

RIDE CONTROL APP USER GUIDE

This mobile app is compatible with the CYC
X-Series Controllers

CYC MOTOR

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OVERVIEW

The CYC Ride Control app is the official mobile app paired with the CYC Gen 3 technology. Use it as a secondary dashboard, settings set-up, or both. Unleash all the possibilities of ebike customization at your fingertips.

With advanced features, you can adjust your performance sensitivity, power, torque, and peripherals.

Pair the mobile app with any X-Series controller. When connected wirelessly, your ebike experience will now be integrated more than ever.

FEATURES

- Wireless connectivity
- Torque sensor configuration
- Compatible with CYC X-Series Controllers
- Real-time dashboard for all your motor and riding information
- Fully customizable parameters for pedal assist, throttle, and gear preferences

This platform is your go-to station for your CYC kit and X-Series controller.

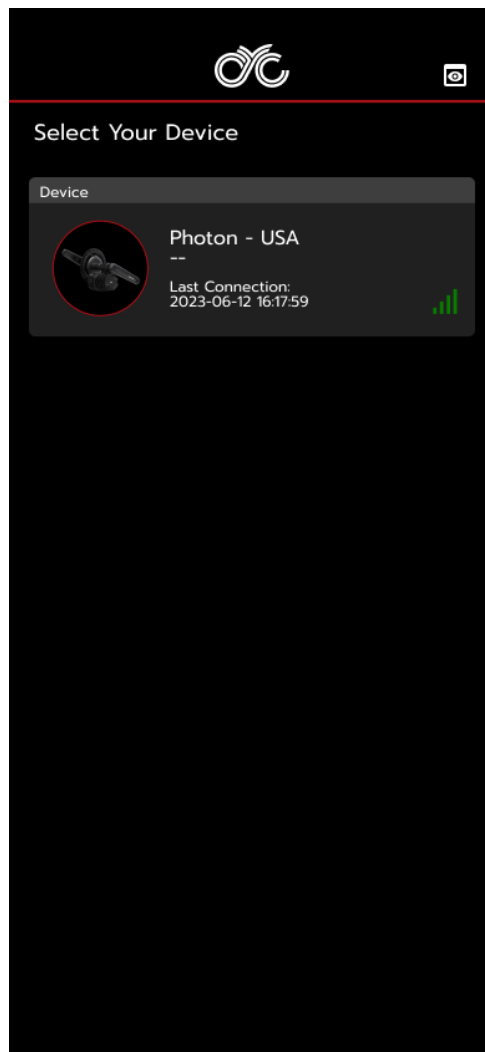




CONNECTING A DEVICE

STEPS

1. Open the app and tap the Search button at the bottom of the screen. Kindly ensure your phone's wireless system is enabled. (Please keep close to the motor while connecting)
2. Available devices will then be listed, select your kit and it will begin connecting to the controller. (Please note signal strength)
3. Once connected, the CONNECT icon will change stating you are connected & can select again to disconnect.

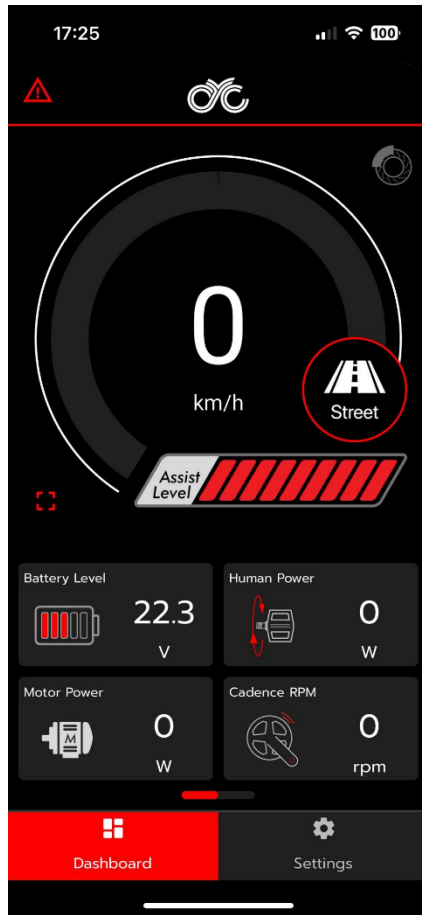




DASHBOARD



Warning icon to check error codes and clear faults



Switch to **LANDSCAPE** mode

Change between **DASHBOARD** and **SETTINGS**

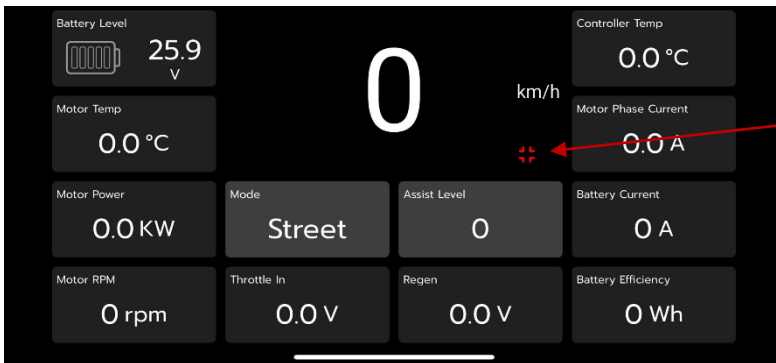
Instantly swap between **STREET** and **RACE** mode

REAL-TIME DATA

Motor Rpm	0 rpm	Controller Temp	51.7 °C
Motor Temp	85.5 °C	Throttle In	3.4 V
Input Current	0 A	ODO	0 km

**Swipe for more information*

LANDSCAPE MODE



Switch back to **PORTRAIT** mode



You can still change your mode in **LANDSCAPE MODE**

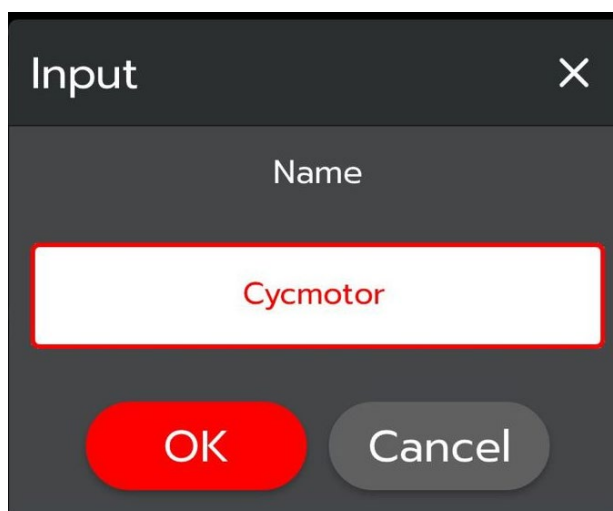
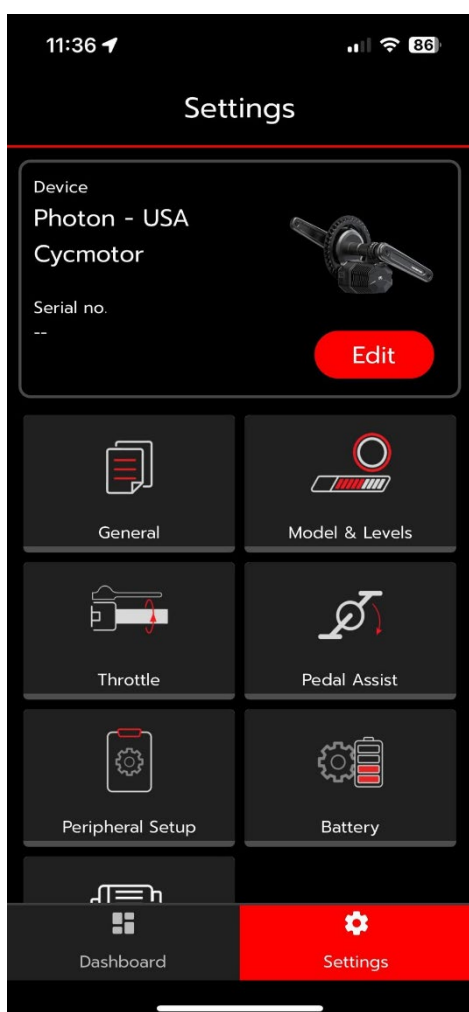


MAIN SETTINGS

The settings page allows you to navigate through different parameters. There are seven different categories each providing adjustable settings or readings from your ebike system.

IMPORTANT: Save all new changes or risk losing progress after a restart.

To save, tap the 'Save' button in the upper righthand corner. The 'Save completed.' Message will appear after saving successfully.



CUSTOMISE DEVICE NAME

Easily identify your kit by renaming your bike. Your bike's custom name is specific to you.

This means that if another person connects to your bike, it will not show the customized name you've set.



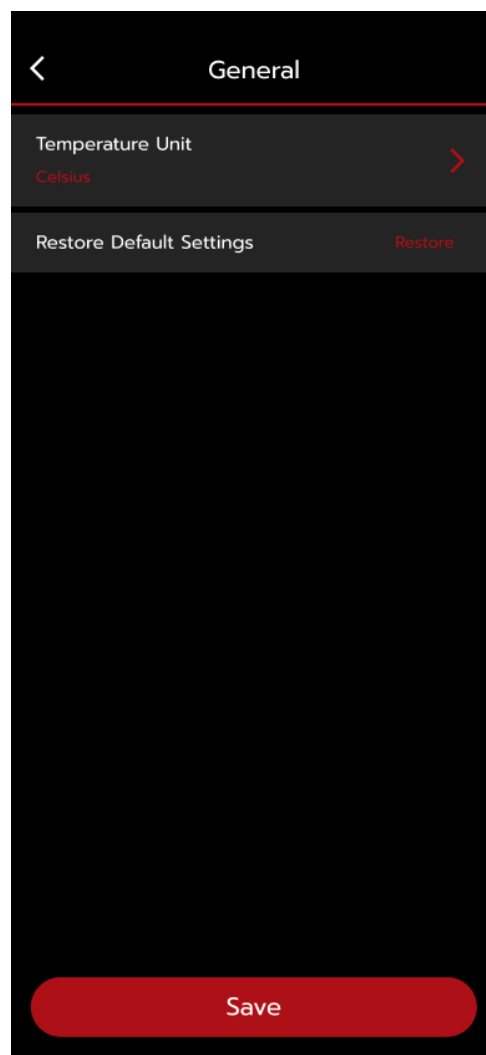
GENERAL

Temperature Unit

Set your units to display in degree Celsius (°C) or Fahrenheit (°F).

Restore Default Settings

Restore to factory/default settings.





MODES & LEVELS (GEN 3/4)

Race & Street Mode

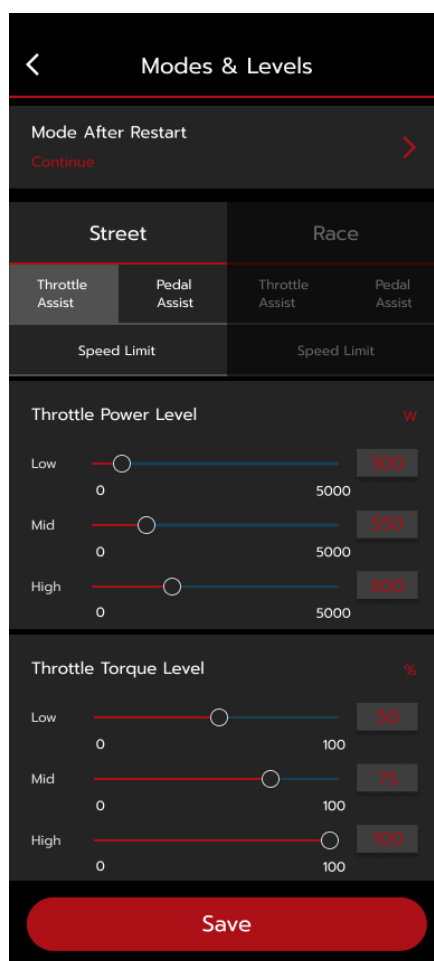
You can set the throttle & PAS output independently for both modes.

Race Mode Throttle & PAS

Race Mode is your “boost” or “full power” mode and has parameters set for reaching closer to the system’s full capabilities. You can adjust these to your own preference within the capabilities of your controller and battery.

Street Mode Throttle & PAS

Street Mode is intended to be set to your region’s legal limits. You can adjust these to your own preference or to your region’s legal limits. You can adjust these to your own preference or to your region’s legal limits.





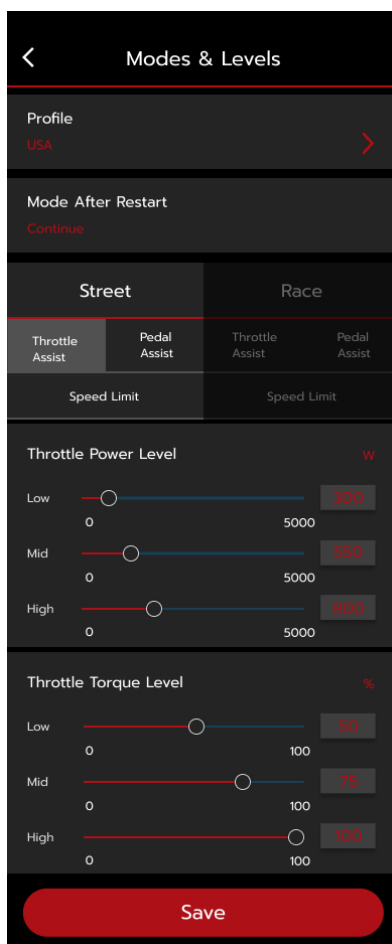
MODES & LEVELS (PHOTON)

Profile (Photon)

You can select different region's legal limits default settings.

Mode After Restart

You can select in which mode your kit will be in when you switch it on. Select it to continue in the mode you left off or select Race or Street mode.

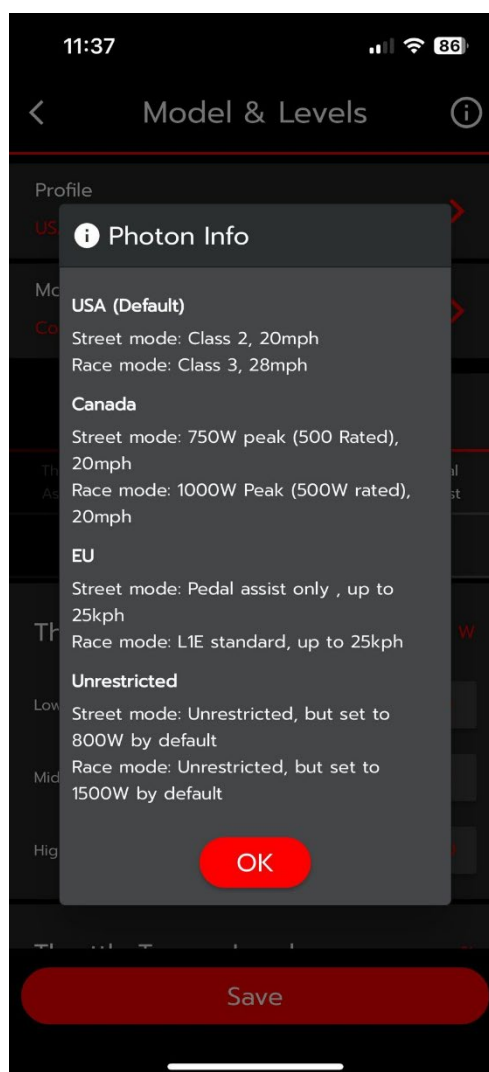
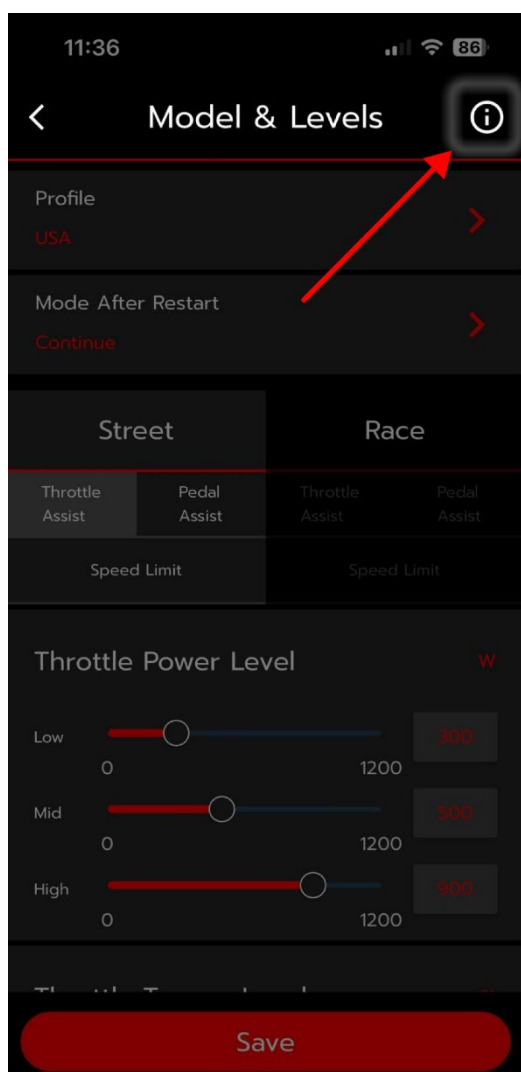




SELECTING POWER PRESETS (PHOTON)

For Photon kits, you can choose between different presets based on your region. You can find this under *Modes & Levels*, by selecting *Profile*.

Then save your settings to avoid losing progress.





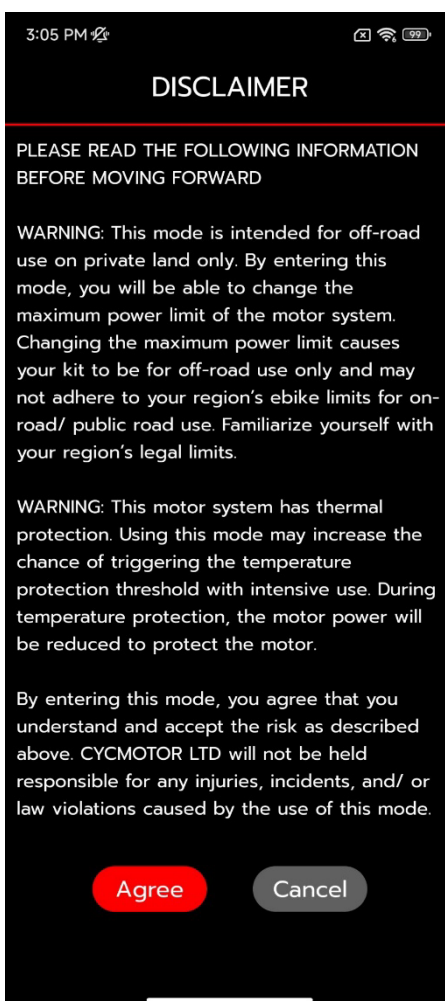
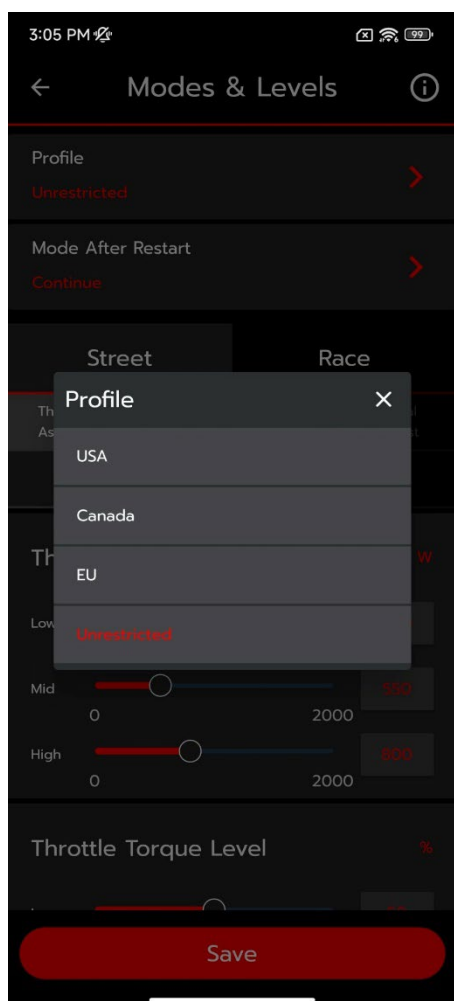
UNRESTRICTED MODE (PHOTON)

To access *Unrestricted Mode*, select *Profile* under *Modes & Levels*, then select *Unrestricted*.

You will need to read the disclaimer before agreeing to use this mode. Save your settings to avoid losing progress.

WARNING:

Entering **UNRESTRICTED** mode causes your kit to be for **off-road use only** and may not adhere to your region's ebike limits for on-road/public road use. We recommend you to familiarize yourself with your region's legal limits.





THROTTLE

Ramping Time

This is the time it takes for the motor to achieve the required input. For example, if you open the throttle fully, it will take 250ms (by default) before the motor gives you full power. It will gradually ramp up to full power within the set time. We recommend not setting this below 150ms.

Input Deadband

This value pertains to opening the throttle when it's completely closed. This is the amount of throttle can be moved from the zero position without generating a response from the motor. If this value is set lower, your throttle will engage quicker and vice versa.

Throttle Calibration

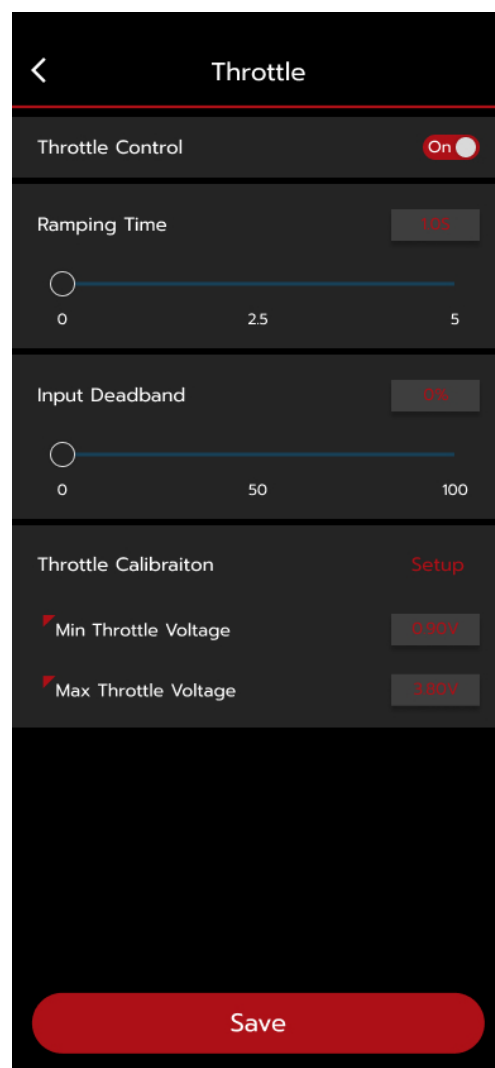
For using your own throttle, this will automatically setup the min and max voltage accordingly. Follow the steps prompted on the screen to set up.

Min Voltage

This is the output of the throttle when opened fully and is pre-set when purchased. This does not need any change with CYC supplied throttles.

Max Voltage

This value should be the same as the Throttle Voltage Reading when the throttle is closed and sets the output when it is not active.





PEDAL ASSIST

The CYC pedal assist system allows users to customize motor assistance based on torque unit, with 0% requiring only 50 N.m. This means that at 100% assistance, when you pedal with 50 N.m. of torque, the system delivers maximum assistance according to your power mapping settings, maintaining that level until it reaches the power limit. The percentage settings correspond to a torque range, where each 1% equates to a 1 N.m. change, enabling users to adjust how much effort they need to exert to achieve desired motor support. Unlike many systems that directly link human power to motor output, our system is designed to flexibly map pedal input to motor behaviour, allowing for a tailored riding experience.

Pedal Assist Sensor

Enable or disable pedal assist.

Torque Sensor Sensitivity

This value pertains to activating pedal assist when it's completely off. This is the amount of pedal force required to activate the pedal assist. If this value is set higher, your pedal assist will engage with less force and vice versa.

Power Ramp Up Time

The amount of time it takes to reach the desired input. This is the responsiveness of the motor.

Motor Assist Factor

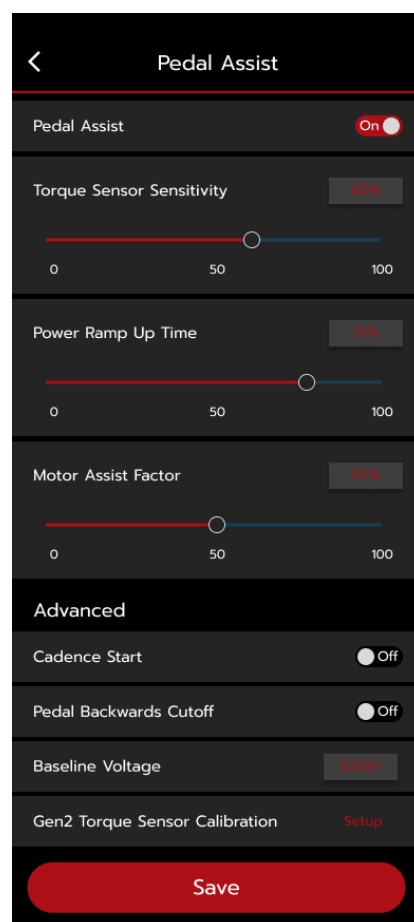
This value pertains to how hard you need to pedal to get full power.

Cadence Start

This feature allows for a cadence-free pull away. i.e., only torque (40N.m.) is required to activate pedal assist.

Pedal Backwards Cutoff

This feature allows you to cut motor power when you pedal backwards.





Baseline Voltage

The baseline voltage is for Gen 2 kits only. We advise not to change this setting or risk damage to your motor kit.

Gen 2 Torque Sensor Calibration

Configure your X1 Pro Gen 2 or X1 Stealth Gen 1 kit's torque sensor to improve performance of the X6 controller.



PERIPHERALS SETUP

Wheel Magnet

This is the number of magnets in the wheel that is communicating with the speed sensor. For more accurate vehicle speed limiting and measurement, we advise to add more magnets to the wheel.

NOTE: Please set up wheel settings via the display for accurate speed readings.

Brake Sensor

Enable/Disable brake sensors.

Invert Brake Sensor Signal

If you are using brake sensors from a different supplier, you can use this feature to set up your brake sensors as needed.

WARNING: Please contact your authorized distributor or CYC support if you're setting up third-party peripherals.

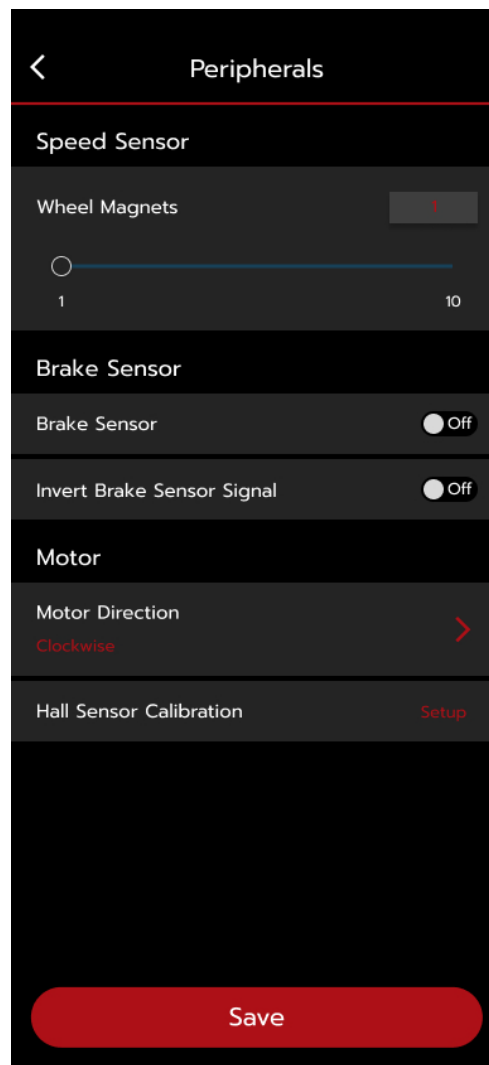
Motor Direction

This setting is for users who'd want to switch the direction to where the motor is facing. Please note that this is reserved for specific uses only.

WARNING: Do not change this setting without consulting with CYC or authorized distributors as it changes the motor direction from its default position.

Hall Sensor Calibration

This setting accurately assesses the position and speed of the motor's rotor. During setup, the motor will turn slowly for calibration, please lift the back wheel while calibrating.





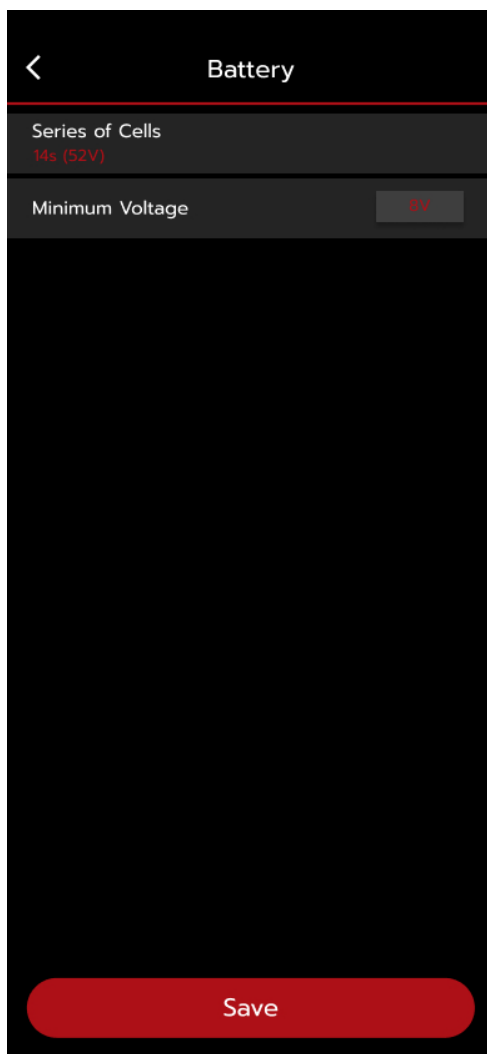
BATTERY

Series of Cells

The nominal voltage of your kit will be the voltage advertised or specified upon the purchase of your battery. This value refers to the numbers of cells inside your battery and is presented as the nominal voltage of your pack. Your kit is pre-set to 52V but you can change this at any time via the app or on your display.

Minimum Voltage

The value the controller will fault when connecting too low a voltage to the system. This setting can be used to protect your battery if too much voltage sag is detected.





For improved battery life use, we encourage you to refer to our recommended cut off voltages below:

Samsung 50S cell nominal voltage	3.6
Recommended app settings	3.2

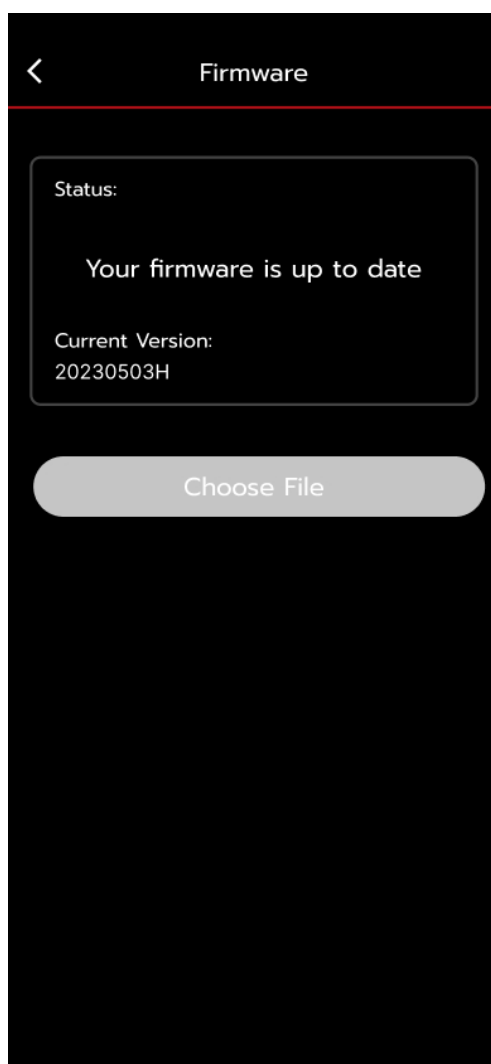
Cell Count	Nominal Voltage	Recommended App Settings
10	36V	32V
11	40V	35V
12	43V	38V
13	47V	42V
14	50V	45V
15	54V	48V
16	58V	51V
17	61V	54V
18	65V	58V
19	68V	61V
20	72V	64V



FIRMWARE UPDATE

To update firmware, go to *Firmware Update* and press *Update* for the app to automatically download the latest version of the kit controller.

To select a specific firmware version, press *Choose File* and update accordingly.





BATTERY INFORMATION

Please note that the Maximum Power Level **MUST** be changed in the CYC Ride Control App to match your battery's specifications. Follow the guidelines below:

Battery Voltage	BMS	Motor Power Limit
72V	50A	3600W
72V	40A	2800W
72V	30A	2000W
60V	50A	3000W
60V	40A	2400W
60V	30A	1800W
52V	40A	2000W
52V	30A	1500W
48V	50A	2400W
48V	40A	1900W
48V	30A	1400W
36V	40A	1400W
36V	30A	1000W
36V	20A	700W

**Failure to set power settings correctly through the CYC Ride Control app may cause damage to the battery and/or motor.*



DEFAULT SETTINGS INFORMATION (PHOTON)

Peak Limit & Default Settings	USA	Canada	EU	Unrestricted
Street PAS	1200W Low 300W, 50% torque Mid 550W, 75% torque High 800W, 100% torque	1000W Low 300W, 50% torque Mid 550W, 75% torque High 750W, 100% torque	750W Low 300W, 50% torque Mid 550W, 75% torque High 750W, 100% torque	2000W Low 300W, 50% torque Mid 550W, 75% torque High 800W, 100% torque
Street Throttle	1200W Low 300W, 50% torque Mid 550W, 75% torque High 800W, 100% torque	1000W Low 300W, 50% torque Mid 550W, 75% torque High 750W, 100% torque	Disabled	2000W Low 300W, 50% torque Mid 550W, 75% torque High 800W, 100% torque
Street Speed Limit	32kph	32kph	25kph	100kph
Race PAS	1200W Low 500W, 50% torque Mid 850W, 75% torque High 1200W, 100% torque	1000W Low 300W, 50% torque Mid 750W, 75% torque High 1000W, 100% torque	1000W Low 300W, 50% torque Mid 750W, 75% torque High 1000W, 100% torque	2000W Low 500W, 50% torque Mid 1000W, 75% torque High 1500W, 100% torque
Race Throttle	1200W Low 300W, 50% torque Mid 850W, 75% torque High 1200W, 100% torque	1000W Low 300W, 50% torque Mid 750W, 75% torque High 1000W, 100% torque	1000W Low 300W, 50% torque Mid 750W, 75% torque High 1000W, 100% torque	2000W Low 500W, 50% torque Mid 1000W, 75% torque High 1500W, 100% torque
Race Speed Limit	45kph	32kph	25kph	100kph



DISCLAIMER

If you require any more information or have any questions about the app user guide disclaimer, please contact us via email at technical_support@cycmotor.com.

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