User's Manual

EtherFast 10/100M Smart Switch

Model No.: SP616DB / SP624DB

http://www.micronet.info

Package Contents

Verify your package contains the following items:

- SP616DB/SP624DB 10/100 Mbps Smart Switch

- User's Manual

- Power Cord

- Rack Ears with Screws and Rubber Foots

Features

Micronet SP616DB/SP624DB has the following key features:

- Provide 16 (SP616DB) or 24 (SP624DB) RJ-45 ports of 10/100 Mbps, auto negotiation

- Provide one expansion slot for optional fiber optic module

- Provide one web-based console port

- Provide 2K (SP616DB)/10K (SP624DB) MAC address and 2M (SP616DB)/1.5M (SP624DB) buffer memory

- Provide 16 (SP616DB) or 24 (SP624DB) port-based VLAN groups to segment network

- Provide 2 trunking groups to aggregate bandwidth

- Provide auto-uplink function, no more cross-over cable

- Support store-and-forward mechanism

- Support non-blocking wire speed forwarding rate

- Suitable for rack-mount installation

Physical Description

Front Panel

Figure 1: Front Panel of SP616DB

Figure 2: Front Panel of SP624DB

POWER
This LED comes on when the switch is properly connected to power and turned on.

TX/FX Push Button
The push button is located at the right side of port 16 (SP616DB) or port 24 (SP624DB).
Release this button to use RJ-45 port 16 (SP616DB) or port 24 (SP624DB), and press this button
to use the 100BASE-FX module.

IP RESET Push Button
Press the front panel IP RESET push button for around five seconds to reset the Switch back to
default IP Address (192.168.1.10).

Port Status
The RJ-45 ports are numbered from 1 to 16 (SP616DB), or from 1 to 24 (SP624DB).

LEDs

Label		Status	Indication
POWER		On	Power is feeding in.
		Off	Power is switched off.
			Improper connection.
CONSOLE	LNK	On	A valid network connection. LNK stands for LINK.
		Off	No connection.
	ACT	Flashing	Transmitting or receiving data. ACT stands for ACTIVITY.
		Off	Neither connection nor activity.
PORT	LNK/ACT	On	A valid network connection. LNK stands for LINK.
		Flashing	Transmitting or receiving data. ACT stands for ACTIVITY.
		Off	Neither connection nor activity.
	SPEED	On	A valid 100Mbps connection.
		Off	A valid 10Mbps connection.
FX	LNK	On	A valid network connection. LNK stands for LINK.
		Off	No connection.
	ACT	Flashing	Transmitting or receiving data. ACT stands for ACTIVITY.
		Off	Neither transmitting nor receiving data.

Table 1: SP616DB/SP624DB LED Indication

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Installation

Preparing the Site

Select the site that meets the following requirements:

Characteristic	Requirement
Temperature	32 to 104˚F (0 to 40˚C)
Humidity	Maximum relative humidity of 90%, non-condensing
Condition	At least 1.8 meters (6 feet) to the nearest source of electromagnetic noise
Ventilation	Minimum 3 inches (0.25 feet) of clearance around the ventilation openings
Power Outlet	Within 1.8 meters (6 feet) to the switch

Table 2: SP616DB / SP624DB Operating Requirements

Settling the Switch
- *Mounted to 19-inch standard rack*
  Locate the accessories provided in the product package. Use the rack-mount brackets and screws to install the switch into any EIA 19" standard rack.
  Step 1: Attach the brackets to each side of the chassis.
  Step 2: Apply the screws to each side and secure them tightly.
  Step 3: Carefully position the switch into the rack.
  Step 4: Align the brackets to the side holes on the rack and use rack screws to secure the chassis with the rack.
  Step 5: Proceed to the "Connecting to Power" section.

- *Desktop or any flat surface*
  The switch can sit on desktop or any flat surface with adequate space and ventilation. If you want to place it onto a shelf, make sure the shelf can withstand the weight of the switch.
  Step 1: Simply put the switch on the desired place.
  Step 2: Ensure the switch receives good ventilation.
  Step 3: Proceed to the "Connecting to Power" section.

Installing the Module (optional)
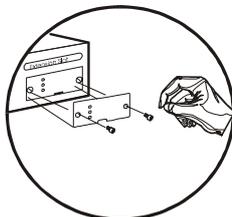Consult the following illustrations for installation.
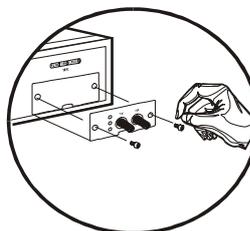

Figure 3: Removal of cover plate   Figure 4: Fiber module being installed

Step 1: Make sure the power is switched off. The module is not hot-swappable.
  ⓘ *It may cause electric shock or any possible damage to the switch if the power is not switched off.*

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Step 2: Remove the module from the static-free container.
Step 3: Unscrew the cover plate of the expansion slot.
    (The slot for single-port module is located at the right side of the switch.)
Step 4: Remove the plate.
    (Keep it for future use in case you decide to remove this module later.)
Step 5: Carefully slide the module into the slot, along the internal plastic guide rails.
Step 6: Once it is fully slid in, snap in the module to make a proper connection.
Step 7: Fasten the module screws then.
Step 8: Finally, turn on the power.

Connecting to Power

Locate the provided AC power cord.
Step 1: Connect the AC power cord to the receptacle at the back of the switch.
Step 2: Attach the plug into a standard AC outlet with a voltage ranging from 100 to 240 VAC.
Step 3: The power LED on the front panel will come on then.

Connecting to Network

Step 1: First, ensure the power of the switch (and end devices) is turned off.
    ⓘ *It may cause electric shock or any possible harm to you if the power is not switched off.*
Step 2: Prepare cable with corresponding connectors for each type of port in use.
Step 3: Connect one end of the cable to the switch and the other end to a desired device.
Step 4: Once the connections between two end-devices are made successfully, turn on the power.
Now the switch is operational.

Switch Configuration

Setting UP Console Port Connection

SP616DB/SP624DB provides one RJ-45 console port and a web-based interface, allowing users to configure and manage the switch remotely from web browser.

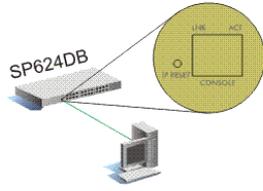1. Connect UTP/STP cable to SP616DB/SP624DB's console port.
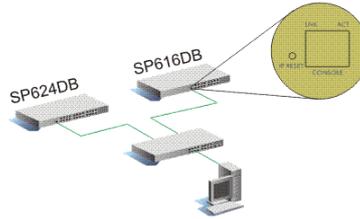

Figure 5: Connect directly to PC   Figure 6: Connect to PC via another switch

2. In the web browser, specify the default IP address of SP616DB/SP624DB (**192.168.1.10**).
   Default User Name: **admin**
   Default Password: (null)
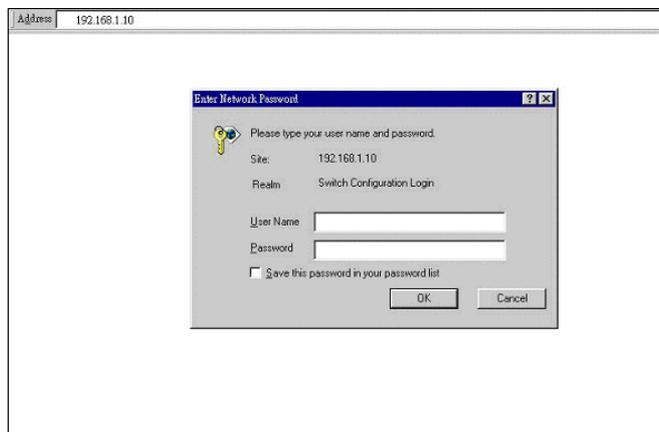
Figure 7: Switch Configuration Login

Main Menu

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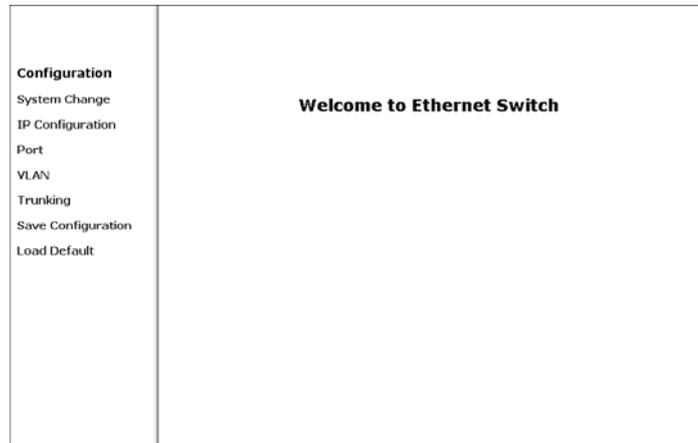
Figure 8: Main menu

System Change

The **System Change** parameters can be displayed by clicking the **System Change** button in the left sub-menu.
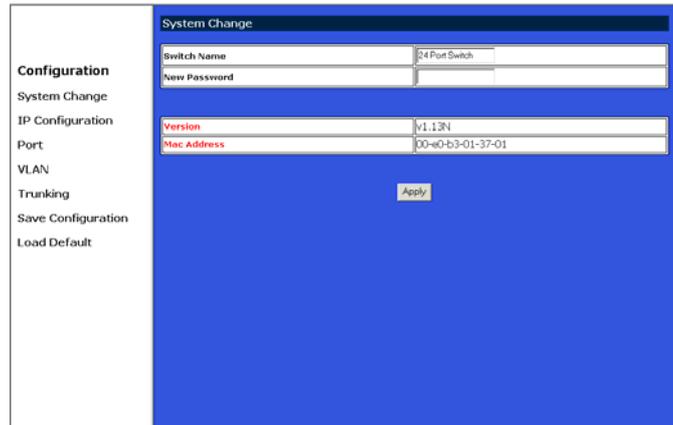

Figure 9: System Change

- Switch Name: Type a switch name and replace the current switch name with a new one. **(Please restart your Computer once the Switch Name is replaced and saved under "Save Configuration "by the new name)**.
  Note: only "a-z ", "A-Z", "0-9", "under line" & "Space" can be acceptable, totally can not exceed 16 characters.
- Password: Enter a user-defined password and change the factory default password.
  Note: only "a-z ", "A-Z", "0-9", "under line" & "Space" can be acceptable, totally can not exceed 16 characters.
- Apply: Click the **Apply** button and apply the new System settings.

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IP Configuration

Figure 10: IP Configuration

- Refresh: Click the **Refresh** button and refresh back to the last saved IP Configurations.
- IP Address, Netmask, Default Gateway: You can see and change the IP Address, Netmask, and Default Gateway of the Ethernet Switch.
- Apply: Click the **Apply** button and apply the new IP Configurations.

Port

Figure 11: Port

- Refresh: Click the **Refresh On** or **Refresh Off** button to or not to refresh back to the last saved settings of the ports.
  *Note: it is recommended to change the **Refresh On** button to **Refresh Off** while you change the settings of the ports. The **Refresh On** will refresh the settings of the ports shown on the screen around every ten seconds.*
- Mode: Choose **AUTO, 10HD, 10FD, 100HD** or **100FD** for the ports.
- Flow Control: Choose **Enable** or **Disable** to enable or disable the flow control of the ports.
- Transmit / Receive: Choose **On** or **Off** to turn on or off transmit / receive of the ports.
- Apply: Click the **Apply** button and apply the new settings of the ports.

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VLAN

Figure 12: VLAN

- VLAN: Click and choose the ports to be added into the VLAN groups.
- Apply: Click the **Apply** button and apply the new settings of the VLAN groups.
  Note: all Ports have to be selected to one of the VLAN Groups, those Port/Ports were not selected will be notified by the alarm message which shows "Non-Identify VLAN Group ".

Trunk
SP616DB:

Figure 13: Trunk of SP616DB

- Disable: Click and choose the **Disable** to disable the Trunk Group 1 or Trunk Group 2.
- Trunk Group 1: Click and choose the **Port 1, 2** to be added into the Trunk Group 1.
- Trunk Group 2: Click and choose the **Port 9, 10** to be added into the Trunk Group 2.
- Apply: Click the **Apply** button and apply the new settings of the Trunk Groups.
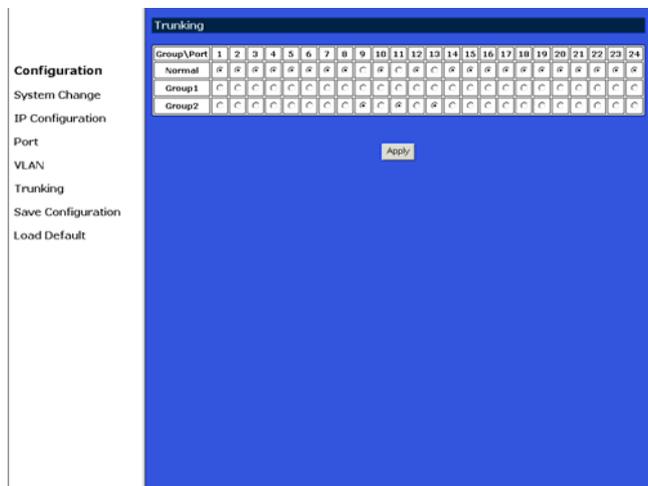
SP624D:

Figure 14: Trunk of SP624DB

- Trunk Group 1: Click and choose any four ports to be added into the Trunk Group 1.
- Trunk Group 2: Click and choose any four ports to be added into the Trunk Group 2.
- Apply: Click the **Apply** button and apply the new settings of the Trunk Groups.
  Note: each Trunk Group can not be selected more than four ports, the alarm message will show "Non-Identify Trunk Group", if it's exceeded.

Save Configuration

Figure 15: Save Configuration

- Click **Save Configuration**.
- Click the **Ok** or **Cancel** button to or not to save the configurations.
  *Note: the **Cancel** button will discard any data you have changed since the last "Save" operation. Without clicking **Ok** button, the switch does not save any changes you may have made.*
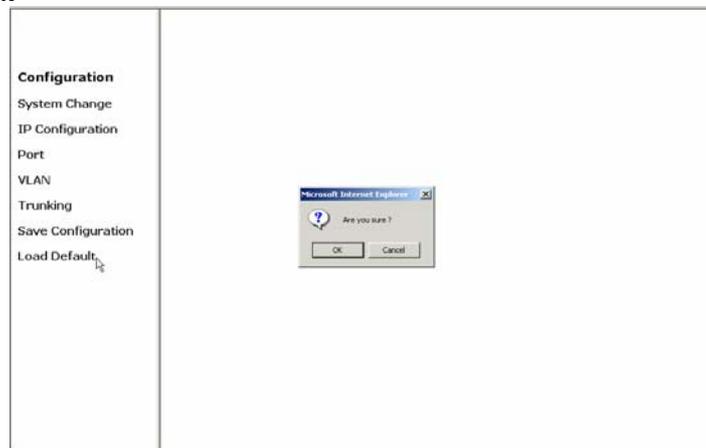
Load Default

Figure 16: Load Default

- Click **Load Default**.
- Click the **Ok** or **Cancel** button to or not to load the default settings.
  *Note: once the **Ok** button is selected, all last saved **Port**, **VLAN**, and **Trunking** setting will revert back to the default settings.*

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Specifications

IEEE standard	IEEE 802.3,10BaseT IEEE 802.3u,100BaseTX/FX
Port	SP616DB: 16 10/100 Mbps ports SP624DB: 24 10/100 Mbps ports
Speed	200 Mbps full-duplex 100 Mbps half-duplex
Dimension	440 × 207 × 44 mm rack-mount size
Weight	SP616DB: 1.94 kg SP624DB: 2.07 kg
Power Input	100 - 240 VAC, 50 - 60 Hz
Input Fuse	SP616DB: 3.3VDC, 2.5A SP624DB: 3.3VDC, 5A; 5V, 1A
Power Consumption	SP616DB: 8.25W Max. SP624DB: 21.5W Max.
Operating Temperature	32 to 104˚F (0 to 40˚C)
Storage Temperature	-13 to 158˚F (-25° to 70°C)
Humidity	10 - 90%, non-condensing
Emission	FCC part 15 Class A, CE Mark

$C\epsilon$ FC

P/N 2300-0180