



BB502 Battery Powered GPS Asset Tracker

Operation & Installation Guide

Power On/Off, Reboot Device

There are 3 ways to power the device on/off or reboot it.

- Magnet on Rectangle on Enclosure
- Power Switch on Circuit Board
- Disconnect the Battery

Power On/Off with Magnet

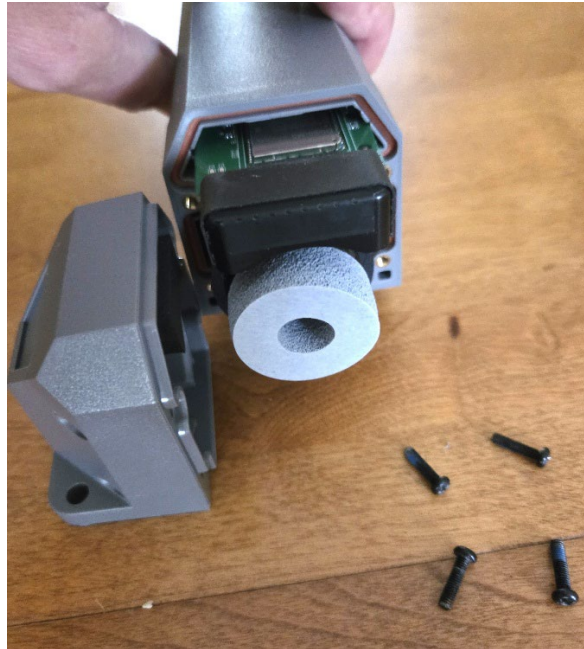
- To **power off** the device, place the magnet (provided) on the rectangle (circled in red) on the enclosure. Use tape to secure it in place.



- To **power on** the device, remove the magnet. DO NOT LOSE THE MAGNET! STORE IT IN A KNOWN LOCATION!
- To **reboot** the device, hold the magnet on the rectangle for 10 seconds, then remove it.

Power On/Off with Power Switch

- a. Unscrew the end cap (4 small screws) with a Phillips head screw driver. **Carefully** slide out the battery and circuit board. **SLIDE BOTH BATTERY AND CIRCUIT BOARD OUT TOGETHER!** The battery is connected to the board so BE VERY CAREFUL not to break the wires or the connector!



- b. Locate the power switch on the circuit board (circled in red):



- c. Slide power switch to on or off as desired.



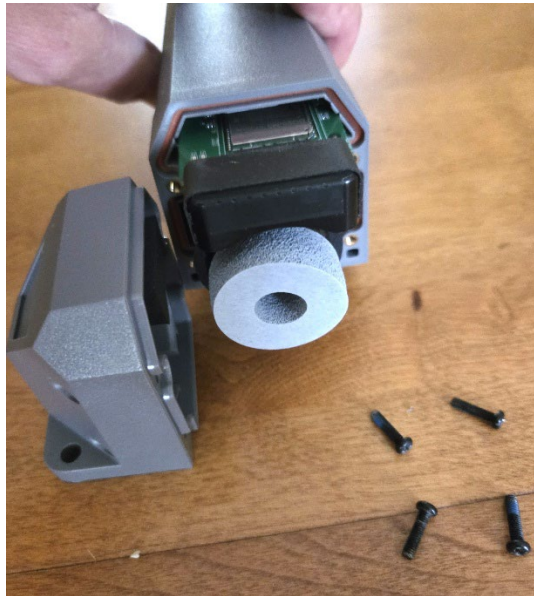
- d. To reboot the device, slide power switch off for 10 seconds, then on.
- e. Carefully slide the battery and board back into the enclosure. Ensure the board slides into the slots above the battery! Tightly screw the end cap in place. DO NOT OVERTIGHTEN!

Power On/Off by Disconnecting the Battery

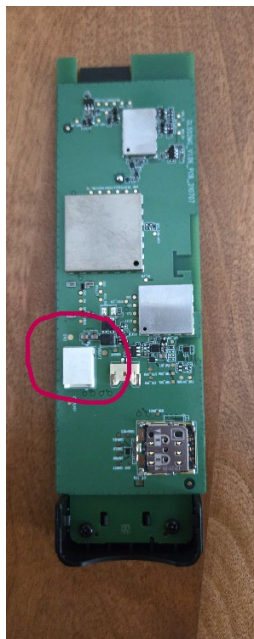
Procedure is the same as described in the next section, Battery Replacement

Battery Replacement

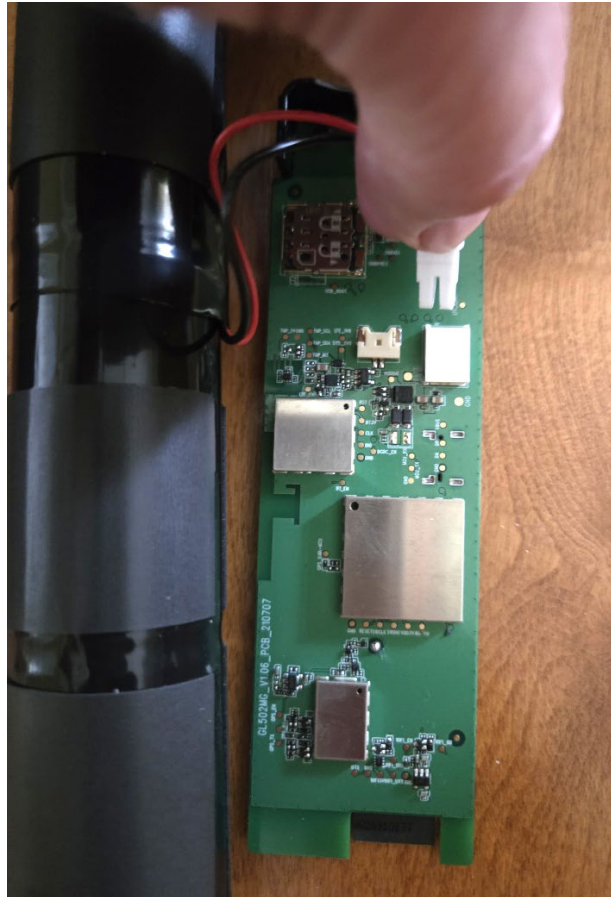
- a. Unscrew the end cap (4 small screws) with a Phillips head screw driver. **Carefully** slide out the battery and circuit board. **SLIDE BOTH BATTERY AND CIRCUIT BOARD OUT TOGETHER!** The battery is connected to the board so BE VERY CAREFUL not to break the wires or the connector!



- b. Locate the power connector on the underside of the circuit board (circled in red):



- c. To **disconnect** the battery (and power off the device), remove the white male connector from the white female connector on the circuit board. With fingernails, push both tabs on each side of the white male battery connector away from the white female connector on the circuit board. **PUSH ON THE EDGES OF THE WHITE MALE CONNECTOR ONLY! NEVER PULL ON THE WIRES!!!**



- d. To **connect** the battery (and power on the device), insert the white male battery connector into the white female connector on the circuit board. Push the tabs on each side of the male connector gently but firmly till it snaps into place. **DO NOT bend or pull the wires!!!**
- e. To **reboot** the device, slide power switch off for 10 seconds, then on.
- f. Carefully slide the battery and board back into the enclosure together. Ensure the board slides into the slots above the battery! Tightly screw the end cap in place. **DO NOT OVERTIGHTEN!**

Installation

Intermodal Container / Trailer Door Screw Mount

Tools and Materials needed:

- Cordless Drill
- 3/16" Drill Bit
- 3/8" Open-End Wrench
- Cross Tip Drill Attachment (or 1/8" Hex Allen Wrench)
- Scratch Awl
- RTV Sealant

Procedure:

- a. Tag equipment with appropriate signage to indicate Lockout/Tagout procedure is in process.
- b. Set the parking brake.
- c. If the equipment is parked on an incline chock the wheels.
- d. Block or crib equipment that is suspended on jacks in order to prevent falling or shifting.
- e. Record the Module IMEI Number located on the device label, and the trailer/container/asset identifier name and/or number.
- f. Identify a suitable mounting location. Preferred locations are:
 - Top of the left or right door
 - Between locking rods
 - In the bottom of corrugation well



Top Left Container Door Mount (mounted in corrugation well between locking rods)

- g. Ensure mounting surface is level and rust free.
- h. Level device in mounting area with label facing down.
- i. Mark all four (4) mounting holes with scratch awl. Drill all four (4) mounting holes.
- j. Apply RTV sealant inside the mounting holes.



Sealant Applied to Backside

- k. Feed mounting screws from inside container door.
- l. Mount device on screws and tighten nuts (**CAUTION:** Drive screws at low speed to avoid seizing).
- m. Remove the activation magnet from the front of the device enclosure in order to activate device reporting.
- n. **IMPORTANT!!! SAVE THE MAGNET! KEEP IT IN A WELL KNOWN AND ACCESSIBLE PLACE!!!** *The magnet is used to power down the unit for storage and to reboot the unit upon startup.*