

Package Contents — Basic or Full-Duplex Unit

If you ordered Guardian part number:

Part Number	Description
140-5016-500	VHF 136-174 MHz Guardian Basic Unit
140-5016-501	VHF 136-174 MHz Guardian Full-Duplex Unit
140-5026-500	VHF 215-240 MHz Guardian Basic Unit
140-5026-501	VHF 215-240 MHz Guardian Full-Duplex Unit
140-5046-300	UHF 406.1-470 MHz Guardian Basic Unit
140-5046-301	UHF 406.1-470 MHz Guardian Full-Duplex Unit
140-5046-501	UHF 450-512 MHz Guardian Basic Unit
140-5046-501	UHF 450-512 MHz Guardian Full-Duplex Unit
140-5096-500	MAS 928-960 MHz Guardian Basic Unit
140-5096-501	MAS 928-960 MHz Guardian Full-Duplex Unit

Your package contains:

- (1) Guardian Serial Modem
- (1) Power Cable
- (1) 8-Pole Socket Connector



Package Contents — Two-Piece Kit

If you ordered Guardian as part of a kit number:

Part Number	Description
250-5016-500	VHF 136-174 MHz Guardian Demo Kit
250-5026-500	VHF 215-240 MHz Guardian Demo Kit
250-5046-300	UHF 406-470 MHz Guardian Demo Kit
250-5046-500	UHF 450-512 MHz Guardian Demo Kit
250-5096-500	MAS 928-960 MHz Guardian Demo Kit

Your package contains:

- (2) Guardian Basic or Full-Duplex Serial Modems
- (2) SMA-Male to BNC-Female Connectors
- (2) SMA-Female to BNC-Male Connectors
- (2) TNC-Male to BNC-Female Connectors
- (2) Mini Circuits 5 W 20 dB Attenuators
- (2) Flex Rubber Duck Antennas (VHF, UHF, or 900 MHz)
- (2) 120 VAC to 12 VDC Power Supply
- (1) 72 in. Serial Programming Cable
- (1) Start Up CD-ROM and Product Information Card



Minimum Requirements

Interface and configuration of this device requires a user PC with an available serial COM port interface, Microsoft Windows 98 or newer, and a web browser.

Technical Support

For assistance with this product, contact CalAmp technical support.

Email wngsupport@calamp.com

Phone 805-987-9000

Or visit the Support section of our website at <http://www.calamp.com/support>.

Any changes or modifications not expressly approved by the party responsible for compliance (in the country where used) could void the user's authority to operate the equipment.

CalAmp reserves the right to update its products, software, or documentation without obligation to notify any individual or entity. Product updates may result in differences between the information provided and the product shipped. For access to the most current product documentation and application notes, visit www.calamp.com.

UL Listed models only



When operating at elevated temperature extremes, the surface may exceed +70 Celsius. For user safety, the Fusion should be installed in a restricted access location.



WARNING — EXPLOSION HAZARD, do not connect while circuit is live unless area is known to be non-hazardous.



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ABOUT CALAMP

CalAmp is a leading provider of wireless communications products that enable anytime/anywhere access to critical information, data and entertainment content. With comprehensive capabilities ranging from product design and development through volume production, CalAmp delivers cost-effective high quality solutions to a broad array of customers and end markets. CalAmp is the leading supplier of Direct Broadcast Satellite (DBS) outdoor customer premise equipment to the U.S. satellite television market. The Company also provides wireless data communication solutions for the telemetry and asset tracking markets, private wireless networks, Interoperable Train Control (ITC) radio transceivers for use in railroad Positive Train Control (PTC) applications, public safety communications and critical infrastructure and process control applications. For additional information, please visit the Company's website at www.calamp.com.

Guardian™

SERIAL RADIO MODEM FOR LICENSED SPECTRUM

Quick Start Guide

CalAmp®



This quick start guide covers programming software installation and basic modem setup. For advanced configuration please refer to the user manual.

Guardian™

SERIAL RADIO MODEM FOR LICENSED SPECTRUM

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PN 004-5006-000 Rev A
Revised October 2014

All specifications are typical and subject to change without notice.

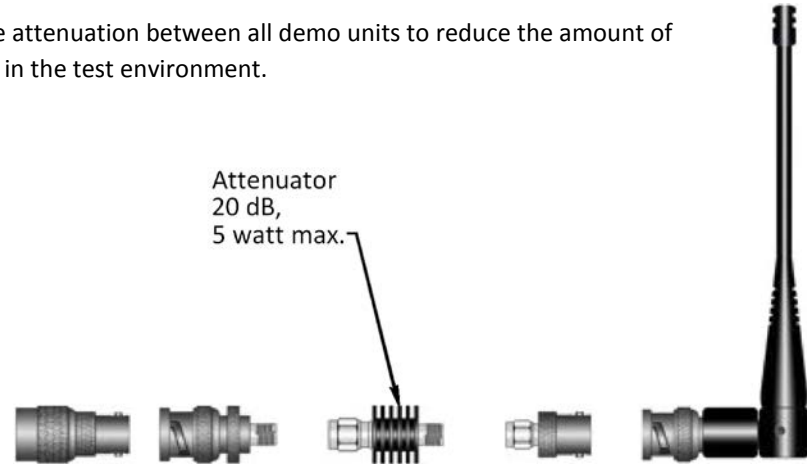


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Setup and Configuration

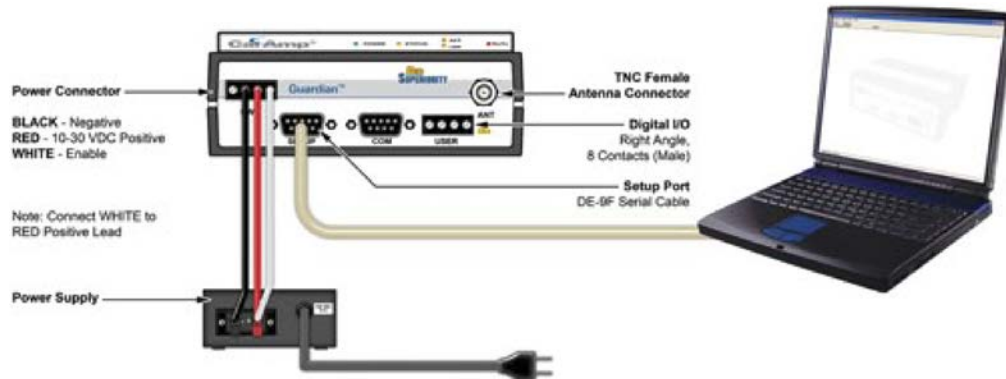
It is easy to set up a Guardian network to verify basic unit operation and experiment with network designs and configurations. An Rx/Tx antenna is required for basic operation.

Important: Use attenuation between all demo units to reduce the amount of signal strength in the test environment.



Device Connections

Refer to the following diagram for the proper device connections for basic operation.



Field Programming Software

The Guardian Field Programming Software (FPS) is the programming and diagnostic software for the Guardian serial radio modem. The FPS allows the user to edit and program user programmable settings, interactively tune modem and RF parameters, and monitor diagnostic data from the Guardian.

INSTALLING THE FPS

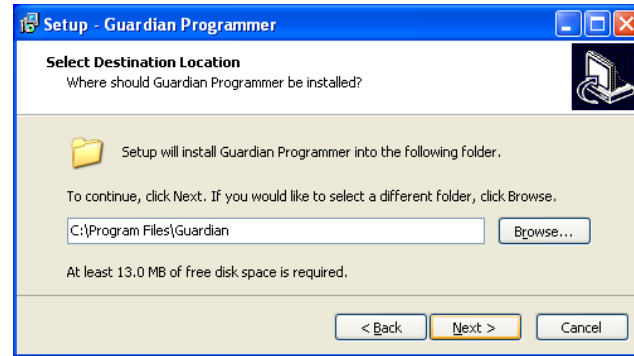
To use the FPS, you will need a PC with Windows 98 or later and at least one operational COM port available.

Step 1 Open the .zip file and open the **setup.exe** application. After the application is extracted from the .zip file, the **Guardian Programmer Setup** window opens. Click **Next**.

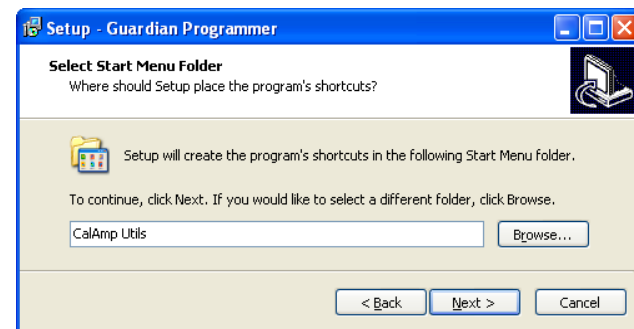


INSTALLING THE FPS (continued)

Step 2 Setup shows the destination location where the Guardian FPS files will be installed. Click **Next** to continue.

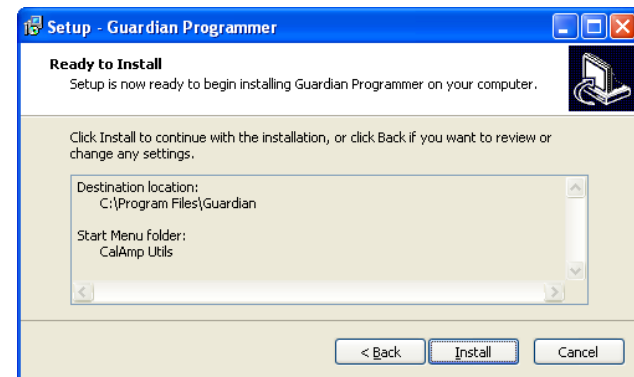


Step 3 Setup shows the program group in the Start Menu that will be created or to which the Guardian FPS will be added. Click **Next** to continue.

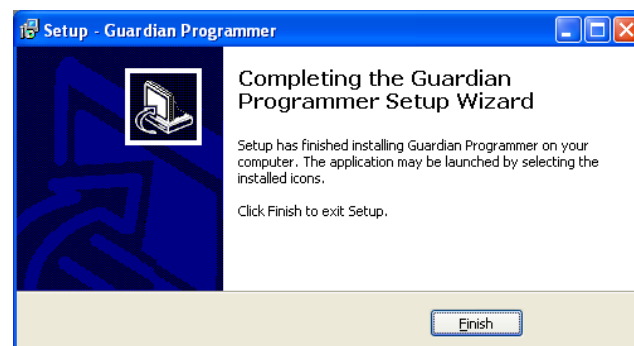


Note: Accept the default installation location and program group unless there is reason to change them.

Setup displays the destination and program group and provides the opportunity to go back to change either if necessary.



Step 4 Click **Install** to begin installation. Setup displays the progress as files are extracted and installed and displays a window similar to the following when complete.



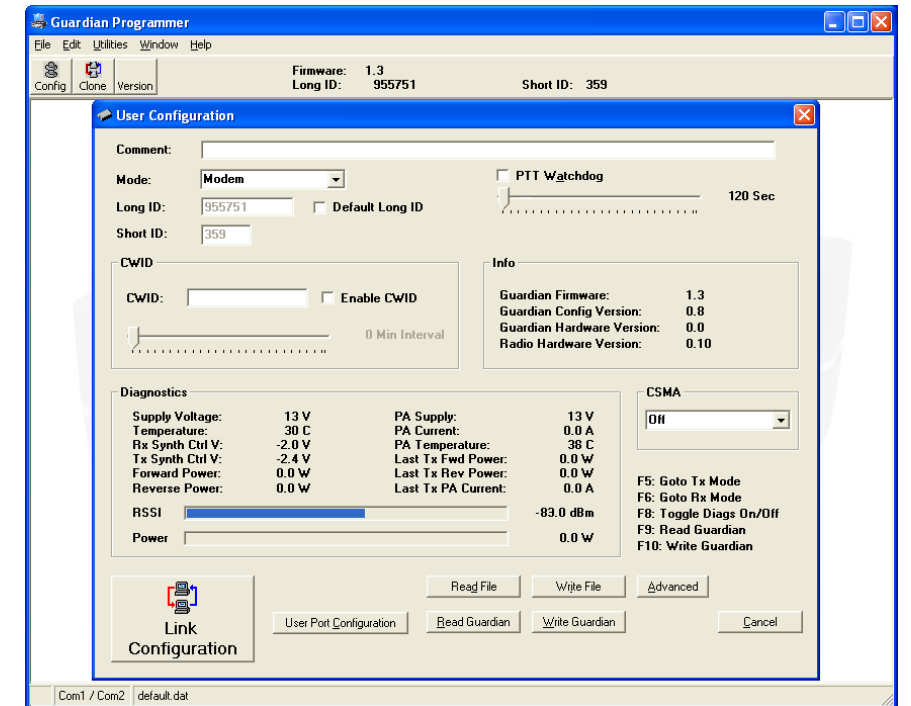
When finished, click **Finish** to exit Setup.

USING THE FPS

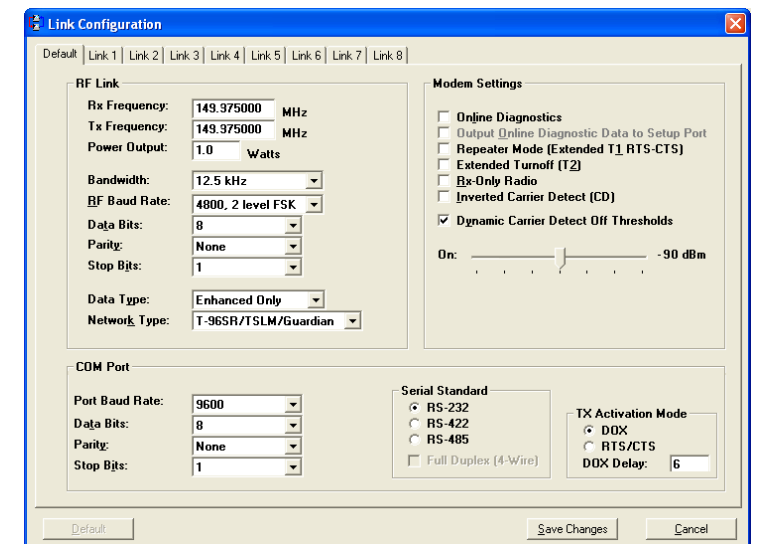
Make sure all connections are made as shown in the Device Connections diagram and then power the Guardian.

Step 1 Locate the **CalAmp Utils** program group (or if you named it differently during installation) and select the **Guardian** application.

Step 2 From the Guardian Programmer window, click **Config** in the upper left corner. This will open the User Configuration window and read configuration information from the device, auto-populating the Diagnostics section, and the RSSI bar will indicate received signal strength.



Step 3 Click **Link Configuration** in the lower left corner of the **User Configuration** window. Set the **RF Link**, **COM Port**, and **Modem Setting** as required. Click **Save Changes** when finished.



Your Guardian modem is now ready for use. For advanced network settings, please refer to the Guardian Serial Radio Modem User Manual (PN 001-5006-000) provided, or our online support library at www.calamp.com.