

# **Tracker Pro**

## **User Manual**

Edition 1.0

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#### Approvals

Approval refers to the approver's acceptance of the content and overall intention of this document, including acceptance of any commitments described in order to successfully deliver the initiative. The approver, where relevant, also confirms that this document complies with relevant strategies, policies and regulatory requirements.

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#### Related documents

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### 1 Tracker Pro

Front View Tracker Pro





### 2 Diagnostic Checks

One of the diagnostic checks is a battery/connectivity check. To take advantage of this feature we would recommend **immediately prior to shipping a tag to a customer you firstly:** 

 Press in the middle of the identification plate on the top of the tag and hold for approximately 2 seconds, then let go. The lights will show the device status over 3 stages:

#### Stage 1:

Battery status will appear in stage one where the LED lights will turn on from left to right to indicate the current battery status



Lights 1, 2, 3 and then 4 will light up individually

#### Stage 2:

Signal strength will appear in stage two when LED lights will turn on from right to left to indicate the 2G/4G signal strength

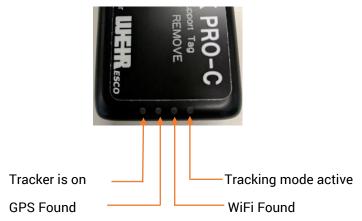


Lights 1, 2, 3 and then 4 will light up individually



#### Stage 3:

Additional information will appear in stage three where the LED light will turn on to show the following:



All 4 lights will turn on and then off.

NOTE: Multiple tag diagnostics are attached to the lights so if the lights are already flashing you will need to wait 10 seconds after lights have turned off before you do the battery/connection check.

### 3 How the Location Technologies Work

Tracker Pro utilises three location technologies in this order

- 1. GPS location: This is the most accurate location type but it requires a direct line of sight with the sky to work. Meaning it will work best when outdoors or near windows, where the tag can see the sky. The accuracy is usually between 0.5 and 5 metres.
- 2. WPS (WiFi Positioning System) location: If GPS location fails the tracker will use any WiFi signals around to figure out its location. The accuracy is usually between 10-30 metres.
- 3. GSM location: This is the least accurate location type but it is the last resort if everything else fails. The tracker will use GSM towers and triangulate to give you a location update that can have an accuracy of 100 1000 metres

### 4 Firmware Updates

Firmware updates will be applied automatically.



### 5 Simple Troubleshooting

If for whatever reason your Tracker Pro is not responding or behaving as it should, you can reset the tracker by pressing and holding the button for 10 seconds. This will not affect your settings.

### 6 Timeliness of Location Updates

Location updates are not instant in general as it takes time to get a GPS fix and if that fails the other location technologies come into action. After the location data is collected the tracker has to connect to the internet via the GSM network in order to send the location information.

### 7 Accuracy of Location Updates

Location accuracy depends on a number of variables, please refer to "How the Location Technologies Work" section for more details on how these technologies work.

Generally speaking here are a few good practices that help improve the location accuracy of your Tracker Pro

- Avoid surrounding your tracker with metals as they block GPS and GSM signals
- To allow for more GPS locations to occur, try to place your tracker somewhere with a good line of sight to the sky
- Try to place your tracker with the identification plate/logo facing up

### 8 Battery Life

The advertised battery life values are general guidelines, in reality there are many variables that affect battery life such as:

- Where the tracker is mounted: with a clear line of sight with the sky, the tracker will use less power per location update
- Whether the Tracker is indoors or outdoors: if the tracker is indoors more power will be used as the tracker will try to look for a GPS fix before attempting to locate itself via WPS or GSM. Find out more about this under the "How the location technologies work" section.



### 9 FCC Compliance and Warning Statement

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

Any Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

