1. Package Content

Thank you for purchasing PLANET 16/24-Port 10/100Mbps Unmanaged Fast Ethernet Switch, FNSW-1601 / FNSW-2401. The term **"Fast Ethernet Switch"** mentioned in this user's manual refers to the FNSW-1601 / FNSW-2401.

The box should contain the following items:

- The Fast Ethernet Switch x 1
- User's Manual x 1
- Power Cord x 1
- Rubber Feet x 4
- Two rack-mounting brackets with attachment screws x 8

If any of these are missing or damaged, please contact your dealer immediately; if possible, retain the carton including the original packing material, and use them again to repack the product in case there is a need to return it to us for repair.

2. Product Features

Physical Port

- 16 / 24 10/100Mbps Fast Ethernet ports
- Supports auto MDI/MDI-X function

Layer 2 Features

- Complies with IEEE 802.3, 10BASE-T, IEEE 802.3u 100BASE-TX Ethernet standard
- Supports powerful Green Ethernet for power saving
- Features Store-and-Forward mode with wire-speed filtering and forwarding rates
- Hardware based 10/100Mbps, half / full duplex mode, flow control, auto-negotiation
- Complies with IEEE 802.3x flow control for full duplex operation and back pressure for half duplex operation
- Complies with IEEE 802.1p Class of Service
- Integrated address look-up engine, supporting 8K absolute MAC addresses
- Automatic address learning and address aging
- Supports CSMA/CD protocol

Hardware Features

- 100~240V AC, 50~60Hz, 0.3A Universal Power Input
- FCC, CE Class A compliant

3. Product Specifications

Model	FNSW-1601	FNSW-2401
Hardware Specifications		
Hardware Version	V8	V10
10/100BASE-TX MDI/MDIX Ports	16	24
Throughput (packet per second)	2.38Mpps	3.57Mpps
Switch Fabric	3.2Gbps	4.8Gbps
Weight	1.6kg	1.7kg
Power Consumption / Dissipation	1.3 watts / 4.4BTU	1.9 watts / 6.4BTU
Power Requirements	100~240V AC, 50/60Hz, 0.3A	
Dimensions (W x D x H)	440 x 180 x 44mm, 1U height	
Switch Processing Scheme	Store-and-Forward	
Address Table	8K entries	
Power Green Ethernet	10m ~ 50m: Saving up to 22%	10m ~ 50m: Saving up to 12%
Flow Control	Back pressure for half duplex, IEEE 802.3x pause frame for full duplex	
Temperature	Operating: 0~50 degrees C Storage: -10~70 degrees C	
Humidity:	5% to 90%, Storage: 5% to 90% (non-condensing)	
Standards Conformance		
Regulation Compliance	FCC Part 15 Class A, CE	
Standards Compliance	IEEE 802.3 (Ethernet) IEEE 802.3u (Fast Ethernet) IEEE 802.3x (Full-Duplex Flow Control) IEEE 802.1p (Class of Service)	

4. Switch Front Panel

Figures **1** & **2** show the front panels of Fast Ethernet Switches.



Figure 1: FNSW-1601 Front Panel



Figure 2: FNSW-2401 Front Panel

LED Indicators

FNSW-1601 / FNSW-2401

System

LED	Color	Function
PWR	Green	Lights to indicate that the Switch has power.

5. Switch Rear Panel

Figure **3** shows the rear panel of Fast Ethernet Switch.

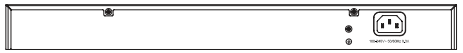

Figure 3: FNSW-1601 / FNSW-2401 Rear Panel

Power Note

1. The device is a power-required device, meaning, it will not work till it is powered. If your networks should be active all the time, please consider using UPS (Uninterrupted Power Supply) for your device. It will prevent you from network data loss or network downtime.
2. In some area, installing a surge suppression device may also help to protect your Fast Ethernet Switch from being damaged by unregulated surge or current to the Switch or the power adapter.

Per 10/100Mbps Port

LED	Color	Function
LNK / ACT	Green	Lights to indicate the link through that port is established successfully. Blinks to indicate that the Switch is actively sending or receiving data over that port.
100Mbps	Green	Lights to indicate the port is runing at 100Mbps. Lights off to indicate that the port is operating at 10Mbps.

6. Installing the Switch

This part describes how to install your Fast Ethernet Switch and make connections to it. Please read the following topics and perform the procedures in the order being presented.

Note

This Fast Ethernet Switch does not need software configuration.

Desktop Installation

To install the Fast Ethernet Switch on desktop, simply follow the following steps:

Step 1: Attach the rubber feet to the recessed areas on the bottom of the Fast Ethernet Switch.

Step 2: Place the Fast Ethernet Switch on desktop near an AC power source.

Step 3: Keep enough ventilation space between the Fast Ethernet Switch and the surrounding objects.

Step 4: Connect your Fast Ethernet Switch to network devices.

A. Connect one end of a standard network cable to the 10/100 RJ45 ports on the front of the Fast Ethernet Switch.

B. Connect the other end of the cable to the network devices such as printer servers, workstations or routers, etc.

Step 5: Supply power to the Fast Ethernet Switch.

A. Connect one end of the power cable to the Fast Ethernet Switch.

B. Connect the power plug of the power cable to a standard wall outlet.

When the Fast Ethernet Switch receives power, the Power LED should remain solid Green.

Rack Mounting

To install the Fast Ethernet Switch in a 19-inch standard rack, follow the instructions described below.

Step 1: Place your Fast Ethernet Switch on a hard flat surface, with the front panel positioned toward your front side.

Step 2: Attach a rack-mount bracket to each side of the Switch with supplied screws attached to the package. Figure **4** shows how to attach brackets to one side of the Fast Ethernet Switch.

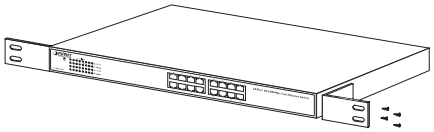

Figure 4: Attach the brackets to the Fast Ethernet Switch

> **Caution**
>
> You must use the screws supplied with the mounting brackets. Damage caused to the parts by using incorrect screws would invalidate your warranty.

Step 3: Secure the brackets tightly.

Step 4: Follow the same steps to attach the second bracket to the opposite side.

Step 5: After the brackets are attached to the Fast Ethernet Switch, use suitable screws to securely attach the brackets to the rack, as shown in Figure **5**.

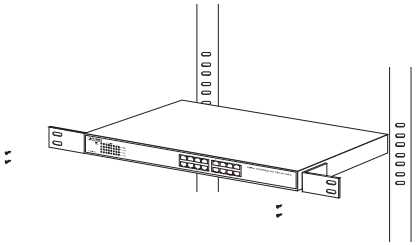

Figure 5: Mount the Fast Ethernet Switch in a Rack

Step 6: Proceed with Steps 4 and 5 of **Desktop Installation** to connect the network cabling and supply power to your Fast Ethernet Switch.

7. Customer Support

Thank you for purchasing PLANET products. You can browse our online FAQ resource on the PLANET Web site first to check if it could solve your issue. If you need more support information, please contact PLANET switch support team.

PLANET online FAQ:
http://www.planet.com.tw/en/support/faq.php?type=1

Switch support team mail address:
support_switch@planet.com.tw

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PLANET Networking & Communication

EC Declaration of Conformity

For the following equipment:

*Type of Product : 16/24-Port 10/100Base-TX Fast Ethernet Switch
*Model Number : FNSW-1601, FNSW-2401

* Produced by:
Manufacturer's Name : **Planet Technology Corp.**
Manufacturer's Address: 10F., No.96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C.).

is herewith confirmed to comply with the requirements set out in the Council Directive on the Approximation of the Laws of the Member States relating to Electromagnetic Compatibility Directive on (2004/108/EC).
For the evaluation regarding the EMC, the following standards were applied:

EN 55022	(2010+AC: 2011, Class A)
EN 61000-3-2	(2006+A1:2009+A2:2009)
EN 61000-3-3	(2008)
EN 55024	(2010)
IEC 61000-4-2	(2008)
IEC 61000-4-3	(2010)
IEC 61000-4-4	(2012)
IEC 61000-4-5	(2005)
IEC 61000-4-6	(2013)
IEC 61000-4-8	(2009)
IEC 61000-4-11	(2004)

Responsible for marking this declaration if the:
☒ **Manufacturer** ☐ **Authorized representative established within the EU**
Authorized representative established within the EU (if applicable):
Company Name: **Planet Technology Corp.**
Company Address: **10F., No.96, Minquan Rd., Xindian Dist., New Taipei City 231, Taiwan (R.O.C.)**
Person responsible for making this declaration
Name, Surname **Kent Kang**
Position / Title : **Product Manager**

Taiwan — *Place*
31th March., 2014 — *Date*
Legal Signature

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PLANET Networking & Communication

User's Manual

Unmanaged Switch

FNSW-1601 / FNSW-2401

www.PLANET.com.tw

16/24-Port 10/100Mbps
Fast Ethernet Switch



PLANET Technology Corp.

2351-A50090-004

Energy Saving Note of the Device

This power required device does not support Standby mode operation. For energy saving, please remove the power cable to disconnect the device from the power circuit.

Without removing power cable, the device will still consume power from the power source. In view of Saving the Energy and reducing the unnecessary power consumption, it is strongly suggested to remove the power connection from the device if this device is not intended to be active.

10M 100M | Auto Negotiation | Auto MDI/MDI-X | Plug & Play | Green Networking