(English) UM-7KL0A-002

# **User's Manual**

# Bracket Installation Type Cycle Computer



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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).
- Please observe the appropriate rules and regulations of the country, state or region in which you conduct your business as a dealer.
- The Bluetooth <sup>®</sup> 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.

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

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.

A	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.
A	CAUTION	Failure to follow the instructions could cause personal injury or physical damage to equipment and surroundings.

# Important safety information

# **A 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.
- Riding precautions
- Do not pay excessive attention to the cycle computer display while riding. Doing so may result in an accident.
- Ensure that head and tail lights can turn on before riding the bicycle.
- Safety precautions
- Be sure to remove the battery and charging cable before wiring or attaching parts to the bicycle. Failure to do so may cause an electric shock.
- Be sure to follow the instructions provided in the manuals when installing the product. Only use SHIMANO
  genuine parts. If a component or replacement part is incorrectly assembled or adjusted, it can lead to
  component failure and cause the rider to lose control and crash.

### **A** CAUTION

- Riding precautions
- Observe the instructions in the manual for the bicycle in order to ride safely.
- Safety precautions
- 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.

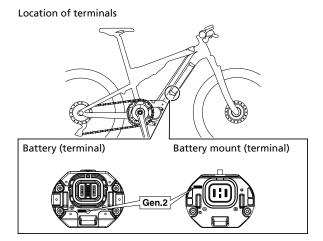
# SHIMANO STEPS battery management systems and compatibility

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.



# **Notice**

### ■ Safety precautions

- If any malfunction or trouble occurs, consult the place of purchase nearest you.
- For any questions regarding methods of installation and maintenance, please contact your place of purchase.
- Be sure to attach dummy plugs to any unused E-TUBE ports.
- For installation and adjustment of the product, consult the place of purchase.
- 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.
- Do not turn the bicycle upside down. There is a risk of damage to the cycle computer and switch unit.
- Do not leave the cycle computer in an extremely high temperature surrounding environment such as in a closed vehicle on a hot day, or near a heater. If these are not observed, problems with operation may occur.
- Handle the components carefully, and avoid subjecting them to strong shock.
- Although the bicycle still functions as a normal bicycle even when the battery is removed, the light will not turn on if it is connected to the electric power system. Be aware that using the bicycle under these conditions will be considered non-observance of the road traffic laws in Germany.
- Contact the place of purchase for updates of the component software. 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 maximum performance we highly recommend SHIMANO lubricants and maintenance products.

### Care and maintenance

• 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.

### ■ Labels

• Some of the important information contained in this manual is also indicated on the device label.

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.

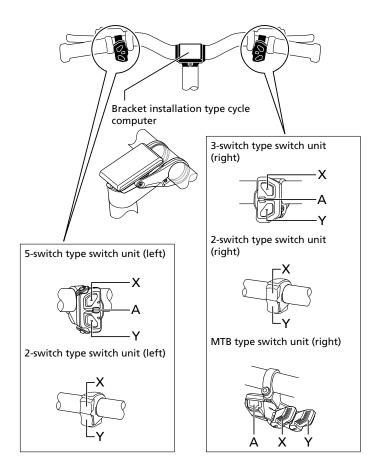
The latest user's manuals are available on our website (https://si.shimano.com).

Name	Details
SHIMANO STEPS User's Manual	This is the basic user's manual for SHIMANO STEPS. It contains the following content:
	SHIMANO STEPS quick guide
	Basic operations when riding
	<ul> <li>How to operate assist bicycles that use flat handlebars, such as city, trekking, or MTB type bicycles</li> </ul>
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	It contains the following content:
Manual (Gen.2)	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	It contains the following content:
( clamp band type / bracket installation type / switch unit integrated type )	<ul> <li>Method for configuring settings via the main body buttons and switch unit</li> </ul>
	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

This product is secured to the handlebar with a clamp band or incorporated in the handlebar, depending on the bicycle. This product is operated with the switch unit included in the assist bicycle.



The operation for each switch is indicated below.

### Switch unit (left)

Х	When riding: Increase the level of assistance When setting: Move cursor or change setting
Υ	When riding: Decrease the level of assistance When setting: Move cursor or change setting
A	When riding: Switch main screen display When setting: Switch screen / confirm setting changes

Switch unit (right)

## Names and functions of parts Notation method for operations

X	When riding: Shifting up (3-switch / 2-switch type) Shifting down (MTB type)
Υ	When riding: Shifting down (3-switch / 2-switch type) Shifting up (MTB type)
A * 1	When riding: Switch between automatic and manual gear shifting

\* 1 Only enabled when the assist bicycle supports automatic gear shifting.

# **TECH TIPS**

- When connected to the E-TUBE PROJECT, you can change the functions assigned to each switch on the switch unit. Please contact your place of purchase for details.
- Also refer to the "Switch Unit User's Manual ( with LED indicator function / without LED indicator function )."

# **Notation method for operations**

Subsequent operations of this product are indicated using the following notation.

Notation	Operation
< ◊>	Indicates an operation for pressing the X of the assist switch.
<◊>	Indicates an operation for pressing the Y of the assist switch.
<a></a>	Indicates an operation for pressing the A of the assist switch.
[Clock] (Example) Time setting	Items displayed on the cycle computer screen are enclosed in square brackets in this manual. When this notation is used in a procedure, it indicates an operation for selecting a display on the screen with $< \diamondsuit >$ or $< \diamondsuit >$ and pressing the A of the assist switch to switch the screen or confirm the setting.

# Installing and removing the cycle computer

# Removing the cycle computer

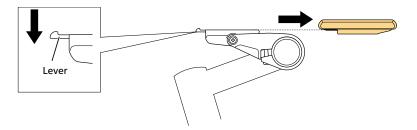
This product can be easily removed from the bicycle.

# **TECH TIPS**

- Screws to secure the bracket and cycle computer are included with the product. Please contact your place of purchase in the following cases:
  - When the cycle computer cannot be easily removed with the procedure indicated here
  - When securing the cycle computer so that it cannot be easily removed

### 1. Removing the cycle computer from the bracket

Slide the cycle computer to the front while pushing the bracket lever down to remove it.



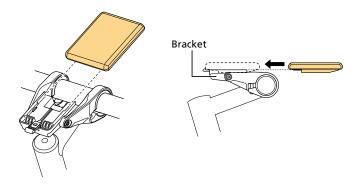
# NOTICE

• This product does not operate when removed from the bicycle.

# Installing the cycle computer

1. Sliding the cycle computer and installing it to the bracket

Be sure to push it in firmly until you feel a click.



# NOTICE

• If the cycle computer is not installed correctly, the assist function will not operate normally.

# **Basic operation**

# Turning the power ON/OFF

This product does not have a function for turning the power ON/OFF. The power of this product is linked with the main power of the assist bicycle. When the main power is turned ON, all components connected to the drive unit of the assist bicycle are also turned ON (such as assist driving, the power of this product, the electronic gear shifting mechanism, and the lights).

The main power can be turned ON/OFF using the power switch of a component included in the assist bicycle. Refer to the "SHIMANO STEPS User's Manual" or the user's manual of the component with a power switch.

# NOTICE

- Before turning the power ON, please refer to the "SHIMANO STEPS Special Battery and Parts User's Manual (Gen.2) " to check the following:
  - The battery is firmly attached to the battery mount.
- The power cannot be turned ON while charging.

# **TECH TIPS**

• If the bicycle is left unused for 10 minutes or more after turning the power ON, the power automatically turns OFF (auto power OFF function).

When the main power is turned ON, the screen shown below is displayed, then switches to the main screen.



# Viewing the screen

The items displayed on the main screen differ according to the assist bicycle.

When the traveling data display (I) When the traveling data display (I) When the traveling data display (I) has two items has four items has six items 10:38 **BOOST** (O) (D) + (D) (N) -Assist Profile 5.0 (M) 10:38 2 (L) (M) km/h **20**.0 km/h 35.0 km/h 20.0 km/h **45**.0 SPEED TORQUE — (I) 11 — (G) A2 — (H) (K) — GEAR 65 65 1234.0 12345 65 1234.0

# Viewing the screen

(A)	Current time When a warning occurs, a warning code is displayed in this area. (Refer to " Warning indication .")
(B)	Assist mode display Displays the current assist mode. (Refer to "Assist mode and bar display .")
(C)	Battery level indicator $_{*1}$ Displays the level of the battery mounted on the bicycle in 10 levels. Displayed in red when the level is at 10% or less.
(D)	Light icon Displayed when the light connected to the drive unit is ON.
(E)	Bluetooth <sup>®</sup> LE icon Displayed when a SHIMANO STEPS component connected with this product is communicating with an external device via Bluetooth <sup>®</sup> LE.
(F)	Current speed
(G)	Gear position Displays the current gear position for electronic gear shifting.
(H)	Automatic / manual gear shifting * 2 [M]: Displayed for manual gear shifting. [A1]: When two automatic gear shifting settings are registered, indicates that the product has switched to automatic gear shifting due to the first setting. When there is only one automatic gear shifting setting, indicates that the product has switched to automatic gear shifting. [A2]: When two automatic gear shifting settings are registered, indicates that the product has switched to automatic gear shifting due to the second setting.
(1)	Traveling data display Refer to the " Switching the main screen display " section.
(J)	Page guide Displays the current page when page switching is possible. Refer to the "Switching the main screen display" section.
(K)	ABS warning $_{\star3}$ For a bicycle with an ABS, indicates that ABS is not operating.
(L)	Bar display (speed) The length of the bar changes in real-time according to the current speed. Only displayed when the traveling data display (I) has two items.
(M)	Bar display (assist) The bar is displayed as a different color according to the assist mode that is currently set. The length of the bar changes in real-time according to the size of the drive unit output.  (Refer to "Assist mode and bar display .")
(N)	Maintenance alert Indicates that maintenance is required. Contact your place of purchase or a distributor if this icon is displayed.
(O)	Warning icon (Refer to " Error/warning indication .")

### **Basic** operation

### Turning the light ON/OFF

- \* 1 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.
- \* 2 Refer to the "SHIMANO STEPS User's Manual" for information on the operation for switching between automatic and manual gear shifting.
- \* 3 For a bicycle with an ABS, ABS warning is always displayed when the power is turned ON. For information on enabling the ABS, refer to the "ABS User's Manual ."

# **Turning the light ON/OFF**

If a light is connected to the drive unit, this product can be used to operate the light. Refer to "Turning the light ON/OFF [Light] ."

# **TECH TIPS**

• The light power is linked with the main power. The light cannot be turned ON when the main power is OFF.

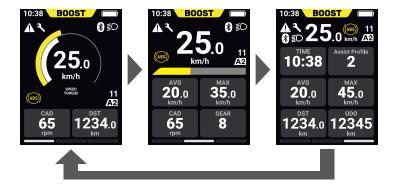
# Switching the main screen display

This product enables up to four screen configurations to be registered for the main screen, and can switch between them.

### 1. Press <A>

The screen switches as indicated below each time <A> is pressed.

Example: When three screen configurations are registered



The screen configurations of the main screen can be registered in E-TUBE PROJECT. Please contact your place of purchase.

# **TECH TIPS**

- When the switch unit (left) is the 2-switch type, the screen can be switched by pressing < ⋄ > + < ⋄</li>
   > (simultaneously).
- When a component compatible with Bluetooth <sup>®</sup> LE is connected to your bicycle, you can register and edit screen configurations for the main screen in E-TUBE PROJECT Cyclist. For details, refer to the "E-TUBE PROJECT Cyclist User's Manual ."

# Items displayable as traveling data

Traveling data	Explanation
[DST]	Traveling distance
[ODO]	Cumulative distance
[RANGE]	Traveling range * 1
[TIME]	Riding time
[AVG]	Average speed
[MAX]	Maximum speed
[CAD]	Cadence
[CLOCK]	Current time
[GEAR]	Gear position
[SPD]	Current speed
[Assist Profile]	Current assist profile (Refer to " Dynamically changing the riding comfort [Assist Profile] .")

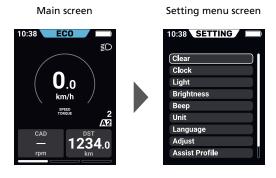
<sup>\* 1</sup> The value is not displayed when the assist mode is set to [OFF] or when the walk assist mode is enabled.

# **Setting menu**

# Switching to the setting menu

The items that can be set differ according to the assist bicycle. If assist switch is not connected, the setting menu cannot be displayed.

1. Stop the bicycle ♦ <A> (continue to press and hold until the screen switches)



# **TECH TIPS**

• When the switch unit (left) is the two-switch type, E-TUBE PROJECT is required to change settings. Contact the place of purchase.

# **Exiting the setting menu [Exit]**

When you close the setting menu, the application returns to the main screen.

1. On setting menu screen: [Exit]

# **Setting the time [Clock]**

1. Setting menu screen ♦ [Clock] ♦ change the "Hour" number with <♦> or <♦> ♦ <A>

The cursor moves to the "Minute" number.



2. Change the "Minute" number with <♦> or <♦> ♦ <A>

The display will automatically return to the setting menu screen.

# **TECH TIPS**

Continue to press and hold < ⋄ > or < ⋄ > to change the number quickly.

# Turning the operation sound ON/OFF [Beep]

Set whether to emit the operation sound.

1. Setting menu screen ♦ [Beep] ♦ [ON] / [OFF]

The display will automatically return to the setting menu screen.



The beep sound for operation mistakes and errors/warnings cannot be turned OFF.

# Dynamically changing the riding comfort [Assist Profile]

The riding comfort of the assist bicycle is determined by the relationship between the force applied to the pedals and the drive unit output, and the maximum output of the drive unit. This product enables you to select two

assist profiles, [BASIC] and [Fine tune], that determine the riding comfort. The setting item names in [Assist Profile] and their content depend on your bicycle. In addition, by connecting to E-TUBE PROJECT, you can perform a wider range of customization than before.

### 1. Setting menu screen ♦ [Assist Profile] ♦ [BASIC] / [Fine tune]

### [BASIC]

One of the following two combinations of assist modes is set by default:

- [BOOST] / [TRAIL] / [ECO]: A combination of assist modes for sport riding.
- [HIGH] / [NORMAL] / [ECO]: A combination of assist modes for comfortable riding in urban settings.

### [Fine tune]

Supports a wide range of riding conditions with a maximum of 15 levels.

- The number of settings registered by default depends on the bicycle.
- The settings and gear position can be customized in E-TUBE PROJECT.



 Depending on the setting, battery consumption may increase and the assisted traveling range may greatly decrease.

# Assist mode and bar display

The color of the assist mode display and bar display changes according to the assist mode.

# When the assist mode is set to [OFF]

The assist mode display is white. The bar display for level of assistance is not available.



### When the assist mode is set to the minimum level of assistance

- The assist mode display and bar display are light blue.
- With the [Fine tune] mode, the assist mode is displayed as a numeric value. For example, when 15 levels are set, 1/15 is displayed for the mode with the minimum level of assistance and 15/15 is displayed for the mode with the maximum level of assistance.



### When the assist mode is set to the intermediate level of assistance

- The assist mode display and bar display are green.
- The [Fine tune] mode is displayed in green except when the level of assistance is at the minimum or maximum.
- When two or fewer assist modes are set with the [Fine tune] mode, this color display is not available.



### When the assist mode is set to the maximum level of assistance

The assist mode display and bar display are yellow.

• When one assist mode is set with the [Fine tune] mode, yellow indicates that assist is ON.



# When the walk assist mode is set

The assist mode display and bar display are blue.

Walk assist mode (standby)

Walk assist mode (assistance functioning)





# **TECH TIPS**

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

# **Setting the display**

### Setting the screen brightness [Brightness]

Setting menu screen ♦ [Brightness] ♦ <♦> or <♦> to adjust the brightness ♦ <A>
 The display will automatically return to the setting menu screen.



## Switching the display language [Language]

Setting menu screen ♦ [Language] ♦ select the display language ♦ <A>
 The display will automatically return to the setting menu screen.

## Changing the unit of the speed and distance [Unit]

Select the unit for displaying the speed and distance.

Setting menu screen ♦ [Unit] ♦ [km] / [mile]
 The display will automatically return to the setting menu screen.

## Matching the displayed speed with another device [Display speed]

You can adjust the displayed value when there is a difference between the speed displayed on this product and the speed indicator of another device.

### 1. Setting menu screen ♦ [Display speed] ♦ <♦> or <♦> to adjust the value ♦ <A>

The display will automatically return to the setting menu screen.



### Increase value

Increases the displayed speed value.

### Decrease value

Decreases the displayed speed value.

# **TECH TIPS**

This setting only changes the displayed value. It does not change the power assist function.

## Resetting the traveling distance [Clear]

Resets the traveling distance. When the traveling distance is reset, [TIME] (riding time), [AVG] (average speed), and [MAX] (maximum speed) will also be reset.

### 1. Setting menu screen ♦ [Clear] ♦ [DST] ♦ [OK]

The display will automatically return to the setting menu screen.

# Setting the assist bicycle function

# Turning the light ON/OFF [Light]

Turns the light connected to the drive unit ON/OFF.

### 1. Setting menu screen ♦ [Light] ♦ [ON] / [OFF]

The display will automatically return to the setting menu screen.

### Setting the gear position when starting from a stop [Start mode]

Automatically shifts to the set gear position when the bicycle starts from a stop. [Start mode] can only be set when the bicycle has a Di2 internal geared hub.

Setting menu screen ♦ [Start mode] ♦ <♦> or <♦> to select the gear position ♦ <A>
 The display will automatically return to the setting menu.



### [OFF]

Do not set the start mode.

### [1], [2], ...

Select the gear position when starting from a stop. A gear position up to the maximum gear position of the shifting unit installed to the assist bicycle can be selected.

# **TECH TIPS**

- [Start mode] can also be set for manual gear shifting.
- [Start mode] can only be set to [OFF] for manual gear shifting.
- This setting overwrites the automatic gear shifting settings configured at the time of purchase. It can be set when switched to [M], [A1] or [A2].

## Adjusting automatic gear shifting [Shift timing]

Adjusts the gear shifting timing during automatic gear shifting.

### 1. Setting menu screen ♦ [Shift timing] ♦ <♦> or <♦> to adjust the value ♦ <A>

The display will automatically return to the setting menu.



### Increase value

Increase the value when pedaling feels too heavy.

### Decrease value

Decrease the value when pedaling feels too light.

# **TECH TIPS**

• This setting overwrites the automatic gear shifting settings configured at the time of purchase. It can be set when switched to [A1] or [A2].

# **Troubleshooting**

# Gear shifting adjustment with the electronic gear shifting unit [Adjust]

If gear shifting feels abnormal, contact the place of purchase.

# When gear shifting operation is impossible

If you are unable to change gears using the electronic gear shifting, check the cycle computer display for the following. Also refer to "Error/warning indication."

# When [Adjust] is displayed

The system has switched to adjustment mode. Perform the following operation to cancel it.

### 1. <♦><♦> (select [Cancel]) ♦ <A>

The system returns to the setting menu screen.



### 2. On setting menu screen: [Exit]

The system returns to the main screen or sub screen, and gear shifting is available.

# **Error/warning indication**

### **Error** indication

If an error code "E\*\*\*" (where \*\*\* is letters or numbers) is displayed on the entire screen, the product may have malfunctioned.

Refer to the "SHIMANO STEPS Special Battery and Parts User's Manual" and follow one of the procedures below to reset the display:

### Troubleshooting

### Error/warning indication

- Press the battery power button to turn the power OFF.
- Remove the battery from the battery mount.





• If the situation does not improve even after turning the power back ON, stop using the bicycle and consult with the place of purchase or a distributor as soon as possible.

# Warning indication

If the warning icon and a warning code "W\*\*\*" (where \*\*\* is letters or numbers) are displayed on the screen, the product may have a temporary problem. Functionality may be limited while the code is displayed. If the situation is improved, this indication will disappear. If the situation does not improve, contact the place of purchase as soon as possible.



For details on error/warning codes, check the latest versions below:



https://si.shimano.com/error

# When a problem occurs

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



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

### **SHIMANO**

C€₩

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