



OWNERS MANUAL

Charging Batteries – Flat type - Li-ion

Safety Precautions

- Do not use damaged components – consult your authorised SR SUNTOUR Dealer immediately for replacement parts.
- **Use only genuine SR SUNTOUR Batteries and Chargers with your bike, anything else invalidates your warranty and may cause irreparable harm.**
- Use only a power source rated at 100-240 volts AC.
- Do not use the battery with other appliances or charge other batteries with the charger.
- Do not throw the battery into a fire.
- Keep the area where the battery is charged well ventilated. Keep it free from litter and anything combustible to avoid fire from sparks or overheating.
- If you notice a strange smell or smoke, **switch off** the power immediately! Take your battery and charger to your authorized dealer for service or replacement.
- Do not rotate the pedals when charging the battery whilst it is mounted on the bicycle. The cord may twist around the pedal or the crank, and damage the cable and or plug. In extreme conditions it may cause an electric shock or fire.
- Place the charger firmly on a flat surface. Using the charger upside-down or stretching the cord tight may result in malfunction, fire or electric shock.
- Do not cover the charger or place objects on it.
- Do not touch the Power Source Plug with wet hands.
- Keep the Power Source Plug clean and free of dust, clean regularly.
- To remove the Power Source Plug from a socket, do not pull the cable, pull the plug.
- Avoid any contact with water when recharging your battery. If a plug or socket does get wet, dry it thoroughly before proceeding.
- If the supply Cord is damaged, it must be replaced by the Manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.
- Do not touch the charger with your skin for long periods during charging. Burning of the skin may result.
- Do not subject the battery or charger to shocks, e.g. by dropping.
- Do not connect positive and negative terminals by using metallic objects; be especially careful when inserting any key to ensure that it is not accidentally inserted into the charger socket on any battery.
- Do not submerge the battery or charger. Soaking either in water may cause irreparable damage.
- Do not disassemble or modify the battery or charger.
- Recharge the battery before each journey, and always recharge it if unused for one month.
- Charge the Li-ion battery indoors at a temperature between 5° C to 35° C. (41°F to 95°F)

- The charger cannot charge a battery when the temperature is over 60° C or under -3° C.
- Do not recharge your battery in direct sunlight or in a very hot environment.
- Be sure to keep pets and small children away from the area where you are recharging.
- Do not recharge the battery continuously for more than 24 hours. This could seriously reduce the life of the battery.
- Be sure to insert the Power Source Plug fully into a wall socket.

HOW TO CHARGE

Use only for charging your SR SUNTOUR battery only. To charge the battery, just follow the simple steps below:

Step 1 – Unlock the battery by using the key & take the battery out of the bike.

Step 2 – Plug the charger plug into the connector socket located on the side of battery.

Step 3 – Connect the charger to the battery. (Make sure the pins are aligned)

Step 4 – Plug charger to a power socket (AC100V-240V).

Charging a battery takes around 5 hours depending upon the state of charge.

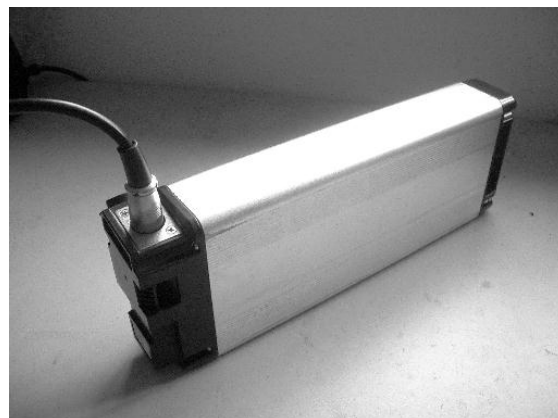
- **Li-ion battery Charger (Model Name: NC-SSC07ST) can only charge the following battery pack:**
 - Battery MODEL 10UR18650E-4 (36V/7400mh)



Lithium-ion Battery Charger

Charger LED indicators:

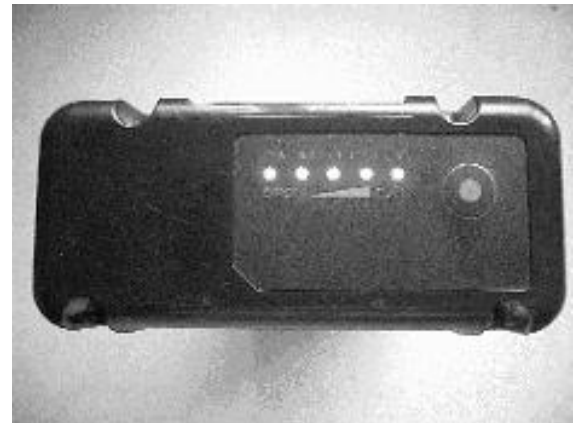
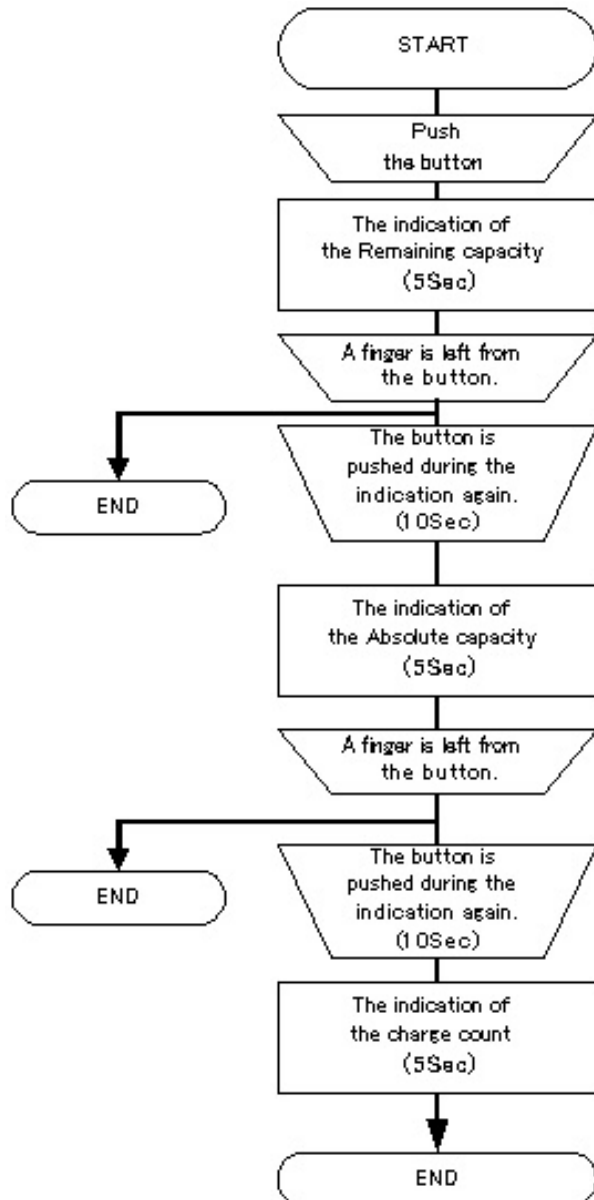
LED status	Condition of the charger
OFF	Full Charge / No Battery
RED TURN ON	Charging process
GREEN TURN ON	After fully Charged
RED BLINK	Abnormal Condition (Battery)
Bi-color BLINK	Abnormal Condition (Charger)
GREEN BLINK	Temperature Waiting Time



LED Battery Status Indicator

The LED status indicator on the battery pack can indicate the condition of Remaining capacity, Absolute capacity and Charge count.

That operation is as mentioned in the following chart:



Remaining capacity

Remaining capacity is the “fuel gauge” of the battery.

Absolute capacity

Absolute capacity is the comparison of typical full charging capacity and Actual full charging capacity. With this, a user can know the overall condition of the battery.

Charge count

Charge count is the number of times the battery has been charged.

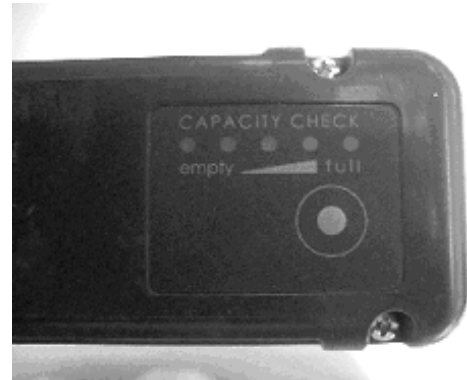
Quick check is possible by referring the flow chart as shown left.

LED indication lights

The information is expressed in the following formats.

● Remaining capacity

LED Indicator	Remaining capacity
E ●●●●●● F	100 - 80 %
E ●●●●○ F	79 - 60 %
E ●●●○○ F	59 - 40 %
E ●●○○○ F	39 - 20 %
E ●○○○○ F	19 - 10 %
E ◎○○○○ F	9 - 3 %
E □○○○○ F	2 - 0 %
○ OFF	
● ON	
◎ Slow Blink	
□ Fast Blink	



● Absolute capacity

LED Indicator	Absolute capacity
E ○●●●●● F	- 80 %
E ○●●●◎ F	79 - 70 %
E ○●●●○ F	69 - 60 %
E ○●●◎○ F	59 - 50 %
E ○●●○○ F	49 - 40 %
E ○●◎○○ F	39 - 30 %
E ○●○○○ F	29 - 20 %
E ○◎○○○ F	19 - 0 %
○ OFF	
● ON	
◎ Slow Blink	

● Charge count

LED Indicator	Charge count
E ◎○○○○ F	0 - 49
E ●○○○○ F	50 - 99
E ●◎○○○ F	100 - 149
E ●●○○○ F	150 - 199
E ●●◎○○ F	200 - 249
E ●●●○○ F	250 - 299
E ●●●◎○ F	300 - 349
E ●●●●○ F	350 - 399
E ●●●●◎ F	400 - 449
E ●●●●● F	450 - 499
○ OFF	
● ON	
◎ Slow Blink	

Battery Range

(1) Factors affecting Range

The following table shows the A-Y - the many factors that affect battery range.

A	Ambient Temperature of Battery when charging (lower = better)
B	Ambient Temperature of Battery when not in use (higher = better)
C	Ambient Temperature of Bike in use (higher = better)
D	Battery Age (newer = better)
E	Battery charge cycles (number of time charged)
F	Battery Condition (state of charge)
G	Battery Recovery Time (how soon after last journey)
H	Battery Storage (cool, dry place recommended)
I	Brake usage
J	Driver ability
K	Driver concentration (inadvertently braking with the throttle open)
L	Driving techniques
M	Condition/repair state (a well-serviced bike improves range)
N	Obstacles on journey
O	Speed – Average
P	Speed – Variability
Q	Terrain – Slope
R	Terrain – Surface
S	Terrain – Variability
T	Traffic conditions (including vehicles, pedestrians and cyclists)
U	Tire condition (regularly check for damage)
V	Tire Pressure (always keep within recommended range)
W	Weight of driver
X	Wind direction
Y	Wind speed

(2) Maximising the Range

- Charge the battery at room temperature 0°C to 40° C. (32°F to 104°F).
- Discharge the battery as much as possible before recharging.
- Use your gears. Downshift when accelerating or riding uphill.
- Don't ride with under-inflated tires and keep the chain clean and well lubricated.

(3) Battery Life

- If used and maintained properly it should last 300-500 charging cycles.
- Do not recharge the battery continuously for more than 24 hours. This can seriously reduce the life of the battery.
- If the range per charge becomes too short, the battery's life may have come to an end. Replace the battery with a new one from your Authorised SR SUNTOUR Dealer.

(4) Extended Storage

- Fully charge the battery.
- Recommended storage temperature: -20°C to 35°C (-4°F to 95° F)
Charge the battery every 3 months.

Precautions for use of the battery

1. Precautions for use of the battery in a cold climate

Charge and discharge are the effects of a chemical reaction inside the battery. The capacity of a battery declines in cold weather because the chemical reaction isn't as active when the temperature is low. The mileage of E-bikes then often becomes shorter in this case but note the cause of this phenomenon is not battery failure. We advise when riding in colder conditions that you store the battery inside (more than 10°C) when you are not riding. We also recommend that you charge the battery indoors where the temperature is higher.

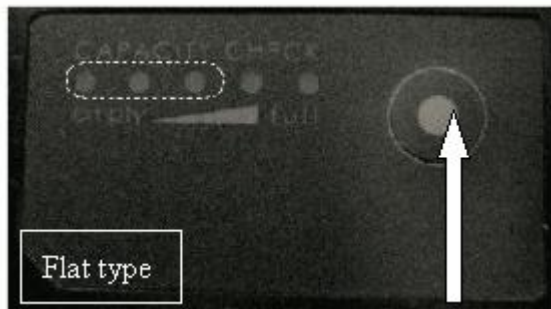
2. Precautions for long term battery storage

Remaining capacity decreases even if you don't use the battery, because the chemical reaction continues and then a protection circuit becomes active. Our advice regarding long-term storage is as follows.

- 1) When a battery is kept in the fully charged condition for a long time, the battery suffers some damage. Try to keep the battery in a capacity condition that 3 LEDs of the remaining battery capacity indicator are turned on.
- 2) When the battery is completely discharged for a long time, the battery suffers damage. Check the remaining capacity with the LED indicator every 3 months. If, when checking the remaining-capacity status, only one or two of the LED's are lit, charge the battery until 3 LEDs are lit.
- 3) DO NOT leave a battery in high temperature environment. When temperature is high, chemical reaction becomes more active, and the remaining capacity

decrease rapidly. Keep the battery in a dry place where it isn't exposed to direct sunlight and the ambient temperature is less than 30°C).

- 4) Store the battery in a plastic bag to prevent a short circuit.



Push the above button to check remaining battery capacity. For long-term storage, 3 lights is ideal. Check capacity every 3 months and re-charge as necessary.