



**KEY-DISP**

The eBike Display  
Users Manual

KD786

KD786

## Contents

|  |    |
|--|----|
| PRODUCT NAME AND MODEL .....               | 1  |
| SPECIFICATION .....                        | 1  |
| FUNCTION SUMMARY .....                     | 1  |
| FUNCTIONAL AREA .....                      | 2  |
| BUTTON DEFINITION .....                    | 2  |
| GENERAL OPERATION .....                    | 3  |
| ◆ SWITCH ON/OFF THE EBIKE SYSTEM .....     | 3  |
| ◆ DISPLAY INTERFACE .....                  | 3  |
| ◆ PUSH-ASSIST .....                        | 4  |
| ◆ SWITCH ON/OFF THE LIGHT .....            | 4  |
| ◆ BATTERY INDICATOR .....                  | 5  |
| ◆ OUTPUT POWER .....                       | 5  |
| ◆ ERROR CODE .....                         | 6  |
| DISPLAY SET .....                          | 6  |
| ◆ TRIP RESET .....                         | 7  |
| ◆ TOGGLE UNIT .....                        | 7  |
| ◆ BRIGHTNESS .....                         | 8  |
| ◆ AUTO OFF .....                           | 8  |
| ◆ SERVICE .....                            | 9  |
| ◆ ASSIST LEVEL .....                       | 9  |
| ◆ SOC VIEW .....                           | 10 |
| ◆ PASSWORD .....                           | 11 |
| PASSWORD ENABLE .....                      | 11 |
| PASSWORD CHANGE .....                      | 12 |
| PASSWORD DISABLE .....                     | 13 |
| INFORMATION .....                          | 14 |
| ◆ WHEEL SIZE .....                         | 14 |
| ◆ SPEED LIMIT .....                        | 14 |
| ◆ BATTERY INFO .....                       | 15 |
| ◆ CONTROLLER INFO .....                    | 15 |
| ◆ DISPLAY INFO .....                       | 16 |
| ◆ TORQUE INFO .....                        | 17 |
| ◆ CONNECTION LAYOUT .....                  | 17 |
| QUALITY ASSURANCE AND WARRANTY SCOPE ..... | 18 |
| WARNINGS .....                             | 18 |

## Product name and model

E-bike Intelligent TFT central display  
An integration of stem and display  
Model: KD786-CAN

## Specification

- 2.0" TFT color screen
- 36V/48V Power Supply
- Rated working current :22mA
- Off-state leakage current: <1 $\mu$ A
- Operating temperature: -20 $^{\circ}$ C~ 60 $^{\circ}$ C
- Storage temperature: -20 $^{\circ}$ C~ 70 $^{\circ}$ C

## Function Summary

**KD786 has many functions to meet the Users' needs. The indicating contents are as follows:**

- Battery SOC indication: voltage value or battery percentage
- Intelligent indication of TRIP, ODO, Current speed, MAX. speed and AVG. Speed, Motor power and Ride/TRIP time(Min), Range
- assist-level selection and indication
- The push-assist control and indication
- Backlight On/Off and headlight indicator
- Error code indication
- Various Parameters Settings (*e.g., Trip clearance, Back-light, Unit toggle, assist level, power-on password settings, etc.*)
- Recover Default Settings

## Function Area :



## Button definition

KD786 is using K41 remote button. Four buttons: on/off , i , +/light, -/push-assist.

## General Operation

### ◆ Switching the E-bike System On/Off

Hold the **on/off** button for 2s to switch on E-bike system. When display is on, hold the **on/off** button for 2s again, the E-bike system will be switched off. The E-bike system no longer uses the battery power.

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

- When E-bike is not in use for 5 minutes, the E-bike system will switch off automatically.

### ◆ Display Interface

After switching on the E-bike system, the display will show Current Speed and Trip Distance, ODO, power, battery SOC and assist level by default.

Press the “i” button to show more riding data below:


**Trip (km)--> Max Speed (km/h)-->AVG speed (km/h)-->Rang (km)--> CAL (kCal)-->Trip time (min)**



显示界面切换

Display interface cycle

#### ◆ Push-assist

When assist level is at 0, press - button again and ebike is into push-assist mode. Hold - button for more than 2 s and the bike is running at the uniform speed of less than 6 km/h. and the screen shows flashes of icon “”



Push-assist Mode

#### ◆ Switching the Lighting On/Off

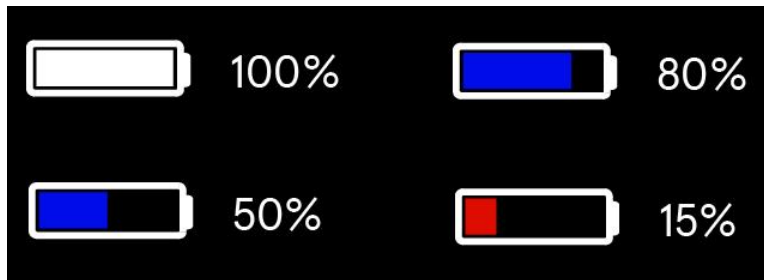
To switch on E-bike headlight, hold the “+” button for 2s. the light icon appears and The backlight brightness is automatically reduced. Likewise, hold the “+” button for 2s again, the bike light can be switched off and light icon disappears and display back light brightness recovers.



Switching the lighting on interfac

### ◆ Battery Indicator

Battery voltage is switchable between 36 and 48 volts. The battery voltage is reported by controller and display shows the voltage.



Battery Indicator interface

### ◆ Motor Power Indicator

The power of the motor is shown via digital display.



Motor Power Indication Interface

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### ◆ 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.

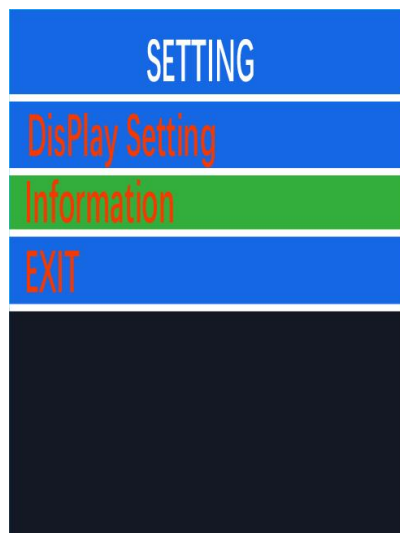


Error Code Indication

- Have the display repaired when an error code appears. Or else you will not be able to ride the bike normally.

## Settings

When display is on and bike is stationary, hold i button for 2 seconds to enter settings page.



Settings Interface.

**Note:** all the settings must be done to a parked bike with no speed

## ● Display Setting

### ◆ Trip Reset

**Trip Reset** represents trip distance clearance setting. \*And at the same time, **Max. Speed, AVG Speed, Trip and Trip time** will be cleared as well.

Press the “+” button or the “-” button to select Yes or No.

To save the setting and return to **Trip-Reset**, press the “i” button. Or

Hold “i” button to return to home page or press **BACK** to return home page. When display or E-bike system is off, the above data will not be cleared automatically. The default setting is “**TRIP Rest-NO**”



Trip reset interface

### ◆ Toggle unit

**Toggle Unit** represents change unit between **Metric** and **Imperial**. The default is “Metric”.

To toggle unit, press the “+” button or the “-” button to choose the desired setting item, and then press the “i” button to save the setting and return to **Toggle Unit**. Or Hold “i” button to return to home page or press **BACK** to return home page.



Toggle unit interface

### ◆ Brightness

Press +/- to select **Brightness** and press i to enter the setting. 100% is the highest brightness. 10% is the lowest brightness. 5 settable levels: 100%-75%-50%-30%-10%. The default is 100%.

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

To save the setting and return to **Brightness**, press the “i” button. Or

Hold i button to return to the home page or press **BACK** to return to home page.



Brightness set interface

### ◆ Auto off

Press +/- to select **Auto Off** and press i to enter the setting. 100% is the highest brightness. To change the backlight brightness, press the “+” button or the “-” button to choose the desired auto off time duration. The settable range is 9-8-7-6-5-4-3-2-1-OFF(min). the default auto off time is 5 min.

To save the setting and return back to **Auto off**, press the “i” button. Or

Hold i button to return to the home page or press **BACK** to return to home page.



Auto off set interface

### ◆ Service

Press the “+” or the “-” button to select Service. Press i to enter the setting. Press +/- to choose NO (no service) or YES (service is needed ). press i button to save and return back to **Service**.

Or hold “i” button to return to home page or press **BACK** to return to home page.



Service set interface

### ◆ Assist Level Settings

Press +/- to select Power Set and press i to enter the settings. Press +/- to switch between the 3 assist modes, 0-3/0-5/0-9. the default mode is 0-5 .

hold “i” button to return to home page or press **BACK** to return to home page.



Assist level set interface

### ◆SOC view

Press UP or Down to select SOC View and press i button to enter the setting. Press UP or Down to switch between Voltage values and percentage of Battery SoC. The default view method is percentage. Press i to save the setting and return back to **SOC view** settings. Or

Hold "i" button to return to home page or press **BACK** to return to home page.



SOC view set interface

### ◆ Password

Press +/- button to choose '**Password**' and press **i** to confirm. Meanwhile press +/- button to choose '**Start Password**' and press **i** to confirm. Press **i** button to shift from '**OFF**' to '**ON**'. By default, password is not enabled.

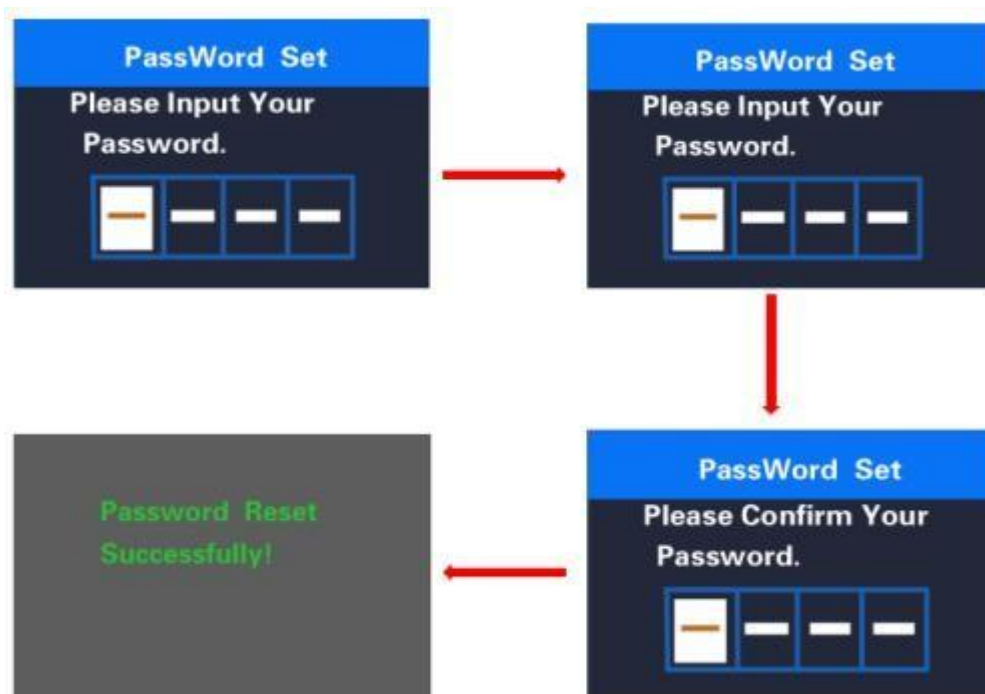


Power-on password input settings interface

### ◆ Power-on password enable

In "**Start PassWord**" interface, choose '**ON**' and press **i** to confirm. Meanwhile, display interface asks for a password. Press +/- button to increase or decrease numbers and press **i** to confirm the first digit and move to the next digit. After 4 digits of a password are input, press **i** to confirm and the interface will prompt for re-entering the password. If two inputs are consistent, the

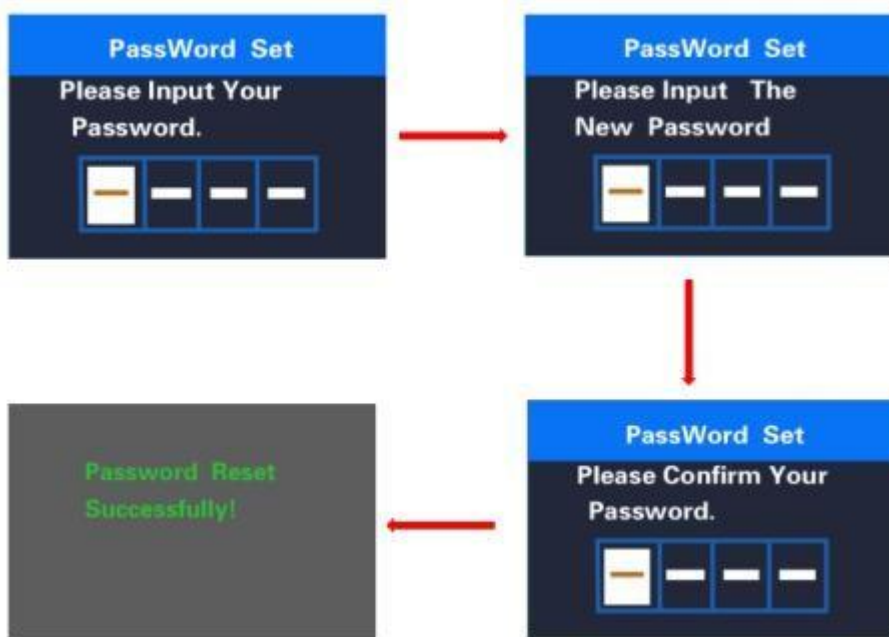
system prompts that the password is set successfully. If two inputs are inconsistent, the first input needs to be repeated correctly and confirm the new password again. The interface will be redirected to original settings page in 2 seconds after the password is set successfully. Hold **i** to **return** to the home page or by route' **BACK**' →'home page'.



Password enable confirmation interface

#### ◆ Password Change.

When password is enabled. '**Reset password**' will add to Password interface. Press +/- button to select '**Reset Password**' and press **i** to confirm. Meanwhile, the interface asks for current password. When the correct password is input, the interface prompts you for a new password. Then follow the operations of setting a new password. The interface will be redirected to original settings page in 2 seconds after the password is reset successfully. Hold **i** to return to the home page or by route' **BACK**' →'home page'.

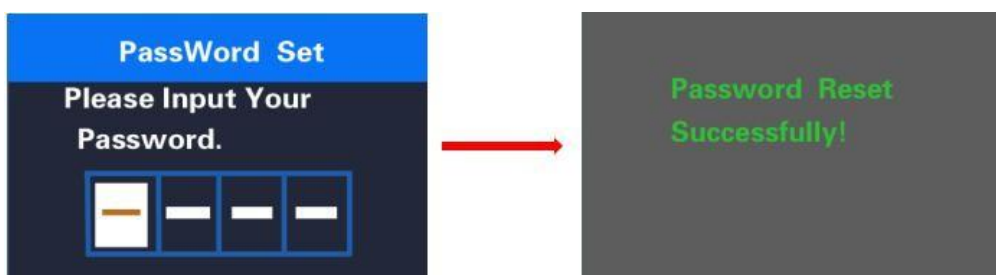


Password change interface

#### ◆ Password Disable

In “**Start PassWord**” interface, choose **OFF** and short press **i** to confirm. Meanwhile, display interface asks for a password. When the correct password is input, the display prompts ‘password function disabled’. After 2 seconds, the interface will be redirected to original settings page. Or

Hold **i** to return to home page or by route’ **BACK**’ → ‘home page’.



Password disable interface

## ● Information

In **DisPlay Setting** page, select **BACK** and press **i** to back to main setting page. Press +/- to select **Information**. Press **i** button enter **Information** menu.

### ◆ wheel size

Press +/- to select **wheel size** and press **i** button to check wheel size info.

Remarks: only readable, not adjustable.

Hold "i" button to return to home page or press **BACK** to return to home page



Wheel size interface

### ◆ Speed limit

Press +/- to select **Speed limit** and press **i** button to check speed limit info.

Remarks: only readable, not adjustable.

Hold "i" button to return to home page or press **BACK** to return to home page



Speed limit interface

### ◆ Battery info

Press +/- to select **Battery info** and press i button to check battery info.

Remarks: only readable when a battery with BMS is applied.

Hold "i" button to return to home page or press **BACK** to return to home page



Battery info interface

### ◆ Controller info

Press +/- to select **Ctrl info** and press i button to check controller info on software version and hardware version

Hold "i" button to return to home page or press **BACK** to return to home page

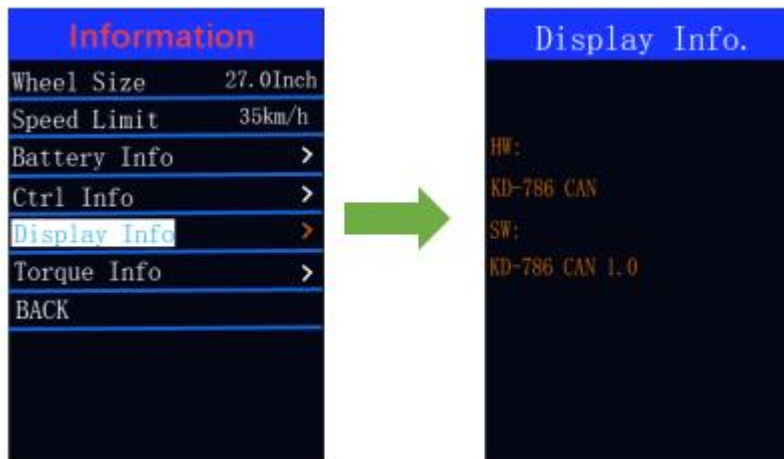


Controller info interface

◆ **Display info**

Press +/- to select **Display info** and press i button to check display info on software version and hardware version

Hold "i" button to return to home page or press **BACK** to return to home page



Display info interface

◆ **Torque info**

Press +/- to select **Torque info** and press i button to check the torque info.

**Remarks:** torque info is only readable when torque motor is applied.

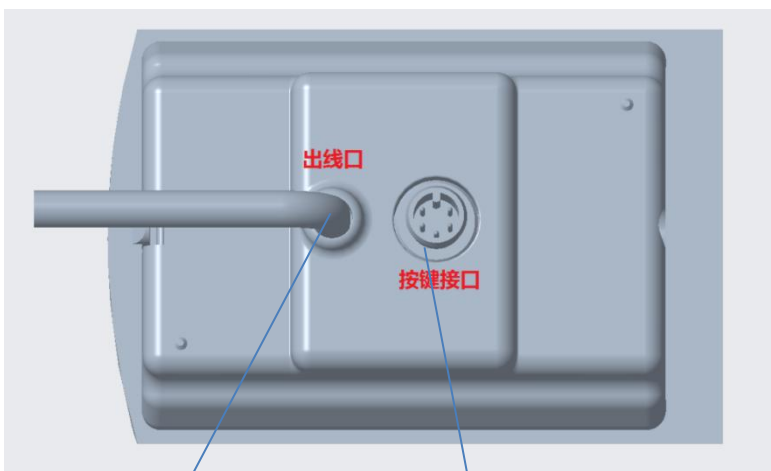
Hold "i" button to return to home page or press **BACK** to return to home page



Torque info interface

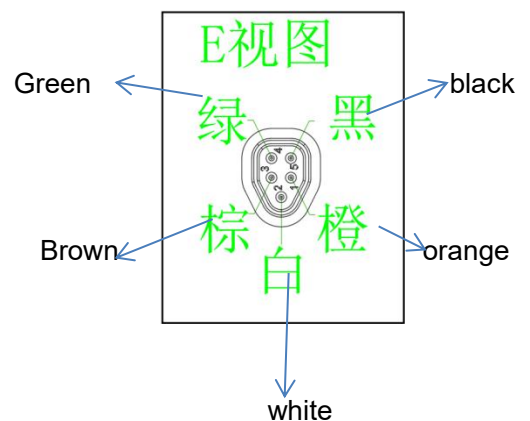
■ If there is not any operations in 20 seconds, the display will exit the settings state.

◆ **Display connection layout:**



Outgoing cable

remote connector



### Display male end pin-out info

| Wire no. | Color  | function      |
|----------|--------|---------------|
| 1        | Orange | Button signal |
| 2        | White  | CAN-L         |
| 3        | Brown  | P+            |
| 4        | Green  | CAN-H         |
| 5        | Black  | GND           |

### 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.).
6. Beyond Warranty period.

### Warnings:

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