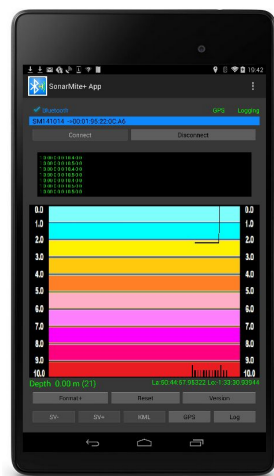


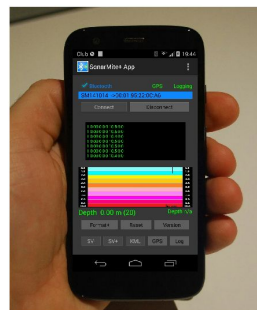


## SonarMite 'Plus' Bluetooth App. version 1.0

The SonarMite+ App is based on the free SonarMite App but offering additional features. The software is an Android App designed to work with the popular [SonarMite Bluetooth Echo Sounder](#) used in hydrographic surveying applications. With the demise of Hyperterminal as a standard terminal application the end user is left with little choice for a simple communications program with serial data devices. Connecting via Bluetooth is cleaner than USB cable, there are no wires and the connection is independent of baud rate and other serial port settings. Most terminal programs are not easily configured with commands to directly interface with instruments such as SonarMite.



**TABLET**



**PHONE**

### SonarMite App+

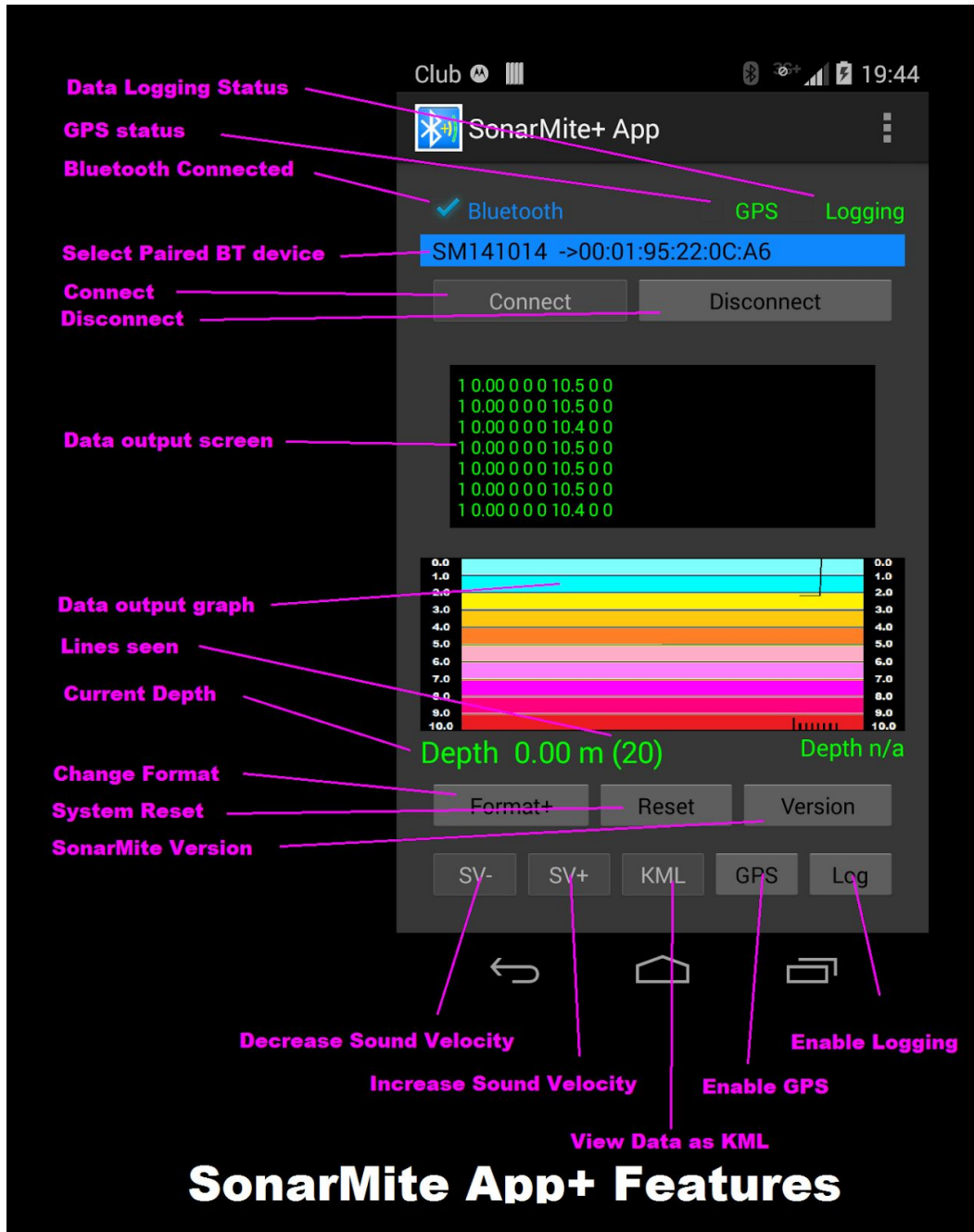
(c) Lymetree Associates 2014

The App is dedicated to connecting to the SonarMite and providing most simple commands via pre-programmed buttons. Dedicated buttons give a more intuitive interface than using the dropdown keyboard or voice interface. Buttons include '**Format**' to change the data output format, '**Version**' will show the current firmware version and '**Reset**' will cancel any changes and set the instrument back to its default settings.

SonarMite App+ is a program giving the user basic SonarMite display and control functions as with the free of charge App from the Google Play website. SonarMite+ has more advanced features and displays, this will be supplied for a charge from the Google Play website. There will be free email support but limited to the current software version and Android operating system.

# App Layout

The SonarMite App is a single layer program with all access from the main screen, to maximize the display area the screen only supports portrait mode and suppresses screen rotation.



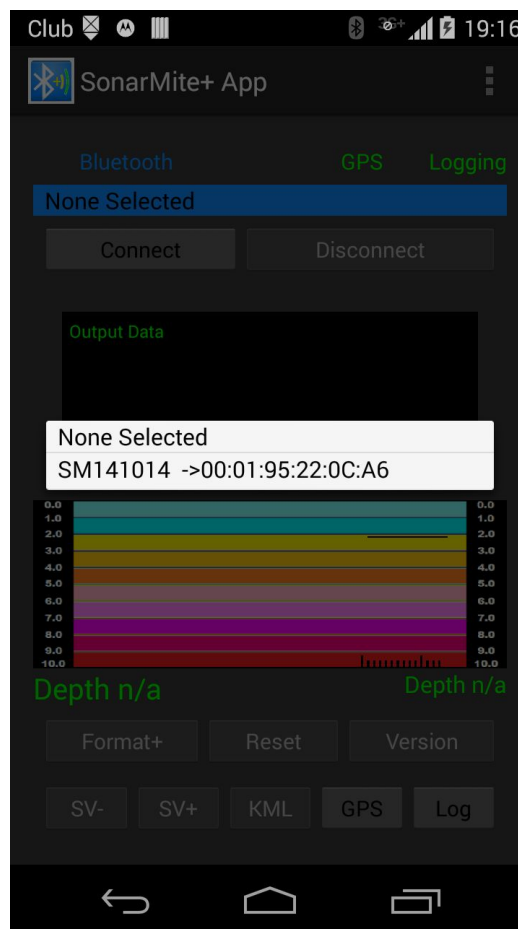
# Configuration

**Before running the App - The SonarMite App does not override the system settings so before the user launches the App they should configure the following system settings ...**

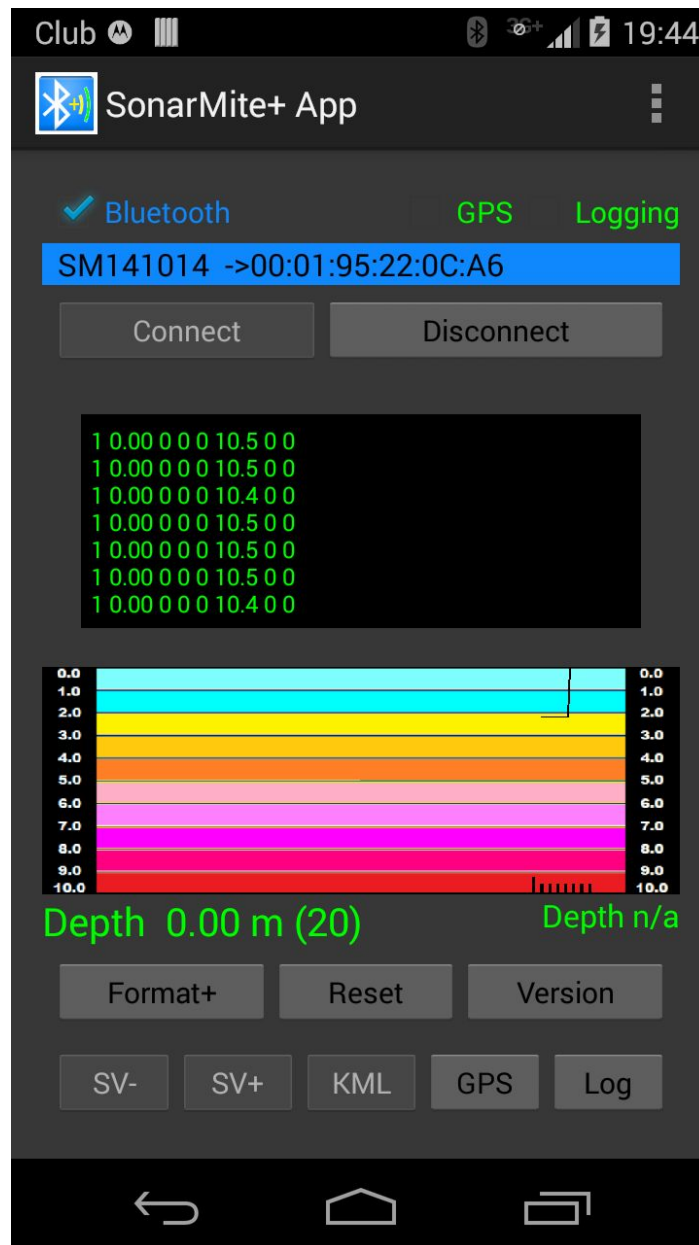
**1 Enable Bluetooth**, if the Android does not have or support Bluetooth an error message will be displayed and the application will halt. The App has been tested with all versions of the operating system that support Bluetooth.

**2 Pair with the Device** - Switch on the SonarMite, then using the system Bluetooth settings search for the device and when found 'Pair' with it. Once paired the system will retain the settings for this device so it need not be located for future connections.

**3 Clicking the Paired devices Spinner** (currently showing 'none') and select the device ...



**4 Press the [Connect] button**, the transmit LED on the SonarMite should illuminate and data should start to appear scrolling in the data window...

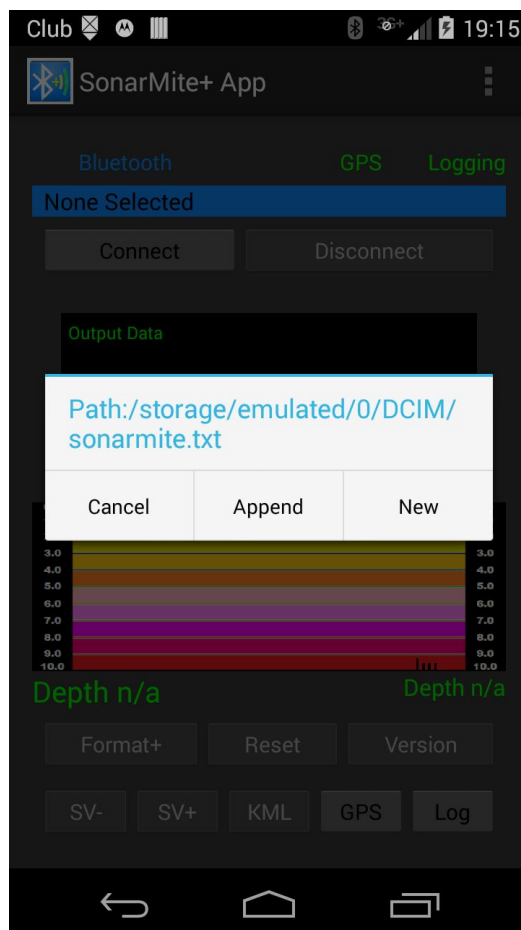


**5 Pressing [Disconnect] or making the App lose top window will force any open Bluetooth connection to close.** This is to prevent the connection consuming power when it is out of focus. **The depth display is only shown when the unit is in SonarMite output format.**

# Data Collection

The SonarMite App+ is designed to collect GPS position and SonarMite depth data in a sequential time tagged data file. The front display shows both a numeric and a graphical display of current depth data.

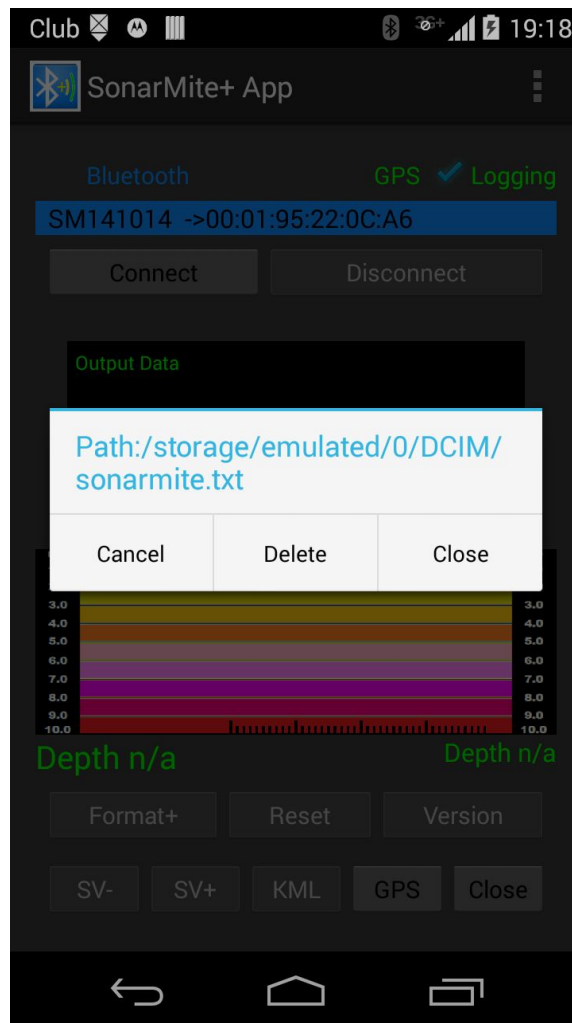
The **[LOG]** button will enable data logging of all depth and position data seen. When logging data is stored in a file called '*SonarMite.txt*' and the button will change to **[CLOSE]** to terminate logging if pressed. All data is time stamped with the difference in time since the last value in Milliseconds.



The user is offered the following storage options ...

- **[CANCEL]** - Abort the storage function
- **[APPEND]**- Wind to the end of the existing log file and append new data to the end of file.
- **[NEW]** - Delete any existing datafile and replace with new data, backup to .bcp

The **[CLOSE]** button when the Logging is ticked at the top of screen will close the current logging datafile. with the following options ....

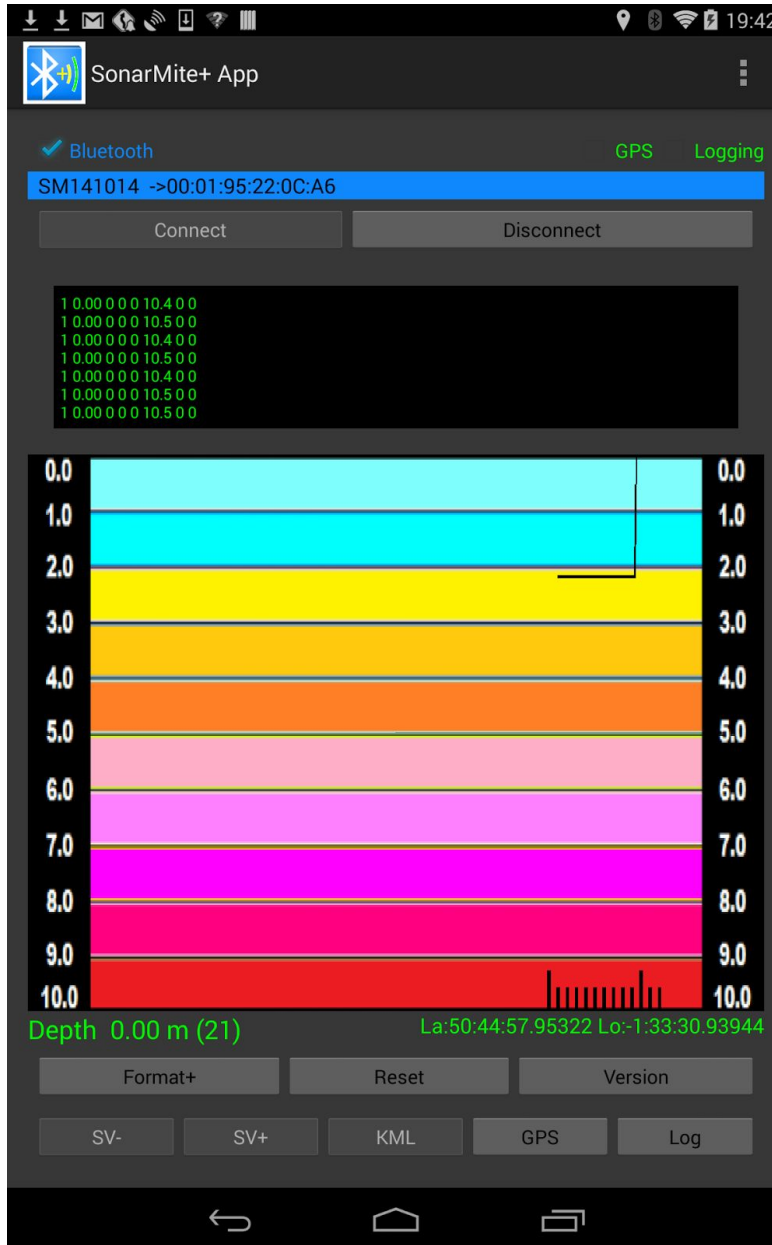


The user is offered the following storage options ...

- **[CANCEL]** - Abort the close storage function and continue logging
- **[DELETE]**- Close and delete the logging file.
- **[CLOSE]** - Close the current data logging file.

# GPS Position logging

[GPS] - This button will enable the current GPS position to be appended in the log file, when enabled the GPS checkbox will be tick marked at the top of screen.



**[KML]** - This button is only enabled if the system is connected to the internet, the GPS is enabled and ticked, the logging is enabled and ticked and at least 4 positions have been seen. Pressing the button when enabled will port the data logging file into a KML file. Positions stored in the existing logfile are converted to a KML datafile and then Google Earth/Maps is invoked to display the data layed over an image or map background of the area.

