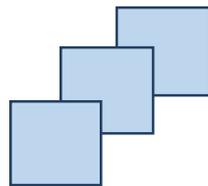


FIFOTRACK iBUTTON READER

USER GUIDE



Model: iButton Reader

Version: V1.2

www.fifotrack.com

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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

Document History	3
1 Instructions of Safety	5
2 Applied Model.....	5
3 Basic Description & Specification	5
4 Installation	5
<i>4.1 Connect to A300</i>	<i>5</i>
5 Operation.....	6
<i>5.1 Setting on tracker</i>	<i>6</i>
5.1.1 Authorizing Tag(s).....	6
5.1.2 Delete Authorized Tag(s)	7
5.1.3 Retrieve Tag(s) Authorization Status	7
5.1.4 Tag Operation Logic.....	8
5.1.5 Control.....	8
<i>5.2 Setting on FIMS.....</i>	<i>9</i>
5.2.1 Adding Global Driver Information	9
5.2.2 Assign Driver to Tracker.....	10
5.2.3 RFID/iButton Logbook	12
6 NOTE	12

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°C~85°C
- ⊙ Cable length: 3m

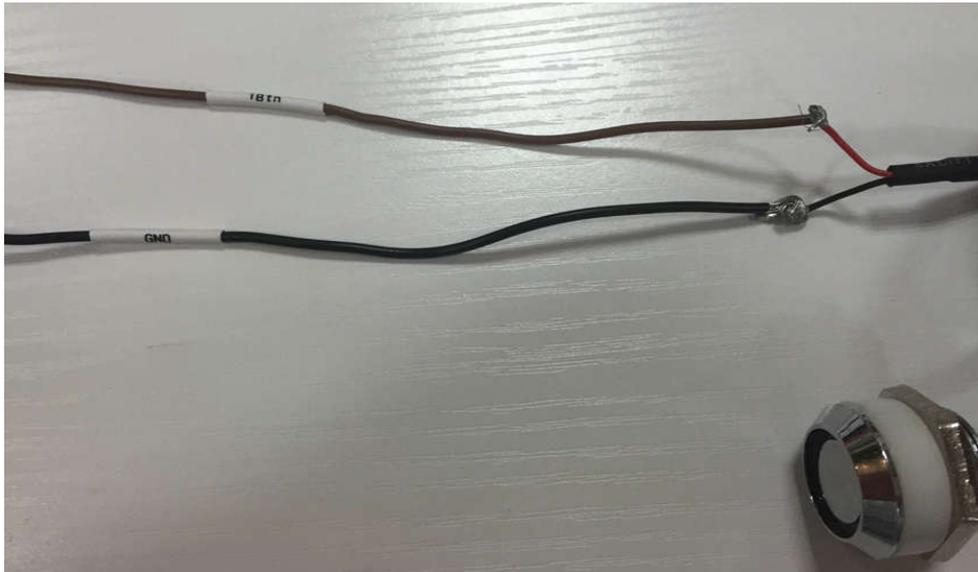
4 Installation

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

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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.

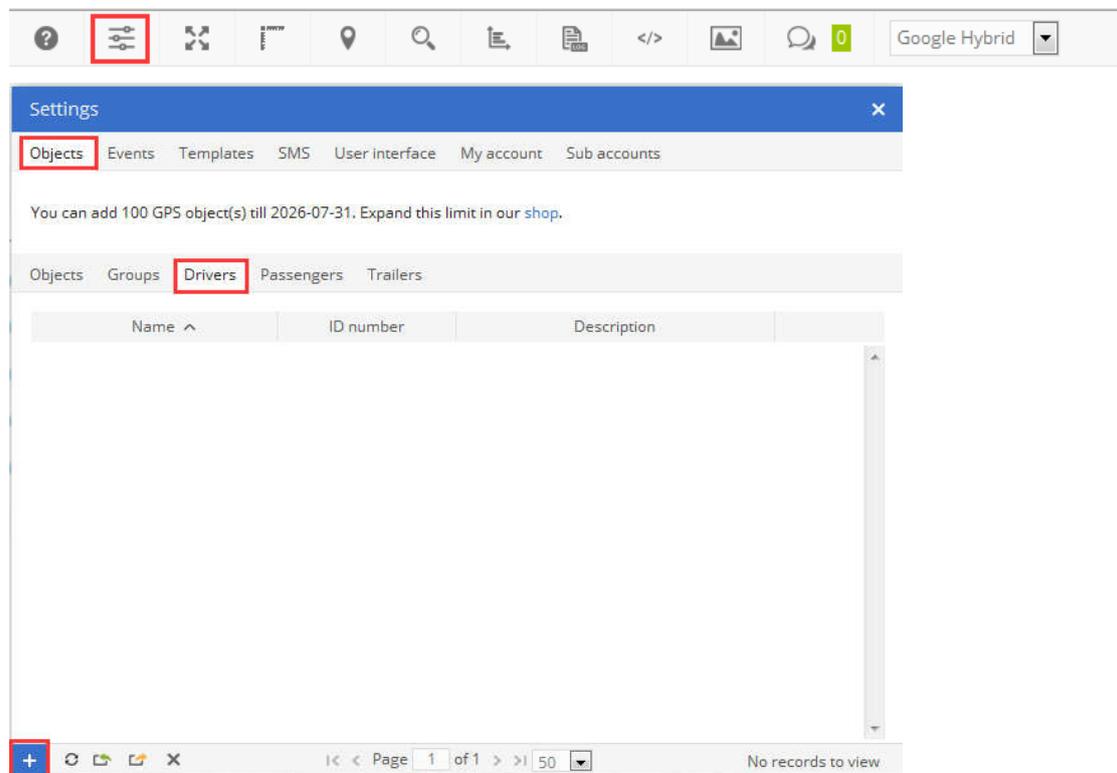
5.2 Setting on FIMS

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.

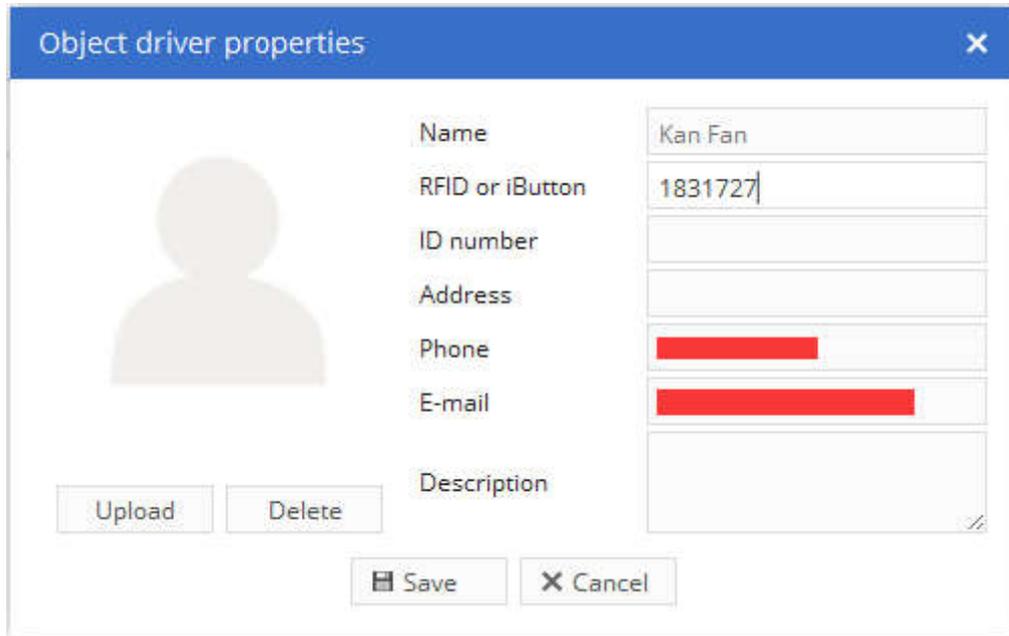


The screenshot shows the FIMS web interface. At the top, there is a navigation bar with various icons. Below it, a 'Settings' window is open, showing a menu with 'Objects', 'Events', 'Templates', 'SMS', 'User interface', 'My account', and 'Sub accounts'. The 'Objects' menu item is highlighted with a red box. Under 'Objects', there are sub-menus for 'Objects', 'Groups', 'Drivers', 'Passengers', and 'Trailers'. The 'Drivers' sub-menu is also highlighted with a red box. Below the sub-menus, there is a table with columns for 'Name', 'ID number', and 'Description'. The table is currently empty. At the bottom of the table, there is a red box around a '+' icon, which is the 'Add' button. The page footer shows 'Page 1 of 1' and 'No records to view'.

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.

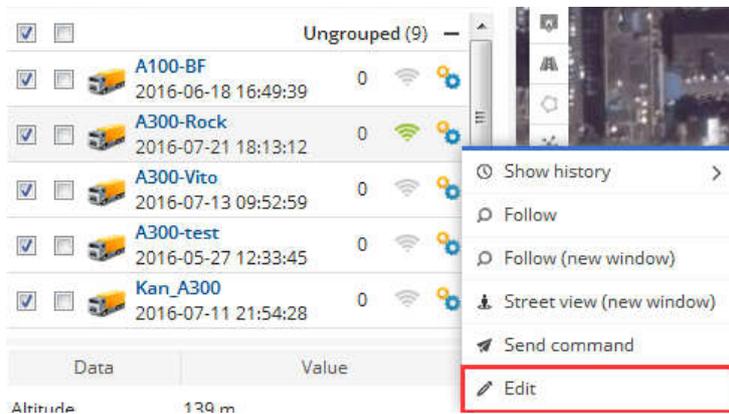
NOTE: Number laser-printed on tag is in hexadecimal, to add driver on FIMS, it should be changed to decimal; For example, 1BF32F in hexadecimal is equal to 1831727 decimal, which is set in the dialog.



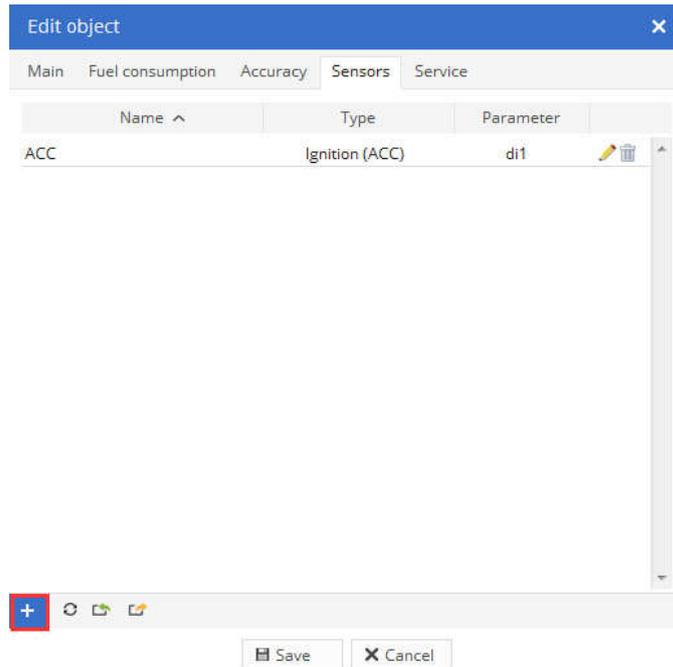
Click "Save" button, then one driver's information has been added.

5.2.2 Assign Driver to Tracker

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



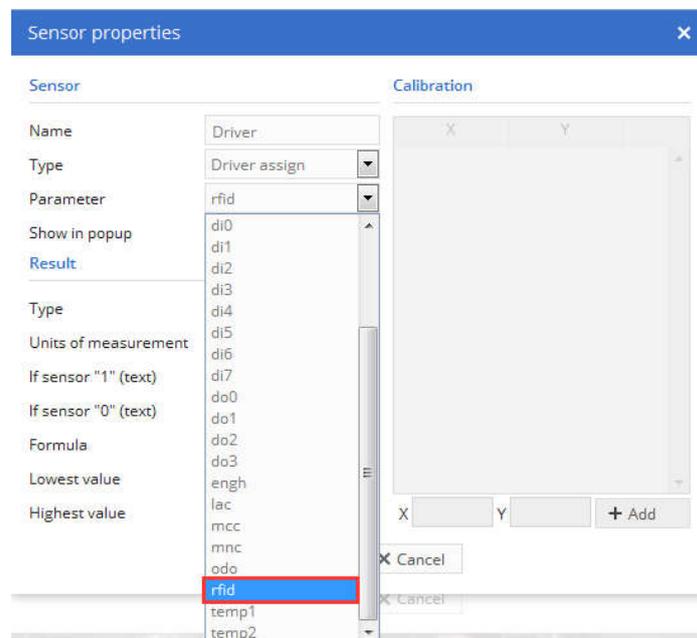
Data	Value
Altitude	139 m



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:

Object	kph
Ungrouped (9) -	
A100-BF 2016-06-18 16:49:39	0
A300-Rock 2016-07-25 11:16:19	0
A300-Vito 2016-07-13 09:52:59	0
A300-test 2016-05-27 12:33:45	0
Kan_A300 2016-07-11 21:54:28	0

Data	Value
Altitude	160 m
Angle	28 °
Driver	Kan Fan
Nearest zone	HQ-shennan-road (0.08 km)
Odometer	56 km
Position	22.546528 °, 114.079393 °
Time (position)	2016-07-25 11:16:19
Time (server)	2016-07-25 11:16:20
t-sensor-1	NaN Cels
t-sensor-2	25.68 Cels

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:

RFID and iButton logbook
✕

Delete all
Export to CSV
Show

Object: All objects

Time from: 2016-07-01 00:00

Drivers:

Passengers:

Filter: Whole period

Time to: 2016-07-31 00:00

Trailers:

Time	Object	Group	Name	Position	
2016-07-28 09:54:23	A300-Rock	Driver	165906249	22.546485 °, 114.080598 ° - 1963°-1977 Hua Fu Lu, HuaQiang Bei, Futian Qu, Shenzhen Shi, Guangdong	🗑
2016-07-26 14:22:57	A300-Rock	Driver	166549319	22.546506 °, 114.080551 ° - 1963°-1977 Hua Fu Lu, HuaQiang Bei, Futian Qu, Shenzhen Shi, Guangdong	🗑
2016-07-25 18:55:10	A300-Rock	Driver	165906249	22.546945 °, 114.079531 ° - 1963°-1977 Hua Fu Lu, HuaQiang Bei, Futian Qu, Shenzhen Shi, Guangdong	🗑
2016-07-25 11:15:58	A300-Rock	Driver	Kan Fan	22.546530 °, 114.079398 ° - 1963°-1977 Hua Fu Lu, HuaQiang Bei, Futian Qu, Shenzhen Shi, Guangdong	🗑
2016-07-07 18:52:50	Kan_A300	Driver	4586911	22.546670 °, 114.079853 ° - 1963°-1977 Hua Fu Lu, HuaQiang Bei, Futian Qu, Shenzhen Shi, Guangdong	🗑
2016-07-07 18:52:28	Kan_A300	Driver	1647308	22.546670 °, 114.079853 ° - 1963°-1977 Hua Fu Lu, HuaQiang Bei, Futian Qu, Shenzhen Shi, Guangdong	🗑

Page 1 of 1
View 1 - 6 of 6

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.