1. **Installing the VMMap application**

1.1 Download the VMMap app from the Apple Store by searching for “VMMap” or scan the below QR code.

![App Store download link](image)

1.2 After installing the app, the below icon will appear on the device. Press the VMMap icon to launch the app.

1.3 Enter your log in credentials. Create an account if needed by selecting the “Create One” option at the bottom of the screen. If you have an account and cannot remember your password use the “Forgot Password” link to reset your password.

![Login screen](image)

1.4 If creating a new account, fill in the required information and select “Sign Up”.  

![Sign Up form](image)
A confirmation email will be sent from the VMMap cloud server. Follow the instructions in the email to activate the account.

After the account has been setup you can log into the app by selecting "Login", and the app will open to the home screen.

![Login Screen](image1.png)

![Home Screen](image2.png)

**Note:**
Use the URL [https://vmmap.vxmt.com/login](https://vmmap.vxmt.com/login) to navigate to the VMMap web-based app. From this location you can log in, access the data logs or reset the password.

### 2. Setting up the app

From the Home screen, select the **Menu** icon , then select the **Settings** icon to enter the setup menu. Select the menu choices by touching that option. A check mark will appear to the right of the selected option.

- **Map Provider** - Select Google® or Apple® maps. A check mark will show against the selected choice.
  
  ![Map Provider](image3.png)

- **GPS Accuracy** – Select Low or High. If High accuracy is used, information from other wireless devices like Wi-Fi hot spots, routers, etc. will be used together with the GPS information, to improve the precision of the locate.
  
  ![GPS Accuracy](image4.png)

- **GPS Tweaks** - This setting allows the user to select the number of GPS sample readings that are averaged before a result. Touching the number shown in the Sample count line will launch a keypad where the user can enter this number of samples. The default numbers of samples is six.
  
  **Note:** The higher this number is, the longer it will take to calculate a result.
d. **Measure Units** - Touch on the Imperial line to show results in feet and inches or metric to display meters. A check mark will show against the selected choice.

<table>
<thead>
<tr>
<th>GPS TWEAKS</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Average</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sample count</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>8</td>
<td>9</td>
</tr>
</tbody>
</table>

e. **Devices** - The vLoc2 or vLoc3 series receiver that has been successfully paired with the application will be displayed here with a checkbox.

<table>
<thead>
<tr>
<th>DEVICES</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>vLocPro</td>
<td></td>
</tr>
</tbody>
</table>

### 3. Bluetooth Pairing – vLoc2 Series - Connecting to the VMMap app

**vLoc2 series receivers**
The vLoc2 series receivers vLocPro2, vLocML+2, vLoc-5000 and vLocDM2 will work with the VMMap app. Screens for the vLocPro2 are used so yours may appear slightly different than the illustrations shown in this user guide.

In order to work with an iOS device, please ensure the latest software for the vLoc2 series receiver is installed via MyLocator2. Also, the installed Bluetooth module must be at least the model OBS421-RD. As of March 2016, the line “OBS421”, indicates that the Bluetooth module installed in the receiver is compatible with iOS devices.

**Note:**
This hardware may change over time, for the latest information please contact the manufacturer.

The information about the type of the Bluetooth module that is installed in your vLoc2 series receiver is found in the “About” screen of the receiver.

3.1 Power on the vLoc2 series receiver by pressing the on/off button 🌟.
3.2 If the Bluetooth Search option in the vLoc2 series receiver is active, you must disable it by:
   a. Long press the "i" button to enter the setup menu.
   b. Use the -/+ keys to navigate to the Bluetooth Search option.
   c. Press the Enter key twice to disable the Bluetooth Search function.
   d. Now the Bluetooth icon on the receiver screen should have a red line through it showing that it is disabled.

3.3 In the VMMap app navigate to the Setup Menu.

3.4 Use your finger to pull down the screen to initiate a Bluetooth connection. At the top of the screen a rotating wheel will be displayed while the app is scanning for the receiver.

3.5 After the scan is finished, in the DEVICES section at the bottom of the Setup menu, the vLocPro name will appear with a checkmark to the right of the name. If no checkmark is shown, touching the name vLocPro will add the checkmark to indicate that the receiver and the mobile device are connected. Shortly after that, the Bluetooth icon on the receiver screen will change to a blue color.

   Note: For more information about the receiver please check the vLoc2 manual.

4. Bluetooth Pairing – vLoc3 Series Connecting to the VMMap app vLoc3 series receivers

4.1 In the iOS device, open the Bluetooth settings to make it discoverable.

4.2 In the vLoc3 series receiver navigate to the Bluetooth Pairing menu by pressing and holding the "i" button. Use the -/+ keys to scroll to the Bluetooth Pairing menu and press Enter. The receiver is now searching for a Bluetooth device to pair with.

4.3 In the list of search results, use the -/+ keys to scroll to your device, and press Enter to start the pairing process.
4.4 On the iOS device respond to the Bluetooth Pairing Request by selecting “Pair”.

4.5 In the VMMap app, go to Settings. At the bottom of the page under “DEVICES” select the vLoc3 series receiver.
4.6 Exit to the locate screen on the vLoc3 receiver and notice that the Bluetooth icon is now blue. Also note the iPhone now shows the vLoc3 receiver as connected.

5. **Working with VMMap**

Follow these instructions to create a log session using the VMMap app:

5.1 Launch the VMMap app on the iOS device.

5.2 Press Plus symbol + on the right to start a new mapping session.

5.3 Enter the desired information in the Name and Observation fields in this Job Information screen.

5.4 Press the **Map** button to display the world map and start the logging process. The Bluetooth icon on the vLoc2 screen will change to the color to blue and in a couple of moments one to four red dots should be displayed near the Bluetooth icon. This indicates that the GPS data was received in the vLoc2 receiver. The map will display the blue dot corresponding to the GPS position.
5.5 The VMMap Map screen has the following buttons and icons at the bottom:

**Map type** – Press to toggle through map modes of Standard, Terrain or Hybrid indicating the type of map that will be displayed.

**Bluetooth** button – Shows the status of the connection with the vLoc2 receiver. When blue, is indicating that the connection is established, similar with the icon on the vLoc2 receiver.

**Note:**
If the Bluetooth connection is lost, the color of this button will change to gray. Pressing this button again will reconnect to the receiver and its color will change back to blue.

**Utility** button. Pressing the button will display a list of different utility pins with their corresponding colors. Choose the appropriate utility pin for the job.
5.6 Operate the vLoc2 receiver as needed to locate the target line. Once a measurement is ready to be recorded, press the button on the vLoc2 receiver. The vLoc will display the information screen which contains the GPS coordinates alongside the depth and current measurement.

![Image of vLoc2 receiver information screen]

5.7 Press the ‡ key to send the locate information to the VMMap app and to start the averaging process for the GPS coordinates.

5.8 Several beeps will be generated based on the setting selected, afterward a pin will be placed on the map.

Note:
If user wants to manually center their location, a button 🧤 is provided for this function in the lower right side of the map.

5.9 Touching a Utility Pin on the map will open a sub-menu. Select Show Info in the sub-menu to display relevant information from that utility pin. Touch any part of the screen to close the sub-menu.

![Image of Utility Pin sub-menu]

5.10 Adding comments to Pins
a. Relevant information regarding a pinned location can be entered by pressing Edit Comments from the Utility Pin sub-menu.
b. Text entered via the keyboard will appear in the Comments section.
c. Press Cancel or Save to exit.

![Image of Utility Pin with Edit Comments and Comments field]

5.11 Creating a Junction
Utility Pins on the map can be configured as a “Junction Pin”

5.11.1 Tap on the desired Utility Pin on the map.
5.11.2 Tap Set as Junction, a confirmation message will be displayed. If Yes is pressed an incremental number will be assigned and displayed above the pin on the map.

5.12 Using Junctions
5.12.1 Take the next reading that will place the latest pin on the map. Initially this latest pin will be connected to the last pin on the map.
5.12.2 Touch the last pin – that you want to be connected to “Junction 1” - and on the sub-menu press the Choose Junction option. The list of the available junctions that this pin can be connected to will be displayed. In this case, only one junction was defined and is shown as Junction 1. From the list of junction pins, tap on the one that you want the last pin to be connected to.

5.12.3 The connections will be reconfigured, and the last pin will be linked to the chosen junction, Junction 1 in our case.
The next pin will be linked to the last pin on the map.

5.12.4 If needed, another junction pin can be defined in the same way. As shown in the below illustrations. The pin for the next reading will be initially connected to the last pin on the map.

5.12.5 Touch this past pin for the menu to open. Select the **Choose Junction** menu and chose this time **Junction 2**. The last pin will be connected this time to the **Junction 2**.
6. **Split Surveys**

This option will disconnect the pin that was opened from the previous pin that is connected to. This option is mainly used to place separate surveys of the same utility type on the same map/log.

To do that proceed as follows:

6.1 Take the first reading that you would like to be the beginning of the new line. Initially this pin will be connected to the previous pin.

6.2 Open the pin that you would like to be the first pin of a new line. Chose the **Split Survey** option.

A confirmation window will open. If YES is pressed this last pin will be disconnected from the previous one and will be tagged with a number.
Select Split Survey in the Utility Pin sub-menu

Acknowledge confirmation screen

See new starting pin at the split

6.3 Continue with the survey, and pins will be placed on the map and connected to this new starting pin.

New following pins are placed on the split route

Note:
If another line must be placed on the map, repeat the above steps.
Note:
If a pin has been marked by mistake, you can unmark it by opening the pin and choosing **Clear Junction** this time. The pin will be reconnected to the previous one.

6.4 Touch on any part of the screen to close the pop-up menu.

6.5 When finished with a job, press **Done** to exit the map screen.

6.6 If needed, a picture can be taken at this point by tapping the “**camera**” icon which will attach the picture to the file.
7. Sharing Information
Sharing of the collected data can be easily shared through the cloud or by email.

7.1 From the Map Start screen tap on the Share icon which will bring up the available sharing options.

7.2 Email - Tap the iOS Share icon and the options of emailing a kml or csv file are shown. Selecting either will launch the email client and attach the data file.

Cloud – Log into the VMMap web portal at https://vmmap.vxmt.com/ to view the data and maps.

8. Working with an external Bluetooth GPS unit

Note: In order to use an external Bluetooth GPS receiver, it must be compatible with iOS devices. Refer to the manufacturer’s instructions for this information.

8.1 Pair the external GPS device with the iOS device using the manufacturer instructions. See Picture 8. Ex: in this screen a Garmin GLO GPS is identified, and next step will be to connect it to the smart device.

Note: Please note that this pairing has been done as per the manufacturer’s instruction from the iOS device Bluetooth menu.
8.2 Once the pairing is done, as per manufacturer’s instructions, the VMMap application will start using the information provided by the connected device.