



The eBike Display
Users Manual

KD68C

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Product name and Model

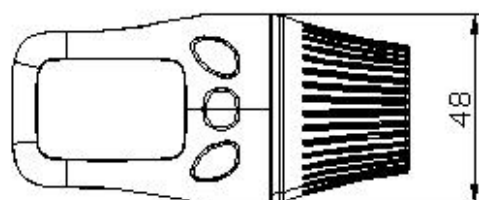
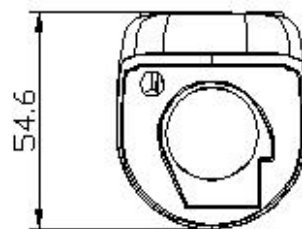
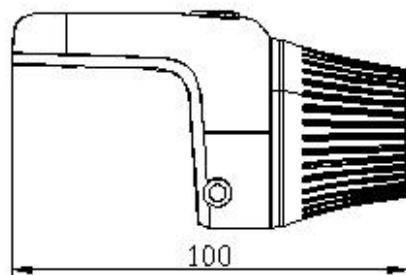
E-bike Intelligent LCD Display;
Model: KD68C.

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

KD68C has many functions to fit the users' needs. The indicating contents are shown as follows:

- Battery level indicator
- Motor output indication
- Assistance level indication
- Speed indication
- Trip time
- Trip distance and total distance
- The lighting On/Off
- Error code indication
- Various Parameters Settings (*e.g. wheel diameter, speed limit, battery level bar, controller current limit, password enable, etc.*)

- Recover Default Settings

◆Button Definition

There are three buttons (, , ) on the KD68C display that represent functions respectively: **ON/OFF**, **UP**, **DOWN**.

Installation:

KD68C can be mounted on the left side of handlebar close to its grip. Adjust the angle for a good display view. Cut off the power before connecting the corresponding connectors between display and controller..

General Operation

◆Switching the E-bike System On/Off

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

In the same way to hold the **ON/OFF** button for 2s again, the E-bike system will be switched off.

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

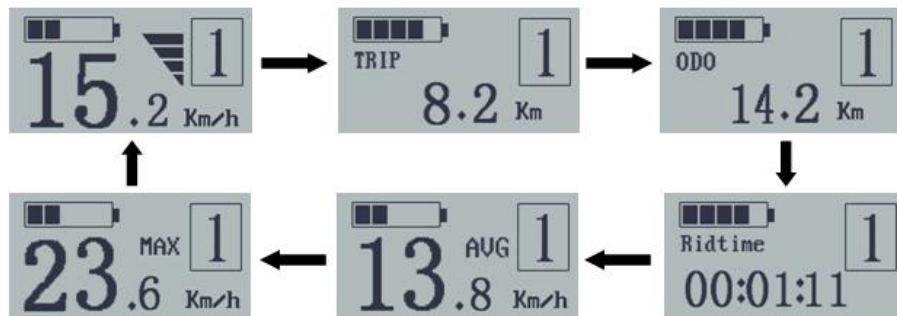
■When E-bike is parked for more than 10 minutes, the E-bike system will be switched off automatically.

◆Display Interface

After switching on the E-bike system, the display shows current speed by default.

To show more indication items, press **ON/OFF** button to show the following in turn:

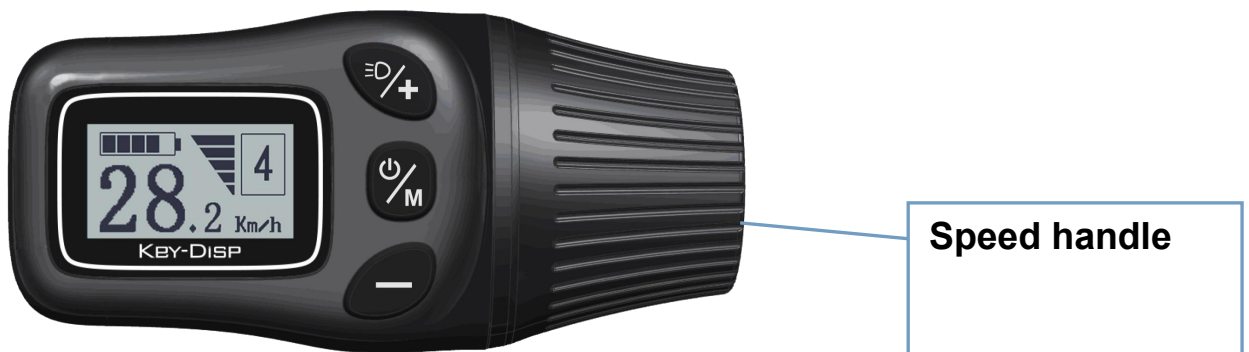
Current Speed (Km/h) → Trip Distance (Km) → ODO (Km) → Trip Time (Hour) → Average Speed (Km/h) → Maximum Speed (Km/h) → Current Speed (Km/h). Each state displays for 3s, and then automatically returns to current speed.



Display Interface

◆Speed regulation

Turn speed handle of KD68C to adjust the speed of electric scooter (bicycle).



◆ Assist Level options

Press the **UP/DOWN** to increase or decrease until the desired assistance level is displayed. The default power ranges from level “1” to level “3”. Level “1” is the minimum power. Level “3” is the maximum power. The default value is level “1”.



Assist Level “3”

◆ Switching the Lighting On/Off

To switch on the display backlight and headlight of the E-bike, hold the **UP** button for 2s.

In the same way to hold the **UP** button for 2s again, the backlight and the headlight will be switched off.



Switch On/Off the Lighting

◆ Power indication

Through the display can know the power of the motor. The display is shown in the figure below, each grid represents the power of 60W.



Power of the motor

◆ Error Code Indication

If there are errors about the electronic control system, the error code will appear automatically. The messages of the error code refer to **Attached list 1**.



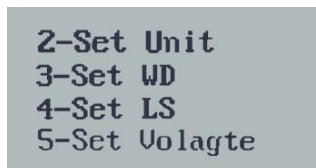
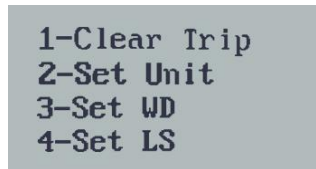
Error Code Indication

■The error code on the display needs to be removed. Or else you will not be able to ride the scooter(bike) normally.

General Settings

After the E-bike system is switched on, to access general settings menu, hold both **UP** and **DOWN** button for 2 s.

Press **Up** or **DOWN** button to select the setting items, press **ON/OFF** to confirm and enter the corresponding settings.



General Settings Interface

◆ Trip Distance Clearance

Clear Trip represents single trip distance clearance. Press **UP** or **DOWN** button to choose YES or NO to set trip distance clearance. The default is NO. If you choose YES and press **ON/OFF** button to confirm the option, the display will show ' **OK** ' and return to the general settings interface. Otherwise the display will return to the general settings interface directly. The default is NO.

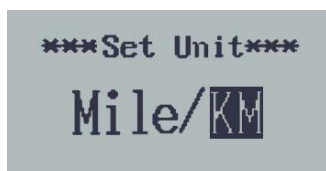


Trip distance clearance

◆Unit Mile/KM Conversion

Set Unit represents unit settings. To convert unit, press **UP/DOWN** to increase or decrease until the desired setting is displayed.

To store a changed setting, press **ON/OFF** button to confirm and the display will show '**OK**' and return to general settings interface. The default unit is Metric.



Mile and Kilometer Conversion Settings Interface

◆Wheel Diameter Settings

Set WD represents wheel diameter settings. Optional values are 16, 18, 20, 22, 24, 26, 700C and 28. Default diameter is 26 inch.

To change basic settings, press **UP/DOWN** to increase or decrease until the desired value is displayed. To store a changed setting, press **ON/OFF** button and the display will show '**OK**' then return to general settings interface.



Wheel Diameter Settings Interface

◆Speed-limit Settings

Set LS represents limit speed settings. Limit speed range is 12Km/h to 40Km/h. Limit speed default value is 25Km/h.

To change basic settings, press **UP/DOWN** to increase or decrease until the desired value is displayed. To store a changed setting, press **ON/OFF** button to confirm the setting. The display will show '**OK**' and return to general settings interface.



Limit Speed Settings Interface

◆Battery Power bar Settings

VOL represents battery voltage settings. Each bar represents a voltage value. 5 bars voltage values must be entered one by one. For example, VOL 1 is the first bar voltage value, the default value is 31.5V.

To set battery power bar, press **UP/DOWN** to increase or decrease the value.

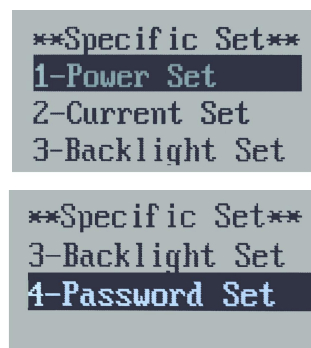
To store a changed setting and access the second bar, press **ON/OFF** button. Set the voltage value for the other bars in the same manner. After voltage values for 5 bars are all entered, long press **ON/OFF** button to confirm and return to the previous menu.



Battery Power Bar Settings

Personalized Parameter Settings

Hold both **UP** and **DOWN** button more than 2 seconds to enter general settings. Hold both **UP** and **DOWN** button for another 2 seconds to enter personalized parameter settings interface. Press **UP** or **DOWN** button to choose the personalized parameter setting items, then press **ON/OFF** button to enter the corresponding settings interface.



Personalized parameter settings Interface

◆Power Assistant Level Settings

Power Assistant Level Mode option(*this function is not applicable to a scooter)

Power Set represents power assist level settings. In assistance level settings, there are 8 modes for your options: 0-3, 1-3, 0-5, 1-5, 0-7, 1-7, 0-9, 1-9. The default mode is 1-3.

To select the mode of power assist level, press **UP/DOWN** to increase or decrease the values until the desired mode is displayed.

To store a changed setting and access the PAS ratio settings page, press **ON/OFF** button.



PAS mode option Interface

PAS Ratio Settings(*this function is not suitable for scooter)

PAS ratio setting matches the different requirements. For example, the range is “45-55 percent” for level 1, ratio value can be changed and the default ratio is 50 percent.

Press **UP** or **DOWN** button to increase or decrease the number. Press **ON/OFF** button to confirm and move to the next PAS level ratio settings. Level 9 is the maximum. After all PAS ratios are input, press **ON/OFF** button to confirm and return to personalized parameter settings interface. For PAS ratio default values, please refer to **Attached list 2**.



PAS Ratio Interface

◆Controller Over-Current Cut Settings

Current Set represents controller over-current cut settings. It can be changed from 7.0A to 25.0A. The default value is 15A.

To change basic settings, press the **UP/DOWN** button to increase or decrease the value of the current.

To store a changed setting, hold the **ON/OFF** button and then return to personalized parameter settings interface.



Current Set Interface

◆ Backlight settings

Backlight Set represents backlight settings. Level "1" is the low brightness. Level "2" is the medium brightness. Level "3" is high brightness. The default value is "2".

To modify the backlight brightness, press the **UP/DOWN** button to increase or decrease until the desired setting is displayed. To store a changed setting, press the **ON/OFF** button and return to personalized parameter settings interface.



Backlight Settings Interface

◆ Power-on Password Settings

Password Set represents power-on password settings. The default power-on password is 1212.

After accessing the power-on password settings, press **UP/DOWN** to modify the value and then press **ON/OFF** to confirm digit one by one until the correct 4-digit password is completed, and then press **ON/OFF** to access power-on password enable settings interface, otherwise stay still in the password input state.



Power-on Password Input Interface

Power-on Password Enable/Disable

Press **UP** or **DOWN** button to choose Disable or Enable and press **ON/OFF** button to confirm. Power-on Password default is Disable. If you choose Enable, press **ON/OFF** button to enter Power-on Password Change interface, otherwise exit the power-on password settings interface.



Power-on Password Disable/Enable Interface

Power-on Password Change

When the display shows "Password Set, P3", press **UP/DOWN** to change the value and then press **ON/OFF** to confirm digit one by one until the new 4-digit password is completed.

To store the new power-on password, hold **ON/OFF** button for 2 s and exit settings.

When you switch on the E-bike system next time, the display will show P1,0000, please input the new password to power on.



Power-on Password Change Interface

◆Exit settings

In the settings interface, press **ON/OFF** button to confirm the input. Hold **ON/OFF** button more than 2 seconds to save the settings and then exit the current settings. Hold **DOWN** button more than 2 seconds to cancel current setting operation and exit the settings.

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

Factory Reset

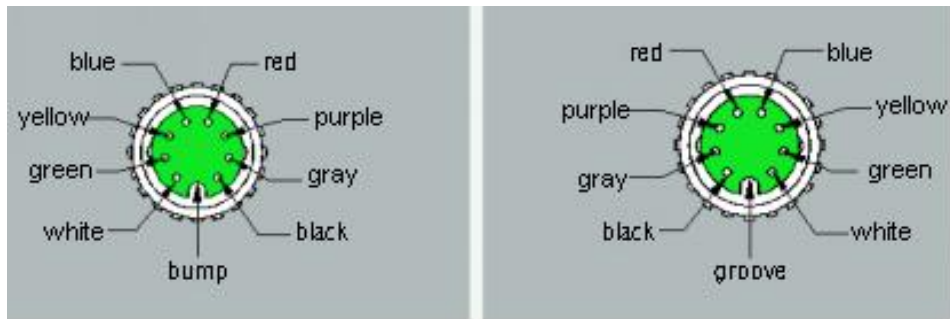
Factory Reset represents recover default settings. Press both **UP** and **ON/OFF** button more than 2 seconds to enter recover default settings. Press **UP** or **DOWN** button to choose Y or N. Y means that recovers default settings. N means that do not recover default settings. When it is Y, hold **ON/OFF** button more than 2 seconds to recover default settings. The display shows '**OK**', prompts for operation completed and returns to display startup state. The default state is N.



Recover Default Settings Interface

Connection layout

Connector wire sequence



Display end

connection wire end to display end

Wire sequence table

wire sequence	Color	Function
1	Red	VCC
2	Blue	K
3	Yellow	TX
4	Green	RX
5	White	GND
6	Black	GND
7	Gray	SP
8	Purple	SV

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

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 of the display is caused by wrong installation or operation.
- 3) The shell of the display is broken after the display is out of the factory.
- 4) The cable of the display is broken.
- 5) Beyond warranty period.
- 6) The fault or damage of the display is caused by the force majeure (e.g., fire, earthquake, etc.)

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 an error code appears.

■ THIS MANUAL INSTRUCTION IS A GENERAL-PURPOSE VERSION. SOME OF THE VERSIONS FOR THE DISPLAY SOFTWARE WILL BE DIFFERENT FROM SPECIFICATION TO SPECIFICATION. PLEASE ALWAYS REFER TO AN ACTUAL VERSION.

Attached list 1: Error code definition

Error Code	Definition
21	Current Abnormality
22	Throttle Abnormality
23	Motor Phase Abnormality
24	Motor Hall Signal Abnormality
25	Brake Abnormality
30	Communication Abnormality

Attached list 2: PAS ratio default value table

Level PAS level mode	1	2	3	4	5	7	8	9
0-3/1-3	50%	74%	92%	—	—	—	—	—
0-5/ 1-5	50%	61%	73%	85%	96%	—	—	—
0-7/ 1-7	40%	50%	60%	70%	80%	96%	—	—
0-9/ 1-9	25%	34%	43%	52%	61%	79%	88%	96%