

User's Manual

Shift Switch



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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

- **INGESTION HAZARD:** This product contains a button cell or coin battery.
- **DEATH** or serious injury can occur if ingested.
- A swallowed button cell or coin battery can cause **Internal Chemical Burns** in as little as **2 hours**.
- **KEEP** new and used batteries **OUT OF REACH** of **CHILDREN**
- **Seek immediate medical attention** if a battery is suspected to be swallowed or inserted inside any part of the body.



- Remove and immediately recycle or dispose of used batteries according to local regulations and keep away from children. Do NOT dispose of batteries in household trash or incinerate.
- Even used batteries may cause severe injury or death.
- Call a local poison control center for treatment information.
- The compatible battery type : CR1632
- The nominal battery voltage : 3 V
- Non-rechargeable batteries are not to be recharged.
- Do not force discharge, recharge, disassemble, heat above 85°C or incinerate. Doing so may result in injury due to venting, leakage or explosion resulting in chemical burns.
- Ensure the batteries are installed correctly according to polarity (+ and -).
- Do not mix old and new batteries, different brands or types of batteries, such as alkaline, carbon-zinc, or rechargeable batteries.
- Remove and immediately recycle or dispose of batteries from equipment not used for an extended period of time according to local regulations.
- Always completely secure the battery compartment. If the battery compartment does not close securely, stop using the product, remove the batteries, and keep them away from children.

⚠ 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 throw or subject this product to strong shocks. If this is not observed, bursting, overheating or problems with operation may occur.
- Do not let grease adhere to the metal terminals. A conduction failure may result.
- Use only the coin batteries specified. When replacing the coin battery, replace both batteries at the same time with new ones. Using different kinds of coin batteries or new and old coin batteries together may cause the coin batteries to burst, leak fluid, overheat or catch fire, resulting in a fire, injuries or contamination in the surrounding area.

Important safety information

- Coin batteries are hazardous and must be kept away from children. Never put coin batteries in mouth or in any part of the body. Severe or fatal injuries can occur within 2 hours if swallowed or placed inside the body. If this occurs or is suspected, seek medical attention immediately.



- Do not use this equipment in locations where children are likely to be present. If the included coin batteries are swallowed by mistake, seek medical attention immediately.
- Dispose of the coin batteries according to proper country and/or state disposal regulations. Disposal of this product into fire or a hot oven, or mechanically crushing or cutting it, can result in an explosion of the coin batteries.
- Do not use the coin batteries outside their operating temperature ranges. If a battery is used or stored in temperatures which are outside these ranges, fire, injury or problems with operation may occur.
- Do not use the coin batteries if leakages, discoloration, deformation or any other abnormalities occur. If this is not observed, bursting, overheating or problems with operation may occur.
- If any leaked fluid from the coin batteries gets on your skin or clothes, wash it off immediately with clean water. The leaked fluid may damage your skin.
- Do not leave this product in an extremely high temperature surrounding environment such as in a closed vehicle on a hot day, or near a heater. Doing so may result in an explosion of the coin batteries or the leakage of flammable liquid or gas from them.
- Do not subject this product to extremely low air pressure. Doing so may result in an explosion of the coin batteries or the leakage of flammable liquid or gas from them. Transporting this product by air is not a problem.
- When operating the shift switch, be careful not to allow your fingers to be caught in the derailleur. The powerful motor which drives the electronic gear shifting derailleur will operate without stopping until the shifting position is reached.

Notice

- Be sure to rotate the crank while performing the switch operations related to gear shifting.
- 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 with 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 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.
- Do not turn the bicycle upside down. There is a risk of damage to the shift switch.
- Contact the place of purchase for updates of the component software. The most up-to-date information is available on the SHIMANO website.
- For connectable components, check the compatibility information on the SHIMANO product website (<https://productinfo.shimano.com/#/com>).
- Actual behavior may differ depending on the connected components and firmware version.
- For details on changing settings of the shift switch, contact the place of purchase or a distributor.
- Coin batteries
 - Insert the coin batteries with the correct +/- orientation.
 - Remove the coin batteries if you do not use them for a long period.
 - When the coin batteries are depleted, remove them immediately.
- Store this product or the bicycle with this product installed in a cool indoor location away from direct sunlight and rain (approx. 10 - 20°C). If the storage temperature is too low or too high, the performance of the coin batteries is reduced, and their usable time will be shorter. When using after a long period of non-use, be sure to replace the coin batteries with new ones.
- 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.

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 of 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.

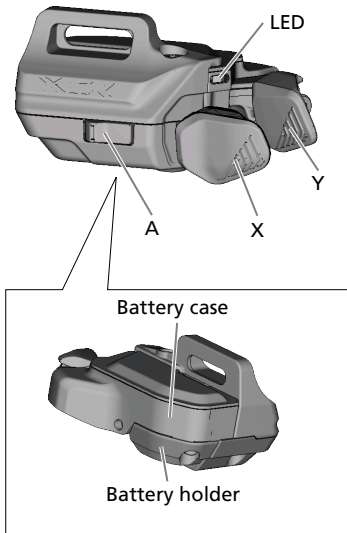
Regular inspections before riding the bicycle

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

- Are operations carried out smoothly?
- Are the shift switches attached to the handlebars snugly?
- Do any abnormal noises occur during operation?
- Is there sufficient charge remaining in the coin batteries?

Names and functions of parts

Names of parts



Basic operation

Default values are listed below. The functions assigned to each switch can be changed. For the setting procedure, contact the place of purchase or a distributor.

Switch	Operation
X	Shifting down
Y	Shifting up
A	Switching operation modes

How to operate

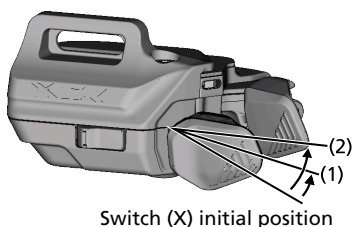
Gear shifting operation

Be sure to rotate the crank while performing all switch operations related to gear shifting.

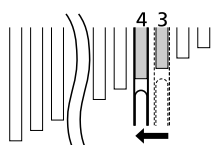
Double action

The number of sprocket shifts depends on the lever stroke. To shift one sprocket, move the lever to position (1). To shift two sprockets, move the lever to position (2).

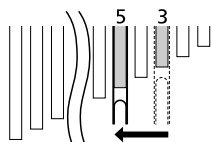
- **Switch (X): Shifts from smallest to largest sprocket side**



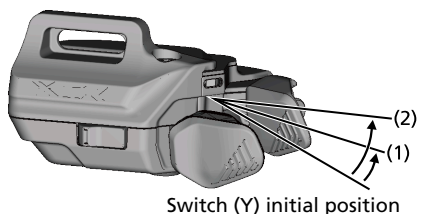
- (1): Shifts one sprocket
Example: From the 3rd to the 4th sprocket



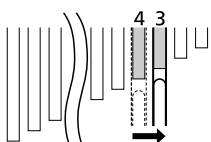
- (2): Quick-shifts two sprockets
Example: From the 3rd to the 5th sprocket



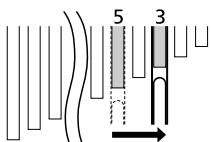
- **Switch (Y): Shifts from largest to smallest sprocket side**



- (1): Shifts one sprocket
Example: From the 4th to the 3rd sprocket



- (2): Quick-shifts two sprockets
Example: From the 5th to the 3rd sprocket



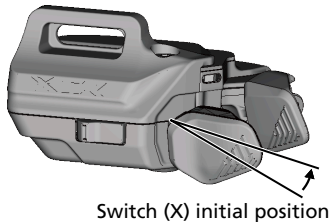
Single action

Operate the switch to shift one sprocket.

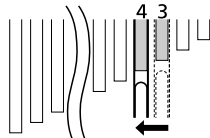
Names and functions of parts

How to operate

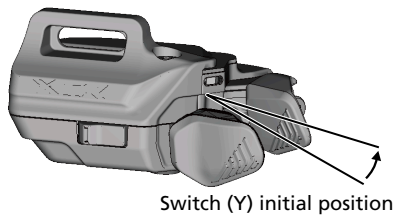
- **Switch (X): Shifts from smallest to largest sprocket side**



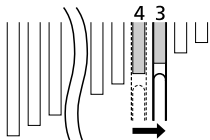
Shifts one sprocket
Example: From the 3rd to the
4th sprocket



- **Switch (Y): Shifts from largest to smallest sprocket side**



Shifts one sprocket
Example: From the 4th to the
3rd sprocket



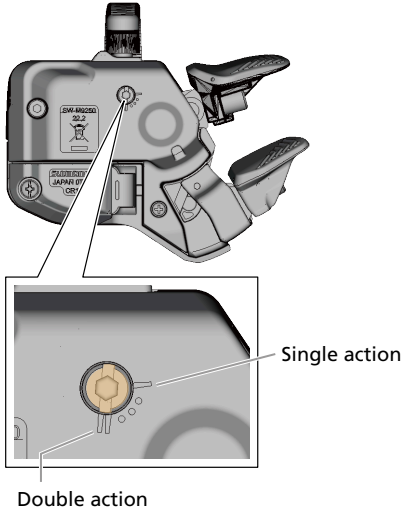
TECH TIPS

- The XTR series enables you to change the switch operations. For details, refer to [Changing the switch operations](#).

Changing the switch operations

This product enables you to change the switch operations. For details on the switch operations, refer to [How to operate](#).

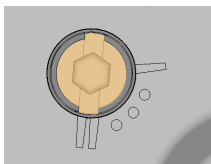
1. Change the switch operations using a slotted screwdriver or a 2 mm hexagon wrench.



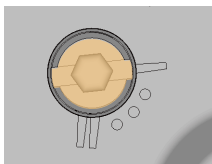
TECH TIPS

- For details on the switch operations, refer to [How to operate](#).

Double action

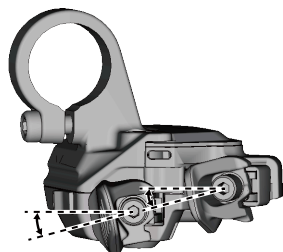
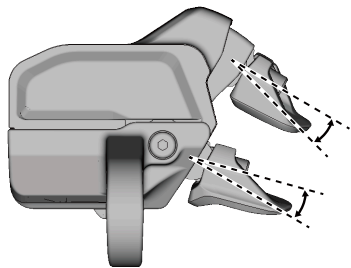


Single action



Adjusting the switch angle

This product enables you to adjust the switch angle. For details, contact your place of purchase or a distributor.



Switching operation modes

This product has two operation modes. The normal mode, which enables you to use automatic / manual gear shifting, and the adjustment mode, which enables you to perform gear shifting adjustment. If gear shifting adjustment is required, contact the place of purchase or a distributor.

If the system has switched to the adjustment mode, gear shifting is not possible.

Mode	Switch operation	Action	Remarks
Normal mode	Single-click A	Switching to automatic gear shifting	For SHIMANO E-BIKE SYSTEMS with a cycle computer: Switch between [Auto 1], [Auto 2] and manual gear shifting For other bicycles compatible with automatic gear shifting: Switch between [Auto 1] and manual gear shifting
	Press and hold A for 2.0 seconds or longer	Switching to adjustment mode	The LED of the rear derailleur lights up yellow.
Adjustment mode	Press and hold A for 2.0 seconds or longer	Switching to normal mode	The LED of the rear derailleur turns off.

TECH TIPS

- You can customize the gear shifting features of [Auto 1] and [Auto 2] in E-TUBE PROJECT Cyclist. For details, refer to the [user's manual for E-TUBE PROJECT Cyclist](#).

Checking the coin battery level with a shift switch operation

If you hold down X and Y simultaneously for 0.5 seconds or longer, the LED changes to any of the status shown in the figure depending on the coin battery level.

11 - 100%		Yellow-green
1 - 10%		Red
0%		Off

If the LED lights red when the switch is pressed, the coin battery level is low.

Coin battery replacement

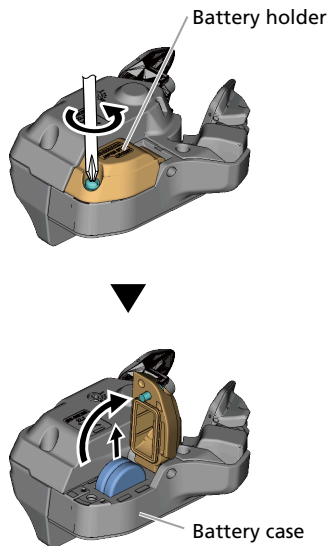
Before replacing the coin batteries

- The supplied coin batteries may be low, as they are intended only for test purposes. When the coin battery level becomes low, replace the coin batteries with new ones.
- When replacing the coin batteries and opening/closing the battery holder, move to an area well away from sources of water (such as rivers, lakes, the ocean, or ditches).
- Do not perform this task in locations with a lot of water or mud, such as outdoors during rain or car washing facilities. If this is not observed, problems with operation may occur.
- Do not perform this task in areas with a lot of sand or dust in the air. If this is not observed, problems with operation may occur.
- Before replacing the coin batteries, wipe the battery holder and battery case to remove water, dirt, etc. If this is not observed, problems with operation may occur.
- Use your hands or an insulated tool with a blunt tip to replace the coin batteries.
- Take care of the terminals when removing the coin batteries in order to prevent damage to the coin batteries.
- When performing this task with your hands, clean your hands and remove all water and dirt.
- Static electricity can damage electronic components. Discharge static electricity from your body before performing this task.
- Use two CR1632 coin batteries.
- It is recommended that you use new coin batteries.

Replacing the coin batteries

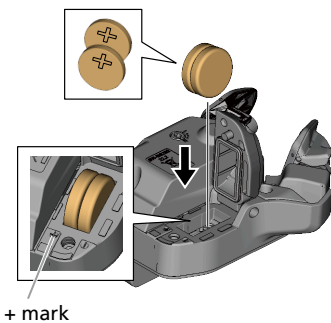
1. **Open the battery holder using a screwdriver, then remove the two old coin batteries from the battery case.**

If it is difficult to remove a coin battery, affix tape, etc. to the surface of the coin battery and pull it out.



2. **Set the new coin batteries to the battery case.**

As shown in the figure, set the two coin batteries with the positive (+) side on the side of the + mark.



TECH TIPS

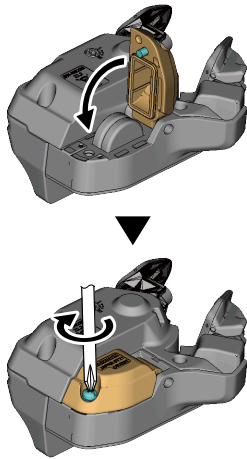
- The position of the mark may differ according to the shift switch.

3. **Close the battery holder, and firmly secure it with a screwdriver.**

Be careful not to overtighten the screw, as it may cause damage.

Coin battery replacement

Replacing the coin batteries



NOTICE

- Before closing the battery holder, check that the waterproof sealing gasket and contacting surfaces are free of foreign substances (such as dirt, dust, sand, hair, thread, or liquids).
- If there are foreign substances present, wipe them away with a clean, dry cloth that does not shed lint or fibers.
- Open the battery holder only when replacing the coin batteries, and do not leave it open. Doing so may cause problems with operation due to foreign objects getting inside or deterioration to the electronic component, etc.
- Installing the coin battery with the positive (+) and negative (-) polarities reversed will not only stop the component from operating, it may also cause the component to malfunction. Make sure the coin battery is installed correctly.
- After replacement, check that it works normally.

Wireless function

Method for pairing with the shifting unit

This product must be paired with a shifting unit to use.

Refer to the [user's manual for E-TUBE PROJECT Cyclist](#) or contact the place of purchase or a distributor for how to perform pairing.



https://si.shimano.com/um/7J4MA/PAIRING_PROCESS

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
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.

If the LED lights red when the switch is pressed while riding, the coin battery level is low. Replace the coin battery.

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

When using this product with SHIMANO E-BIKE SYSTEMS and the bicycle has a cycle computer installed, refer to the SHIMANO E-BIKE SYSTEMS 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

Refer to the FAQ.

- **SHIMANO E-BIKE SYSTEMS FAQ**



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

- **Di2 FAQ**



<https://bike.shimano.com/faq/DI20A>

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