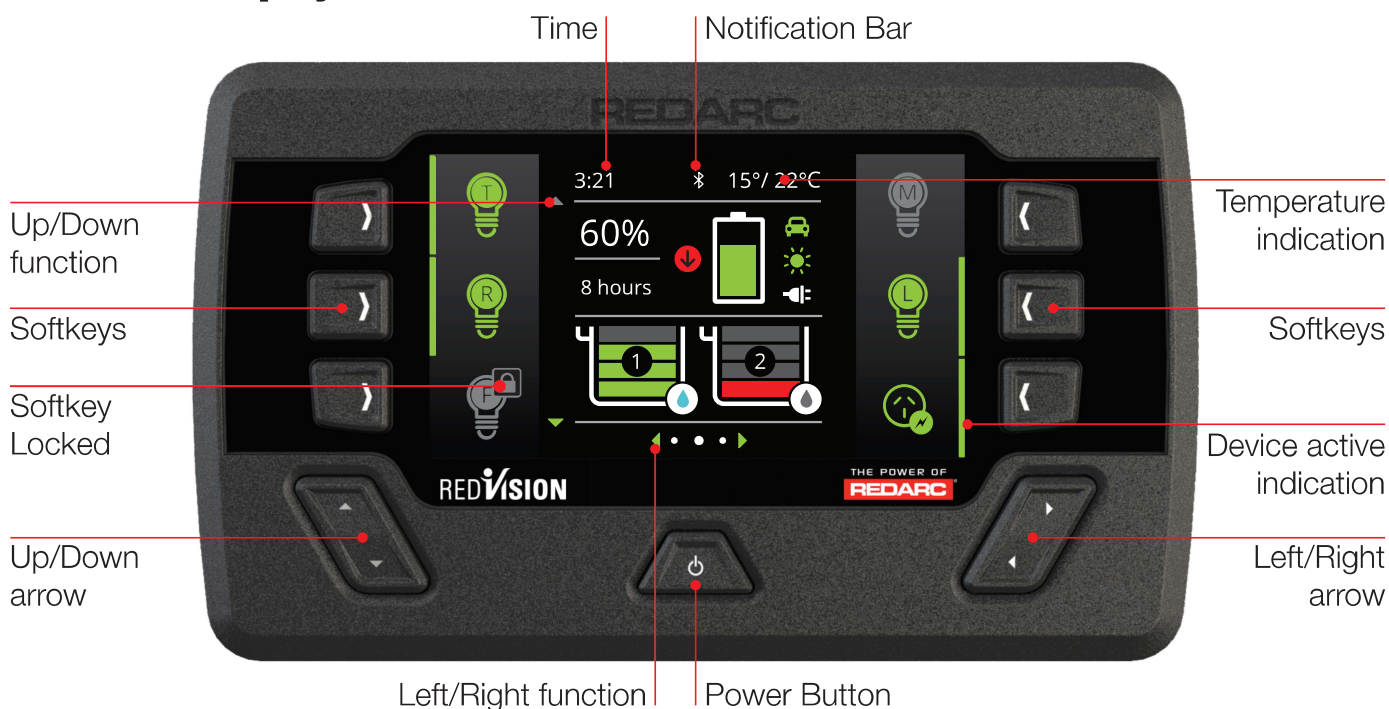


4.1 The Display



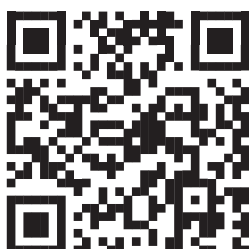
The Display is the main user interface for the RedVision System. It brings information and control to one place without the need for multiple displays and control panels. It is to be mounted in a sheltered location and is the base for control and display for RedVision. It also provides the Bluetooth® interface for the RedVision App.

NOTICE

Do not use chemicals or cleaning products as damage to the unit may occur. Clean using a slightly damp cloth only.

A Quickstart guide explaining the operation and functions of the Display is included with the Display, appears over the following few pages and may also be found at:

<http://redarcqr.com/RedVisionQSG>



4.1.1 Navigation

The Left/Right buttons are used to navigate the pages on the centre of the screen. The Up/Down buttons are used to cycle through devices on the Home Page or to navigate through options found on other pages.

The Left/Right and Up/Down functions are indicated on the screen.

4.1.2 Soft Keys

The Soft Keys are used to toggle devices on/off (eg Lights, Water Pump).

Soft Keys may also be conditionally locked, for example to prevent a shower pump being accidentally operated while the vehicle ignition is on.

4.1.3 Power Button Function



Push

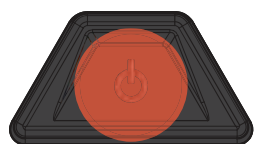
Pushing the Power Button ONCE will open a Power Button instruction dialogue and allow switching between Storage and Touring modes.



Push x2

Pushing the Power Button TWICE will invoke the 'Master Switch' function.

This function switches a defined set of devices and can be customised, by the installer, to user specifications.



HOLD

HOLDING the Power Button will put the screen into Standby mode.

Pushing any button will wake the screen up again. When the system is set to 'Storage Mode' only the Power Button will wake the display up.

4.1.4 Notification Bar



Bluetooth® Connected



Load Disconnect Invoked



Master Switch Invoked



Storage Mode Selected



Fault Indication

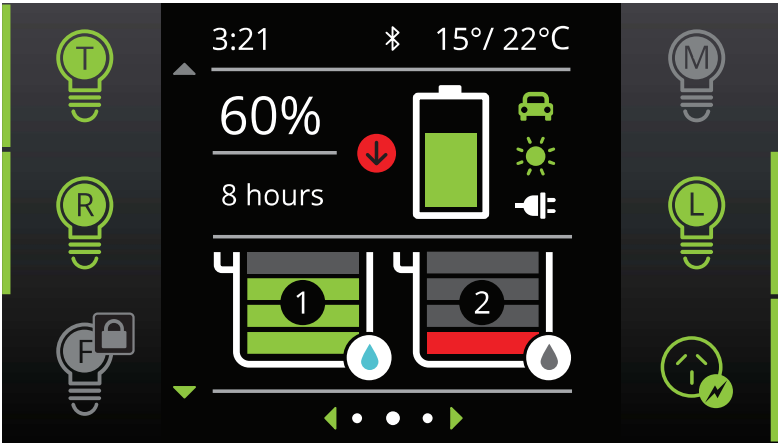


Alarm Notification

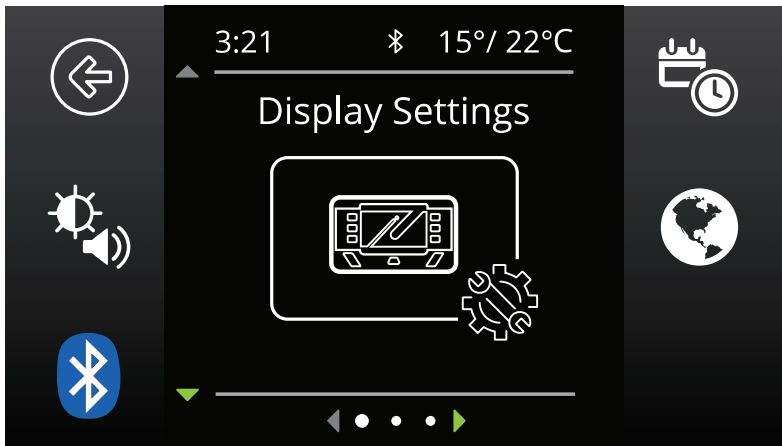
4.1.5 Basic Screens

Home Screen

The Home Screen shows the system overview in the centre, with connected devices managed by Soft Keys to the left and right. The system overview shows BMS status and Water Tank levels*¹. Pushing the Up/Down arrows cycles through all available devices. Pushing Left reveals the Settings menu and Right reveals the information menu.



¹The information provided on the home screen may vary depending on the system

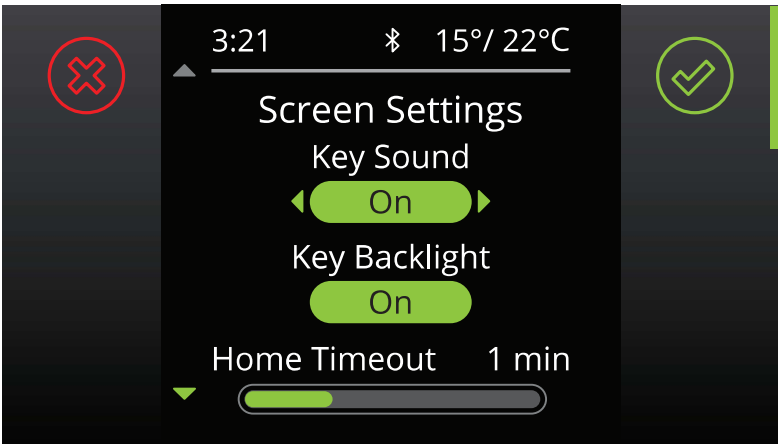


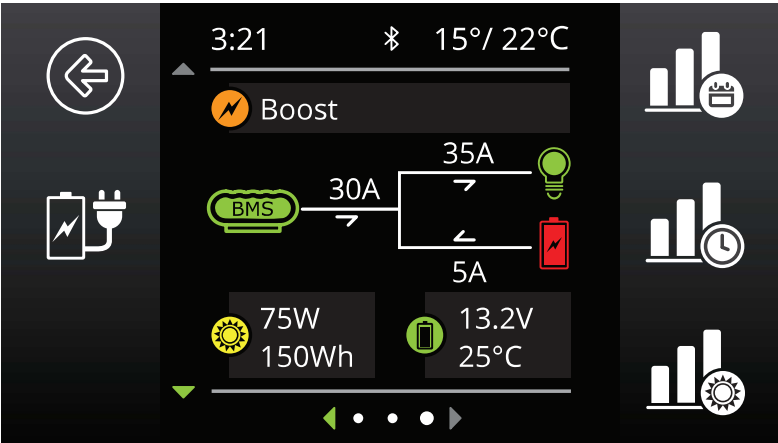
System Settings

This menu allows the user to change Display, System, BMS and Distribution Box settings, selected by Soft Key. Pushing the Up/Down arrows cycle through the available settings menus. Pushing the top left 'Back' Soft Key will return the user back to the Home Screen.

Changing Settings

Once the desired Settings Screen is selected using the Soft Keys, the available settings can be modified. Pushing the Up/Down arrows will cycle through the settings. Pushing the Left/Right arrows will modify the setting. The 'Green Tick' Soft Key will save the adjustment, the 'Red Cross' Soft Key will cancel the changes.





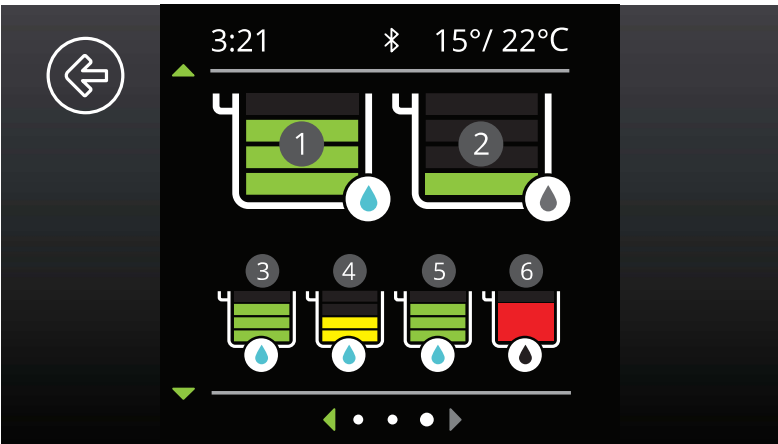
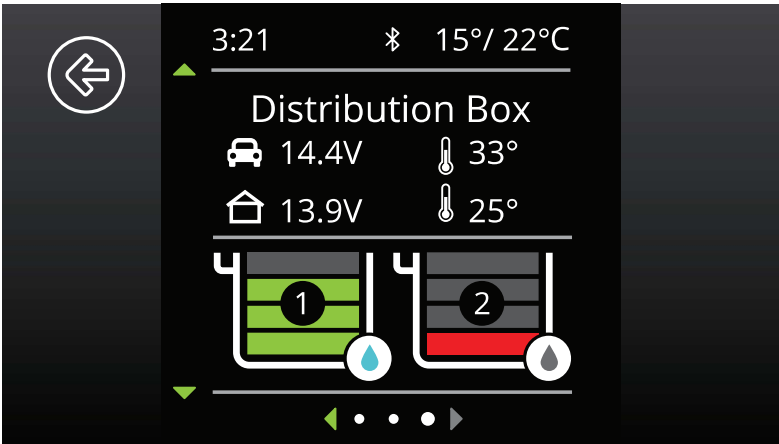
BMS Information

The BMS information screen provides information on charge stage, current flow, State of Charge (SoC), solar input and battery status*². The Soft Keys on the right link to performance logs for SoC/Day, SoC/Hour and Solar Power input. The Soft Key on the left links to the Charging Source information page. Pushing the down arrow displays the Distribution Box Info. screen*³

^{*2} When used with a REDARC MANAGER system.
^{*3} When used with a REDARC RedVision Distribution Box.

Distribution Box Information

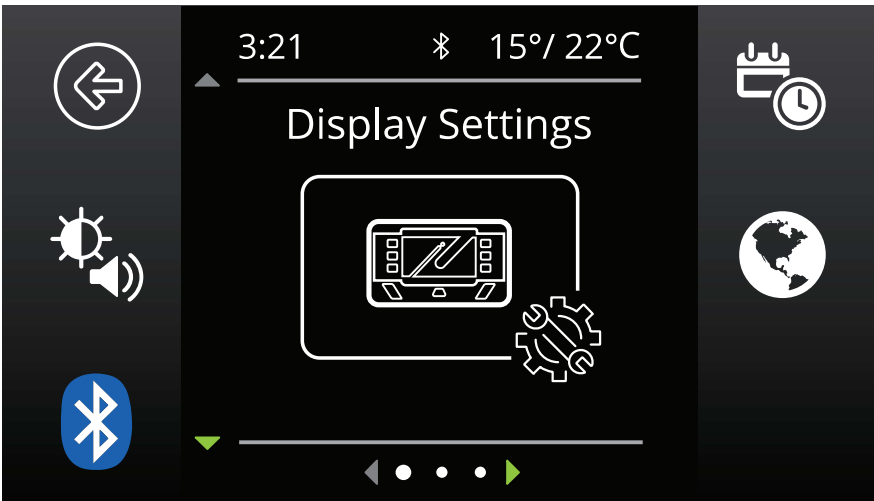
The Distribution Box information screen provides information on Starter and Auxiliary battery voltages, Water Tank levels and temperatures from the connected probes. Pushing the down arrow will display the level of up to 6 water level tanks if connected.



Water Tank Levels

Where there are more Water Tanks sensors connected than showing on the Distribution Box Information page, pushing the down arrow will display the level of ALL connected Water Tank Levels (up to 6 in total).


4.1.6 Display Settings





Factory Settings


Key Sound:	ON
Key Backlight:	ON
Home Timeout:	1 min
Standby Timeout:	1 min
Brightness Minimum:	20%
Brightness Maximum:	100%
Clock Format:	12 Hour


The Display Settings screen allows setup and modification of Display specific settings as outlined below.

- 

This icon will return to the Home Screen
- 

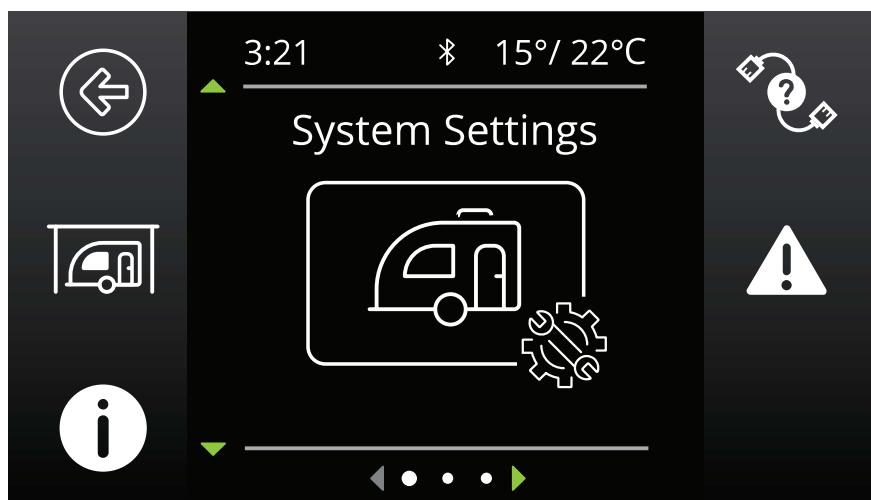
This icon links to the Screen Settings menu. This menu allows switching of Key Sounds and Backlight and modification of Screen Timeouts and Minimum and Maximum Screen Brightness levels
- 

This icon links to the Bluetooth® pairing screen. This screen allows connection of the Display to a standalone device via Bluetooth®. This process is explained further in Section 4.3.1
- 

This icon links to the Date and Time settings screen. The user is prompted to enter date and time upon first startup however should this need to be changed, it can be done in this menu
- 

This icon links to the Regional Settings menu. This menu allows toggle of the Clock format between 12 and 24 hour formats and the Temperature units between Celsius and Fahrenheit

4.1.7 System Settings



The System Settings screen allows modification of the current operating mode as well as providing information on the system and previous fault history. Each icon is described below.



This icon will return to the Home Screen



This icon links to the System Mode menu. This menu allows switching of the System Mode between Storage and Touring. Storage Mode will switch off all loads and set the Manager into Storage Mode should one be connected



This icon links to the About Us screen. This screen provides contact information for REDARC

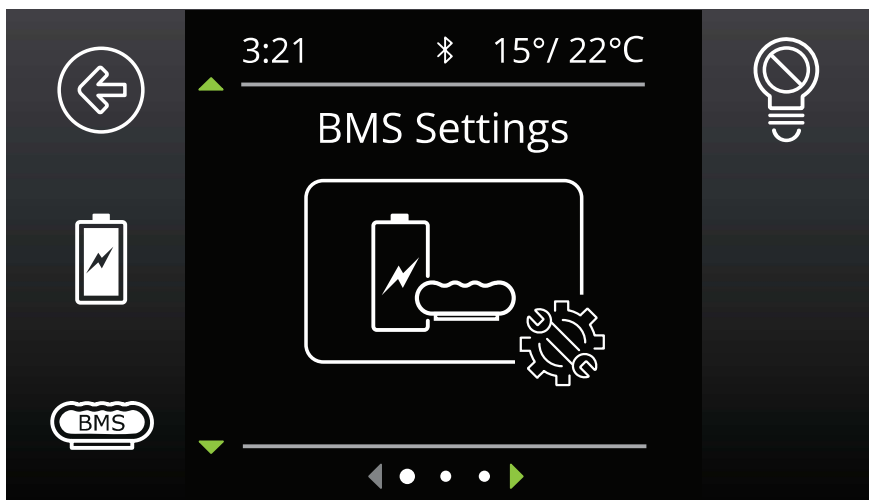


This icon links to the R-Bus Diagnostics screen. This screen provides a serial number for each REDARC device connected to the system. More information on the selected device can be found by clicking the top right Soft Key



This icon links to the Fault History screen. This screen provides a list of the 10 most recent faults. Clicking the top right Soft Key will provide more information on the selected fault

4.1.8 BMS Settings



When a Battery Management System is connected, the system will allow setup and modification of a number of BMS settings as outlined below.



This icon will return to the Home Screen



This icon links to the Battery Information screen. This screen allows the user to set their battery type and size. This information is critical for the operation of the Manager product so it is important to ensure this is correct



This icon links to the Charger Settings screen. This screen allows setting of the DC input trigger on the Manager and allows modification of the Low Voltage and SoC alarm levels.

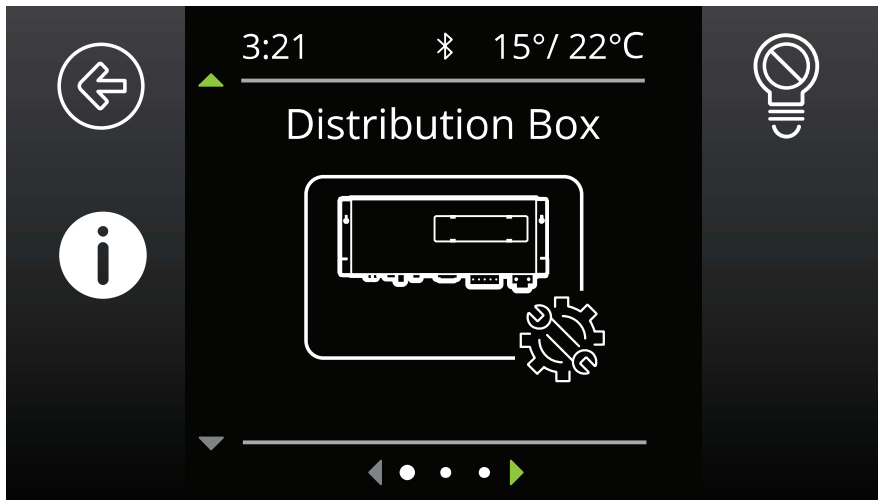


This icon links to the BMS Load Disconnect screen. This allows for setting of the Load Disconnect feature on the Manager.

NOTE: This feature operates similarly but independently to the Distribution Box Load Disconnect feature.

More information about the functionality of these screens can be found in The MANAGER instruction manual.

4.1.9 Distribution Box Settings



This Settings screen allows setup and modification of the Distribution Box Load Disconnect feature and provides information on the Distribution Box's channel setup. Distribution Box settings can only be changed by the system installer.



This icon will return to the Home Screen



This icon links to the Channel Information screen. This screen provides information on the devices connected to the 22 available channels (input and output) on the Distribution Box. Clicking the top right button will display more information



This icon links to the RedVision Load Disconnect screen. This screen allows setting of the Load Disconnect type (based on SoC or Voltage) and the Disconnect and Reconnect levels

4.2 Fault Display



Fault screens will be shown if either an output fuse is blown, the Manager has a fault, or if the unit encounters a switching fault.

Fuse Faults

When a fuse fault is detected (ie, a fuse is blown) the output channel will be turned off and the corresponding icon on the display will be shown in red. Additionally the LED adjacent to the fuse will illuminate as described in Section 2.5.3 Blown Fuse Indicators on page 17. The fault will clear automatically once the fuse is replaced.

Switching Errors

A switching error indicates one of the 10A outputs is overloaded. In the event that a switching error is detected, the relevant output channel will be turned off and the corresponding icon on the display will be shown in red, and the message “TVMS output channel over temperature” will be displayed.

After 60 seconds, the channel will be turned ON again;

- If the error has been fixed the channel will remain ON.
- If the error is still present the channel will turn OFF again immediately.

While the channel is ON and in switching error mode, RedVision will re-attempt to turn the load on every 60 seconds. During this time the user may turn the channel OFF permanently. (Note that the ability to turn the channel OFF only applies to user-controlled channels - some channels may be automatically switched depending on the configuration of the system.)

4.3 The RedVision App

The RedVision App allows users to control multiple on-board devices from their smartphone; for example turning lights, inverter, water pumps and other loads such as televisions, electric steps and fridges on or off. It also provides the user with the ability to monitor water levels, temperature, energy (battery power) consumption and storage, with the battery information available when used with a REDARC Manager battery management system. The RedVision App replicates most of the display and switching features of the Display.

⚠ CAUTION

Only use the RedVision App to operate devices with moving parts when you have a clear line of sight to the moving parts.

NOTICE

The RedVision App and its interactions with the RedVision System have not been tested on all smartphones available on the market so is not guaranteed to work on all devices. However, the app has been designed to work with:

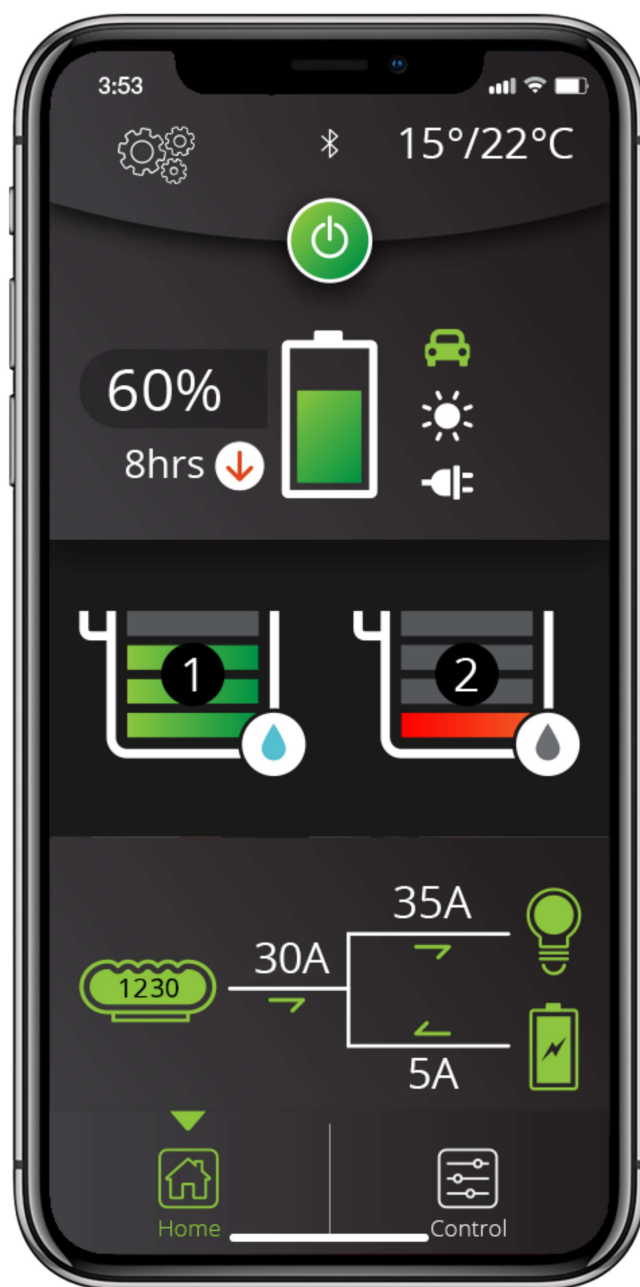
- IOS 11.1 (or later)
- Android 7.0 (or later)

and with

- Bluetooth® 4.0 (or later).

For a full list of compatible devices as they become validated, please visit:

www.redarc.com.au/redvision



4.3.1 Bluetooth® Pairing Instructions

1. Install the RedVision or Configurator App (scan the corresponding QR code **1** or search for “REDARC” on your device’s app store)
2. On the Display, press Left, navigate to display settings & press the Bluetooth® Soft Key – this should say “Your display is ready for pairing” **2**
3. Open the RedVision or Configurator App
4. On the RedVision App, if you get a “No device selected” pop-up, click “Configure” **3**. If using the Configurator App, move to step 5.
5. Choose your Display from the list (this should match the serial number on your Display, which can be found in R-Bus Diagnostics on the display **4**)
6. Read and agree to any disclaimers shown.
7. Wait for passcode prompt (this may pop up or show up as a notification depending on your phone)
8. Enter the 6-digit code shown on Display **4**
9. “Your device is paired.” **5**

