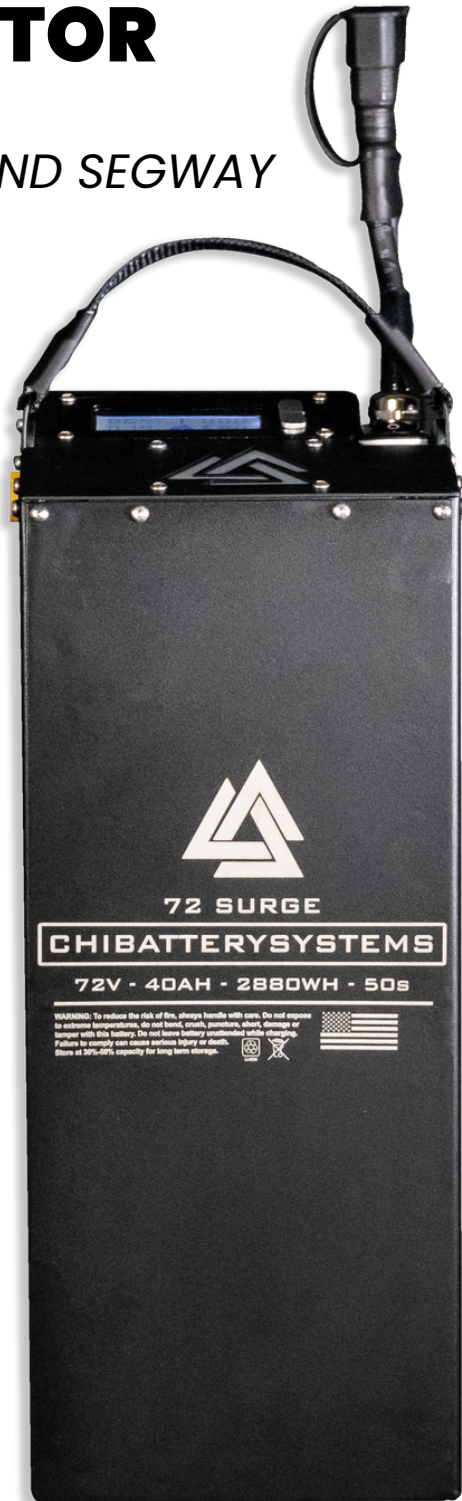


000
CHIBATTERYSYSTEMS

**THE GLADIATOR
SERIES**

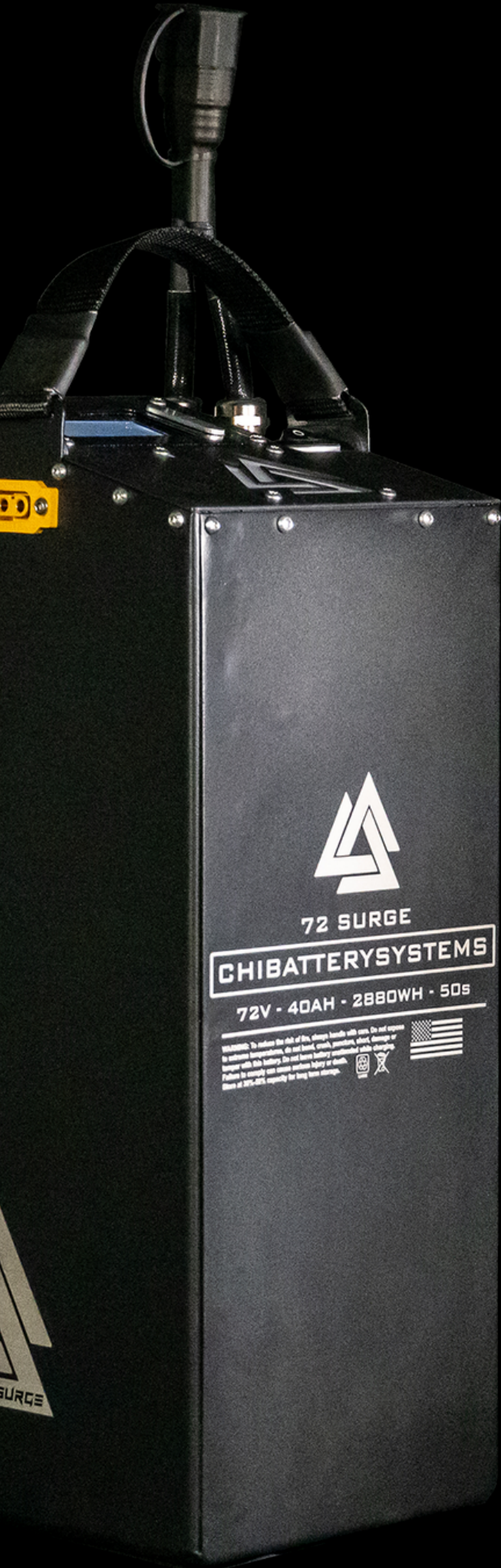
FOR THE SUR RON AND SEGWAY



72

SURGE

INSTRUCTIONAL GUIDE



SPECS

AH	40Ah
WH	2880
CONT. AMPS	200
PEAK AMPS	360
CONT. POWER	15KW
CHARGED VOLT	84V
VOLT CUT OFF	58V
CELL	50S

For technical and support questions please reach out to Support@Chibatterysystems.com

FOLLOW US



@chibatterysystems

WHAT'S IN YOUR HARDWARE KIT



RUBBER BLOCK

X1

USE THIS FOR ADDED SECURITY WHEN RIDING. APPLY TO THE TOP OF YOUR SUR RON LID TO COMPRESS ON TOP OF THE BATTERY TO HOLD IT IN PLACE.



TOUCH UP PEN

X1

THE TOUCH UP PEN ALLOWS YOU TO CLEAN UP ANY SCUFFS OR SCRATCHES ON YOUR BATTERY THAT MIGHT OCCUR WHEN RIDING.

INSTALL

**THE 72 SURGE IS A DROP IN BATTERY!
NO ADDITIONAL PARTS OR
MODIFICATIONS REQUIRED. SIMPLY
INSTALL AS YOU WOULD WITH YOUR
STOCK BATTERY**



BATTERY HEALTH

Low voltage cutoff: If you are using an aftermarket controller, make sure to properly set the low voltage cutoff to protect your battery from draining to the point of no return.

- 60V Gladiators: The lowest we recommend is 46.4V, which is 2.9V per cell group.
- 66V Gladiators: The lowest we recommend is 52.2V, which is 2.9V per cell group.
- 72V Gladiators: The lowest we recommend is 58V, which is 2.9V per cell group.

Storing your battery: Batteries should be prepared for storage based on voltage, not percentage. They should be stored near nominal voltage and periodically checked and charged to ensure they remain within the following ranges:

- 60V Gladiators: between 54.4V–57.6V
- 66V Gladiators: between 61.2V–64.8V
- 72V Gladiators: between 68V–72V

Keep your battery in a dry, temperature controlled environment during periods of storage. Storing your battery near 0% or 100% can result in permanent degradation and damage.

Balance charging: Balance charging can be a preventative measure – it keeps the voltage difference between cell groups to a minimum and helps counter major imbalances before they can occur. We recommend performing a 48 hour balance charge every few months.



SMART BMS

Click iOS or Android
to Download

**SURGE BATTERIES AFTER 4/1/2024 NOW USE
A NEW APPLICATION FOR THE SMART BMS**

[iOS](#)
[Download](#)

[Android](#)
[Download](#)

Your battery will arrive with all necessary settings preconfigured in the app. There are no changes needed within the smart BMS to begin use. Changes made in the app will affect the battery, so we only recommend adjusting settings if you are confident to do so. Every once in a while you will want to make sure everything is balanced and within tolerance. Cell levels should stay even, but as your battery is used there will be some variation. If you have any questions please reach out to our support team!

SEE BELOW FOR BATTERIES BUILT BEFORE APRIL 2024

[iOS](#)
[Download](#)

[Android](#)
[Download](#)

To connect to the app for the first time, you will want to make sure your Gladiator is plugged in and charging. Once this is achieved, you should be able to find your device in the app. To select the correct view, you will want to choose "single cell" when first entering the app.

The only things you will need to use within the app are the **voltage**, **temperature**, and **cell levels**. Other aspects of the app will give incorrect readings, so don't be alarmed if your app looks like it's giving strange readings, such as the amount of cycles.

READING YOUR SMART BMS CELL LEVELS

You will find your individual cell levels under the name *Battery Strings*. Every once in a while you will want to make sure everything is balanced and within tolerance. Cell levels should stay even, but as your battery is used there will be some variation. If you have any questions about cell level differences please reach out to our support team!

CONFIGURATION GUIDE

COMES PRE-CONFIGURED

BACKLIGHT CONTROL:

While on the main screen, press the bottom button to toggle the backlight on or off.

CLEARING THE CURRENT (A) AND WATT (W) READING:

While on the main screen, hold the bottom button for approximately one second before releasing it. This will reset the current (A) reading to zero.

SETTING THE PARAMETERS OF THE BATTERY AND THE FAULT ALARMS:

While on the main screen, press the top button to access the settings menu. The top button can now be pressed again to cycle through the following parameters:

"AH XXX.X": Rated capacity (amp-hours) of the battery

"FU XXX.X": Voltage of the battery once fully charged

These are used to calibrate the capacity readings on the main screen.

"HU XXX.X": Overvoltage alarm

"LU XXX.X": Undervoltage alarm

"HA XXX.X": Overcurrent alarm

These will cause either the voltage or amperage reading to flash if their respective conditions are met while riding. A setting of "000.0" will disable the alarm.

Once the desired parameter is selected, the bottom button can be pressed to increase the highlighted number by one. Waiting five seconds after changing a number will automatically skip to the next variable in the sequence.

To save any changes made, hold the top button for approximately one second before releasing it. If performed correctly, the screen will flash and the settings will be saved.

DISPLAY GUIDE

Gladitator must be **CHARGED TO FULL** before first use to calibrate your display.

To maintain accurate capacity (AH) and percentage (%) readings leave the screen on while riding and when charging* The screen is unable to detect changes to capacity when off.

*Your display recalibrates every time you charge it to full, regardless if it is on or off. It only needs to remain on during charging if you are not charging all the way.

If you forgot to turn your display on during your ride and the percentage / capacity is not accurate, charging to full will resolve it. Your Voltage (V) will always be accurate no matter what.

Your display will come preconfigured so there is no need to do anything on your end. If you are curious about configuration, or accidentally set something you did not mean to, please refer to the configuration page.

The new display is meant to give you a more in-depth experience with your battery. With Voltage, Amp Hours, Watts, percentage, Amps, and temperature readings readily available, you can be totally in-sync with your battery.

ABOUT THE DISPLAY

