



E-bike Display
User's Manual

KD59E

Product name and model

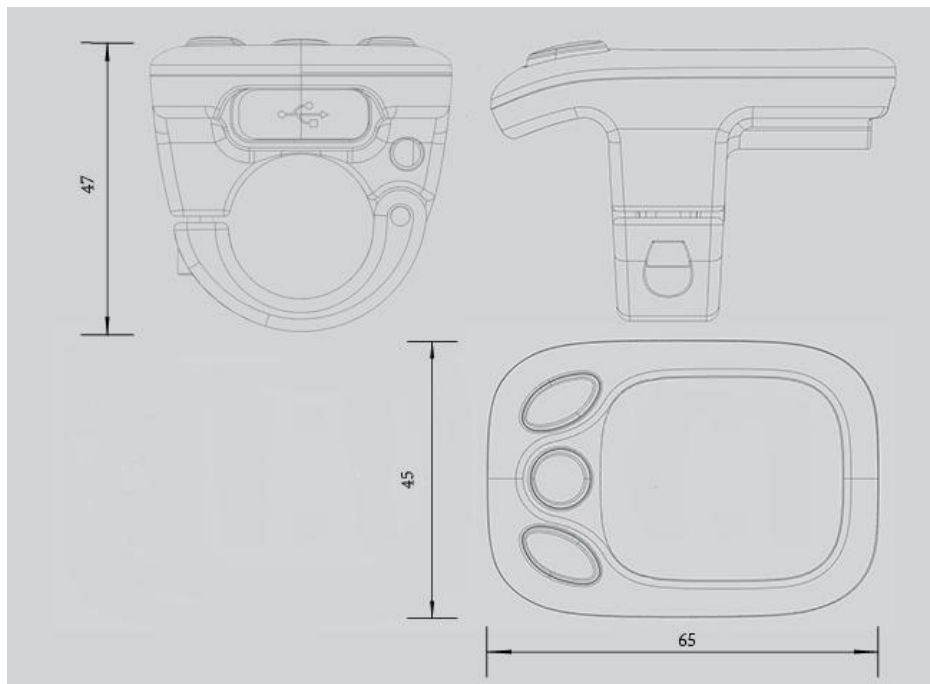
Electric Bicycle Intelligent LED Display
Model: KD59E

Specifications

- 24V/36V/48V Power Supply
- Rated working current: 10mA
- The maximum working current: 30mA
- Off-state leakage current: $<1\mu\text{A}$
- Working temperature: $-20^{\circ}\text{C}\sim 60^{\circ}\text{C}$
- Storage temperature: $-30^{\circ}\text{C}\sim 70^{\circ}\text{C}$

Appearance and Size

Product appearance and dimensional figure (unit: mm)



Function Summary and Button Definition

◆Function Summary

KD59E has many many functions to meet the users' need. The indicating contents are as follows:

- Smart battery indicator
- Assistance-level indicator
- The push-assist function
- The Lighting On/Off (optional)

◆Button Definition

There are three buttons (, , ) on the KD59E display representing functions respectively **ON/OFF**, **UP** and **DOWN**.

General Operation

◆Switching the E-bike System On/Off

To switch on the E-bike system, hold the **MODE** button for 2s.

Likewise, hold the **MODE** button for 2s again, the E-bike system will be switched off.

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

■When E-bike is parked for more than 10 minutes, the E-bike system will be switched off automatically.

◆Switching the Lighting On/Off

To switch on display backlight and E-bike headlight, hold the **UP** button for 2s. The battery indicator light and power assist level indicator light became faint at the same time.

Likewise, hold the **UP** button for 2s again, the headlight will be switched off. The battery indicator and power assist level indicator recover brightness at the same time.

◆Switching Push-assist mode On/Off

To access the push-assist mode, keep holding the **DOWN** button, the E-bike will go on at a uniform speed of 6 Km/h. Meanwhile, 5 power assist indicator lights will be circularly displayed in turn.

The push-assist function is switched off as soon as you release the **DOWN** button.

■Push-assist function may only be used when you push the E-bike. Be aware of danger of injury when the bike wheels do not have ground contact.

◆PAS Level Options

Assistance level indicates the output power of the motor. The default value is level "1".

Press the **UP/DOWN** button to select power assist level, the default power ranges from level "0" to level "5". The output power is zero on Level "0". Level "1" is the minimum power. Level "5" is the maximum power.

◆Battery Indicator

The five battery indicator lights represent the capacity of the battery. All five green LED lights are on when the battery is in high voltage. When the battery is in low voltage, the bottom LED light will blink to give a notice that the battery needs to be recharged immediately.

◆Error code Indication

If a fault occurs in the electronic control system, the display indicator lights will blink. Here is the reference of error definition in **Attached list 1**.

Operation Cautions

- ◆ Use the display with caution. Don't attempt to disconnect or link the connector when battery power is on.
- ◆ Try to avoid hitting the display.
- ◆ Don't modify system parameters to avoid parameter disorder.
- ◆ Make the display repaired when error code appears.

Quality assurance and warranty scope

I Warranty

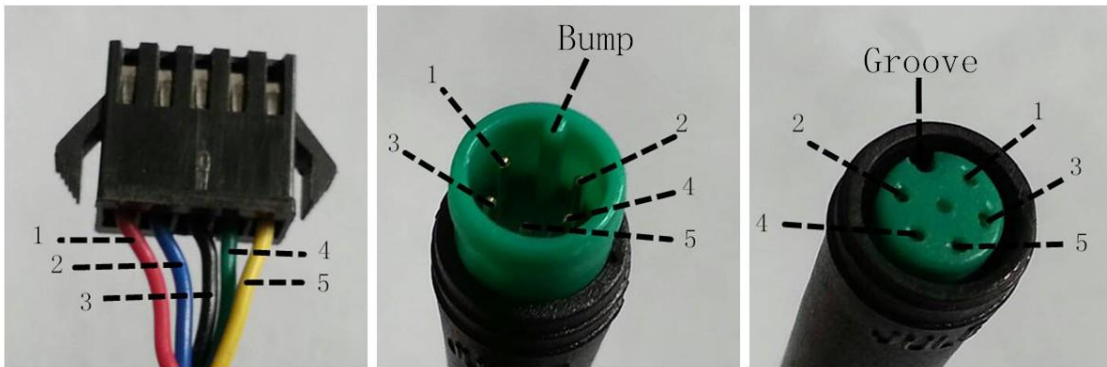
- 1) The warranty will be valid only for products used in normal usage conditions.
- 2) The warranty is valid for 24 months after the shipment or delivery to the customer.

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

- 1) The display is demolished.
- 2) The damage 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) Beyond warranty period.
- 6) The fault or damage is caused by the force majeure (such as fire, earthquake, etc.) or natural disasters like lightning, etc.

Connection layout

Connector wire sequence:



Connector to controller

Display end

Connection wire end to display end

Wire sequence table

Wire sequence	Color	Function
1	Red (VCC)	+
2	Blue(K)	Lock
3	Black(GND)	-
4	Green(RX)	RX
5	Yellow(TX)	TX

■ Some products have wire connection with water-proof connectors, users can not see the color of wires in the harness.

Attached list 1: Error definition

Error definition	PAS Indicator light response
Current Abnormality	Indicator light flash at level 1
Throttle Abnormality	Indicator light flash at level 3
Motor Phase Abnormality	Indicator light flash at level 1&3
Motor Hall Signal Abnormality	Indicator light flash at level 5
Brake Abnormality	Indicator light flash at level 3&5
Low voltage alarm	Indicator light flash at battery 1 1&3
Communication Abnormality	Indicator light flash at All levels