Asanté FriendlyNET Switch 4024P
Unmanaged 24-port 10/100 Switch
User's Guide

Introduction

Thank you for purchasing the Asanté FriendlyNET Switch 4024P. This FriendlyNET unmanaged 24-port 10/100 switch can provide dedicated 100Mbps throughput per port to the desktop. With features like auto-negotiation and full duplex transmission, these systems offer smooth network migrations and easy upgrades to increase network capacity.

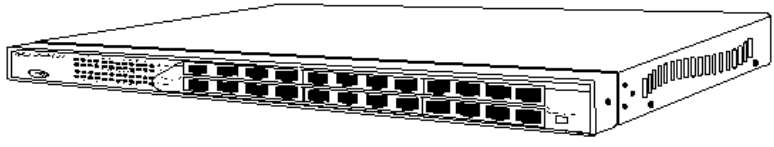

Figure 1 The FriendlyNET Switch 4024P

Features

The FriendlyNET Switch 4024P has the following features:

- ❑ 24 10/100Mbps auto-negotiated switch ports
- ❑ Compliance with IEEE802.3, IEEE802.3u, and IEEE802.3x standards
- ❑ Back pressure (collision based) flow control in half duplex operation
- ❑ IEEE802.3x flow control in full duplex operation
- ❑ One up-link push button for cascading
- ❑ Dip switches on all ports for auto-negotiation or forced full duplex
- ❑ Visual diagnostic LEDs for each port
- ❑ 13-inch rack mount width
- ❑ Standard 1U chassis height
- ❑ Internal switching power supply

Package Contents

The package contains the following items:

- ❑ (1) FriendlyNET Switch 4024P 24-port 10/100 switch
- ❑ (1) AC power cord
- ❑ (4) Self-adhesive rubber feet
- ❑ (1) Rack-mount kit, which includes two rack-mounting brackets and mounting screws
- ❑ User's Guide (this book)

Front Panel Information

The following sections describe the key features of the FriendlyNET Switch 4024P front panel and how to use them.

Figure 2 FS4024P front panel

LEDs

The LEDs on the front panel provide visual evidence of the status of the following items:

- ❑ Switch power supply
- ❑ Full/Half duplex operation mode and collision indicator
- ❑ Connection (link) speed of 10Mbps or 100Mbps
- ❑ Data activity on each segment

Table 1 Power LED

LED Indicator	Color	Description
Power	Green	The unit is powered on and ready for use
	Off	The unit is powered off

Table 2 Full/Collision LEDs

LED Indicator	Color	Description
Full/Collision	Off	There is no link, or a half-duplex operation mode has been established, and no collisions have occurred
	Yellow	The operation mode is full duplex
	Blinking Yellow	The operation mode is half-duplex, and collisions are occurring

Table 3 Link/Activity LEDs

LED Indicator	Color	Description
Link/Activity	Off	No link is established on the port
	Green	A 10Mbps link has been successfully established on the port
	Blinking Green	A 10Mbps link has been established, and data transmission or receiving activity is occurring on the port
	Yellow	A 100Mbps link has been established on the port
	Blinking Yellow	A 100Mbps link has been established, and data transmission or receiving activity is occurring on the port

Switch Ports

There are twenty-four RJ-45 connectors on the front panel. The 10/100Mbps speed and Full/Half duplex mode of each port are automatically determined when you connect the switch to 10Base-T or 100Base-Tx devices.

Normal/Uplink Push Button

One Normal/Uplink push button is located at the right end of the front panel. You can use it to change the connection mode of the 24th port on the switch, for connecting to either a PC or a hub/switch. The default setting is in the Normal (MDI-X) position, which is the "out" position. The port is configured to connect with a PC when the button is in this position. When the push button is pressed in (MDI), it allows you to connect with a hub or a switch using straight-through twisted pair cable.

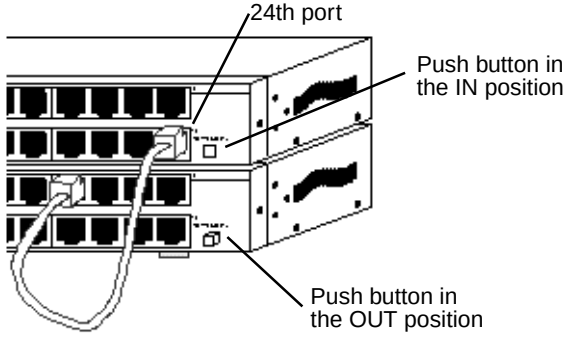

Figure 3 Uplink connection to a second switch

Rear Panel Information

Full/Auto Dip Switches

All of the ports are capable of auto-negotiation. In addition, each port has a dip-switch on the back panel, which can be set to either auto-negotiation, or enforced full duplex operation mode.

If you set a dip-switch to the **Auto** position, the operation mode is automatically determined by the capability of the link partner. If the link

partner is not able to advertise its capability, the default operation mode is half duplex.

If you set a dip switch to the **Full** position, the port can transmit and receive data simultaneously. Full mode is used for point-to-point connections only.

The speed of the port is auto-sensing no matter which position you set the dip-switch in.

Connecting To Network Devices

If you are connecting several workstations and a server, you can build the network using the FriendlyNET Switch 4024P as shown in Figure 4.

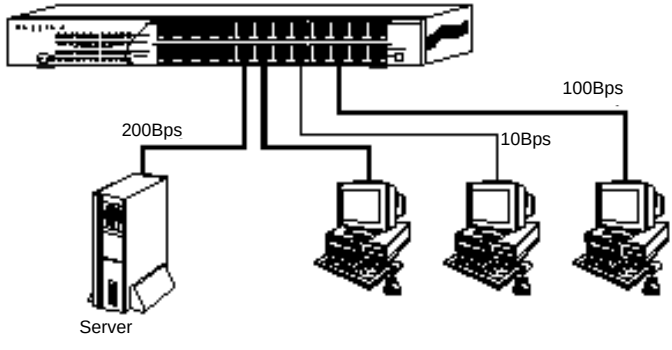

Figure 4 A simple network topology

To improve the efficiency of the network, it is best to have 200Mbps full duplex operation between the server and the FriendlyNET Switch 4024P, if the LAN adapter on the server can operate in full duplex mode.

Connecting to a Switch or a Hub

Make switch-to-switch or switch-to-hub connections by connecting the 24th port of the FriendlyNET Switch 4024P with straight-through cable (Category 3 for 10Mbps only, Category 5 for all others) to any port of the other hub/ switch; make sure the Normal/Uplink button is pressed in when you make this connection. Make sure also that the dip-switch for the port on the FriendlyNET Switch 4024P is set to **Auto** mode.

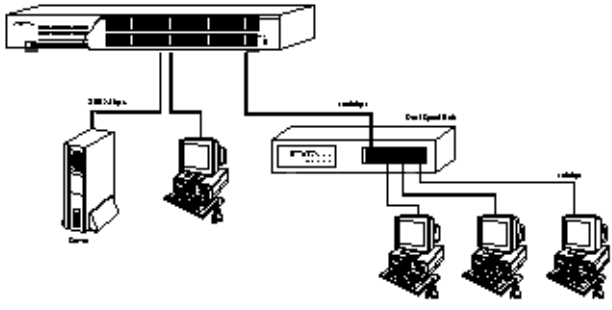

Figure 5 Multiple hub/switch network

For 100Base-T networks, the maximum network diameter is approximately 205 meters, assuming you are using UTP cable (Category 3 for 10Mbps only, Category 5 for all others). The maximum length between hubs or hubs and switches is 100 meters.

Placing or Rack Mounting the Switch

The FriendlyNET Switch 4024P is supplied with two mounting brackets, six screws, and four rubber feet for mounting the rack or placing it on a flat surface.

Placing the FS4024P on a flat surface

1. Apply the four rubber feet to the bottom of the unit.
2. Put the unit on the flat surface.

Mounting the FS4024P in a Rack

1. Place a mounting bracket over the mounting holes on each end of the unit.
2. Insert each screw through the bracket and into a mounting hole in the switch, as shown in Figure 6.
3. Insert the unit into your 13-inch rack.

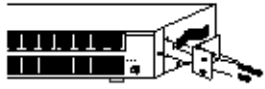

Figure 6 Rack mounting bracket

Product Specifications

Standards supported	ISO/IEC 802.2-3, IEEE 802.3, IEEE 802.3u, IEEE802.3x
Interfaces	RJ-45 Connectors for 10Base-T and 100Base-Tx Fast Ethernet
Cabling	Category 3 for 10Mbps only, Category 5 for all others
Input voltage	100 to 240 VAC at 50 to 60 Hz
Power consumption	30 W
Operating temperature	0 to 40° C
Storage Temperature	-20 to 70° C
Operating Humidity	10 to 90% RH
Storage Humidity	10 to 95% RH
Dimensions	330mm (13”)X 43mm (1.69”)X207mm (8.15”)
Weight	2.6Kg (5.69lb)
Certification	FCC Class A, CE Class A

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