# ATW User Manual

Revision: 1.1

| Document Title      | ATW User manual |
|---------------------|-----------------|
| Version             | 1.1             |
| Finale Date         | 2018-05-25      |
| Status              | Released        |
| Document Control ID | TRACKER ATW     |

#### Contents

| 1 Introduction                          | 3 |
|---|---|
| 2 Product Overview                      | 3 |
| 2.1 Appearance                          | 3 |
| 2.2 Buttons/12PIN Interface Description | 3 |
| 2.3 LED Description                     | 4 |
| 3 Getting Started                       | 5 |
| 3.1 Parts List                          | 5 |
| 3.2 Battery Charging                    | 5 |
| 3.3 ATW Data Cable                      | 5 |
| 3.4 Power on/Power off                  | 6 |
| 4 Frequency                             | 6 |
| 5 Trouble shooting and Safety info      | 7 |
| 5.1 Trouble shooting                    | 7 |
| 5.2 Safety info                         | 7 |

## **1** Introduction

ATW is a powerful GPS locator which is designed for vehicle and assets tracking. With superior receiving sensitivity, fast WCDMA frequencies 850/1900/1700. Its location can be real time or schedule tracked by backend server or specified terminals. Based on the embedded wireless tracking protocol, ATW can communicate with the backend server through WCDMA and GSM network, and transfer reports of emergency, Geo-fencing, device status and scheduled GPS position etc... Service provider is easy to setup their tracking platform based on the functional wireless tracking protocol.

## **2 Product Overview**

## 2.1 Appearance



Figure 1-1

### 2.2 Buttons/12PIN Interface Description

| Button /12PIN Interface Description |   |  |
|-------------------------------------|---|--|
| KEY/interface                       | Description   |  |
| Power Key                           | Power on ATW  |  |
|                                     | Power off ATW (If power key is enabled)                                   |  |
| Function Key                        | Geo-Fence mode  |  |
|                                     | Long press the key to enable/disable Geo-Fence ID0                        |  |
|                                     | Geo-Fence in current position mode  |  |
|                                     | Long press the key to enable/disable Geo-Fenc e ID0. If e nable Geo-Fence |  |
|                                     | ID0, using the current position as the centre of Geo-Fence 0.             |  |
|                                     | SOS mode (default)  |  |
|                                     | Long press the key to active SOS alarm                                    |  |

| 12PIN     | Connect a 3.7V Li-ion or Li-Polymer battery can power on ATW                  |  |
|-----------|---|--|
| interface | Backend server developer or administrator can use the data cable to configure |  |
|           | ATW (by RD or engineer not by end user).                                      |  |
| Reset Key | Click the key will turn off internal VBAT when OS is ab normal, and then      |  |
|           | press Power Key to restart ATW.   |  |

## 2.3 LED Description



Figure 1-2 There are four LED lights in ATW device, the description as following.

| Light     | Event                   | State      |
|-----------|-------------------------|------------|
| Power LED | Power on and normal     | Dark       |
|           | Fully charged           | Solid      |
|           | In charging             | Slow flash |
| WCDMA     | Power on and normal     | Slow flash |
| LED       | Power off               | Dark       |
| WIFI LED  | WIFI on                 | Slow flash |
|           | WIFI off                | Dark       |
| GPS LED   | GPS fixed               | Fast flash |
|           | GPS has been turned off | Dark       |

## **3 Getting Started**

### 3.1 Parts List

| Name                          | Picture | Remark  |
|-------------------------------|---------|---|
| ATW Locater                   |         | The WCDMA/GPS locator.  |
| ATW Data and<br>charger Cable |         | It the d ata cable w hich c an be used for<br>firmware upg rading a nd configuration (by<br>RD or engineer not by end user).<br>It also includes the charger interface on the<br>ATW. |

## 3.2 Battery Charging

The following items are suggestion for battery charge, please pay more attention.

- During the charging process, the Power LED light will slow flash. When the battery is fully charged, the Power LED light will be Ever-light.
- You can charge the battery using charging cable which connects ATW device with the Adapter.
- Charging will last about 5 hours.

Note: If the ATW device is firstly used, please make sure the battery is fully charged, which will make the life of battery much longer.

### 3.3 ATW Data Cable

ATW Data Cable is a cable with a 12PIN connector.

The data cable is used for data download, which will be use d for firm ware update or configuration and can be used for charging at the same time (by RD or engineer not by end user).



Figure 2-1

#### 3.4 Power on/Power off





Power on:

Press the Power key at least 3 sec onds and release it to power on ATW device .
Note that, the Power LED light will light for a moment and then turn off.

Power off:

• Press the power key about 3 seconds; Power LED light will light for a moment and then turn off, which indicates that ATW device has been powered off.

Note: the u ser can no t power off ATW if the power key is disabled by protocol.

## **4 Frequency**

GSM850:824-849MHz (TX), 869-894MHz (RX); PCS1900:1850-1910MHz (TX), 1930-1990MHz (RX); WCDMA B5:824-849MHz (TX), 869-894MHz (RX); WCDMA B2:1850-1910MHz (TX), 1930-1990MHz (RX); WCDMA B4:1710-1755MHz (TX), 2110-2155MHz (RX); GPS:1575.42MHz

## **5** Trouble shooting and Safety info

## 5.1 Trouble shooting

| Trouble             | Possible Reason            | Solution                                    |
|---------------------|----------------------------|---|
| Messages can't be   | APN is wrong. Some         | Ask the network operator for the right      |
| reported to the     | APN can not visit the      | APN.  |
| backend server by   | internet directly.         |   |
| Mobile network.     | The IP address or port of  | Make sure the IP address for the            |
|                     | the backend server is      | backend server is an identified address     |
|                     | wrong.                     | in the internet.                            |
| Unable to power off | The function of power key  | Enable the function of power key by         |
| ATW.                | was disabled by            | AT+GTFKS.                                   |
|                     | AT+GTFKS.                  |   |
| Battery can not be  | The battery has not been   | Using a external power source with 3.6V     |
| charged             | used for too long time and | to 4.2V DC power supply to active the       |
|                     | has been locked.           | battery or apply for after sale help.       |
| ATW can't fix GPS   | The GPS signal is weak.    | Please move ATW to a place with open        |
| successfully.       |                            | sky.  |
|                     |                            | It is better to let the top surface face to |
|                     |                            | the sky. (The same surface with             |
|                     |                            | indication LED)                             |

## 5.2 Safety info

The following items are suggestion for safety use, please pay more attention.

- Please do not disassemble the device by yourself.
- Please do not put the device on the overheating or too humid place, avoid exposure to direct sunlight. Too high temperature will damage the device or even cause the battery explosion.
- Please do not use ATW on the airplane or near medical equipment.

#### FCC Caution.

#### § 15.19 Labelling requirements.

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.

#### § 15.21 Information to user.

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

#### § 15.105 Information to the user.

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 lim its are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can ra diate 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 in terference will n ot 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 cir cuit 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.

-----

#### ISED RSS Warning/ISED RF Exposure Statement

**ISED RSS Warning:** 

This device com plies with Innovation, Sc ience and Econom ic Development Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device m ay not caus e interference, and (2) th is device m ust accept any interference, including interference that may cause undesired operation of the device. Le présent appareil est conform e aux CNR d'ISED applic ables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

(1) l'appareil ne doit pas produire de brouillage, et

 (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillageest susceptible d'en compromettre le fonctionnement.

ISED RF exposure statement:

This equipm ent com plies with IS ED ra diation exposure lim its set forth for an uncontrolled environm ent. This equipm ent should be installed and operated with minimum distance 20cm between the radiator& your body . This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter. Le rayonnem ent de la classe b repecte ISED fixaient un environnem ent non contrôlés.Installation et mise enœuvre de ce m atériel devrait avec échan geur distance minimale entre 20 cm ton corps.Lanceurs ou ne peuvent pas coexister cette antenne ou capteurs avec d'autres.