

Battery Charger (EC-E6002)



User's manuals in other languages are available at :
<http://si.shimano.com>

IMPORTANT NOTICE

- Contact the place of purchase or a bicycle dealer for information on installation and adjustment of the products which are not found in the user's manual. A dealer's manual for professional and experienced bicycle mechanics is available on our website (<http://si.shimano.com>).
- Do not disassemble or alter this product.

For safety, be sure to read this user's manual thoroughly before use, and follow it for correct use.

IMPORTANT SAFETY INSTRUCTIONS

SAVE THESE INSTRUCTIONS - This manual contains important safety and operating instructions for SHIMANO STEPS battery charger.

For replacement information, contact the place of purchase or a bicycle dealer.

Be sure to observe the following instructions in order to avoid burns or other injury from fluid leakage, overheating, fire, or explosion.

DANGER

- Do not allow the battery charger to get wet. If it is wet or water is allowed inside, it could cause a fire, ignition, overheating, or electric shock.
- Do not use it while it is wet, and do not touch or hold it with wet hands. An electric shock may occur.
- Do not cover the charger with cloths while it is in use. If this is not observed, heat may build up and the case may become deformed, or fire or overheating may occur.

• Do not disassemble or modify the charger. If this is not observed, electric shocks or injury may occur.

- Use the charger at the specified power supply voltage only. If a power supply voltage other than that specified is used, fire, explosions, smoke, overheating, electric shocks or burns may occur.

• Use the specified battery and charger combination for charging and observe the specified charging conditions. Not doing so may cause overheating, bursting, or ignition of the battery.

• DANGER - TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT USE THIS CHARGER OUT OF U.S.A. AND CANADA.

(This clause applies to users in North America only)

WARNING

- Be sure to hold the power cable by the power plug when connecting to and disconnecting from the electrical outlet. If you do not hold the power cable by the power plug, fire or electric shocks may occur. If the following occurs, stop using the device and contact a dealer. A fire or electric shock may be caused.
 - * If heat or acrid-smelling smoke is coming out from the power plug.
 - * If there is a bad connection inside the power plug.
- Do not touch metallic parts of the charger or the AC adapter if there is a lighting storm. If lightning strikes, electric shocks may occur.
- Do not overload the electrical outlet with appliances beyond its rated capacity, and use only a 100 – 240 V AC electrical outlet. If the electrical outlet is overloaded by connecting too many appliances using adapters, overheating resulting in fire may occur.
- Do not damage the power cord or power plug. (Do not damage, process, let near hot objects, bend, twist or pull them; do not place heavy objects on top or bundle them tightly.) If they are used while damaged, fire, electric shocks or short-circuits may occur.
- Do not use the charger with commercially-available electrical transformers designed for overseas use, as they may damage the charger.
- Always be sure to insert the power plug as far as it will go. If this is not observed, fire may occur.
- Do not insert or remove the plug while it is wet. If this is not observed, electric shocks may result. If there is water leaking out of the plug, dry it thoroughly before inserting it. (Representation in product label.)
- Do not recharge the battery in wet or very humid places, or outdoors. A fire, ignition, overheating, or electric shock may occur.

• If the battery does not become fully charged even 2 hours after the designated charging time, immediately unplug the battery from the outlet and contact the place of purchase. Doing otherwise may cause it to overheat, burst, or ignite.

- When charging the battery while it is installed on the bicycle, do not move the bicycle. The charger's power plug may come loose and not be fully inserted into the electrical outlet, resulting in risk of fire.
- After reading the user's manual carefully, keep it in a safe place for later reference.

CAUTION

- Disconnect the power plug from the electrical outlet and the charging plug from the battery before cleaning the charger.
- During charging, do not let the battery charger touch your skin in one spot for an extended period. Failure to do so may result in a low-temperature burn as the temperature of the battery charger can rise to 40 – 70°C during charging.

• Periodically check the battery charger and adapter, particularly the cord, plug, and case, for any damage. If the charger or adapter is broken, do not use it until it has been repaired by service agent.

• This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved. Children should not play with the appliance. Cleaning and user maintenance should not be made by children without supervision.

- Before using battery charger, read all instructions and cautionary markings on battery charger, battery, and product using battery.

Note

Charge the battery indoors to avoid exposure to rain or wind.

- The battery can be charged within a temperature range of 0 to 40°C. The charger does not work in temperatures outside this range and displays an error. (The LED lamp on the charger blinks.)
- Do not use outdoors or in environments with high humidity.
- Do not place the battery charger on the floor or other dusty places when using it.
- Place the battery charger on a stable surface such as a table when using it.
- Do not place any objects on top of the battery charger or its cable. Do not place a cover on it either.
- Do not bundle the cables.
- Do not hold the battery charger by the cables when carrying it.
- Do not apply excessive tension to the cables and charging plugs.
- In order to prevent the cable from being damaged, avoid wrapping it around the main body during storage.
- Do not wash the battery charger or wipe it using detergents.
- Do not allow children to play near the product.
- When charging the battery while it is mounted on the bicycle, be careful not to trip over the charger cord. This may lead to injury or cause the bicycle to fall over, damaging the components.
- When charging the battery while it is mounted on the bicycle, be careful of the following:
 - Do not remove the battery from the battery mount while charging.
 - Do not ride with the charger mounted.
- Make sure to close the charging port cap after charging. If foreign matter such as dirt or dust adheres to the charging port, there is a risk that the charging plug will not fit into the charging port.
- Products are not guaranteed against natural wear and deterioration from normal use and aging.
- For maximum performance we highly recommend Shimano lubricants and maintenance products.

Charging can be carried out at any time, regardless of the remaining battery, but please fully charge the battery in the following cases:

- The battery is not fully charged at the time of purchase. Before riding, be sure to fully charge the battery.

If the battery has become completely empty, charge it as soon as possible. If the battery is left uncharged, it may cause the battery to deteriorate and become unusable.

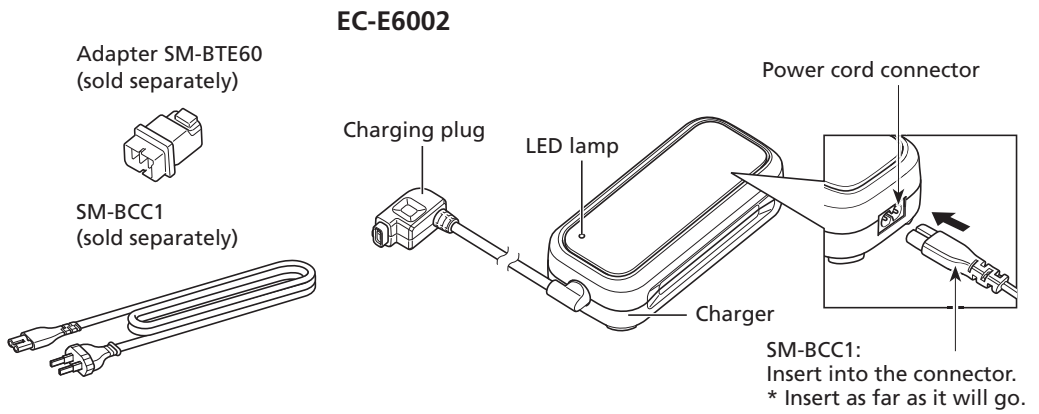
- If the bicycle will not be ridden for a long period of time, store it away with approximately 70% battery capacity remaining. In addition, take care not to let the battery become completely empty by charging it every 6 months.
- Avoid using the battery under conditions which are outside the normal operating temperature range, otherwise the battery may not operate or its performance may deteriorate.
- If the temperature of the battery is high, charging time will increase.

Read this user's manual together with the user's manual for the SHIMANO STEPS.

■ Main specifications

Input	100 – 240 V AC, 1.5 A, 50/60 Hz	
Output	42 V DC, 1.8 A	
Compatible battery	Battery type	Lithium-ion
	Nominal capacity	SHIMANO BT-E6000/BT-E6010/BT-E8014: 11.6 Ah BT-E6001/BT-E8010/BT-E8020: 14 Ah
	Nominal voltage	36 V

Names of parts



Charging method

When charging the battery alone

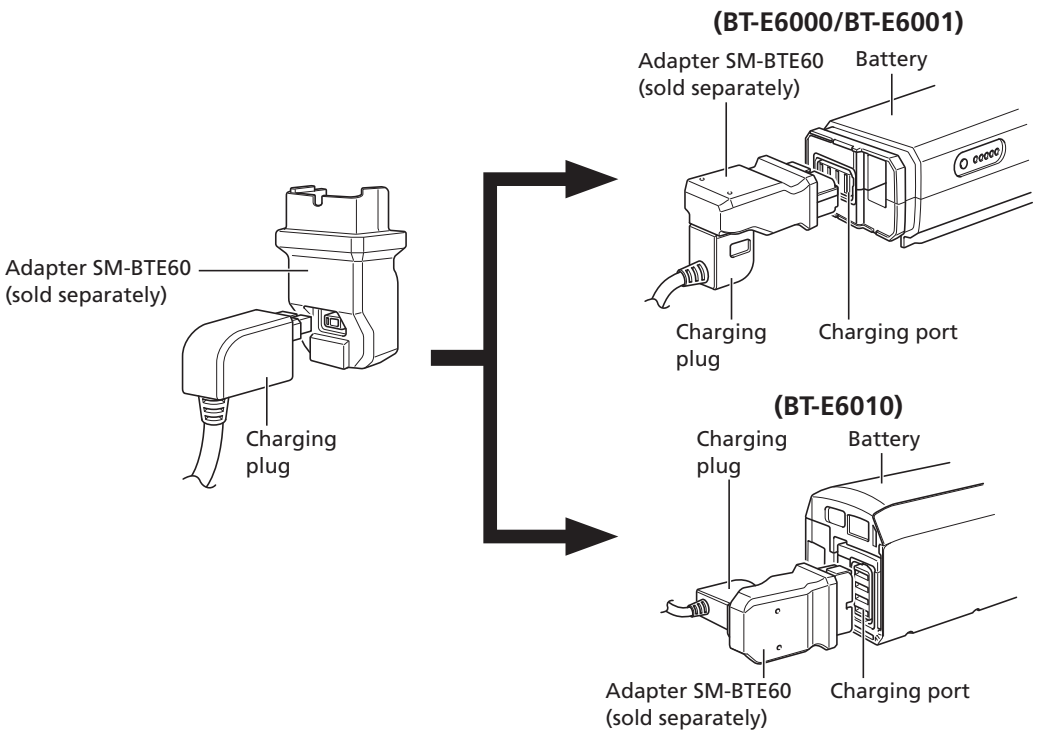
When charging the battery, position the battery and battery charger as shown in the illustration.

* The direction of the battery socket varies depending on the specifications.

(BT-E6000/BT-E6001/BT-E6010)

1. Attach the adapter to the charging plug.
2. Connect the charger's power plug into the outlet.
3. Connect the adapter into the charging port.

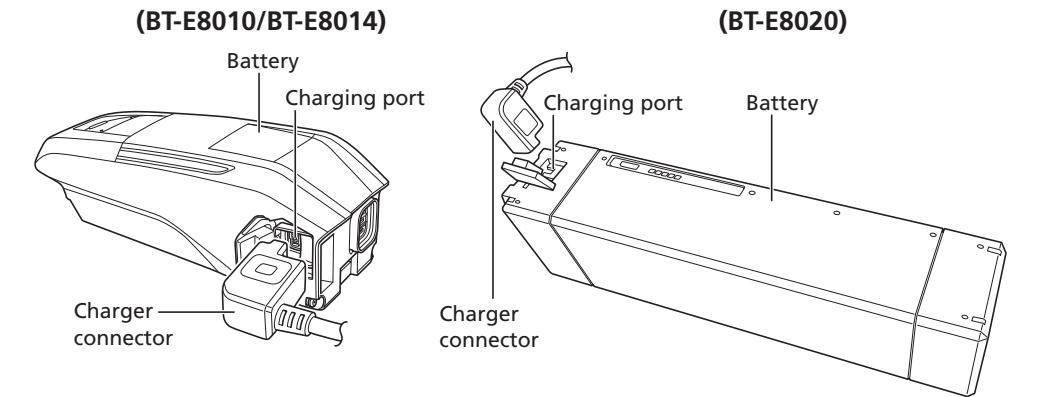
* Charge the batteries on a flat surface indoors.



(BT-E8010/BT-E8014/BT-E8020)

1. Plug the charger's power plug into the outlet.
2. Plug the charging plug into the charging port.

* Charge the batteries on a flat surface indoors.



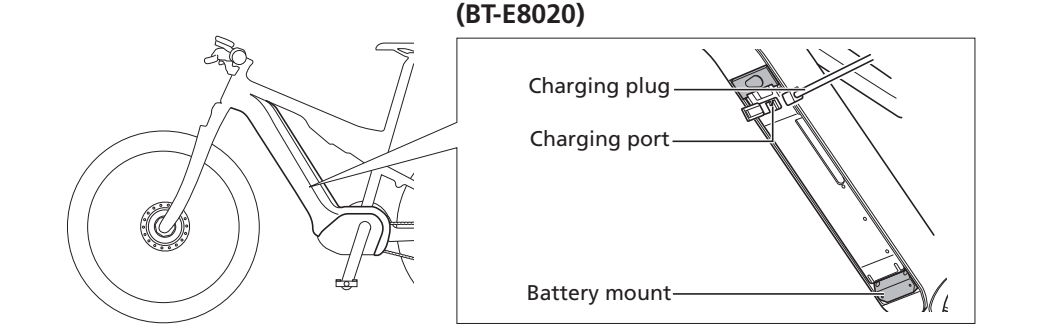
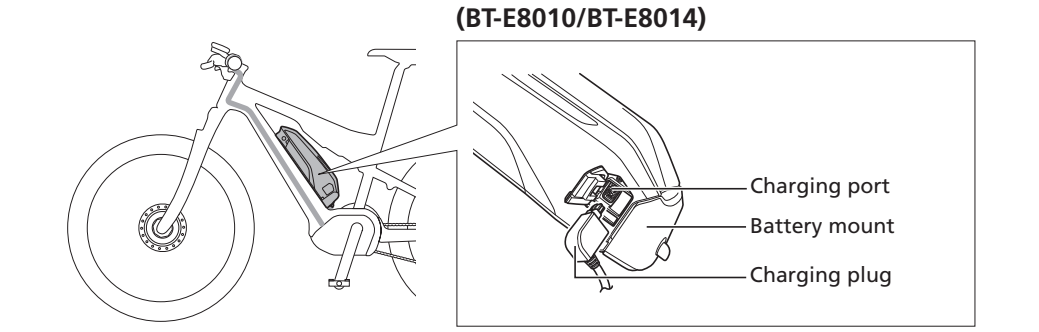
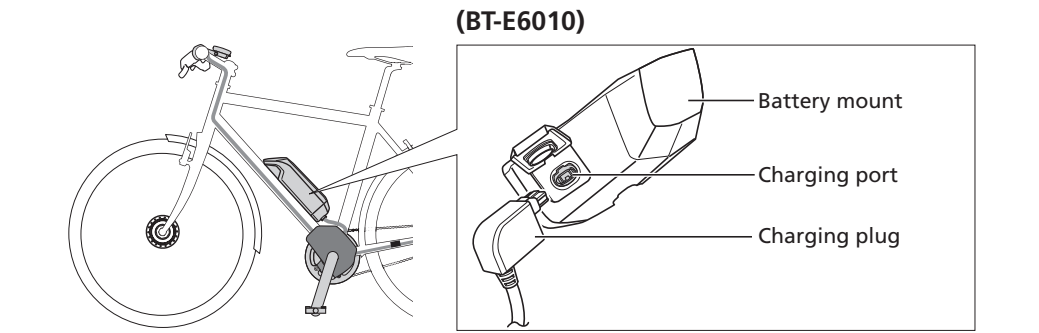
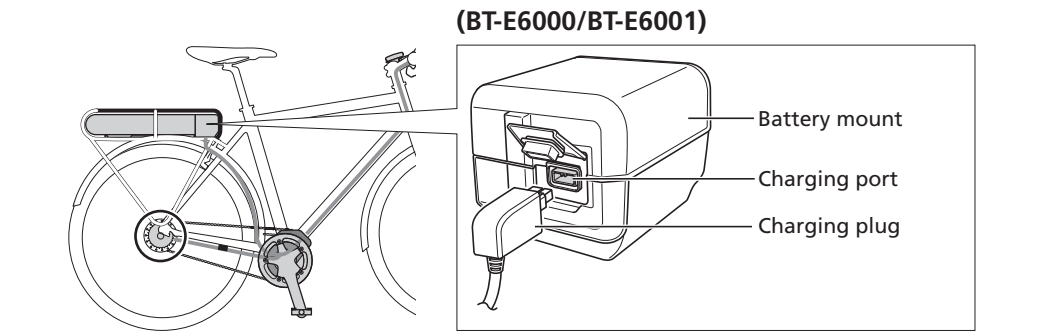
When charging the battery while it is mounted on the bicycle

1. Connect the charger's power plug to the power source.
2. Insert the charging plug into the battery mount charging port.

* Charge the batteries on a flat surface indoors.

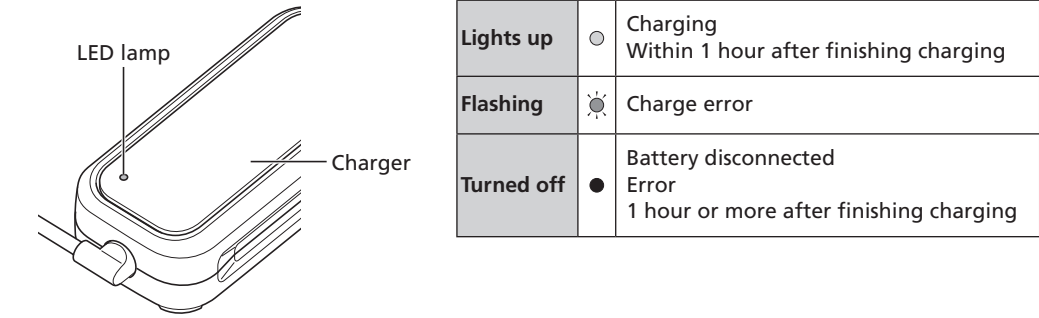
* Place the battery charger on a steady surface such as the floor before charging.

* Stabilize the bicycle to ensure that it does not collapse during charging.



Charger LED lamp

• After charging has started, the LED lamp on the charger lights up.



• Charging times are as follows.

Designated charging time	
Battery	Charging time from a battery level of 0%
BT-E6000, BT-E6010, BT-E8014	About 6.5 hours
BT-E6001, BT-E8010, BT-E8020	About 7.5 hours

Troubleshooting		
Content	Cause/Possibility	Solution
The battery cannot be recharged.	Is the charger's power plug securely inserted into the electrical outlet?	Disconnect and then reconnect the charger's power plug, and then repeat the recharging operation. If the battery still cannot be recharged, contact the place of purchase.
	Are the charging adapter and charging plug, and the charging adapter and charging port, all securely connected? When charging the battery while it is installed on the bicycle, is the charging plug securely connected to the battery?	Once you have made sure that all connecting parts are securely connected, try charging again. If the battery still cannot be recharged, contact the place of purchase.
	Is the battery charger, charging adapter, or connecting terminal dirty?	Wipe the connection terminals with a dry cloth to clean them, and then repeat the recharging operation. If the battery still cannot be recharged, contact the place of purchase.
The battery does not start recharging when the charger is connected.	The battery may be at the end of its service life.	Replace the battery with a new one.
The battery and charger are becoming hot.	The temperature of the battery or charger may exceed the operating temperature range.	Stop charging, wait for a while and then recharge again. If the battery is too hot to touch, it may indicate a problem with the battery. Contact the place of purchase.
The charger is warm.	If the charger is being used continuously to charge batteries, it may become warm.	Wait a while before using the charger again.
The LED lamp on the charger does not light up.	Are the charging adapter and charging plug, and the charging adapter and charging port, all securely connected? When charging the battery while it is installed on the bicycle, is the charging plug securely connected to the battery?	Make sure there are no foreign objects stuck to the connector, then securely connect all connecting parts. If there is no change, contact the place of purchase.
	Is the battery fully charged?	If the battery is fully charged, the LED lamp on the battery charger turns off, but this is not a malfunction. Disconnect and then reconnect the charger's power plug, and then repeat the recharging operation. If the LED lamp on the charger still does not light up, contact the place of purchase.
The battery cannot be removed.		Contact the place of purchase.
The battery cannot be inserted.		Contact the place of purchase.
There is an abnormal odor.		Stop using the battery immediately and contact the place of purchase.
Smoke is coming out from the battery.		Stop using the battery immediately and contact the place of purchase.
Cycle computer power will not turn on.	Is it charging?	The power cannot be turned on while the battery is mounted on the bicycle and being charged. Stop charging. If charging begins while the cycle computer is turning on, it will forcibly shut down.

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.
NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
-Reorient or relocate the receiving antenna.
-Increase the separation between the equipment and receiver.
-Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-Consult the dealer or an experienced radio/TV technician for help.

SHIMANO

SHIMANO NORTH AMERICA BICYCLE, INC.
One Holland, Irvine, California 92618, U.S.A. Phone: +1-949-951-5003

SHIMANO EUROPE B.V.
High Tech Campus 92, 5656 AG Eindhoven, The Netherlands Phone: +31-402-612222

SHIMANO INC.
3-77 Oimatsu-cho, Sakai-ku, Sakai-shi, Osaka 590-8577, Japan

Please note: specifications are subject to change for improvement without notice. (English)
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