UBCKT350 Intelligent Instrument Instructions

catalogue

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preface

Dear user, in order to better operate your electric vehicle, please carefully read the instruction manual of the e-bike instrument before use. We will tell you in the simplest language about every step of using the instrument, including hardware installation, setup, and normal use of the instrument. At the same time, we will help you solve any confusion and obstacles that may arise.

User precautions

Pay attention to safety during use and do not plug or unplug the instrument when powered on.

Try to avoid collisions on the instrument panel.

The outer shell of the instrument adopts waterproof technology, please do not disassemble it randomly to avoid affecting the waterproof performance of the instrument.

Regarding the background parameter settings of the instrument, please do not change them arbitrarily, otherwise normal riding cannot be guaranteed.

When the instrument cannot be used normally, it should be sent for repair as soon as possible.

一、Product Introduction

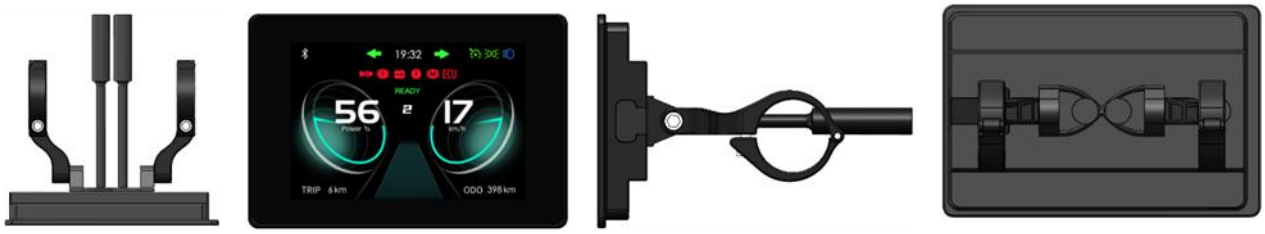
1. Description

instrument

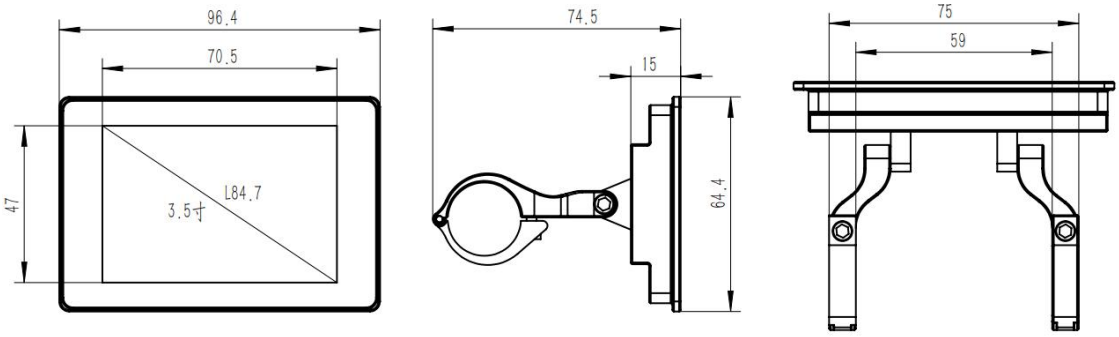
2. Model No.

UBCKT350

3. Appearance



4. Product specifications



General Parameter		
Dimension	Length*Width*Height	Length*Width*Height
	Screen Size	3.5''
	Holder Diameter	Holder Diameter
Screen Size	Type	TFT
	Color	RGB
	Resolution	320 * 480
Connector	Type	M8 waterproof joint male 5 core
	Length	20 cm
General Feature	Operating Voltage	12V - 60V
	Operating Temperature	-20 ℃ - +70 ℃
	Ingress Protection Rating	IP67
	Communication Protocol	UART/CAN
Other Feature	Theme	3
	Bluetooth	BLE 5.2

5. Main interface display

1. Bluetooth function: Bluetooth on/off status display, display identification after successfully connecting to instrument Bluetooth;

2. Cruise control: Display the vehicle in cruise control mode;

3. Warning reminder: display warning information;

4. Mode display: displays the current vehicle mode;

5. Outline light: displays the on/off status of the outline light, and displays the identification when the system's outline light is on;

6. Headlight display: Display the on/off status of the headlights, and display the identification when the system headlights are on;

7. Battery display: displays real-time battery level;

8. Turn icon display: displays the current direction of vehicle rotation;

9. Real time speed display: Display real-time speed values;

10. Accumulated mileage ODO: displays the accumulated mileage;

11. Logo display: displays the vehicle's logo;

12. Boost mode display: displays the vehicle's activation of boost mode;

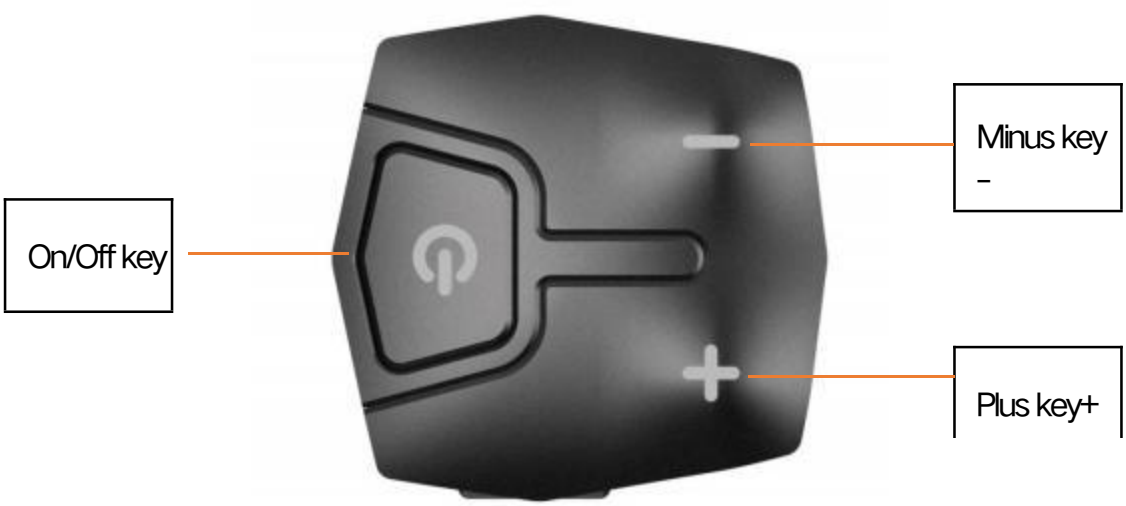
13. Single Mileage TRIP: displays the mileage of the current ride;

14. Power display: displays the current vehicle power;

15. Time display: displays the current time;

6. Button Definition

The E-bike type instrument has three buttons. Including "On/Off key", "Plus key+", and "Minus key -". Key setting
As shown in the following figure



7. Routine Operations

The E-bike instrument panel provides three themed UI styles and five languages for users to set up. This specification sheet is based on
Using Theme1 and English versions as examples for explanation.

"Press and hold button for>2.5S" is replaced by "long press", and "press and hold button for<0.5S" is replaced by "click".

① On/Off Animation

After long pressing the "On/Off" button, the instrument panel will power on and play the startup animation; In the power on state, long press the "On/Off" button to make the system power off and the instrument play a shutdown animation. In the shutdown state, the leakage current of the instrument is less than 1uA. The startup interface is shown in the following figure

② Gear selection

After turning on, click the "+" or "−" button to switch the power assist gear, change the output power of the motor, and adjust the instrument panel.

The default gear is 0-5, with no power output in 0 gear. 1st gear is the lowest power and 5th gear is the highest power.

When the instrument is turned on, it defaults to 1st gear. The assist gear selection interface is shown in the following figure.

③ Headlight switch

Turn on the lights: Press and hold the "+" button when the lights are turned off, the screen's headlights will light up, and the controller will be notified to turn on the lights.

Turn off the lights: Press and hold the "+" button while the lights are on, the screen headlights will dim, and the controller will be notified to turn off the lights.

After turning on and off the light, the light sensing function failed, and it returned to normal after restarting. The display interface of the headlight switch is shown in the following figure.

④ Boost cruise mode

When the vehicle is stationary, click the "-" button to shift to 0, then long press the "-" button again to enter the boost cruise mode. The boost cruise interface is shown in the following figure.

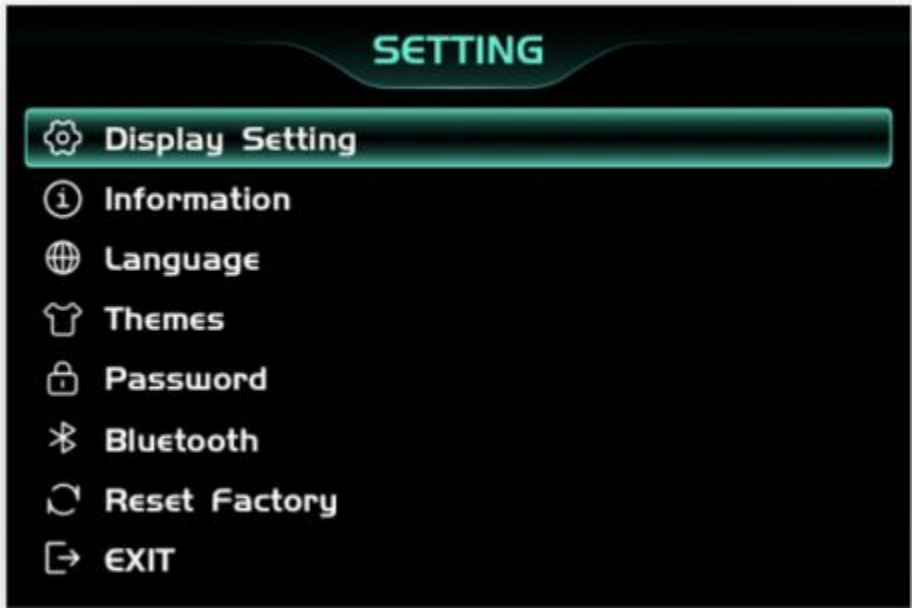
In the boost cruise mode, the boost sign is dynamically displayed. When the vehicle speed is less than 6km/h, long press the "-" button to stop the boost status. The screen boost sign disappears and the static boost sign status is restored.

The cruise assist function can only be used when the user is driving an electric vehicle, please do not use it while riding.

二、Information Viewing and Settings

1.Instrument settings

Click the "" key to enter the settings information list, use the "+" or "−" keys to move the cursor up and down, select "Display Setting", "Information", "Language", "Themes", "Password", "Bluetooth", "Reset Factory" and "Exit", and click "" to enter. The function selection interface is shown in the following figure Show. Please refer to Appendix 1 for system parameter settings, security settings, factory parameter settings, and advanced option passwords.



① Conversion of English and metric units

Enter the "Display Setting" menu, select "Unit", click "" to enter the settings, use the "+" or "−" keys to move the cursor up and down, select "km/h; mph", click "" to save and exit to " “

"Unit", exit to the main interface through "Back" ->"Exit". The unit conversion is shown in the following figure.

② Automatic shutdown

Enter the "Display Setting" menu, use the "+" or "-" keys to move the cursor up and down, and select "Auto"Off, click to enter the settings interface, move the cursor to select "OFF", "1min", "2min", "3min","4min", "5min", "6min", "7min", "8min", "9min", "10min" ("OFF" indicates turning off the automatic shutdown function, "1min-10min" respectively represents the time for automatic shutdown.) The required automatic shutdown time will be saved by clicking "" to exit from the "Display Setting" menu, and exit by clicking "Back" → "Exit"Main interface.

Attention: Any operation during the automatic shutdown time will be timed again, and the time for not operating will reach the set time
It will only shut down after a certain amount of time.

③ Single mileage reset

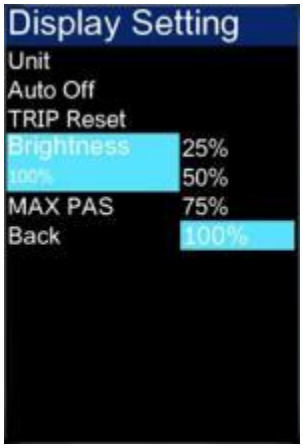
Enter the "Display Setting" menu, use the "+" or "-" keys to move the cursor up and down, and select "Trip"Reset, click to enter the settings, then move the cursor to select "NO"/"YES" ("YES" indicatesClear to zero ("NO" means not reset), click "" to save and exit to "Trip Reset", click "Back" →Exit to the main interface.

When the cumulative mileage reaches its maximum value, it will automatically reset to zero. The maximum mileage for a single trip is

655KM (different The maximum value of the protocol is different. When a single mileage is reset, both the single mileage and the average speed are reset at the same time

④ Backlight brightness setting

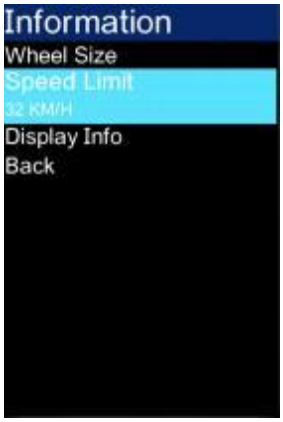
Enter the "Display Setting" menu, use the "+" or "-" keys to move the cursor up and down, select"Brightness", click "" to enter the settings,move the cursor to select "25%"/"50%" after entering the settings/"75%"/"100%", short press "" to save and exit to "Brightness", use "Back" → "Exit" to exit Go to the main interface. The backlight settings are shown in the following figure.



2.Information viewing

① Wheel diameter information - enter the "Information" menu, use the "+" or "-" keys to move the cursor up and down, select "Wheel Size", click "" to enter the settings. The default wheel diameter is 26Inch, and the range can be set to 16Inch-29Inch. After setting up, exit to the main interface through "Back" ->"Exit".

② Speed limit information - enter the "Information" menu, the speed limit information is not adjustable. When the unit is km (metric system), the default speed limit is 32km/h; When the unit is in miles, the default speed limit is 20MPH. Through "Back"Exit to the main interface.
As shown in the following figure.

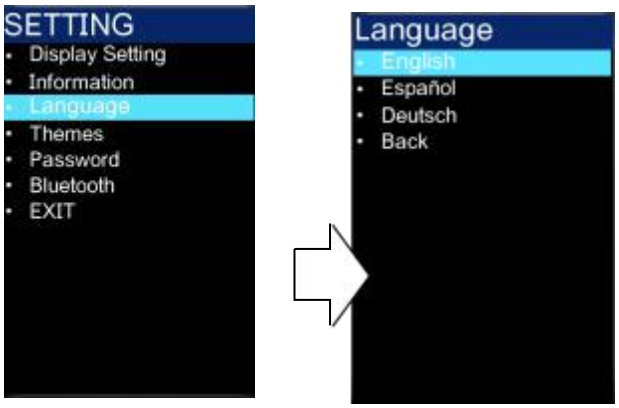


③ Instrument Information - Enter the "Information" menu, use the "+" or "-" keys to move the cursor up and down, select "Display Info", click "OK", and the instrument interface will display the instrument software and hardware version number (software and hardware version number The version number may change due to different batches of products. Exit to the main interface through "Back" ->"Exit".

④ Cruise control - enter the "Information" menu, use the "+" or "-" keys to move the cursor up and down, select "Cruise control", click "OK", and exit to the main interface through "Back" ->"Exit".

3.Language selection

The E-bike instrument panel offers 5 languages for users to choose from. Click the "" key to enter the settings information list, use the "+" or "−" keys to move the cursor up and down, select "Language", click "" to enter the language selection interface, move the cursor to switch between "English", "Deutsch", "Fran ç ais", "Chinese", and "Espa ñ ol", then short press "" to confirm. Exit to the main interface through "Back" ->"Exit". The language selection is shown in the following figure.



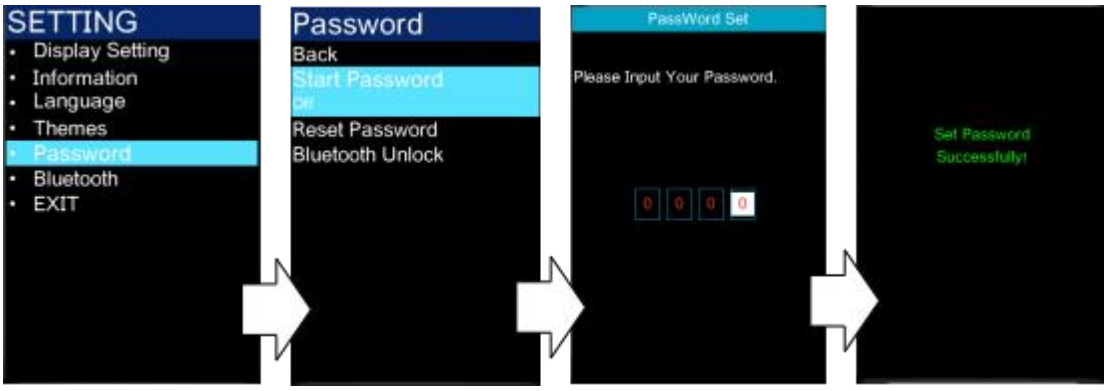
4.UI selection

The E-bike instrument panel provides four different styles of UI interfaces for users to choose from. Click the "" key to enter the settings information list, use the "+" or "−" keys to move the cursor up and down, select "Themes", click "" to enter, use the "+" or "−" keys to switch between "ECO" - "TOUR" - "TURBO" - "SPORT", and then short press "" to confirm. Exit to the main interface through "Back" ->"Exit". The UI selection is shown in the following figure.

5.Password settings

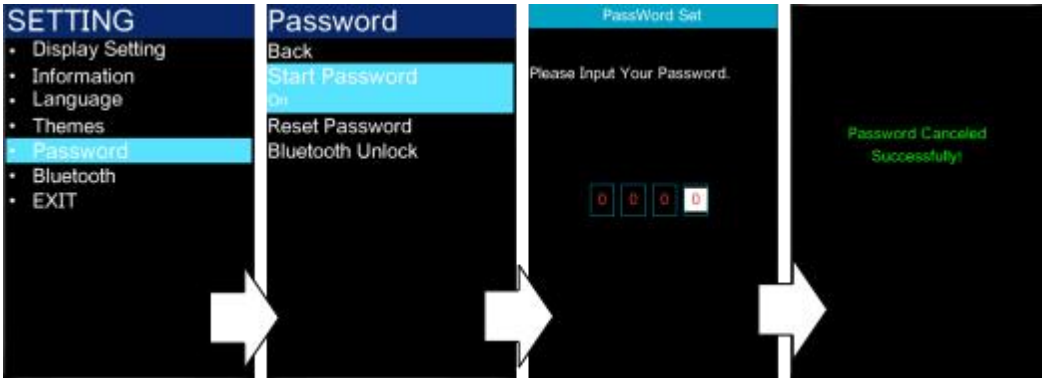
① Enable password function - click the "" key to enter the setting information list, use the "+" or "-" keys to move the cursor up and down, select the "Password" option, and click "" OK "to enter the Password options interface. Select" Start Password "(Start Password status is off) with the cursor and click" "Confirm". The interface will prompt you to enter the password (the initial password defaults to 0000), At this point, use the "+" or "-" keys to switch between the numbers "0-9", click "" to confirm the number in the current cursor. After entering, the system will prompt that the password function is successfully enabled. After the password function is successfully set, the interface will automatically jump to the original setting interface, and exit to the main interface through "Back" ->"Exit".

The operation steps are shown in the following figure.



② Turn off password function - click the "" key to enter the setting information list, use the "+" or "-" keys to move the cursor up and down, select the "Password" option, and click "" OK "to enter the Password options interface. Select" Start Password "(Start Password status is on) with the cursor and click" "confirm". The interface will prompt you to enter the password. At this time, use the "+" or "-" keys to switch the numbers "0 -9", Click "" to switch between digits and complete the input

After completion, the system prompts to disable the password function. After successfully canceling the password, the interface will automatically jump to the original settings interface, and exit to the main interface through "Back" ->"Exit". The operation steps are shown in the following figure.



③Setting and Changing Passwords - (The initial password defaults to 0000)

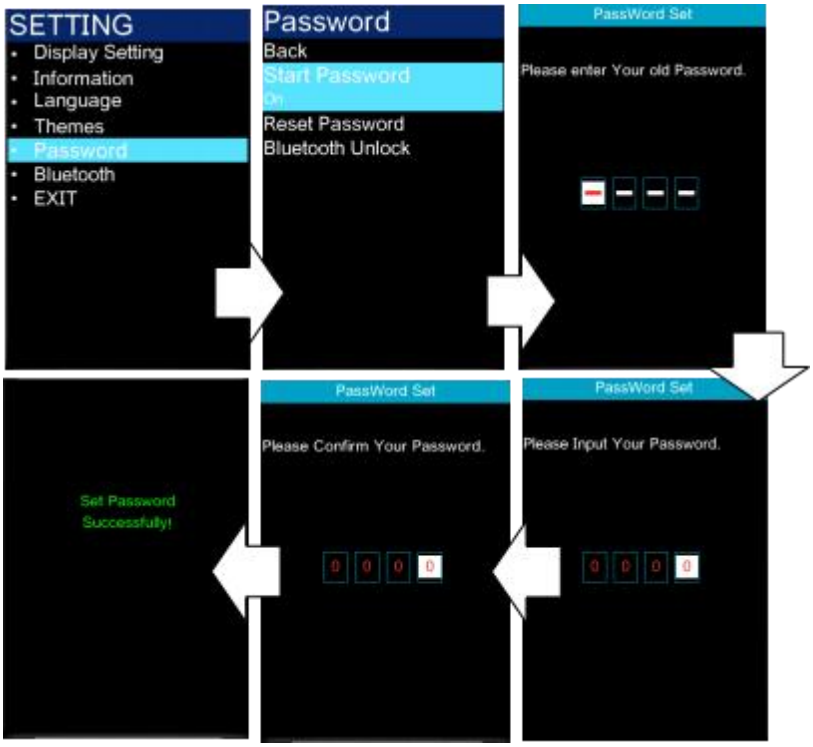
Click the "" key to enter the settings information list, use the "+" or "-" keys to move the cursor up and down, select
After selecting the "Password" option, click "OK" to enter the Password options interface, and select "Reset" with the cursor
After entering the "Password" and clicking "" to confirm,
1. The interface prompts "Please enter your old password". At this time, use the "+" or "-" keys to switch between the numbers "0-9",
Click to switch between digits,
2. After entering, the interface prompts "Please enter your password". At this time, use the "+" or "-" keys to switch between numbers
Words "0-9", click "" to switch between digits,
3. After entering, the interface prompts "Please confirm your password". At this time, use the "+" or "-" keys to switch between numbers
Words "0-9", click "" to switch between digits,

Note: After changing the initial password, if you want to enable the instrument password function, you need to enter a new password to enable it Start.

Do not modify initial password unless necessary

After the password is successfully modified, the interface will automatically jump to the original settings interface, and exit to the main page through "Back" ->"Exit"

Interface. The operation steps are shown in the following figure.



6.Bluetooth connectivity

Click the "" key to enter the settings information list, use the "+" or " -" keys to move the cursor up and down, select the "Bluetooth" option, and click "" OK "to enter the Bluetooth QR code interface. You can scan the QR code and bind the device through the mobile app. After binding the device, the device interface will automatically jump to the main interface, and the Bluetooth function indicator will light up. The operation steps are shown in the following figure.

Attention: The Bluetooth connection distance between the instrument panel and the phone should be within 10 meters.

7.Restore factory settings

Click the "" key to enter the settings information list, use the "+" or " -" keys to move the cursor up and down, select the "Reset Factory" option, and click "" OK "to restore the instrument panel to its factory settings. The operation steps are shown in the following figure:

8.Error code display

When the electric vehicle electronic control system malfunctions, the instrument panel will display an error code. The definition of the error code in this instrument panel is shown in Appendix 2.

3、 Vehicle control

1. Automatic adjustment of screen brightness

The E-bike instrument automatically adjusts the screen brightness based on brightness;

2. Induction headlights

The E-bike instrument panel automatically turns on and off the headlights based on the sensed light intensity;

3. One click start/stop

Mobile phone control for vehicle start/stop;

4. Approaching to unlock/leaving the lock

Approaching the vehicle, the vehicle automatically unlocks; (In vehicle standby mode)

Leaving the vehicle, the vehicle automatically locks (in standby mode)

四、OTA upgrade

Click the "" key to enter the settings information list, use the "+" or "-" keys to move the cursor up and down, select the "OTA" option, and click "" OK "to enter the OTA upgrade interface. The operation steps are shown in the following figure.

Upgrade in progress interface Upgrade completed interface

五、Navigation function

After entering the destination in the search box, click to start cycling. At this time, the instrument panel will display the navigation turn icon type, the remaining distance of the current road section, and the name of the next road section. There are several ways to indicate:

Name	Icon	Name	Icon
Entering the tunnel		**Turn left and turn back**	
Straight Travel		**Turn right and turn back**	
Turn Left		**Turn Right**	
Turn Sharp left		**Turn Sharp Right**	
Turn Slight Left		**Turn Slight Right**	
Entering the roundabout			

Navigation function

六、Frequently Asked Questions and Answers

Q: Why can't it be turned on?

Answer: Check if the battery is turned on or if the external lead is broken.

Q: How should the instrument display fault codes be handled?

Answer: Go to the repair point for electric vehicles in a timely manner for repairs.

七、Version change

The software version of this instrument manual may have slight differences from this manual, and the actual version used shall prevail.

Serial Number	setting	Password	illustrate
1	System Setting	0315	System parameter setting password (fixed)
2	Security Setting	**Factory default** 1234	Security setting password (modifiable)
3	Recover Default	0605	Restore factory parameter settings password (fixed)
4	Advanced Options	0126	Advanced Options Password (Fixed)

Appendix 1: Password Quick Reference Table

Appendix 2: Error Code Definition Table

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation.
If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
-- Reorient or relocate the receiving antenna.
-- Increase the separation between the equipment and receiver.
-- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
-- Consult the dealer or an experienced radio/TV technician for help.

Warning: changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment

The devices has been evaluated to meet general RF exposure requirement， the device can be used in portable exposure condition without restriction