



The user's manual can be seen at the following link:
<https://si.shimano.com>

IMPORTANT NOTICE

- Contact the place of purchase or a distributor 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 (<https://si.shimano.com>).
- Please observe the appropriate rules and regulations of the country, state or region in which you conduct your business as a dealer.
- Make sure to also refer to the “SHIMANO E-BIKE SYSTEMS Special Battery and Parts User's Manual” and the “SHIMANO E-BIKE SYSTEMS User's Manual” as well.



For safety, be sure to read this user's manual thoroughly before use, follow it for correct use, and store it so that it can be referenced at any time.

 DANGER	Failure to follow the instructions will result in death or serious injury.
 WARNING	Failure to follow the instructions could result in death or serious injury.
 CAUTION	Failure to follow the instructions could cause personal injury or physical damage to equipment and surroundings.

Important safety information

- 
- Consult your place of purchase or a distributor regarding items requiring replacement.
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- Be sure to observe the following instructions in order to avoid burns or other injury from fluid leakage, overheating, fire, explosion, or electric shock.

-  **DANGER**
- Use the specified battery charger for charging and observe the specified charging conditions. Doing otherwise may cause overheating, bursting, or ignition.
 -  Do not leave the battery near sources of heat such as heaters, and do not heat the battery or throw it into a fire. Doing so may cause bursting or ignition.
 -  Do not deform, modify, disassemble, or apply solder directly to the battery. Doing so may cause leakage, overheating, bursting, or ignition.
 - Do not connect the terminals with metallic objects. If this is not observed, short-circuits or overheating may occur, resulting in burns or other injury.
 - Do not carry or store the battery together with metallic objects such as necklaces or hairpins. If this is not observed, short-circuits or overheating may occur, resulting in burns or other injury.
 - Do not place the battery into fresh water or sea water, and do not allow the battery terminals to get wet. Doing so may cause overheating, bursting, or ignition.
 - Do not throw or subject the battery to strong shock. Doing so may cause overheating, bursting, or ignition.
 - If the battery does not become fully charged even two hours after the designated charging time, immediately unplug the battery from the electrical outlet and contact the place of purchase. Doing otherwise may cause overheating, bursting, or ignition.
 - In the event of a battery fire, the following should be noted:
 - If possible, carefully keep other batteries away from the fire
 - Evacuate all persons from the immediate area of fire
 - Extinguish the fire with plenty of cold water (at least the weight of 10 battery packs)

-  **WARNING**
- **WARNING:** Risk of fire. Never disassemble. No user serviceable parts.
 - Do not disassemble or modify the product. This may cause the product to not operate correctly, and you may suddenly fall and be seriously injured.
 - Use the product under the supervision of someone responsible for safety, and only as instructed. Do not allow anyone (including children) with reduced physical, sensory, or mental capacity, or those without experience or knowledge, to use the product. Do not allow children to play near the product.
 - Keep away from children.
 - If any liquid leaking from the battery gets into your eyes, immediately wash the affected area thoroughly with clean water such as tap water without rubbing your eyes, and seek medical attention immediately. If this is not done, the battery liquid may damage your eyes.
 - If any leaked fluid gets on your skin or clothes, wash it off immediately with clean water (for at least 15 min). The leaked fluid may damage your skin.
 - Medical assistance is required for symptoms caused by accidental ingestion of battery fluid, contact with skin or eyes, or inhalation of battery combustion gases.
 - If mist or vapor is inhaled by mistake, go immediately to an area with fresh air, stay warm and quiet, and seek professional medical advice if required.
 - Do not use it outside of the operating temperature ranges of the battery. If a battery is used or stored in temperatures which are outside these ranges, fire, injury or problems with operation may occur.
 1. During discharge: -10°C - 50°C
 2. During charging: 0°C - 40°C
 3. Recommended storage temperature: -10°C - below 30°CTemperatures above 60°C may result in battery leakage and rupture.

- Do not use the battery if it has any noticeable scratches or other external damage. If this is not observed, bursting, overheating or problems with operation may occur.
- Do not use products with broken seals (*). Immediately forward them for appropriate recycling.
 - * The screw heads on the enclosure are sealed with adhesive or cover.
- Do not use the battery if leakages, discoloration, deformation, or any other abnormalities occur. If this is not observed, bursting, overheating or problems with operation may occur.
- Do not recharge the battery in wet or very humid places, or outdoors. A fire, ignition, overheating, or electric shock may occur.
- Do not insert or remove the plug while it is wet. Doing so may result in electric shock. If the inside of the plug is wet, dry it thoroughly before inserting it.
- Batteries shall not be in contact with solvent materials (i.e. diluents, alcohol, oil, or anticorrosive agents) or chemicals that impact surfaces (i.e. detergents).

 CAUTION

- Do not leave the battery in a place exposed to direct sunlight, inside a vehicle on a hot day, or other hot places. This may result in battery leakage.
- Avoid large temperature changes.
- Do not store this product near open fire and food.
- Store the battery at dry places.
- Keep the following in mind to prevent the battery from dropping while riding:
 - Confirm that the battery is securely locked to the battery mount.
 - Do not ride with the key inserted.
- When using an integrated type battery, be sure to install a battery cover to the bicycle. For the installation method of the battery cover, refer to the instructions in the manual for the bicycle.
- If an error occurs during the battery discharge or charge operation, immediately stop using it and check the user's manual. If you are not sure, consult the place of purchase or a distributor.
-  Do not touch the battery when it is at a high temperature. Doing so may cause a burn.
- Avoid touching the battery for an extended period of time when its temperature has increased. Doing so may cause a low-temperature burn.

Notice

- Charging can be carried out at any time, regardless of the remaining battery, but please fully charge the battery in the following cases. Be sure to use the dedicated battery charger.
 - The battery cannot be used at the time of purchase. Before riding, be sure to fully charge the battery.
 - When the battery is completely depleted, charge it as soon as possible. If you leave the battery without charging it, the battery will deteriorate and may become unable to be used.
- Wait a while before pressing the power button when turning the power ON again after the power has been turned OFF.
- Before connecting the battery, make sure that the area where the battery will be connected (terminal) is dry and not dirty.
- Press the battery power button and if the LED display does not light up, the protective circuit is operating. Connect the battery charger and charge the battery to deactivate this.
- Rechargeable batteries have the greatest performance when kept and used at normal room temperature (20°C ± 5K).
- If the battery is charged in a low-temperature environment of 5°C or lower, the traveling distance of a full charge will be shorter. Also, if the battery is used in a low-temperature environment of 5°C or lower, the battery consumption will become quicker. This is due to the characteristics of the battery, and the battery will return to normal when at a normal temperature.
- Riding with a high level of assistance in a low-temperature environment when the battery level is low may cause the battery level to drop to 0%, due to the characteristics of the battery. Charge it before use.
- Only use batteries for the applications that they were designed for.
- Make sure to also refer to the battery charger user's manual.
- Products are not guaranteed against natural wear and deterioration from normal use and aging.
- Note the following when transporting batteries:
 - This product falls under the requirements of the Dangerous Goods Legislation
 - Undamaged batteries can be transported on the road by private users without additional requirements
 - When batteries are transported by a third party, special requirements (e.g. ADR, DGR, UN-3480) on packaging and labeling need to be met, and they may only be packed and shipped by trained personnel
 - Do not transport damaged/unfunctional batteries
 - Be sure to confirm if any regulations in the country of origin and destination exist and adhere to them
 - Please contact an authorized bicycle dealer, SHIMANO local sales office or distributor, if you have any questions about the transportation or shipment of batteries
- For maximum performance we highly recommend SHIMANO lubricants and maintenance products.

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.

■ Main specifications

Battery main body	Li-Ion
Nominal capacity	BT-EN404-A / BT-EN604-A: 11.6 Ah BT-EN405-A / BT-EN605-A / BT-EN805-A / BT-EN805-L-A: 14 Ah BT-EN606-A / BT-EN806-A: 17.5 Ah
Operating temperature range	During discharge: -10°C - 50°C During charging: 0°C - 40°C
Recommended storage temperature	-10°C - below 30°C
Nominal voltage	36 V

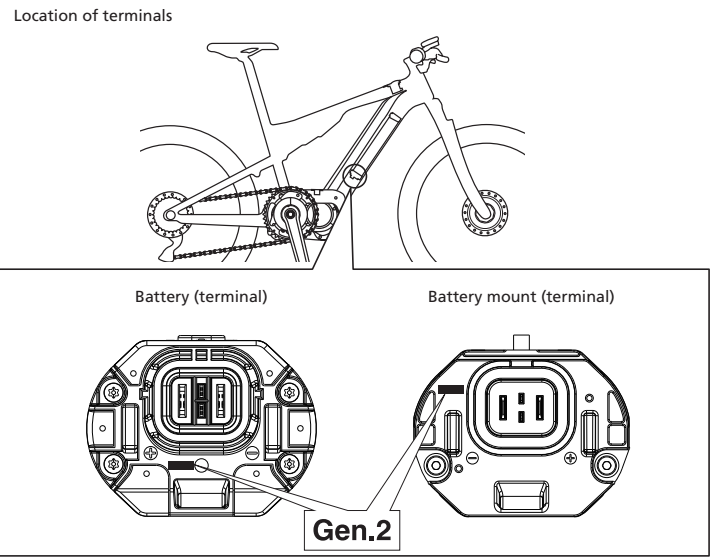
■ Check compatibility

Always check product compatibility when you want to change batteries or add new ones. Information on component compatibility is provided on the SHIMANO product website (<https://productinfo.shimano.com/>).

Gen.2 mark

This product is made for second-generation (Gen.2) systems only. Check for the “Gen.2” marking as shown in the figure. Do not use with battery mounts that do not have this marking.

Example: BT-EN805-A and compatible battery mount



■ E-TUBE PROJECT

The drive unit may not operate correctly if the latest firmware version is not installed. Connect to E-TUBE PROJECT, then update the firmware.

Introduction

You cannot use the battery immediately after shipment. The battery can be used after charging it with the designated battery charger. Be sure to charge it before use. The battery can be used when the LED on it turns on.

Regular inspections before riding the bicycle

Before riding the bicycle, check the following items. If any problems are found, consult your place of purchase or a distributor.

- Is the battery level sufficient?
- Is the battery installed correctly?

Handling method

■ Charging time

The charging time will vary depending on the battery level and the battery charger being used. Refer to the battery charger user's manual for the designated charging time. This is a lithium-ion battery. Use the dedicated battery charger designated by SHIMANO.

■ Battery storage / moving method

- If the bicycle will not be ridden for an extended period, store it with a battery level of approximately 70%, without fully charging the battery. Also, charge the battery once every six months to ensure that it is not completely discharged.
- After a prolonged storage time, it may be necessary to charge and discharge the batteries multiple times to restore their original performance.
- Store the battery or bicycle with battery installed in a cool indoor location away from direct sunlight and rain (approx. 10 to 20°C). If the storage temperature is too low or too high, the performance of the battery is reduced, and its usable time will be shorter. When you use it after a long storage period, make sure to charge it first.
- Handle the battery with both hands. Firmly hold the battery during installation, removal or transport. Failure to do so may cause the components to fall and break or cause injury.

■ Battery life

- The battery is an exhaustible item. The battery will gradually lose its capacity to charging after repeated use. If the length of time that the battery can be used and its traveling distance become extremely short, it has probably reached the end of its life, and so you will need to purchase a new battery.
- The life of the battery will vary depending on factors such as the storage method, the usage conditions, the surrounding environment and the characteristics of the individual battery pack.

■ Used batteries

- Lithium-ion batteries are recyclable, valuable resources. Please observe the appropriate rules of the country, state or region regarding used batteries. If you are not sure, consult the place of purchase or distributor.



Disposal information for countries outside the European Union
This symbol is only valid within the European Union. Follow local regulations when disposing of used batteries. If you are not sure, consult the place of purchase or a distributor.

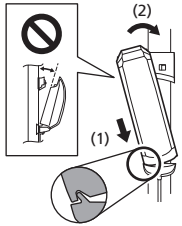
Installing the battery

Secure the battery to the battery mount with a key. There are several types of keys, so there may be differences with this explanation.

- The battery can be inserted without turning the key.
- For details on the compatibility of the battery and battery mount, check the compatibility information on the SHIMANO product website (<https://productinfo.shimano.com/#/com>).

■ External type

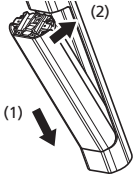
1. Use the following procedure to insert from the lower side of the battery:
 1. Align the concave section on the bottom of the battery with the convex section on the battery mount, then insert the battery.
 2. Push the battery in the direction of the arrow until you feel a click.



■ Integrated type

The following procedure uses a type of bicycle where the battery is installed/removed from the lower side of the down tube as an example.

1. Use the following procedure to insert from the lower side of the battery:
 1. Insert from the lower side of the battery.
 2. Push the battery in the direction of the arrow until you feel a click. After pushing the battery in, pull the battery to confirm that it is locked securely.



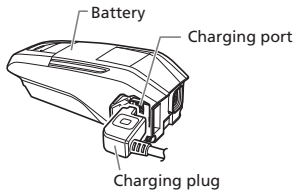
Charging the battery removed from the bicycle

Charge the battery placed on a level surface. Orient the battery and the battery charger as indicated in the figure.

- * The orientation of the battery charging port differs according to the model.

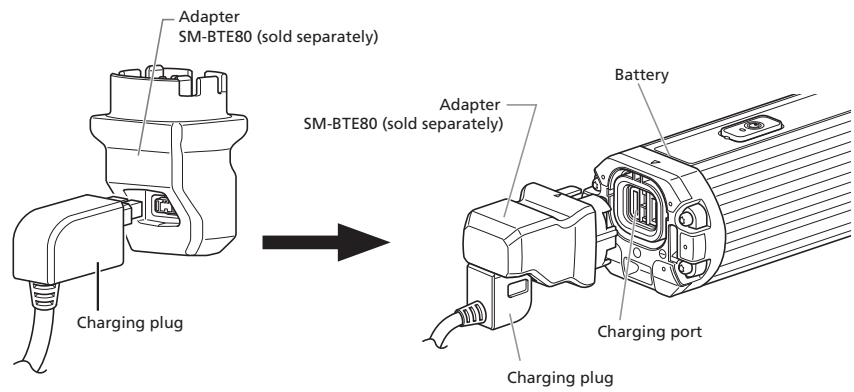
■ External type

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



■ Integrated type

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

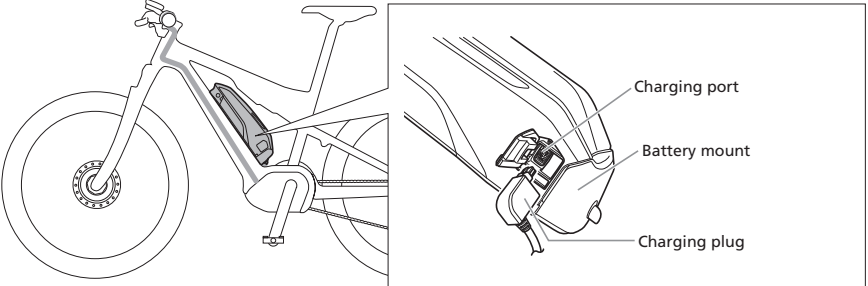


Charging the battery attached to the bicycle

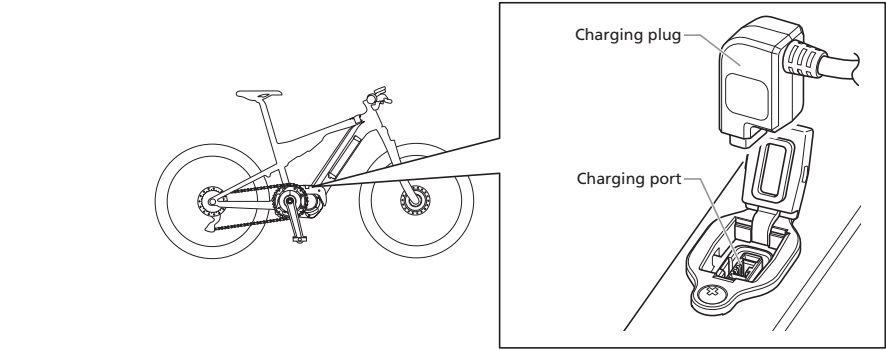
Charge the battery with the battery charger placed on the floor or some other stable surface. Secure the bicycle in place when charging, so that it does not tip over.

After charging, firmly close the charging port cap.

1. Connect the battery charger's power plug to the electrical outlet.
 2. Insert the charging plug into the charging port.
- External type



Integrated type
The position of the satellite charging port differs depending on the bicycle.



Battery LED

The LED on the battery enables the current charging status and battery level to be checked. The shape of the LED differs depending on the model.



■ Display while charging

When there are five battery LEDs

Lighting pattern	Charging status
	0 - 20%
	21 - 40%
	41 - 60%
	61 - 80%
	81 - 99%
	100%

: Off : Lit : Flashing

When there is one battery LED

Lighting pattern		Charging status
	Repeatedly flashes green 1 time	0 - 20%
	Repeatedly flashes green 2 times	21 - 40%
	Repeatedly flashes green 3 times	41 - 60%
	Repeatedly flashes green 4 times	61 - 80%
	Repeatedly flashes green 5 times	81 - 99%
	 *1	100%

* 1 Turns off one hour after fully charged.

: Off : Lit : Flashing

■ Battery level indicator

You can press the power button to check the current battery level.

When there are five battery LEDs

Lighting pattern	Battery level
	100 - 81%
	80 - 61%
	60 - 41%
	40 - 21%
	20 - 1%
	0%
	* If the battery is not attached to the bicycle
	0%
	* If the battery is attached to the bicycle
	* If the power is OFF

: Off : Lit : Flashing

When there is one battery LED

The LED lights up when the battery is attached to the bicycle. (Unless the battery level is at 0%)

Lighting pattern		Battery level
	Repeatedly flashes green 5 times	100 - 81%
	Repeatedly flashes green 4 times	80 - 61%
	Repeatedly flashes green 3 times	60 - 41%
	Repeatedly flashes green 2 times	40 - 21%
	Repeatedly flashes green 1 time	20 - 0%
		0% * If the battery is attached to the bicycle

: Off : Flashing

SHIMANO



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