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Cycle Satiator Programmable Charger - Quick Start Guide

Advantages of using the Cycle Satiator charger:

- Graphical OLED display: Provides realtime and historical information
- Select from multiple charging programs
- Fast charge setting: Up to 70% faster than the stock charger
- Partial charge setting: Dramatically improve battery lifespan
- Watertight, Vibration resistant and fan-less design: made to be carried on the bike
- Programmable and Firmware upgradable



How to use the Cycle Satiator for the First time:

- 1. Plug the AC cable into the AC Input Jack of the Charger.
- 2. Connect the DC Output Cable into the Charger and turn the outer ring clockwise to lock the connector in place.
- 3. Plug the AC Cable into an electric outlet. The charger will power up.
- On the <u>first charge</u>, push the lower button for 3 seconds. The Display Screen will show "FORCE START"
- 5. Plug the 4 pin connector into the battery.
- 6. Check the display to see if the Charger is charging.

If the charger is not charging, Disconnect the charger from the bike and try again from Step 4. The charger may not start if the battery is already full.

Selecting a Charging Profile:

- 1. Disconnect the charger from the battery
- 2. Hold the upper button for 3 seconds and release to enter the list of charging profiles
- 3. Use the upper and lower buttons to scroll through the list of 5 charging profiles.
- 4. To enter a particular charging profile, hold the lower button for 3 seconds.
- 5. Connect the battery and the charger will start charging

#1. Normal Charge Setting

#01	NORMAL	48V
	CHARGE	100%
	54.2 V	4.0 A

#2. Partial Charge Setting

#02 PARTIAL	48V
CHARGE	80%
51.8 V	3.0 A

Use this setting to charge the battery normally. This is the default charge setting used to fill the battery to approximately 97-100% capacity.

Use this setting to extend the lifespan of the battery pack. The charger will charge the battery to approximately 80% capacity with a reduce charging speed.

Charging to 80% can extend the life cycle of the pack by up to 2x. The disadvantage is roughly 20% reduced riding range. Studies

have shown that charging to 80% gives the best overall lifespan without sacrificing too much of the pack's range.

#3. Slow Charge Setting

#03 SLOW	48V
CHARGE	100%
54.2 V	2.0 A

The charge current will be reduced by half. Use this setting when you want to reduced the power demands on the electric outlet, for example when charging with a solar power system. A slower charge setting can also slightly increase the lifespan of the battery.

#4. Fast Charge Setting

#04 FAST	48V
CHARGE	100%
54.2 V	5.0 A

Use this setting when you need to charge at maximum speed. It is useful when you need to get the charge back into the battery as quickly as possible such as in a delivery/rental fleet situation or on long e-bike road trips.

#5. Storage Charge Setting

#05 STORAGE	48V
CHARGE	50%
49.3 V	3.0 A

Use this setting when you need to store the battery for long periods of time. It is recommended to charge the battery at least once every 3 months to maintain the health of the battery. The charger will charge to approximately 50% capacity -the ideal level for storing the battery pack.

Another option for storing the pack is to leave the charger connected to the battery and the electric outlet as the charger will automatically trickle charge the battery to maintain approximately 50% charge level.

Factors that will decrease the number of charge cycles:

All lithium battery packs loose capacity over time. Each charge and discharge cycle will reduce the pack's capacity by a small amount. However some activities can reduce how quickly the pack degrades.

- Charge the battery to 80% charge or less. Charge to 100% only when needed.
- Store the battery at 50% charge when not used for extended periods of time.
- Use slower charging rates when practical
- Avoid discharging the pack below 20% charge when possible.
- Charge and discharge the pack at least once every 3 months
- Avoid storing the pack in high temperatures
- Avoid using high discharge currents for extended periods of time.

Warnings:

- The body of the charger will get warm during the charging phase.
- The battery can only accept a charge up to 5A. The Battery's management system will actively shut down any charging activity if the charge current exceeds 5A.
- Do not program the charger to charge the pack above 54.6V.
- Do not attempt to charge from the discharge port.
- Do not charge in wet environments.