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## **Change History**

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## 2 Specifications

| Item                  | Specifications        |
|-----------------------|-----------------------|
| Dimension             | 79 mm x 42 mm x 13 mm |
| Weight                | 150g                  |
| Power consumption     | 25 mA                 |
| Frequency             | 125 KHz               |
| Operating temperature | -20°C to 55°C         |
| Operating humidity    | 5%-95%                |
| Operating voltage     | 5 V                   |
| Internal resistance   | 3.6R                  |

## **3** Appearance



RFID reader



## **4 RFID Functions**

- Identify the driver ID and grant permission to start the vehicle.
- Through MS03 platform, drivers' attendance can be collected by driver I/O status history.



## **5** Installing the RFID Reader

#### 5.1 Attaching the RFID Reader to Your Vehicle

Attach the RFID reader to your vehicle according to your needs.

#### 5.2 Connecting the RFID Reader to a Tracker

RFID reader's connector:



1. Connect the RFID reader to the T1/T333. Dedicated RS232 ports of the T1/T333 are as follows:



2. Connect the RFID reader to the MDVR.

Because MDVR uses a 4-PIN RS232. when using RFID connection, it is necessary to prepare an 8PIN to 4PIN line.



3. Connect the RFID reader to the T366/T366G. Dedicated RS232 cables of the T366/T366G are as follows:





A. Cut off the RFID reader's connector, as shown in the following figure.



B. Connect the iButton reader to the tracker according to the wiring instructions in the following table.

| T366/T366G Cables | RFID Reader Cables |
|-------------------|--------------------|
| VCC (pink; 5 V)   | Red cable          |
| GND (black)       | Black cable        |
| Tx cable (purple) | Rx cable (yellow)  |
| Rx cable (brown)  | Tx cable (green)   |

After the RFID reader is connected to a tracker, power on the tracker, then the RFID reader's indicator will blink red. When you swipe the RFID card on the RFID reader, the RFID reader's indicator will blink green once and a "beep" sound will be made. Then the tracker will start to record data.





## 6 Using RFID

#### 6.1 Starting the Engine by RFID

Before starting the engine, ensure that:

- 1. The T1/T333/MVT600's input 3 or T366/T366G's input 2 is connected to the engine detection cable.
- 2. A RFID card has been authorized.
- 3. The tracker's output 1 is connected to the engine control cable through a relay, as shown in the following figure.



Note: For details about how to authorize a RFID card, see the section 6.4.1 "Authorizing RFID Cards."

4. The RFID ignition function has been enabled by Meitrack Manager or MS03 tracking platform.

| Device Tracking GeoFen   | ne Authorize GP8 Log Peripheral                      |   | Ģ  | Manager                |
|--|--|---|--|------------------------|
| IMEI 86383502719<br>Firmware T366G_H14TV<br>Guick Setting<br>Diliph Of     | 5687 Rename<br>066_T Battery Left                    | 0%  |  | Write                  |
| Turn off Call Ringtone   | RFID ignition (output 1)<br>Normal Sleep ÖDeep Sleep |   |  | Write                  |
| SMS GPRS Cher Setting  | Clear 0/256 Log data<br>Clear 2/8192                 | Glear 0/65538                             | space Log to<br>space 50% Total copacity (byte) 50%<br>4194304     | Write                  |
| Log Interval 0 🗘   | Seconds  |   |  | Write                  |
| Oil sensor setting<br>-Oil sensor model<br>Use model<br>Use model<br>-None | High oil alarm v<br>Low oil alarm va                 | slue 0 0 %                                | Steal oil afarm value<br>Oil change time range<br>Oil change value | i min<br>i 5s<br>Write |
| Auto Connect<br>Check Device Automaticity<br>Set Device Connection         | ·  | Auto Upgrade<br>© Yea, I would like to re | receive automatic updates about new features.                      | Upgrade                |
|  | Refresh  | Restore Eactory Settings Ex               | xport Settings To File Load Settings From File                     |                        |



| Sending command   |  | •00 |
|---|--|-----|
| Enter tracker name Q Group Tracker name Transmit process        | Search key eg:GPRS,fences,A10<br>Command: RFID ignition (output 1) 🔹 |     |
| W 8518 C     T322 Total(1)     Pheonix-511                      | Status: On 💌   |     |
| T333 Total(3) testforKevin0609 testformartin-5461 TEST-SANDY412 |  |     |
| T355 Total(6) heartbeat-testform_ T355_2473(#)                  |  |     |
| T355-872086-testf           T355V2_2474           testforsteve  |  |     |
| testT355-872383<br>■ T355G Total(3)                             | Send command   |     |

Note: For the T366/T366G, you must make sure the RFID event has been enabled. Otherwise, the function will be unavailable.

#### 6.2 How RFID Works

After swiping the authorized RFID card on the RFID reader, the driver must start the engine within 1 minute. Otherwise, the tracker's output 1 will be triggered (engine cut-off), and thus the driver cannot start the vehicle. At the moment, if you want to start the engine, swipe the RFID card again.

#### 6.3 Configuring RFID by Meitrack Manager

- 1. Connect your tracker to a computer and run Meitrack Manager.
- 2. Meitrack Manager will automatically detect the device, and the **Device** tab page for default parameters is displayed.

| Device Tracking            | GeoFence       | ce GPS Log |              |          |              |         |    |           |          | <b>C</b> meitrac<br>Manage |
|----------------------------|----------------|------------|--------------|----------|--------------|---------|----|-----------|----------|----------------------------|
| Event                      | SMS Header     | Value      |              |          |              |         |    |           | GPRS     | Photo                      |
|                            |                |            | SM           | S 🗌 Call | SM           | IS Call | SN | 1S 🗌 Call |          |                            |
| i ioanooat                 |                | 100        |              |          |              |         |    |           | _        |                            |
| Heading Change             | Heading Change | 0 Cegree   |              |          |              |         |    |           | <b>v</b> |                            |
| Distance Interval Tracking | Distance       | 0 🗘 m      |              |          |              |         |    |           | ¥        |                            |
| Reply Location(Passive)    | Now            |            | $\checkmark$ |          | $\checkmark$ |         | *  |           | >        |                            |
| Time Interval Tracking     | Interval       | ]          |              |          |              |         |    |           | >        |                            |
| Tow                        | Tow            | 0 Seconds  |              |          |              |         |    |           | ~        |                            |
| RFID                       |                |            |              |          |              |         |    |           |          |                            |
| Still                      | Quiet          |            |              |          |              |         |    |           | ~        |                            |
| Move                       | Moving         | ]          |              |          |              |         |    |           | <b>v</b> |                            |
| GSM Jammed(Customized      | GSM Jammed     |            |              |          |              |         |    |           | ~        |                            |
| Fuel Fulled                | Fuel Full      |            |              |          |              |         |    |           | ~        |                            |
| Fuel Empty                 | Fuel Empty     |            |              |          |              |         |    |           | ~        |                            |
| Fuel Stolen                | Fuel Steal     |            |              |          |              |         |    |           | ~        |                            |
| GSM No Jamming(Customized  | GSM No Jamming | ]          |              |          |              |         |    |           | ~        |                            |
| Reject Incoming Call       |                |            |              |          |              |         |    |           |          |                            |
| <                          |                |            |              |          |              | -       |    | _         |          | 2                          |

3. Select Authorize. On the tab page that is displayed, select RFID on the GPRS column.



Note: If this RFID option is deselected, the MS03 platform cannot collect statistics on RFID event reports after you swipe a RFID card. The RFID event is enabled by default.

#### 6.4 Configuring RFID by MS03

#### 6.4.1 Authorizing RFID Cards

- 1. On the main interface, choose **Management**.
- On the Management window that is displayed, select Sending command from Use Normal. The Sending command window is displayed.
- 3. Select one or multiple trackers, select the **Batch RFID authorization** command, specify **From the RFID number** and **Quantity**, and click **Send command**.

| Sending command               |                          |                          | $\mathbf{O}$ |
|-------------------------------|--------------------------|--------------------------|--------------|
| 0                             | Search key eq : (        | GPRS fences A10          |              |
| Enter tracker name Q Group    | Command:                 | Batch RFID authorization | •            |
| Tracker name Transmit process |                          |                          |              |
| MT90 Total(2)     MT90v4      | From the RFID<br>number: | 5437501                  | \$           |
| MT90test                      | Quantity:                | 1                        | \$           |
| MVT380 Total(1)               |                          |                          |              |
| MVT380A00671                  |                          |                          |              |
| MVT600 Total(1)               |                          |                          |              |
| ■ MVT600                      |                          |                          |              |
| T1 Total(1)                   |                          |                          |              |
| ☑ T1A-3505                    |                          |                          |              |
| E T355 Total(1)               |                          |                          |              |
| T355test                      |                          |                          |              |
|                               |                          |                          |              |
|                               |                          | Send                     | command      |

If only one RFID card needs to be authorized, set Quantity to 1.

#### 6.4.2 Deleting Authorized RFID Cards

- 1. On the main interface, choose **Management**.
- On the Management window that is displayed, select Sending command from Use Normal. The Sending command window is displayed.
- Select one or multiple trackers, select the Delete authorized RFID numbers in batches command, specify From the RFID number and Quantity, and click Send command.

If only one authorized RFID card needs to be deleted, set Quantity to 1.



| Sending command               |                   | 000                                     |
|-------------------------------|-------------------|---|
| 0                             | Search key eg : ( | GPRS 、 fences、 A10                      |
| Enter tracker name Group      | Command:          | Delete authorized RFID numbers in bat 💌 |
| Tracker name Transmit process |                   |   |
| MT90 Total(2)                 | From the RFID     | \$437501 \$                             |
| MT90v4                        | Quantita:         |   |
| MT90test                      | Quantity:         | <u> </u>                                |
| MVT380 Total(1)               |                   |   |
| MVT380A00671                  |                   |   |
| MVT600 Total(1)               |                   |   |
| ■ MVT600                      |                   |   |
| E T1 Total(1)                 |                   |   |
| ✓ T1A-3505                    |                   |   |
| T355 Total(1)                 |                   |   |
| T355test                      |                   |   |
|                               |                   |   |
|                               |                   | Send command                            |

#### 6.4.3 Managing RFID Cards

To collect statistics on drivers' driving records by driver I/O status report, add driver information first and then bind a driver to a RFID card.

1. Add a driver.

On the main interface, choose Management.

On the **Management** window that is displayed, select **Driver Info** from **Use Normal**. The **Driver Info** window is displayed.

Click 😳. On the Add driver window that is displayed, add driver information, and click Submit.

| Drive | r info         |                 |     |                        |                     |   |          |                 | ⊜⊗    |
|-------|----------------|-----------------|-----|------------------------|---------------------|---|----------|-----------------|-------|
| Ple   | ease enter the | driver name 🛛 🔍 | •   | Add driver             |                     | 8 |          |                 |       |
|       | Name           | Birthday        | Gen | · · · · · ·            |                     |   | ID No    | Driving license | Photo |
|       | tracy          | 1991-08-01      | Wor | Name:                  |                     |   | 50583199 |                 | 1     |
|       |                |                 |     | Birthday:              | 1970-01-01          |   |          |                 |       |
|       |                |                 |     | Gender:                | Man                 | - |          |                 |       |
|       |                |                 |     | Phone:                 |                     |   |          |                 |       |
|       |                |                 |     | Mobile<br>phone:       |                     |   |          |                 |       |
|       |                |                 |     | Driving<br>license No: |                     |   |          |                 |       |
|       |                |                 |     | ID No:                 |                     |   |          |                 |       |
|       |                |                 |     | Photo                  | Upload photo        |   |          |                 |       |
|       |                |                 |     | 2                      | Submit Reset Cancel |   |          |                 |       |



| Drive | er info          |                 |        |               |                     |            |           |                 | •        | ⊗ |
|-------|------------------|-----------------|--------|---------------|---------------------|------------|-----------|-----------------|----------|---|
| Pl    | ease enter the d | lriver name 🛛 🔍 | • 🖻 🗙  | 🗹 Show the bi | ig picture (move mo | use)       |           |                 |          |   |
|       | Name             | Birthday        | Gender | Phone         | Mobile phone        | Birthday   | ID No     | Driving license | Photo    |   |
|       | tracy            | 1991-08-01      | Women  |               | 135000000           | 1991-08-01 | 350583199 | 123456          | <b>!</b> |   |
|       |                  |                 |        |               |                     |            |           |                 |          | 1 |
|       |                  |                 |        |               |                     |            |           |                 |          |   |
|       |                  |                 |        |               |                     |            |           |                 |          |   |
|       |                  |                 |        |               |                     |            |           |                 |          |   |

2. Add a RFID card.

On the Management window, select RFID card from Use Normal. The RFID card window is displayed.

Click On the Add an RFID window that is displayed, set the RFID card number and bind a driver. These information will be included in a driver I/O status report.

| lease en         | ter the RFID num                              | C 🖸 🗙  |                              |                                   |
|------------------|---|--|------------------------------|-----------------------------------|
|                  | RFID number                                   |  | Driver †                     | Creation date                     |
|                  |   |  |                              |                                   |
|                  | 5437502                                       | dd an RFID                                       |                              | 2015-08-10 16:48                  |
|                  |   | RFID number:<br>Added number:<br>Driver:<br>Subr | 1<br>Add<br>nit Reset Cancel | ¢<br>driver                       |
|                  |   |  |                              |                                   |
| card             |   |  |                              |                                   |
| card<br>lease en | iter the RFID num C                           | 1 <b>O X</b>                                     |                              |                                   |
| card             | iter the RFID num C                           | 1 <b>G X</b>                                     | Driver †                     | Creation date                     |
| card             | iter the RFID num C<br>RFID number<br>5437501 |  | Driver 1<br>tracy            | Creation date<br>2015-08-10 16:21 |

Note:

- 1. To manage RFID cards, driver information must be added first.
- 2. You can query a driver's driving mileage, parking time, time and location of starting or stopping the vehicle by driver I/O status report.



## 7 Querying Reports on MS03

#### 7.1 Event Report

- 1. On the main interface, choose **Reports**.
- 2. On the **Reports** window that is displayed, select **Event report** from **Use Normal**. The **Event report** window is displayed.
- 3. Select a tracker and **RFID** from the **Event** drop-down list, set the query time, and click . The results about RFID readers will be displayed, as shown in the following figure.



| Event r                  | eport          |                               |                                      |                     |                    |         |           | •00        |
|--------------------------|----------------|-------------------------------|--------------------------------------|---------------------|--------------------|---------|-----------|------------|
| Event:                   | RFID           | <ul> <li>Yesterday</li> </ul> | <ul> <li>From: 2015-08-10</li> </ul> | 00:00 To: 2015      | 5-08-10 🗰 23:59 👻  | Address | Q 🚺       | 📙 😔        |
| Θ                        | Tracker name ↓ | Alarm type                    | GPS time                             | Receiving time      | GPS valid Location | n Speed | Latitude  | Longitude  |
| Please select a tracker. | T1A-3505       | RFID(5437501)                 | 2015-08-10 16:55:55                  | 2015-08-10 16:57:26 | Valid              | 0.00    | 22.513541 | 114.057238 |
|                          |                | RFID(5437501)                 |                                      |                     |                    |         |           | 114.057253 |
|                          | T1A-3505       | RFID(5437501)                 | 2015-08-10 17:06:09                  | 2015-08-10 17:07:41 | Valid              | 0.00    | 22.513548 | 114.057198 |
|                          |                | RFID(5437501)                 |                                      |                     |                    |         |           | 114.057203 |
|                          |                |                               |                                      |                     |                    |         |           | 114.057206 |
|                          |                | RFID(5437501)                 |                                      |                     |                    |         |           | 114.057233 |
|                          | T1A-3505       | RFID(5437501)                 | 2015-08-10 17:32:15                  | 2015-08-10 18:32:44 | Valid              | 0.00    | 22.513625 | 114.057155 |
|                          |                | RFID(5437501)                 |                                      |                     |                    |         |           | 114.057151 |
|                          | T1A-3505       | RFID(5437501)                 | 2015-08-10 17:40:32                  | 2015-08-10 18:33:23 | Valid              | 0.00    | 22.513585 | 114.057151 |
| <b>1</b>                 |                | RFID(5437501)                 |                                      | 2015-08-10 17:53:42 | Valid              |         |           | 114.057156 |
|                          |                |                               |                                      |                     |                    |         |           |            |
|                          |                |                               |                                      |                     |                    |         |           |            |



#### 7.2 Driver I/O Status Report

- 1. On the **Reports** window, select **Driver IO status report** from **Use Normal**. The **Driver IO status report** window is displayed.
- Select a tracker or driver, set the I/O status and query time, and click 
   Image: A state of the I/O status and query time, and click Image: The driving records will be displayed.

| Reports                 |                       |                             |                            |                                   |                |               |
|-------------------------|-----------------------|-----------------------------|----------------------------|-----------------------------------|----------------|---------------|
| Use Normal              | Hidden                |                             |                            |                                   |                |               |
|                         | <b>a</b> ali          | 2                           |                            | <b>6</b>                          | P              |               |
| Event report            | Event<br>statistics   | Historical data             | Speed curve                | Speed pie                         | Parking rep    | ort           |
|                         |                       |                             |                            | ***                               |                |               |
| Travel report           | Mileage<br>statistics | Sensor report               | Sensor<br>average          | I/O status<br>report              | Photo repo     | ort           |
|                         |                       |                             | $\boldsymbol{\mathcal{X}}$ |                                   |                |               |
| Scheduling              | Driver IO             | User                        | Maintenance                | Statistics                        | Transfer cre   | edit          |
| screen upload           | status report         | operation                   | report(TC68S)              | report                            | reports        |               |
|                         |                       |                             |                            |                                   | I              | 0             |
| Driver IO status report |                       |                             |                            |                                   |                | 000           |
| Tracker name 💌 🗆 T1A-35 | 05 🔹 1                | nput3(All) 🔹 Active         | ->Inacti 👻 From: 2015-0    | 8-1C 📰 00:00 🝷 T <mark>o</mark> : | 2015-08-11     |               |
| Driver Tracke           | er name Active Tim    | e Inactive Tir              | ne Active Addres           | s Inactive Addre                  | ss Driving mil | e Parking dur |
| tracy                   | 2015-08-10 17         | 19:29 2015-08-10 17         | 22.51358,114.057           | 22.51358,114.05                   | 7206 0         | 00:01:32      |
| tracy                   | 2015-08-10 17:        | 22:15 2015-08-10 17         | 22:19 22.513591,114.05     | 7235 22.513591,114.05             | 7233 0         | 00:00:04      |
| tracy                   | 2015-08-10 17:        | 29:40 2015-08-10 17         | 32:15 22.513618,114.05     | 7155 22.513625,114.05             | 7155 0         | 00:02:34      |
| tracy                   | 2015-08-10 17:        | 35:01 2015-08-10 17         | 35:02 22.513635,114.05     | 7185 22.513636,114.05             | 7185 0         | 00:00:01      |
| tracy                   | 2015-08-10 17         | 40:23 2015-08-10 17         | 40:32 22.513586,114.05     | 7153 22.513585,114.05             | 7151 0         | 00:00:09      |
| tracy                   | 2015-08-10 17         | 47:24 2015-08-10 17         | 22.513671,114.05           | 7216 22.513658,114.05             | 7201 0         | 00:00:34      |
| tracy                   | 2015-08-10 17:        | <u>52:21</u> 2015-08-10 17: | 22.513611,114.05           | 7156 22.513613,114.05             | 7156 0         | 00:00:04      |
| tracy                   | 2015-08-11 14         | 48:02 2015-08-11 14         | 22.513561,114.05           | 7318 22.513573,114.05             | 7308 0         | 00:00:16      |
| uacy                    | 2013/06-11 14         | 2013-06-11 14               | 22.313376,114.03           |                                   |                |               |

Note: In this report, the T1/T333/MVT600's input 3 or T366/T366G's input 2 is connected to the engine detection cable. You can obtain the driver's driving time, mileage, and parking time from this report.

### **8 Firmware Version**

• T1 firmware supports standard version and RFID version. Standard version: The firmware can be compatible with the handset, LED display, LCD display, and camera. RFID version: The firmware can be compatible with RFID (RFID reader + card) only.



T1\_Y50V131–T1\_Y50V157: The firmware supports RFID version.

T1\_Y50401 or later: The firmware supports RFID version.

T1B\_V001 or later: The firmware supports standard version and RFID version. You can select a peripheral by

Meitrack Manager, as shown in the following figure.

| Device Tracking GeoFence Authorize GP3 Log        | neitrack<br>Manager  |
|---|--|
| Device Info                                       |  |
| IMEI 86/14402509/815 Rename                       |  |
| Firmware I1B_H101V00/ Battery Left                | 92% Write  |
| Quick Setting                                     |  |
| Light Off Engine Check Move/Static                |  |
| Turn off Call Ringtone                            |  |
| Sleep Mode   No Sleep   Normal Sleep   Deep Sleep | Write  |
| Flash Data  |  |
| SMS 0/256 Clear                                   | Log data 0/131072 Clear  |
| GPRS 0/8192 Clear                                 |  |
| Other Setting                                     |  |
| Log Interval 0 Seconds                            | Serial Device Type CAMERA CAMERA HANDSET Virite Virite                       |
| Auto Connect                                      | Auto Upgrade A21   |
| Check Device AutomaticIly                         | RED      Ores, I would like to receive automatic updates about new features. |
| O Set Device Connection COM9  Save                | O No, I don't need it. Upgrade   |
| Refresh Restore Factory Settings                  | Export Settings Load Settings Show Description                               |

• T333 firmware supports standard version and RFID version. Standard version: The firmware can be compatible with the handset, LED display, LCD display, and camera. RFID version: The firmware can be compatible with RFID (RFID reader + card) only.

T333\_Y50V005 or later: The firmware supports RFID version.

- The MVT600 firmware can be compatible with RFID (RFID reader + card) only.
- Only T366 RS232 version and T366G RS232 version support RFID.

T366\_V060 or later: The firmware supports RFID.

T366G\_V066 or later: The firmware supports RFID.

If you have any questions, do not hesitate to email us at info@meitrack.com.