

Golf Charger Guide

36V and 48V



This document is a guide for identifying the correct charger for Inventus Power's S-48V60-TRX-HD and S-36V80-TRX batteries.

Inventus Power partnered with charger manufacturers, Lester Electrical and Delta-Q Technologies, to develop charger algorithms specific for our PROTRXion™ lithium-ion batteries. This enables our batteries to be compatible with many existing golf cart chargers to give our customers the ability to use their existing charger. For optimized performance and warranty, we recommend using a Lester Electrical Summit Series II charger for your golf cart.



Please place the Charger Warning Label included in the Integration Kit onto your charger once you have reprogrammed the charger. This warning label is meant as a reminder for operators to avoid using this charger on other batteries such as lead-acid batteries.



WARNING

DO NOT use to charge lead-acid batteries!

This charger is programmed with an algorithm for Inventus Power PROformance lithium-ion batteries.



Contents



Club Car Charger Guide	3
Yamaha Charger Guide	4
EZGO Charger Guide	5
ICON EV Charger Guide	6
Recommended Replacement Chargers	7
Adding Battery Profile to Summit Series II	8-10

Club Car Precedent and Tempo golf carts use a 48V Delta-Q IC650 charger designed specifically for Club Car (ERIC Charger). Depending on the charger model, one of two algorithms should be reprogrammed onto the charger. Go to this website for instructions on how to reprogram the ERIC chargers with the correct Inventus Power algorithm: <https://support.delta-q.com/hc/en-us/articles/360015622531-IC-Series-How-to-Reprogram-Refresh-or-Upgrade-Software-and-Algorithms-via-USB>. You will need a USB flashdrive to reprogram the charger.

To find out which algorithm to use, inspect the first four letters of the serial number located under the barcode label on your charger:



Inspect Label



Inspect First 4 Digits of Serial Number

If the first four letters are **exactly “DQTG”**, your model is the **Lithium-ion Club Car ERIC Charger**. Request the Inventus Power charging algorithm file for the Lithium-ion Version of the Club Car ERIC Charger from your distributor.

If the first four letters **are anything other than “DQTG”**, like in the above image where the letters are **“DGSC”**, your model is the **Lead-Acid Club Car ERIC Charger**. Request the Inventus Power charging algorithm file for the Lead-Acid Version of the Club Car ERIC Charger from your distributor.

For 36V applications, we recommend choosing from our list of recommended 36V chargers on page 7. If you believe your Club Car battery charger is another model, as it looks significantly different than the above picture, please contact your distributor for support.

Yamaha Charger Guide

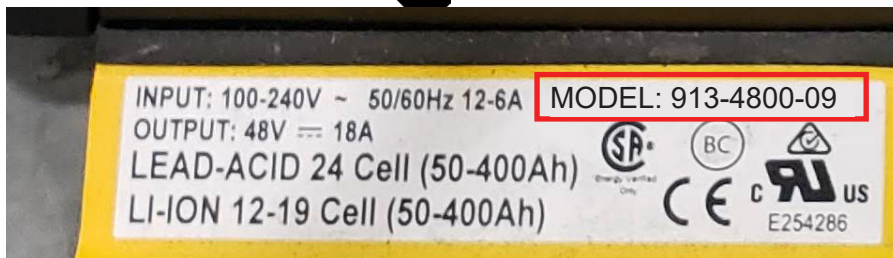


Yamaha golf carts use a 48V Delta-Q QuiQ 1000 charger designed specifically for Yamaha. The Yamaha QuiQ charger by Delta-Q is plug and play compatible with our batteries if the correct algorithm is loaded on the charger. If not, you can select the correct algorithm with the QuiQ programming tool. Confirm you have the correct Yamaha charger that will be compatible with the Inventus Power 48V battery. If the model number matches exactly “**913-4800-09**”, your model is the **Yamaha QuiQ Flooded Lead Acid Battery Charger**.

Now check which algorithm is loaded on the charger. If **Algorithm 93 - Trojan T1275 flooded (non-temperature compensated)** is loaded on the charger, you can continue to use this charger as is and it is compatible with the Inventus Power battery. Otherwise, change the algorithm to the above correct algorithm prior to use. Go to this website for instructions on how to reprogram the QuiQ chargers with a preloaded compatible algorithm: <https://support.delta-q.com/hc/en-us/articles/360015622811-WhoQ-Series-How-to-change-algorithms-using-the-WhoQ-Programmer-CT-software>. You will need the QuiQ Programming Kit for this.



Inspect Label



Inspect Model Number

We recommend replacing other incompatible chargers with an Inventus Power approved replacement charger shown in the table on page 7. For 36V applications, we recommend choosing from our list of recommended 36V chargers on page 7. For these models, request that the Inventus Power charging algorithm gets added to the charger by your distributor prior to delivery.

EZGO golf carts use several customized charger models from Delta-Q Technologies. Below are the most common EZGO chargers from Delta-Q. We recommend replacing any of these chargers with a compatible charger from the list on page 7. For 36V applications, we also recommend choosing from our list of recommended 36V chargers on page 7.

If your EZGO charger is yellow and black like below, your charger model is the **EZGO World Charger for Lead-Acid Batteries**. This charger is not yet compatible with Inventus Power's PROTRXion™ batteries. We recommend replacing this charger with a compatible charger (see list on page 7).



If your EZGO charger is green and black like below, your charger model is the **EZGO Elite Lithium-ion Charger**. This charger is not yet compatible with Inventus Power's PROTRXion™ batteries. We recommend replacing this charger with a compatible charger (see list on page 7).



If your EZGO charger is silver and has model name **"Delta-Q SC-48"** like below, your charger model is the **EZGO Delta-Q SC-48 Charger**. This charger is not compatible with Inventus Power's PROTRXion™ batteries. We recommend replacing this charger with a compatible charger (see list on page 7).

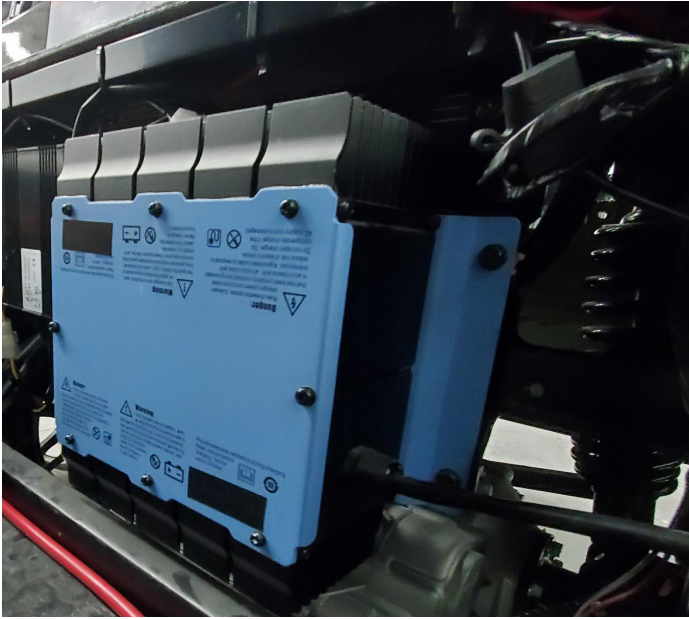


If your EZGO charger is silver and has model name **"PowerWise Qe"** like below, your charger model is the **EZGO Delta-Q PowerWise Qe Charger**. This charger is not compatible with Inventus Power's PROTRXion™ batteries. We recommend replacing this charger with a compatible charger (see list on page 7).





ICON EV chargers are made for lead-acid batteries and are not yet reprogrammable to charge Inventus Power PROTRXion[™] batteries.



ICON EV carts require the blue ICON charger to remain on the vehicle and connected to the motor controller for the vehicle to run. Disconnect the charger positive and negative ring terminal connections and wrap the exposed conductors with electrical tape.

Leave blue charger on vehicle, disconnect from battery

To charge the Inventus Power PROTRXion[™] batteries, a second charger can be added to the cart and mounted in the battery bucket if desired. We recommend adding a charger from the Inventus Power approved charger list shown in the table on page 7. For these models, request that the Inventus Power charging algorithm gets added to the charger by your distributor prior to delivery.

Recommended Replacement Chargers



For Inventus Power PROTRXion™ batteries, it is important to use an approved compatible charger. All incompatible chargers should be replaced with one of the approved replacement chargers shown in the table below. For these models, request that the Inventus Power charging algorithm gets added to the charger by your distributor prior to delivery.

Battery Voltage	Charger Manufacturer	Model Name	Manufacturer Part Number	Inventus Power Battery Profile
48V	Lester Electrical	1050W Summit Series II	30410	22987 - v8
48V	Lester Electrical	650W Summit Series II	30600	22793 - v3
36V	Lester Electrical	650W Summit Series II	30600	(36V ONLY) 22743 - v3

Below are some accessory options for DC connection from charger to battery. Other less common options can be provided by your distributor.

Manufacturer	Accessory Name	Manufacturer Part Number	Notes
Lester Electrical	Ring Terminals w/ lo (6')	41879S	On-Board
Lester Electrical	Club Car 3-Pin (9')	41892S	Off-Board
Lester Electrical	E-Z-GO RXV/TXT 3-Pin (9')	42529S	Off-Board
Inventus Power	M10 to M8 Terminal Adapter	03-59307-001	Needed for 36V positive terminal

Adding Battery Profile to Summit II

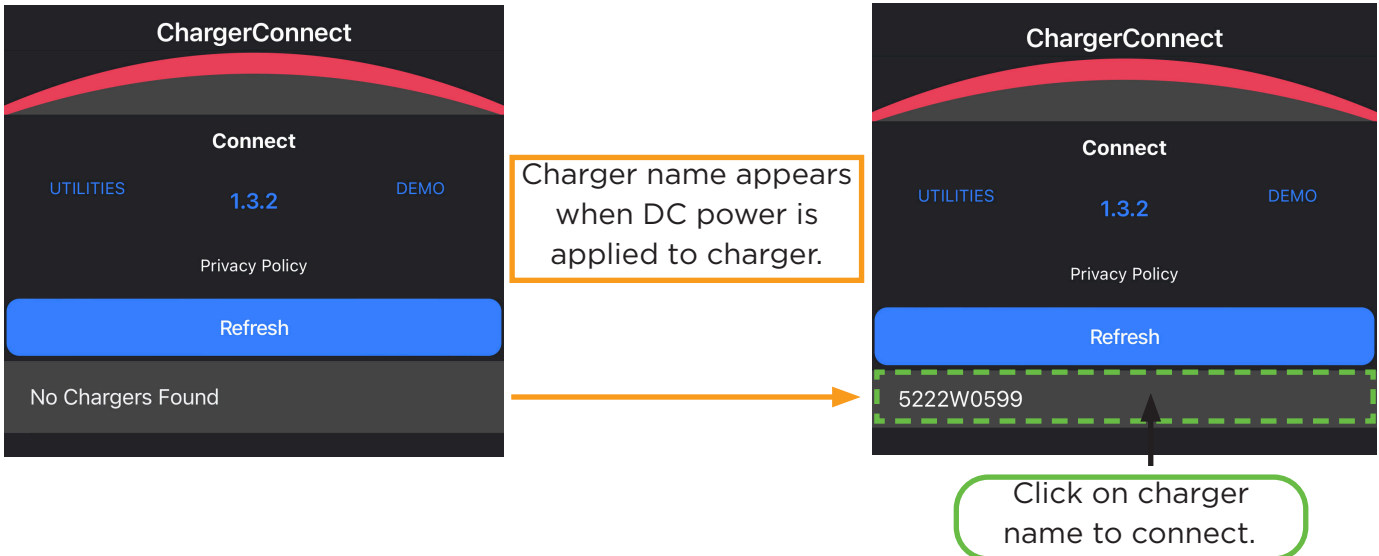


Go to this website for more detailed instructions on how to reprogram the Lester Summit Series II charger with the correct Inventus Power algorithm:

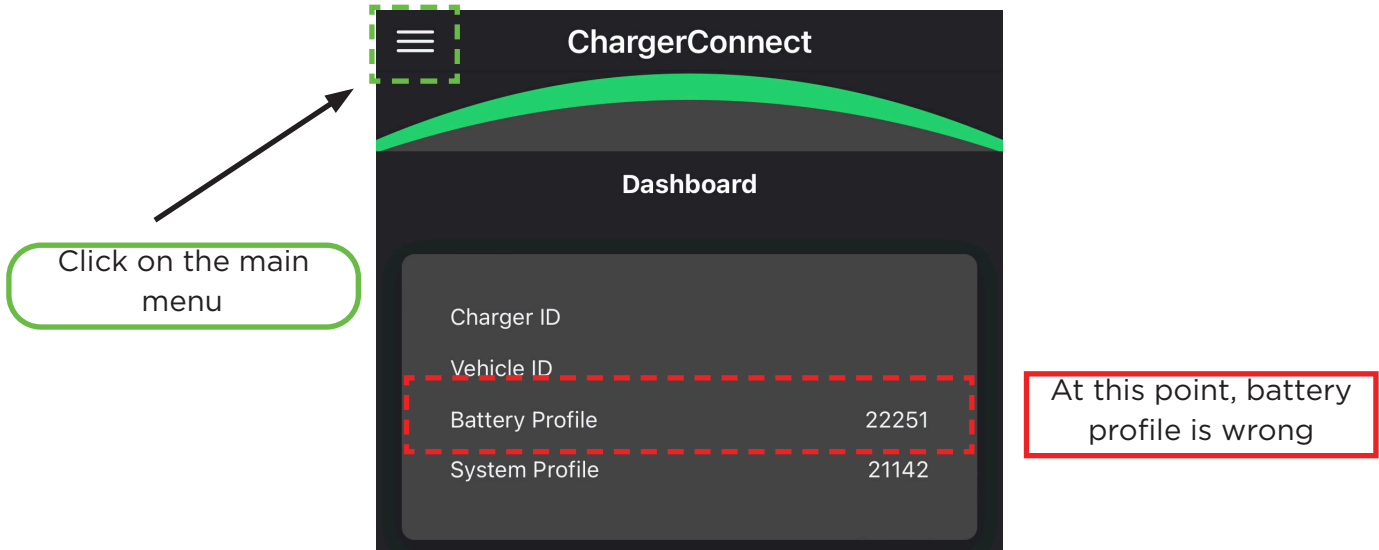
https://assets.website-files.com/62b1d1ced3ce357ed11bccde/62b1d1ced3ce35b3f51bcd3e_43047_B.pdf

You will need to download the Lester Charger Connect App onto your smartphone.

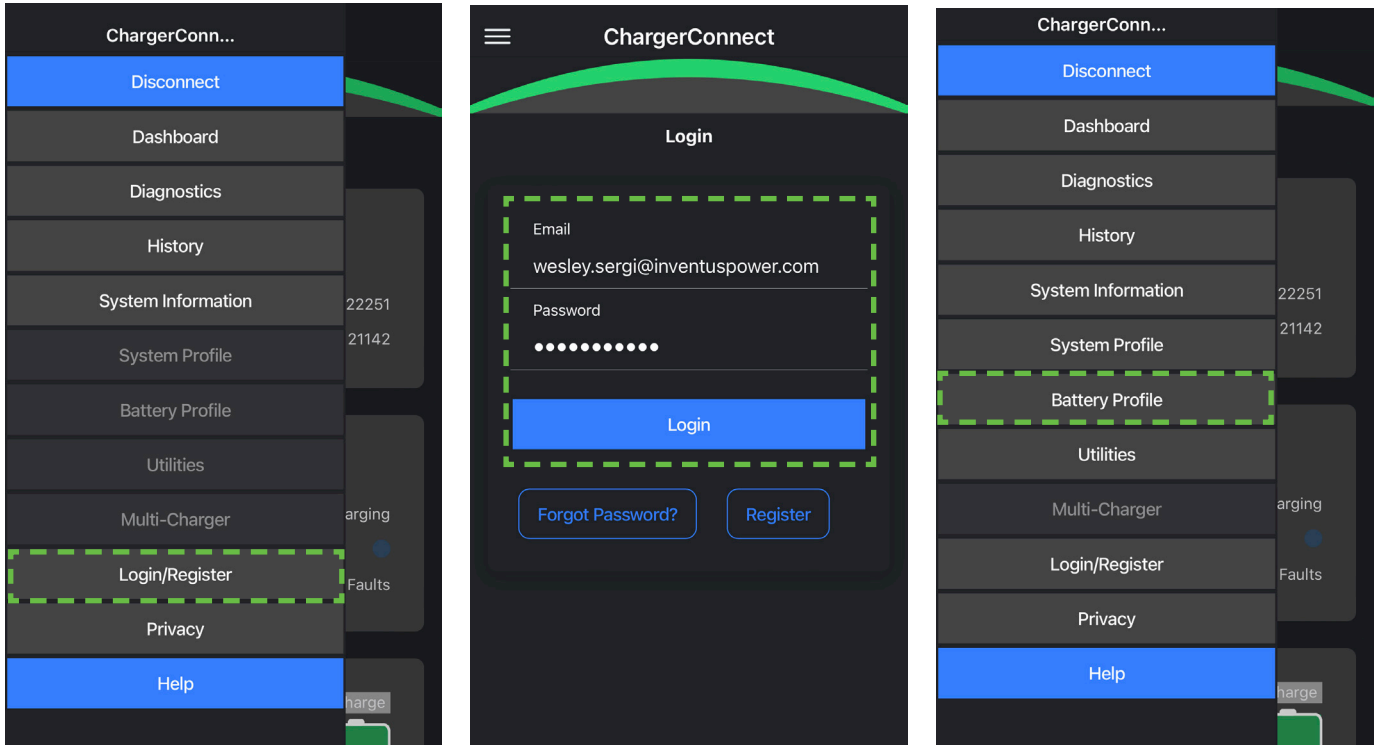
1. Open the Lester Charger Connect App
2. At first, you will not see any chargers available to connect to because the charger is not powered via DC power. **Connect the charger to the battery pack** to power on the charger. DC power is required for the charger to connect to your phone via Bluetooth. Ensure the PROTRXion™ battery is awake by pressing the button and confirming the LEDs light up.



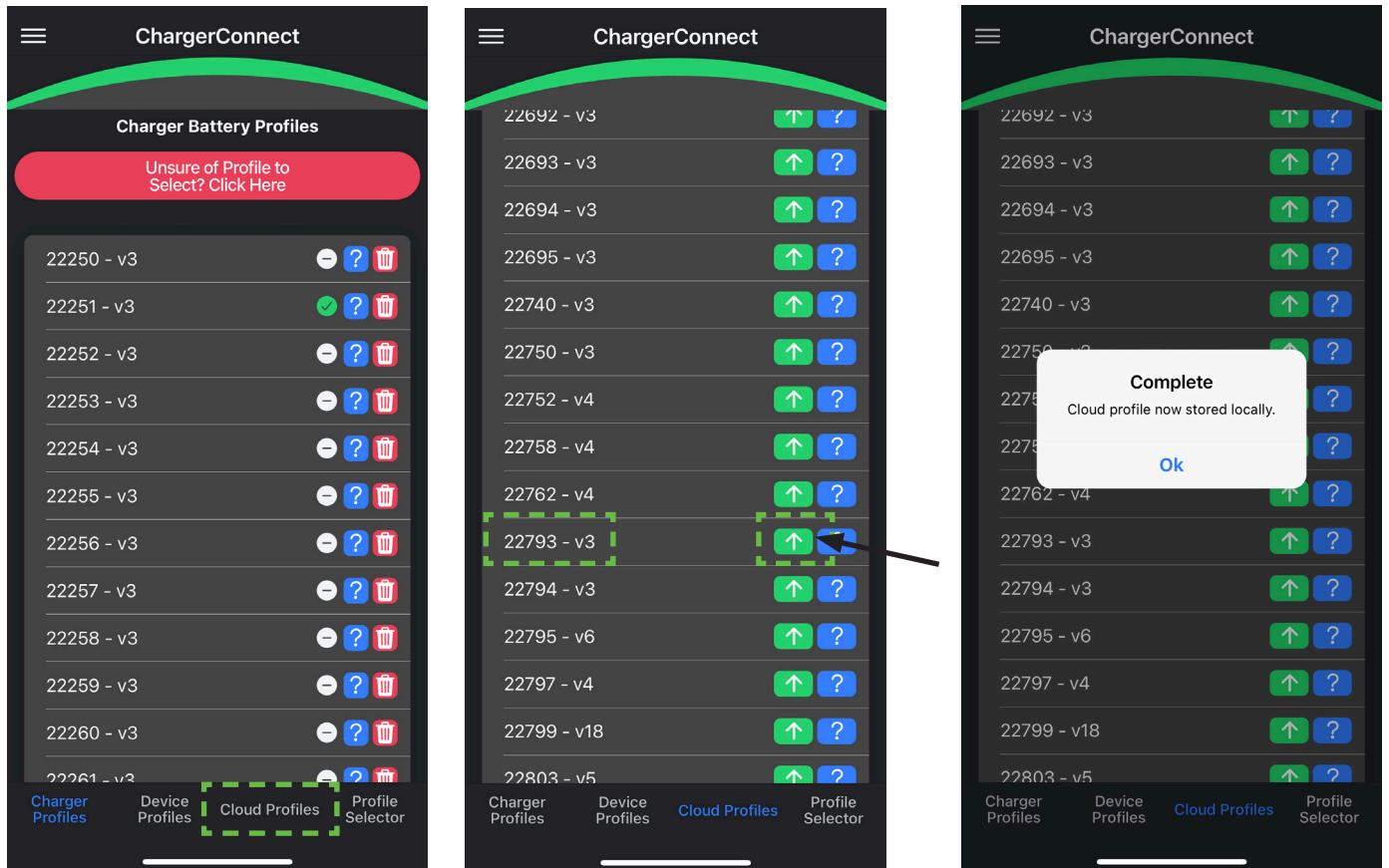
3. From the main dashboard, you can see the charger likely does not have the correct battery profile loaded and selected. To select the battery profile, first login.



Adding Battery Profile to Summit II (Cont.)

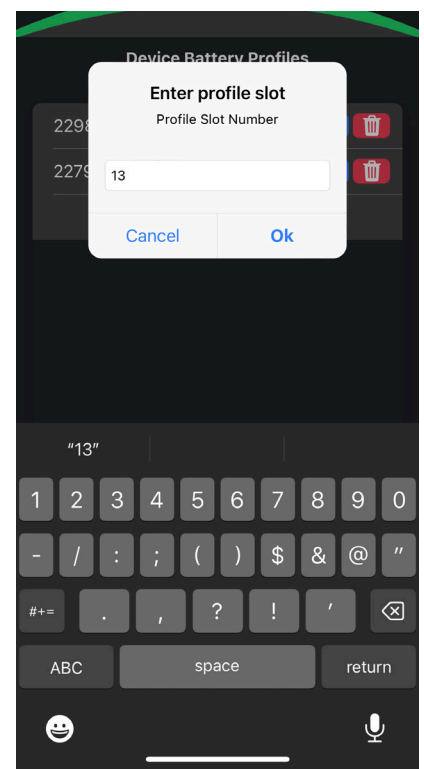
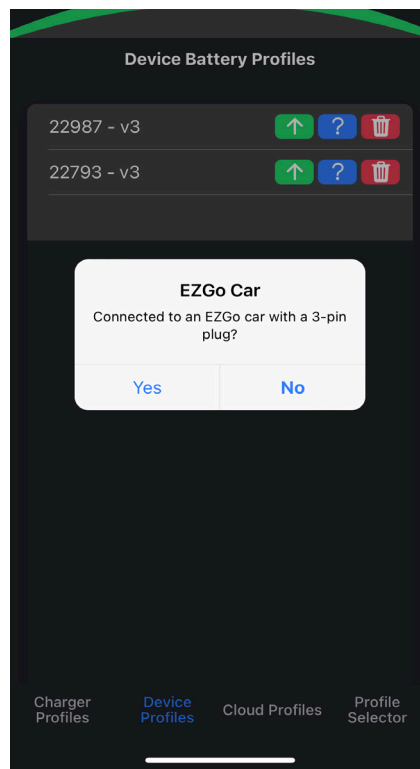
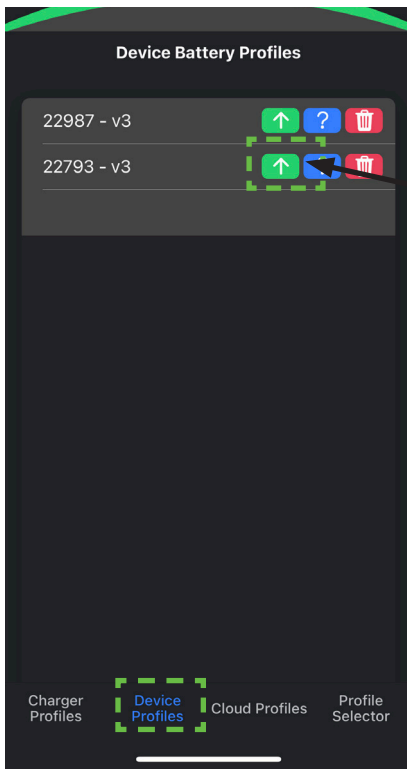


4. Then from the “Battery Profile” tab on the main menu, hit the “Cloud Battery Profiles” tab on the bottom of the screen. Find and download the correct profile **22987 Rev 8 (1050W)** or **22793 Rev 3 (650W)** to the “Charger Battery Profiles” tab.



Adding Battery Profile to Summit II (cont.)

5. Select “Device Profiles” to set the correct “Device Battery Profile” to the Charger. If the charger is going on an EZGO vehicle, hit “Yes” to set the right lockout pin function. For EZGO RXV ensure the lockout pin is set to Active Low. Set which slot on the charger to place the battery profile. When a battery profile is uploaded to the connected charger, it automatically becomes the Active profile on the charger.



6. For the battery profile to become the active charger profile on the charger, the charger may require a restart. Restart the charger by powering off the battery and then powering back on the battery with a button press.
7. Once the Inventus Power battery profile is set, the charger cannot be switched to another profile. Label the charger with the label included in the integration kit.

