

User's Manual

Switch Unit



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IMPORTANT NOTICE

- Contact the place of purchase or a distributor for information on installation, adjustment, and replacement 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>).

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.

The following instructions must be observed at all times in order to prevent personal injury and physical damage to equipment and surroundings. The instructions are classified according to the degree of danger or damage which may occur if the product is used incorrectly.

 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

WARNING

- 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.
- Do not pay excessive attention to the display while riding. Doing so may result in an accident.
- Ensure that head and tail lights can turn on before riding the bicycle.

CAUTION

- Observe the instructions in the manual for the bicycle in order to ride safely.
- Never modify the system. Doing so may cause a system error.
- Use the product under the supervision of someone responsible for safety, and only as instructed. Do not allow anyone (including children) with reduced physical, sensual, or mental capacity, or those without experience or knowledge, to use the product.
- Do not allow children to play near the product.

SHIMANO STEPS battery management systems and compatibility

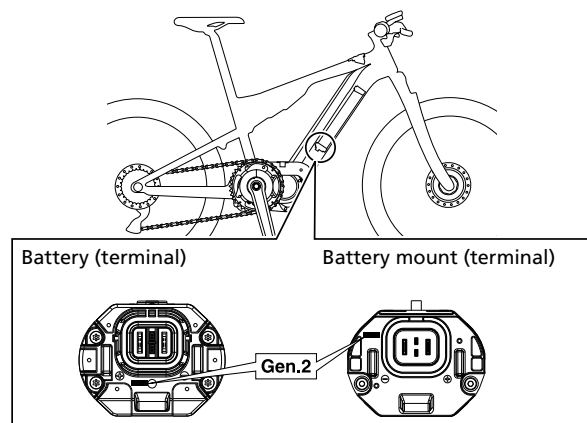
There are two generations of the SHIMANO STEPS battery management system: first generation and second generation (Gen.2).

This manual only describes products compatible with Gen.2.

With some exceptions, first-generation and Gen.2 products of SHIMANO STEPS components are not compatible with each other. For details, refer to the compatibility information on the SHIMANO product website (<https://productinfo.shimano.com/#/com>).

The Gen.2 battery and compatible battery mount are marked "Gen.2" as indicated in the figure.

Location of terminals



Notice

- Do not keep connecting and disconnecting the small waterproof connector. Doing so may impair the waterproofing.
- The components are designed to be fully waterproofed to withstand wet weather riding conditions; however, do not deliberately place them into water.
- Do not clean the bicycle in a high-pressure wash. If water gets into any of the components, operating problems or rusting may result.
- Handle the components carefully, and avoid subjecting them to strong shock.
- Be sure to attach dummy plugs to any unused E-TUBE ports.
- Do not allow water to get into the E-TUBE ports.
- Do not use thinner or other solvents to clean the products. Such solvents may damage the surface.
- Do not turn the bicycle upside down. There is a risk of damage to the switch unit.
- Products are not guaranteed against natural wear and deterioration from normal use and aging.
- For connectable SHIMANO STEPS components and shifting units, check the compatibility information on the SHIMANO product website (<https://productinfo.shimano.com/#/com>).
- The open source software used in this product is available at the following URL:



<https://si.shimano.com/compliance/oss>

- 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.



This symbol on your product, literature, or packaging reminds you that this product must be taken to separate collection at the end of its working life. Do not dispose of this product as unsorted municipal waste but instead take it for recycling. By ensuring the product is disposed correctly, you will help to prevent potential negative consequences for the environment and human health. For info on your nearest recycling point, check with your local waste authority.

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.

- Does the drivetrain perform gear shifting smoothly?
- Is there any looseness or damage in the component parts?
- Are the components securely installed to the frame/handlebar/stem, etc.?
- Do any abnormal noises occur while riding?
- Is there sufficient charge remaining in the battery?

Booklet structure

SHIMANO STEPS user's manuals are split among several booklets, as described below.

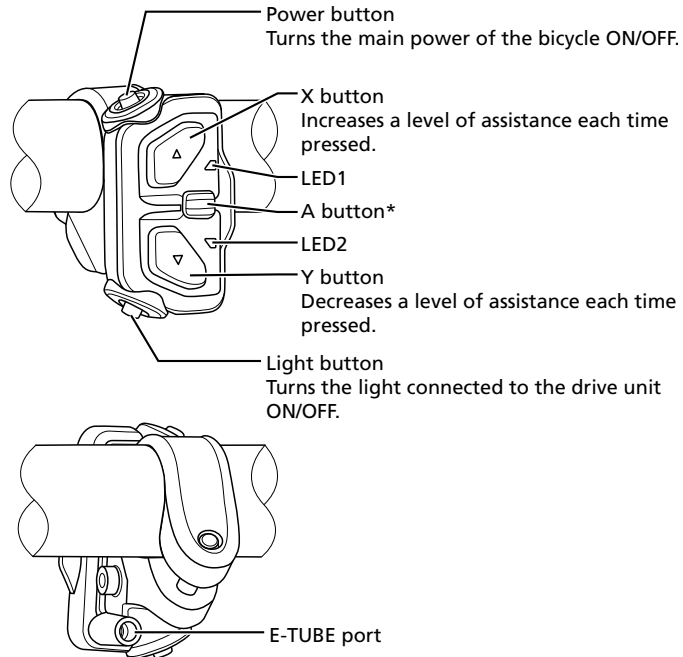
Be sure to read these user's manuals thoroughly before use, and follow them for correct use. Store the user's manuals so that they can be referenced at any time.

The latest user's manuals are available on our website (<https://si.shimano.com>).

Name	Details
SHIMANO STEPS User's Manual	This is the basic user's manual for SHIMANO STEPS. It contains the following content: <ul style="list-style-type: none"> • SHIMANO STEPS quick guide • Basic operations when riding • How to operate assist bicycles that use flat handlebars, such as city, trekking, or MTB type bicycles
SHIMANO STEPS User's Manual for Drop Handlebar Bicycles (separate booklet)	This booklet describes how to operate assist bicycles that use a drop handlebar and are controlled using dual control levers. This should be read along with the SHIMANO STEPS User's Manual.
SHIMANO STEPS Special Battery and Parts User's Manual (Gen.2)	It contains the following content: <ul style="list-style-type: none"> • How to charge and handle the SHIMANO STEPS special battery • How to attach and remove the SHIMANO STEPS special battery to the bicycle • How to read the battery LEDs when charging or during an error
SHIMANO STEPS Cycle Computer User's Manual (clamp band type / bracket installation type / switch unit integrated type)	It contains the following content: <ul style="list-style-type: none"> • Method for configuring settings via the main body buttons and switch unit • Wireless communication method (supported models only)
Switch Unit User's Manual (with LED indicator function / without LED indicator function)	This is the assist switch and shift switch user's manual. It describes switch unit handling and operations.
Satellite System ON/OFF Switch User's Manual	It describes the handling and operations of the satellite system ON/OFF switch.

Names and functions of parts

Names and functions of parts



* The A button is used to operate the cycle computer. Refer to the user's manual of your cycle computer for details.

LED1 display

Displays the level of the battery mounted on the bicycle.

* This battery level display uses zero to indicate a battery level where assistance can no longer be performed. SHIMANO STEPS provides an amount of battery separate from the assist function for additional equipment such as lights and ABS. Therefore, the battery level may differ from that which can be checked with the battery LED.

Names and functions of parts

Names and functions of parts

Display	Battery level
Green	100 - 21%
Red	20 - 11%
Flashing red	10% or less

LED2 display

Mainly used to display the current assist mode. The assist mode returns to OFF when the power is turned OFF. Refer to the "SHIMANO STEPS User's Manual" for details on the assist mode.

Display	State
OFF	The assist mode is OFF.
Light blue	The assist mode with the lowest level of assistance. Push the Y button to turn LED2 OFF and disable the assist mode.
Green	The assist mode with an intermediate level of assistance. When two or fewer assist modes are set, this is not displayed.
Yellow	The assist mode with the highest level of assistance. When one assist mode is set, this indicates that assist is ON. Pressing the X button does not make the level of assistance any higher than this.
Flashing yellow * ₁	The system has switched to adjustment mode. In this state, gear shifting operations cannot be performed with the switch unit (right).
Blue * ₂	The system has switched to walk assist mode.
Flashing blue * ₂	Assistance is functioning in the walk assist mode.
Flashing red	Refer to " Error/warning indication ."

*₁ The adjustment mode cannot be canceled with this product. Refer to the following for details on canceling the adjustment mode:

- SHIMANO STEPS Cycle Computer User's Manual
(clamp band type / bracket installation type / switch unit integrated type)
- Rear Derailleur User's Manual

*₂ Refer to the " SHIMANO STEPS User's Manual " for details on the walk assist mode.

Wireless functions

Wireless functions

Update the E-TUBE PROJECT software to check the latest functions. Please contact your place of purchase for details.

This product supports Bluetooth[®] and ANT, and can send information on the assist mode and gear position for electronic gear shifting to external devices.

Connection method

ANT connection	Turn the power ON to receive communication. Switch the external device to connection mode then connect it.
Bluetooth [®] LE connection	Be sure to switch the external device to connection mode ahead of time. This product receives communication in the following cases: <ul style="list-style-type: none"> • For 15 seconds after the power is turned ON • For 15 seconds after one of the buttons except for the power button is operated

E-TUBE application

- E-TUBE PROJECT Cyclist may be used if a Bluetooth[®] LE connection is established with a smartphone. E-TUBE RIDE can be used to check traveling data on a smartphone connected over Bluetooth[®].
- E-TUBE PROJECT is needed to change the setting of the SHIMANO STEPS and to update firmware. For information on how to install E-TUBE PROJECT, check the support website (<https://bike.shimano.com/e-tube/project.html>).

Specifications

2.4 GHz digital wireless systems

The digital wireless technology of this product uses the same 2.4 GHz frequency as wireless LAN.

In rare cases, measurement may not be able to be performed accurately due to strong electromagnetism, electromagnetic waves, or interference emanated from objects or locations.

- TVs, PCs, radios, motors/engines, or inside vehicles or trains
- Near railroad crossings and tracks, television stations, and radar stations

Wireless functions

Wireless functions

- Other wireless computers or digital control lights

Model name	SW-EN600-L
Frequency band	2,402 - 2,480 MHz
Maximum high-frequency output	+4 dBm
Firmware version	4.0.0 or later

Troubleshooting

Error/warning indication

When an error or warning occurs, both LED1 and LED2 flash red quickly.

Follow one of the procedures below to reset the indication:

- Turn the power OFF, then ON again.
- Remove the battery from the battery mount and install it again.

If the error persists, contact your place of purchase or a distributor for assistance.

When using a cycle computer, refer to the “SHIMANO STEPS Cycle Computer User's Manual” for information on the display. For details on error/warning codes, check the latest versions below:



<https://si.shimano.com/error>

When a problem occurs

The FAQ for SHIMANO STEPS can be accessed with the following:



<https://bike.shimano.com/faq/STP0A>

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