



ASSET TRACKER



WARNING:

Read and understand all instructions and warnings for this product. In addition, read and follow all instructions and warnings provided.

DANGER OF EXPLOSION, INJURY OR FIRE. Carefully follow all instructions and warnings on the battery label and package



CAUTION:

- Never use a damaged or worn out battery
- Batteries should be replaced only with the correct rechargeable 3.7V lithium polymer battery.
- Do not peel the label from the housing.
- Never dispose of a battery in a fire
- Dispose of used batteries in accordance with local regulations.
- Always insert batteries correctly with regard to polarity (+ and -) as marked on the battery and the equipment.
- When installing the battery, do not use excessive force. If the battery does not fit, check to make sure that it matches the polarity markings.
- Never expose the battery terminals to any other metal objects. This can short circuit the battery.
- Avoid exposure to temperature extremes
- When not in use, store the battery in a cool, dark, dry place.
- Keep batteries out of the reach of children.

REGULATORY STATEMENT

This device complies with Part 15 of the FCC rules. Operation subject to the following two conditions:

1. This device may not cause harmful interference,

and

2. The device must accept any interference received, including interference that may cause undesired operation.

Changes or modification to this device may void the user's authority to operate this product.

This product is designed for indoor/outdoor use. It is designed to be weather-resistant.



CAUTION: POTENTIAL EQUIPMENT MALFUNCTION OR FAILURE.

Do not touch the electronic components inside the device, except the reset button and the battery.

COMPONENTS

Figure 1



PRODUCT FUNCTION

RECON Dynamics lets you create that invisible fence and set some custom rules for what's inside it. You'll be able to define specific parameters for location boundaries and crucial measurements like motion, temperature, altitude, and flow rate - virtually anything you want to track and monitor. You can rest easy knowing RECON is always keeping an eye out, ready to alert you at a moment's notice. You'll be notified based on your custom parameters and event notification priorities.

- Supports geo-fencing applications
- Built-in telematic sensors - temperature, vibration (motion), barometer (elevation)
- Operates up to 2 years between battery charges
- Direct sequence spread spectrum (DSSS)
- Low data rate, wide bandwidth spreading
- Low power, long range
- 902 – 928 MHz unlicensed spectrum
- Highly reliable and secure
- Over-determined network topology

NOTE: Metal objects blocking radio frequency (RF) transmission can affect the range of the sensor.

PRODUCT OPERATION

The Asset Tracker is operated using the push-button reset switch located on the top side of the circuit board.

To turn the Asset Tracker on:

- Open the Asset Tracker housing. Remove the retaining screw if necessary.
- Press and hold the reset switch for a few seconds until the LED on the side of the circuit board illuminates green.
- Release the switch and the LED will flash red several times quickly. Then the LED will flash green every few seconds for a period of about 30 seconds.
- The Asset Tracker is now on and has transmitted an initial location signal to the system.

To turn the Asset Tracker off:

- Press and hold the reset switch and continue holding it.
- The LED on the side of the circuit board will flash red and green for about 10 seconds.
- Continue holding the switch until the LED flashes quickly only red.
- Release the switch.
- The Asset Tracker is now off.

PREVENTION OF FALSE ALARMS

The majority of alarms that occur are false. These situations happen every day due to user error, incorrect installation or improper maintenance of the system. False alarms will limit the responsiveness to the system, and become a general inconvenience. As the number of false alarms increases, authorities have become less likely to respond to alarm systems due to this problem. Many of these situations can be avoided by following some very simple practices.

- Ensure all users are properly trained on the operation of the system
- Lock all protected doors, windows or any other asset attached to a sensor
- Check that motion detectors are not obstructed. Do not allow sources of heat or sound in range of the motion or vibration sensors.
- Check that premises are cleared and assets secured before setting the system.
- Turn off all noise sources - radios, compressors, generators, heavy equipment, etc.
- Know how to cancel an alarm or turn off the system before activating.
- If a false alarm is tripped notify the system administrator immediately.
- Test the system on a monthly basis to ensure proper functionality.

Recommended Locations

- Secure product off the ground [above 3 feet (.91m)] to ensure better communication. Place as high as possible on the asset to allow unobstructed transmissions to the system. When possible mount the Asset Tracker with the Recon Dynamics logo oriented up like is shown in Figure 1. This provides the optimum antenna orientation.
- Recommended for use on mobile equipment, containers, gates and remote assets.

Charging the Battery

This wireless sensor contains a rechargeable 3.7V lithium polymer battery. From a single charge the battery can provide up to two years of device use depending on the amount of use.

To Charge The Battery

1. Locate the charging port on the side of the Asset Tracker.
2. Uncover the charging port by removing the plug from the housing. Do not use excessive force as the plug is connected to the housing and will need to be replaced when charging is complete.
3. Plug in the selected charging unit

Note: If the unit is charging correctly, the LED on the circuit board will be red.

4. Disconnect the charger when the LED on the circuit board turns green,

Note: If the unit is functioning correctly, the LED will flash intermittently. The flashing interval may be long enough that you may not see it.

Securing Equipment

The Asset Tracker unit does not need to be removed before operating the attached equipment.

To Secure the Equipment using the Asset Tracker

There are many ways to secure the unit to the asset. Recon Dynamics provides a mounting bracket, but Velcro®, construction adhesives, or even cable ties can be used based on the situation.

1. If you are using the mounting bracket: Attach the bracket to the asset using screws provided or appropriate adhesive. Use caution when selecting a location for mounting. Do not use the screws if doing so will cause irreparable damage to the asset or create a safety hazard.
2. Insert the bottom of the AT unit into the latch, aligning the snap features with the notches of the AT unit.
3. Press the AT into the bracket. When you hear it click, the unit is secured.

To release the Equipment from the Asset Tracker

1. If using the provided mounting latch: Grip the AT unit at the top near the latch.
2. Pull gently towards you.

If the unit is reset and operating correctly, the LED will intermittently flash.

Device Registration

To activate the device, it must first be assigned to your AT monitoring application.

NOTE: The system must be disarmed prior to any changes.

1. Locate the corresponding ID for the AT on the label located on the housing of the AT.



Write the device description and corresponding device number on the Sensor Location List included with the Portable Alarm System. Keep this sheet for reference. This information will be needed during the monitoring service enrollment process. As device changes are made, be sure to contact customer service to make adjustments to the monitoring service.

2. Using a standard web browser on your computer, type www.recondynamics.com into the browser's address bar.

3. Click on the button labeled “Create New Account”.
4. Enter your email address, password, and other information for your account.
5. Once logged in, near the upper right of the web page, click on the box labeled “Add A Device”.
6. In the dialog box enter the ID from the AT label and any information you would like to have associated with the AT or the asset.
7. Click on the Save button to save this device. Repeat this procedure for any other devices you may have.

Note: If the unit is reset and operating correctly, the LED will intermittently flash, although it may be several hours between flashes.

Device Status

The following table lists the LED state and the corresponding device status:

LED State	Device Status
Solid red	Charging
Solid green	Done charging
Flash green	Normal transmission
Flash green then red	Alarm transmission
2 red flashes every 10 seconds	Low battery
Alternating red and green	Battery too low to transmit

Faults

If a fault is present, the system will chime and the Fault screen will be displayed. To silence the chime, select SILENCE. To display the fault and resolve immediately, select DISPLAY. Use the up and down arrows to scroll through the faults. Resolve the issue with the action listed in Description of Fault Codes chart.

TO REMOVE A FAULT

1. To Clear the Fault.
 - a. Open the Asset Tracker Monitoring application in your web browser.
 - b. Select DISPLAY.
 - c. Scroll list of fault(s).
 - d. Locate the correct External ID (label is located on the unit).
 - e. Select CLEAR.
 - f. Select OK.

If the unit is reset and operating correctly, the LED will intermittently flash.

Full One Year Warranty

The Asset Tracker is warranted for one year from date of purchase. We will repair, without charge, any defects due to faulty materials or workmanship. For warranty repair information, visit www.recondynamics.com/warranty.

This warranty does not apply to accessory damage caused where repairs have been made or attempted by others. This warranty gives you specific legal rights and you may other rights which vary in certain states or provinces.