

SpeedStream **5200 Series**

DSL Bridge **Quick Start Guide**



Part Number: 222-00925-01

SpeedStream 5200 Series Bridge

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Warranty Procedures

Prior to returning a product under this warranty, the end user must first call ENI at (408) 878-6803, or send an email to ENI at support@efficient.com to obtain a return materials authorization (RMA) number. RMAs are issued between 8:00 a.m. and 5:00 p.m. Pacific Standard Time, excluding weekends and holidays. The end user must provide the serial number(s) of the products in order to obtain an RMA.

After receiving an RMA, the end user should ship the product, freight or postage prepaid, to Efficient at 5200 Great America Parkway, Santa Clara, CA 95054. The RMA number must be clearly marked on the outside of the package.

Returned Products will be tested upon receipt by ENI. Products that pass all functional tests will be labeled "No Problem Found" and will be returned to the end user at the end user's expense.

Products found to be defective will be repaired or replaced at the election of ENI. ENI will return the repaired or replacement Product to the end user at the address provided by the end user at Efficient Network's expense. For Products shipped within the United States of America, Efficient will use reasonable efforts to ensure delivery within two-business days from the date sent by ENI. Expedited service is available at additional cost to the end user.

Limitations

The limited warranty does not apply to any damage or failure caused by misuse, abuse, acts of nature, accidents (for example dropping or spilling fluids on the Hardware), or the like.

ENI will not honor, and will consider the warranty voided, if: (1) the seal or serial number on the Product have been tampered with; (2) the Product's case has been opened; or (3) there has been any attempted or actual repair or modification of the Product by anyone other than an ENI authorized service provider.

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Efficient Networks, Inc.
4849 Alpha Road
Dallas, TX 75244
Attn: Customer Service

Installation Requirements

Your package should contain the items listed below. If you determine anything to be damaged or missing, please contact the dealer from whom the equipment was purchased.

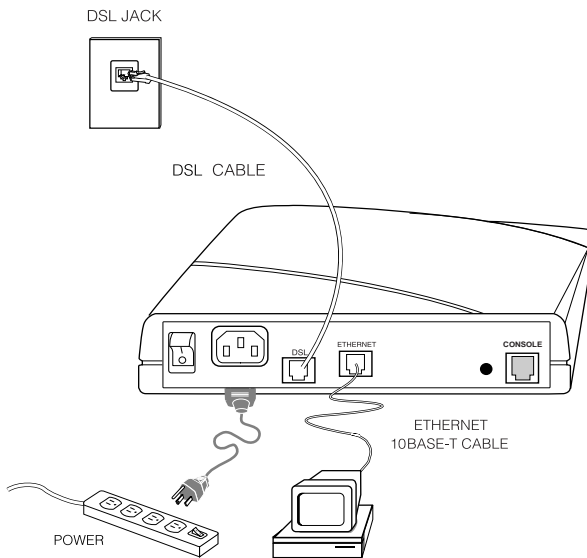
Package Contents

- One SpeedStream 5200 Series Bridge
- One Ethernet 10Base-T cable, RJ-45, red label (straight-through or console)
- One DSL WAN, RJ-14, purple label
- One power cord

Connect Your SpeedStream 5200 Series Bridge

- 1 Place your bridge in a location where it will be well ventilated. Do not stack it with other devices or place it on carpet.
- 2 Connect the bridge to your PC, using the red cable between the bridge's Ethernet port and the Ethernet port on your PC.
- 3 Connect the bridge to your DSL wall jack, using the purple label cable between the bridge's DSL port and the DSL wall jack.
- 4 Connect the bridge to an AC power outlet using the supplied power cord.
- 5 Switch the bridge ON.

The following illustration shows the SpeedStream 5200 Series Bridge when connected:



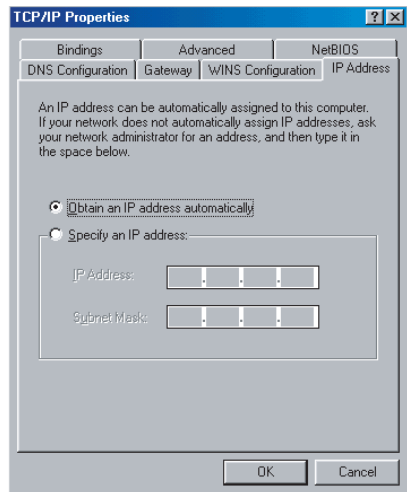
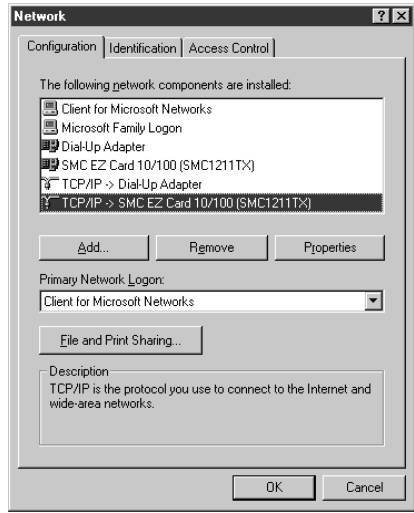
Caution: To reduce the risk of fire, use only no. 26 AWG or larger telecommunications line cord. This cord is used to connect your bridge's DSL port to the DSL wall jack.

Configure Your Workstation

Each workstation requires a unique IP address. This IP address must be supplied by your Network Service Provider. To assign an IP address to a MS Windows™ workstation that has been connected to your bridge:

- 1 Select **Start > Settings > Control Panel >** and click on **Network**
- 2 Select the **Configuration** tab at the top of the dialog. Users of Windows NT select the **Protocols** tab.
- 3 From the list of network components, select **TCP/IP**.
- 4 Click on the **Properties** button.
- 5 Select the **IP Address** tab. In the IP Address dialog, you will either **Obtain an IP address automatically**, or **Specify an IP address** provided by your ISP.
- 6 Under the **DNS Configuration** and **Gateway** tabs, enter the numbers designated by your ISP.
- 7 Click **OK** as needed to confirm your settings, and reboot your computer.

If the TCP/IP protocol is missing, consult documentation for your operating system to install this protocol.



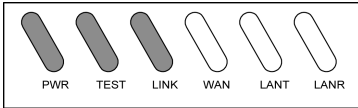
Verification and Troubleshooting

Verify Your DSL Connection

To verify that your DSL connection has been established, use any network application (such as your web browser) to access material on a remote network or the Internet.

Nothing happens when I enter an address into my browser. How can I find and correct what is wrong?

- 1 Verify that the bridge's power is switched ON.
- 2 Check the LINK light on the PC network interface card. If it is not green, check the cable to the bridge is securely connected.
- 3 Confirm that the first three lights on the front of the bridge glow green. If they do not, consult the Lights table in this guide to check the sequence of light changes during bridge initialization (the first thirty seconds after switching on power).
- 4 Check that your workstation is properly configured. Verify that TCP/IP protocol software is loaded and configured with all necessary settings specified by your Network Service Provider (NSP). Review the Configuration section of this guide for a TCP/IP example configuration in Microsoft Windows™.
- 5 Ping the Gateway address provided by your NSP. To do so using Microsoft Windows, under **Start > Run**, type `ping <gateway address>`. If you do not receive a reply, there is a circuit problem between your DSL jack and your NSP gateway. Contact your NSP for resolution.
- 6 Using the same method as above, ping the DNS address provided by your NSP (e.g. `ping <DNS address>`). If you do not get a reply, DNS is down. Contact your NSP for resolution.
- 7 Review your browser and network settings to ensure the connections are being attempted through your SpeedStream 5200 Series Bridge and not some other device (such as a dialup modem).



Your bridge is ready when the first three lights glow green.

Table 1: 5300 Front Panel Lights

Normal Light Sequence	Time	<i>If the sequence is interrupted:</i>
PWR green TEST amber LINK off	5 sec	Contact Technical Support
All lights flash	1 sec	<ol style="list-style-type: none"> 1. Check cable connections and PC Ethernet card light 2. Contact Technical Support
PWR green TEST green LINK off	5 sec	<ol style="list-style-type: none"> 1. Check all cable connections 2. Contact Tech Support
PWR green TEST green LINK amber	5-10 sec	<ol style="list-style-type: none"> 1. Check the DSL cable (try substituting any phone cable) 2. Contact Technical Support
PWR green TEST green LINK green	Ready	

Product Specifications and Support

Bridging

- Transparent bridging

Frame Relay

- Bridging (RFC 1490)

Protocol Interoperability Testing

- Bay Networks™, Cabletron™, Cisco™, RedBack™ (RFC 1483)

WAN Interface

- One Digital Subscriber Line (DSL) interface (RJ-45)

LAN Interface

- Built-in Ethernet connector (RJ-45)
- LAN speed of up to 10 Mbps

IDSL Modem specifications

- Data rates ranging from 144 Kbps
- 2B1Q modulation

Processor

- Motorola® MPC850 operating at 32 MHz
- 1 MB Flash memory, 2 MB DRAM

Physical Specifications

- Dimensions: 8.4 W x 7.0 D x 1.7 H in (21.3 W x 17.8 D x 4.3H cm)
- Weight: 1.5 lb (0.68 kg)

Operating Environment

- Temperature: 40°F to 105°F (5°C to 40°C)
- Humidity: 20%-80%, non-condensing

Power Requirements

- AC Voltage: 100 to 120 V AC, 220 to 240 V AC
- Frequency: 50/60 Hz
- Power Consumption: 10 W maximum
- Built-in power supply, On/Off switch

Agency Approvals

- CE Mark
- TUV
- Safety: UL 1950, CSA 22.2, EN60950
- Emissions: FCC Part 15 Class B, EN55022/CISPR22 Class B
- Immunity: EN50082-1
- Certifications per relevant DSL standards

SpeedStream 5200 Series Bridge Back Panel

The back panel contains all DSL, Ethernet, console, and power interfaces.

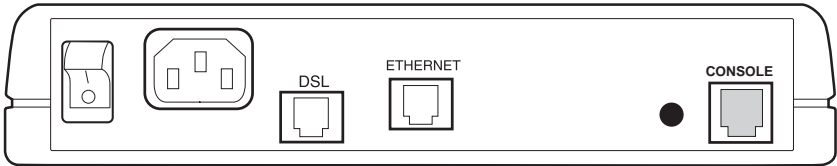


Table 2: 5200 Back Panel Interfaces

From left to right:	
Power	The bridge uses a standard AC power cord and has an ON/OFF switch
DSL Port	DSL connectivity is through this 8-pin, RJ-45 port.
Ethernet Ports	One Ethernet 10Base-T port (8 pin, RJ-45)
Console Port	Asynchronous RS232 connectivity is through this 8 pin, RJ-45 port (support only).

Port Specifications

RJ-45 Port Pin Orientation

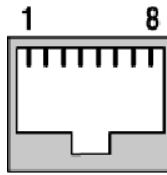


Table 3: Port descriptions

Pin	DSL Port	Ethernet Port	Console Port
1	Not connected	Twisted pair receive +	Receive data
2	Not connected	Twisted pair receive-	Request to send
3	Not connected	Twisted pair transmit +	Not connected
4	Tip or Line A	Not connected	Transmit data
5	Ring or Line B	Not connected	Ground
6	Not connected	Twisted pair transmit -	Clear to send
7	Not connected	Not connected	Not connected
8	Not connected	Not connected	Not connected

Technical Compliances and Support

FCC Part 15 Class B Statement

Section 15.105(b) of the Code of Federal Regulations:

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant of 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 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.

Caution: Any changes or modifications not expressly approved by the party responsible for this device could void the user's authority to operate this equipment.

Canadian D.O.C. Notice

This product conforms to Canadian Class B emissions regulations.

Ce produit se conforme aux règlements d'émission canadienne classe B.

Instructions for Trained Service Personnel Only

Caution: Danger of explosion if battery is incorrectly placed. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

Modem Technical Support

If you need to contact your Network Service Provider or Efficient Networks for technical support, please have the following information ready:

- SpeedStream 5200 Series Bridge model number (on the bottom of the modem)
- Date of purchase
- PC Operating System (e.g. Windows 9x, NT, MacOS 8.x, Unix)
- Detailed description of the problem

Efficient Networks Technical Support in the U.S.:

Efficient Networks, Inc.
5200 Great America Parkway
Santa Clara, CA 95054
Phone:(408) 878-6810
Fax:(408) 878-6801
Email:support@efficient.com
Web:<http://www.efficient.com/>