Display Unit
(LED type)

ORIGINAL INSTRUCTIONS
1. Display unit (LED type)
E-BIKE SYSTEMS

The e-Bike Systems are designed to give you the optimal amount of power assist.

It assists you within a standard range based on factors such as your pedaling strength, bicycle speed, and current gear.

The e-Bike Systems do not operate in the following situations:

• When the display unit's power is off.
• When you are moving 25 km/h or faster.
• When you are not pedaling.
• When there is no residual battery capacity.
• When the automatic power off function* is operating.
  * Power turns off automatically when you do not use the e-Bike Systems for 5 minutes.
• When the assist mode is set to Off mode.

Three types of “assist mode” are available.

Choose from High-Performance mode, Standard mode, Eco mode and Off mode to suit your riding conditions. See “Displaying and switching the assist mode” for information on switching between assist modes.

<table>
<thead>
<tr>
<th>Assist Mode</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-Performance mode</td>
<td>Use when you want to ride more comfortably, such as when climbing a steep hill.</td>
</tr>
<tr>
<td>Standard mode</td>
<td>Use when riding on flat roads or climbing gentle hills.</td>
</tr>
<tr>
<td>Eco mode</td>
<td>Use when you want to ride as far as possible.</td>
</tr>
<tr>
<td>Off mode</td>
<td>Use when you want to ride without power assist. You can still use the other display unit functions.</td>
</tr>
</tbody>
</table>
E-BIKE SYSTEMS

Power assist chart

- This illustration is for reference purposes only. Actual performance may vary depending on road conditions, wind, and other factors.
- In Off mode, power assist is not provided.
INSTRUMENT AND CONTROL FUNCTIONS

Display unit (LED type)

- Assist mode switch (up)
- Function display (Battery capacity indicator/range meter/speedometer)
- Residual battery capacity lamp
- Remaining assist distance lamp
- Function select switch
- Bicycle speed lamp
- Power switch
- Assist mode switch (down)
- Assist mode lamp
- Light switch
- Light lamp
INSTRUMENT AND CONTROL FUNCTIONS

Display unit (LED type)
The display unit (LED type) offers the following operations and information displays.

○ Power “On/Off”
Each time you press the power switch, the power switches between “On” and “Off”. When the power turns on, all the lamps on the display unit light up for approximately 2 seconds and then turn off again. After that, the “STD” assist mode lamp, battery capacity indicator, and the residual battery capacity lamp (range meter and remaining assist distance lamp, or the speedometer and bicycle speed lamp) light up again.

TIP
• When you turn on the power, the assist mode is automatically set to Standard mode.
• Keep your feet off the pedals when turning on the display unit. Also, do not start riding immediately after turning on the display unit. Doing so could weaken the assist power. (Weak assist power in either of these cases is not a malfunction.) If you did either of the above by accident, remove your feet from the pedals, turn on the power again, and wait a moment (approximately 2 seconds) before starting to ride.

○ Displaying and switching the assist mode
The assist mode lamp displays the selected assist mode.
• When you press the assist mode switch (up), the mode changes from “OFF” to “ECO” to “STD”, or from “STD” to “HIGH”.
• When you press the assist mode switch (down), the mode changes from “HIGH” to “STD”, or from “STD” to “ECO”, or “ECO” to “OFF”.

TIP
Further pressing of the assist mode switch (up) or (down) will not cycle the assist mode selections.
In the Off mode, the assist mode lamp does not light.
Displaying and switching the battery capacity indicator, range meter, speedometer

You can display either the battery capacity indicator, range meter or speedometer.

The battery capacity indicator displays an estimate of how much capacity is left in the battery pack, the range meter displays an estimate of the remaining assist distance (kilometers) on the residual battery capacity (In assist off mode, the speedometer displays, the remaining assist distance meter is not displayed.)

Each time you press the function select switch, the function display is switched, and either the residual battery capacity lamp, remaining assist distance lamp or bicycle speed lamp lights up.

See “CHECKING THE RESIDUAL BATTERY CAPACITY” for information on estimating the residual battery capacity.

TIP
When you turn on the power, the items that have been selected last time are displayed on the function display.
When the speedometer is displayed, if the residual battery capacity decrease to 20 %, 10 %, or 0 %, the meter’s display automatically switches to the battery capacity indicator.

Headlight “On/Off” (Applies only to models equipped with a headlight powered by the battery pack. The taillight, which is powered by the battery pack, is switched on/off with the headlight.)

Each time you press the light switch, the headlight switches between “On” and “Off”. When the headlight is lit, the light lamp also lights up.

TIP
When pressing the light switch, the back light of the display unit become dimmer.
For the “HIGH”, only “HI” lights up on the display with the back light.
Display of faults detected by diagnosis mode

The e-Bike Systems are equipped with a diagnosis mode. When you turn on the display unit’s power, if there is a malfunction or fault in the e-Bike Systems, the systems notify you of the fault by flashing the assist mode lamp, residual battery capacity lamp, remaining assist distance lamp, and bicycle speed lamp alternately, and displaying “Er” in the function display. See “TROUBLESHOOTING” regarding symptoms and remedies for abnormal displays and abnormal flashing.

⚠️ WARNING

If a fault is displayed, have your bicycle inspected at a dealer as soon as possible.
## CHECKING THE RESIDUAL BATTERY CAPACITY

You can check the estimate of how much capacity is left in the battery and to what extent it is charged. The check can be performed using either the display unit’s residual battery capacity indicator or the battery’s residual battery capacity indicator lamps.

### TIP
- Even if the battery’s capacity reaches 0 (zero), you can still ride the bicycle as a regular bicycle.
- If you are using an old battery pack, the residual battery capacity indicator may suddenly display very little power when you start moving. This is not a malfunction. Once riding stabilizes and the load is reduced, the proper value is displayed.

### Residual battery capacity indicator display and estimate of residual battery capacity for display unit (LED type)

<table>
<thead>
<tr>
<th>Residual battery capacity indicator display</th>
<th>Estimate of residual battery capacity</th>
<th>Applicable situation</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image" alt="FL 90 80" /></td>
<td>100–71 %</td>
<td>When the battery capacity is between 100 % (FL) and 21 %, the display decreases in increments of 10 %.</td>
</tr>
<tr>
<td><img src="image" alt="70 60 50" /></td>
<td>70–41 %</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="40 30" /></td>
<td>40–21 %</td>
<td></td>
</tr>
<tr>
<td><img src="image" alt="20 11" /></td>
<td>20–11 %</td>
<td>When the battery capacity is between 20 % and 1 %, the display decreases in increments of 1 %.</td>
</tr>
<tr>
<td><img src="image" alt="10 1" /> Slow flashing of numbers</td>
<td>10–1 %</td>
<td>There is very little battery capacity left. Please charge the battery soon.</td>
</tr>
<tr>
<td><img src="image" alt="0" /> Fast flashing of numbers</td>
<td>0 %</td>
<td>The battery capacity has reached 0 (zero). Please charge the battery pack.</td>
</tr>
</tbody>
</table>
### TROUBLESHOOTING

#### E-Bike Systems

<table>
<thead>
<tr>
<th>Symptom</th>
<th>Check</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>The assist mode lamps, residual battery capacity lamp, remaining assist distance lamp are flashing in an alternating pattern (at intervals of roughly 0.2 seconds). Or, the assist mode indicator and battery capacity indicator are flashing in an alternating pattern (at intervals of 0.5 seconds).</td>
<td>There could be a problem inside the Drive Unit is malfunctioning. Turn on the power to the display unit and then leave it alone for 5 minutes. All lamps will turn off automatically. Turn the power on again.</td>
<td></td>
</tr>
<tr>
<td>The display unit shuts down immediately (approx. 4 seconds later) after switching the power on.</td>
<td>Are the bicycle’s battery pack connection terminals dirty?</td>
<td>Remove the battery pack, clean the bicycle’s terminals with a dry cloth or cotton swab, and then install the battery pack again.</td>
</tr>
<tr>
<td>Traveling range has decreased.</td>
<td>Are you fully charging the battery pack?</td>
<td>Charge the battery pack until full (F).</td>
</tr>
<tr>
<td></td>
<td>Are you using the system under low-temperature conditions?</td>
<td>Normal traveling range will be restored when the ambient temperature rises. Additionally, storing the battery pack indoors (in a warm location) before use will improve traveling range under cold conditions.</td>
</tr>
<tr>
<td></td>
<td>Is the battery pack worn out?</td>
<td>Replace the battery pack.</td>
</tr>
<tr>
<td>The assist mode lamps are flashing.</td>
<td>These lamps will flash when the speed sensor is unable to detect a correct signal.</td>
<td>Turn off the power to the display unit and then turn it on again, select the assist mode and then ride for a short distance. Also, make sure the magnet is mounted correctly on the spokes of the wheels.</td>
</tr>
</tbody>
</table>