

User's Manual

Motor Unit



Contents




IMPORTANT NOTICE	3
Important safety information	4
Notice	5
Regular inspections before riding the bicycle	6
Names and functions of parts	7
Names of parts	7
Switching operation modes	7
Switching the automatic gear shifting settings	7
Adjustment mode	8
Wireless function	9
Pairing with a shift switch	9
Pairing with an external device	9
Connection method	9
E-TUBE application	9
2.4 GHz digital wireless systems	10
Specifications	10
Troubleshooting	11
Error / warning indication	11
When a problem occurs	11

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>).
- The Bluetooth[®] word mark and logos are registered trademarks owned by the Bluetooth SIG, Inc. and any use of such marks by SHIMANO INC. is under license.
Other trademarks and trade names are those of their respective owners.
- ANT[®] and ANT+[®] are trademarks or registered trademarks of ANT Wireless.

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. Never place your foot on the motor unit. This may cause the product to not operate correctly, and you may suddenly fall and be seriously injured.

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.
- Do not allow water to get into the E-TUBE ports.
- Do not use the thinners or harsh solvents to clean the products. Such solvents may damage the surface. When cleaning the products, use a cloth moistened with a neutral detergent diluted with water.
- For details on product firmware updates, contact the place of purchase. The most up-to-date information is available on the SHIMANO website.
- Products are not guaranteed against natural wear and deterioration from normal use and aging.
- For connectable components, check the compatibility information on the SHIMANO product website (<https://productinfo.shimano.com/#/com>).
- 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.

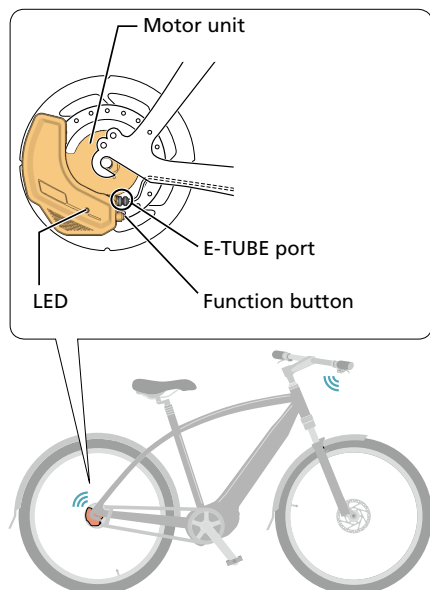
Regular inspections before riding the bicycle

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

- Is there any noticeable damage to the electric wires?
- Is gear shifting carried out smoothly?
- Do any abnormal noises occur during operation?

Names and functions of parts

Names of parts



Switching operation modes

Operation	Function button operation	LED display
Switching the automatic gear shifting settings*	Double-click	Green: Manual gear shifting Flashing green once: [Auto 1] Flashing green twice: [Auto 2]
Switching to the adjustment mode from the normal mode	Press and hold (for two to five seconds)	Yellow: Adjustment mode
Switching to the normal mode from the adjustment mode	Press and hold (0.5 seconds)	Off: Normal mode

* Can only be operated in the normal mode.

Switching the automatic gear shifting settings

The automatic gear shifting settings can be switched by double-clicking the function button.

When there is only one automatic gear shifting setting, you can only switch between manual gear shifting and automatic gear shifting.

You can customize settings such as the gear shifting features, etc. of automatic gear shifting in E-TUBE PROJECT Cyclist and register them as [Auto 1] and [Auto 2]. For details, refer to the user's manual for E-TUBE PROJECT

Cyclist .

Adjustment mode

This mode is normally not used. If gear shifting feels abnormal, contact the place of purchase to perform gear shifting adjustment.

If the system has switched to the adjustment mode, gear shifting is not possible. If the LED is yellow, return to the normal mode by pressing and holding the function button until the LED turns off.

Wireless function

Pairing with a shift switch

To use this product with wireless gear shifting, it must be paired with a shift switch.

Refer to the user's manual for E-TUBE PROJECT Cyclist or contact the place of purchase for information about pairing.

Pairing with an external device

This product supports Bluetooth[®] LE and ANT[®], and can send information such as the current gear position to an external device.

Connection method

ANT [®] connection	Turn the power of the bicycle 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 30 seconds after the power of the bicycle is turned ON• For 30 seconds after the function button is pressed

TECH TIPS

- The LED flashes blue when the product is ready to connect with the external device and receive communication.

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 Cyclist is required to configure the corresponding settings. For information on how to install

E-TUBE PROJECT Cyclist, check the support website (<https://bike.shimano.com/e-tube/project.html>).

2.4 GHz digital wireless systems

This product adopts digital wireless technologies in the 2.4 GHz frequency band, which are used for wireless LAN, etc.

It may receive interference in the following locations or environments, which can prevent wireless communication from being performed correctly in extremely rare cases:

- Near televisions, computers, radios, motors or engines, etc.
- Inside vehicles or trains
- Near railway crossings or tracks
- Near television stations or radar stations
- Near other wireless computers or digital control lights

Specifications

Operating temperature	-10°C - 50°C
Wireless specifications	ANT [®] / Bluetooth [®] LE
Frequency band	2.4 GHz
Maximum radio-frequency power	<10 dBm
Firmware version	4.0.0 or later

Troubleshooting

Error / warning indication

When an error or warning occurs, the LED flashes red.

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 this product with SHIMANO STEPS and 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>

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

MADISON (A DIVISION OF H.YOUNG (OPERATIONS) LTD)
Roeback Way, Knowlhill, Milton Keynes, Buckinghamshire, MK5 8HL, United Kingdom

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

Please note: specifications are subject to change for improvement without notice. (English)
© Sep. 2023 by SHIMANO INC. ITP