

*FriendlyNET*TM

Plug-and-Play Networking Solutions



User's Manual

FriendlyNET GX4 Gigabit Ethernet Switch

Introduction

Thank you for purchasing the Asanté FriendlyNET GX4 Gigabit Ethernet switch. The GX4 switch is simply the most affordable, powerful Gigabit Ethernet solution for connecting desktops, high-performance servers and workstations.

Features

The GX4 switch has the following key features:

- Gigabit Ethernet over copper (1000BaseT, IEEE 802.3ab)
- Full-duplex Gigabit ports support simultaneous 1000 Mbps transmission and 1000 Mbps reception
- Self-correcting Gigabit Ethernet ports automatically resolve common wiring errors (MDI crossover, pair swaps, pair skews, pair polarity) and negotiate the highest transfer rates
- AsantéQ™ link quality monitor evaluates and adjusts for dynamic cable conditions without management or diagnostic equipment
- GX4 models 408 and 224 support 10/100 Mbps ports compatible with Fast Ethernet (100BaseTX) and Ethernet (10BaseT)
- Easy plug-and-play installation. No special software or hardware configuration required

Package Contents

The package contains the following items:

- (1) FriendlyNET GX4 Gigabit Ethernet switch
- (1) User's Guide
- (1) AC power cord
- (4) Rubber feet
- (1) Rack mount kit (optional)

Front Panel Information

During normal network activity, these LEDs are on: Power, LNK/SPD, DPX/ACT, 100M Link, or 1G Link.

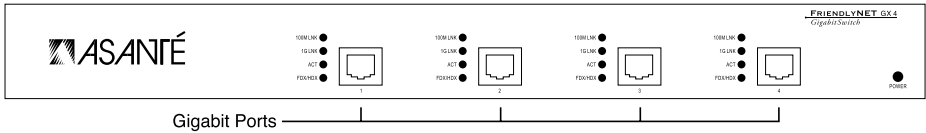


Figure 1. FriendlyNET GX4 Model 400

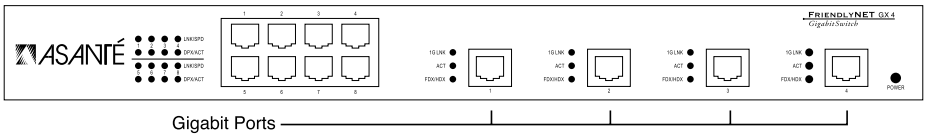


Figure 2. FriendlyNET GX4 Model 408

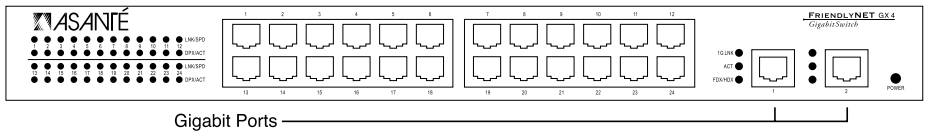


Figure 3. FriendlyNET GX4 Model 224

LED Indicator	Color	Activity	Description
Power	Green	ON	The unit is powered on and ready to use.
		OFF	No power to unit.

Table 1. Power LED

LED Indicator	Color	Activity	Description
A. Gigabit Ports			
100M Link	Green	ON	A valid 100 Mbps link is established.
		Blinking	Possible data error, see Troubleshooting section (AsantéQ).
1G Link	Green	ON	A valid 100 Mbps link is established.
		Blinking	Possible data error, see Troubleshooting section (AsantéQ).
ACT	Green	Blinking	Packet activity: transmission or reception.
FDX/HDX	Green	ON	Operating in full-duplex mode.
		OFF	Operating in half-duplex mode.
B. 10/100 Ports			
LNK/SPD	Green	ON	A valid 100 Mbps link speed is established.
	Yellow	ON	A valid 10 Mbps link speed is established.
DPX/ACT	Green	ON	Operating in full-duplex mode.
	Green	Blinking	Activity in full-duplex Mode.
	Yellow	ON	Operating in half-duplex mode.
	Yellow	Blinking	Activity in half-duplex mode.

Table 2. Activity LEDs

Connecting to Network Devices

If you are connecting several workstations and a server, you can build the network using the GX4 switch as shown in Figure 4.

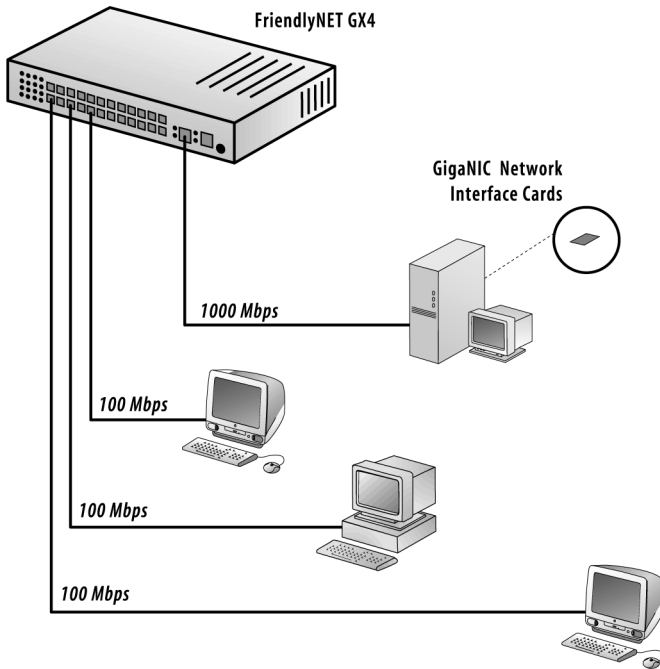


Figure 4. A simple network topology

Connecting to a Switch or a Hub

When making switch-to-switch connections, connect any Gigabit port of the GX4 switch with a Gigabit cable to the Gigabit port on the other switch.

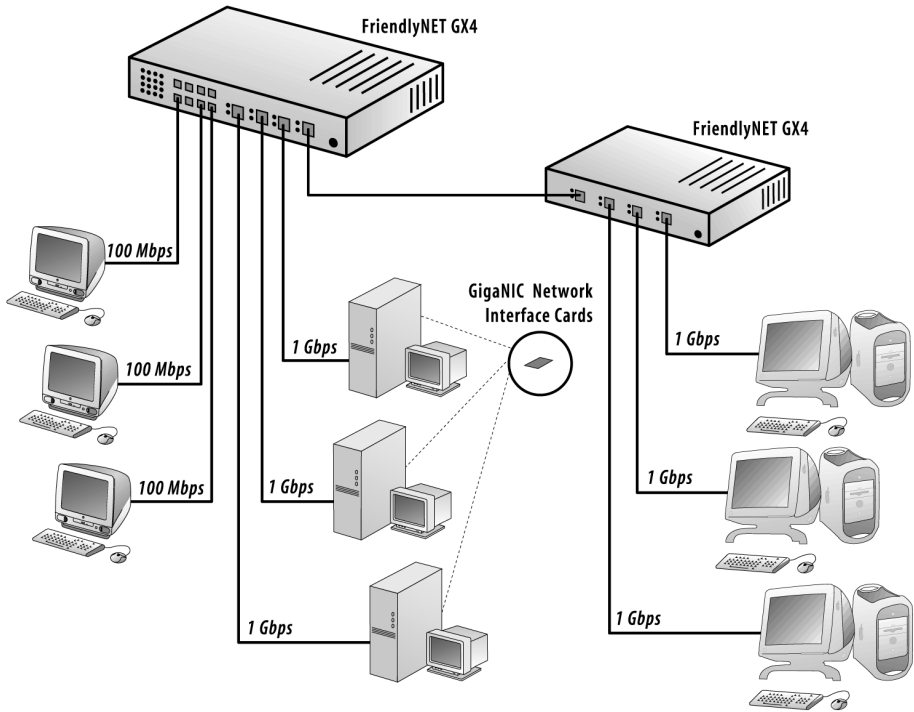


Figure 5. Multiple switch network

For 1000BaseT, 100BaseTX, and 10BaseT networks, the maximum cable length is 100 meters.

Optional: Placing or Rack Mounting the Switch

The GX4 switch comes with four rubber feet for placement on a flat surface.

Placing the GX4 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 GX4 in a Rack (Optional):

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 equipment rack, and attach with screws provided.

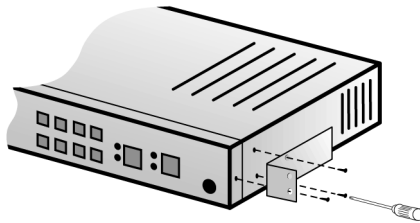


Figure 6. FriendlyNET GX4 Optional Rack Mounting Bracket

Troubleshooting

Symptom	Corrective Action
Power LED is off	Make sure the power cord is connected to the power outlet and power connector on the rear of the unit.
Fast blinking 100M Link or 1G Link	AsantéQ has detected a low Signal-to-Noise Ratio. Replace network cable.
Slow blinking 100M Link or 1G Link	AsantéQ has detected receive bit errors. Check for faulty Ethernet adapters or other network devices. Verify network cable.
100M Link, 1G Link, or LNK/SPD LED is off	No link established. Verify network cable.

Table 3. Troubleshooting

Product Specifications

Standards Compliance

Network	Gigabit Ethernet over UTP Category 5 copper, IEEE 802.3ab (1000BaseT) Fast Ethernet over UTP Category 5 copper, IEEE 802.3u (100BaseTX) Ethernet over UTP Category 3 copper, IEEE 802.3 (10BaseT)
Safety	UL, CSA, TUV/GS
Emissions	FCC Class A, CE
Cable type	Gigabit Copper ANSI/TIA/EIA-568 Category 5 UTP

Environmental Range

Operating Temperature	32° to 104° F (0 to 40° C)
Relative Humidity	10% to 90% non-condensing
Power	Auto-switching, 110/240V, 50/60 Hz, approximately 50W

Product Specifications (Continued)

Weight

Model 400	6 pounds (2.7 Kg)
Model 408	7 pounds (3.2 Kg)
Model 224	8 pounds (3.6 Kg)

Dimensions

Model 400	14" (355 mm) X 9" (229 mm) X 1.7" (43 mm), 1 RU high
Model 408	14" (355 mm) X 9" (229 mm) X 1.7" (43 mm), 1 RU high
Model 224	14" (355 mm) X 9" (229 mm) X 1.7" (43 mm), 1 RU high

FCC Compliance Statement

This hardware device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: 1) this device may not cause harmful interference, and 2) this device must accept any interference received, including interference that may cause undesired operation. This equipment has been tested and found to comply with the limits for a Class A computing device in accordance with the specifications in Subpart B of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If you suspect this equipment is causing interference, turn your unit on and off while your radio or TV is showing interference. If the interference disappears when you turn the unit off and reappears when you turn the unit on, something in the unit is causing interference. You can 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 and the receiver; 3) connect the equipment to an outlet on a circuit different from that to which the receiver is connected; 4) consult the place of purchase or an experienced radio/television technician for additional suggestions. Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Safety Advisory

1. This product should be operated from the type of power source indicated on the marking label. If you are not sure of the type of power available, consult your dealer or local power company.
2. Do not allow anything to rest on the power cord. Do not locate this product where persons will walk on the cord.
3. Never push objects of any kind into this product through cabinet slots as they may touch dangerous voltage points or short out parts that could result in a risk of fire or electric shock. Never spill liquid of any kind on the product.
4. Do not attempt to service this product yourself, as opening or removing covers may expose you to dangerous voltage points or other risks. Refer all servicing to servicing to service personnel.

Visit Asanté at www.asante.com

Main Corporate Telephone Numbers

800-662-9686 Home/Office Solutions

800-303-9121 Enterprise Solutions

408-435-8388

Technical Support – Worldwide

801-566-8991

Technical Support Fax

801-566-3787

Technical Support Bulletin Board System

408-432-1416



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All features and specifications subject to change without prior notice.

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