FIFOTRACK iBUTTON READER USER GUIDE

Model: iButton Reader

Version: V1.2

www.fifotrack.com

Copyright and Disclaimer

- All copyrights belong to Shenzhen fifotrack Solution Co., Ltd. You are not allowed to revise, copy or spread this file in any form without consent of fifotrack.
- is trademark of fifotrack, protected by law.
- Please read this user guide carefully before installation to avoid any possible personal injury or property loss.

Document History

Version	Revision Date	Author	Detail
V1.2	Nov 15, 2016	Vito Hu	Add auto control
V1.1	Sep 1, 2016	Vito Hu	Initial Version

Contents

1 Instructions of Safety

This chapter contains information on how to operate iButton reader and device safely. By following these requirements and recommendations, you will avoid dangerous situations. Please read these instructions fully and follow them strictly before operating the tracker!

Before using, please make sure the tracker has been configured well and LED lights are visible in working status.

2 Applied Model

iButton reader (hereinafter to be referred as “iButton”) is connected to tracker via 1-wire bus, it is applied for:

- A300

3 Basic Description & Specification

- Tag’s working temperature: -40℃~85℃
- Cable length: 3m

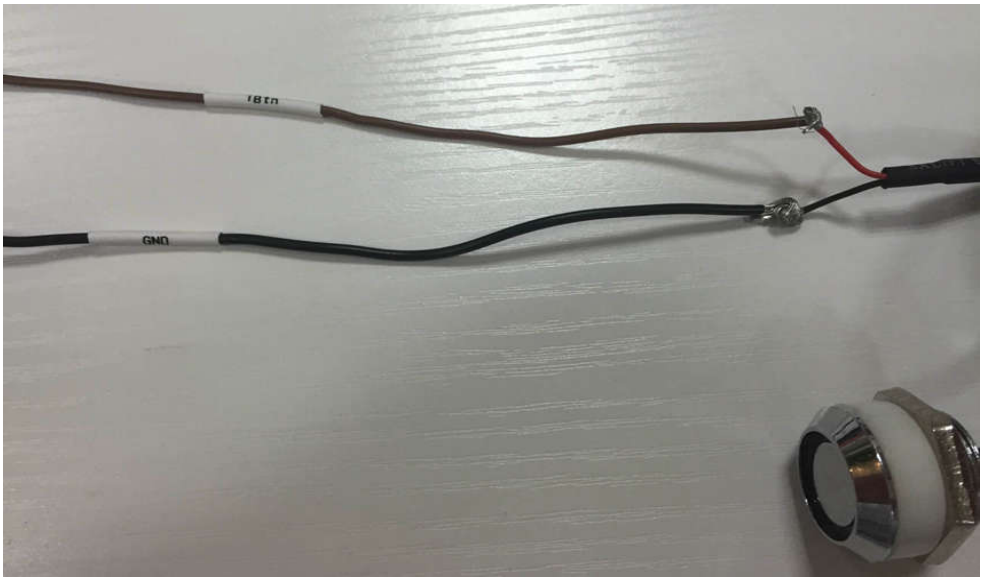
4 Installation

4.1 Connect to A300

iButton Cable	A300 Cable
Black cable	**Black cable/GND**
Red cable	**Brown cable/iBtn**

NOTE:

- Wrap over the naked joints with electrical tape after connection.



5 Operation

5.1 Setting on tracker

On tracker side, iButton's operation includes below ones. **NOTE**: the SMS command described in the following chapters use default SMS password.

5.1.1 Authorizing Tag(s)

Maximally, tracker supports 20 authorized tags. Using the following SMS command to do this operation:

SMS command: 000000,B42,<tag_num1>,<tag_num2>…<tag_numN>

Reply: B42,OK

While *tag_num[1,N]* are tags' number to be authorized.

NOTE: Tag's number laser-printed on tag is in hexadecimal, add "#" before the number.

Tag's number can be read from laser code as below:

For example:

SMS Command: 000000,B42,#1BF32F

Reply: B42,OK

After receiving the command, tracker sets tag number 0x1BF32F as authorized one.

To authorize iButton tags in batches, use the following SMS command:

SMS command: 000000,B42

Reply: B42,OK

After receiving the command, tracker will regard all read iButton tags as authorized ones in 3 minutes. During these 3 minutes, tracker will not generate “Login”, “Log Out” or “Illegal Login” alarm when tag(s) read. It is suitable for official operation.

5.1.2 Delete Authorized Tag(s)

To delete authorized iButton tag(s), using the following SMS command:

SMS command: 000000,B43,<tag_num1>,< tag_num2>…< tag_numN>

Reply: B43,OK

While *tag_num[1,N]* is the iButton tags’ number to be deleted.

NOTE: Tag’s number laser-printed on tag is in hexadecimal, add “#” before the number.

To delete all iButton tags, using the following SMS command:

SMS command: 000000,B43,ALL

Reply: B43,OK

NOTE: “ALL” should be in upper case

To delete tags in batches, using the following SMS command:

SMS command: 000000,B43

Reply: B43,OK

After receiving the command, tracker will delete tags, which are read in 3 minutes. During these 3 minutes, tracker will not generate “Login”, “Log Out” or “Illegal Login” alarm when tag(s) read.

5.1.3 Retrieve Tag(s) Authorization Status

To retrieve tag’s authorization status, using the following SMS command:

SMS command: 000000,B44,<tag_num1>,<tag_num2>…<tag_numN>

Reply: B44,<tag_num1>:<aut1>,<tag_num2>:<aut2>,….<tag_numN>:<autN>

tag_num[1,N]: iButton tag number to be retrieved

aut[1,N]: Authorization status, 0~unauthorized, 1~ authorized

NOTE: Tag's number laser-printed on tag is in hexadecimal, add "#" before the number.

5.1.4 Tag Operation Logic

After swiping tag, tracker generates "Login", "Log Out" or "Illegal Login" alarm, the logic as below:

- If none tag is authorized, all tags are regarded as authorized ones.
- If current tag number recorded in tracker is empty, swiping authorized tag-A, tracker generates "Login" alarm with tag-A number, and then, tracker uploads position package with tag-A's number.
- If current tag number recorded in tracker is empty, swiping unauthorized tag, tracker does nothing to this tag's number.
- If current tag number recorded in tracker is not empty, swiping the same tag, tracker generates "Log Out" alarm, and then, uploads position package with empty tag number.
- If current tag number recorded in tracker is not empty (assumed as *id0*), swiping authorized tag-A whose number is *id1* (*id1* != *id0*), tracker generates "Log Out" with *id0*, and generates "Login" with *id1*. After that, tracker uploads position package with *id1*.
- If current tag number recorded in tracker is not empty (assumed as *id0*), swiping unauthorized tag-A whose number is *id1* (*id1* != *id0*), tracker generates "Illegal Login" with *id1*. After that, tracker uploads position package with *id0*.

5.1.5 Control

In actual usage, user can use fingerprint and "Login", "Logout" alarm to control vehicle, usually, control engine with external relay. As a result, when the resisted driver swipes finger, tracker will unlock engine, otherwise, lock the engine. Setting B23 command to achieve vehicle control:

SMS command: 000000,B23,<alm-code>,<GPRS><SMS><two-way><monitor><photo><AN-idx>

SMS reply : B23,OK

- alm-code: alarm code, for "Login" alarm, ***alm-code*** is 37, while for "Log out" alarm, ***alm-code*** is 38;
- GPRS: GPRS: Disable/enable GPRS uploading;
- SMS: Disable/enable SMS to SOS number(s);
- two-way: Disable/enable SOS number(s) dialing under two-way conversation;
- monitor: Disable/enable SOS number dialing under monitor mode;
- photo: Disable/enable photographing; The option is invalid when fingerprint in using;
- AN-idx: Complicated action;

Under default setting, tracker will lock engine via OUTPUT1 when setting ***AN-idx*** to 1 in B23 command, and unlock engine via OUTPUT1 when setting ***AN-idx*** to 2 in B23 command; Set the other options according to actual using.

For example:

SMS command: 000000,B23,37,100002

SMS reply : B23,OK

After the command sent, when resisted finger swiped, tracker generates “Login” alarm, sends GPRS data to platform, and unlocks engine.

SMS command: 000000,B23,38,100001

SMS reply : B23,OK

After the command sent, when resisted swiped again, tracker generates “Log out” alarm, sends GPRS data to platform, locks engine.

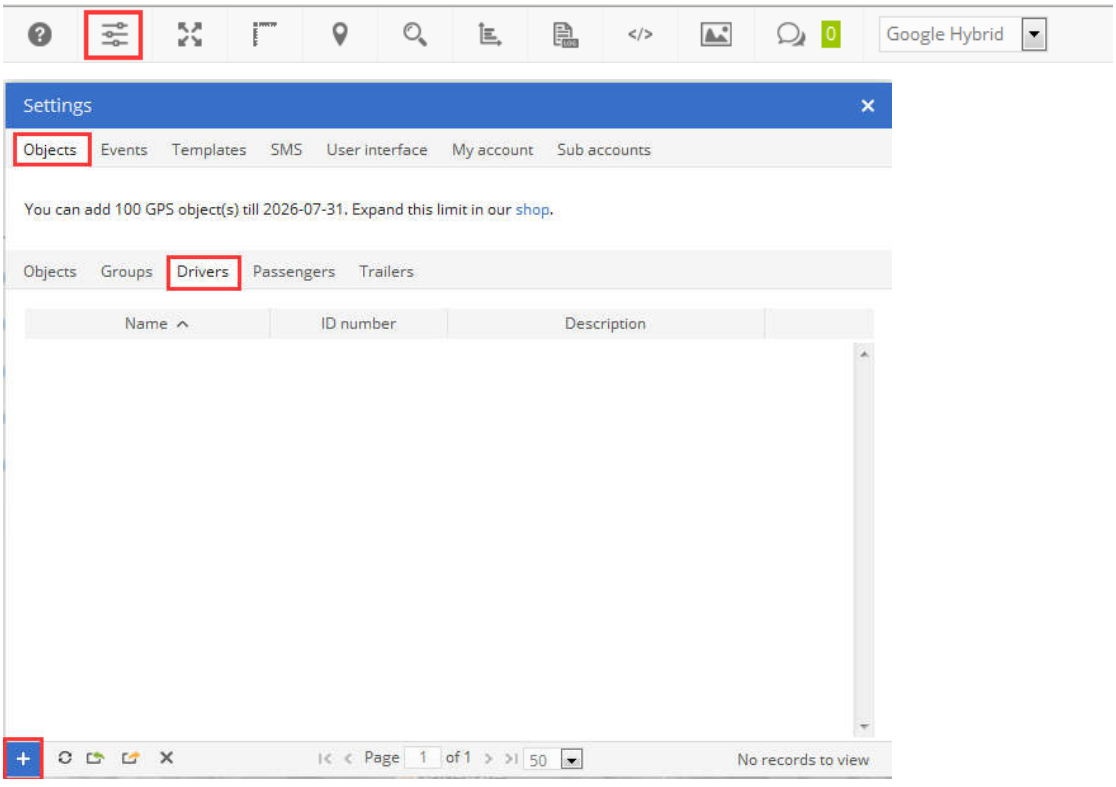
5.2 Setting on FIMS

Setting on FIMS includes:

- Add global driver information
- Assign driver to tracker

5.2.1 Adding Global Driver Information

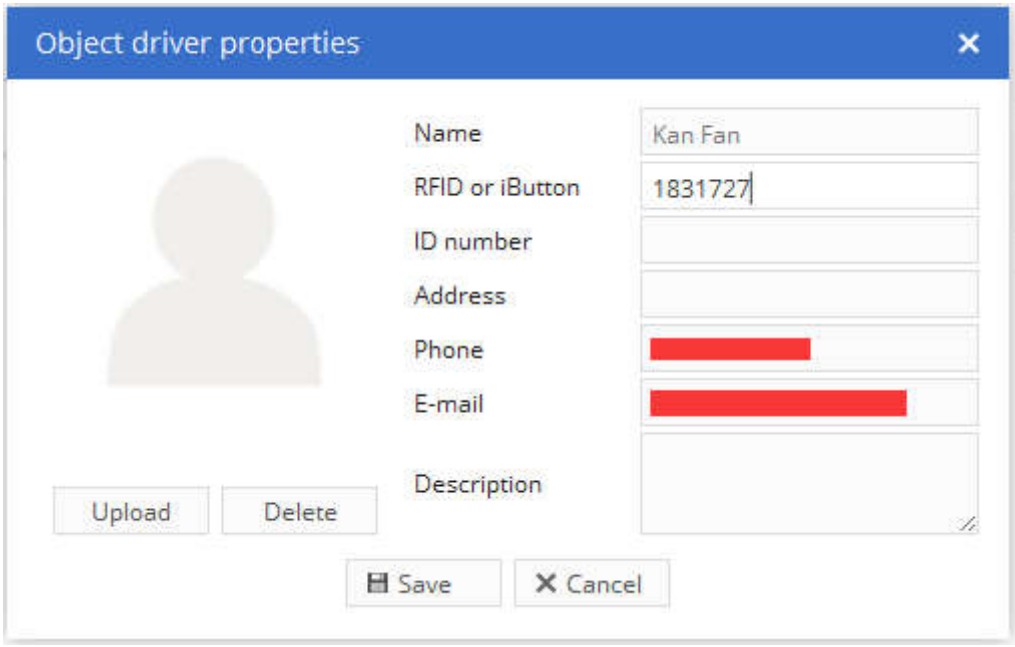
Select “Setting”→”Objects”→”Drivers”, click “Add” button.



In “Object driver Properties” web-page, add driver’s information, such as “Name”, “Address”, “Phone Number”, etc.. Also, driver’s photo can be uploaded in this page. **NOTE, “RFID or iButton” can be read**

from tag's laser code.

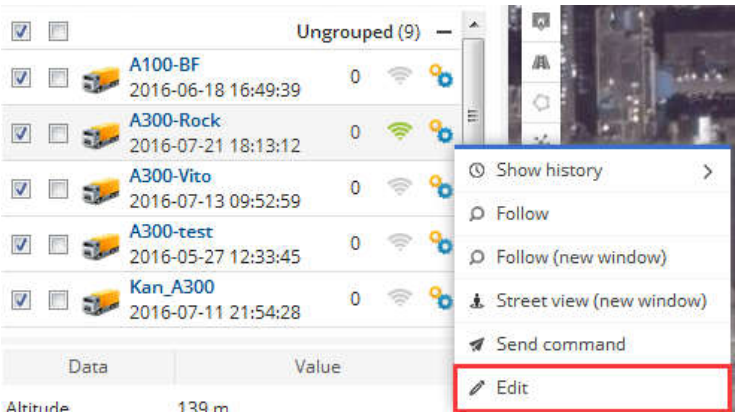
NOTE: Number laser-printed on tag is in hexadecimal, to add driver on FIMS, it should be changed to decimal; For example, 1BF32F in hexadecimal is equal to 1831727 decimal, which is set in the dialog.

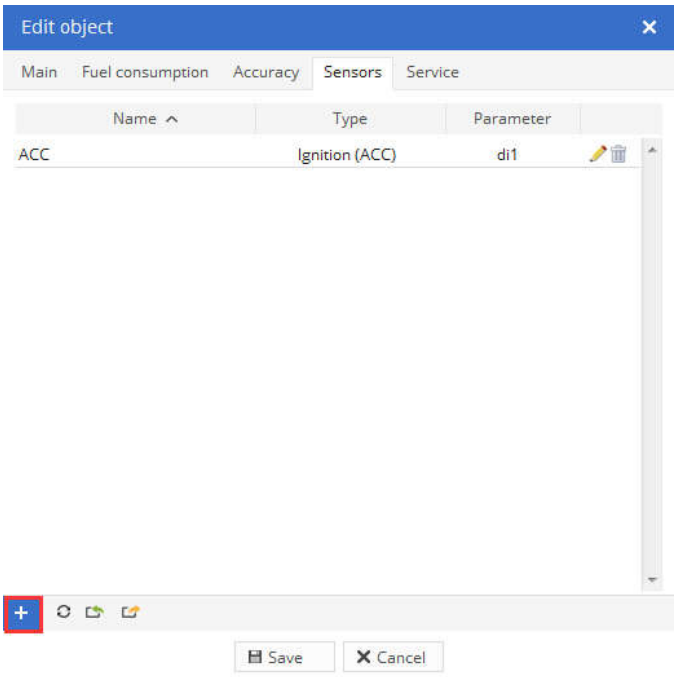


Click "Save" button, then one driver's information has been added.

5.2.2 Assign Driver to Tracker

select target tracker→"Edit"→"Sensors"→"Add"

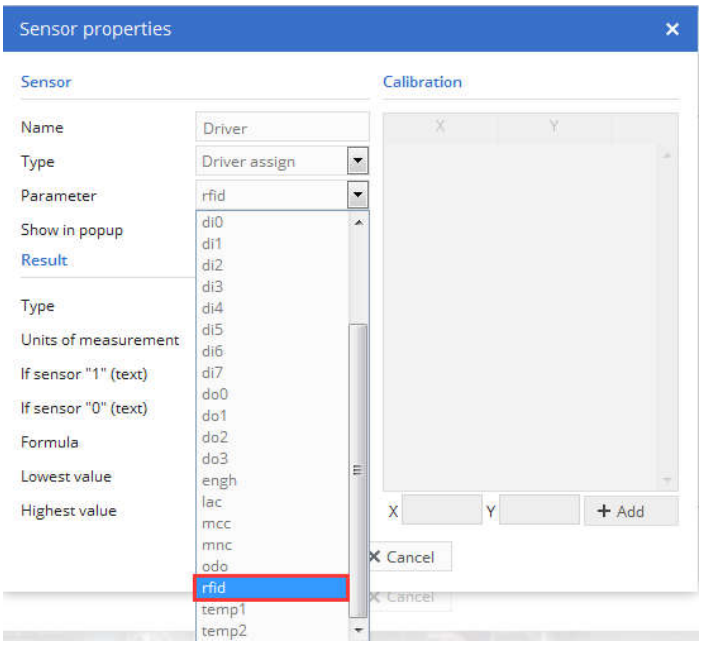




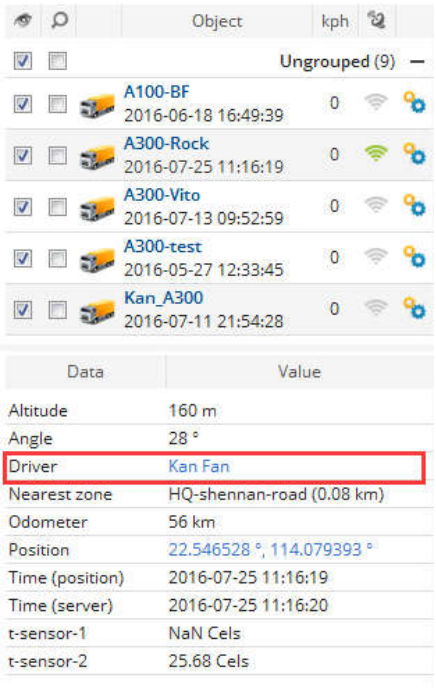
At “Sensor Properties” dialog, set parameters as below:

Sensor

- Name: Input self-define string
- Type: Select “Driver assign”
- Parameters: Select “rfid”

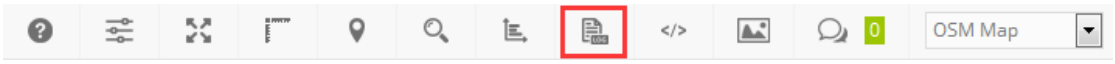


Click “Save”, real-time driver information will be display at “Object page”, as below:

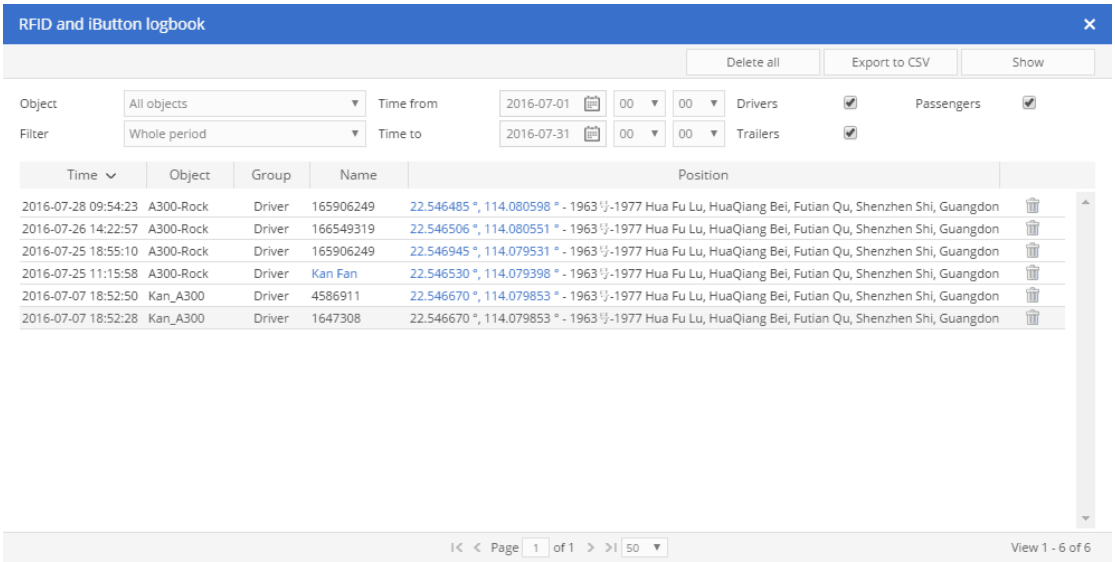


5.2.3 RFID/iButton Logbook

FIMS supports RFID/iButton logbook, which shows the information of driver, click “RFID and ibutton logbook” button to start logbook, as below:



Log detail is shown:



6 NOTE

- After swiping authorized tag, tracker’s power LED will flash for 2s.

Please e-mail us at info@fifotrack.com if any question or feedback.