



WaveRider®
The World's Wireless Web Company

LMS3200

User Guide

Version A

Warranty

In the following warranty text, "WaveRider®" shall mean WaveRider Communications Inc.

This WaveRider product is warranted against defects in material and workmanship for a period of **one (1) year** from the date of purchase. During this warranty period WaveRider will, at its option, either repair or replace products that prove to be defective.

For warranty service or repair, the product must be returned to a service facility designated by WaveRider. Authorization to return products must be obtained prior to shipment. The WaveRider RMA number must be on the shipping documentation so that the service facility will accept the product. The buyer shall pay all shipping charges to WaveRider and WaveRider shall pay shipping charges to return the product to the buyer within Canada or the USA. For all other countries, the buyer shall pay shipping charges as well as duties and taxes incurred in shipping products to or from WaveRider.

WaveRider warrants that the firmware designed by it for use with the unit will execute its programming instructions when properly installed on the unit. WaveRider does not warrant that the operation of the unit or firmware will be uninterrupted or error-free.

Limitation of Warranty

The foregoing warranty shall not apply to defects resulting from improper or inadequate maintenance by the buyer, buyer-supplied interfacing, unauthorized modification or misuse, operation outside the environmental specifications for the product, or improper site preparation or maintenance. No other warranty is expressed or implied. WaveRider specifically disclaims the implied warranties of merchantability and fitness for any particular purpose.

No Liability for Consequential Damages

To the maximum extent permitted by applicable law, in no event shall WaveRider or its suppliers be liable for any damages whatsoever (including, without limitation, damages for loss of business profits, business interruption, loss of business information, or any other pecuniary loss) arising from the use of or inability to use the product, even if WaveRider has been advised of the possibility of such damages, or for any claim by any other party.

Because some states/jurisdictions do not allow the exclusion or limitation of liability for consequential or incidental damages, the above limitation may not apply to you.

In no event will WaveRider's liability exceed the amount paid for the product.

Regulatory Notices

This equipment has been tested and found to comply with the limits for a Class A Intentional Radiator, pursuant to Part 15 of the FCC Regulations and FCC-210 of the IC Regulations. These limits are intended to provide protection against harmful interference when the equipment is operated in a commercial/business/industrial environment.

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

Notice to User

Any changes or modifications to equipment that are not expressly approved by the manufacturer may void the user's authority to operate the equipment.

Preface

About this Manual

WaveRider recommends that you read the following sections before you install and operate the LMS3200:

- *Software License Agreement* on page 2
- *Warranty* on page 4
- *Warnings and Advisories* on page 12
- *Regulatory Notices* on page 11

NOTE: The information contained in this manual is subject to change without notice.

Regulatory Notices

Industry Canada

Operators must be familiar with IC RSS-210 and RSS-102.

The LMS3200 CCU and EUM have been designed and manufactured to comply with IC RSS-210.



WARNING!

To prevent radio interference to the licensed service, this device should be operated indoors and away from windows to provide maximum shielding. Equipment (or its transmit antenna) that is installed outdoors is subject to licensing.

Federal Communications Commission

The LMS3200 CCU and EUM have been designed and manufactured to comply with FCC Part 15.

The FCC ID for the LMS3200 equipment is OOX-WRM3200.

The transmitter of LMS3200 devices complies with Part 15.247 of the FCC rules.



WARNING!

Operators must be familiar with the requirements of the FCC Part 15 Regulations prior to operating any link using this equipment. For installations outside the United States, contact local authorities for applicable regulations.

Interference Environment

Manufacturers and operators of spread-spectrum devices are reminded that the operation of these devices is subject to the conditions that:

- any received interference, including interference from industrial, scientific, and medical (ISM) operations, must be accepted; and
- these devices are not permitted to cause harmful interference to other radio services.

If the operation of these systems does cause harmful interference, the operator of the spread-spectrum system must correct the interference problem, even if such correction requires the Part 15 transmitter to cease operation. The FCC does not exempt spread-spectrum devices from this latter requirement regardless of the application. The FCC strongly recommends that utilities, cellular stations, public safety services, government agencies, and others that provide critical communication services exercise due caution to determine if there are any nearby radio services that can be affected by their communications.

Operational Requirements

In accordance with the FCC Part 15 regulations:

1. The maximum peak power output of the intentional radiator shall not exceed one (1) watt for all spread-spectrum systems operating in the 902-908 MHz band.
2. Stations operating in the 902-908 MHz band may use transmitting antennas of directional gain greater than 6 dBi, provided the peak output power from the intentional radiator is reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
3. The operator of a spread-spectrum system is responsible for ensuring that the system is operated in the manner outlined in *Interference Environment* on page 12 and *Operational Requirements* on page 12.

Warnings and Advisories

General Advisory

Operator and maintenance personnel must be familiar with the related safety requirements before they attempt to install or operate the LMS3200 equipment.

It is the responsibility of the operator to ensure that the public is not exposed to excessive Radio Frequency (RF) levels. The applicable regulations can be obtained from local authorities.



WARNING!

This system must be professionally installed. Antennas and associated transmission cable must be installed by qualified personnel. WaveRider assumes no liability for failure to adhere to this recommendation or to recognized general safety precautions.



WARNING!

Do not operate the LMS3200 CCU or EUM without connecting a 50-ohm termination to the antenna port. This termination can be a 50-ohm antenna or a 50-ohm resistive load capable of absorbing the full RF output power of the transceiver. Failure to terminate the antenna port properly may cause permanent damage to the device.



WARNING!

To comply with FCC RF exposure limits, the antenna for this transmitter must be fix-mounted on outdoor permanent structures to provide a separation distance of 32 cm (12 inches) or more from all persons to satisfy RF exposure requirements. The distance is measured from the front of the antenna and the human body. It is recommended that the antenna be installed in a location with minimal pathway disruption by nearby personnel.