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ELECTRIC BIKE **INSTRUCTION MANUAL**

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Q7&E300 Display User Manual



Product model

E-bike Intelligent LCD display

Model: KD716

Specifications

- (1)36V/48V Power Supply
- (2)Rated working current: 25mA
- (3)The maximum working current: 30mA
- (4)Off-state leakage current: <math><1\mu\text{A}</math>
- (5)Operating temperature: $-20^{\circ}\text{C}\sim 60^{\circ}\text{C}$
- (6)Storage temperature: $-30^{\circ}\text{C}\sim 70^{\circ}\text{C}$

Appearance and size

Display appearance and dimensional drawing (unit: mm)



Function summary and distribution

Function summary

KD716 display has many functions to meet riders' cycling needs. The indication elements are as follows:

- (1)Intelligent Battery SOC
- (2)Motor power indicator
- (3)Assist level indicator and adjustments
- (4)Speed indication (incl. current speed, Max. speed and Avg. speed)
- (5)ODO and Trip
- (6)Push-assistance function
- (7)Trip time
- (8)Backlight on/off
- (9)Error code indication
- (10)USB connection(optional)
- (11)Various parameter settings (battery level bar settings, assist level, power-on password settings)

Function layout



KD716 Function distribution interface

General operations

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 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 5 μ A.

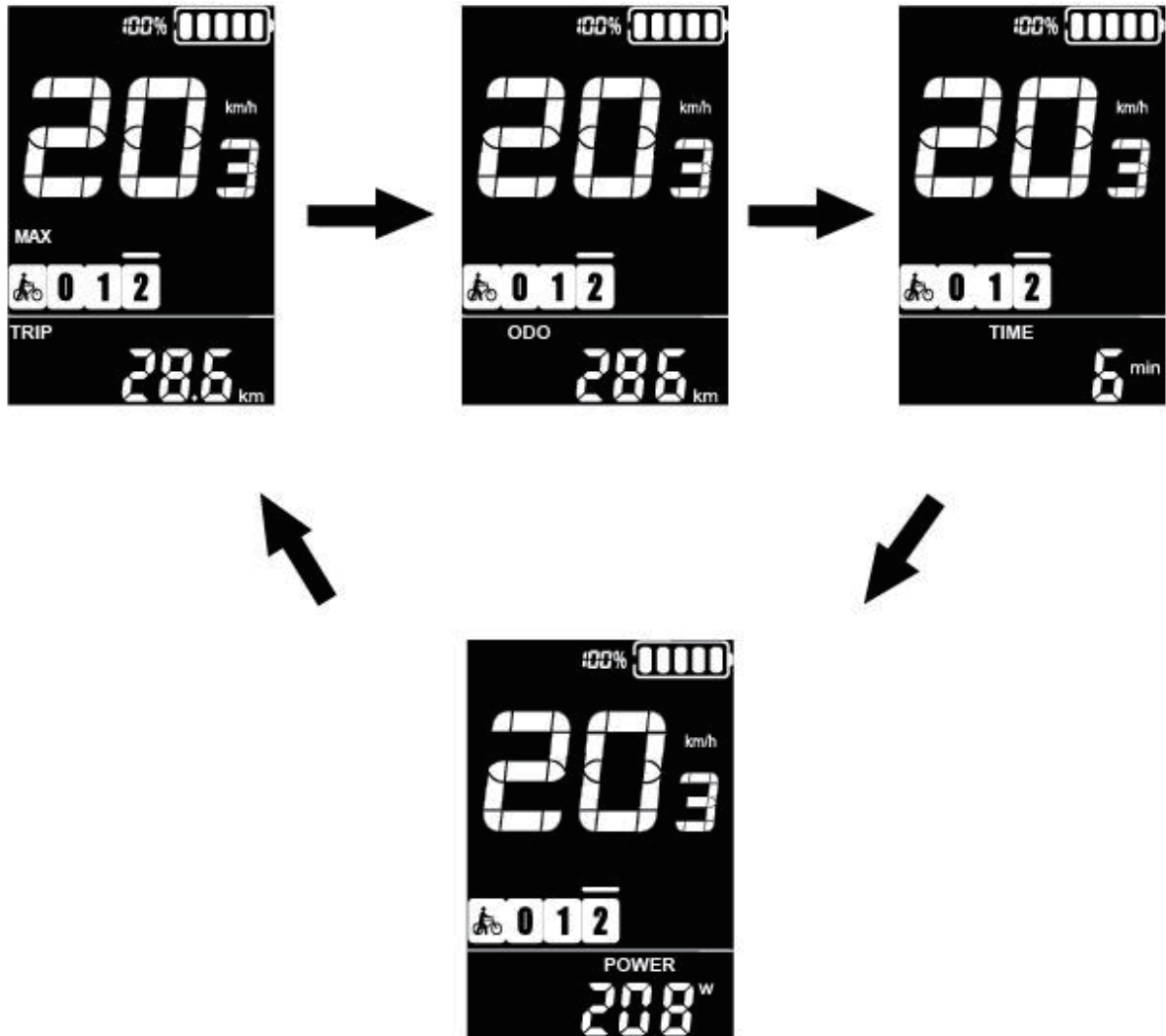
When the E-bike is parked for approx. 10 minutes, the E-bike system switches off

Display Interface

After switching on the E-bike system, the display shows current Speed and ODO by default.


Press remote "i" button to switch between indication functions below:

Trip Distance (Km)→ ODO (Km)→ Trip Time (Min.)→ Power (Watts). Finally, it cycles back trip distance again.



Display indication cycle interface

Switching Push-assist Mode On/Off

To activate the push-assistance function, press and hold the “-” button. 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. The E-bike system stops the power output immediately.



Push-assistance mode

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 Lighting On/Off

Hold + or  for 2 seconds, display backlight turns on and in the meantime, display sends command to controller to turn on the headlight. When there is lack of ambient light or the rider is riding the bike at night, the LCD backlight may be turned on. Again, hold + or  for 2 seconds to turn off the LCD backlight and display sends command to controller to turn off the headlight.



Backlight on Interface

Assist Level Selection

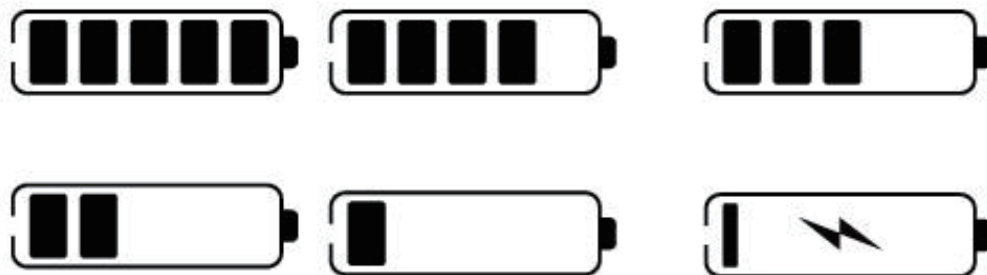
Press "+" or "-" button to switch between the E-bike system assist levels and change the motor output power. The default assist level mode is 0-5(level "0" to level "5"). The output power is zero on Level "0". Level "1" is the minimum output power. Level "5" is the maximum output power. When you reach "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 interface

Battery Power Indicator

The five battery bars represent the capacity of the battery. Five bars are bright when the battery is in full 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 power indicator interface

Motor Power Indicator

The power of the motor can be read via interface below by digital display.



Motor power 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**.



Error code interface

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.

General Settings

Hold “i” button to switch on the display. In the case of a parked e-bike with its display activated, hold both ‘+’ and ‘-’ simultaneously for 2 seconds to enter General Settings.

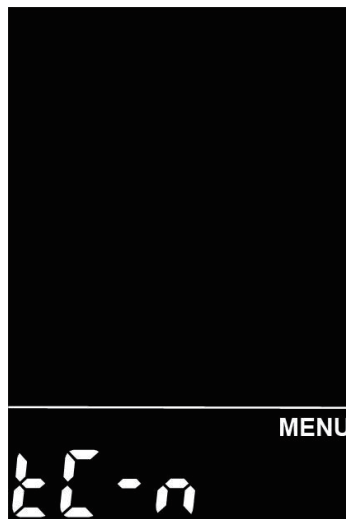
All the Settings are operated in the case of a parked E-bike.

Trip Distance Clearance

TC represents trip distance clearance setting.

To clear trip distance, press “+” button or “-” button to select the Yes or No. Yes represents clearing a single ride distance. No represents not clearing a single ride distance.

To store a changed setting, press the “i” button and then access Backlight Settings.



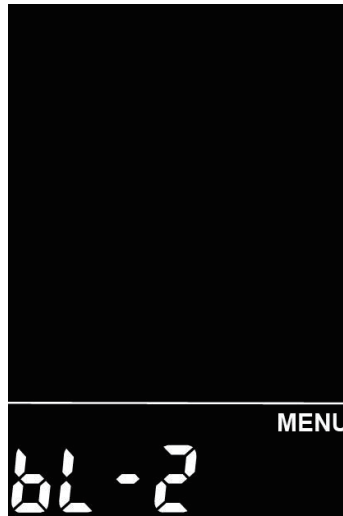
Trip distance clearance interface

Backlight settings

bL represents backlight settings. Level “1” is the lowest brightness. Level “2” is the medium brightness. Level “3” is the highest brightness. The default value is “1”.

To change the backlight brightness, press the +/- button to increase or decrease until the desired brightness level is displayed.

Press i button to store a changed setting and then access unit toggling settings.



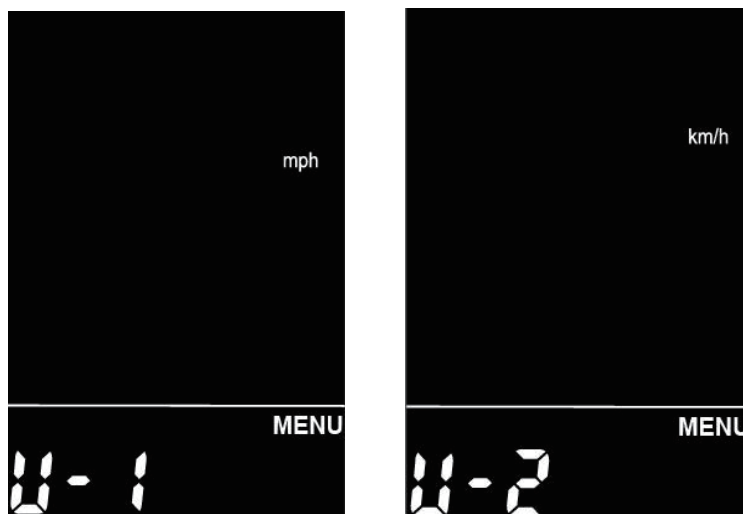
Backlight settings interface

Toggle the unit KM/Mile

U represents unit settings, "1" is mile and "2" is kilometer. The default value is "2".

To toggle the unit, press the +/- button to increase or decrease until the desired unit is displayed.

Press the i button to store a changed setting and then access trip distance clearance setting again or hold the i button for 2s and exit **General Settings**.



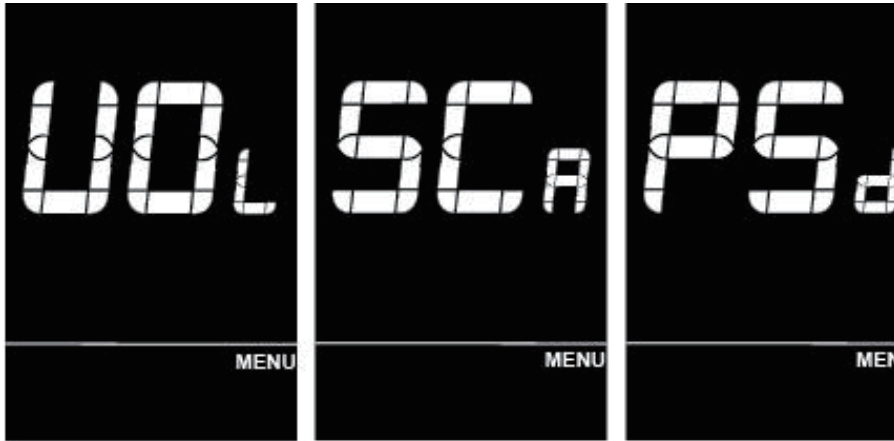
Miles and KM toggling interface

Personalized Parameter Settings

Personalized parameter setting contains 3 parameters, which are Battery Power Bar Settings, Assist level mode parameter and Power-on Password Settings.

Hold + and - button simultaneously for 2 seconds to enter General Settings and Hold + and - button simultaneously for another 2 seconds to enter personalized parameter settings interface.

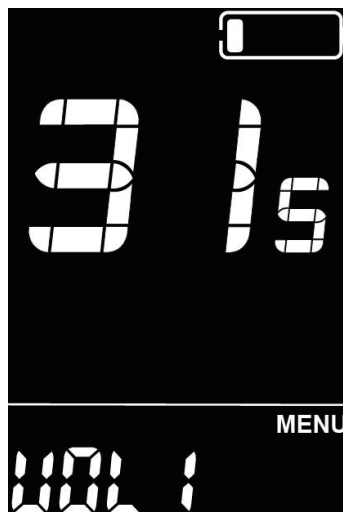
Press + or - button to choose the desired personalized parameter setting item, then press i button to enter the setting interface.



Personalized setting item cycle interface

Battery Bar Settings

VOL represents voltage settings. Each bar of the battery pack symbol represents a voltage value. Each of the 5 values is to be entered one by one. For example, VOL 1 is the first battery bar and its default value is 31.5V. Press + or - to increase or decrease the voltage value. Press i button to store a changed setting and access the second battery bar setting. Likewise you can set the values in the same manner for other bars. After desired values for 5 bars are entered completely, hold i button for 2 s to confirm and return to previous menu.

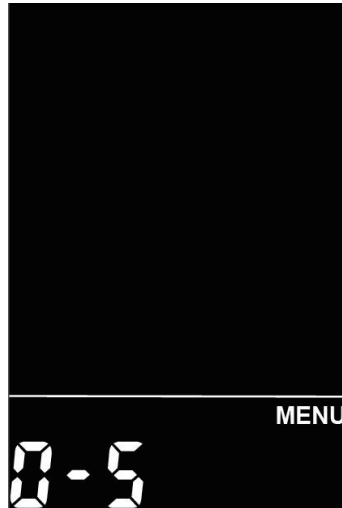


Battery bar settings interface

Assist Level

SCA stands for Assist Level. Press i button to view the current auxiliary level, the default mode is 0-5 .

Press and hold the i button for 2 seconds to confirm and return to the previous menu.



Assist level mode

Power-on password settings

PSd represents power-on password settings. Power-on password is a 4-digit code. The default password is "1212".

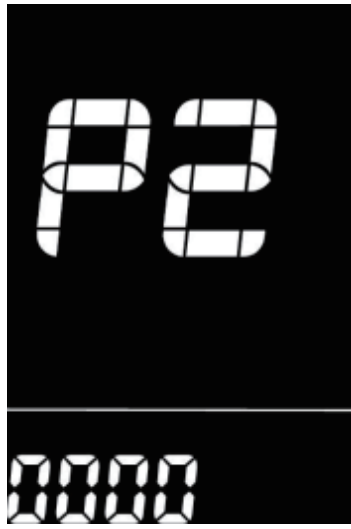
Press i button to enter the interface where "P2, 0000" is shown on the screen. Please input the current password or default password '1212'

Press +/- button to increase or decrease the numbers and press i button to confirm digits one by one until the correct 4-digit password is completed. Press i button to access power-on password Enable/Disable Settings.

Otherwise stay still in password input state.

Upon entering the correct password, you will enter the startup password enable /disable settings interface. The screen will display "PSd-Y/N", with "Y" indicating the activation of the startup password, and "N" indicating the deactivation of the startup password.

Choose "PSd-Y" and press the "i" button briefly to enter the password setup mode. The screen will display "P3" as a prompt, allowing you to set a password based on your personal preference. Once the password is set, press and hold the "i" button to confirm.



Power-on password input interface

Exit the settings

In settings interface,

Press i button (less than 2 s) is to confirm the input and save current settings.

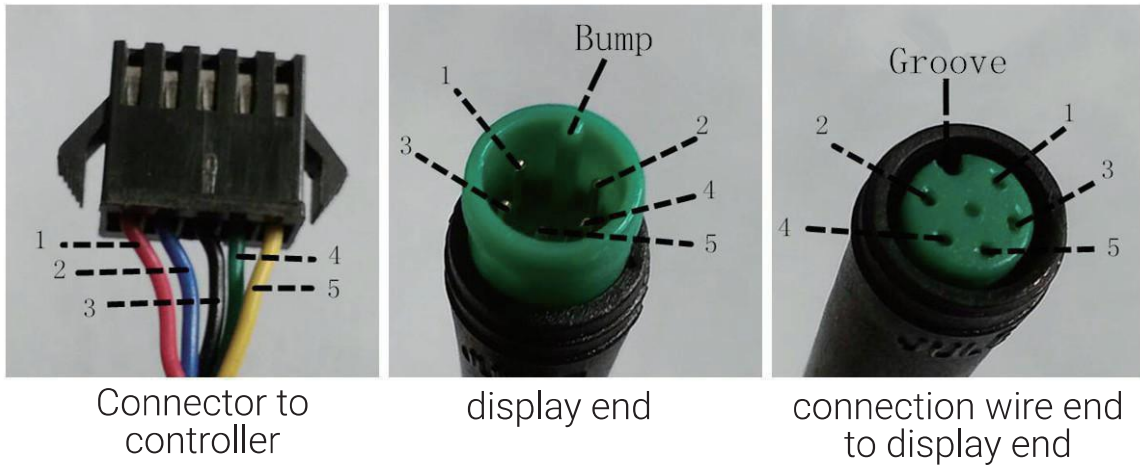
Hold the i button (more than 2 s) is to store the settings and exit the current setting.

Hold the - button (more than 2 s) is to cancel the operations but not to store settings data and exit the settings.

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

Wire connection layout

Connector wire sequence



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 displays have wire connection with water-proof connectors; users cannot 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. Have the display repaired when error code appears.

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