CRAGG RAILCHARGER™
Quick Start Guide for

20SMC-12V
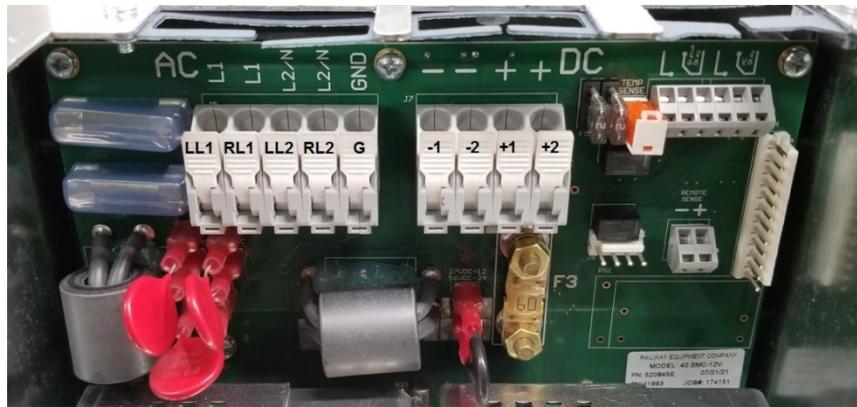# 20SMC-24V
40SMC-12V
40SMC-24V
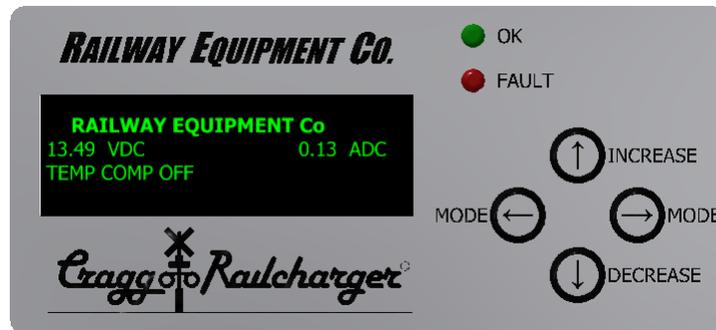# 60SMC-12V
80SMC-12V

This document is a quick start guide for setting up an SMC Battery Charger. If you wish to go into depth about the charger and all its functions, please refer to the last page of this document for steps to find a technical manual on our website.

Setup Procedure:

1. When you first get your SMC Battery Charger, make sure you have all the connections properly connected. Have the AC power going into the AC terminal block. Connect LINE1 to LL1, LINE2/NEUTRAL to LL2, and GROUND to G.

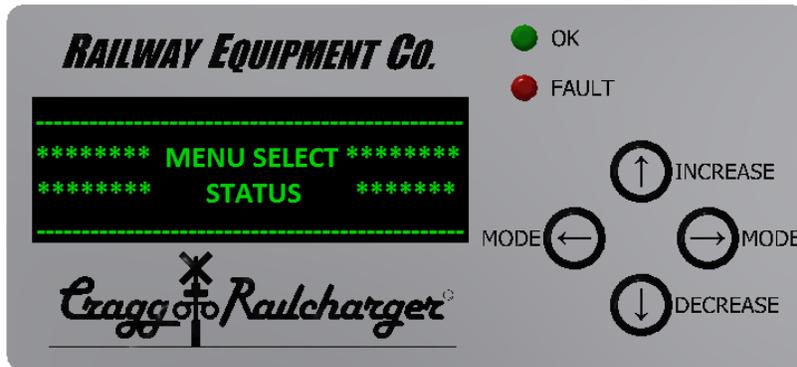2. Once you powered the charger on, the OK LED will turn green, and you will see the start screen:

On the starting screen you will see:

- **(Output Voltage) VDC**
  - o This voltage is the voltage that the charger is outputting. It is measured in VDC. **NOTE:** The value that is shown for the output voltage may differ from your unit.

- **(Output Current) ADC**
  - o This current is the current that the charger is outputting. It is measured in ADC. **NOTE:** The value that is shown for the output current may differ from your unit.
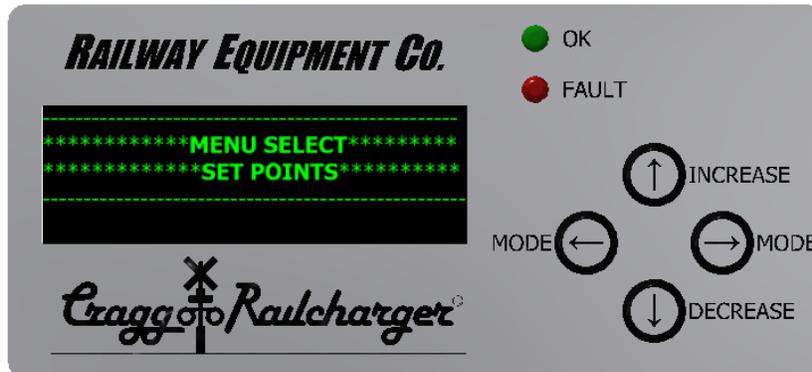
- **Temp Comp**
  - This will display whether or not the temperature compensation is enabled or disabled.
  - If you have set this to something other than disabled or "OFF", it will display the battery temperatures when you have the optional sensor installed.
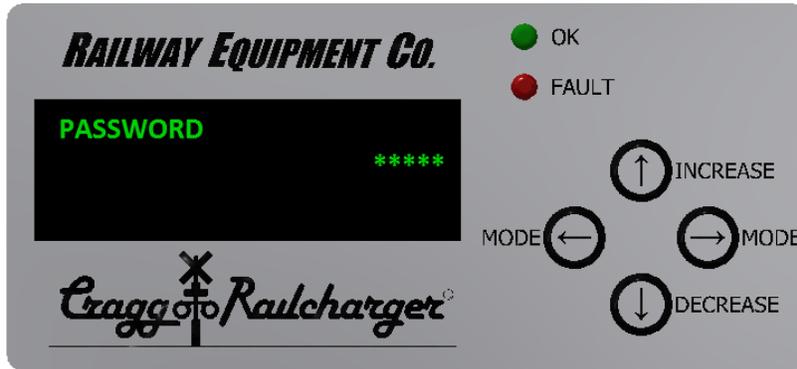
3. Next you go to the **STATUS MENU** under Menu Select by clicking the left mode button once.
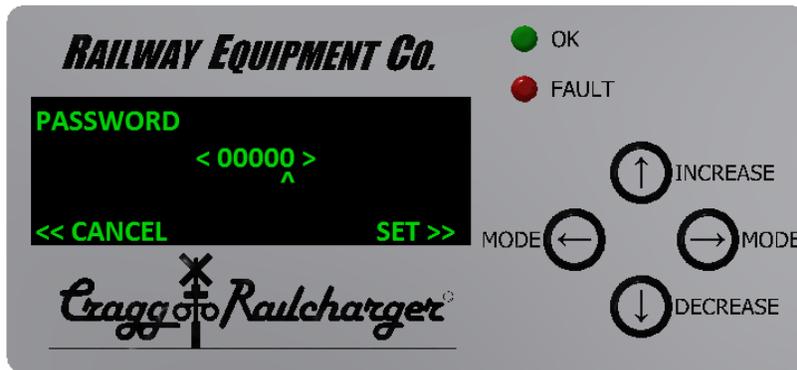

4. Now click the increase button twice and you will have reached the **SET POINTS MENU** under Menu Select.
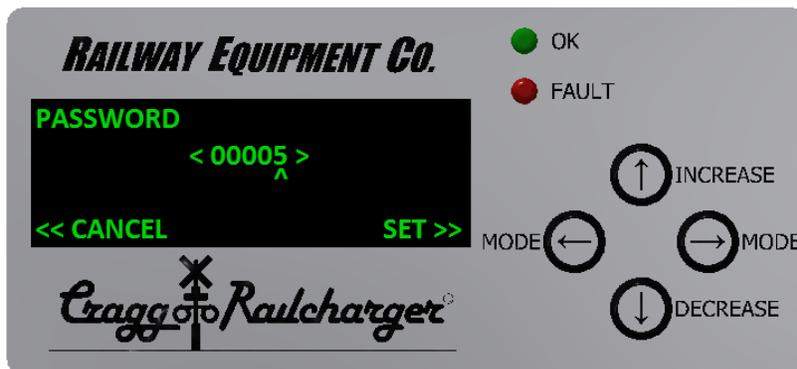
5. Once there, click the right mode button once and you will be at the **PASSWORD** screen.

6. Now you want to enter in a password. To do this, first click the increase button once to have the ability to change the password.
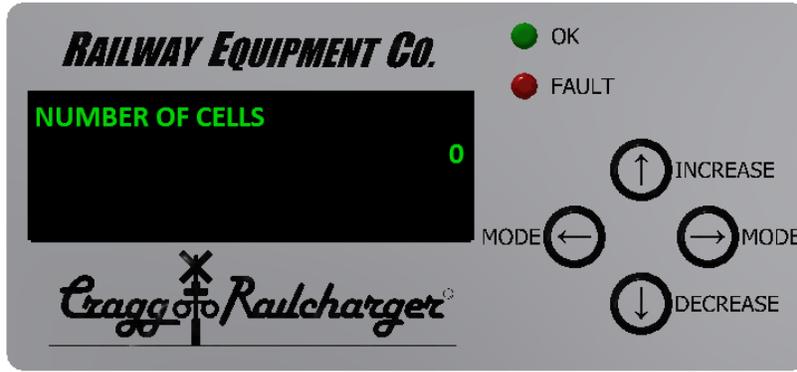

7. Using the increase or decrease buttons, you can change the value to enter in the desired password.

8. You want to have a password of 5 entered in. Once you have entered 5 in, you will need to press and hold the right mode button to **SET** the password. After it is set, it will go back to the original password screen as seen in step 5.

9. After the password, you want to click the right mode button once and you will get to the **USER LEVEL** screen. You can choose between Advanced and Basic user level. For setting up the charger, select **BASIC**. Once selected, press the right mode button to move on.

10. Now you need to select the **BATTERY TYPE**. Use the increase or decrease buttons to cycle through the different types of battery you could have. Once you find your battery type, push the right mode button once. Here are the different types of batteries:

    - Generic NI-CAD
    - Generic LEAD ACID
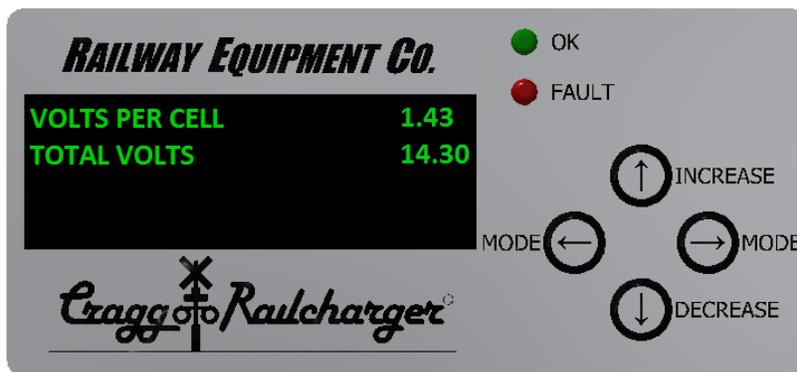   - SAFT SPL NI-CAD
    - GNB ABSOLYTE

11. Next you need to set the **NUMBER OF CELLS** per your battery bank. At first you will have a value of 0 entered in, use the increase or decrease buttons to change the number of cells you have. Refer to table below on the maximum and minimum amounts you can have for each battery type. Once finished, click the right mode button.

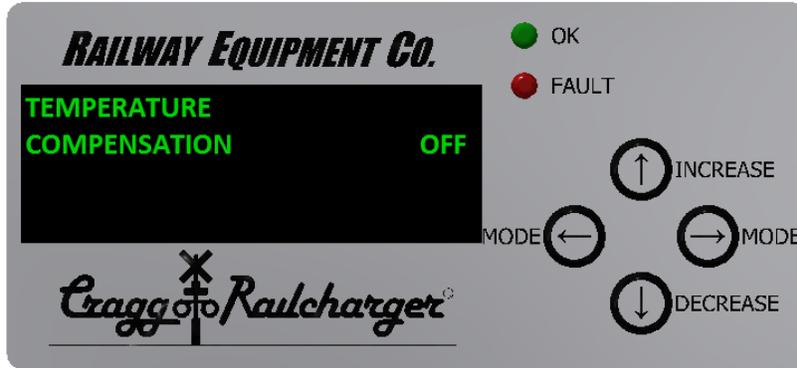|	Generic NI-CAD		Generic LEAD ACID		SAFT SPL NI-CAD		GNB ABSOLYTE	
	Min	Max	Min	Max	Min	Max	Min	Max
20SMC-12V	5	12	5	8	5	12	5	8
20SMC-24V	18	26	11	18	18	26	11	18
40SMC-12V	5	12	5	8	5	12	5	8
40SMC-24V	18	26	11	18	18	26	11	18
60SMC-12V	5	12	5	8	5	12	5	8
80SMC-12V	5	12	5	8	5	12	5	8

12. Next you need to set the **VOLTS PER CELL** to battery manufacturer's specs. Use the increase or decrease buttons to change the volts per cell. You will also notice that the total volts will change with it. After you have your values, click the right mode button.
NOTE: TOTAL VOLTS = Number of Cells * Volts per Cell

13. Now you will see the **TEMPERATURE COMPENSATION** screen. Select between the options below. Click the right mode button to move on once you have selected.
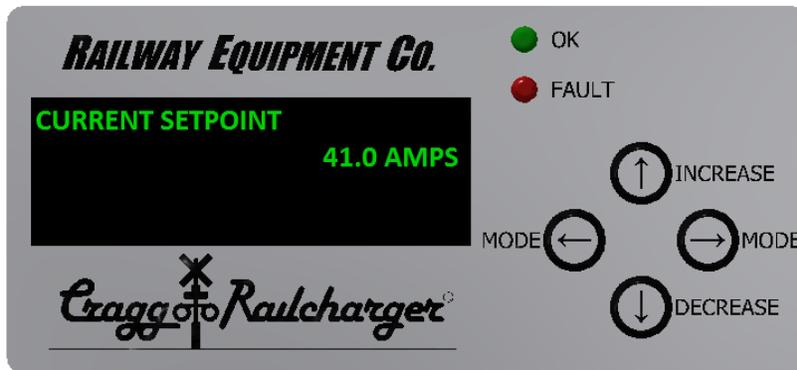
- If you do not have the optional temperature sensor, then you want this to be set at OFF.
- If you do have the temperature sensor and it is installed, then you have a choice between 50% and 100% compensation.

NOTE: If you do not have the optional temperature sensor, but set temperature compensation to be either 50% or 100%, on the start screen you will see TEMP COMP MISSING and the fault LED light up red.
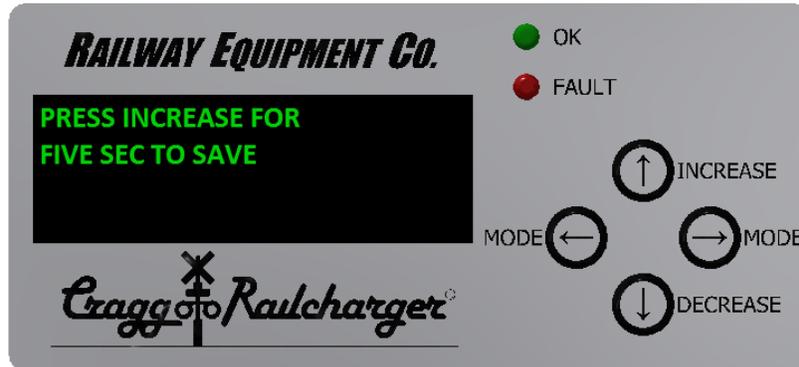
14. The last setting you will need to set is for your **CURRENT SETPOINT**. Here you use the increase or decrease buttons to set the current setpoint. Once you have your value, click the right mode to finish.
NOTE: Refer to table below to find the range of your SMC charger.

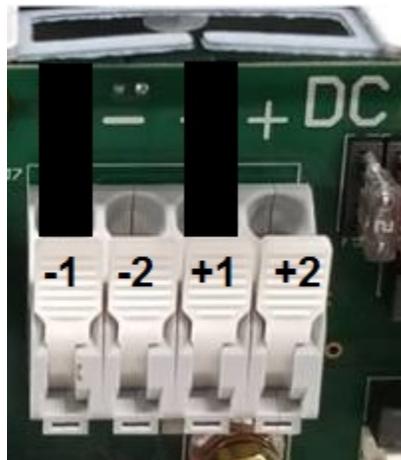|	Minimum	Maximum
20SMC-12V	10	21
20SMC-24V	10	21
40SMC-12V	20	41
40SMC-24V	20	41
60SMC-12V	30	61
80SMC-12V	40	81

15. Once you have finished entering all values and setpoints, you will see the following screen after the **CURRENT SETPOINT:**

To save your entries, you need to press and hold the increase button for 5 seconds. Once the timer is at zero, the charger will go back to the start screen when you initially power the unit on, and all your values will be saved. Your values will be saved when you shut down the charger and turn it back on. **NOTE:** If you do not hold the button for 5 seconds, all settings will not be saved that you have just changed.

16. After all the settings have been set, connect your battery bank to one of DC outputs. Have the positive terminal on the battery bank go to a + and the negative terminal go to a – on the DC terminal block.

Viewing the technical manual for the SMC Battery Charger

1. In a browser, type in our website: www.rwy.com

2. Click on the **Products** tab, located on the top of the webpage.

3. Find **Battery Chargers & Batteries** and click on learn more.

4. Find the **SMC Battery Charger** and click on it.

5. On the left side of the screen, find **Download Manual**, click on that and you will now be able to view the technical manual for the SMC Battery Charger.