Global RV Guardian®

The Latest Innovation in Technology

Installation Guide

Guardian Wireless

Your Wireless Security System Leader

Introduction

Congratulations on your Guardian Wireless purchase! This manual will help you install and use your new Global RV Guardian. If, for any reason, the instructions in this manual are not clear, please feel free to call us at 1-800-330-7413 for assistance.

Installation

Checking the Box Contents

Make sure that the following items are found in your box:
- A control box
- A satellite antenna
- A 15 foot antenna cable
- A key fob remote
- An LED status indicator
- Two door/window sensors (default installation only)
- A shore power sensor (default installation only)
- Any additional sensors or key fob remotes that you ordered.
- Any other accessories, such as a siren, that you ordered.
- Four #6 or #8 screws for mounting the control box.

NOTE: If you declined any one of the default sensors, you will not find that sensor in the box.

If you do not find any one of the above items, double check the packaging, as some of these are small and easily missed. If, after having double checked the packaging, you still do not find the above items, please contact us.

Mounting the Control Box

Locating the Control Box

Consider the following when locating your control box:
- **Visibility:** The unit shouldn't be obviously placed, especially not out in the open. Thieves will spot and disable the unit quickly if it is easy to find.

- **Protection:** Locate the control box under the protection of one or more sensors. In a locked storage area or in a closet with a door/window sensor are better places than just hiding the unit from sight.
- **Antenna Location:** The Global RV Guardian is so called because it uses satellite technology to communicate alarms and other information to our servers. Always locate the antenna on or at the highest point of the RV, such as on the roof, laying flat. Make sure not to locate other satellite antennas near the Global RV Guardian antenna, or RF jamming may occur. A distance of at least 1 meter (about 40 inches) should be kept between the Global RV Guardian antenna and any other satellite or GPS antennas.
- **Power Source:** The control box will require a 12 volt DC power source capable of a maximum of 2 Amperes of peak current.
- **Locating Other Wired Accessories:** The control box has two possible wired accessories: an LED indicator and a siren/horn. The LED is normally shipped with all units, and comes with a 6 foot long cord. This cord may be extended with 20 to 24 AWG wire to any location on the RV, and is used to indicate system status. The siren/horn is an optional device, and if delivered, comes with a 2ft cord attached, which can be extended using 18 to 22 AWG wire to the appropriate location.
- **Sensor Signal Strength:** The sensors have a general indoor range of 100 feet. This accounts for the obstruction of the signals by walls and other objects. Metal walls may impede the signal from the sensors, so always test the sensors' ability to communicate to the control box before permanently mounting them.

Mounting the Antenna

NOTE: It is highly recommended that you decide on a location for the antenna and the control box and take plenty of measurements before attempting to mount the antenna.

NOTE: Always make sure that the distance between the antenna and the control box does not exceed the 15 feet of the antenna cable. If you have mounted your antenna and control box, but the cable ended up to be too short, do not splice it. Contact Guardian Wireless for information on acquiring a longer cable.

Follow these steps to mount your antenna:
- Carefully measure out the location where you would like to place the antenna. Check that all other satellite and GPS antennas are at least 1

meter (40 inches) away from the Global RV Guardian antenna to avoid RF jamming.
- Drill a 25mm (1 inch) hole where the center of the antenna will go. If you will be using the three outer mounting holes as well, mark and drill 3 holes for #8 machine screws.
- Mount the antenna using the included M25 nut, and/or using 3 #8 Machine screws or #8 bolts and nuts. The antenna includes a molded on foam gasket, however, you may add additional water sealing/water proofing if desired. **NOTE: #8 hardware is not included. Mounting with just the M25 nut is usually OK, but may not work for mounting surfaces that are thicker than ½ inch.**
- Run the cable from where you intend to locate the control box to where you have mounted the antenna. The round, blue mating end for the antenna will require a 5/8" hole to pass through. Make sure to protect the cable from holes through metal with grommets, to prevent damage and possible shorting.

Mounting the Control Box

NOTE: Always check to make sure that the provided hardware will work for your mounting surface. The screws we provide are designed for most wooden and sheet metal installations.

Follow these steps to mount your control box:
- Turn the mounting feet out from the box to the desired position.
- Holding the control box where you intend to mount it, mark the locations of the mounting holes.
- Drill pilot holes for the screws.
- Install the antenna cable to the control box using a small screw driver to tighten the screws to hold the 9 pin serial style connector in place. Screwing the cable tight keeps it from falling off.
- Install the control box using the included #6 or #8 screws, or use your own hardware appropriate for your mounting surface.
- Connect the siren/horn to the right most pair of terminals on the control box, following the polarity indicated in Figure 1.
- Connect the LED indicator to the center pair of terminals on the control box, following the polarity indicated in Figure 1.
- Connect a 12 volt DC power source to the left most pair of terminals on the control box, following the polarity indicated in Figure 1.
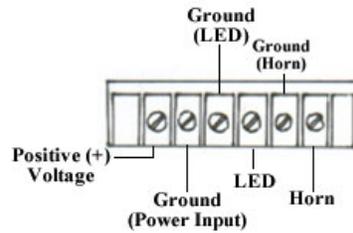
Figure 1

- **Test the control box:** If you have used a switched 12 volt DC source, turn on the power to the control box. Then, go to the location of the LED. Using the included key fob(s), try arming and disarming the system. The LED will turn on to indicate that the system is Armed and off to indicate that the system is Disarmed. If the LED does not turn on and off, check the polarity of both the LED and the 12 volt DC power connections. If you extended the LED cord, check that the polarity is correct at the junction as well. Check that there are no shorts. If the polarity at all points is correct and there are no shorts, refer to the Troubleshooting Guide for more ways to check the system out.

Mounting the Sensors

Most sensors we supply come with their own sheet of instructions. As such, this section will only describe those sensors that either do not come with instructions from the manufacturer or are assembled by Guardian Wireless before shipping. If you receive a sensor that does not have instructions, or you are having problems following the included instructions, please feel free to contact us at 1-800-330-7413 for assistance.

Sensor Mounting Tips

Here are some tips to install your sensors:
- **Testing:** Always test your sensors, in the desired location, before permanently mounting them. This saves time and the patching of many holes.
- **Location:** Try to locate sensors where thieves cannot see them before entering your RV. If they can't see them, they can't avoid being detected by them.
- **Firm Mounting:** Mounting with screws is always better than mounting with double sided foam tape. Use screws when possible.
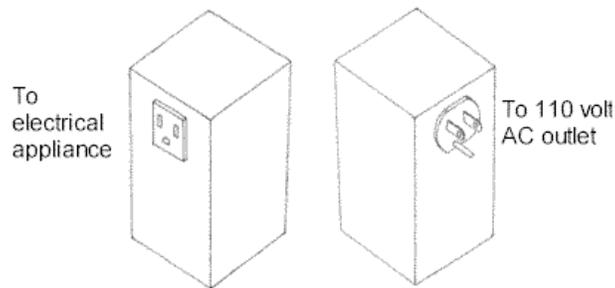
Loss of Power Sensor

Figure 2

This sensor is a small box with prongs on one side and an outlet on the other, as shown in Figure 2. It is designed to detect a disconnection of the RV from external AC power.

To install the Loss of Power sensor:
- Plug the sensor into any outlet that is **not** powered by an inverter while the RV is connected to external AC power.
- You may plug any device that will consume less than or equal to 10 Amperes into the sensor's outlet. Lamps are a good example of a device that will consume less than 10 Amperes.
- **Testing the Loss of Power Sensor:** With the control box turned on, plug the sensor into the wall. Arm the system. Unplug the sensor and wait for the phone call. If a phone call is received within approximately 30 seconds, the sensor is operational.
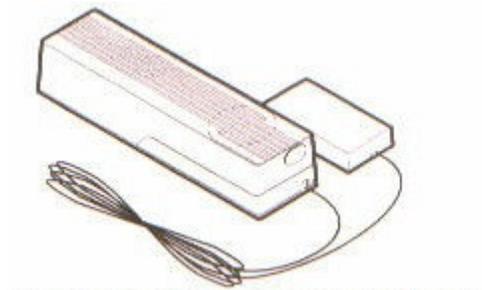
High Water Sensor

Figure 3

This sensor is a two part device connected by 4 feet of wire, as shown in Figure 3. The larger end is the transmitter, and the smaller end the detector. The High Water sensor is best used in bilges or engine rooms.

Tips for locating the High Water sensor:
- Always mount the transmitter as high up the wall as possible from the detector. The sensor will fail if the transmitter gets wet.
- Never extend the wires between the transmitter and the detector, or the sensor may fail to function correctly.

To test the High Water sensor:
- Take the sensor to the location where it will be used.
- With the control box turned on, short the two contacts, shown in Figure 4 on page 8, on the detector for about 5 seconds. It does not matter if the system is armed or disarmed, the alarm will be transmitted either way.

Figure 4

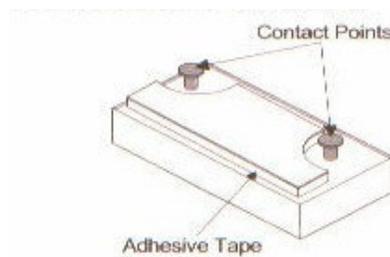- Wait for a phone call indicating that the alarm was detected.
- If no phone call is received, move the sensor and try again.
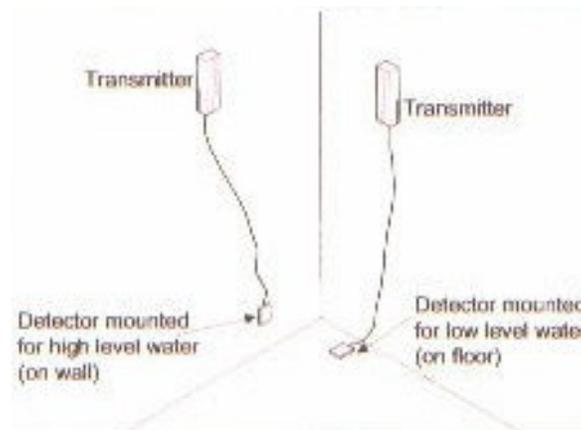

Figure 5

To install the High Water sensor:
- Locate the transmitter about 4 feet above the floor. Make sure the detector reaches the desired location, either on the wall a few inches up for a "high" detection or on the floor for a "low" detection, as shown in Figure 5.

- Remove the cover from the transmitter by pressing on the round button at the one end, as shown in Figure 6 on page 9.

Figure 6

- Remove the batteries.
- Mark the screw locations, remove the sensor, and drill pilot holes.
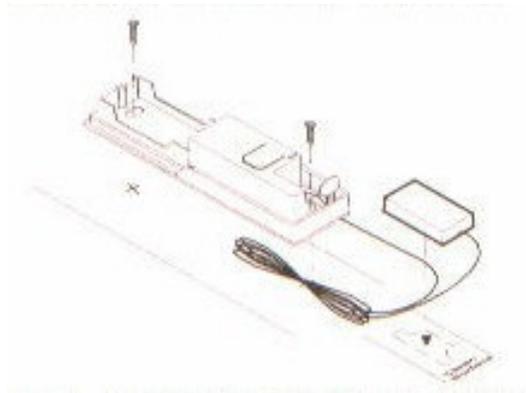

Figure 7

- Mount the transmitter with the included screws, as shown in Figure 7.
- Replace the batteries.
- Put the cover back on.
- Remove the film covering the adhesive on the double sided tape on the detector, and press the detector into place at the desired detection level.

Modified Wired Sensors

Any type of switch like sensor, that doesn't require a separate power source, can be converted into a wireless sensor by using a standard Door/Window sensor transmitter. Modified Wired sensors will typically come preassembled by Guardian Wireless, with a wireless Door/Window sensor already attached, via a 6 foot cord. Installation of the transmitter is the same procedure as if installing a Door/Window sensor, but without the requirement for being placed next to a window or door. The transmitter can even be hidden away, while the modified sensor is visible, if so desired. If

manufacturer's instructions for installing the wired sensor are available, they will be included for reference. Examples of Modified Wired sensors include Temperature Alert sensors, wired reed switch door/window magnetic sensors, and float sensors. If you have ordered any sensors that require the wireless modification, you will receive special instructions separate from this manual. Please refer to those instructions for installation and maintenance guidelines.

Siren/Horn

An optional siren or horn may be purchased with your system. Most of the siren/horn devices Guardian Wireless sells have three wires: steady, common, and yelp. These wires are normally identified right on the siren/horn body. When connecting the siren or horn to the Control Box, always connect the common wire to the –Horn terminal, and either the steady OR the yelp wire to the +Horn terminal. Never connect both the steady and yelp wires to the +Horn terminal because you will burn out the siren/horn. Insulate the unused yelp or steady wire to keep it from shorting against any metal in the area.

System Operation

Operating the System Locally

The Global RV Guardian System is designed for simple operation via the included key fob(s) and LED indicator. Here is how to use the system:

▪ **Arming:** To arm the system, simply press the Arm button on the key fob. The LED indicator will come on to show that the system is now Armed. If the LED does not come on, the system may have been Disarmed via the Guardian Wireless website, and as such, you must first press the Disarm button followed by the Arm button. The LED indicator will then light to show that the system is Armed.
▪ **Disarming:** To disarm the system, simply press the Disarm button on the keyfob. The LED indicator will turn off to show that the system is disarmed. If the LED does not turn off, the system may have been Armed via the Guardian Wireless website, and as such, you must first press the Arm button followed by the Disarm button. The LED indicator will then turn off to show that the system is Disarmed.

Operating the System Remotely

The Global RV Guardian System can be operated through our website by pointing your browser to:

https://www.guardianwireless.com/members/logon.asp

Logging In

Members Log On

| Username | | Password | | Log On |

Figure 8

After going to the above address, you will be presented with a logon screen. There, you may enter the username and password that you received in the letter that was included with your system. After you enter your information and click the "Log On" button, you will be redirected to your system's events page.

The Events/History Page

The events page is capable of showing all of the messages your unit has ever sent. The default is to show you the alarms and system messages for the current month and year, however, you can change this by selecting a different month and/or year and clicking the nearby Go button, as highlighted in yellow in Figure 9. Also, as with all global units, the Global RV Guardian can show you the location of all of the events by providing you with a "Map" link, as highlighted in red in Figure 9.

Recent Events / History

Welcome,

You have the following messages. To view archived history please select a month and year:

January ▼ 2007 ▼ Go

Time Stamp (CST)	Alarm	Alarm Details	Map Details
1/29/2007 4:05:08 PM	Status	Armed,Relay 1 Off,Relay 2 Off,Battery Voltage: 15.28 v, Bilge Pump Cycle: 0, Duration: 0 Min.	
1/29/2007 12:39:35 PM	Intrusion	Latitude: 0,Longitude: 0	Map
1/28/2007 4:05:09 PM	Status	Armed,Relay 1 Off,Relay 2 Off,Battery Voltage: 15.44 v, Bilge Pump Cycle: 0, Duration: 0 Min.	
1/27/2007 4:05:10 PM	Status	Armed,Relay 1 Off,Relay 2 Off,Battery Voltage: 15.28 v, Bilge Pump Cycle: 0, Duration: 0 Min.	
1/26/2007 4:05:12 PM	Status	Armed,Relay 1 Off,Relay 2 Off,Battery Voltage: 15.44 v, Bilge Pump Cycle: 0, Duration: 0 Min.	

Total Rows: 5

Figure 9

The Control Page

Control

Welcome,

You can remotely control the following:

Coordinates ▼ Send Cancel

Previous 10 remote control actions		
Time	Action	Result
1/4/2008 12:40:11 PM	Remote Lock	SUCCESS
11/24/2007 6:53:29 PM	Remote Unlock	SUCCESS
11/21/2007 10:54:04 AM	Status	SUCCESS
10/31/2007 12:47:50 PM	Status	SUCCESS
10/31/2007 11:23:08 AM	Status	SUCCESS
3/7/2007 9:41:59 AM	Status	SUCCESS
2/7/2007 3:50:50 PM	Status	SUCCESS
1/25/2007 3:37:08 PM	Status	SUCCESS
1/25/2007 3:34:44 PM	Relay 1 Off	SUCCESS
1/25/2007 3:33:58 PM	Status	SUCCESS

Figure 10

The control page, shown in Figure 10, is where you can control your unit, without being physically present with a key fob to do so. The control page shows you a history of the ten most recent messages you have sent to your unit. You also have three commands available: Status, Remote Arm, and Remote Disarm. To use these commands, simply select the desired command and click on the Send button. Then, after confirming the chosen command, the following text will be displayed, showing you it will take 3 minutes to process your command.

"Your request will take a minimum of 3 minutes due to satellite transmission.
You will be redirected to your events page in 3 minutes.
The time the message was sent: 00:00:00AM (CST)."

After the 3 minutes are up, you will be redirected to the events page where you will be able to see the result of the command you chose to send.

The Preferences Page

The preferences page, shown in Figure 11, is where you will find displayed your name, address, and telephone numbers. You may not edit your name and address; however, you may edit your phone numbers. To edit your phone numbers, simply click in one of the boxes shown in Figure 11, and enter the number, starting with area code, without any punctuation.

For example, the phone number (123) 555-0123 would be entered 1235550123. You may enter any three phone numbers, however, you may not enter 911 or any law enforcement agency phone number, as doing so is not permitted by law.

Preferences / Account

Welcome,

You currently have 19 messages left.

Owner's Information	
First Name	Demo
Last Name	Unit
Address1	500 S. 16th Street
Address2	
City	Manitowoc
State	WI
Postal Code	54220

Update | Cancel

Emails	
Email 1	gwsales@guardianwire
Email 2	sales@guardianwireles

Update | Cancel

Phone Numbers	
Call Order	**Phone Number**
Phone1	9202426320
Phone2	
Phone3	

Update | Cancel

Figure 11

Troubleshooting Guide

The Control Box

- **The Control Box doesn't respond to the Key Fob, turn on the LED, or send out any alarms:** These symptoms all indicate the Control Box isn't getting any power. Check the polarity of the connections. If the polarity is correct, check the voltage going into the box. The voltage should be a nominal 12 volts DC, but can be as low as 10.5 volts and as high as 15.5 volts. If the voltage going in is correct, please call 1-800-330-7413 for further assistance.
- **The LED does not turn on, but the unit sends alarms:** The LED is most likely not connected properly. Check the polarity of the connections and make sure there are no shorts in the cord between the LED and the Control Box. If the polarity is correct or the unit only sends High Water, Smoke, or Temperature alarms, then try replacing the battery in the Key Fob(s). If the LED still does not work, please call 1-800-330-7413 for further assistance.
- **The LED turns on and off, but no alarms are sent:** There are three possibilities: the sensor signal(s) are not able to reach the control box, the satellite antenna is not finding a signal, or the satellite antenna is not getting power. Please call 1-800-330-7413 for further assistance in troubleshooting this problem.
- **One of my alarms does not work:** Most likely, the battery is dead. Replace the battery. Most sensors take some form of lithium or alkaline battery. Be sure to match the type and size. If replacing the battery does not fix the sensor or you need help locating a replacement battery, please call 1-800-330-7413 for further assistance.
- **The Siren/Horn does not go off:** Check to make sure you haven't misconnected the siren/horn. Most of the siren or horn devices Guardian Wireless sells have three conductors: common, yelp, and steady. If yelp and steady are connected, then the horn will not work. You must always connect common and either yelp or steady. Make sure that common is on the –Horn terminal of the Control Box and yelp or steady are on the +Horn terminal of the Control Box. This is the correct polarity. Check to make sure you don't have any shorts, especially if you extended the wires to reach the box. If, after checking for shorts and proper polarity, the siren/horn does not work, please call 1-800-330-7413 for further assistance.
- **My question isn't answered in this troubleshooting guide:** Please call 1-800-330-7413 and we will do our best to help you out. We are open from 8:00 AM to 4:30 PM CST.

FCC NOTE

This device complies with FCC Rules Part 15.
Operation is subject to the following conditions:
> *This device may not cause harmful interference*
> *This device must accept any interference that may be received, including interference that may cause undesired operation.*
> *Changes or modifications not expressly approved by Guardian Wireless, Inc. can void the user's authority to operate the equipment.*

Warranty Information

LIMITED WARRANTY. Guardian Wireless warrants to the original retail purchaser, that if a Product is found to be defective in material or workmanship, within one year from the date of purchase, Guardian Wireless shall, at its sole and absolute discretion, repair or replace it with a new or reconditioned Product of the same or more recent model in exchange for the defective Product. This limited warranty applies only if proof of purchase presented at the time claim is made.

This limited warranty does not cover and is void with respect to: (i) physical damage to the surface of the Product, including cracks or scratches; (ii) cosmetic damage; (iii) any Product which has been improperly installed, repaired or modified; (iv) any Product which has been subject to misuse (including any Product used in conjunction with hardware electrically or mechanically incompatible), abuse, physical damage, abnormal operation, incorrect line voltage, improper handling, neglect, lightning, electrical surges, exposure to excessive moisture or dampness or extreme changes in climate or temperature; (v) any Product damage due to accident, fire, flood, and/or other acts of God, improper commercial use or damage that occurs in shipping; (vi) any Product on which factory-installed Product access numbers or serial numbers have been removed, altered or rendered illegible; (vii) consumables (such as batteries). Transportation to and from the authorized service center is the customer's responsibility.

EXTENDED LIMITED WARRANTY. If you have purchased our Extended Limited Warranty, we will extend the Limited Warranty explained above for the term on a year to year basis The Extended Limited Warranty will be available in One, Two or Three year increments Extended warranty is available upon purchase of the unit or within the last thirty days of the initial warranty term. You must notify us by telephone, e-mail or written notice at least 30 days before the end of the then-current yearly term to sign up for the extended warranty.

WARRANTY EXCLUSIONS. The limited warranty and, if purchased, the extended limited warranty do not apply if we determine upon inspection that any of the following conditions caused the need for service: A. Damage resulting from accidents, Acts of God, alterations or misuse; B. You fail to properly follow the operating or installation instructions; C. Trouble in a telephone line or due to interruption of power; D. Repairs needing batteries; E. Ordinary maintenance or wear and tear; F. Alterations to your premises; or G. Alterations to the system made at your request, or made necessary by a change to your premises, damage to your premises or the alarm system, or for any other cause beyond our control.

Guardian Wireless, Inc.
500 S 16th Street
PO Box 633
Manitowoc, WI 54220

(800) 330-7413
(920) 769-0066

http://www.guardianwireless.com/
info@guardianwireless.com

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