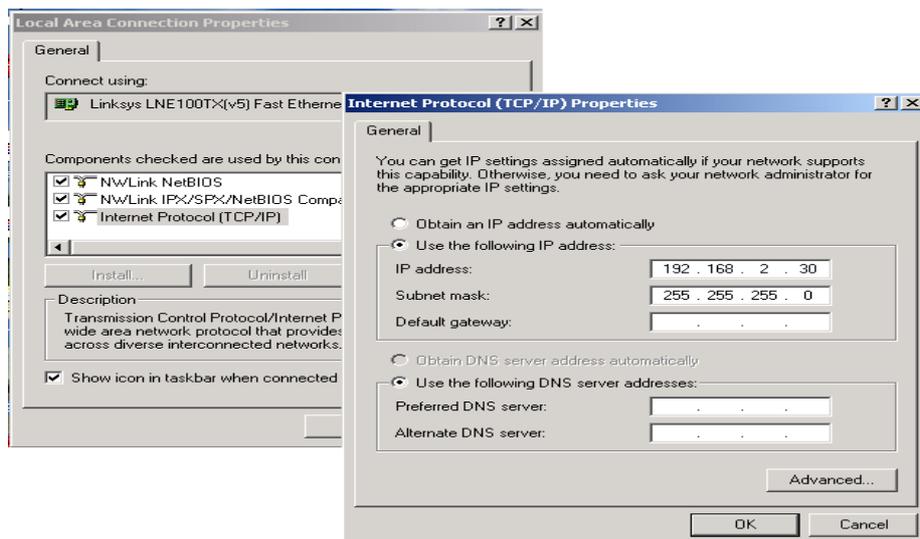
Please follow the steps to configure this Web Smart switch.

Step 1:

Use a twisted pair cable to connect this switch to your PC.

Step 2:

Set your PC's IP to 192.168.2.xx.



Step 3:

Open the web browser (like IE...), and go to 192.168.2.1 site, and then you will see the login screen.



USER LOG IN

Site: 192.168.2.1

ID: admin

Password: ●●●●●●

OK

Key in the user ID and the password to pass the authentication,

IP: 192.168.2.1
ID: admin
Password: admin

After the authentication procedure, the home page shows up.

Step 4:

On the following home page, select the configuration by clicking the icon. It includes,

- Administrator
- Port Management
- VLAN Setting
- QoS Setting
- Port Security
- Logout

The screenshot shows the configuration page for a 16-Port 10/100Mbps Modular Fast Ethernet Switch. The page has a dark blue header with the title "16-Port 10/100Mbps Modular Fast Ethernet Switch". Below the header is a light blue sidebar with a list of navigation options: Administrator, Port Management, VLAN Setting, Trunk Setting, QoS Setting, MAC Address Configuration, and Logout. The main content area is white and features a welcome message: "Welcome to Use 16-Port 10/100Mbps Modular Fast Ethernet Switch" followed by "16 Ports plus 2 Expansion". Below this, there are three columns of features: "Flow metering" (Bandwidth control), "VLAN Support" (VLAN Groups), and "Basic Feature" (Embedded HTTP web Management, Configuration Recovery, TFTP Software upgradeable, Auto-logout Security, Password security).

Administrator: Authentication Configuration

16-Port 10/100Mbps Modular Fast Ethernet Switch

<ul style="list-style-type: none"> Administrator <ul style="list-style-type: none"> <li style="color: #c00000;">Authentication Configuration System IP Configuration System Status Load default setting Firmware Update Port Management VLAN Setting Trunk Setting QoS Setting MAC Address Configuration Logout 	<h3 style="margin: 0;">Authentication Configuration</h3> <table border="1" style="width: 100%; border-collapse: collapse; margin-top: 10px;"> <thead> <tr style="background-color: #d3d3d3;"> <th style="width: 40%;">Setting</th> <th style="width: 60%;">Value</th> </tr> </thead> <tbody> <tr> <td>Username</td> <td><input type="text" value="admin"/> max:15 Characters</td> </tr> <tr> <td>Password</td> <td><input type="password" value="•••••"/> max:15 Characters</td> </tr> <tr> <td>Confirm Password</td> <td><input type="password" value="•••••"/></td> </tr> <tr> <td colspan="2" style="text-align: right; padding-top: 5px;"> <input type="button" value="Update"/> </td> </tr> </tbody> </table>	Setting	Value	Username	<input type="text" value="admin"/> max:15 Characters	Password	<input type="password" value="•••••"/> max:15 Characters	Confirm Password	<input type="password" value="•••••"/>	<input type="button" value="Update"/>	
Setting	Value										
Username	<input type="text" value="admin"/> max:15 Characters										
Password	<input type="password" value="•••••"/> max:15 Characters										
Confirm Password	<input type="password" value="•••••"/>										
<input type="button" value="Update"/>											

You can change the user name and the password, and click “Update” to confirm the new change. After that, you can reset this switch by power off and then power on to take the new user name and the password effectively.

Administrator: System IP Configuration

16-Port 10/100Mbps Modular Fast Ethernet Switch

- Administrator
 - Authentication Configuration
 - System IP Configuration
 - System Status
 - Load default setting
 - Firmware Update
- Port Management
- VLAN Setting
- Trunk Setting
- OoS Setting
- MAC Address Configuration
- Logout

System IP Configuration

Setting	Value
IP Address	<input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="2"/> . <input type="text" value="1"/>
Subnet Mask	<input type="text" value="255"/> . <input type="text" value="255"/> . <input type="text" value="255"/> . <input type="text" value="0"/>
Gateway	<input type="text" value="192"/> . <input type="text" value="168"/> . <input type="text" value="2"/> . <input type="text" value="254"/>

You can change the IP address by typing the new IP address and click “Update” to confirm the new change, and then the message will show “Setting Process OK!!”, After that, you should reset this switch by power off and then power on it to complete the new change.

Administrator: System Status

16-Port 10/100Mbps Modular Fast Ethernet Switch

- Administrator
 - Authentication Configuration
 - System IP Configuration
 - **System Status**
 - Load default setting
 - Firmware Update
- Port Management
- VLAN Setting
- Trunk Setting
- QoS Setting
- MAC Address Configuration
- Logout

System Status

MAC Address	00:03:cd:02:01:a7
Number of Ports	16
Comment	<input style="width: 80%;" type="text" value="switch"/> <input type="button" value="Update"/>
System Version	IP1726_ETEN16 v283.2.060921

It shows this switch MAC address, and you can select “Back to the last display” or “Logout” when the time’s out.

Administrator: Load Default Setting to EEPROM

The screenshot shows the web management interface for a 16-Port 10/100Mbps Modular Fast Ethernet Switch. The page title is "16-Port 10/100Mbps Modular Fast Ethernet Switch". On the left, there is a navigation menu under "Administrator" with the following items: Authentication Configuration, System IP Configuration, System Status, **Load default setting** (highlighted), and Firmware Update. Below this are "Port Management", "VLAN Setting", "Trunk Setting", "QoS Setting", "MAC Address Configuration", and "Logout". The main content area is titled "Load Default Setting" and contains a single "Load" button.

You can click “Load” to load the new factory default setting, and then reset the switch by power off and then power on to take it effectively.

Administrator: Firmware Update

The screenshot shows the web management interface for a 16-Port 10/100Mbps Modular Fast Ethernet Switch. The page title is "16-Port 10/100Mbps Modular Fast Ethernet Switch". On the left, there is a navigation menu under "Administrator" with the following items: Authentication Configuration, System IP Configuration, System Status, Load default setting, **Firmware Update** (highlighted), "Port Management", "VLAN Setting", "Trunk Setting", "QoS Setting", "MAC Address Configuration", and "Logout". The main content area is titled "Firmware Update" and contains the following text: "Before updating the firmware, you should install the TFTP+DHCP server on your PC (web management station). Once completing the software installation and configuring the DHCP program as shown in the document, you should click the [update] button. The firmware will be update in one to two minutes." Below this text is a warning: "You'd better carefully read the document regarding the update procedure, preventing the unexpected problem form occurring." At the bottom of the main content area is an "Update" button.

Follow the instruction on the screen to update the new firmware. Please contact with your sales agents to get the latest firmware information.

Port Management: Port Control Configuration

16-Port 10/100Mbps Modular Fast Ethernet Switch

Port Configuration

Port No.	Tx & Rx	Link Capability	Duplex	Pause	Backpressure
01	Enable	Auto-Nego.	Full	Enable	Enable

Update

Port	Current Status				Setting Status				
	Link	Speed	Duplex	FlowCtrl	Tx&Rx	Capability	Duplex	Pause	Backpressure
1	---	---	---	---	Enable	Auto	full	on	on
2	---	---	---	---	Enable	Auto	full	on	on
3	---	---	---	---	Enable	Auto	full	on	on
4	---	---	---	---	Enable	Auto	full	on	on
5	---	---	---	---	Enable	Auto	full	on	on
6	---	---	---	---	Enable	Auto	full	on	on
7	---	---	---	---	Enable	Auto	full	on	on
8	---	---	---	---	Enable	Auto	full	on	on

Select the “Port No.” which you want to configure the mode below,

“Capability” - Auto-Nego. or force on 100M or 10M mode

“Duplex” - you can select the port is full/half-duplex or enable/disable this port.

Port Management: Port Mirroring

16-Port 10/100Mbps Modular Fast Ethernet Switch

- Administrator
- **Port Management**
 - Port Configuration
 - **Port Mirroring**
 - Bandwidth Control
 - Broadcast Storm Control
- VLAN Setting
- Trunk Setting
- QoS Setting
- MAC Address Configuration
- Logout

Port Mirroring

Destination Port	01							
Monitored Packets	Disable							
Source Port	1	2	3	4	5	6	7	8
	<input type="checkbox"/>							
	9	10	11	12	13	14	15	16
	<input type="checkbox"/>							

1. Only one destination port is active all the time.
 2. If the Port number of source port is the same as the destination port, the source port will be ignored automatically by program.

Port mirroring is used to mirror traffic from the source port to a destination port for analysis.

Select the destination port from port 1 to port 16, and select the source port by click the checking box of the port.

Port Management: Bandwidth Control

16-Port 10/100Mbps Modular Fast Ethernet Switch

Bandwidth Control

If the link speed of selected port is lower than the rate that you setting, this system will use the value of link speed as your setting rate.

Port No	Tx Rate	Rx Rate	Link Speed	Port No	Tx Rate	Rx Rate	Link Speed
1	100M	100M	100M	9	100M	100M	100M
2	100M	100M	100M	10	100M	100M	100M
3	100M	100M	100M	11	100M	100M	100M
4	100M	100M	100M	12	100M	100M	100M

Select the “Port No.” which you want to configure the mode below,

“TX Rate” is meant you can set the maximum transmission rate of this selected port and choose the full speed or in 128K/256K/512K/1M/2M/4M/8M speed.

“RX Rate” is meant you can set the maximum receiving rate of this selected port and choose full speed or in 128K/256K/512K/1M/2M/4M/8M speed.

Port Management: Broadcast Storm Control

16-Port 10/100Mbps Modular Fast Ethernet Switch

Broadcast Storm Control

Enable	<input type="checkbox"/>
Threshold	<input type="text" value="127"/> 1~127

This value indicates the number of broadcast packet which is allowed to enter each port in one time unit. One time unit is 10 ms for 100Mbps speed and 100 ms for 10Mbps speed

You can enable or disable the broadcast storm protection feature by clicking “Update”.

VLAN Setting: Group VLAN Setting

16-Port 10/100Mbps Modular Fast Ethernet Switch

Group VLAN Setting

Group No	<input type="text" value="01"/>							
Member Port	01	02	03	04	05	06	07	08
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Member Port	09	10	11	12	13	14	15	16
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Comment	<input type="text" value="-----"/>							

Group	VLAN Member																Comment
-	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	-
1	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	v	111111
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

There are 8 VLAN groups, 01, 02, 03, 04, 05, 06, 07, 08 can be used.

You can select a group, and then click the port number which you want to put it into the selected VLAN group.

VLAN Setting: Multi to 1 Setting

16-Port 10/100Mbps Modular Fast Ethernet Switch

Multi to 1 Setting

Destination PortNo:

Current Setting: Port:-

Disable Port	01	02	03	04	05	06	07	08
	<input type="checkbox"/>							
	09	10	11	12	13	14	15	16
	<input type="checkbox"/>							

1. A example for Multi-to-1 structure

Destination Port/ Current Setting

Ports **VLAN Groups**

01 1

02 2

⋮ ⋮

This is a special design for easily setting the switch VLAN into “VLAN Per Port“. After this setting, all ports can only connect to the destination port.

Trunk Setting: Trunk Configuration

16-Port 10/100Mbps Modular Fast Ethernet Switch

Administrator
Port Management
VLAN Setting
Trunk Setting
QoS Setting
MAC Address Configuration
Logout

Trunk Configuration

Trunk Hash Algorithm Selection		<input checked="" type="radio"/> Port ID <input type="radio"/> SA <input type="radio"/> DA <input type="radio"/> SA & DA			
Trunk0	Port1	Port2	Port3	Port4	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Trunk1	Port5	Port6	Port7	Port8	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

1. Selecting one port for a trunk will be treated as a void setting.
2. Don't connect both trunk channels to a single switch, this will cause unlimited traffic loop once a broadcast packet is coming to any port of the switch.

Set up port trunk groups, and click the port number you want to include it into the same group. There are two groups to choose, and the maximum of ports for one group is 4.

QoS Setting: Priority Mode

16-Port 10/100Mbps Modular Fast Ethernet Switch

Administrator
Port Management
VLAN Setting
Trunk Setting
QoS Setting
 Priority Mode
 Class of Service Configuration
 MAC Address Configuration
 Logout

Priority Mode

Priority Mode	
Mode	<input checked="" type="radio"/> First-In-First-Service <input type="radio"/> All-High-before-Low <input type="radio"/> Weight-Round-Robin Low weight: <input type="text" value="0"/> High weight: <input type="text" value="0"/>

When the queue weight is set to "0", it will be treated as "8".

Click the priority mode you want, there are three priority modes to choose.

QoS Setting: Class of Service Configuration

16-Port 10/100Mbps Modular Fast Ethernet Switch

- ▶ Administrator
- ▶ Port Management
- ▶ VLAN Setting
- ▶ Trunk Setting
- ▶ QoS Setting
 - Priority Mode
 - **Class of Service Configurator**
- ▶ MAC Address Configuration
- ▶ Logout

Class of Service Configuration

=Enable High Priority

Port No\Mode	Port Base	VLAN Tag	IP / DS	Port No\Mode	Port Base	VLAN Tag	IP / DS
1	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	9	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	10	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	12	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	13	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	14	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	15	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	16	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

As long as any of three COS schemes(802.1Q VLAN Tag,IP TOS/DS or Port Base) is mapped to "high", the data packet will be treated as the high priority.

You can select the class of service for each port.

MAC Address Configuration: MAC Address Configuration

16-Port 10/100Mbps Modular Fast Ethernet Switch

- ▶ Administrator
- ▶ Port Management
- ▶ VLAN Setting
- ▶ Trunk Setting
- ▶ QoS Setting
- ▶ **MAC Address Configuration**
- ▶ Logout

MAC Address Configuration

Port No	MAC Address																																	
1	<table border="1"> <tr><td>ff</td><td>:</td><td>ff</td><td>:</td><td>ff</td><td>:</td><td>ff</td><td>:</td><td>ff</td><td>:</td><td>ff</td></tr> <tr><td>ff</td><td>:</td><td>ff</td><td>:</td><td>ff</td><td>:</td><td>ff</td><td>:</td><td>ff</td><td>:</td><td>ff</td></tr> <tr><td>ff</td><td>:</td><td>ff</td><td>:</td><td>ff</td><td>:</td><td>ff</td><td>:</td><td>ff</td><td>:</td><td>ff</td></tr> </table> <p style="text-align: center;"><input type="button" value="Read"/></p>	ff	:	ff	ff	:	ff	ff	:	ff																								
ff	:	ff	:	ff	:	ff	:	ff	:	ff																								
ff	:	ff	:	ff	:	ff	:	ff	:	ff																								
ff	:	ff	:	ff	:	ff	:	ff	:	ff																								

Select Port Filter

Port No	Filter Status	Port No	Filter Status
1	Disable	9	Disable
2	Disable	10	Disable
3	Disable	11	Disable
4	Disable	12	Disable
5	Disable	13	Disable
6	Disable	14	Disable
7	Disable	15	Disable

Select the port number which you want to enable/disable the MAC address. For the filtering function of the port, please click "Update" to take the setting effectively.

Logout: You can click "Logout" to logout.

