

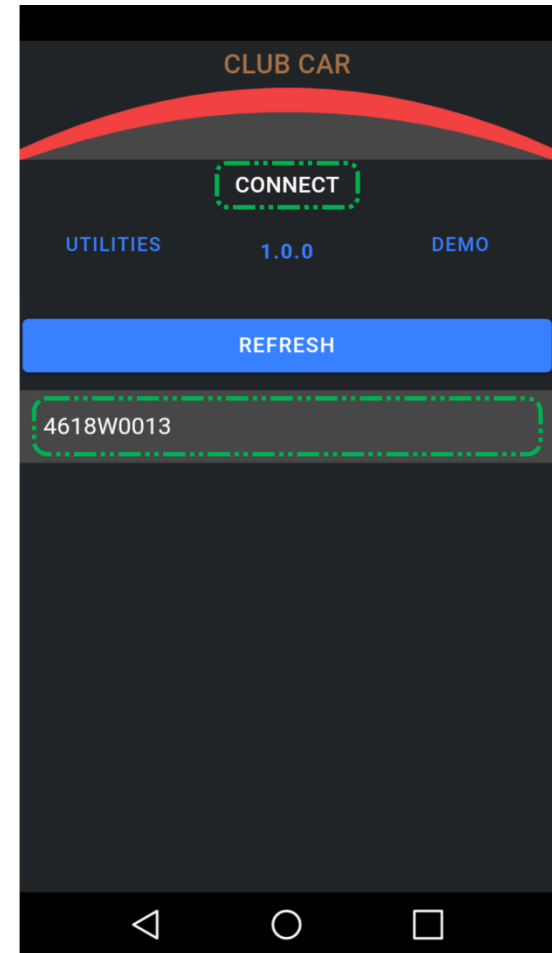
Club Car® Pack Charging System App User's Guide

Club Car® Pack Charging Systems feature Bluetooth wireless communication, which can be accessed using an Apple® or Android™ smart phone, tablet, or similar device. Download the Club Car Pack Charging System (CCPCS) app for your device by visiting the App Store® or the Google Play™ store and searching for "Club Car Pack Charging System App".

The charger must be connected to a valid battery pack in order to communicate with it via Bluetooth. If the charger is connected to a valid battery pack, open the CCPCS app and select the charger from the list of available chargers that the app is able to communicate with on the "Connect" screen. The charger serial number is the identifier of the unit, unless the "Charger ID" has been previously set via the app. While connected, the Red, Yellow, and Green LEDs on the charger will slowly blink at the same time until the Bluetooth communication is disconnected from the charger. If the unit was actively charging before the Bluetooth connection was made, it will continue to charge while connected unless stopped via the app. Your location services in device settings must be enabled for the app to work.

Quick reference to contents

Feature	Page(s)
Dashboard	2-3
Navigation Menu	4
Diagnostics	5
History	6-7
System Information	8
System Profile	9-12
Battery Profile	13-14
Faults	15



Dashboard

The dashboard is the first thing that will appear after connecting to a charger. This screen will show a snapshot of information on the connected charger and the state-of-charge information.

Charger ID – Displays the ID of the charger. This field is factory set to be blank. The Charger ID can be set/modified on the “Dashboard” and “System Profile” screens.

Battery Pack – Displays the type of battery connected to the charger; Fusion or Tabasco.

Battery Profile – Displays the profile number of the active battery profile. A description of this profile, including the compatible batteries, is available on the “Battery Profile” screen.

System Profile - Displays the profile number of the active system profile, the setup file used to configure the battery charger to the application.

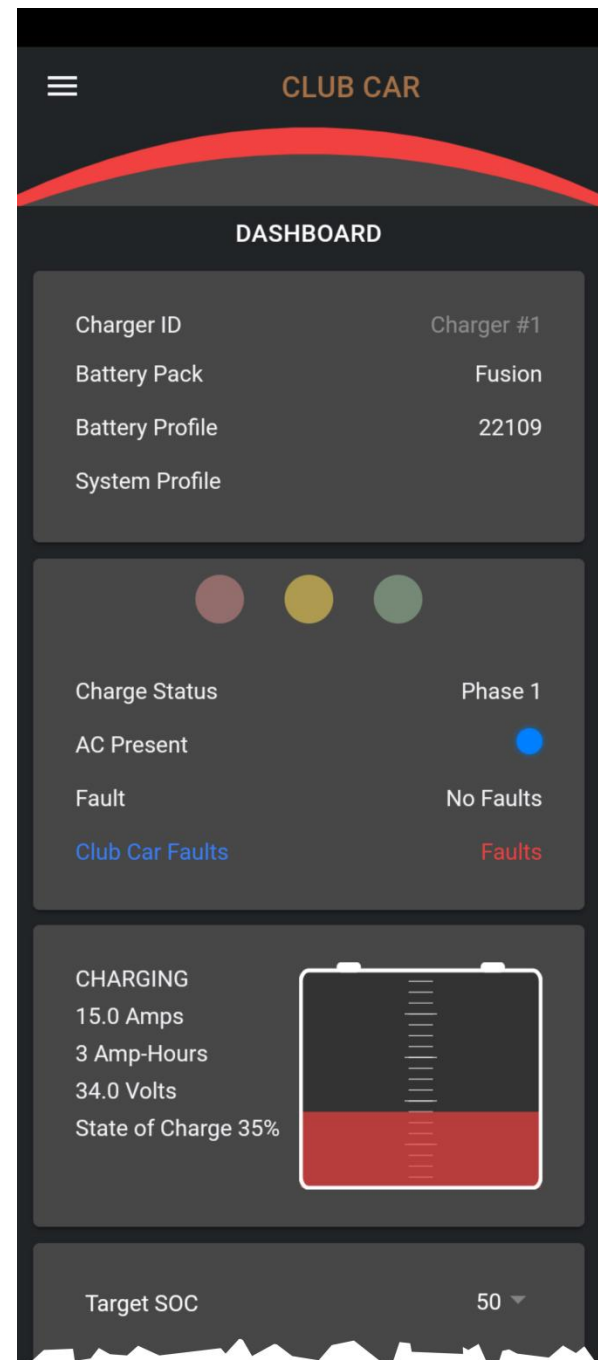
LED Display – Displays the same charge status LEDs that are present on the charger. Details regarding the LEDs can be found in the charger user’s manual.

Charge Status – Displays the active charge cycle phase.

AC Present – Indicates AC input power is present at the charger by illuminating the field’s blue LED, which corresponds to the blue “AC Present” LED on the charger.

Fault – Displays any active charger faults. Descriptions of the faults, as well as instructions for resolving them, are detailed in the charger user’s manual.

Club Car Faults – Displays any active faults being communicated via BMS. Descriptions of the faults can be found in ‘Faults’. This is accessible by clicking blue “Club Car Faults” on this screen or choosing “Faults” in the navigation menu in the upper left hand corner (see ‘Faults’ section for details).



NOTE: Depending on the screen size of the smart phone or tablet (device) you are using, you may need to scroll down to see all of the fields.

Charge State: Displays 'CHARGING' or 'NOT CHARGING'.

Output Current – Displays the DC output current in amps.

Amp-Hours Charged – Displays the number of amp-hours charged.

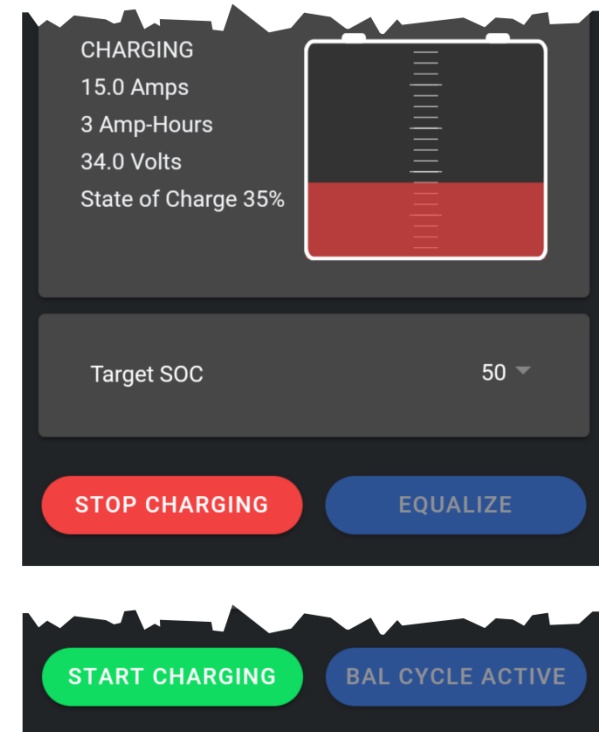
Battery Voltage – Displays the battery pack voltage in volts.

Battery State of Charge – Displays the estimated State of Charge (SOC) of the battery pack as a percentage and graphically.

Target SOC - Displays the three State of Charge selectable options to which the charger will charge the battery towards. The charger will continue to charge the battery until the battery's SOC is achieved.

Manual Stop/Start Button – Tapping this button will stop a charge cycle (red button) or start a charge cycle (green button).

Manual Equalize/Balance Button –This option is not valid on Club Car Pack Charging System and the button will be inactive.

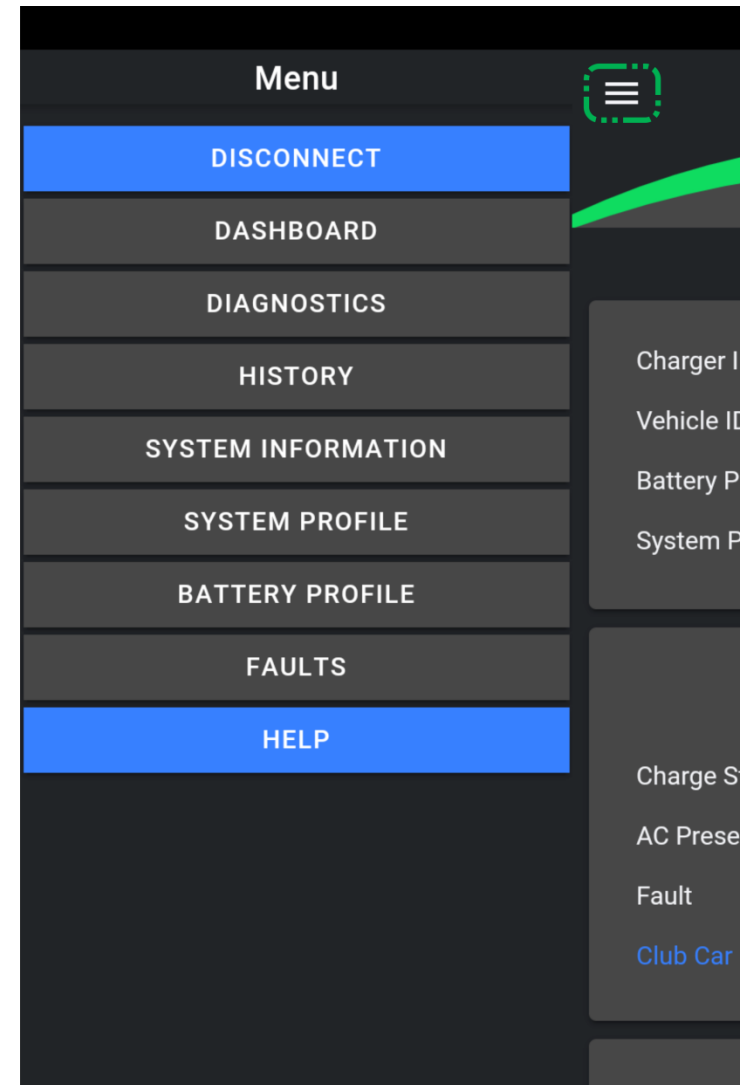
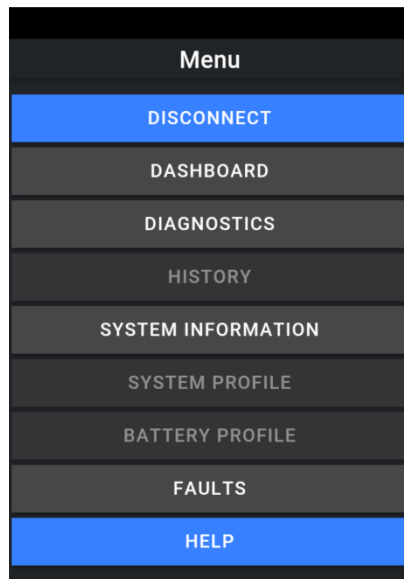


Navigation Menu

The Navigation Menu can be accessed by tapping the three (3) horizontal lines in the upper left-hand corner of the app. This menu is where all the features of the CCPCS can be reached.

Disconnect – This menu item disconnects the Bluetooth connection between the charger and your smart phone or tablet (device) and returns you to the “Connect” screen.

Note: *If the connected charger is actively charging, the “History”, “System Profile”, and “Battery Profile” menu items will be disabled. The “Manual Stop/Start Button” on the “Dashboard” screen can be used to (1) stop the active charge cycle in order to access these menu items and (2) start a new charge cycle prior to disconnecting from the charger.*



Diagnostics

This shows what the charger is doing graphically and by written display.

Amp meter – Displays the DC output current in amps and graphically.

Volt meter – Displays the battery pack voltage in volts and graphically.

State of Charge (SOC) – Displays the State of Charge (SOC) of the battery pack as a percentage.

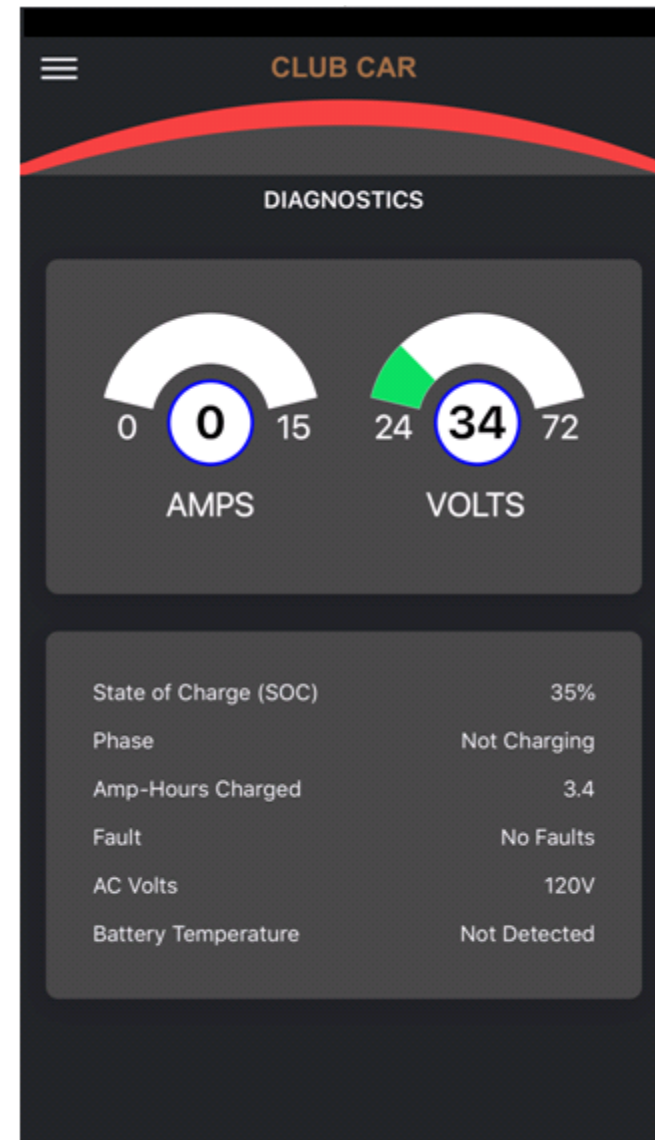
Phase – Displays the active charge cycle phase.

Amp-Hours Charged – Displays the number of amp-hours charged.

Fault – Displays any active charger faults. Descriptions of the faults, as well as instructions for resolving them, are detailed in the charger user's manual.

AC Volts – Displays the AC input voltage in volts.

Battery Temperature – Battery temperature sensor is not used with CCPCS battery profile, so "Not Detected" is displayed in this field.



History

See app screenshots below

This shows details on charging cycles that have occurred on charger allowing for analysis and review of charger performance.

Charger Histories Tab

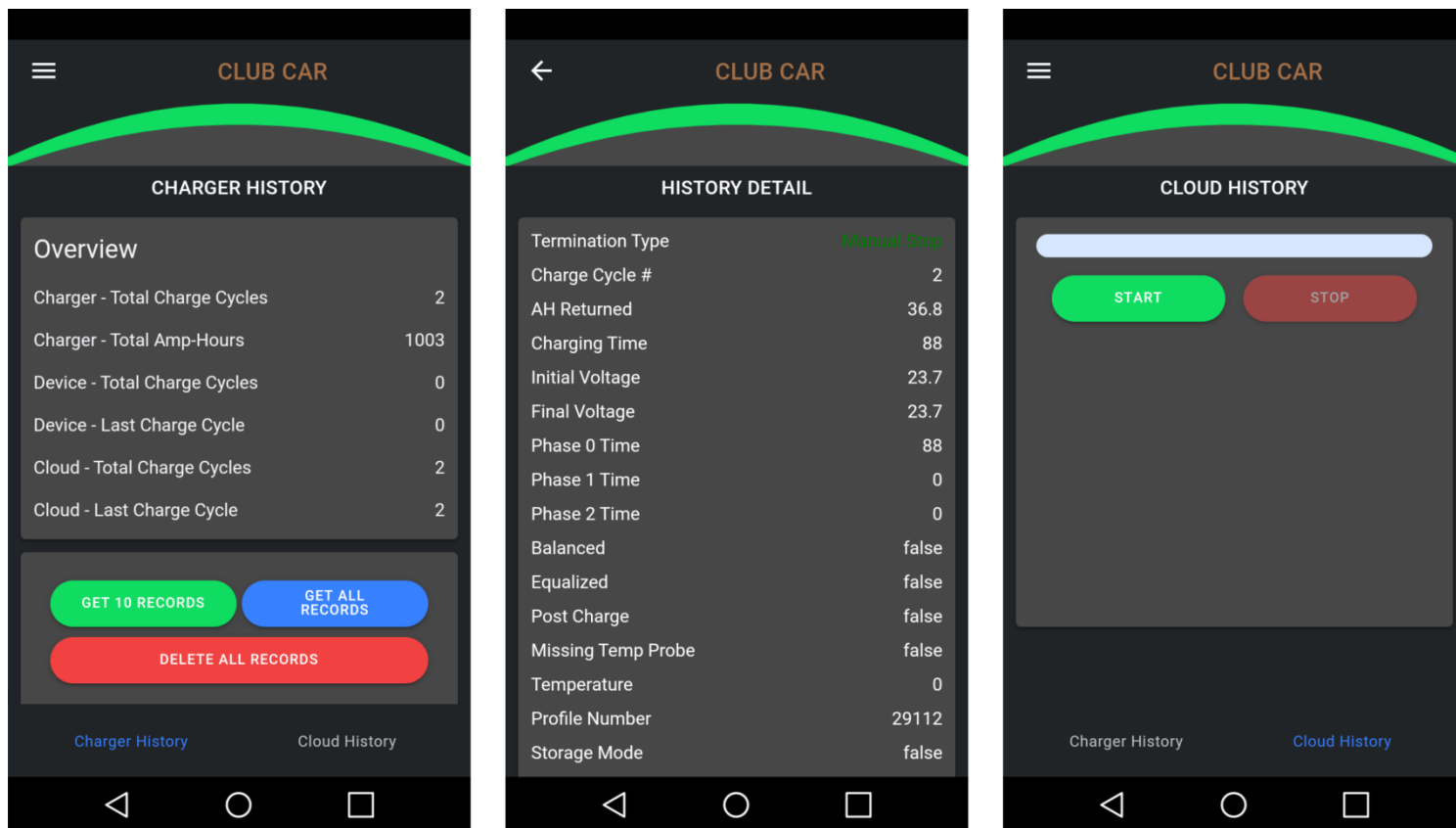
- **Overview Section**
 - **Charger**
 - **Total Charge Cycles** – Total charge cycles that the connected charger has recorded.
 - **Total Amp-Hours** – Total amp-hours that the connected charger has recorded.
 - **Device**
 - **Total Charge Cycles** – Total charge cycle history records that have been downloaded from the connected charger to your smart phone or tablet (device).
 - **Last Charge Cycle** – Number of the last charge cycle history record that has been downloaded from the connected charger to your smart phone or tablet (device).
 - **Cloud**
 - **Total Charge Cycles** – Total charge cycle history records that have been downloaded from the connected charger and uploaded to the Cloud.
 - **Last Charge Cycle** – Number of the last charge cycle history record that has been downloaded from the connected charger and uploaded to the Cloud.
- **Get 10 Records Button** – Tap to download the latest 10 charge cycle history records that have not been previously downloaded from the connected charger to your smart phone or tablet (device).
- **Get All Records Button** – Tap to download all charge cycle history records that have not been previously downloaded from the connected charger to your smart phone or tablet (device).
- **Delete All Records Button** – Tap to delete all charge cycle history records from your smart phone or tablet (device) that have been previously downloaded from the connected charger.
- **Records Section** – Individual charge cycle history records that have been downloaded from the connected charger are displayed in this section and can be selected to view the data (see “History Details” below).

History Details

The “History Details” screen displays the data for an individual charge cycle history record. When you have finished reviewing the data, you can use the “Back” button (found at top left of history screen) in order to return to the “Charger Histories” tab.

Cloud Histories Tab

Tapping the “Start” button will upload all of the charge cycle history records that have been downloaded from the connected charger to your smart phone or tablet (device) to the Cloud . Once the records have been uploaded, they can be accessed from any smart phone, tablet, laptop, or PC via ChargerConnect.net using the charger serial number.



System Information

The “System Information” screen is for the display of information only. No fields on this screen can be edited.

Serial Number – Displays the serial number of the connected charger.

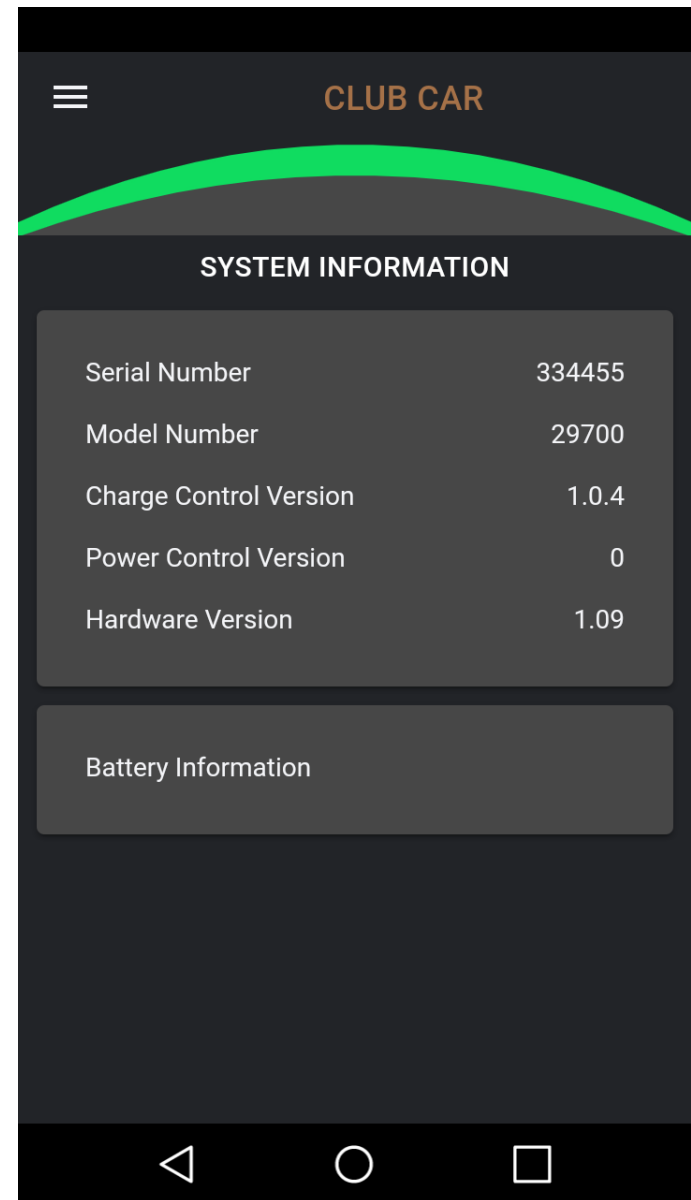
Model Number – Displays the model number of the connected charger.

Charge Control Version – Displays the version of charge control firmware on the connected charger.

Power Control Version – Displays the version of power control firmware on the connected charger.

Hardware Version – Displays the hardware version of the connected charger.

Battery Information – For future use. Not currently active.



System Profile

See app screenshots below

Charger Profiles Tab (all fields on this tab can be edited)




Charger ID – The ID of the charger. This field is factory set to be blank. The Charger ID can be set/modified on the “System Profile” and “Dashboard” screens.

System Profile - Displays the profile number of the active system profile, the setup file used to configure the battery charger to the application.



Cable Gauge (AWG) – The gauge of the DC cable in American Wire Gauge (AWG). This field is used to correctly compensate for the voltage drop of the DC cable.

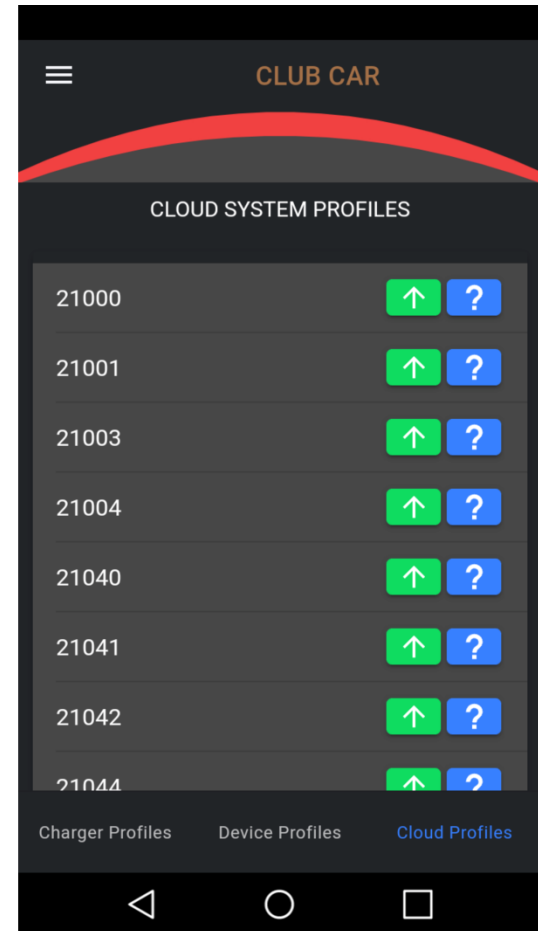
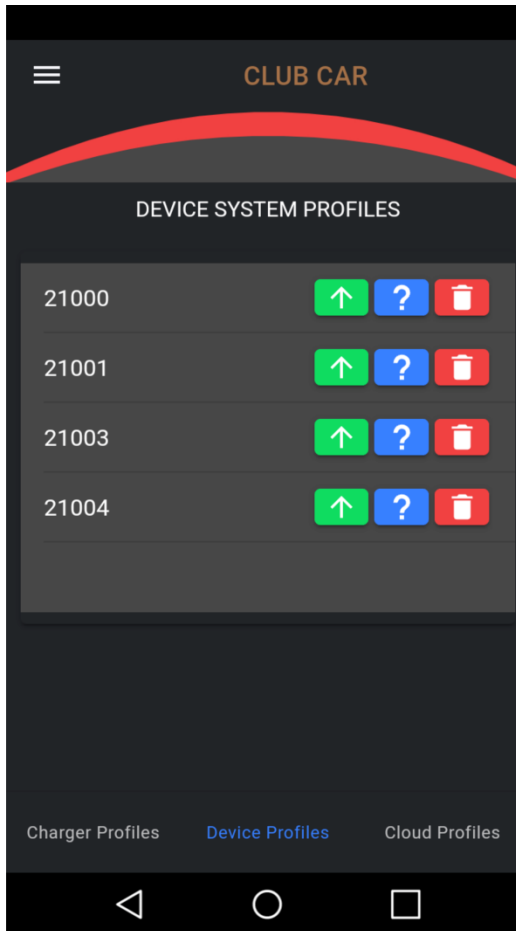
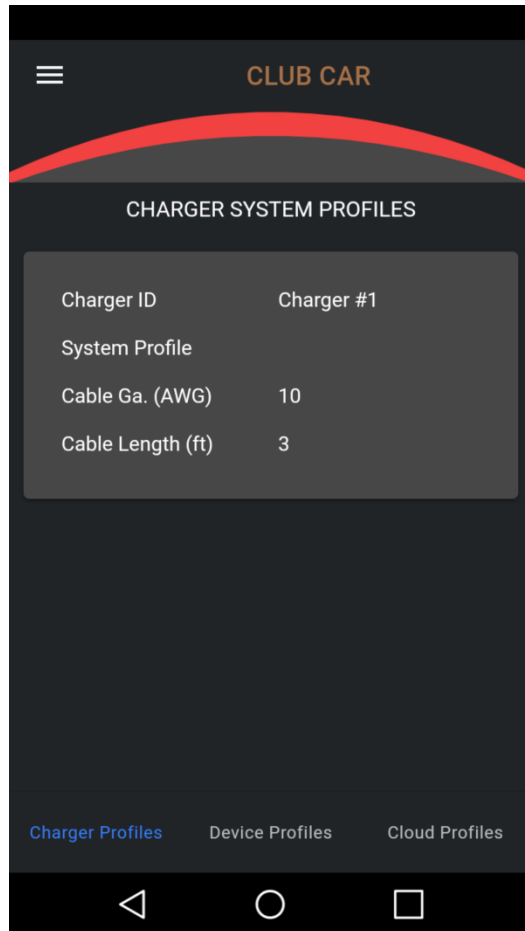
Cable Length (feet) – The length of the DC cable in feet [one direction only, not the sum of the length of both the positive (+) and negative (-) wires]. This field is used to correctly compensate for the voltage drop of the DC cable.

Device Profiles Tab

- Lists all system profiles available on your smart phone or tablet (device).
- Upload a system profile that resides on your smart phone or tablet (device) to the connected charger via the green arrow button. 
- Blue question mark buttons provide detailed descriptions of the system profiles. 
- Delete system profiles that reside on your smart phone or tablet (device) via the red trash can button. 

Cloud Profiles Tab



- Lists all system profiles available for download from the Cloud.
- Download system profiles from the Cloud to your smart phone or tablet (device) via the green arrow buttons. 
- Blue question mark buttons provide detailed descriptions of the system profiles. 





Battery Profile

See app screenshots below



Charger Profiles Tab

- Lists all battery profiles available on the connected charger.
- Set the “Active Battery Profile” via the green check mark. 
- Blue question mark buttons provide detailed descriptions of the battery profiles. 
 - See the “Battery Profile Quick Reference” section below for information regarding the most commonly used battery profiles.

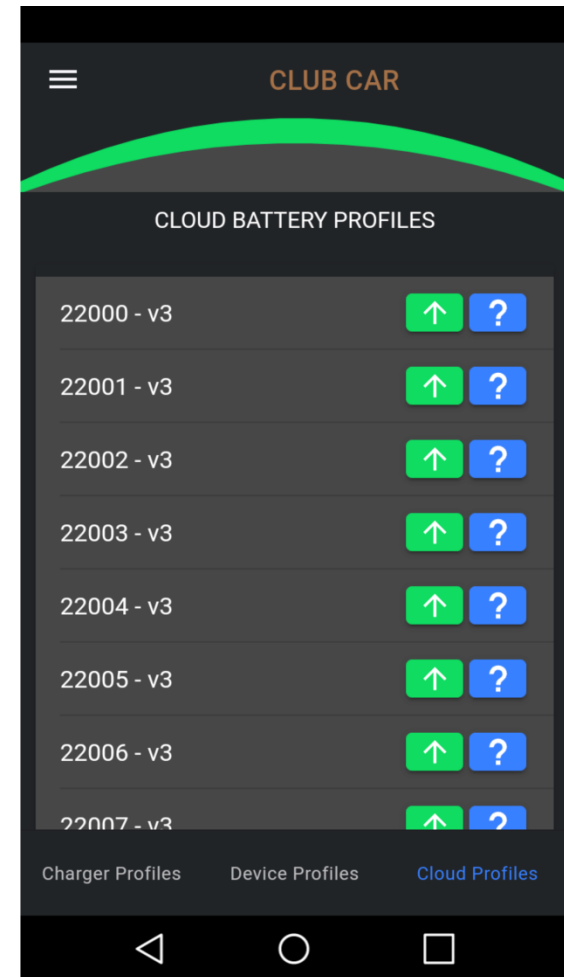
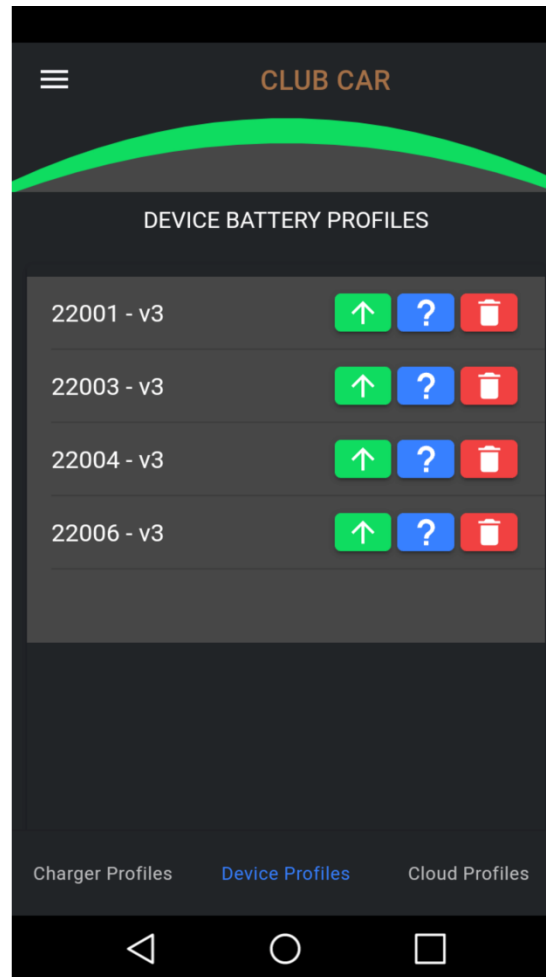
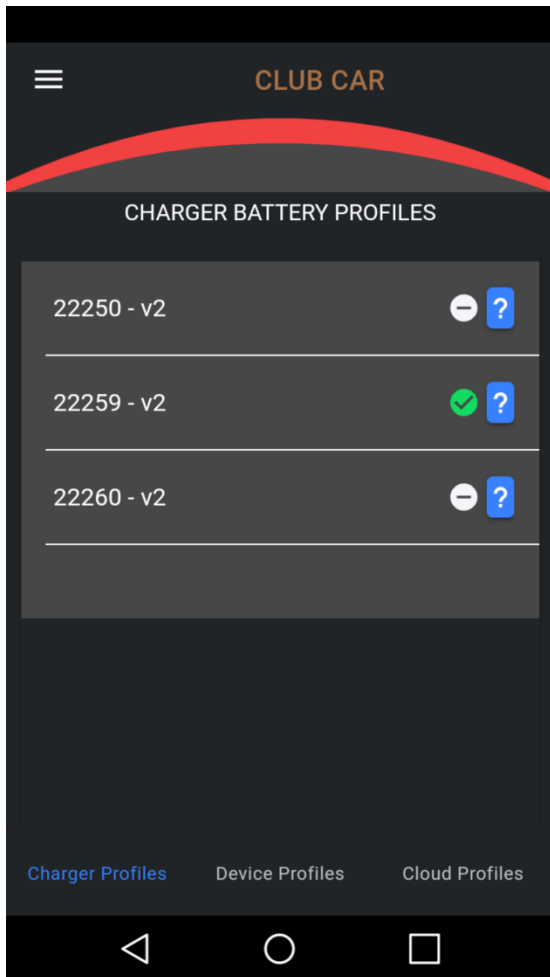
Cloud Profiles Tab

- Lists all battery profiles available for download from the Cloud.
- Download battery profiles from the Cloud to your smart phone or tablet (device) via the green arrow buttons. 
- Blue question mark buttons provide detailed descriptions of the battery profiles. 
 - See the “Battery Profile Quick Reference” section below for information regarding the most commonly used battery profiles.

Device Profiles Tab

- Lists all battery profiles available on your smart phone or tablet (device).
- Upload battery profiles that reside on your smart phone or tablet (device) to the connected charger via the green arrow buttons 
 - You will be required to select the “Profile Slot Number”. Summit Series II chargers can store up to 20 battery profiles locally. The local battery profiles are stored in “Slots”, which are numbered 0-19. You can either select an empty Slot to store the battery profile that will be uploaded to the charger or a Slot that currently contains a battery profile, in which case the battery profile will be overwritten.
 - **NOTE: When a battery profile is uploaded to the connected charger, it automatically becomes the Active profile on the charger.**
- Blue question mark buttons provide detailed descriptions of the battery profiles. 
 - See the “Battery Profile Quick Reference” section below for information regarding the most commonly used battery profiles.

- Delete battery profiles that reside on your smart phone or tablet (device) via the red trash can button.

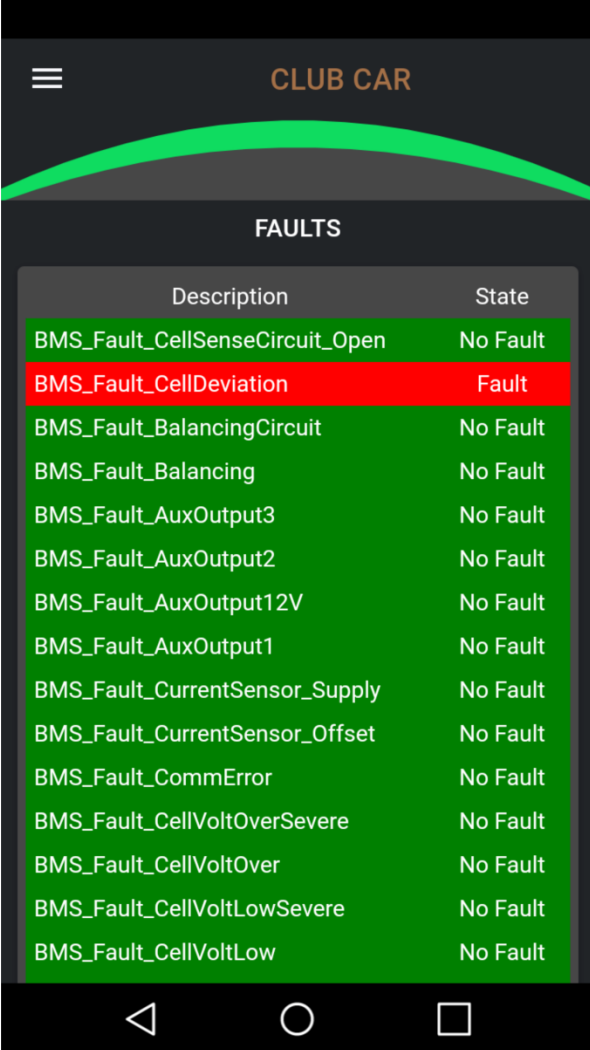


Faults

This shows a list of all potential faults that can be communicated by BMS.

When fault is detected, state will change from “No Fault” to “Fault” and become highlighted by red. Description to the left of the fault shown provides detail on fault.

A user can also sort the table of faults by selecting "Description" to sort by descriptions or "State" to sort between Fault/No Fault.



Description	State
BMS_Fault_CellSenseCircuit_Open	No Fault
BMS_Fault_CellDeviation	Fault
BMS_Fault_BalancingCircuit	No Fault
BMS_Fault_Balancing	No Fault
BMS_Fault_AuxOutput3	No Fault
BMS_Fault_AuxOutput2	No Fault
BMS_Fault_AuxOutput12V	No Fault
BMS_Fault_AuxOutput1	No Fault
BMS_Fault_CurrentSensor_Supply	No Fault
BMS_Fault_CurrentSensor_Offset	No Fault
BMS_Fault_CommError	No Fault
BMS_Fault_CellVoltOverSevere	No Fault
BMS_Fault_CellVoltOver	No Fault
BMS_Fault_CellVoltLowSevere	No Fault
BMS_Fault_CellVoltLow	No Fault

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