The eBike Display

User Manual

KD718
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Product name and model

E-bike Intelligent LCD display
Model: KD718

Specifications

- 24V/36V/48V Power Supply
- Rated working current: 10mA
- The maximum working current: 30mA
- Off-state leakage current: <1μA
- Operating temperature: -20℃ ~ 60℃
- Storage temperature: -30℃ ~ 70℃

Appearance and Size

◆ Display appearance and dimensional drawing (unit: mm)
◆ Remote appearance and dimensional drawing (unit: mm)
Function Summary

KD718 has many functions to meet riders’ needs, the indication elements are as follows:

- Battery and battery percentage
- Motor power
- Power assist level
- Speed indication (incl. current speed, Max. speed and Avg. speed)
- ODO and trip distance
- The push-assistance function
- Trip time
- Backlight On/Off
- Error code indication
- Cadence (optional)
- USB connection (optional)
- Range (optional)
- Various Parameters Settings (e.g., wheel size, speed-limit, battery bar settings, assist level, controller limited current, password enable/disable, etc.)
- Recover Default Settings

General Operation

◆ Switching the E-bike System On/Off

To switch on the E-bike system and provide the power supply to the controller, hold the On/Off button on the remote for 1 second.

To switch off the E-bike system, hold the On/Off button for 2s. The E-bike system no longer uses the battery power.

When E-bike system is switched off, the leakage current is less than 1 μA.

■ When the E-bike is parked for approx. 10 minutes, the E-bike system switches off automatically.

◆ Display Interface

After switching on the E-bike system, the display shows Current Speed and Trip Distance by default.

Press “i” button to switch between the indication functions below:

ODO (km) → MAX. Speed (km/h) → AVG. Speed (km/h) → Trip Time (Min.) → ODO (km).

*Finally, it cycles back to ODO (km) again.
**Switching Push-assistance Mode On/Off**

To activate the push-assistance function, press and hold the "-" button on the remote. After 2 seconds, E-bike is activated to go at a uniform speed of 6 Km/h while the screen displays.

The push-assistance function is switched off as soon as you release the "-" button on the remote. The E-bike system stops the power output immediately.

- Push-assistance function may only be used when pushing the E-bike. Be aware of danger of injury when bike wheels do not have ground contact while using the push-assistance function.
◆ Switching the Lighting On/Off
To switch on E-bike front light or rear light, briefly press the “LED” button on the remote. The display backlight brightness is automatically reduced while the screen displays LED. Likewise, briefly press the “LED” button again, the bike front light or rear light can be switched off and display backlight recover its brightness.
*If E-bike front light or rear light is independent of “LED” button, the “LED” button can only be used to switch on/off the display backlight.

![Switching the Lighting On/Off Interface](image)

◆ Assist Level Selection
Press “+” or “-” button to change the E-bike system assist level and change the motor output power. The default assist level ranges from level “0” to level “5”, The output power is zero on Level “0”. Level “1” is the minimum output power. Level “5” is the maximum output power. When you reach “5”, press the “+” button again, the interface still shows “5”, and blinks at “5” to indicate the power maximum. When you are in level “0”, press the “-” button again, the interface still shows “0” and blinks at “0” to indicate the power minimum. The default value is level “1”.

![Assist Level ‘1’ Interface](image)
◆ Battery Indicator
The battery percentage info-graphic indicates current battery power. The battery frame is full of a specified color such as green color or white color when the battery is in high voltage. When the battery is in low voltage, battery frame will flash at the frequency of 1HZ to give a notice that the battery needs to be recharged immediately.

![Battery SOC Indication Interface](image)

◆ Motor Power Indicator
The motor power can be read via the interface below (bottom green rim).

![Motor Power Indication Interface](image)

◆ USB connection indication (optional)
When a USB external device is inserted into the display, the USB connection indication is shown as follows:

With the USB connection, it is possible to operate and charge most devices whose power supply is possible via USB (e.g., various mobile phones). Using a matching USB cable, connect the USB port of external device to the USDB port of the display.
USB Connection Indication Interface

◆ Error Code Indication
The components of the E-bike system are continuously and automatically monitored. When an error is detected, the respective error code is indicated in text indication area. Refer to detailed definition of the error codes in Attached list 1.

Have the display inspected and repaired when an error code appears. Or else, you will not be able to ride the bike normally. Please always refer to an authorized bicycle dealer.
**DisPlay Setting**

Press the On/Off button to switch on the display.

To access Setting page, hold both the “+” button and the “-” button for 2s.

All the Settings are operated in the case of a parked E-bike.

◆ **Unit km/mile Conversion**

Toggle Unit represents unit settings.

To toggle the unit, press the “+” button or the “-” button to choose the desired unit and press the “i” button to confirm. The default value is “Metric(km)”

To store a changed setting, briefly press the “i” button
◆ Backlight Brightness Settings

LCD Luminance represents backlight brightness. 100% is the highest brightness. The less the percentage, the lower the backlight brightness.

To modify the backlight brightness, press the “+” button or the “-” button to choose the desired percentage.

![Backlight Brightness Settings Interface]

◆ Auto-off Time Settings

Dormancy represents display auto-off time settings.

To change display automatic shutdown time, press Dormancy and press “+” button or “-” button to choose the desired duration. The default auto-off time is 5 minutes.

To store a changed setting, briefly press the “i” button to confirm.

![Auto-off Time Settings]
SOC View Settings
SOC view represents 2 display methods of remaining battery capacity. One is by the percentage and the other is by the Voltage value. Press "+/-" button to choose the desired display method. The default view method is by the percentage.

To store a changed setting, briefly press the "i" button to confirm.

Trip Distance Clearance
Trip Reset represents trip distance clearance setting. To clear trip distance, press "+" button or "-" button to select Yes or No. Yes represents clearing a single ride distance. No represents not clearing a single ride distance.

To store a changed setting, briefly press "i" button to confirm.
◆ AL sensitivity
AL sensitivity represents Ambient Light Sensor settings. The sensitivity of AL sensor ranges from 1 to 5. The default value is 3. It can help with adjusting the screen brightness as per the ambient light conditions automatically. When you ride the bike at night or in a place where there is a lack of light, the display backlight and bike light will be turned on automatically. Press +/- button to choose the desired sensitivity value.

To store a changed setting, briefly press the "i" button to confirm.

**AL sensitivity settings**

◆ Power-on Password Settings
To access the power-on password setting page, select ‘Password’ in the menu and press “i” button to confirm.

Password Set means power-on password settings. Power-on password is a 4-digit code. The default password is ‘1212’.

**Password Setting Interface**

1. Power-on Password Disable/Enable
   To enable or disable Start Password settings, press the “+” or the “-” button to select ON or OFF. ON means enabling a power-on password while OFF means disabling a power-on password. The default value is OFF.
To enable a power-on password, choose ON and press “i” button to confirm and input the current password or default password ‘1212’. Press the “+” or the “-” button to change the number and press the “i” button to confirm digits one by one until the correct password (current password or default password ‘1212’) is completed.

To disable the current password, choose OFF and press “i” button to confirm and input the current password correctly. The screen displays ‘PassWord Canceled Successfully’. Then the display password is restoring the default code ‘1212’.

2. Power-on Password Reset

From the last interface above, press the “+” or the “-” button to select ‘Reset PassWord’ and press the “i” button to confirm to access power-on password reset interface. There are 3 pages for setting up a new password:

In the first page, please enter the current password or default password ‘1212’ correctly.

Then it moves to the second page for inputting a new password. Press the “+” or the “-” button to increase or decrease the number and then press the “i” button to confirm digits one by one until a new 4-digit password is completed.

Finally, it comes to the third page and reenter the new password again for confirmation. The screen displays ‘PassWord Reset Successfully’.

When switching on the E-bike system next time, please enter the new password to power on.
Advanced Settings

After General Settings (DisPlay Setting) is done, Press Back to return Setting page.

Press UP/DOWN button to choose Advanced Settings and press “i” button to enter Advanced Settings page.

◆ Wheel Diameter Settings

Wheel represents wheel diameter settings.

To change basic settings, press the “+” or the “-” button to increase or decrease until the desired value is displayed. The default value is 26 inch.

To store a changed setting, briefly press the “i” button to confirm.

◆ Speed-limit Settings

Speed Limit represents the limited speed settings. When the current speed is faster than speed limit, the E-bike system will be switched off automatically. Speed limit range is 12Km/h to 40Km/h. The default value is 25km/h.

To change basic settings, press the “+” or the “-” button to increase or decrease until the desired value is displayed.

To store a changed setting, briefly press the “i” button to confirm.
◆ Battery Info.

Press Battery info for more information and status of the battery you are currently using.

◆ Error Code

Press Error code for detailed information of last 10 errors in the record.

◆ Exit Settings

In the settings interface,

1. Briefly press the “i” button is to confirm and store a changed setting but stay within current setting menu.

2. Hold the “i” button for 1 second is to store a changed setting and exit current setting menu and return back to display start-up interface.

3. Hold the “-” button for 1 second is to cancel the setting operations without storing a change and return back to display start-up interface.

   ■ If there is no operations in one minute; the display will exit the settings state.

Quality Assurance and Warranty Scope

I. Warranty

(1) The warranty will be valid only for products used in normal usage conditions.

(2) The warranty is valid for 24 months after the shipment or delivery to customers.

II. The following cases do not belong to our warranty scope.

1. The display is demolished.

2. The damage of the display is caused by wrong installation or operation.

3. Shell of the display is broken when the display is out of the factory.

4. Wire of the display is broken.

5. The fault or damage of the display is caused by the force majeure (e.g., fire, earthquake, etc.).

Connection Layout

Connector wire sequence

wire sequence table

<table>
<thead>
<tr>
<th>Wire</th>
<th>Color</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Red (VCC)</td>
<td>+</td>
</tr>
<tr>
<td>2</td>
<td>Blue (K)</td>
<td>Lock</td>
</tr>
<tr>
<td>3</td>
<td>Black (GND)</td>
<td>-</td>
</tr>
<tr>
<td>4</td>
<td>Green (RX)</td>
<td>RX</td>
</tr>
<tr>
<td>5</td>
<td>Yellow (TX)</td>
<td>TX</td>
</tr>
</tbody>
</table>

Some displays have wire connection with water-proof connectors; users can’t see the color of lead wires in the harness.

Warnings:
1. Use the display with caution. Don’t attempt to release or link the connector when battery is on power.
2. Try to avoid hitting the display.
3. Don’t modify system parameters to avoid parameter disorder.
4. Make the display repaired when error code appears.

*This manual instruction is a universal version for DISPLAY KD718. Some versions of this display may be different from specification to specification as to the software. Please always refer to an actual version.*
**Attached list 1: Error code definition**

<table>
<thead>
<tr>
<th>Error Code</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>21</td>
<td>Current Abnormality</td>
</tr>
<tr>
<td>22</td>
<td>Throttle Abnormality</td>
</tr>
<tr>
<td>23</td>
<td>Motor Phase Abnormality</td>
</tr>
<tr>
<td>24</td>
<td>Motor Hall Signal Abnormality</td>
</tr>
<tr>
<td>25</td>
<td>Brake Abnormality</td>
</tr>
<tr>
<td>30</td>
<td>Communication Abnormality</td>
</tr>
</tbody>
</table>

**Attached list 2: Assist level ratio defaults**

<table>
<thead>
<tr>
<th>Level</th>
<th>PAS Level mode</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0-3/1-3</td>
<td>50%</td>
<td>74%</td>
<td>92%</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0-5/ 1-5</td>
<td>50%</td>
<td>61%</td>
<td>73%</td>
<td>85%</td>
<td>96%</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0-7/ 1-7</td>
<td>40%</td>
<td>50%</td>
<td>60%</td>
<td>70%</td>
<td>80%</td>
<td>90%</td>
<td>96%</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>0-9/ 1-9</td>
<td>25%</td>
<td>34%</td>
<td>43%</td>
<td>52%</td>
<td>61%</td>
<td>70%</td>
<td>79%</td>
<td>88%</td>
<td>96%</td>
</tr>
</tbody>
</table>