

## Step 1: Selecting a Mounting Location

To ensure ideal performance and to maximize service life:

- Select a horizontal mounting position (lying flat, facing skyward) that provides the best view of the sky.
- Select a mounting location that is clean and isolates the AT5 from damage.
- The AT5 can also be mounted on a flat vertical surface, but this may reduce the communication reliability, GPS location accuracy, and decrease the maximum sustainable messaging rate. If the device must be mounted vertically facing the horizon, mount the device with the connector cap pointed towards the ground.
- Thoroughly clean the mounting area, especially for VHB tape installs.
- Recommended mounting area size is 5.0" L x 3.0" W (127mm L x 76mm W).
- DO NOT PAINT OR COVER THE AT5, otherwise product performance and service life will be impacted.
- DO NOT PRESSURE WASH THE AT5 device or endcap connection.



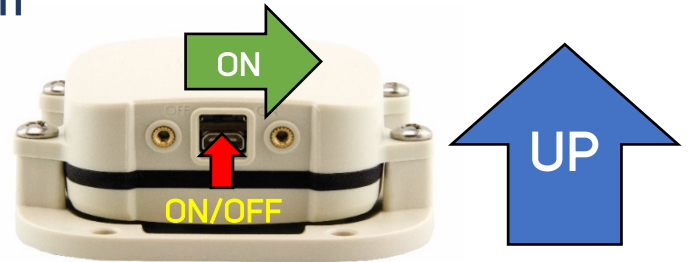
## Step 2: Prepare Device for Installation

The AT5 consists of the following parts:

- Qty 1 AT5 Tracking Device
- Qty 1 VHB Tape pad (Optionally Used)

Tools Required:

- Phillips Screwdriver (Size P0 or P1)
- Small tipped non-conductive tool



- Remove the AT5 Endcap with a P0 or P1 size Phillips Screwdriver.
- IMPORTANT: Set the AT5 ON/OFF switch to ON. The AT5 will NOT operate in the OFF position. Use a tool with a small nonconductive tip to toggle the switch. Avoid hitting any circuit components or electrical contacts.
- Reinstall the AT5 Endcap. Ensure screws are secure to prevent future water ingress.

- The AT5 should be shipped installed on its plastic mounting bracket. If not, secure the AT5 to the mounting bracket with the supplied screws. Do not over-tighten the mounting screws (max. 10 in.lb) or damage to the mounting ear or AT5 body may occur.
- Ensure the molded in label indicating "THIS SIDE TOWARDS SKY DO NOT PAINT" is skyward facing.

## Step 3: Select a Mounting Method

### VHB Adhesive Tape

The AT5 may be mounted using the supplied VHB double sided adhesive tape (with or without the mounting bracket). Consult the Geoforce VHB Installation and Removal Guide for proper cleaning and use of VHB tape when mounting the device.

### Self-Tapping Screws

For installations requiring metal fasteners, select the appropriate #6-32 self-tapping or machine screws to secure the AT5 plate to the AT5 device. Do not over-tighten the mounting screws (max. 10 in.lb) or damage to the mounting ear or AT5 body may occur.

## Step 4: Record the Asset and AT5 Serial Numbers

- Record the AT5 serial number.
- Record the asset name and serial number.
- Enter the asset information into the Geoforce Track and Trace software application and assign the AT5 serial number. Contact your Geoforce account service representative if you require assistance.



**WARNING: IF YOU DO NOT TURN THE DEVICE TO "ON" THE AT5 WILL NOT WORK.**

# AT5 Maintenance – Battery Replacement

The AT5 Satellite Asset Tracker ships with and uses four “Energizer Ultimate” L92 AAA Primary Lithium batteries. When replacing the internal batteries, it is required to replace with the same “Energizer Ultimate” L92 AAA batteries.

## Tools/Supplies Required:

- Phillips P1 sized screwdriver. An electric drill is not recommended.
- Four new “Energizer Ultimate” L92 AAA lithium batteries.

**Note: Alkaline and rechargeable AAA-sized batteries are NOT allowed.**

## Battery Replacement Notes

- Always replace the batteries in a clean and dry environment (to avoid water or debris from entering the enclosure).
- Ensure the device is clean of any caked-on dirt or other debris and dry prior to opening the device for battery replacement.

## Step 1: Remove Housing Screws

- Using a Phillips P1 size screwdriver, remove the four screws that secure the device to its plastic mounting bracket and set them safely aside (magnetic dish recommended to prevent screws from being lost).
- Remove the four housing screws that secure the two halves of the device together and set them safely aside (magnetic dish recommended to prevent screws from being lost).

## Step 2: Remove Top Cover

With the screws removed, grasp the top cover/electronics assembly and remove.

**NOTE: Use caution to prevent dirt, water, or other foreign contamination from entering the device during battery replacement.**

**NOTE: Avoid directly touching any antennas or circuit components.**



## Step 3: Remove and Replace the Old Batteries

- Carefully remove the four old batteries, one at a time.
- Set old batteries aside for responsible disposal and do not let old batteries mix with new replacement batteries.

**NOTE: Replace all batteries and do not mix with other battery types.**

- Carefully install four new batteries.

**NOTE: Correct battery polarity is critical to device function.**

## Step 4: Reinstall Cover

- Reinstall the top cover/electronics assembly with the gasket and electrical spring contacts clean and properly aligned.
- Reinstall **all four** screws in an “X” pattern to ensure an even and proper seal on each corner. **Maximum screw torque: 5 in-lbs.**

## Step 5: Confirm Functionality

The AT5 Satellite Asset Tracker will automatically power up and begin service after battery replacement by sending a power up location message. If the unit is outdoors and in good sky-view this reading will register with the Geoforce Track and Trace application.

**NOTE:** If leaving the switch in the ON position, changing batteries while indoors or with obstructed sky view may result in NOT receiving a “power on” message. To receive a “power on” message, restart the AT5 device by switching it off and then back on with good sky view.

**NOTE:** The Geoforce Track and Trace Application may not show the update immediately; it may take up to 30 minutes for the new check-in reading to register depending on sky view at the time of device power up.

# Product Notices and Warnings

## Installation Notices

1. **WARNING:** This product assembly is **NOT** certified for use in Hazardous Locations including all Zone and Class/Division classified areas. **Operating this product assembly within known classified hazardous areas is at the user's risk.**
2. Geoforce highly recommends using mounting fasteners made of a material such as stainless steel that resists galvanic corrosion and environmental weathering. This is especially important for marine applications.

## Operational Notices

1. **External line power and wiring connections are NOT allowed on the AT5.**
2. Usage of the AT5 above 60°C and below -30°C may cause RF signal degradation and decreased battery longevity.
3. If the asset is going to be stored indoors for extended periods, shut down the AT5 by flipping the power switch to off to prevent draining the internal batteries.
4. **Tightening Cover Screws:** Upon replacing the Battery Compartment Cover or the Configuration Cable Cover, tighten the screws according to specification; otherwise, the unit may no longer retain its water-tight capability.
5. **Blasting Area Warning:** To avoid interference with blasting operations, turn the AT5 off when in a "Blasting Area" or in areas posted "Turn off two-way radio." Obey all signs and instructions.

## Battery Notices

1. When replacing the internal batteries, use only "Energizer Ultimate" L92 AAA batteries. **Alkaline and rechargeable AAA-sized batteries are NOT allowed.**
2. **Replaceable Batteries - Caution:** Risk of explosion of battery if replaced by an incorrect type. Dispose of used batteries according to the manufacturer's instructions.