

The eBike Display
Users Manual

KD68C

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Product name and model

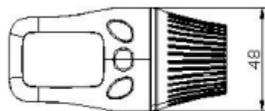
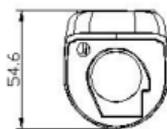
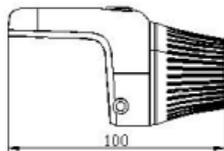
Intelligent LCD display of eBike; model: KD68C.

Specifications

- 24V/36V/48V Power Supply
- Rated working current: 10mA
- The maximum working current: 30mA
- Off leakage current: <1uA
- The supply controller working current: 50mA
- Working temperature:-20℃~ 60℃
- Storage temperature: -30℃~ 70℃

Appearance and Size

Display appearance and dimension figure (unit: mm)



Function Summary and Button Definition

◆Function Summary

KD21C can provide a lot of functions to fit the users' needs. The indicating contents as shown 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(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 represented by the following functions respectively: **MODE, UP, DOWN.**

Install Instructions

KD68C are applicable to fixing on the right or left side of the handlebar corresponding to the handle, pay attention to adjusting the display screen fit to the visual. Under the circumstances of electric scooter (bicycle) power off, link the display-side adapter and the switch wiring to finish installation of meter.

General Operation

◆Switching the eBike System On/Off

To switch on the eBike system, hold the **MODE** button for 2s.

In the same way to hold the **MODE** button for 2s again, the eBike system will be switched off.

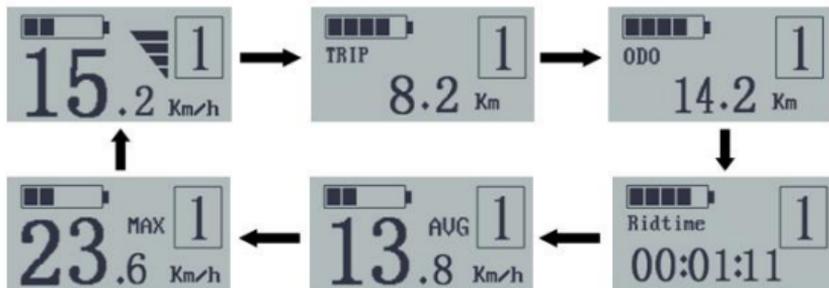
When switching off the eBike system the leakage current is less than 1 μ A.

■When parking the eBike for more than 10 minutes, the eBike system switches off automatically.

◆Display Interface

After switching on the eBike system, the display shows current speed .

To change the indicated information, press the **MODE** button to show in turn as below: 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 the state of current speed.



Display Interface

◆Speed regulation

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

◆ Assistance Level Selection

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”.

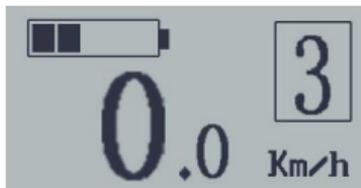


Assistance Level “3”

◆ Switching the Lighting On/Off

To switch on the display backlight and headlight of the eBike, 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**.



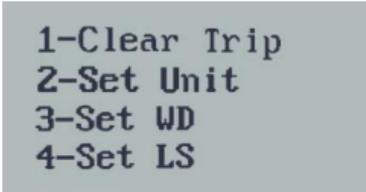
Error Code Indication

■ **Only the error has been resolved can exit the error code indication, the scooter (bike) will not be able to travel after the error.**

General Settings

After the eBike 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 content, press **MODE** to confirm the corresponding settings.



1-Clear Trip
2-Set Unit
3-Set WD
4-Set LS



2-Set Unit
3-Set WD
4-Set LS
5-Set Uolagte

General Selection Settings Interface

◆ Trip Distance Clearance

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



Clear Trip
YES/NO

Trip distance clearance

◆ Unit Mi/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 **MODE** button to access trip distance clearance settings and the display will show OK then returns to general selection settings interface. The default unit is Metric.



Mile and Kilometer Conversion Settings Interface

◆Wheel Diameter Settings

Set WD represents wheel diameter settings. Electable values are 16, 18, 20, 22, 24, 26, 700C and 28. Default diameter is 6 inch.

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



Limit Speed Settings Interface

◆ Battery Power bar Settings

VOL represents 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 number.

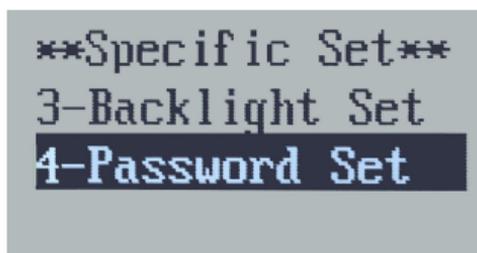
To store a changed setting and access the second bar, press **MODE** button. By analogy, after 5 bars voltage values is entered, hold **MODE** to confirm and return to the previous menu.



Battery Power Bar Settings

Personalized Parameter Settings

Hold **UP** and **DOWN** button more than 2 seconds to enter general settings, then use the same manner to enter personalized parameter settings selection interface. Press **UP** or **DOWN** button to choose the personalized parameter settings items, then press **MODE** button to enter the corresponding settings interface.



Personalized parameter settings Interface

◆ Power Assistant Level Settings

Power Assistant Level option(this function is not suitable for scooter)

Power Set represents power assistant level settings. In assistance level settings, there are 8 modes to select: 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 assistance level, press **UP/DOWN** to increase or decrease until the desired setting is displayed. To store the changed setting and access the PAS ratio settings page, press **MODE** button.



PAS Mode option Interface

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

To modify the value of PAS ratio can match the different requirements. For example, the range is “45-55 percent” of 1 level, bottom value can be modified and the default is 50 percent.

Press **UP** or **DOWN** button to increase or decrease the number. Press **MODE** button to confirm and turn to the next PAS ratio settings. 9 levels is the maximum. After all PAS ratio inputted, press **MODE** button to confirm and return to personalized parameter settings interface. Various symbol definitions 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 **MODE** 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 middle 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 **MODE** button and then 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.

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



Power-on Password Entering Interface

Power-on Password Enable/Disable

Press **MODE** button to enter power-on password enable/disable

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



Power-on Password Disable/Enable Interface

Power-on Password Modify

When the display shows “Password Set, P3”, press **UP/DOWN** to modify the value and then press **MODE** to confirm digit one by one until the new 4-digit password is completed.

To store the new power-on password, hold **MODE** button for 2 s and then exit settings.

When switching the eBike system on next time, the display will show P1,0000, please input the new password to power on.



Power-on Password Modify Interface

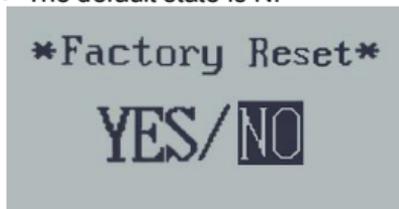
◆Exit settings

In the settings state, press **MODE** button to confirm the input. Hold **MODE** button more than 2 seconds to save the settings and then exit the current settings. Hold **DOWN** button more than 2 seconds to cancel the operating but not saving the settings data, and then exit the settings state.

■If there is not any operations in one minute, display will exit the settings state automatically.

Factory Reset

Factory Reset represents recover default settings. Press both **UP** and **MODE** 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 **MODE** button more than 2 seconds to recover default settings, then display "OK" represents operation complete and return to general display state. The default state is N.



Recover Default Settings Interface

Quality Assurance and Warranty Scope

I Warranty

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

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

II The following items do not belong to our warranty scope:

1) Shell is broken when display is out of the factory.

2) Wire is broken.

3) It cannot be demolished.

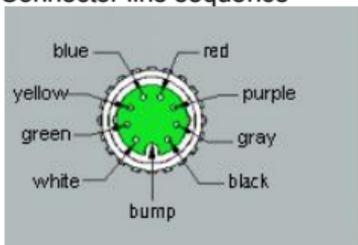
4) Wire of the display is broken.

5) The fault or damage is caused by the force majeure (such as fire, earthquake, etc.) or natural disasters like lightning, etc.

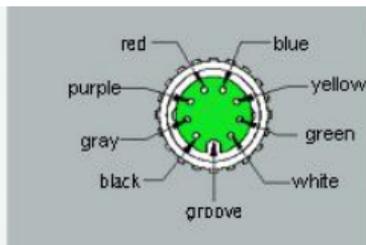
6) Beyond the warranty time.

Connection layout

Connector line sequence



Display-side adapter



Switch wiring

Line sequence table

Line 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 wire use the water-proof connector, users can not see the inside color.

Operation Cautions

- ◆ Be careful of safe use. Don't attempt to release the connector when battery is on power.
- ◆ Try to avoid hitting.
- ◆ Don't modify system parameters to avoid parameters disorder.
- ◆ Make the display repaired when error code appears.

Attached list 1: Error code definition

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

Attached list 2: Power assist table

Level Level Item	1	2	3	4	5	6	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%	90%	96%	—	—
0-9/ 1-9	25%	34%	43%	52%	61%	70%	79%	88%	96%