

# Crosby®

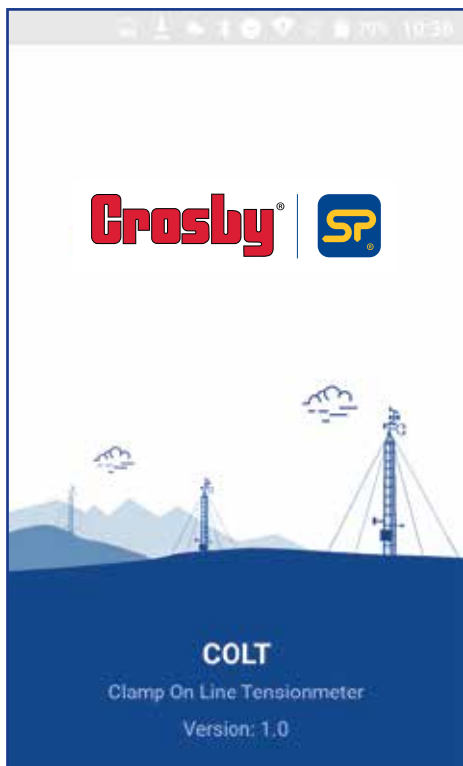


## COLT2 Clamp On Line Tensionmeter

# COLT2 Android/iOS Application

Part No:  
SU3715  
Issue 2

<b>1. COLT2 App introduction</b>	<b>01</b>
<b>2. Downloading and installing App</b>	<b>02</b>
<b>3. Description</b>	<b>03-04</b>
<b>3.1 Home</b>	<b>05-08</b>
<b>3.2 Rope</b>	<b>09-10</b>
<b>3.3 Calibration Check</b>	<b>11</b>
<b>3.4 User Settings</b>	<b>12-15</b>
<b>3.5 Report</b>	<b>16</b>
<b>3.6 Reconnect</b>	<b>17</b>
<b>3.7 Update</b>	<b>18</b>
<b>3.8 Help</b>	
<b>3.9 Product Info</b>	
<b>4. Notes</b>	<b>19</b>



## 1.0 Introduction

This Android/ iOS application has been developed to use with the Clamp On Line Tensionmeter (COLT), to measure the tension in tower lines, wire ropes etc. under Bluetooth Low Energy communication standard.

The Application will accurately search, connect and display the tension value from the measuring device under specific manufacturing standards.

The COLT app is very simple, reliable and easy to use. This application can do a high-end data logging according to the mobile device's memory capacity and it will allow user to view or send the logged data via email.

Another attractive feature is the 'database update', COLT app currently supports around 50+ wire ropes and Straightpoint will add more wire ropes to the library. The user will be able to update their database with just one click and get all the wire rope details free of charge.

## 2.0 Downloading and Installing the Application

For full instructions on the COLT2 App, please download the app from Play Store /iOS App Store, using the QR codes below and then see the help section.



Android Screen



iOS Screen

Note: The app will work from Android 4.4 version onwards, and the application is suitable to work with almost all manufacturer's mobiles with a 4" display size or above, except some Samsung models; this is due to manufacturer's defect with BLE connectivity.

With Apple devices, the app will work from iOS version 6 upwards, and is suitable to work with iPhone 5 upwards.

### 3.0 Description

After installation, the app will open through a splash screen then ask for a T&C agreement and will start the Bluetooth scanning process. App will ask to turn on the mobile Bluetooth if it is not ON already, and it will list out all the COLT devices available in range. User can identify the device's names using the serial number engraved in the device. Refer to screens 1, 2, and 3 below (Android/iOS).



Android Screen 1



Android Screen 2



Android Screen 3



iOS Screen 1



iOS Screen 2

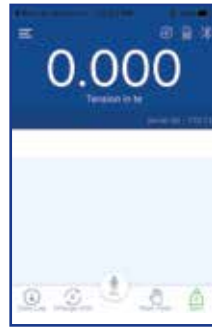


iOS Screen 3


Once the user is connected to the device for the first time, the screen shown on the next page will appear without any wire rope database. It will take around 30-60 seconds to load the app when connected for the first time.



Android Screen 4

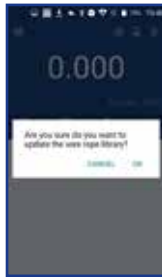


iOS Screen 4

The first thing the user should do is carry out an application database update. For that select the  menu button and user will go to the menu list, where the user can select 'Update' and the application will display a pop up confirmation message. Select 'OK' (for Android) or 'Yes' (for iOS), then the application will start downloading the database (Note: In order for a successful application update to take place, the mobile data or Wi-Fi needs to be switched ON). See screenshots below:



Android Screen 5



Android Screen 6



Android Screen 7



Android Screen 8



Android Screen 9



iOS Screen 5



iOS Screen 6



iOS Screen 7



iOS Screen 8



iOS Screen 9

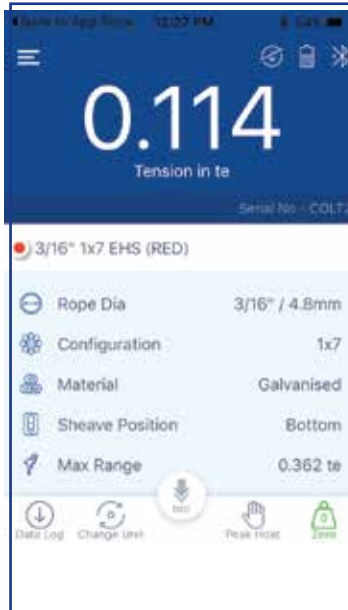
After a successful update the user will get around 50 plus ropes in the application database. They can select and use the wire ropes according to the application and rope availability.

### 3.1 Home

The Home screen is where the user can see the tension reading from the COLT device. From the Home screen the user can access various options like unit change, Data logging, Set Zero and Peak hold. User can also see the selected wire rope details such as rope diameter, configuration, current sheave position of the COLT device, maximum calibration range of the selected rope and wire rope colour. The user will also get an indication of battery level in the COLT device, Bluetooth connection, overload condition, and type of selected data log from the top right corner of the screen.




Android Screen 10



iOS Screen 10

**Data Log:** User can start the data logging through this tab. Press this tab and enter the required 'Job Details' including latitude, longitude, temperature, windspeed, wind direction etc and select the required Datalog type from the same screen. The method of data logging will be different according to the type of datalog selected. The selected data log type can be found from the top right corner of the home screen.

- If the selected datalog type is 'manual', the home screen symbol will be . After entering the job details user should press the 'REC' button whenever he needs to log the data in to the log file – this is a manual on-demand process. After the full data entry, press the 'End log' for saving the logged data file and the screen will give a pop-up options to view, send or delete the logged file.



Android Screen 11



Android Screen 12



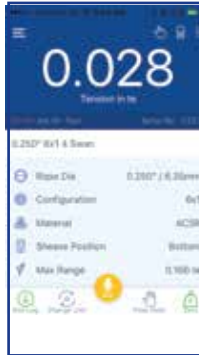
Android Screen 13



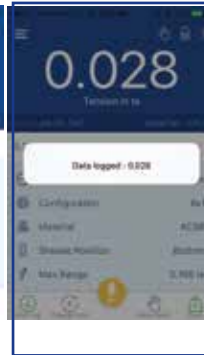
Android Screen 14



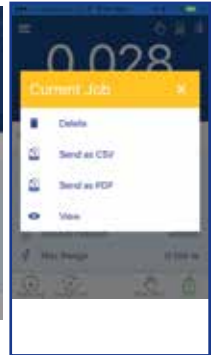
iOS Screen 11



iOS Screen 12



iOS Screen 13



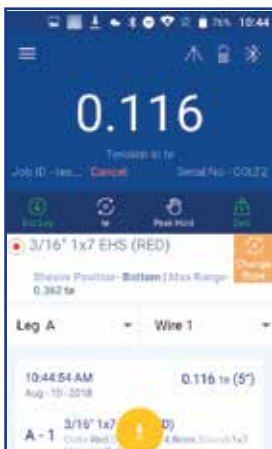
iOS Screen 14

- If the data log type is 'timed', the home screen symbol will be . In this mode, after entering the job details press the play button available on home screen to start the datalogging process then the data will be logged automatically according to the time set in user settings. After the full data entry, press stop button to stop/save the logged data file then the screen will give options to view, send or delete the logged file.

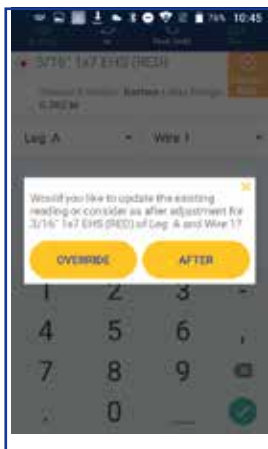
- If the data log type is 'Multi Anchor', the home screen symbol will be . After entering the job details, user can select the number of anchor leg and wires from the drop-down list (user can also select the elevation requirement from the same screen). The change rope provision is available in the home screen. Data logging will be the same as manual on demand. User should press the REC tab whenever he needs to log the load value. Data will be stored after entering elevation value if any. After full data entry for all the leg and wires, press 'End Log' to save the logged data file and then the screen will give options to view, send or delete the logged file.

Note: If user tries to log data for the same wire rope a second time the app will provide user with an option to override the old value with a new value or will allow a new value to be saved as 'after' reading.





Android Screen 15



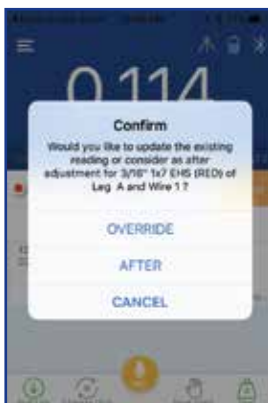
Android Screen 16



Android Screen 17



iOS Screen 15



iOS Screen 16



iOS Screen 17

- If the datalog type is 'Overload', the home screen symbol will be . After entering the job details, home screen will provide a start button to start the datalog, whenever the load value goes beyond the overload threshold limit set in the alarm high user settings, the overloaded load value will be logged automatically. Press the stop button to save the logged data file and then the screen will give options to view, send or delete the logged file.

- If the datalog type is 'Average' the home screen symbol will be . After entering the job details user should press the 'REC' button whenever user needs to log the data in to the log file – this is a manual on demand process. After the full data entry, press the 'End log' to save or view the average of the logged data and the screen will provide pop-up options to view, send or delete the logged file.

Note: All the data logged files will be available in the 'Report', from this, the user can view and send the files in .CSV/pdf format.

**Unit:** From this tab the user will get provision to change the default load unit to other different units. The available units in the drop-down list will be kg, te, lbs, kN. This will not be a permanent unit change.

**Peak Hold:** Using this tab selection, the user can hold the peak load value in the home screen. Press the tab again to release the peak hold value.

**Zero:** Using this tab, the user can zero the present load value. For each rope there will be a zero shift because this zeroing is common for all the wire ropes, so each time before measuring the rope tension, the user should make sure that the home screen display is zero.

**Alarm:** Home screen will give the overload and under load alarm-both visual and audio- according to the user setting threshold. The alarm can be turned off by tapping the screen or by bringing the load value into the alarm limit. The user can disable the alarm functionality from user settings. It will show an orange visual for the low alarm and red for high alarm.



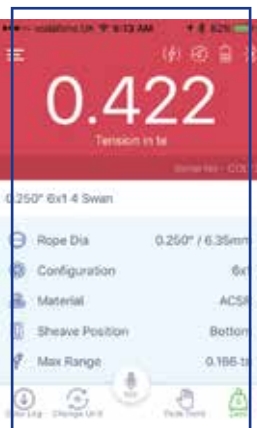
Android Screen 18



Android Screen 19

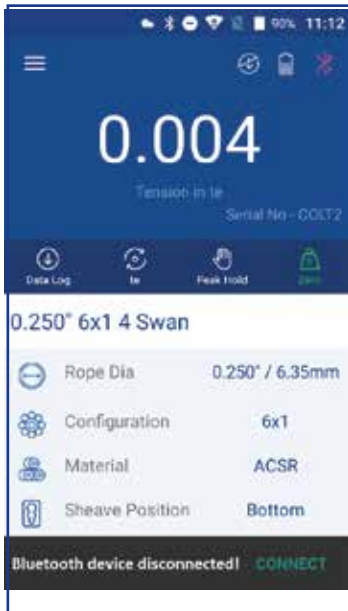


iOS Screen 18

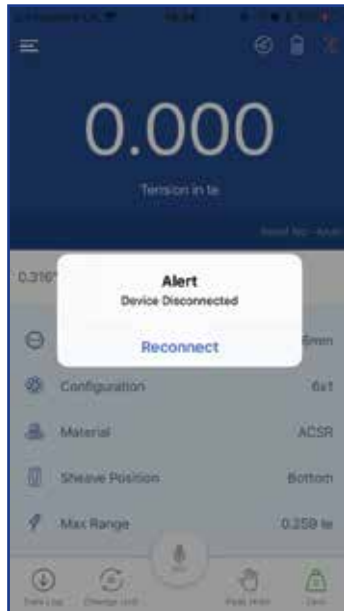


iOS Screen 19

Note: Once the COLT device is disconnected from the application, or the mobile device is disconnected from the COLT, the home screen will give a pop-up informing about the device disconnection. The user can reconnect through the connect button in the pop-up. The display will then list out all the available devices and select the required device from that list.



Android Screen 20

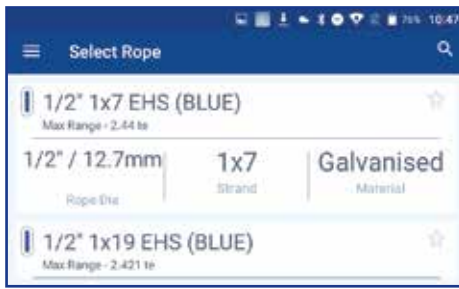


iOS Screen 20

### 3.2 Rope

Under the Rope option, the user can select the required wire ropes, go to the menu bar, select 'Rope' and then select the required wire ropes from the rope list. If the user needs to make several wire ropes in their favourite list that provision also provided in this page. Rope selection can be done by a single touch.

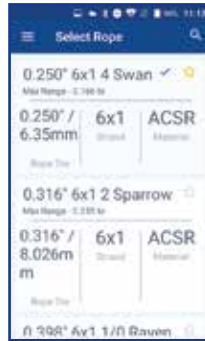
Adding rope to favourite list: Press and hold the wire rope then the app will display a pop-up message for confirmation. Press 'Yes' for adding the rope in user's favourite list. The user can easily identify the favourite rope from the 'star' symbol that appears in the right-hand side of the rope details. To remove the rope from the favourite list, follow the same procedure - press and hold the wire rope name until a popup message appears for confirmation (see screens below for reference).



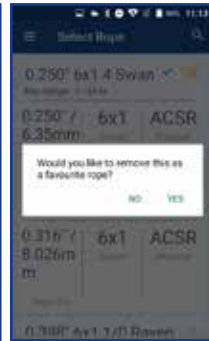
Android Screen 21



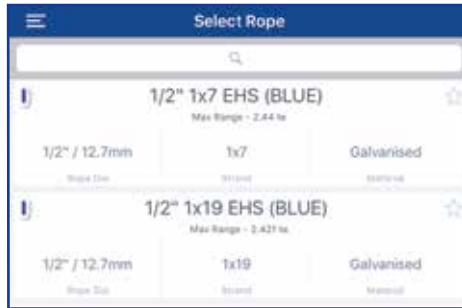
Android Screen 22



Android Screen 23



Android Screen 24



iOS Screen 21



iOS Screen 22



iOS Screen 23



iOS Screen 24

### 3.3 Calibration Check

Cal rod counter values can be checked within the CAL Check section. Click on 'CAL Check', it will list out rod count of corresponding serial numbers.

Cal Rod Counter:

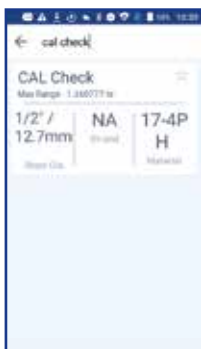
The COLT device can be supplied with a CAL Rod in order for checking and verifying the accuracy of the COLT (CAL Rod is available for purchase).

How to use the CAL Rod to perform a calibration check:

1. Within the COLT2 App there is a 'CAL Check' option available in the 'Rope' section. When the user selects this, a serial number pop-up window will appear.
2. Enter the CAL rod serial number and select 'SAVE', the app will go back to the home page.
3. Before making a Cal check, keep the COLT device on a flat surface and zero the app home screen value if there is any load value showing.
4. Take the COLT and fix the CAL Rod between sheaves.
5. When the load value reaches in between 1.27te to 1.45te (2800lbs to 3200lbs) and once the value is stable, the app will display a 'Cal check is done' pop-up.
6. When the user presses 'OK' the app will redirect to the 'Rope' page and the user can select required rope for the next job.

The CAL rod's maximum possible use is limited to 500 counts, so the user should use the same mobile device to obtain the correct CAL rod count. Cal rod count value will be available in the 'Report' section in the menu – see the 'Rope' section in this manual. Once the maximum count has been reached, the app will give an alert message to the user.

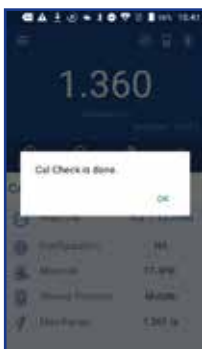
To view a video guide on performing a calibration check using the Cal Rod please select this link: <https://youtu.be/d-wlbMeRfoo>



Android Screen 25



Android Screen 26



Android Screen 27



Android Screen 28



iOS Screen 25



iOS Screen 26



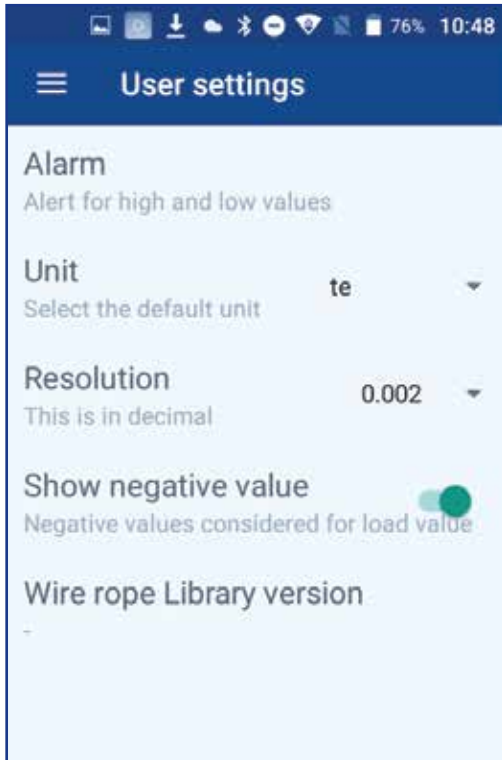
iOS Screen 27



iOS Screen 28

### 3.4 User Settings

This is the place where the user can do all the settings before taking the load reading. The user can set the default unit, resolution and the low and high alarm threshold. Everything can be set from this screen.

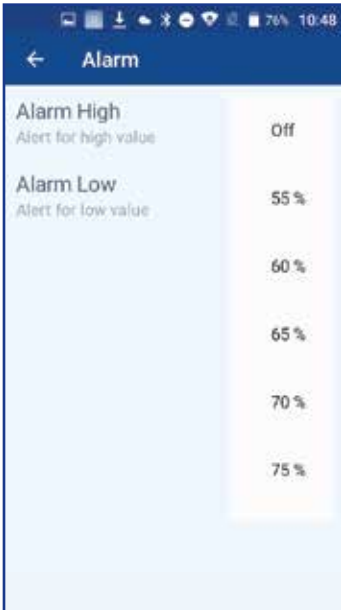


Android/iOS Screen 29

## Alarm:

Alarm setting will allow the user to set the alarm threshold levels.

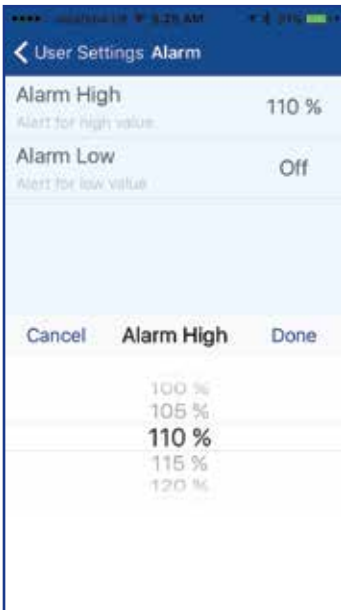
The setting will give the provision to set the high and low alarm levels.



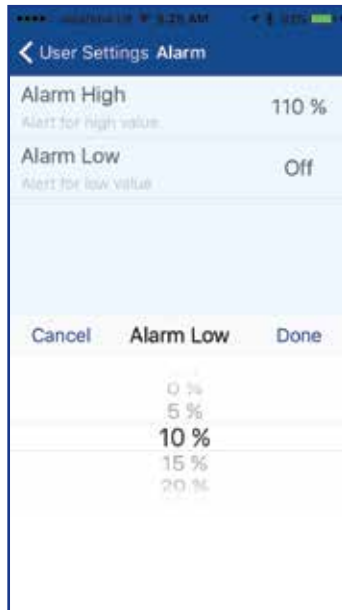
Android Screen 30



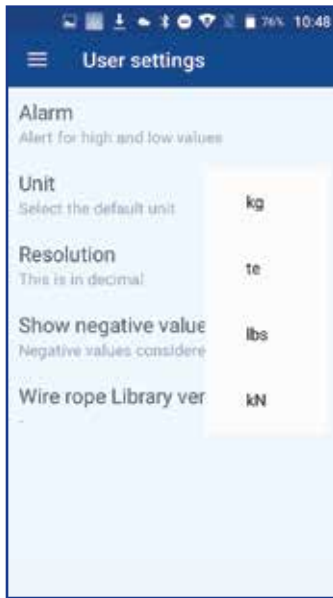
Android Screen 31



iOS Screen 30



iOS Screen 31



Android Screen 32



iOS Screen 32

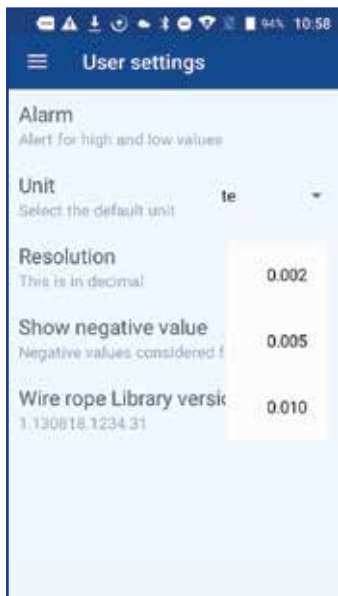
**Unit:**

This is the default unit setup. According to this setting the home screen will show the unit. Available units are kg, te, lbs, and kN.

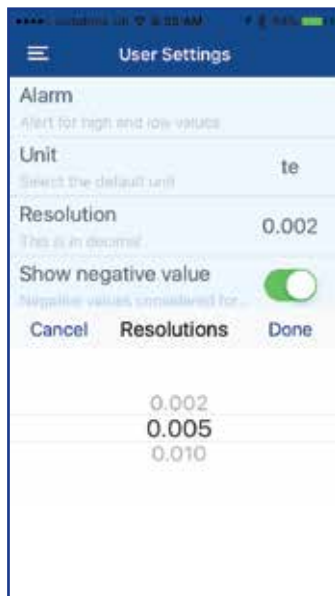
**Resolution:**

Resolution is the minimum load value change setting. According to the unit selection, the resolution will vary. For the kg unit, available resolutions are 2, 5 & 10, for tonne unit it is 0.002, 0.005, and 0.010, for lbs it is 2,5,10 for kN it is 0.02, 0.05, 0.10. The user can select it from the drop-down list.





Android Screen 33



iOS Screen 33

#### Show Negative Value:

Show negative value setting allows the user to enable or disable the negative load readings showing on the home screen. If this setting is in disabled mode, the home screen value shows '0' for all the load values less than or equal to zero.

#### Wire rope Library version:

This option will give the user regarding the current wire rope database version running on the app.

### 3.5 Report

Under the report option all the logged reports are available as well as the CAL rod counter. This page will allow the user to view or send the logged data and to download it in .CSV/pdf file format.



Android Screen 34



Android Screen 35



Android Screen 36



Android Screen 37



iOS Screen 34



iOS Screen 35



iOS Screen 36



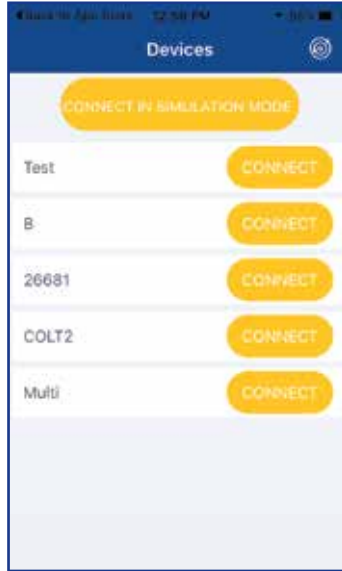
iOS Screen 37

### 3.6 Reconnect:

Reconnect allows the user to search for the all available COLT devices within the application’s range. The application will list out all the devices in the scan list and the user can connect to the desired COLT device. If the user faces any application hang issue or load value issues, they can reconnect to the device through this option.



Android Screen 38



iOS Screen 38

### 3.7 Update:

This is the option the user should do first after the application installation. This allows the application to install the factory calibrated wire rope data to the mobile device.

Note: Once the app is updated with latest wire rope library it will not allow the user to revert to an older version or to the same version.

### 3.8 Help:

Help will provide the user manual for the COLT App to the user. The user's mobile device will need to be capable of opening pdf files.

### 3.9 Product Info:

This will redirect the user to the COLT product webpage on the Straightpoint website. Mobile devices should be connected to Wi-Fi/Internet for this to be successful.

Note: The Authority to enter into Manufacturer Setting and Calibration resides in the application manufacturer Straightpoint.