BUFFALO™

35020672-01

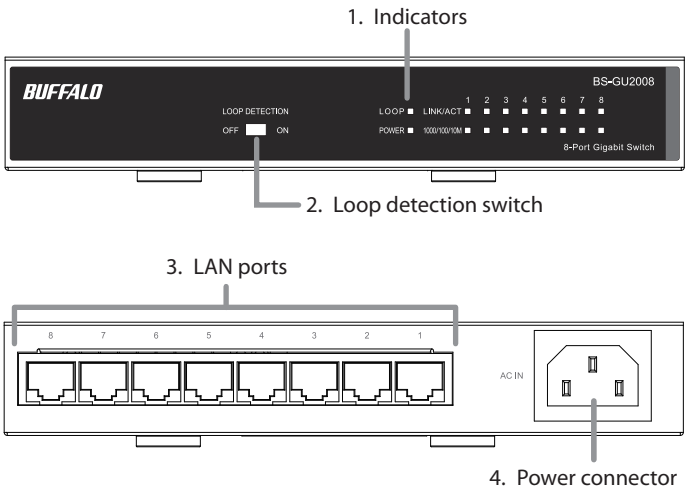
BS-GU2008
User Manual

Package Contents

The package contains the items shown below. If any items are missing, please contact the dealer where you purchased the BS-GU2008 .
The appearance of the BS-GU2008 may vary from the illustration.

- Switch (main unit) 1
- Power cable 1
- Rubber feet 4
- Serial number stickers 2
- User manual (this document) 1
- Warranty 1

Layout



1.Indicators

Indicators are located on the front panel of the product. The functions of each indicator are shown below.

Link/Act (Green)
On: Link established
Blinking: Data transfer
Blinking (1-second interval): Loop detected
Off: Link not established

1000/100/10M (Green or Orange)
On (Green): 1000 Mbps link
On (Orange): 100 Mbps link
Blinking (Green or Orange): Loop detected
Off: 10 Mbps link or no link

Loop (Red)
Blinking: Loop detected
Off: Normal

Power (Green)
On: Power on
Off: Power off

2.Loop detection switch

Switch loop detection on and off.

3.LAN ports

These are ports for connecting 1000BASET/100BASE-TX/10BASE-T devices.

4.Power connector

Connect the included power cable to this connector.

Installation

Precautions for Installation

- Do not install the device in an unstable location such as on an unsteady table or an inclined surface.
- Do not place another hub or object that generates heat on top of this unit.
- Please route all cables properly to prevent people from tripping over them.
- Ensure the air vents on the product are not blocked by other equipment or walls.
- Only use the power cable included with the product. Using other power cables may result in damage or fire.

Floor or Shelf Mounting

Attach the supplied rubber feet to the bottom corners of the unit before use.

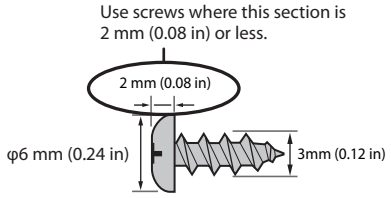
Mounting to a Metal Surface

To mount to a metal surface, such as the side of a steel desk, use the "BS-MGK-A Magnet Kit" (sold separately). Attach the supplied rubber feet to the bottom corners of the unit before using the magnet kit.

Caution:
- Do not put floppy discs, magnetic cards, or other magnetic storage media near magnets. Doing so may delete or corrupt data.
- If the switch is secured by the magnet alone, it should be no more than 75 cm (29.5 in) from the floor.

Mounting to a Wall

To mount the unit to a wall, use 2 screws (not included) with the dimensions shown below. Install the screws 78 mm (3.1 in) apart and slide the mounting holes in the base of the BS-GU2008 over them.



Loop Detection

This unit can detect network loops that can cause interference in the network.

What Is a Loop?

If both ends of an Ethernet cable are connected to the same hub, or when multiple connections exist between two hubs, data may be sent in a loop around the network, wasting network capacity and never getting to its destination. This continuously circulating data may interfere with other network communication.

Loop Detection

- Off: Loops are not detected.
- On: If a network loop is detected, the link/act, 1000/100/10M, and loop LED on the front of this unit blink once per second.

Turning Loop Detection On and Off

1. Use the switch on the front of the BS-GU2008 to turn loop detection on and off.
2. Disconnect the power cable, then reconnect it.
   Note: The setting isn't changed until power cable is disconnected and reconnected.

Caution :
- While loop detection is enabled, the BS-GU2008 will send a loop detection packet through the network every two seconds. If these packets disrupt your network in any way, disable loop detection.
- Loop detection cannot detect or block all types of loops.

When a Loop is Detected

Reconnect the wiring, making sure that no wires are connected in a loop.

Specifications

Check Buffalo's website (www.buffaloamericas.com) or the product catalog for information about the latest products or compatible models.

Standards	IEEE802.3ab (1000BASE-T) IEEE802.3u (100BASE-TX) IEEE802.3 (10BASE-T)
Flow Control	IEEE802.3x (when operating at full duplex) Back pressure (when operating at half duplex)
Ports	8 (all ports support Auto MDI-X)
Compatible Cables (*) (**)	1000BASE-T: Enhanced category 5 or higher UTP/STP cables 100BASE-TX: Category 5 or higher UTP/STP cables 10BASE-T: Category 3 or higher UTP/STP cables
Connector	RJ-45 8-pin connector (Shield type)
Power	AC 100-240V 50/60Hz
Power Consumption	Max. 4.0 W
External Dimensions	180 x 102 x 30 mm; 7.1" x 4" x 1.2" (excluding protruding parts)
Weight	540 g (1.19 lb.)
Operating Environment	Operating temperature: 0–50 ℃ (32-122 °F) Operating humidity: 10-85 % (no condensation)
Standards	VCCI Class B, FCC Class B, Canada IC Class B, UL
Transmission Speeds	1000 Mbps (1000BASE-T) 100 Mbps (100BASE-TX) 10 Mbps (10BASE-T)
Switching Method	Store and forward
Jumbo Frames	Up to 9,216 bytes (including 14 byte header + 4byte FCS)
Transfer Encryption Method	8B1Q4/4D-PAM5 (1000BASE-T) 4B5B/MLT-3 (100BASE-TX) Manchester encoding (10BASE-T)
Access Method	CSMA/CD
Data Transfer Speed (Throughput)	1,488,095 packets/second (1000BASE-T) 148,810 packets/second (100BASE-TX) 14,881 packets/second (10BASE-T)
Switching Fabric	16 Gbps
MAC Address Table	8,000 (self-learning)
Buffer Memory	128 KBytes
Aging Time	Approx. 300 seconds
Other	Loop detection Power saving (***)

* This unit automatically detects and adjust for straight or crossover Ethernet cables, so either type of cable may be used.

** Site-terminated Ethernet cables are not recommended. Always use preassembled cables.

*** This function automatically recognizes the port link status and the length of Ethernet cables, then adjusts the operating power accordingly. This also adjusts the power when the data is not transmitted (the device connected to this switch should be compatible with IEEE802.3az EEE).

Trouble Shooting

If you are unable to connect to a network, check the following.

- Is the power cable connected correctly? Also, is the power cableplugged into an outlet or surge protector?
- Is the Ethernet cable connected correctly? Are any cables disconnectedor broken?
- Is the link/act LED on? If not, manually set the communication mode of the connected device to 100 Mbps half duplex or 10 Mbps half duplex.

Federal Communication Commission Interference Statement

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.

If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This 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.