

Driver ID

The latest Movin' On GPS beacon models include support for connection to a touch-and-go iButton reader, which allows drivers to identify themselves at the beginning of trip segments.

Fleet Managers now have the ability to view reports based upon the name of the driver rather than the vehicle.

iButton and Touch-and-Go Reader

The iButton is a standardized button-shaped device that contains a chip with a unique code. The Touch-and-Go iButton Reader recommended for use with Movin' On GPS beacons has a small flat surface which reads the code from the iButton when it comes into contact. In the center of the surface is an embedded LED which provides visual feedback to the user.

iButtons, iButton key holders and Touch-and-Go reader devices are all available from Movin' On GPS.



1. Using the iButton

The driver is expected to touch the iButton to the reader prior to turning on the vehicle ignition. If the driver forgets to do this and the ignition is turned on before the iButton touches the reader, a buzzer will sound as a reminder and the driver may touch the iButton to the reader at that point to record their Driver ID. If the driver fails to touch the iButton to the reader, any events generated will have a blank Driver ID associated with them.

If the code is correctly read from the iButton, the LED on the reader will blink for several seconds before returning to solid green.

The current Driver ID stored on the Movin' On GPS beacon is always erased when the ignition is turned off. Therefore drivers are encouraged to adopt the habit of always touching their iButton to the reader prior to turning the ignition on, even after short stops along their route.

Supported Beacons

The Driver ID feature is currently available on the following beacon models:

- MOSS 6500, 6501 (2G GPRS)
- MOSS 6550, 6551 (3G HSPA)



2. Reader Installation and Testing

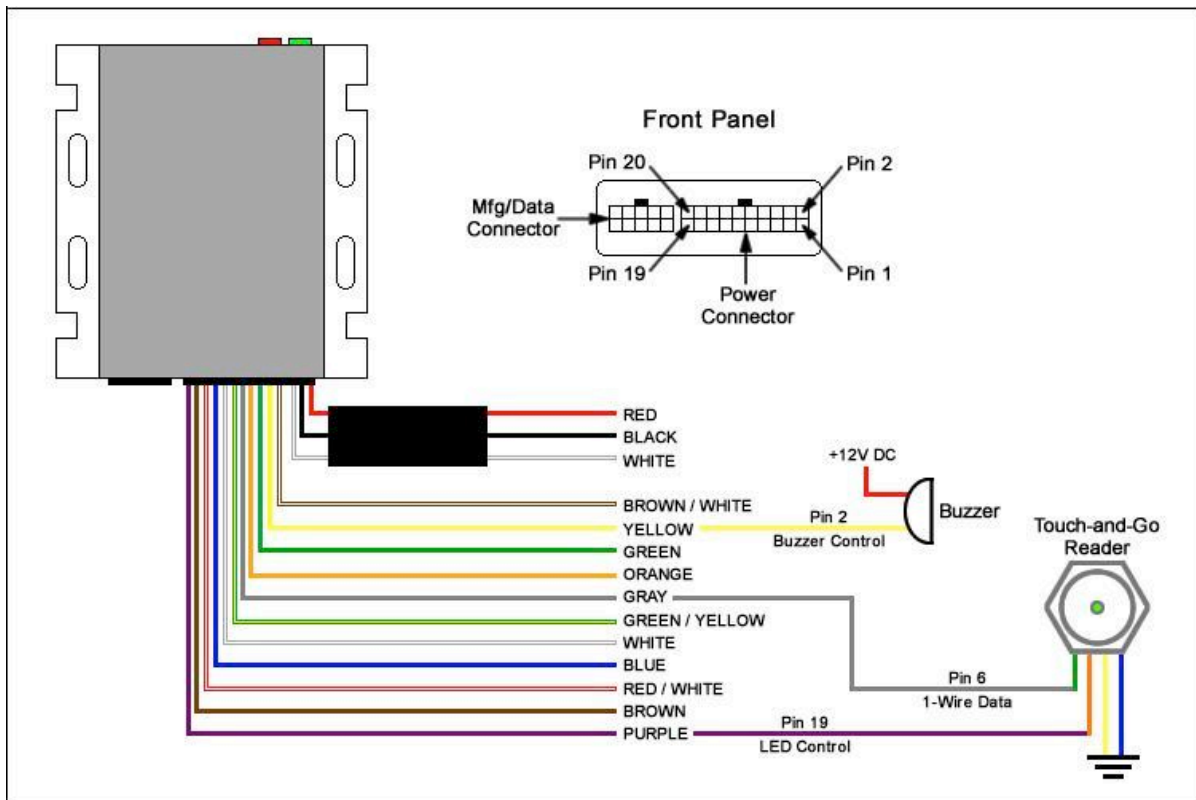
The iButton reader uses the 1-Wire data connection on the Movin' On GPS Beacon to transmit the Driver ID. This is located on Pin 6 on the wiring harness, which is attached to the gray wire in the bundle. The reader also makes use of the LED interface for feedback to the driver. This interface is located on Pin 19 on the harness, attached to the purple wire.

Please note that if the purple wire on Pin 19 is missing from your wiring harness, you will need to upgrade to the latest harness configuration.

The reader should be mounted on the dashboard within easy reach of the driver. Remove the plastic plug from the reader wires so the individual wires can be separated. Connect the green wire on the reader to the gray wire on the Movin' On GPS beacon. The orange wire on the reader controls the LED operation. Connect this to the purple wire on the beacon wiring harness. The blue and yellow wires on the reader are connected to ground. Note that if there is a short circuit on the reader after installation, the LED will flash rapidly, and the beacon will report a Driver ID to the server that reads "ADDEADDEADDEADDE".

Please refer to the Touch-and-Go Reader Wiring Diagram below.

Touch-and-Go Reader Wiring Diagram



Once installed, the Touch-and-Go Reader may be tested by checking the green LED, which is in the center of the device surface. When the reader is active, the LED will remain solid green. To test the reader, touch the surface with an iButton for a few seconds. The LED will blink for several seconds before returning to solid green. This indicates that the identification code from the iButton has been successfully read by the reader and stored in the Movin' On GPS beacon.

The Driver ID feature also makes use of a warning buzzer which provides immediate audio feedback when the driver fails to use their iButton.

A 12V piezoelectric buzzer capable of emitting a 75db alarm is appropriate in most cases. If the installation is in a large vehicle where the beacon is under the dashboard, a louder buzzer may be required so that it can be heard by the driver. For large trucks, the buzzer can be in the 12V to 28V range. An example buzzer that is appropriate for most installations can be found here: <http://www.radioshack.com/product/index.jsp?productId=23262846>

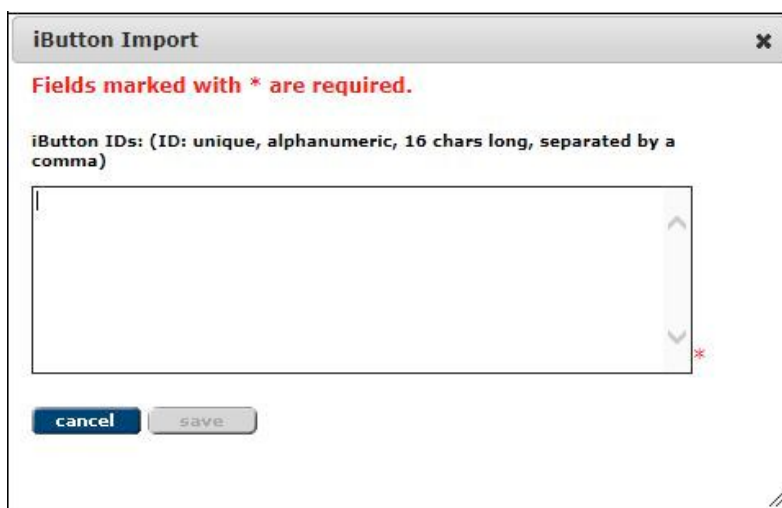
On the Movin' On GPS beacon, the yellow wire in the wiring harness on Pin 2 is connected to the ground terminal on the buzzer, and the power terminal is connected to the vehicle source.

3. Portal Configuration – iButton Provisioning

There are two ways to provision an iButton into the Movin' On GPS Portal:

1. The first time an iButton is touched to a reader attached to a beacon registered to a subscriber, the identifier from that iButton will be stored in the list of available iButtons for that subscriber.
2. The iButton Management Interface provides an “Import” button which will allow iButton codes to be read from the iButton and manually entered into the list of devices. Please note that these codes are lengthy alpha-numeric strings and manual entry is not recommended for large numbers of devices.

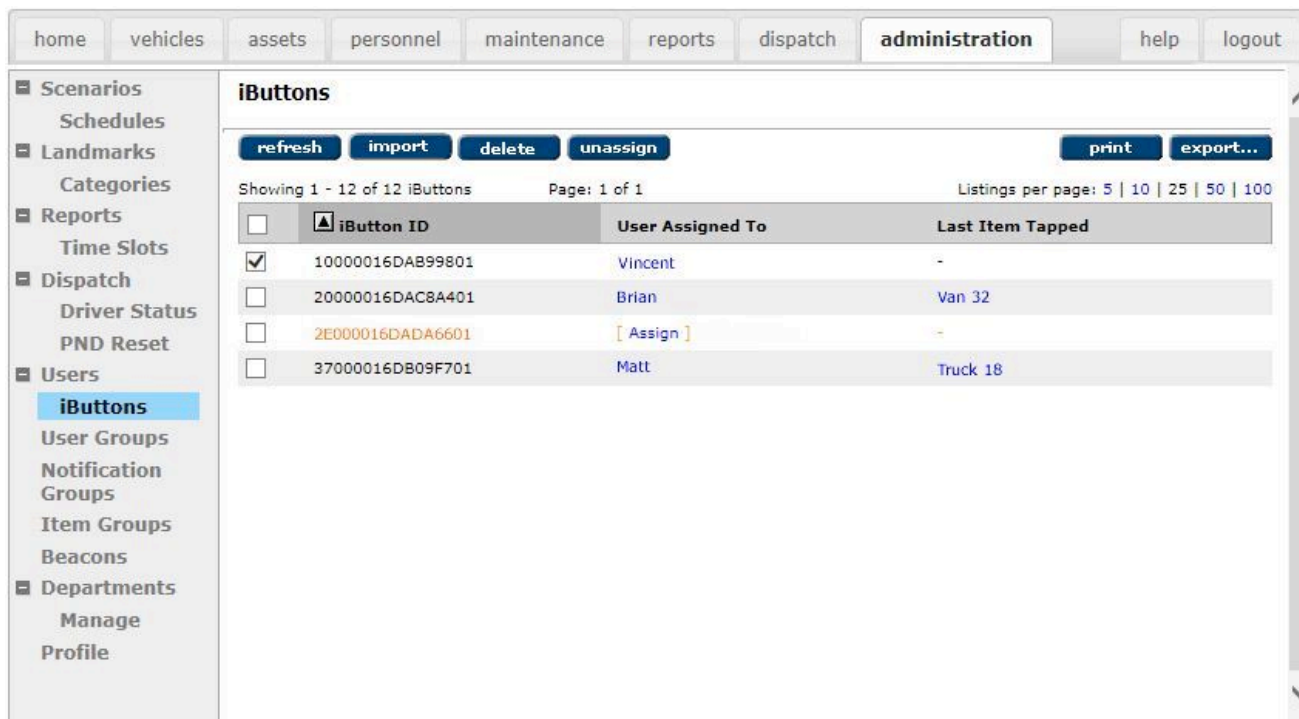
iButton Import Interface



The screenshot shows a web-based form titled "iButton Import". At the top right of the form is a close button (X). Below the title, a red message states "Fields marked with * are required." Underneath, there is a label "iButton IDs: (ID: unique, alphanumeric, 16 chars long, separated by a comma)". Below the label is a large text input field with a vertical scrollbar on the right side. A red asterisk (*) is located at the bottom right corner of the input field. At the bottom of the form, there are two buttons: "cancel" and "save".

Once the iButton codes have been input into the system, they will appear in the list in the iButton Management interface. Unassigned iButtons will be highlighted in orange, as seen in the example below.

iButton Management Interface




The screenshot shows the 'iButtons' management interface. At the top, there are navigation tabs: home, vehicles, assets, personnel, maintenance, reports, dispatch, **administration**, help, and logout. A left-hand menu lists various system components, with 'iButtons' selected under the 'Users' category. The main content area displays a table of iButtons with the following data:

<input type="checkbox"/>	iButton ID	User Assigned To	Last Item Tapped
<input checked="" type="checkbox"/>	10000016DAB99801	Vincent	-
<input type="checkbox"/>	20000016DAC8A401	Brian	Van 32
<input type="checkbox"/>	2E000016DADA6601	[Assign]	-
<input type="checkbox"/>	37000016DB09F701	Matt	Truck 18

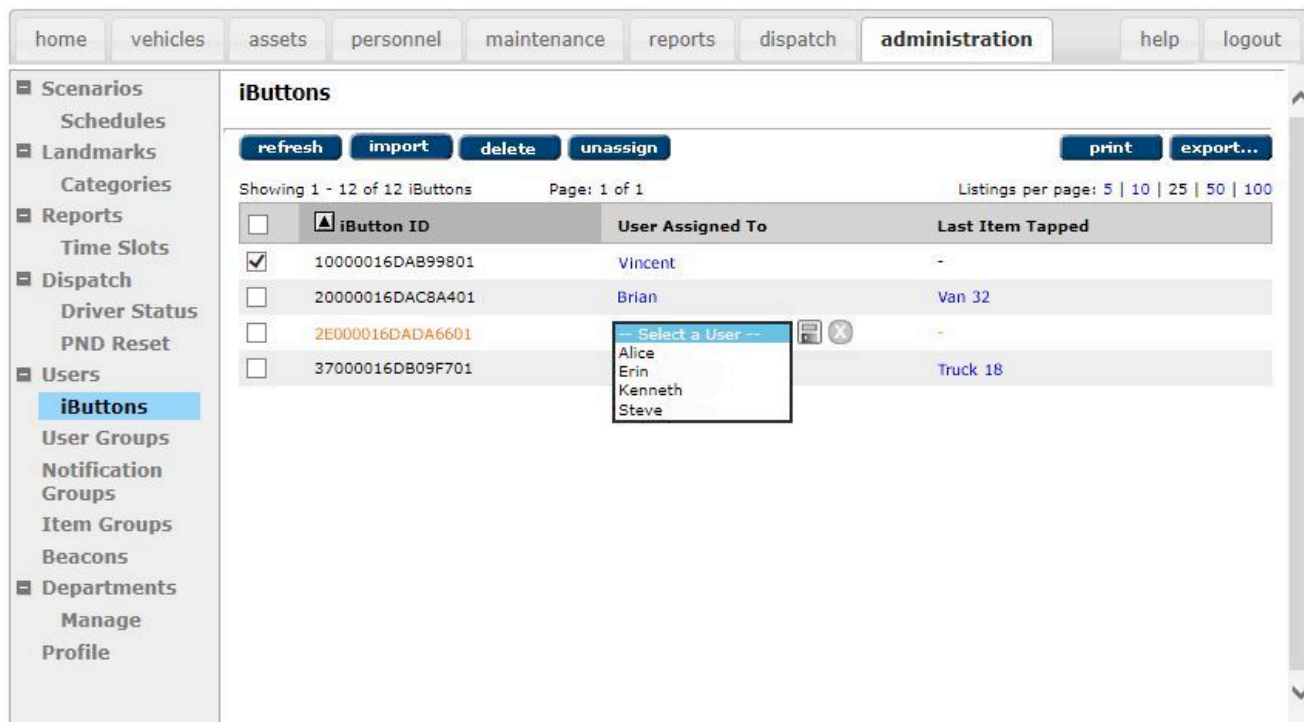
Buttons for 'refresh', 'import', 'delete', 'unassign', 'print', and 'export...' are visible above the table. The table indicates 'Showing 1 - 12 of 12 iButtons' and 'Page: 1 of 1'. Listing options are set to 5 per page.

Drivers are selected from among the list of Users created under the administration tab of the Movin' On GPS portal. When viewing the list of Users, those with an iButton assigned to them will be indicated with the  icon.

To assign an iButton to a driver, open the iButton management interface by selecting "iButtons" in the left-hand menu, and click on the "Assign" link beside an available iButton. A list of available user records will appear. Highlight the desired user and click on the save  icon.

Once the iButton is assigned to a driver, if they touch their iButton to a reader attached to a registered Movin' On GPS beacon, the Driver ID read from that iButton will be associated with events generated by that beacon.

iButton Management Interface – iButton Assignment



The screenshot shows the 'iButtons' management interface. At the top, there is a navigation bar with tabs for 'home', 'vehicles', 'assets', 'personnel', 'maintenance', 'reports', 'dispatch', 'administration' (selected), 'help', and 'logout'. A left sidebar contains a menu with categories like 'Scenarios', 'Reports', 'Dispatch', and 'Users', with 'iButtons' highlighted under 'Users'. The main content area has buttons for 'refresh', 'import', 'delete', 'unassign', 'print', and 'export...'. Below these are pagination controls: 'Showing 1 - 12 of 12 iButtons', 'Page: 1 of 1', and 'Listings per page: 5 | 10 | 25 | 50 | 100'. A table lists iButtons with columns for 'iButton ID', 'User Assigned To', and 'Last Item Tapped'. A dropdown menu is open for the third row, showing a list of users: 'Alice', 'Erin', 'Kenneth', and 'Steve'.

<input type="checkbox"/>	iButton ID	User Assigned To	Last Item Tapped
<input checked="" type="checkbox"/>	10000016DAB99801	Vincent	-
<input type="checkbox"/>	20000016DAC8A401	Brian	Van 32
<input type="checkbox"/>	2E000016DADA6601	Select a User --	-
<input type="checkbox"/>	37000016DB09F701		Truck 18

4. Event Reporting Using Driver ID

The following portal reports support Driver ID, and may be generated by selecting the Driver Name as opposed to the Item Name in the report setup.

- Route Log
- Stop Report
- Event Detail Report

The example on the next page shows the report input page for an Event Detail Report. The user is allowed to select a "mode" for the report, either Item or Driver ID. If Driver ID mode is selected, the user will be provided with a list of driver names for creating the report, and the result will display only those events associated with the selected driver.

Please note that JavaScript maps must be enabled in your portal profile to take full advantage of reporting based on Driver ID.

Event Detail Report Input – Driver ID

Event Detail Report

Fields marked with * are required.

Select mode: Item Driver ID

Select a driver: John Smith cancel create report

Events to include on report:

<input checked="" type="checkbox"/> Select All Events	<input checked="" type="checkbox"/> Arm Where Parked
<input checked="" type="checkbox"/> Accident Detection	<input checked="" type="checkbox"/> Harsh Acceleration
<input checked="" type="checkbox"/> Defective Temp Sensor	<input checked="" type="checkbox"/> Harsh Cornering
<input checked="" type="checkbox"/> Harsh Braking	<input checked="" type="checkbox"/> Ignition On - Off
<input checked="" type="checkbox"/> Idle Alert	<input checked="" type="checkbox"/> Interval Tracking
<input checked="" type="checkbox"/> Input	<input checked="" type="checkbox"/> Posted Speed Alert
<input checked="" type="checkbox"/> Output	<input checked="" type="checkbox"/> Speed in Zone - Polygon
<input checked="" type="checkbox"/> Power Cut	<input checked="" type="checkbox"/> Start & Stop
<input checked="" type="checkbox"/> Speed Monitoring	<input checked="" type="checkbox"/> Zone - Circular, Zone - Polygons
<input checked="" type="checkbox"/> Temperature Sensor Alert	

Group report data by: Event Date and time

Driver ID in Map View

In addition to items, operators may now select drivers for display in Map View. Please note that JavaScript maps must be enabled in your portal profile to use Map View based on Driver ID.

5. Important Considerations

Because the identification of the current driver is determined by the ignition events received by the beacon, it is a best practice to maintain an ignition scenario with a 24/7 schedule to prevent inconsistent results and to ensure the driver is properly warned by the buzzer when they fail to touch their iButton to the reader.

If you are still experiencing difficulty obtaining appropriate results for the Driver ID feature after following the steps in this document, please contact Movin' On GPS Support at info@movinongps.com.