Thank you for purchasing Shimano products.

- This instruction manual explains the operation of the E-TUBE PROJECT. Be sure to read this manual before use in order to fully utilize the functions.
- In order to use the E-TUBE PROJECT, either the SM-PCE1, SM-PCE02, or SM-BCR2 interface is required.

Check the following support site for the latest support information.
http://e-tubeproject.shimano.com
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10. SM-BTR2, BT-DN110
12. SM-EWW01, EW-WU101, EW-WU111
CUSTOMIZE

This function is used to customize the gear shifting system.

1. Click [Customize] in the main screen.

2. Click [Display monitor settings]* or [Switch setting] or [Front derailleur adjustment setting] or [Rear derailleur adjustment setting] or [Multi shift mode setting] in the Customize menu screen to move to the respective setting screens.

* You can select [Display monitor settings] when using SC-M9051, SC-M9050, SC-MT800, or SC-S705. For details on [Display monitor settings], please read the E-TUBE PROJECT Application Instruction Manual (MTB Edition).
Switch setting

Switch the shift switch function of the switch unit.

1. Display the customize menu screen.
2. Click [Switch setting] in the customize menu screen.
3. Select the desired setting for each switch.

* Clicking [Restore default values] and then [Set] restores each of the switches functions to default.

* Whether to assign either the D-FLY function or the gear shifting function to the switch can be selected.

● When performing D-Fly setting

---
The items that can be set are as follows.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[D-FLY Ch.1]</td>
<td>Assign Ch. 1.</td>
</tr>
<tr>
<td>[D-FLY Ch.2]</td>
<td>Assign Ch. 2.</td>
</tr>
<tr>
<td>[D-FLY Ch.3]</td>
<td>Assign Ch. 3.</td>
</tr>
<tr>
<td>[D-FLY Ch.4]</td>
<td>Assign Ch. 4.</td>
</tr>
</tbody>
</table>

- When performing gear shifting setting

![Switch function setting](image)

The items that can be set are as follows.

<SW-M9050-L/SW-M9050-R>

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Rear Shift Up]</td>
<td>Shifts the rear derailleur from a larger sprocket to a smaller sprocket.</td>
</tr>
<tr>
<td>[Rear Shift Down]</td>
<td>Shifts the rear derailleur from a smaller sprocket to a larger sprocket.</td>
</tr>
<tr>
<td>[Use X2]</td>
<td>(X2) switch is enabled.</td>
</tr>
<tr>
<td>[Use Y2]</td>
<td>(Y2) switch is enabled.</td>
</tr>
</tbody>
</table>

ST-R8070-L/ST-R9170-L/ST-R8070-R/ST-R9170-R>

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Rear Shift Up]</td>
<td>Shifts the rear derailleur from a larger sprocket to a smaller sprocket.</td>
</tr>
<tr>
<td>[Rear Shift Down]</td>
<td>Shifts the rear derailleur from a smaller sprocket to a larger sprocket.</td>
</tr>
</tbody>
</table>
### <ST-S705/SW-S705>

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Front Shift Up]</td>
<td>Shifts the front derailleur from a smaller chainring to a larger chainring.</td>
</tr>
<tr>
<td>[Front Shift Down]</td>
<td>Shifts the front derailleur from a larger chainring to a smaller chainring.</td>
</tr>
<tr>
<td>[Rear Shift Up]</td>
<td>Shifts the rear derailleur from a larger sprocket to a smaller sprocket.</td>
</tr>
<tr>
<td>[Rear Shift Down]</td>
<td>Shifts the rear derailleur from a smaller sprocket to a larger sprocket.</td>
</tr>
</tbody>
</table>

### <SW-E6000/SW-E6010-R>

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Front Shift Up]</td>
<td>Shifts the front derailleur from a smaller chainring to a larger chainring.</td>
</tr>
<tr>
<td>[Front Shift Down]</td>
<td>Shifts the front derailleur from a larger chainring to a smaller chainring.</td>
</tr>
<tr>
<td>[Rear Shift Up]</td>
<td>Shifts the rear derailleur from a larger sprocket to a smaller sprocket.</td>
</tr>
<tr>
<td>[Rear Shift Down]</td>
<td>Shifts the rear derailleur from a smaller sprocket to a larger sprocket.</td>
</tr>
</tbody>
</table>

### <SW-E6010-L>

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Front Shift Up]</td>
<td>Shifts the front derailleur from a smaller chainring to a larger chainring.</td>
</tr>
<tr>
<td>[Front Shift Down]</td>
<td>Shifts the front derailleur from a larger chainring to a smaller chainring.</td>
</tr>
<tr>
<td>[Rear Shift Up]</td>
<td>Shifts the rear derailleur from a larger sprocket to a smaller sprocket.</td>
</tr>
<tr>
<td>[Rear Shift Down]</td>
<td>Shifts the rear derailleur from a smaller sprocket to a larger sprocket.</td>
</tr>
</tbody>
</table>

### <Other compatible units>

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Rear Shift Up]</td>
<td>Shifts the rear derailleur from a larger sprocket to a smaller sprocket.</td>
</tr>
<tr>
<td>[Rear Shift Down]</td>
<td>Shifts the rear derailleur from a smaller sprocket to a larger sprocket.</td>
</tr>
</tbody>
</table>
* Please be aware of the following when setting functions.

- D-FLY function setting is not available when the following conditions are not satisfied.

  ➢ When only the switch is connected
    - When the version of firmware for the switch to be set supports D-FLY.

  ➢ When devices other than the switch are also connected
    - You can set the D-Fly function when all of the four following conditions are met.
      1. When the version of firmware for the switch to be set supports D-FLY.
      2. When D-FLY compatible wireless devices (EW-WU101, EW-WU111, SC-MT800, SC-M9051) are connected, and when the version of firmware supports D-FLY.
      3. When D-FLY compatible masters (BM-DN100, BT-DN110) are connected, and when the version of firmware supports D-FLY.
      4. When junction A is connected.

        ➢ SC-MT800 and SC-M9051 are junction A devices with wireless functionality. As a result, conditions two and four can be satisfied by one device.
- Cyclecomputer left and Cyclecomputer right can be set when D-FLY function setting is not available (when the above conditions are not satisfied).

- SW-E6000/SW-E6010-R can be set to Cyclecomputer right.

- SW-E6010-L can be set to Cyclecomputer left.


- [Front Shift Up] and [Front Shift Down] can be selected for models other than ST-S705/SW-S705/SW-E6000/SW-E6010-L/R, but will not function when there is no front derailleur.

4. Click [OK] to close the dialog box and click [Set] to complete the setting.
**Front derailleur adjustment setting**

This lets you adjust the front derailleur.

1. Display the customize menu screen.
2. Click [Front derailleur adjustment setting] in the customize menu screen.
3. Click [Yes].
   - If you have not performed low/top adjustment yet, click [No], disconnect the unit from the PC, and perform adjustment.
   
   For information on how to perform low / top adjustment, refer to the dealer's manual.
   
   When [Adjustment method] is clicked, a different window appears.
4. Set the front derailleur to the second speed and the rear derailleur to the first speed before adjustment. Follow the instructions on the screen and then click [Set].
5. Click [Down] / [Up] to adjust.
   - When [Front derailleur adjustment method] is clicked, a detailed description of the adjustment method will be displayed in a different screen.

The settings to be adjusted are as follows.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Adjustment setting]</td>
<td></td>
</tr>
<tr>
<td>[Down]</td>
<td>Moves the chain guide toward the inside (- display direction).</td>
</tr>
<tr>
<td>[Up]</td>
<td>Moves the chain guide toward the outside (+ display direction).</td>
</tr>
</tbody>
</table>

|                  |                                                      |
| Displays the current set value in [Setting Value]. |

- The front derailleur and the rear derailleur will not operate while this procedure is being carried out, even if you operate the shifting switches.
- FD-6770 cannot be adjusted.
- Rotate the crank arms while carrying out operations which are related to adjustment and gear shifting.

6. Click [Set] to complete adjustment.
Rear derailleur adjustment setting

This lets you adjust the rear derailleur.

1. Display the customize menu screen.
2. Click [Rear derailleur adjustment setting] in the customize menu screen.
   - Click [Rear derailleur adjustment method] in the rear derailleur adjustment setting screen to display a separate screen with details on the adjustment method.

The settings to be adjusted are as follows.

<table>
<thead>
<tr>
<th>Item</th>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Adjustment setting]</td>
<td>[Down]</td>
<td>Moves the guide pulley toward the inside (- display direction).</td>
</tr>
<tr>
<td></td>
<td>[Up]</td>
<td>Moves the guide pulley toward the outside (+ display direction).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Displays the current set value in [Setting Value].</td>
</tr>
<tr>
<td>[Rear derailleur gear shifting]</td>
<td>[Down]</td>
<td>Shifts the rear derailleur from a smaller sprocket to a larger sprocket (- display direction).</td>
</tr>
<tr>
<td></td>
<td>[Up]</td>
<td>Shifts the rear derailleur from a larger sprocket to a smaller sprocket (+ display direction).</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Displays the current number of sprockets in [Gear position].</td>
</tr>
</tbody>
</table>

- The front derailleur and the rear derailleur will not operate while this procedure is being carried out, even if you operate the shifting switches.
- Rotate the crank arms while carrying out operations which are related to adjustment and gear shifting.
- The adjustment bolt judgment screen may be displayed while rear derailleur gear shifting operations are being carried out. If this happens, follow the instructions in the screen to adjust the adjustment bolt.

4. Click [Set] to complete adjustment.
Shift mode setting

Set the teeth ranges of the gears, the shift modes, and the Synchronized shift interval.

1. Display the customize menu screen.
2. Click [Shift mode setting] in the Customize menu screen.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Select the number of teeth]</td>
<td>[Number of teeth of FC] Select the number of chain ring gear teeth.</td>
</tr>
<tr>
<td></td>
<td>[Number of teeth on CS (range)] Select the number of cassette sprocket gear teeth.</td>
</tr>
<tr>
<td>[Select shift mode]</td>
<td>[Shift mode 1] Select synchronized shift or semi-synchronized shift.</td>
</tr>
<tr>
<td></td>
<td>[Shift mode 2] Select synchronized shift or semi-synchronized shift.</td>
</tr>
<tr>
<td>[Gear position control]*</td>
<td>Select Set/Do not set.</td>
</tr>
</tbody>
</table>

* May not be possible to select depending on the product and gear teeth group combination. E.g.) If using an FC with 52-36 gear teeth with RD-R9150, etc.

3. Set the teeth ranges of the gears, the shift modes, the Synchronized shift interval, and then click [Next].

* Click [About Shift mode] for an explanation of Synchronized shift and Semi-synchronized shift.

* Click [About gear position control] to display an explanation about gear position control.
4. Depending on the combination set for the shift modes, one of the four screens below will display.

- **Shift mode 1: Semi-synchronized shift**  Shift mode 2: Synchronized shift

![Semi-synchronized shift screen]

- **Shift mode 1: Synchronized shift**  Shift mode 2: Synchronized shift

![Synchronized shift screen]
- Shift mode 1: Synchronized shift  Shift mode 2: Semi-synchronized shift

- Shift mode 1: Semi-synchronized shift  Shift mode 2: Semi-synchronized shift
**Synchronized shift**

Modify Synchronized shift map settings. Synchronized shift is a function that automatically shifts gears on the front derailleur in synchronization with rear derailleur gear shifting.

1. Display the customize menu screen.
2. Click [Shift mode setting] in the Customize menu screen.
3. Set either Shift mode 1 or Shift mode 2 to [Synchronized shift] and then click [Next].
4. A dialog box [Shift mode setting] with a Synchronized shift map will display.
5. Click and drag the green and blue cells to make changes to the Synchronized shift map.
   - Gear positions and teeth numbers for the crank and cassette sprocket are indicated on the axes of the Synchronized shift map. The gear ratio at each gear position is indicated in each cell. The green and blue cells indicate the gear positions at which synchronized shifting is executed. Green cells and arrows apply to shifting up. Blue cells and arrows apply to shifting down.

Example) When Shift mode 1 is set to Synchronized shift and Shift mode 2 is set to Semi-synchronized shift:
* Click [Restore default values] to return the Synchronized shift map to its default state.

* While a green or blue cell is being clicked, cells outside the range within which the cell can be moved turn black, as shown in the illustration below. (The below illustration shows an example where the cell at FD position Low/RD position 3 is being clicked.)

If both Shift mode 1 and Shift mode 2 are set to [Synchronized shift], the buttons [Copy map1] and [Copy map2] appear.

6. Click [OK] to apply the changes to the bicycle.

To ensure rider comfort when using Synchronized shift, the cells may only be moved within a set range, which is established according to the following rules.

* **Synchronized shifting outward**
  - Synchro shift point RD gear position \(\geq\) Shift end point RD gear position
  - Settable range for the Shift end point shall extend to the gear position with a gear ratio one step lower than that of the Synchro shift point.

  Example) If the Synchro shift point is 2.40, the Shift end point can be moved down to the gear position with the gear ratio 2.26.

* **Synchronized shifting inward**
  - Synchro shift point RD gear position \(\leq\) Shift end point RD gear position
  - Settable range for the Shift end point shall extend to the gear position with a gear ratio one step higher than that of the Synchro shift point.

  Example) If the Synchro shift point is 2.08, the Shift end point can be moved up to the gear position with the gear ratio 2.12.

* The blue arrows shall be higher than the green arrows.
Example) The green cell (on right) is moved from FD position Top/RD position 3 to FD position Top/RD position 4: Before, the green cell (on left) can be moved to RD position 7.

After, the green cell (on left) can be moved to RD position 8.
Semi-synchronized shift

Semi-synchronized shift is a function that automatically shifts the rear derailleur when the front derailleur is shifted in order to obtain optimal gear transition. It is possible to set the rear derailleur to jump from 1 to 4 gears. (Some gear numbers cannot be selected depending on gear combination.)

1. Display the customize menu screen.

2. Click [Shift mode setting] in the Customize menu screen.

3. Set either Shift mode 1 or Shift mode 2 to [Semi-synchronized shift] and then click [Next].


Example) When Shift mode 1 and Shift mode 2 are both set to Semi-synchronized shift:

- Click [Restore default values] to return the values in the Rear shifts up on Front shift down and Rear shifts down on Front shift up pull-down boxes to default values.

5. Click [OK] to apply any changes to Semi-synchronized shift values to the bicycle.
**Multi shift mode setting**

The multi shift mode setting can be changed. Multi-shifting is a function to shift the rear derailleur by several gears in a row by holding down the shift switch. (Multi-shifting cannot be used for the front derailleur.)

* To perform the multi shift mode setting, a battery unit or a battery mount unit needs to be connected in addition to the derailleur.

1. Display the customize menu screen.
2. Click [Multi shift mode setting] in the customize menu screen.
3. Click each item to select the settings description.

The items that can be set are as follows.

<table>
<thead>
<tr>
<th>Item</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>[Multi shift mode setting]</td>
<td>Whether the multi shift mode is used or not can be selected. If you use a 2-step switch, you can select [ON] or [OFF] for each step. For other switches, select [ON] or [OFF] in [Other Shifting Switch].</td>
</tr>
<tr>
<td>[Gear-shifting interval]</td>
<td>The gear-shifting interval for multi shift can be selected from five levels.</td>
</tr>
<tr>
<td>[Gear number limit]</td>
<td>A limitation can be placed on the number of gears that are shifted with one long press.</td>
</tr>
</tbody>
</table>

4. Click [Set] to complete set up.
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