

EdgeMarc 4550 Networking Gateway

Hardware Installation Guide

Version 1.0



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INDUSTRY CANADA (IC) NOTICE

"NOTICE: This equipment meets the applicable Industry Canada Terminal Equipment Technical Specifications. This is confirmed by the registration number. The abbreviation, IC, before the registration number signifies that registration was performed based on a Declaration of Conformity indicating that Industry Canada technical specifications were met. It does not imply that Industry Canada approved the equipment."

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Caution: Users should not attempt to make such connections themselves, but should contact the appropriate electric inspection authority, or electrician, as appropriate."

WARRANTY AND REPAIR SERVICE CENTER:

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This Class (A) digital apparatus complies with Canadian ICES-003.

Licensing

Use of this product is subject to Edgewater Networks Software License Agreement.

Portions of this product include software sponsored by the Free Software Foundation and are covered by the GNU GENERAL PUBLIC LICENSE.

See the *VOS for EdgeMarc User Manual* for more information regarding licenses.

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Preface

Thank you for purchasing the 4550 EdgeMarc .

This Installation Guide describes the 4550 and hardware installation procedures. It is intended for network installers, network operators, and security officers.

About this Guide

The following table briefly describes each chapter and appendix in this guide.

Chapter or Appendix	Description
Chapter 1, Overview	Summary of the functional features of the 4550; describes front-panel LEDs and physical features of the back panel
Chapter 2, Getting Started	Instructions for installing the 4550 and accessing the VOS for EdgeMarc management software.
Appendix A, Specifications	List of technical specifications of the 4550.
Appendix B, Warranty Information	Text of the hardware warranty for the 4550.
Appendix C, Certification	Information about agency compliance.

Typographic Conventions

Task steps are presented in numbered lists. User inputs are displayed in boldface type and can represent either keyboard input or mouse selections in a browser window. Web GUI menus and input areas are represented in italic type.



Note

Denoted with a pencil icon, notes emphasize useful information.



Caution

Denoted with an exclamation point icon, cautions indicate situations in which proper procedures must be followed to avoid the risk of data loss or equipment damage.



Warning

Denoted with a lightning bolt symbol, warnings indicate situations in which proper procedures must be followed to avoid the risk of bodily injury.

Contact and Support Information

Edgewater Networks, Inc.

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Santa Clara, CA 95051

<http://www.edgewaternetworks.com>

Phone: +1 (408) 351-7200

General Email: info@edgewaternetworks.com

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Edgewater Networks, Inc. - Technical Assistance Center

Phone: +1 (408) 351-7200 ext. 2

Support Email: support@edgewaternetworks.com

Overview

The 4550 is an intelligent, networking solution for enterprises and service providers.

The following sections provide more details about the features of the 4550:

- Front Panel LEDs
- Back Panel

Front Panel LEDs

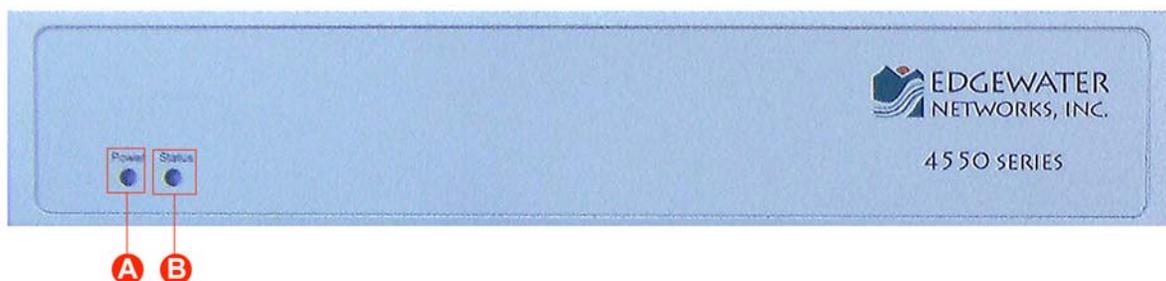


Figure 1: 4550 Front Panel LEDs

	LED Label	Activity	Description
A	Power	Off	Power switch is off (or no power from the AC outlet)
		Green	Power is supplied to the unit
B	Status	Off	The unit could not boot up because of self test failure
		Green	Self test passed

Back Panel

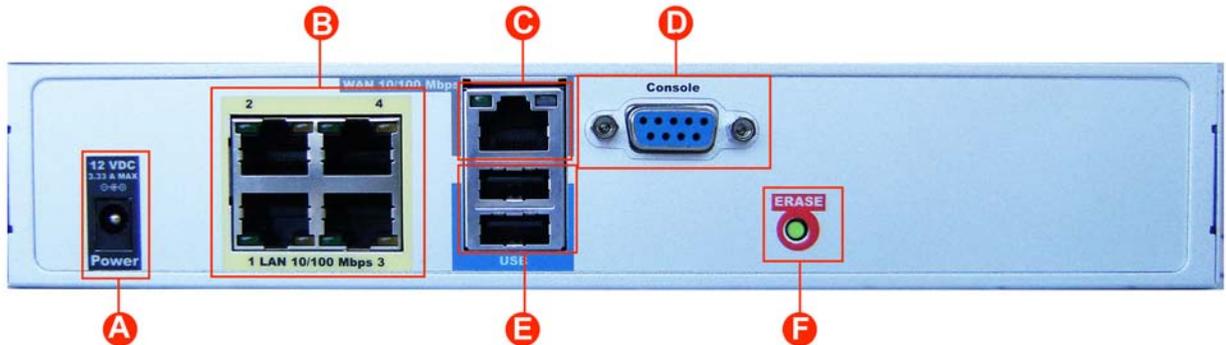


Figure 2: 4550 Back Panel

	Name	Description
A	Power Connector	Accepts the plug from the supplied power cord to connect the unit to an AC power outlet.
B	10/100 Mbps Ethernet LAN Ports	Local Area Network (LAN) ports to connect the IP phones or an Ethernet switch. Unit can also be configure through any of these ports using the web interface
C	10/100 Mbps Ethernet WAN Port	This port is typically used when connecting the 4550 to an existing WAN router, cable or xDSL modem.
D	Management Console Port	<p>This port is used to establish a local console session with the 4550 using a VT100 terminal or emulation program. The cable required is a straight-through DB-9 cable. The serial port uses a baud rate of 9600, 8 data bits, 1 stop bit and no parity.</p> <p>This port is used for debug or local diagnostic purposes only. Primary configuration of the 4550 is performed from a web browser as covered in <i>VOS User Manual</i></p>
E	USB Ports	2 x USB ports
F	Erase Button	<p>If pressed twice in quick succession, only the CLI password will be changed back to its original password.</p> <p>If pressed three times in quick succession, the EdgeMarc will revert back to the factory default settings. This will reset all passwords and erase all prior configurations. The default LAN address will be set to 192.168.1.1.</p> <div style="border: 1px solid black; padding: 5px;"> <p> Caution Using the Erase button as outlined above means any configuration made to the 4550 will be lost. Erasing the configuration means that IP phones installed behind the 4550 will not work and Internet connectivity or network access for</p> </div>

	Name	Description
		<i>PCs will be down until the system is reconfigured.</i>

Getting Started

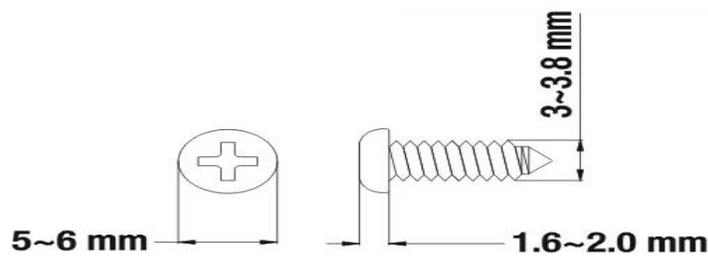
Physical Installation

The 4550 is designed for desktop, rack or wall-mount installation. Observe the following guidelines when installing the system:

- Always verify that the AC cord is disconnected from a power source prior to installation.
- Ensure that the installation site has adequate air circulation and meets the minimum operating conditions for the system as specified in **Specifications** section of this document

Required Tools and Materials

- If the unit is to be mounted on the wall then:
 - 1 Flat or Philips screw driver
 - 2 round or flat head Philips or slotted screws – 1 ½ inch long



- 2 hollow wall anchors
- If the unit will be mounted in a shelf:
 - 1 Flat or Philips screw driver
- If T1/E1 port will be used to connect to WAN
 - T1 cable to connect the T1/E1 port to a T1 line.



Warning

To reduce the risk of fire, use only 26 AWG or larger wire (e.g. 24, 22, 20, etc.) to connect the T1 port on your unit to an RJ-45 jack.

- Ethernet cables to connect the LAN ports to LAN switches or to individual IP phones. They can also be used to connect the Ethernet WAN port to a WAN router, a Cable Modem or a DSL Modem, if T1/E1 port is not being used to connect to the WAN.

Desktop Installation

1. Remove the 4550 and accessories from the shipping container.
2. Place the 4550 on a flat, dry surface such as a desktop, shelf or tray.

Wall-Mount Installation

You can mount the 4550 on a wall using the two mounting brackets on the bottom of the appliance. We recommend that you use two round or pan head screws.

1. Install two screws 5.9063" (150 mm) horizontally apart on a wall or other vertical surface. The screws should protrude from the wall so that you can fit the appliance between the head of the screw and the wall.

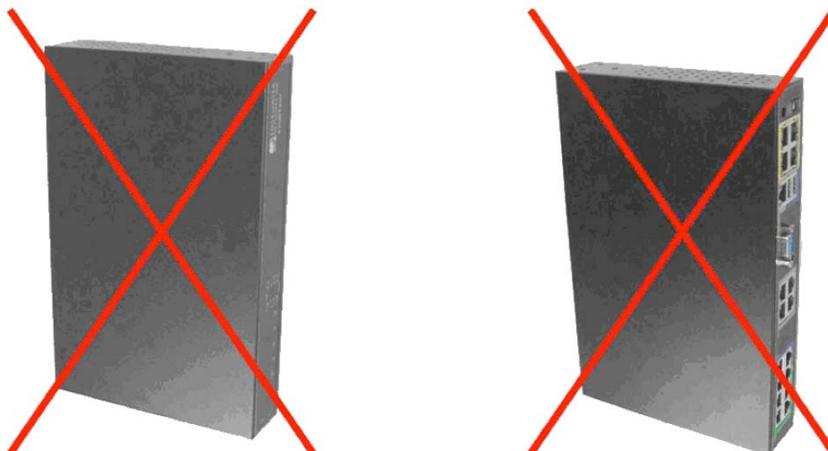


If you install the screws in drywall, use hollow wall anchors to ensure that the unit does not pull away from the wall due to prolonged strain from the cable and power connectors.

2. Remove the 4550 and accessories from the shipping container.
3. Mount the 4550 on the wall as shown below.



4. Do not mount the 4550 on the wall as shown below.



Rack-Mount Installation

You can mount the 4550 in a 19" rack by using the rack-mount kit supplied with the product.

1. Attach the ear mounts to both sides of 4550 with the screws.
2. Attach the 4550 with the ear mounts to the shelf by screwing the ear mounts to the shelf with screws.

Connecting the Power and Cables

The 4550 comes with an AC power cord and power adapter for connecting the unit to the AC outlet.



Warning

Always connect the AC power cord to an AC outlet suitable for the power supply that came with the unit in order to reduce the risk of damage to it.

- Connect one end of the AC power cord to the power adapter and the other one to the AC outlet.
- Connect plug from the power adapter to the Power Connector on the 4550. Sometimes a little force is necessary to get the plug properly positioned



Caution

Secure the power adapter using a fastener or tie wrap to nearby shelf so that it does not hang from the power connector.

- If connecting to the WAN using the T1 then connect the T1 cable to the T1/E1 port and the other end of the cable to the T1 line. Enable the T1 port from the Network Configuration Menu. In this case Ethernet WAN port will not be available.
- If connecting to a WAN router, cable modem or DSL modem, then connect the Ethernet cable to the Ethernet WAN port on the 4550 and the other end to the WAN device.

Administration

You can configure the 4550 using a web browser such as Internet Explorer or Mozilla Firefox. The 4550 is shipped with the pre-configured IP address 192.168.1.1 for the LAN port.

To connect to the 4550, follow these steps:

1. Connect a PC with DHCP enabled to LAN port 4 of the 4550
2. Launch a web browser on the PC and enter the URL string: **192.168.1.1**. Press **Return**

The login window appears



3. Enter the username **root** and the password **default** to log into the system

The initial 4550 main configuration menu appears

<p style="text-align: center;">Configuration Menu</p> <ul style="list-style-type: none"> • Network • DHCP Relay • DHCP Server • Firewall • NAT • Traffic Shaper • VoIP ALG • Survivability • SIP UA • SIP GW • VPN • System <ul style="list-style-type: none"> ▸ Certificate ▸ Clients List ▸ Dynamic DNS ▸ File Download ▸ File Server ▸ Network Information ▸ Network Restart ▸ Network Test ▸ Tools ▸ Proxy ARP ▸ RADIUS Settings ▸ Reboot System ▸ Route ▸ Services Configuration ▸ Set Link ▸ System Information ▸ System Time ▸ T1 Configuration ▸ Upgrade Firmware ▸ User Commands ▸ VoIP Subnet Routing <p style="text-align: center;"> Home Help </p>	<p style="text-align: right;">Help</p> <hr/> <p>System</p> <hr/> <p>Software Version: VersionB.11.0B -- Thu Aug 3 17:21:31 PDT 200B</p> <hr/> <p>Hostname: E_4550</p> <hr/> <p>Model Number: EdgeMarc.4550</p> <hr/> <p>LAN Interface MAC Address: 00:03:6D:DF:16:01</p> <hr/> <p>Registration Status: The ALG feature is registered. View license key.</p> <hr/> <p>System Date: 08/09/2008 01:20:30 UTC</p> <hr/> <p>Change Administrative Password: The password of the read-write administrative user can be changed.</p> <hr/> <p>Change Read-Only Password: The password of the read-only user can be changed.</p>
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4. Select **Network** and start configuring the 4550.



Note

For secure network management, change the default user name and password as described in the VOS for EdgeMarc User Manual.

Specifications

WAN Ports	1x10/100 Ethernet
LAN Ports	4 10/100 Ethernet (Managed VLAN Switch)
Serial Ports	1xRS-232
USB Ports	2
Dimensions	Height 1 $\frac{11}{16}$ " (42.863 mm), Width 9" (228.6 mm), Depth 6 $\frac{8}{16}$ (168.275 mm)
Weight	3 lb (1.361kg)
Power	12V @ 3.33A, external plug pack
Warranty	1 Year
Environmental	Operating Temperature: 5° to 40°C Humidity: 20% to 80%, non-condensing

For the latest information, please visit the following URL: <http://www.edgewaternetworks.com> and look for EdgeMarc Product Family Specifications under Products→EdgeMarc

Warranty Information

Hardware Warranty

For a period of one (1) year after shipment of the Product, Edgewater warrants that such Hardware will substantially conform to Edgewater's published specifications for such Hardware on the date of order if properly used in accordance with procedures described in the documentation supplied by Edgewater. End-user shall notify Edgewater of any nonconformance during the warranty period, obtain a return authorization for the nonconforming Hardware from Edgewater, and return the nonconforming Hardware to Edgewater's designated repair facility, freight prepaid, with a statement describing the nonconformity. Edgewater's exclusive obligations with respect to nonconforming Hardware shall be, at Edgewater's option, to advance replace such Hardware, if it is determined to be defective, or to refund to End-user the purchase price paid for the Product. Advance replacement units are shipped same business day for next-day delivery (within the US) when hardware failure is determined by 1pm PST. Failed components must be returned to Edgewater within 14 days or End-user will be charged for new product purchase.

Certification and Compliance

FCC PART 68 NOTICE

This equipment complies with Part 68 of the FCC Rules and the requirements adopted by ACTA. On the bottom surface of this equipment is a label that contains, among other information, a product identifier in the format US:AAAEQ##TXXXX. If requested, this number must be provided to the telephone company.

This equipment uses RJ48C and R11 jacks.

A Plug and jack used to connect this equipment to the premises wiring and telephone network must comply with the applicable FCC Part 68 rules and requirements adopted by ACTA. See installation instructions for details.

If this equipment, Model 4550 causes harm to the telephone network, the telephone company will notify you in advance that temporary discontinuance of service may be required. But if advance notice is not practical, the telephone company will notify the customer as soon as possible. Also, you will be advised of your right to file a complaint with the FCC if you believe it is necessary.

The telephone company may make changes in its facilities, equipment, operations or procedures that could affect the operation of the equipment. If this happens, the telephone company will provide advance notice in order for you to make the necessary modifications to maintain uninterrupted service.

If trouble is experienced with this equipment, Model 4550 for repair or warranty information, please contact Edgewater Networks Technical Assistance Center at 408.351.7255. If the equipment is causing harm to the telephone network, the telephone company may request that you disconnect the equipment until the problem is resolved.



Caution

This equipment contains no user-serviceable parts.

Connection to party line service is subject to state tariffs. Contact the state public utility commission, public service commission or corporation commission for information.

If your home has specially wired alarm equipment connected to the telephone line, ensure the installation of Model 4550 equipment does not disable your alarm equipment. If you have questions about what will disable alarm equipment, consult your telephone company or a qualified installer.

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