

Watch the 2 minute  
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watch?v=UfhRat3\\_-RE&t=5s](https://www.youtube.com/watch?v=UfhRat3_-RE&t=5s)  
as a link

# Asset Tracker AT1000

## Installation Guide

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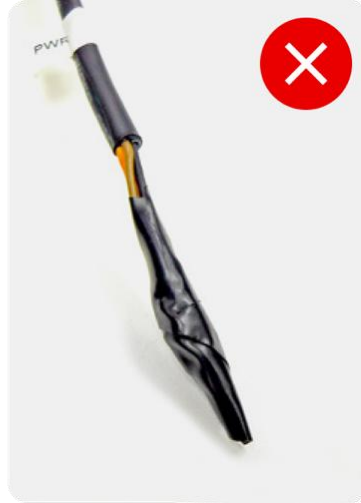
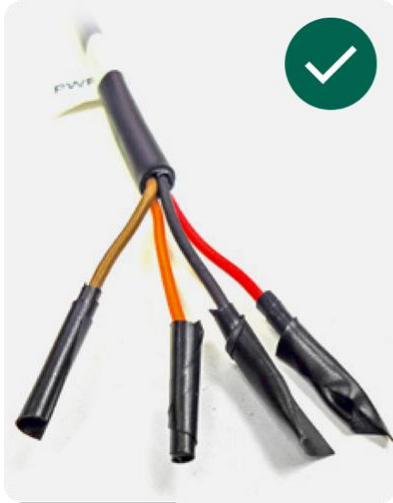
## 1 Overview of the AT1000 Leds

The AT1000 LED indicator lights have been designed to provide a simple visual reference regarding the device's current status. The table describes each status and the respective LED indications.

Device Status	Power LED	Network/Cell LED	Emergency Button	Tamper Switch
Activation	Illuminated	-	Pressed	Pressed (device in cradle)
Attempted activation with device not in cradle	Blinking	-	Pressed	Not pressed
Deactivation	Illuminates and then turns off	Illuminates and then turns off	Pressed	Not pressed (out of cradle)
Device is not registered on GSM/HSPA network	-	Illuminated	-	-
Device is registered on GSM/HSPA network	-	Blinking	-	-
Modem is off (not transmitting)	-	OFF	-	-
GPS status: connection lost or connection found	Blink once	-	-	-

## 1.1 No External Power Source Installation

To install the unit, perform the following steps:



1. Validate that the unit is setup in the Unity Application.
2. Install the cradle to a secure location where good GPS coverage can be achieved. **NOTE: Install the device as close as possible to the front of the trailer to ensure protection to the device when the trailer is tethered to the tractor.**
3. Mount the unit in the cradle. Make sure the tamper switch is pressed.
4. Use nylon cable ties to secure the unit.
5. Wrap or tape each input/output wire separately to avoid short circuiting and battery drainage.

## 1.2 Hardware Installation

To hardwire the unit to power source, perform the following steps:

To install the unit, perform the following steps:

1. Validate that the unit is setup in the Unity Application.
2. Install the cradle to a secure location where good GPS coverage can be achieved. **NOTE: Install the device as close as possible to the front of the trailer to ensure protection to the device when the trailer is tethered to the tractor.**



3. Mount the unit in the cradle. Make sure the tamper switch is pressed.

4. Use nylon cable ties to secure the unit.

5. The AT1000 has four cables in the pigtail cable harness:

- a) Power (Red Wire)
- b) Ground (Black Wire)
- c) Input #1 (Orange)
- d) Input #2 (Brown)

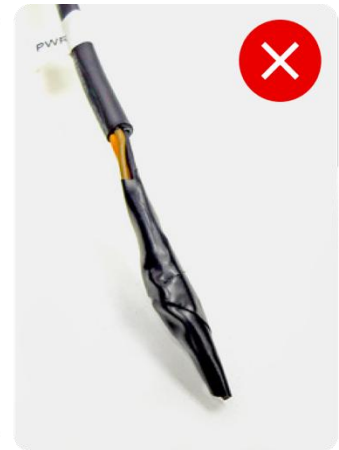
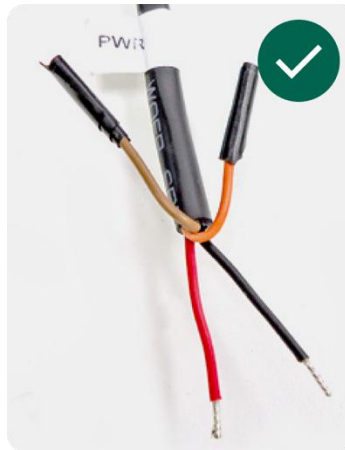
**NOTE: If input wires are not used, wrap or tape the wires separately to avoid short circuiting and battery drainage.**



Connect the unit to the external power source:

- Power (Red Wire)
- Ground (Black Wire)

**NOTE: The unit is adapted for 9-32V power supply.**



## 1.3 Activation

To activate the unit, perform the following steps:

1. While the unit is in cradle (the Tamper Switch is pressed) press the Emergency Button for at least 3 seconds. The Power LED will glow for 3 seconds.
2. After the Power LED ceases glowing, and the Network/Cell LED blinks, stop pressing the Emergency button.
3. Verify that the Power LED blinks twice. This indicates successful Network/Cell communication with the control center.

## 1.4 Deactivation

To deactivate the unit, perform the following steps:

1. Dismount the unit from the cradle. Make sure the tamper switch is not pressed.
2. Press the Emergency Button for at least 3 seconds. While the Emergency Button is pressed, the Power LED glows for 2 seconds.
3. After the Power LED ceases glowing, stop pressing the Emergency Button.

## 2 FAQ

### 2.1.1 How do you install the AT1000?

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The AT1000 can be installed by referring to the installation guide provided. The mounting cradle is secured to the asset using 4 supplied screws, the AT1000 device is snapped into the cradle mount, and finally the device is secured to the cradle using 4 zip ties.

### 2.1.2 Does the AT1000 have a mag-mount option?

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Yes, the AT1000 also has a magnetic mount available as an accessory. The 4 cradle mounting screws are replaced with 4 magnets to create the magnetic mount cradle.

### 2.1.3 How do you turn on the AT1000 device?

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Place the unit in the mounting cradle (make sure it's fully inserted and the tamper switch is pressed), then press and hold the emergency button on the front. The power LED should light, and glow for ~3 seconds. After the power LED stops glowing, and the network/cell LED blinks, stop holding the emergency button down. Verify that the network/cell LED blinked twice. The two blinks indicate that the AT1000 successfully connected to the cellular data network. When a successful data call is made, the device will transmit a location snapshot to Unity.

### 2.1.4 How many inputs does the AT1000 have?

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The AT1000 has 3 available inputs: 2 general purpose inputs, and a Power ON/OFF input that tracks the status of external power.

### **2.1.5 What voltage range is the AT1000 setup to work with?**

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The AT1000 can use any voltage between 9- 32V DC for the power supply.

### **2.1.6 What is expected battery life?**

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The internal battery (3.7V 13.6Ah), can last up to 3 years without recharging, based on 1 position transmission/heartbeat every 24 hrs.

### **2.1.7 How long does it take for the battery to recharge?**

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Once the battery is fully discharged, it takes 24 hrs for a full charge.

### **2.1.8 Does the temperature affect the charging of the AT1000 battery?**

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For the standard AT1000, the built-in battery charger is normally activated when external power is turned ON, and the environmental temperature is between 0 – 45 Celsius, or between 32 – 113 Fahrenheit. If the temperature falls outside of that range, the battery will not charge.

### **2.1.9 How long does it take for the AT1000 device to report the start and end of a trip/movement?**

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If configured to report on motion, the AT1000 typically reports the start of a trip after 2 minutes of constant motion. Similarly, the end of a trip is reported once the device is sitting still for more than 2 minutes (no movement).

### **2.1.10 What's the right data plan for my expected use of an AT1000?**

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Please use the AT1000 Data Usage Calculator to calculate your expected data use.

### **2.1.11 Can the AT1000 device be configured to detect trailer tethering?**

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Yes, either one of the 2 general purpose inputs can be used to detect the connection/ disconnection of the trailer tether, or the main external power input can be used to detect tethering status based on power status (power is ON = trailer is tethered).