



The Guardian Installation Instructions

This guide provides general instructions for installing The Guardian security, tracking, and monitoring devices. If you are unsure about any steps, it is highly recommended to consult a professional marine electrician or contact us for support at 954.613.2255.



System Overview:

The Marine Guardian is a state-of-the-art security and monitoring solution specifically designed for boats and marine vessels. It combines GPS and cellular/satellite hybrid tracking technology to provide unparalleled coverage and peace of mind. Whether your boat is on land, at the dock, at anchor, or underway, you can monitor its status and security from virtually anywhere in the world.

Inputs:

The Guardian has 6 available inputs in the wiring harness. The input wires are labeled accordingly. Inputs 1,2,3,4,5,6 can all be used for the following:

- Door contacts - either capsule or flush mount
- High water sensor - * **ONLY** use the highwater sensor that ships with The Guardian system. Other sensors operate at different voltages and will harm the Guardian hub and void the warranty.
- Infrared beam sensors
- Shore power sensor

Safety First:

- **Disconnect power:** Before beginning any electrical work, always disconnect power to your boat's battery system.
- **Proper tools:** Use the correct tools for each task.
- **Waterproofing:** Ensure all connections are waterproof using marine-specific connectors (e.g., heat-shrinkable butt splices) to prevent corrosion and electrical issues in the marine environment.
- **Fuse protection:** The Guardian ships with a 10A fuse----
- **Professional help:** If you are not comfortable with marine electrical systems, consider hiring a certified marine electrician.

I. Pre-Installation Planning

1. **Read the Manual:** Thoroughly read the entire Marine Guardian installation manual before starting the installation.
2. **Device Components:** Familiarize yourself with all components included in your Marine Guardian kit (e.g., Guardian device, sensors, wiring harness, etc.).
3. **Document your Installation:** The Guardian has 6 input wires. Each input wire is labeled every 12". Write down which input wire is connected to a specific sensor.
4. **Location Selection (The Guardian device):**

The Guardian is designed to be mounted below deck. When deciding on the best location, the biggest factor will be 2G/3G/4G reception. Use your mobile phone to test various locations inside the boat to see where the best reception is found, usually close to a port hole, hatch or window.

- **Secure:** Choose a secure, dry, and protected location for the Guardian hub. It should be away from direct water exposure and excessive vibration. Its small footprint is designed for easy concealment.
- **Accessibility:** Ensure The Guardian device is accessible for wiring connections and future service. Leave enough space to connect the wiring harness and satellite antenna (if purchased)
- **GPS/Cellular Signal:** The hub must be able to "see" the sky for optimal GPS and cellular signal reception. Avoid mounting it near large metallic obstructions (e.g., engines, battery banks, large metal structures) that can block signals. Fiberglass, wood, or plastic typically do not block signals.
- **Cable Routing:** Plan cable routes to be secure, protected from moving parts, sharp edges, foot traffic, and marine elements.

5. Sensor Placement:

- **High Water Sensor:** Find a spot in the bilge of the vessel that is level with the top of the bilge pump, ensuring the electronic water-sensing switch is positioned correctly.
- **Infrared beam sensors:** **Attention** - Infrared beams input cannot receive 12 volts directly. The infrared beams have their own control box to be mounted. The beam sensors need to accurately point at each other. It is recommended

to install the beams at a helm station or entry point as your first line of defense.

- **Door/Hatch Sensors:** Mount these on the intended doors or hatches to detect unauthorized opening. The contacts should be installed in a corner of the latch side of the door or hatch opening.
- **Shore Power Sensor:** This sensor is connected at the shore power entry point.

II. Installation Steps

Step 1: Mount The Guardian Hub

- **ATTENTION:** DO NOT connect this device to a 24-volt system without a converter to 12v. This will void the warranty.
- The main device cannot be mounted upside down. It can be mounted on the side of a wall or flat facing straight up
- The main device cannot be used through carbon fiber

Steps:

1. **Prepare the Surface:** Clean and dry the chosen mounting surface.
2. **Secure the Hub:** Use the self-tapping screws (or other provided hardware) to securely attach the Guardian hub to the chosen location. Ensure the hub is oriented facing up or on a 90-degree plane. (e.g., with the "Facing Up" sticker facing upward for optimal GPS antenna performance).
3. **Cable Access:** Make sure there is ample room for wire harness and satellite antenna wire (if purchased) to be positioned correctly.
4. **Wire Harness:** Unwrap the wire harness neatly. Connect the deutsche to the hub. Each wire is labeled for its intended purpose.

Step 2: Wire the Power Connection

The power connection also monitors the battery voltage. There is no separate battery monitor to install.

1. **Identify Power Source:** Connect the Marine Guardian to a 12V DC power supply. A constant, fused, unswitched positive source (e.g., directly to the engine start battery) is typically recommended to ensure continuous monitoring.
2. **Positive Connection:**
 - Connect the **white (+ or positive)** wire from the Guardian's power cable to the positive terminal of your power source.
 - **Crucial:** Install the 5A fuse in line with this positive connection.
3. **Negative (Ground) Connection:**
 - Connect the **black (- or ground)** wire from the Guardian's power cable to the negative terminal of your battery or to a common ground (-) terminal on your boat.
4. **Secure Wires:** Use cable ties or wire clamps to neatly secure all power wiring, protecting them from abrasion, moving parts, and sharp edges.
5. **Waterproof Connections:** Use the supplied marine-specific, heat-shrinkable butt splices for all wire connections.

Step 3: Install and Connect Sensors

The Marine Guardian supports a variety of sensors to monitor different aspects of your vessel's systems. Follow these general guidelines for sensor installation:

1. Flush Mount Door Contact Sensors



Kit contents:

- Flush mount sensor
- 2 18 AWG crimps
- 2 18 AWG heat shrink

Steps:

- Run an input wire to the door location. Secure the wire with cable ties.
- Start off with 3/16 drill bit
- Use a 5/16 drill bit to step up the hole a little larger
- Finish off with a 3/8 drill bit
- Use the supplied marine-grade adhesive or screws for secure mounting.
- Connect the sensor wires to the input wire using the supplied 18 AWG crimps. Be sure to slide the heat shrink sleeves on the wire before crimping.
- Use the heat gun to shrink the heat wrap over the crimp

2. High Water Sensor



Kit contents:

- High water sensor
- High water sensor bracket
- 2 14 AWG crimps
- 2 14 heat shrink provided
- 2 10-24x3/4 Phil pan machined screws
- 3 10x1/2 Phil pan screws

Steps:

- Find a spot in the bilge of the vessel that is level with the top of the bilge pump
- Run one of the input wires to the sensor location
- Use the 3 10 x 1/2 Phil pan screws to mount the high-water bracket
- Use the two 10-24x3/4 Phil pan screws to mount the sensor on the bracket
- Connect the red and black 18 AWG to the 2 grey wires of the high-water sensor. Be sure to slide the heat shrink sleeves on the wire before crimping.
- Use the heat gun to shrink the heat wrap over the crimp

3. Shore Power Sensor**Kit contents:**

- Shore power sensor
- 2 18 AWG crimps
- 2 18 AWG heat shrink

Steps:

- Locate the plug for the shore power
- Run an input wire to the shore power entry location
- Find the white/neutral wire on the back of the plug and unscrew it to then add the 14 AWG white/neutral wire off the shore power sensor provided then make sure both white wires are in the hole and tighten down ensuring the wires are secure
- Unscrew the black/ground wire on the back of the plug and unscrew it to then add the 14 AWG black ground wire into the hole and then tighten down making sure the wires are secure
- Using the 18 AWG crimps and heat shrink provided connect the shore power sensor to 1-4 of the input wires

4. Infrared Beams

Attention - Infrared input cannot receive 12 volts directly. The infrared beams have their own control box to be mounted.



Kit contents:

- Infrared control box
- Infrared harness with beam eyes
- 8x3/8 screws
- 4 - 18 AWG crimps
- 4 - 18 AWG heat shrink
- 2 - 3/8 heat shrink

Steps:

Mounting Sensor Box

- Look for a place that is out of the way but still accessible to get to. Use the supplied 4 stainless screws in the bag.

Mounting Infrared Beam Eyes

- Preferred location is in the middle of the helm and helm seat. NOTE: Do not mount the beams too low as a person can step over the beam or an animal or bird can trigger them. We prefer to mount the beam as close to the bottom of the coaming bolster as possible. Make sure that you measure from the bottom of the deck to the center of the eye. Do not go by the bolster, as we have found that not to be the same. If you are mounting it into fiberglass, drill a ½ inch hole. We prefer to use a ½ step drill bit.

Wiring of Sensor

- Single beam harness will have 4 wires coming out of the connector.
- Infrared Input Wire: You can connect this wire to any input wire coming off of the main device. ***Do not** connect the input wire to anything but another input. If you connect this infrared input to 12 Volts you will burn out the sensor and controller on the main device.
- Infrared Power Wire: This wire needs to be connected to a constant 12-24 Volts power source. You can slice this wire into the constant power wire coming off of the main device.
- The Blue and Grey Wires: These are your beam eye wires. They are 32' 10" long. ***When pulling these wires, be careful not to pull hard as they are small and can break.**
- If you are installing a dual beam unit, make sure you don't mix the pairs up. Keep the pair 1 blue and grey that are marked together. They are not front or rear beams, so you can mount them how you want.

Syncing and Testing Beams

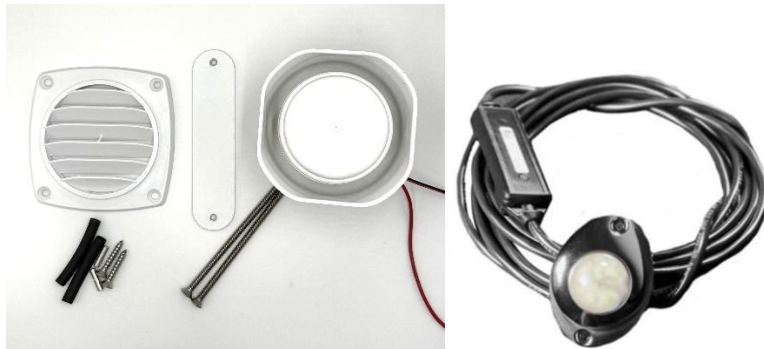
- Once you have mounted the beams and powered up the sensor, you will need to sync the beams. Once powered up, the green and red lights will be blinking. Push the blue button down until the lights go off. Once released, for single beam the green light will stop blinking. With the dual beams, both the green and red light will stop blinking. If the green or red light is blinking, then that pair of beams is not properly synced.
- To confirm that your beams are synced, have a person or object block the beams. When nothing is blocking the beam(s), the light should be on. Once the beam(s) are blocked, the light will go off.

Specifications

Installation distance	Less than 10 m (32' 10")
Detection method	Point to point infrared light beam
Power supply	12 to 24 V AC/ 12 to 30 V DC
Current draw	160 mA max

Operating indicator	BEAM1 / BEAM2
Stand-by:	Green ON / Red ON
Detection Active:	Green OFF / Red OFF
Insufficient sensitivity:	Green Blink / Red Blink
Test input error:	Simultaneous twice blink (Red and Green)

Step 4: Install the siren and optional LED Strobe Light



The siren and strobe are activated when a security sensor or theft fence is tripped. Use the output wire to connect the siren and strobe light.

The siren has a white vent cover. Find a location that is accessible to install and is somewhat unnoticeable.

The LED strobe light should be installed high, such as under the T top.

Siren Kit Contents:

- Waterproof Siren and cover
- Mounting bracket and screws
- 2 18 AWG crimps
- 2 18 AWG heat shrink

LED Strobe Light Contents:

- LED Strobe light with bezel

Siren Kit Steps:

- Find an open area to mount the siren.
- Place the vent cover on the mounting surface and mark the four screw location with a marker or pencil.
- Find the center by drawing lines crisscross between the screw locations.
- With a 2 1/2-inch whole saw, drill a hole at the center of the cross mounting location.
- Drill 2 holes with a 5/32 drill bit for the self-tapping screws
- Drill 2 holes with a 7/32 drill bit for the thru bolts
- Install the vent cover with the two mounting screws in opposite corners.
- Install the siren by using the provided white bracket to sandwich the siren with the thru bolts.
- Connect the wires to the output wiring harness. Match the wire colors.

LED Strobe Light Steps:

- Find a location for the strobe light
- Drill a hole large enough to feed the supplied wire through
- Feed the wire to the output wire and splice together. The output wire is the same output that the siren is using.
- Use the red and black wire only. Cut and discard the white and green wires.

Step 5: Install the LED Alarm Indicator Light

The LED light indicates if the system is armed or disarmed. When the light is illuminated, the system is armed. A good location to install is at the helm or entry location so you can remind yourself to disarm the alarm before accidentally activating a sensor.

Kit contents:

- LED light
- 2 18 AWG crimps
- 2 18 AWG heat shrink

Steps:

- Find a visible spot on the helm or entree way of the vessel to mount the led indicating that the alarm is active
- Drill a 13/64 hole for the LED light
 - Connect the green and black wires to the labeled “ALARM LED” wire on The GUARDIAN main harness

Step 6: Install the satellite antenna (if equipped)

ATTENTION: DO NOT cut the wire. The antenna is designed to be installed outside or through fiberglass. It should not be installed under metal. The “Face the sky” label should be pointed upwards.

Kit Contents:

- Iridium satellite antenna with 15 feet of wire
- 2 8x3/8 Phil Pan Screws

Steps:

- Find an open area such as a gunnel, hardtop, or side of a helm
- Add the provided double sided tape to the white sat antenna bracket, then stick the sat antenna with face to sky upward
- Mount the sat antenna with the 2 8x3/8 Phil Pan Screws
- Attach the antenna wire to the side of the main device by threading it on

III. System Activation and Testing

1. **Double-Check All Connections:** Before powering up, meticulously inspect all wiring connections to ensure they are secure, correctly wired, and waterproof.
2. **Power On:**
 - Ensure the Guardian is connected to the control switch (if applicable) and the power cable.
 - Switch ON your vessel's batteries to power the Guardian.
3. **Initial Power Up:** The Guardian should beep once to indicate it's switching on.
4. **App Download and Setup:**
 - Download the "TMG Dash app from your device's app store (Google Play or Apple App Store).
 - Create an account and register your device within the app.
 - Follow the on-screen prompts to connect your device and set up your profile.
 - You can also login to your account at www.themarineguardian.com
5. **Service Plan Activation and Pairing (if applicable):**
 - To active the service plan for monitoring, go to, or have your customer go to <https://www.themarineguardian.com/serviceplans/>. Complete and submit the form.
 - The customer will receive the annual service plan invoice request via email. They can pay the invoice via the link in the email. Once paid, we will email their username and temporary password to log into the mobile app.
 - A Marine Guardian team member will contact the customer to offer mobile app training and ensure they are comfortable with the system.
6. **Monitor App Status:** Check the app to confirm that all sensors are reporting correctly and the system status (Armed/Disarmed, Ready/Not Ready) is accurate. Address any "System Not Ready" warnings by checking the listed sensors.

IV. Post-Installation

- **Secure Cables:** Use cable ties or wire clamps to neatly secure any loose wiring.
- **Documentation:** Keep your Marine Guardian user manual and installation records in a safe place.
- **Familiarization:** Thoroughly familiarize yourself with the app's features, alert types, and output controls (e.g., siren ON/OFF, ignition kill, bilge pump ON/OFF).
- **Maintenance:** The Marine Guardian system typically requires no ongoing maintenance once installed.

By following these steps and consulting your specific Marine Guardian manual, you can successfully install your security, tracking, and monitoring device, providing peace of mind for your vessel.
