Bike-O-Meter User Manual

For

iOS 7

Version 1

Date 2014-03-09

Thank you for purchasing the Bike-O-Meter App from Cellimagine LLC.

Bike-O-Meter is truly a versatile app that can be used as a pedometer, a speedometer, and trip tracker. It is one of the few apps that works equally well walking, running or in a vehicle.

Tracking features displays path on satellite/hybrid map using push pins and line segments.

Bike-O-Meter has sophisticated algorithms for improved noise rejection capability, and computes values to very high precision and fast response. Measurement errors due to poor satellite reception are minimized even at walking speeds.

FEATURES:
- Intuitive, simple and easy to use
- Pleasing animated graphics and large display panels
- Works equally well walking, running or riding
- Superior noise rejection algorithms for high accuracy
- Accurately monitor several essential parameters with precision
- Noise rejection algorithms minimize position, speed, and distance errors.

SPEEDOMETER FUNCTIONS:
- English and Metric Units. Can switch Units at any time.
- Measurement units: Feet, Feet/Sec. Miles, MPH, (English Units), Meters, meters/Sec., KM, KMPH (Metric Units)
- Persistent User Preference settings such as Units. Odometer and Elapsed time readings are also saved upon program exit.
- Screen ON/Wake Lock feature to keep the Screen from going to sleep. Bike-O-Meter is setup to work in **unattended Mode** with no user activity. The App and GPS device continue working when the mobile device goes to sleep.
- Display shows Maximum, Average and Current Speed.
- Satellite accuracy.
- Heading.
- Change measurement units on the fly.

MAPPING FUNCTIONS:
- Map display in either Roadmap (2D) or Satellite (3D).
- Display current location in real-time.
- Mark your position with push-pins.
- Track path with line segments.
- Save Track points to local files and share files. (PRO Version only)

IMPORTANT: Only the Bike-O-Meter PRO version allows the Track Points (Waypoints) or Pushpins to be saved or stored.

NOTE: Only the Bike-O-Meter PRO has Waypoint saving capability. On the Bike-O-Meter, as soon as you exit the app, all the values will be lost.
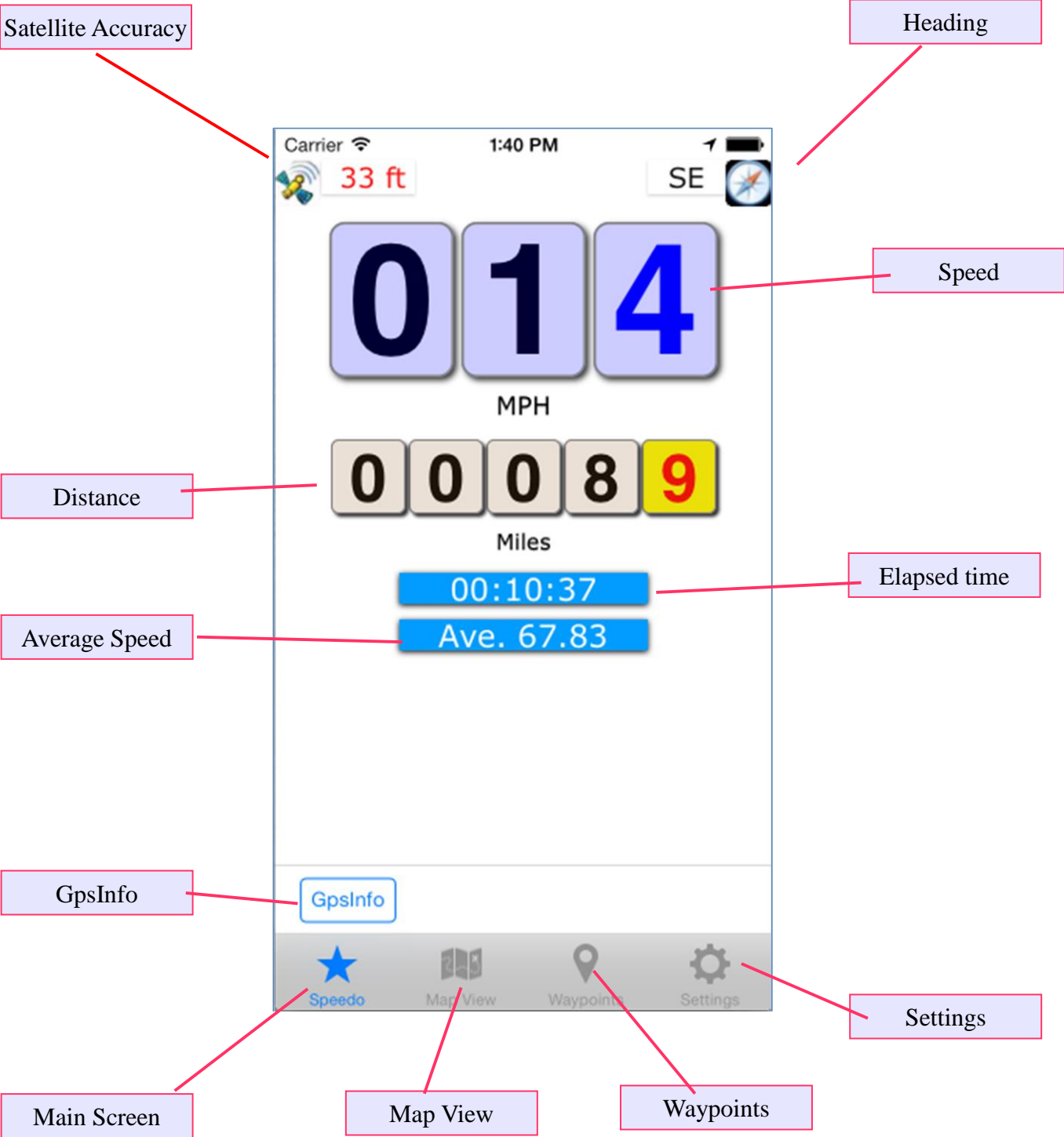
BIKE-O-METER MAIN SCREEN

Satellite Accuracy

Heading

Speed

Distance

Elapsed time

Average Speed

GpsInfo

Settings

Main Screen

Map View

Waypoints

Figure 1

The main screen displays the following information:

Satellite Accuracy: The satellites accuracy in meters or feet.
IMPORTANT: For good satellite reception, the accuracy must be about 3 to 5 meters (9 to 15 feet)

Heading: This is the true magnetic compass direction. Since Heading is a calculated value, movement is required for correct heading values are displayed.

Speed: Displays the speed. Two speed values are displayed – current speed, and average speed.

Distance: Displays the total distance traveled. The distance value is nonvolatile and saved across application exit and device power off.

Elapsed Time: It displays the up-time the Bike-O-Meter App has been running. The elapsed time is preserved across application exit and device power off.

GPS Info: This button takes you to the GPS Info screen that shows more details about the location information. These values are updated in real-time.
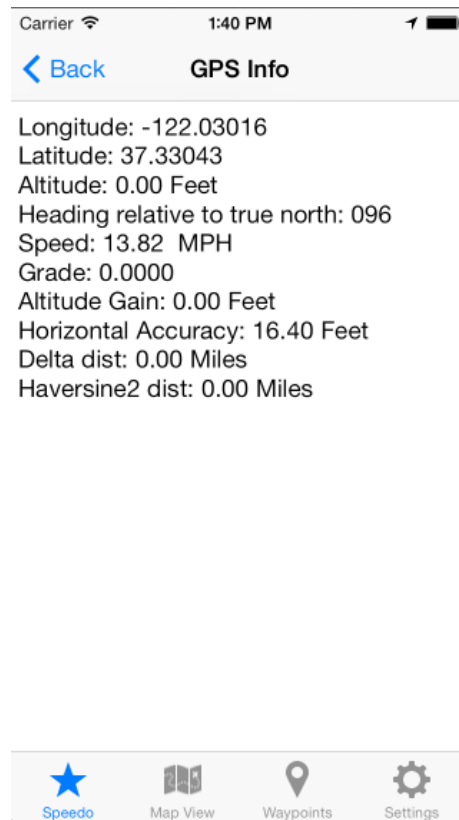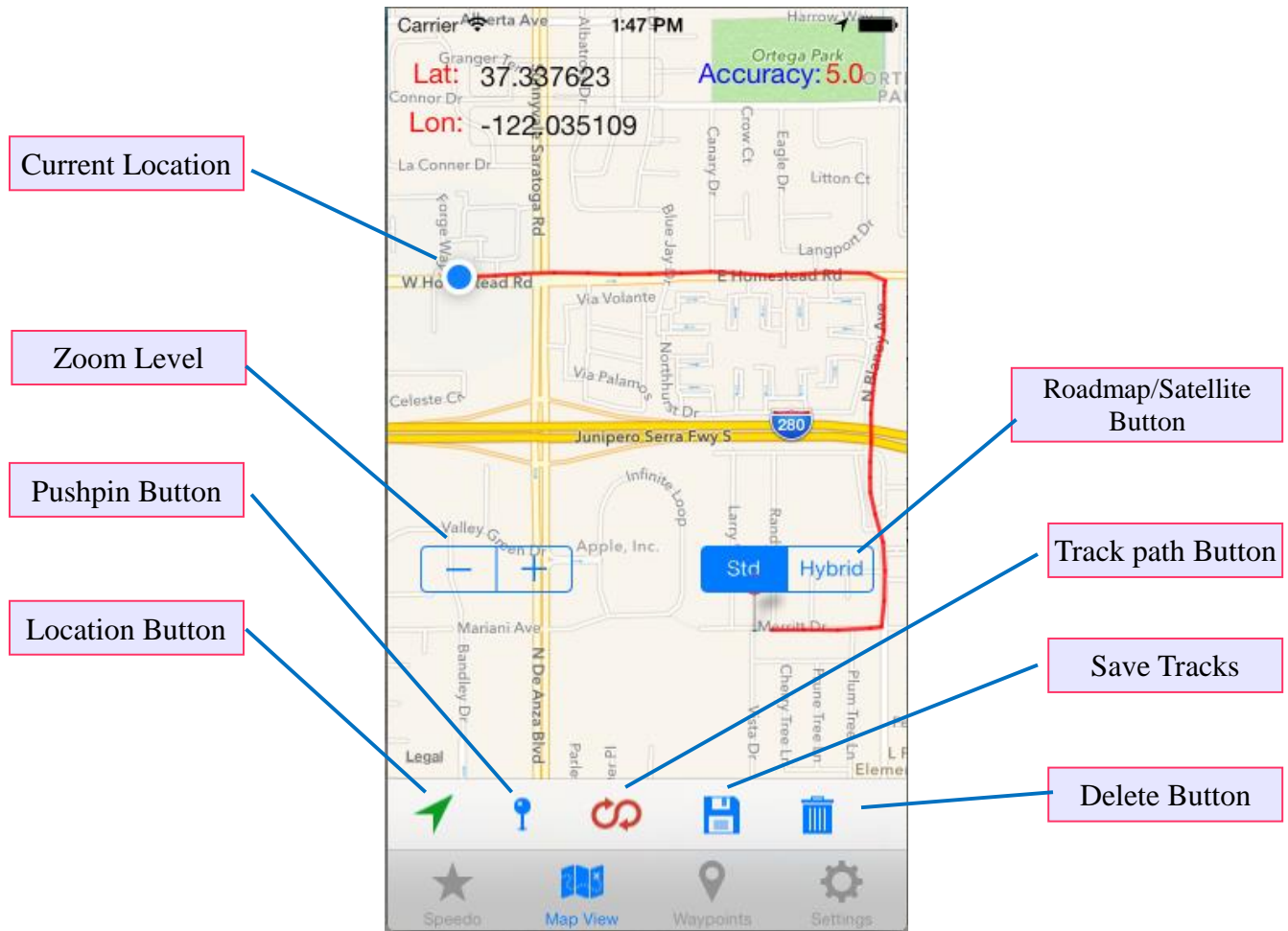

Figure 2

MAP VIEW SCREEN

Figure 3

The Map View screen displays current location on the map. The map can be viewed as a Roadmap (2D) or as a Hybrid Satellite (3D).

The map view has a toolbar and the following buttons:

Location Button: This is a toggle button that displays or hides the current location. The current location is displayed as an animated blue dot as shown in the figure 3.

Pushpin Button: Use this button to place a pushpin at the current location. Each time this button is touched, a new pushpin is placed at the current location.

Trackpath Button: This is also a toggle button to start or stop tracking your current path. To start tracking your path, touch this button. The current path is marked by drawing a red line segment to mark the path.

Save Button: Touch this button to navigate to the Waypoint Save screen. Here you can save the push pins and waypoint as KML and GPX files. You can also Explore saved files and share the files.

Delete Button: Touch this button to clear all the pushpins and tracks.

Roadmap/Satellite Button: This button toggles the map view between the roadmap and satellite view.
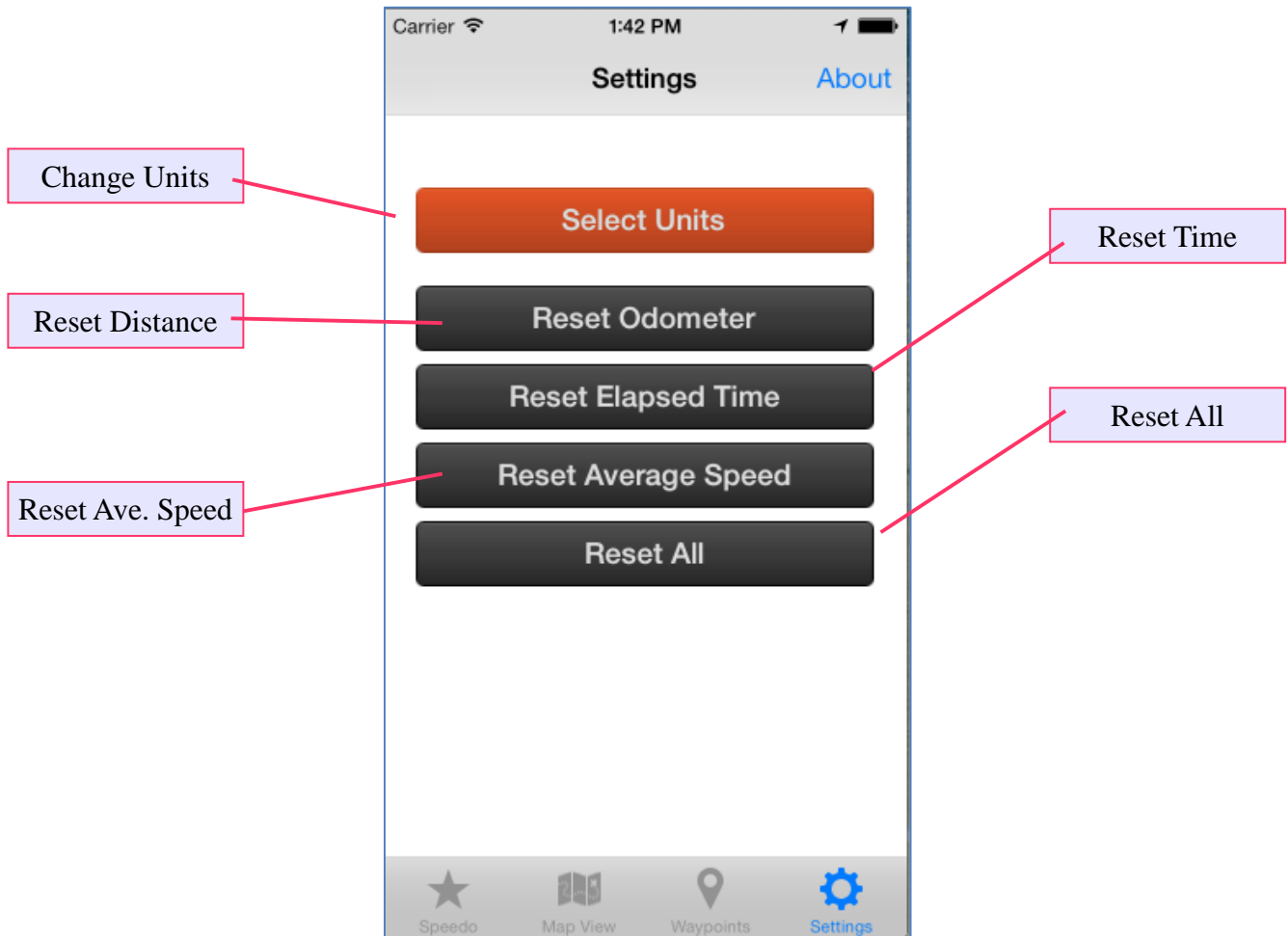
SETTINGS VIEW SCREEN

Figure 4

The Settings screen is used to personalize the App. Preference setting such as measurement units is persistent. Readings like distance travelled, elapsed time are also non-volatile and are saved even if you exit the app or turn off your device.

Select Units: Here you will setup the measurements units English or Metric.

The Reset counters are used to zero out the counters
Reset Odometer: Resets the distance travelled and Step count to zero.

Reset Elapsed Time: Resets the total running (or elapsed time) to zero

Reset Ave. Speed: Resets the average speed to zero.

Reset ALL: Resets all the counters to zero. This button is for convenience.

SETUP

The Bike-O-Meter is intuitive, simple and easy to use and has many advanced features and functions.

STEP 1: First configure and personalize the app. This is done on the **Settings Screen** (Figure 3).

1. On the Settings Screen, select your preferred Units of measurement – Metric or English
2. Before each trip, if required, reset any or ALL of the counters.

IMPORTANT: Make sure the satellite accuracy is better than 5 meters (16 feet). This is shown on the top left corner of the main screen (Figure 1).

STEP 2: Verify the iPhone Location Services are enabled. Make sure the App has permissions to use the iOS Location **Services**. This is done in the iPhone/iPad **Settings Options**

iOS Settings->Privacy->Locations Settings

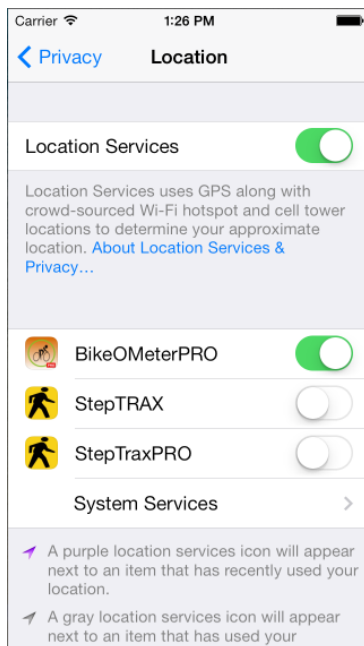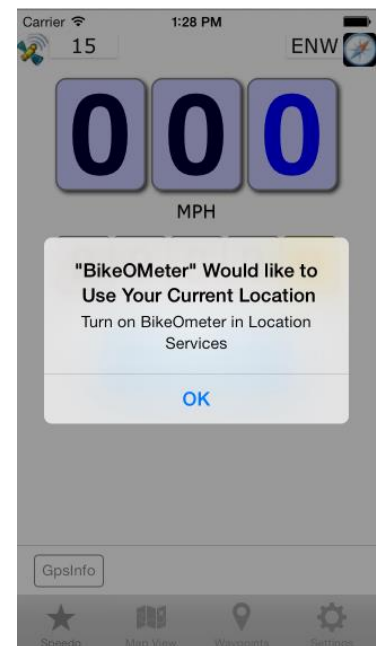Location Services must be ON
BikeOMeter must be ON

Figure 5

Figure 6

When you start the App, if you get a prompt as shown in Figure 6, click OK and set up the Location Services.

STEP 3: Verify Location Services and GPS is working properly. The Bike-O-Meter is a location service/GPS based app. The iPhone uses locations services for GPS assist and can quickly obtain a good GPS fix.

If you are indoors and have Wi-Fi or have data connection, you can view the Bike-O-Meter Map in either 2D (roadmap) or in satellite view. If you click on the Location button, you current position is highlighted by flashing blue dot.
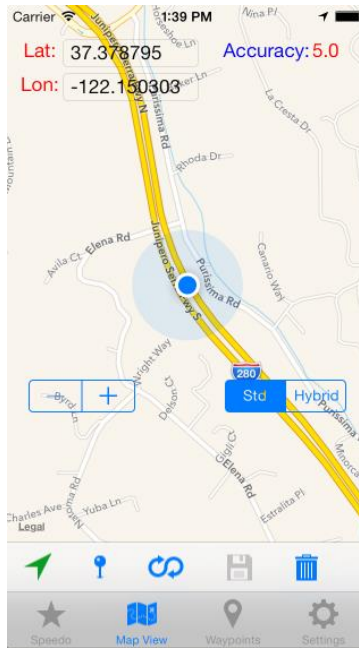This verifies that your Location service is working properly.

Figure 7

That's it. You can now start your activity and either read your measurements or track your path/ position on the map.

OPERATION:

Bike-O-Meter is real simple and easy to use; we will explain how it works.
Keep in mind that the App requires the use of GPS. **The GPS accuracy is about 5 meters (16 feet), and this technology requires movement to detect speed, distance and heading.**

1. To start the App, on the iPhone screen, simply click on the **Bike-O-Meter** icon. The main Bike-O-Meter screen shows up. However for the app to work properly, you need a good satellite fix.
2. Go outdoors in clear view of the sky. Make sure that the Satellite accuracy is good – 5 meters (16 feet) or better.
3. As with any GPS based speedometer/odometer, the speed readings and the distance readings will **not change unless there is movement**.
4. The **HEADING (direction)** is calculated based on GPS locations. To obtain proper heading values you need movement. Once you start walking or running, you will get correct HEADING.
5. If necessary reset the required counters or all the values.
6. If you lose Satellite fix/count (for example you go indoors), the reading become unreliable. The Map will work indoors.

See Figure 3 for all the toolbar buttons and descriptions.

IMPORTANT: Make sure that the **Horizontal Accuracy** is less than 5 (meters (16 feet) to get accurate readings. As with any GPS based system, only Latitude and Longitude and Elevation values are valid when stationary. All other reading such as Speed, Heading and Distance require movement.

Using the MAP and Tracking:

1. Touch the **Map tab** to get to the map screen
2. Tap on the **Location Button** to display your position on the map. A blue animated dot will show your current location.
3. Touch the **Pushpin** button to drop a pin at the current location.
4. Touch the **Track** button to start tracking your path. A red line is drawn on the map to track your path as you move around.
5. You can turn off tracking by tapping on the Track button (toggle).
6. Tap on the Roadmap/Satellite tool button to switch the map to satellite view. You can toggle this button to switch between satellite view (3D) and roadmap (2D).
7. Use the (- +) Zoom buttons to adjust the map magnification.
8. To save your Push pins and Waypoint data touch the Save button (Disk icon). This will take you to the Waypoint Save screen that gives you the various options for saving and exporting the files.
9. To remove all pushpins and path tracks, tap on the **Trash can** tollbar button.
10. Keep in mind the tracking data is not saved and will be lost in the Bike-O-Meter. Only the Bike-O-Meter PRO versions will save data.

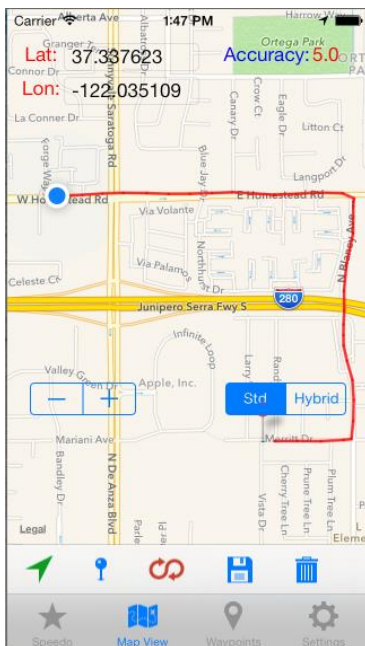See Figure 3 for all the toolbar buttons and descriptions.
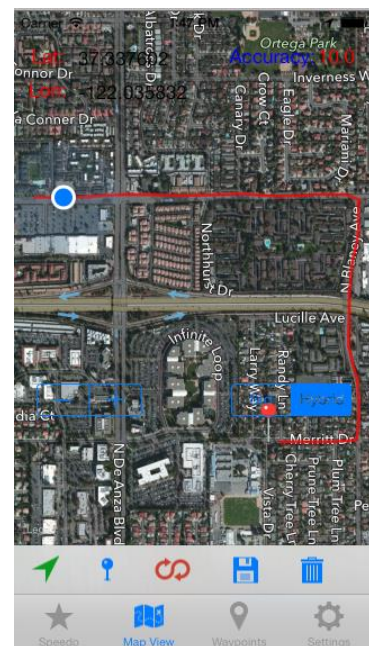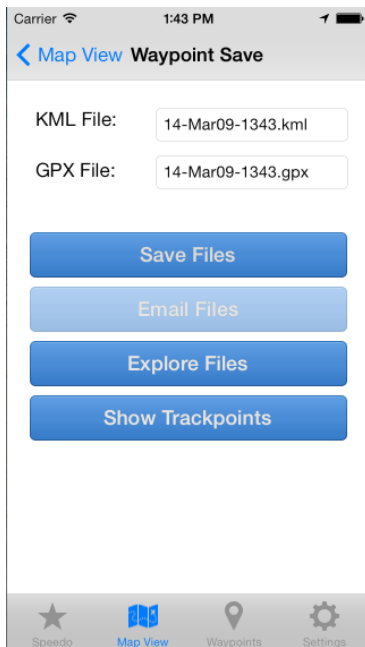

Figure 8

Figure 9

Saving Waypoints:

1. To save your Push pins and Waypoint data touch the Save button (Disk icon). This will take you to the Waypoint Save screen that gives you the various options for saving and exporting the files.
2. Keep in mind the tracking data is not saved and will be lost in the Bike-O-Meter. Only the Bike-O-Meter PRO versions will save data.

See Figure 3 for all the toolbar buttons and descriptions.

Figure 10

Figure 11

The Waypoint files names are automatically time stamped for uniqueness. You can changes these same if you prefer.

Touch the Save Files button to save the KML and GPX files.

You can explore all the previously saved files by touching the Explore Files button. The file list is as shown in Figure 11. You can individually delete a file or use the Delete All button to delete all files.

The files can be shared by e-mail. To share files, touch the Email Files button.

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An e-mail composer screen is displayed with the selected trackpoint files automatically attached. Enter the require e-mail addresses and touch the send button to export the files.
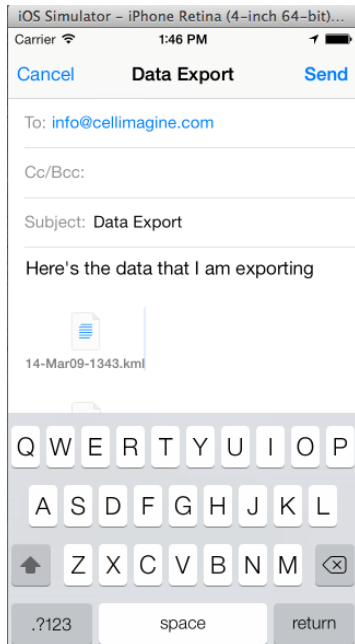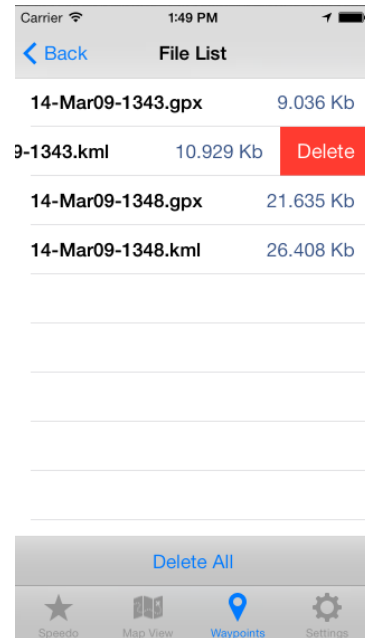

Figure 12

Figure 13

Waypoints Screen:

The screen displays all the currently collected waypoints. If you wish to manually add or delete a Trackpoint you can do it here.

1. Touch the + button **to** manually add a waypoint
2. Tap on the **X** button to remove the last (most recent) waypoint.
3. Touch the **Pushpin** button to drop a pin at the current location.
4. Touch the **Track** button to start tracking your path. This will automatically add waypoints at fixed intervals (15 second).
5. You can turn off tracking by tapping on the Track button (toggle).
6. To save your Waypoint data touch the Save button (Disk icon). This will take you to the Waypoint Save screen that gives you the various options for saving and exporting the files.
7. To remove all pushpins and path tracks, tap on the **Trash can** tool button.
8. Keep in mind the tracking data is not saved and will be lost in the Bike-O-Meter. Only the Bike-O-Meter PRO versions will save data.
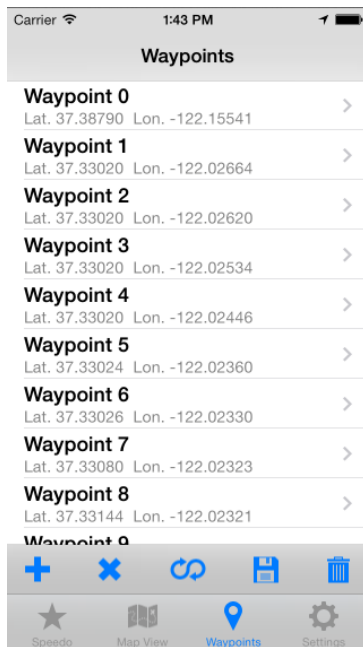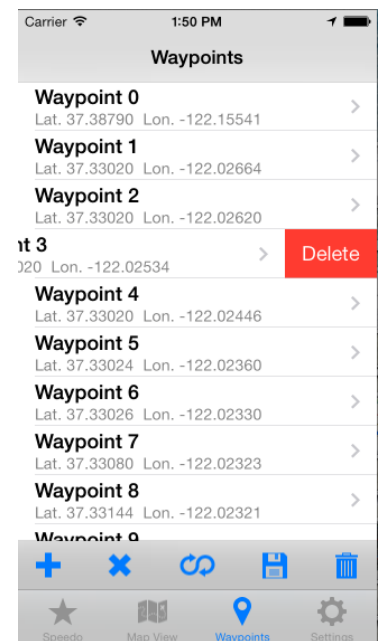

　　　　Figure 14

　　　　Figure 15

Waypoint Detail Screen:

You can find details about any Waypoint by touching the disclosure button for that waypoint roe (>). The Detailed Waypoint Screen shows details for a waypoint as shown below.
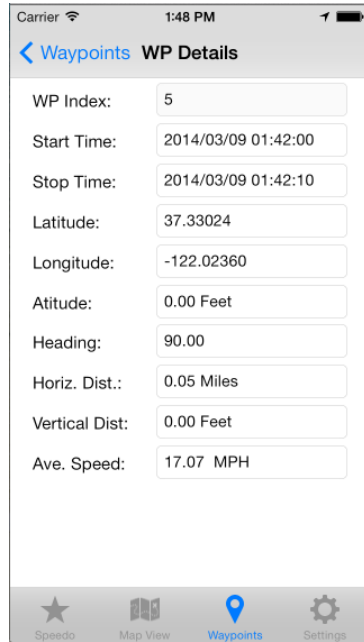

Figure 16

Contact Us

For technical support, user manuals or any other questions, please feel free to contact us.

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