



Product Documentation



Emanate PowerPath™ Tag PPT-200

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Emanate PowerPathTM Tag PPT-200

User and Installation Guide

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Review the specifications in section 1.5, 4.2, 4.3, 5 for proper and safe operation of the device

1 INTRODUCTION

1.1 The PowerPath™ Tag

The PowerPath Tag incorporates both hardware and software that provide the ability to track location and usage state of AC powered assets. PowerPath Tags are used as part of advanced RTLS technology that can contribute to optimum usage of assets in a facility. This Quick Start Guide contains instructions for installing your PowerPath Tag, connecting your Tags to your asset, and for initially configuring the tags.

1.2 Additional Documentation

This Quick Start Guide contains basic information for physically installing PowerPath Tags. PowerPath Tags can be used in a variety of different RTLS systems, some of which may require special software configuration as well. Please see any additional documentation which accompanies your product for further information.

1.3 Parts

Before you begin installation, make sure you have the following parts on hand:

Part	Comment
PowerPath Tag	Supplied by Vendor
C13 Power Cable	Not supplied by Vendor
Quick Start Guide	Supplied by Vendor
Additional documentation and software	Your RTLS Vendor may supply additional documentation and software in support of this product
<i>For mounted installations you may also need the following items:</i>	
Tie-wraps	Not supplied by Vendor
Double sided tape	Not supplied by Vendor

1.4 Important Notices

- The Model PPT-200 Tag contains 802.11 and Bluetooth Low Energy transmitting devices, and must be installed in a manner which provides at least 20 cm (7.8 inches) of separation distance from all persons.
- **Obtaining the Latest Software Version:** You can use the Emanate Tag Management server to upgrade your tags with the latest firmware.

1.5 Technical Specifications



- PPT-200 is rated for 100-240 VAC 50-60Hz operation
- Max current throughput of PPT-200 is 12A @ 110VAC or 6A @ 240VAC
- Max power consumption of the PPT –200 unit is 3W
- Rated up to 2000 m elevation
- Operating Temperature = 0 to 55 deg C
- Storage Temperature = -25 to 65 deg C
- IP rating of IP32 with correct orientation
- For indoor use

Warning: Use of this device outside of specifications and directions provided within this manual can reduce protection below safe levels for operation.

2 OVERVIEW OF THE INSTALLATION PROCESS

There are three overall stages to the installation process:

1. **Initial Activation:**

In order for the tag to communicate with the Wi-Fi network and the PowerPath server, basic network access parameters must be configured into the tag.

This configuration is done with the PowerPath Tag iPhone App.

See Section 3 for more information.

2. **Physical Connection:**

The tag must then be physically attached to the device to be tracked.

See Section 4 for more information.

3. **Additional Software Configuration:**

Once activated and connected to the device, additional configuration is done from the PowerPath Server.

See the documentation accompanying the PowerPath Server for more information.

3 ACTIVATING THE TAG

This section contains discussion of the steps to initially activate a tag using the iPhone app.

3.1 Unpacking

Carefully unpack the Tag from the box.

3.2 Pressing the Button

The Tag ships with the battery charged, but with the hardware and radios in a deep sleep state.

In order to configure the tag from the iPhone application, you must first wake up the tag. This is done by pushing the button on the top of the tag.

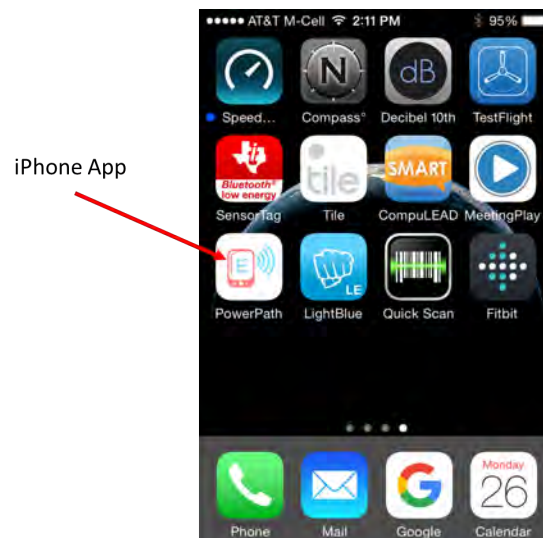
Once you push the button, the tag wakes up, and the Bluetooth Low Energy radio becomes active for 30 minutes.

**Note**

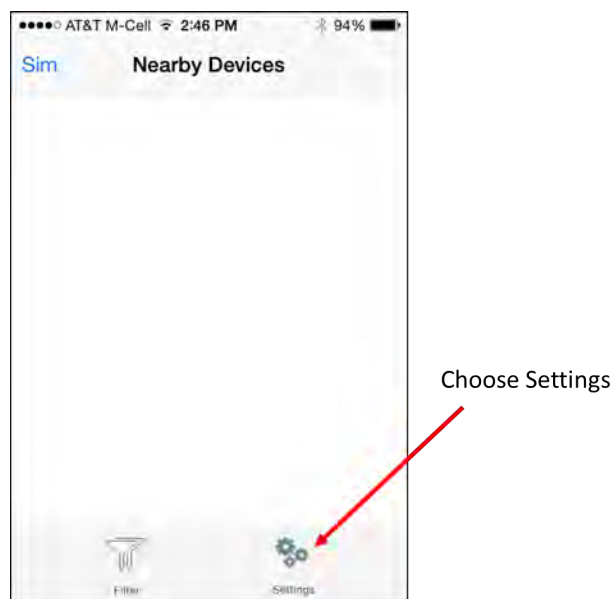
If the Status LED does not flash after pressing the button, the battery may have been run down. In that case, you should first charge up the tag by plugging it into an AC outlet for 2 hours.

3.3 Connecting the iPhone App

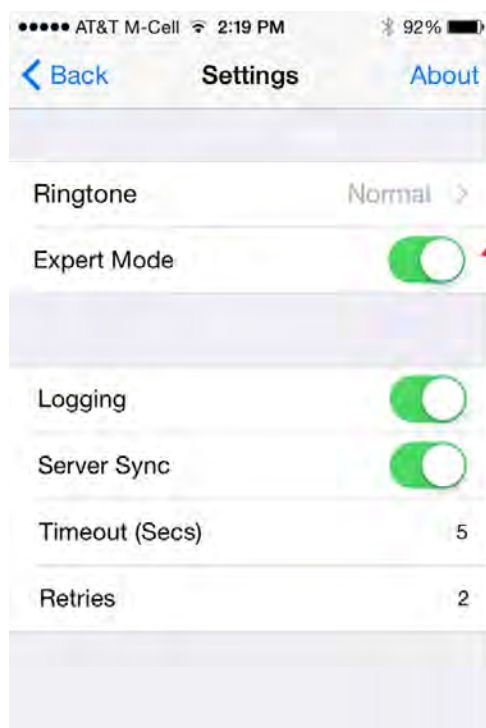
You should see the PowerPath iPhone App icon on your phone. If the PowerPath iPhone Application is not installed on your phone, first install it using the Apple App Store.



After launching the App, choose Settings from the bottom menu.



Enable "Expert Mode" on the Settings Screen, and then choose "Back"..



Enable
Expert
Mode

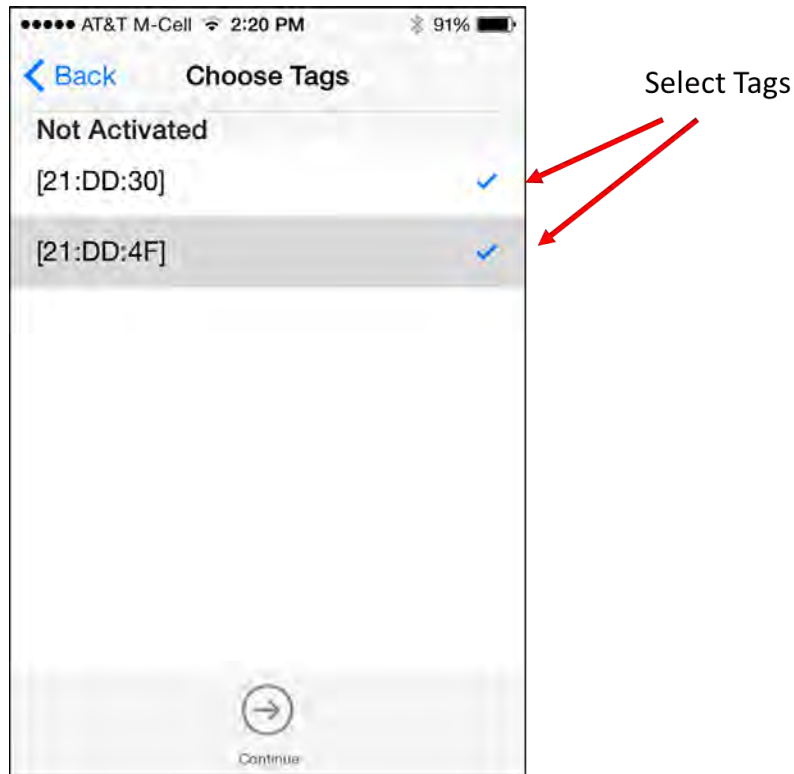
Now choose Activate from the bottom Menu:



Choose Activate

3.4 Activating Network Parameters with the App

First select the tag(s) you want to Activate from the Activation Screen, and then hit Continue.



After you have selected a device, a device detail screen will appear. Tap the Configure button to go to the Activation parameter screen.

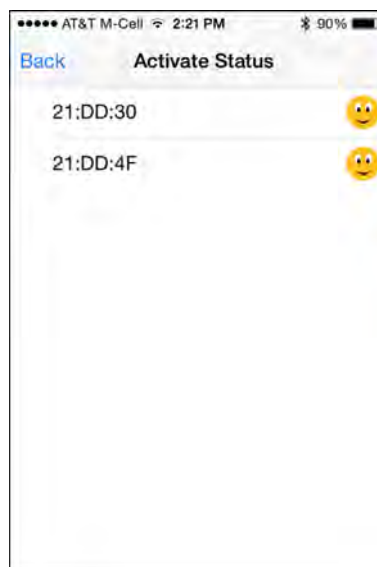


The next screen will allow you to enter Activation parameters for the Tag.

These parameters are the following:

- Customer ID: Unique ID for customer (assigned by Emanate)
- Server Name: DNS name or IP address of the Emanate Server
- WiFi SSID: SSID of the WiFi network
- Password: WPA2-PSK passphrase for WiFi network

Once you have filled in the parameters, tap the Continue button. Once activation is complete, you will see a confirmation screen as shown below.

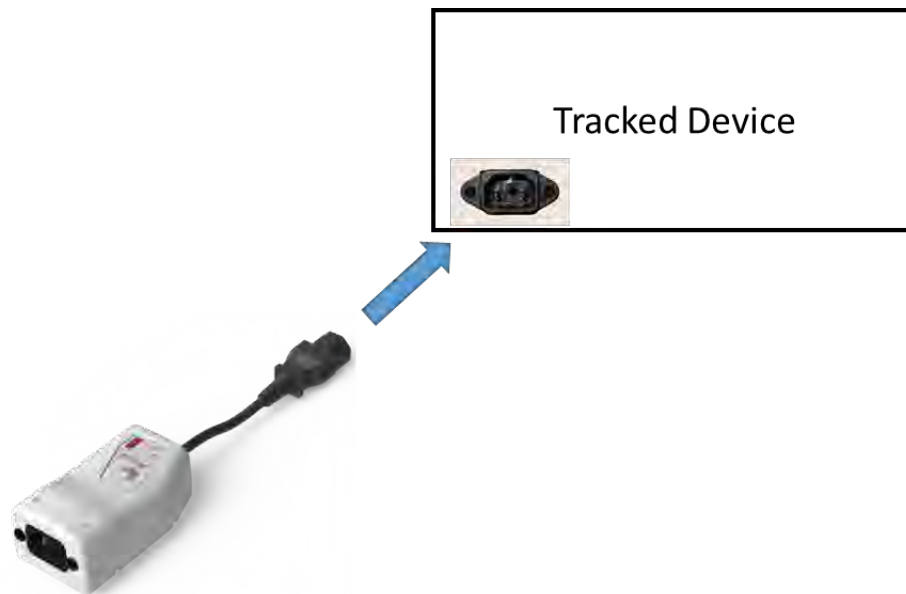


4 CONNECTING THE TAG

This section contains discussion of the steps to physically attach the tag to the device to be tracked.

4.1 Connecting Tag Cable to Device

Note **Your Device Must have a IEC60320 C14 (Male) Connector:** The tag is designed with an IEC60320 C13 (Female) cable, and can only work with devices that have a IEC60320 C14 (Male) connector.



1. Insert the Tag's C13 cable into the C14 connector on the device to be tracked.

4.2 Tag Mounting Options



Note **Moisture:** The tag is rated for IP32, which is protected from moisture including a damp wipe. Avoid mounting the tag in a place where it will be subject to dripping liquid, spillage, excessive condensation, or other significant volume of moisture. It is suggested the tag is mounted to the device to allow for sanitization as the asset is being sanitized. Mount the tag so the AC connector C14 is pointing down. Disconnect the AC power source prior to wiping with a moist cloth. Avoid any moisture build up on the tag and/or near the AC power connections. Utilize a sanitation wipe or solution with less than 60% alcohol content.

1. Mounting Option 1: Mount the tag to a pole or other narrow object on the device using tie-wraps, feeding the wraps through the belt-loop openings on the bottom of the tag.
2. Option 2: Mount the tag with strong sticky tape or other adhesive, making sure the tag is secure.

4.3 Connecting to AC Power

**Note**

The PPT-200 is rated for maximum 12A @ 110 VAC operation. The PPT-200 cannot be used with any devices which requires max current of more than 12A @ 110 VAC. The detachable power cord must have adequate power and current rating to support the asset being connected to.

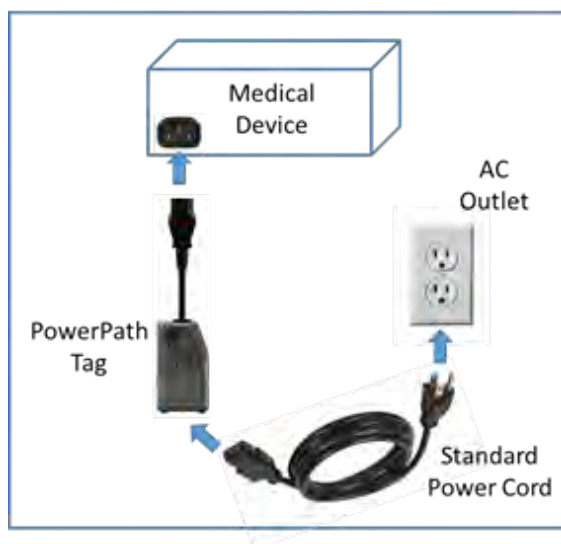
Note

Protecting against Electric Shock. The PPT-200 is classified as Class I Equipment with an internal power source providing 2 MOPP according to IEC 60601-1/EN 60601-1/CSAC22.2 60601.1:14/AAMI ES 60601-1:2012, which means that it is an instrument included in the protective grounding (protective earth) system of the room by way of grounding contacts in the power plug. To protect the patient and hospital personnel, when operating from an AC source, tag must be grounded. You must use an appropriate C13 3-wire cable which grounds the tag to the power line ground (protective earth) when plugged into an appropriate 3-wire receptacle. **DO NOT OPERATE THE PPT-200 ON A 2-WIRE AC SUPPLY.**

After the Tag is securely mounted, connect a standard IEC60320 3-wire C13 (female) power cord into the tag in order to power the tracked device.

Note

Locking Connector – The PPT-200 is designed to accept a locking connector to lock the C13 power cord to the tag. Use the AC connector screws that are supplied with the tag for attaching the locking connector. The size of the screws supplied are TRUSS HD M3-.5x10MM. Use normal torque for tightening. If other screws are desired, please contact us.



5 SAFETY COMPLIANCE NOTICE



This device has been tested and rated for IP rating IP32. It is dust proof and able to be wiped clean for sanitization purposes. Avoid excessive moisture buildup on tag. The tag and asset should be unplugged from the wall when the equipment is being sanitized by a damp cloth.

Cleaning methodology – The tag can be wiped with an alcohol wipe with < 60% alcohol content used for sanitizing medical equipment.

This device has been tested and certified according to the following safety standards and is intended for use only in Information Technology Equipment which has been tested and certified to these or other equivalent standards:

- UL Standard 61010-1 / CSA C22.2 No. 61010-1 3rd edition
- UL Standard 60601-1
- This device has been tested to provide 2 Methods of Patient Protection in use with medical devices as defined by IEC 60601-1 3rd Edition.

Note

This device is approved for indoor use only.

Note

Service: There are no user serviceable parts inside the Tag. Please refer all repair operations to a qualified service center.

6 CERTIFICATIONS

NOTE: This equipment has been tested and found to comply with FCC Rules and Regulations Part 15 Subpart B Class B 2015. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause interference in which case the user will be required to correct the interference at his own expense.

7 EMANATE LEGAL NOTIFICATIONS

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LIMITED WARRANTY

Emanate guarantees that the PowerPath Tag Model PPT-200 is free from physical defects in material and workmanship under normal use for one year from the date of purchase. If this product proves defective during this warranty period, contact Emanate Customer Support in order to obtain a Return Authorization Number. **BE SURE TO HAVE YOUR PROOF OF PURCHASE AND SERIAL NUMBER FROM THE PRODUCT PACKAGING ON HAND. RETURN REQUESTS CANNOT BE PROCESSED WITHOUT PROOF OF PURCHASE.** When returning a product, mark the Return Authorization Number clearly on the outside of the package and include your original proof of purchase.

IN NO EVENT SHALL EMANATE'S LIABILITY EXCEED THE PRICE PAID FOR THE PRODUCT FROM DIRECT, INDIRECT, SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES RESULTING FROM THE USE OF THE PRODUCT, ITS ACCOMPANYING SOFTWARE, OR ITS DOCUMENTATION. EMANATE DOES NOT OFFER REFUNDS FOR ANY PRODUCT. Emanate makes no warranty or representation, expressed, implied or statutory, with respect to its products or the contents or use of this documentation and all accompanying software, and specifically disclaims its quality, performance, merchantability, or fitness for any particular purpose. Emanate reserves the right to revise or update its products, software or documentation without obligation to notify any individual or entity.

ADDITIONAL NOTIFICATIONS

The PowerPath Tag, Model PPT-200 product is subject to U.S. export controls when exporting outside the United States. You are responsible for ensuring compliance with these regulations.

The Emanate PowerPath Tag, Model PPT-200 includes software embedded therein ("Embedded Software") for use with the Emanate Tag Server. Your use of the Embedded Software and Server Software is subject to the End User License Agreement (EULA) included in this box.

The Emanate PPT-200 is RoHS compliant and passes the WEEE compliance directive

The Emanate PPT-200 tag is non-recyclable.

