

Firebox® SSL Core Hardware Guide

Firebox® SSL VPN Gateway



Copyright and Patent Information

Copyright© 1998 - 2005 WatchGuard Technologies, Inc. All rights reserved.
WatchGuard, the WatchGuard logo, Firebox LiveSecurity, and any other mark listed as a trademark in the "Terms of Use" portion of the WatchGuard Web site that is used herein are either registered trademarks or trademarks of WatchGuard Technologies, Inc. and/or its subsidiaries in the United States and/or other countries. All other trademarks are the property of their respective owners.
Printed in the United States of America.
Publication ID: 2245-001
Text ID: 2201-000
Doc Version: 4.9-1
U.S. Patent Nos. 6,493,752; 6,597,661; D473,879. Other Patents Pending.

Notice to Users

Information in this guide is subject to change without notice. Companies, names, and data used in examples herein are fictitious unless otherwise noted. No part of this guide may be reproduced or transmitted in any form or by any means, electronic or mechanical, for any purpose, without the express written permission of WatchGuard Technologies, Inc.

Limited Hardware Warranty

This Limited Hardware Warranty (the "Warranty") applies to the enclosed Firebox hardware product, not including any associated software which is licensed pursuant to a separate end-user license agreement and warranty (the "Product"). BY USING THE PRODUCT, YOU (either an individual or a single entity) AGREE TO THE TERMS HEREOF. If you do not agree to these terms, please return this package, along with proof of purchase, to the authorized dealer from which you purchased it for a full refund. WatchGuard Technologies, Inc. ("WatchGuard") and you agree as set forth below or on the reverse side of this card, as applicable:

1. LIMITED WARRANTY. WatchGuard warrants that upon delivery and for one (1) year thereafter (the "Warranty Period"): (a) the Product will be free from material defects in materials and workmanship, and (b) the Product, when properly installed and used for its intended purpose and in its intended operating environment, will perform substantially in accordance with WatchGuard applicable specifications.

This warranty does not apply to any Product that has been: (i) altered, repaired or modified by any party other than WatchGuard except for the replacement or inclusion of specified components authorized in and performed in strict accordance with documentation provided by WatchGuard; or (ii) damaged or destroyed by accidents, power spikes or similar events or by any intentional, reckless or negligent acts or omissions of any party. You may have additional warranties with respect to the Product from the manufacturers of Product

Limited Hardware Warranty

components. However, you agree not to look to WatchGuard for, and hereby release WatchGuard from any liability for, performance of, enforcement of, or damages or other relief on account of, any such warranties or any breach thereof.

2. REMEDIES. If any Product does not comply with the WatchGuard warranties set forth in Section 1 above, WatchGuard will, following receipt of the product you claim is defective and at its option, either (a) repair the Product, or (b) replace the Product; provided, that you will be responsible for returning the Product and for all costs of shipping and handling. Repair or replacement of the Product shall not extend the Warranty Period. Any Product, component, part or other item replaced by WatchGuard becomes the property of WatchGuard. WatchGuard shall not be responsible for return of or damage to any software, firmware, information or data contained in, stored on, or integrated with any returned Products.

3. DISCLAIMER AND RELEASE. THE WARRANTIES, OBLIGATIONS AND LIABILITIES OF WATCHGUARD, AND YOUR REMEDIES, SET FORTH IN PARAGRAPHS 1 AND 2 ABOVE ARE EXCLUSIVE AND IN SUBSTITUTION FOR, AND YOU HEREBY WAIVE, DISCLAIM AND RELEASE ANY AND ALL OTHER WARRANTIES, OBLIGATIONS AND LIABILITIES OF WATCHGUARD AND ALL OTHER RIGHTS, CLAIMS AND REMEDIES YOU MAY HAVE AGAINST WATCHGUARD, EXPRESS OR IMPLIED, ARISING BY LAW OR OTHERWISE, WITH RESPECT TO ANY NONCONFORMANCE OR DEFECT IN THE PRODUCT (INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ANY IMPLIED WARRANTY ARISING FROM COURSE OF PERFORMANCE, COURSE OF DEALING, OR USAGE OF TRADE, ANY WARRANTY OF NONINFRINGEMENT, ANY WARRANTY OF UNINTERRUPTED OR ERROR-FREE OPERATION, ANY OBLIGATION, LIABILITY, RIGHT, CLAIM OR REMEDY IN TORT, WHETHER OR NOT ARISING FROM THE NEGLIGENCE (WHETHER ACTIVE, PASSIVE OR IMPUTED) OR FAULT OF WATCHGUARD OR FROM PRODUCT LIABILITY, STRICT LIABILITY OR OTHER THEORY, AND ANY OBLIGATION, LIABILITY, RIGHT, CLAIM OR REMEDY FOR LOSS OR DAMAGE TO, OR CAUSED BY OR CONTRIBUTED TO BY, THE PRODUCT).

4. LIMITATION AND LIABILITY. WATCHGUARD'S LIABILITY (WHETHER ARISING IN CONTRACT (INCLUDING WARRANTY), TORT (INCLUDING ACTIVE, PASSIVE OR IMPUTED NEGLIGENCE AND STRICT LIABILITY AND FAULT) OR OTHER THEORY) WITH REGARD TO ANY PRODUCT WILL IN NO EVENT EXCEED THE PURCHASE PRICE PAID BY YOU FOR SUCH PRODUCT. THIS SHALL BE TRUE EVEN IN THE EVENT OF THE FAILURE OF ANY AGREED REMEDY. IN NO EVENT WILL WATCHGUARD BE LIABLE TO YOU OR ANY THIRD PARTY (WHETHER ARISING IN CONTRACT (INCLUDING WARRANTY), TORT (INCLUDING ACTIVE, PASSIVE OR IMPUTED NEGLIGENCE AND STRICT LIABILITY AND FAULT) OR OTHER THEORY) FOR COST OF COVER OR FOR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES (INCLUDING WITHOUT LIMITATION LOSS OF PROFITS, BUSINESS, OR DATA) ARISING OUT OF OR IN CONNECTION WITH THIS WARRANTY OR THE USE OF OR INABILITY TO USE THE PRODUCT, EVEN IF WATCHGUARD HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THIS SHALL BE TRUE EVEN IN THE EVENT OF THE FAILURE OF ANY AGREED REMEDY.

5. MISCELLANEOUS PROVISIONS. This Warranty will be governed by the laws of the state of Washington, U.S.A., without reference to its choice of law rules. The provisions of the 1980 United Nations Convention on Contracts for the International Sales of Goods, as amended, shall not apply. You agree not to directly or indirectly transfer the Product or associated documentation to any country to which such transfer would be prohibited by the U.S. Export laws and regulations. If any provision of this Warranty is found to be invalid or unenforceable,

then the remainder shall have full force and effect and the invalid provision shall be modified or partially enforced to the maximum extent permitted by law to effectuate the purpose of this Warranty. This is the entire agreement between WatchGuard and you relating to the Product, and supersedes any prior purchase order, communications, advertising or representations concerning the Product AND BY USING THE PRODUCT YOU AGREE TO THESE TERMS. IF THE PRODUCT IS BEING USED BY AN ENTITY, THE INDIVIDUAL INDICATING AGREEMENT TO THESE TERMS BY USING THE PRODUCT REPRESENTS AND WARRANTS THAT (A) SUCH INDIVIDUAL IS DULY AUTHORIZED TO ACCEPT THE WARRANTY ON BEHALF OF THE ENTITY AND TO BIND THE ENTITY TO THE TERMS OF THIS WARRANTY; (B) THE ENTITY HAS THE FULL POWER, CORPORATE OR OTHERWISE, TO ENTER INTO THE WARRANTY AND PERFORM ITS OBLIGATIONS UNDER THE WARRANTY AND; (C) THE WARRANTY AND THE PERFORMANCE OF THE ENTITY'S OBLIGATIONS UNDER THE WARRANTY DO NOT VIOLATE ANY THIRD-PARTY AGREEMENT TO WHICH THE ENTITY IS A PARTY. No change or modification of the Warranty will be valid unless it is in writing and is signed by WatchGuard.

Declaration of Conformity

DECLARATION OF CONFORMITY

WatchGuard Technologies, Inc.

505 Fifth Ave. S., Suite 500
Seattle, WA 98104-3892
USA

WatchGuard Technologies Inc. hereby declares that the product(s) listed below conform to the European Union directives and standards identified in this declaration.

Product (s):

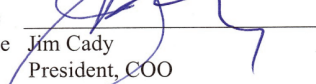
Internet Firewall and VPN (Encryption) Network Device, Models: R6264S, and R4128S.

EU Directive(s):

Low Voltage (73/23/EEC)
Electromagnetic Compatibility (89/336/EEC)

Standard(s):

EN 60950 : 1992 (A1:1993; A2:1993; A3:1995; A4:1997; A11:1997)
EN50022 (1998), Class A
EN50024 (1998)

Signature 
Full Name Jim Cady
Position President, COO
Date 6 November 2003

FCC Certification

This device has been tested and found to comply with limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. Operation is subject to the following two conditions:

This device may not cause harmful interference.

This device must accept any interference received, including interference that may cause undesired operation.

CE Notice

The CE symbol on your WatchGuard Technologies equipment indicates that it is in compliance with the Electromagnetic Compatibility (EMC) directive and the Low Voltage Directive (LVD) of the European Union (EU).



Industry Canada

This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

Cet appareil numérique de la classe A respecte toutes les exigences du Règlement sur le matériel brouleur du Canada.

VCCI Notice Class A ITE

この装置は、情報処理装置等電波障害自主規制協議会(VCCI)の基準に基づくクラス A 情報技術装置です。この装置を家庭用環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者が適切な対策を講ずるよう要求されることがあります。

CAUTION: DANGER OF EXPLOSION IF BATTERY IS INCORRECTLY REPLACED. REPLACE ONLY WITH THE SAME OR EQUIVALENT TYPE RECOMMENDED BY THE MANUFACTURER. DISPOSE OF USED BATTERIES ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS.

ATTENTION: IL Y A DANGER D'EXPLOSION S'IL Y A REMPLACEMENT INCORRECT DE LA BATTERIE, REMPLACER UNIQUEMENT AVEC UNE BATTERIE DU MÊME TYPE OU D'UN TYPE ÉQUIVALENT RECOMMANDÉ PAR LE CONSTRUCTEUR. METTRE AU REBUT LES BATTERIES USAGÉES CONFORMÉMENT AUX INSTRUCTIONS DU FABRICANT.

Contents

Limited Hardware Warranty	2
Declaration of Conformity	5
FCC Certification	6
CE Notice	6
Industry Canada	6
VCCI Notice Class A ITE	7
Package Contents	11
Hardware Specifications	12
Environmental Requirements	12
Hardware Description	13
<i>Firebox® SSL Core front panel</i>	13
<i>Firebox® SSL Core rear view</i>	16
Installing the Hard Drive	16
Removing the Hard Drive	19

Firebox® SSL Core Hardware Guide

The WatchGuard® Firebox® SSL is an integrated security device designed to deliver SSL VPN capability to remote users.

The device is packaged in a 1U rack-mountable form factor for space-saving installation.

For information on installing the Firebox SSL Core device, see the Firebox SSL QuickStart Guide. Thank you for selecting the Firebox SSL Core to provide SSL VPN capabilities for your users. We look forward to meeting your security requirements in these dynamic times.

Package Contents

The package should contain the following:

- Firebox® SSL Core device
- Firebox® SSL QuickStart Guide
- 3 straight-through Ethernet cables (green)
- 1 cross-over Ethernet cable (red)
- 1 serial cable (blue)

-
- 1 DB9 adapter
 - 1 rack-mounting kit
 - 1 Power cable
 - License Key
 - WatchGuard SSL VPN Gateway Administration Guide
 - Warranty card
 - 4 rubber pads for the bottom of the appliance

Hardware Specifications

The following table shows the specific hardware specifications for the Firebox SSL Core.

Processor	1.2 GHz Intel-Based Processor
Memory - Flash	64 Mbyte
Memory - RAM	256 Mbyte
Network interfaces	6x10/100
Serial ports	1 DB9
Power supply	100-240 VAC Autosensing
Dimensions	D=9.5" W=16.75" H=1.75"
Weight	9.2 lbs without the hard drive installed

Environmental Requirements

WatchGuard recommends physically installing a Firebox SSL Core device under the following conditions:

Hardware Description

- Securely rack-mounted
- Placed in a secured environment, such as a locked LAN room, or similar space, to prevent physical compromise by unprivileged personnel
- Connected to conditioned power to prevent damage caused by power spikes and other power fluctuations

The following table shows other environmental requirements.

Operating temperature	0 – 40 degrees Celsius (+32 – 104 degrees Fahrenheit)
Operating humidity	10% – 85%
Non-operating temperature	–40 – 70 degrees Celsius
Non-operating humidity	10% - 95% Non-condensing at 55 degrees Celsius (131 degrees Fahrenheit)
Non-operating random vibration	7 – 28 Hz 0.001 to 0.01 G ² per Hz
Acoustic noise	50 dBA at 20 – 25 degrees Celsius
Operating mechanical shock	20.0 G with 11 msec duration, 1/2 sine wave

Hardware Description

Firebox® SSL Core front panel

The following photograph shows the entire front view.



The photograph below shows a close-up of the left side of the indicator panel. From the left, the indicators are as follows:



Front Panel Display

The LCD screen displays Firebox SSL status information. Use the buttons to change the information that appears.

LCD Console Buttons

LCD buttons are used to view information on the Firebox SSL. See the Firebox SSL VPN Gateway Administration Guide for more information.

Power

A yellow LED (light-emitting diode) indicates that the power is on.

Arm/Disarm

The Arm/Disarm LED lights green when the device is working, and red when it is not working.

Serial port (Console)

An DB9 connector for the serial port. This port has a cover that you need to remove to access the port.

The photograph below shows a close-up of the right side of the indicator panel. From the left, the indicators and connections are as follows.



Interface ports

The six ports have standard RJ45 connectors and are labeled External (0), 1, 2, 3, 4, and 5. Each port has a corresponding LED located above the interface ports. Interface ports 2, 3, 4, and 5 are inactive.

LED

The six pairs of LEDs are labeled 0, 1, 2, 3, 4, and 5, and they correspond to the interface ports below. The LEDs show the link and connection speed of the interface. When the interface runs at 100 Mbit, the top LED is green. When the interface runs at 10 Mbit, the bottom LED is green.

Hard Drive Bay

The hard drive bay is used to install the hard disk. This hard disk contains the SSL VPN Gateway software. For hard disk installation instruction, see “Installing the Hard Drive” on page 16.

Firebox® SSL Core rear view

The rear view of the Firebox SSL Core has the AC receptacle and power switch.



AC Receptacle

Accepts the detachable AC power cord supplied with the Firebox SSL Core. The power supply for the Firebox SSL is a WatchGuard standard auto-sensing AC power supply.

Power Switch

Turns the Firebox SSL on or off.

Installing the Hard Drive

Read all instructions before beginning the installation procedure. Keep a copy of your reseller invoice for the hard drive upgrade. You must supply this proof of purchase to WatchGuard with any warranty claims.

System Requirement	
Hardware	The hard drive will only operate on a Firebox® SSL Core.
Appliance Software	The Firebox® must have an approved version of appliance software installed. For Firebox® SSL Core, the appliance software is included on the hard drive. To make sure your Firebox has the most current approved version of appliance software, refer to http://www.watchguard.com/help/docs/firebox_hdd_install.asp .
Environment	The hard drive is not a hot swap device. The Firebox® must be turned off during the procedure.

- 1 Turn off the Firebox.

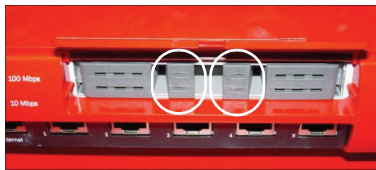
NOTE

The hard drive is not a hot swap device. Failure to turn the Firebox off before installing the hard drive can result in damage to the hard drive.

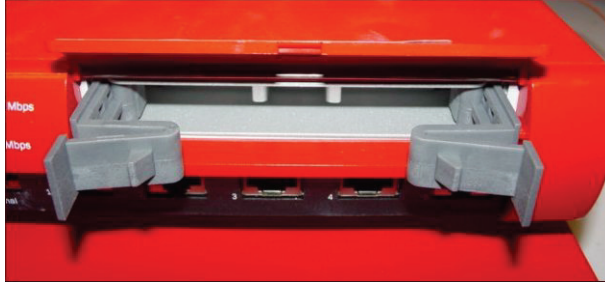
- 2 On the front right side of the Firebox, look for the door covering the hard drive slot.



- 3 Lift the door and find the two release tabs for the hard drive tray.



-
- 4 With your thumbs, press the two tabs in the center of the hard drive tray outward slightly to release the tray arms. Pull the arms gently until they are fully open.



- 5 Remove the tray by pulling on the arms until the tray slides out of the Firebox. Keep the tray in a safe place. If you ever remove the hard drive from your Firebox, you must replace the original tray at that time.
- 6 Remove the new hard drive from its packaging. Prepare it for installation by using your thumbs to press the two tabs in the center slightly outward to release the tray arms. Pull the arms gently until they are fully open.
- 7 Insert the hard drive tray into the hard drive slot on the front of the Firebox. Using the tray arms, push the tray in until the tray is fully seated.
If you have trouble pushing the hard drive in, move it slightly from side to side while applying firm inward pressure.
- 8 Push the tray arms toward the center and push gently on the two tabs until they click to lock the arms into place. If the two tabs do not click, the tray is not fully inserted into the Firebox. Extend the tray arms and push the tray in further.
- 9 Close the door.
If the door does not close completely, the tray is not fully inserted into the Firebox. Extend the tray arms and push the tray in further.

NOTE

The hard drive tray must be fully inserted into the Firebox before you turn the Firebox power on. The hard drive tray is installed correctly if:

*the hard drive tray arms swing in completely and the two tabs click into place; and

Removing the Hard Drive

*the door covering the hard drive slot on the front of the Firebox closes fully.

- 10 Turn the Firebox power on.
If the Firebox does not successfully boot, turn the Firebox power off and check to make sure that the hard drive is fully inserted.

Removing the Hard Drive

You can remove a hard drive from a Firebox® X or move a hard drive from one Firebox to another. Before you remove or add a hard drive, you must turn the Firebox off. The hard drive is not a hot swap device. If you move a hard drive to a different Firebox, the Firebox will automatically reformat the hard drive if necessary.

NOTE

If you have trouble removing a hard drive from a Firebox, use a slight up and down motion while pulling the hard drive out of the hard drive slot.
