

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 NextGen RF technical support.

Email support@nextgenrf.com

Phone **507.514.6246**

Or visit our website at www.nextgenrf.com.

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. NextGen RF 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.nextgenrf.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.

	Description	Item
Basic Unit		
	60 in. Cat 5 Ethernet Cable	
	Power Cable	



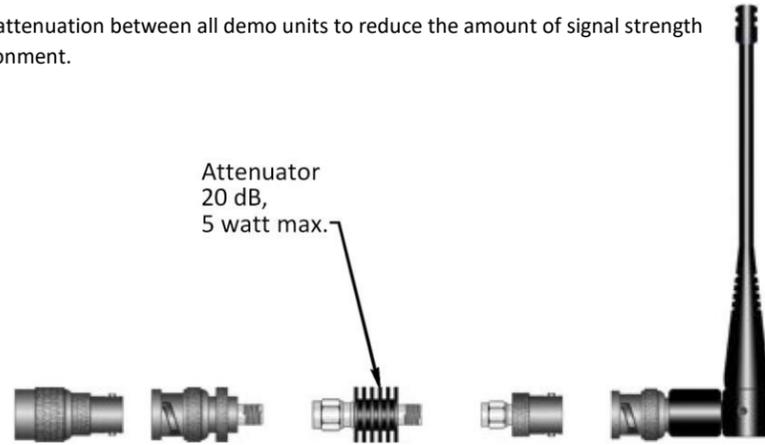
ABOUT NEXTGEN RF

NextGen RF is a USA owned and operated engineering services company providing valuable wireless design expertise on a variety of products, ranging from design consultation to fully turnkey product development. Because we know design, NextGen RF has become the chosen partner for companies worldwide who require a high level of design expertise and responsiveness for their product development. We understand the difficulties of implementing RF solutions in designs and have a proven track record of helping clients efficiently meet their design objectives and requirements. We focus on process-oriented engineering from discovery and idea generation, definition of product requirements and specifications to design, verification and ultimately factory introduction. For more information visit www.nextgenrf.com

SETUP AND CONFIGURATION

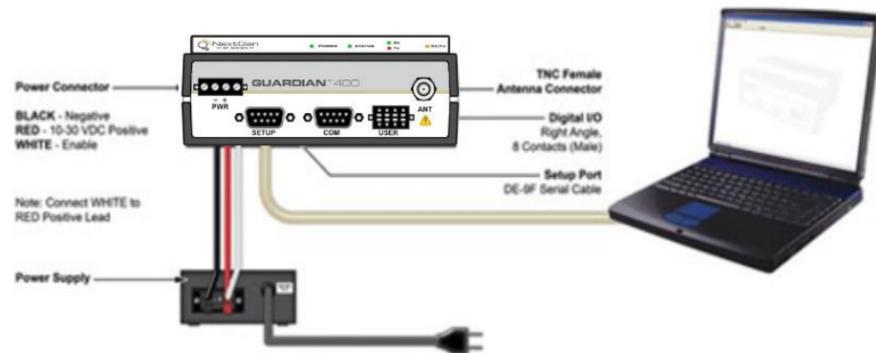
It is easy to set up a Guardian network to verify basic unit operation and experiment with network designs and configurations. An Rx/Tx antenna is required for basic operation.

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



Device Connections

Refer to the diagram below for proper device connections.



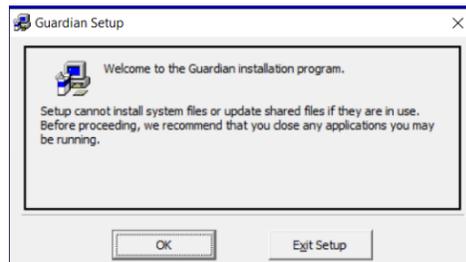
Field Programming Software

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

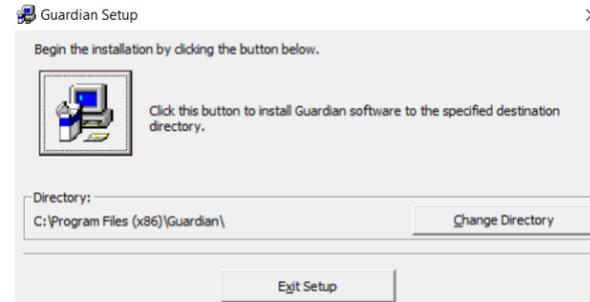
To use the FPS, you will need a PC with Windows 98 or later and at least one operational COM port available.

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 **OK**.

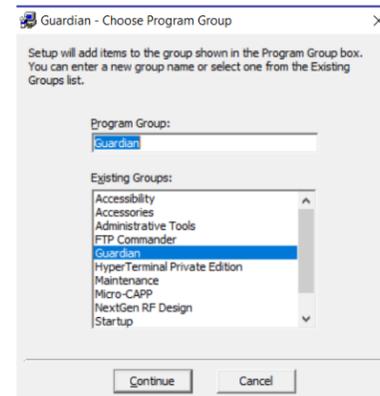


INSTALLING THE FPS (continued)

Step 2 Setup shows the destination location where the Guardian FPS files will be installed. Click the **icon button** to accept the default location 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 **Continue** to continue.

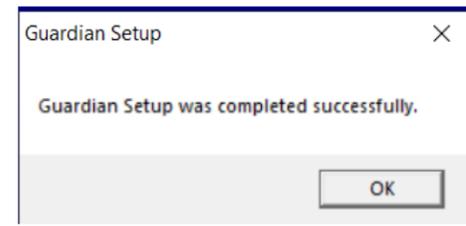
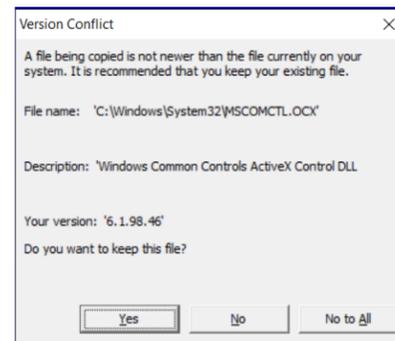


Note: Accept the default installation location and program group unless there is reason to change them.

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

Step 4

During install it checks for certain files that need to be updated and ask if you want to keep the files. It is recommended to click **Yes**.



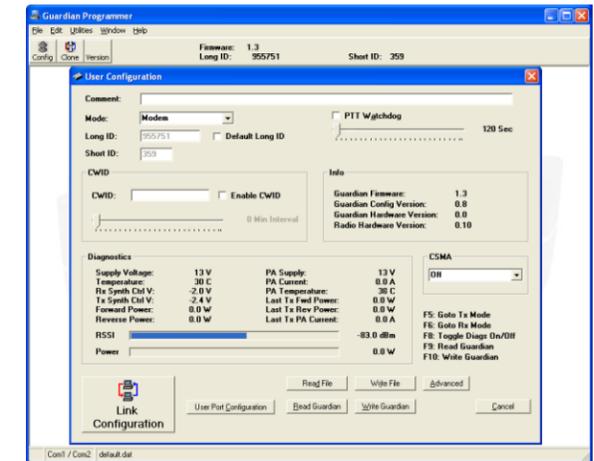
When finished, click **OK** to exit Setup.

USING THE FPS

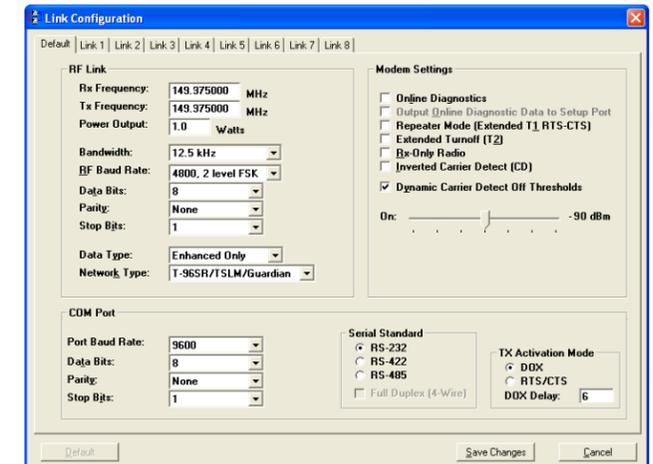
Make sure all connections are made as shown in the Device Connections diagram and then power the Guardian.

Step 1 Locate the **NextGen RG 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).