retrospec K5303 ebike Meter User Guide

Contents

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Introduction

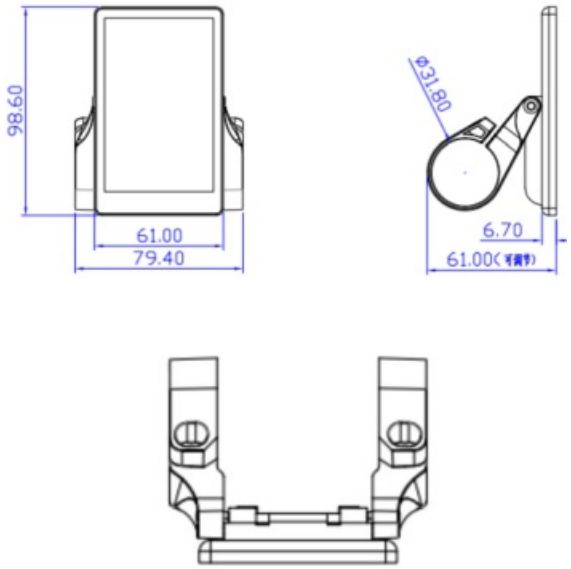
- Dear users, to better operate your e-bike, please carefully read the manual of the K5303LCD display before use.
- We will tell you every detail of the display in the simplest language, including the installation and setting of hardware and the normal use of the display.
- At the same time, it helps you solve the possible confusion and obstacles.

Dimensions

Material and color

- K5303 product housing is made of black Alloy Aluminum & Tempered glass.
- The material of the housing is allowed to be used normally at the temperature of – 40 to 80, and good mechanical properties can be guaranteed.

Figure and dimension drawing (unit: mm)



Function and button definition

Function description

K5303 provides you with a variety of functions and displays to meet your riding needs.

K5303 displays:

- Battery capacity
- Speed (including real-time speed display, maximum speed display, and average speed display),
- Distance (including trip and ODO),
- PAS Level selection,
- The backlight turns on,
- Headlight turn on / off,
- 6KM/H walk assist
- Output Power display
- Error code,
- **Multiple setting parameters Such as** wheel diameter, speed limit, battery capacity setting, various PAS level and power-assisted parameter settings, power on password setting, controller current limit setting, etc.

Display area

K5303 Normal Interface

Button definition

- The main body of the button is made of PC material, and the button part is made of soft silicone material, all in black. There are three buttons on the K5303 display.
- Including the power on/mode button, plus button, and minus button. In the following description, a button is replaced by the text [MODE]. button is replaced by the text [UP]. button is replaced by the text [DOWN]

User Reminder

Pay attention to safety during use.

1. Do not plug and unplug the display when it is powered on.
2. Avoid bumping the display as much as possible.
3. Avoid looking at buttons or displays for long periods while riding.
4. When the display cannot be used normally, it shall be sent for repair as soon as possible.

Installation Instructions

Fix the display on the handlebar and adjust the appropriate angle of view. When the e-bike is powered off, the display can be completed by inserting the connector of the display and the connector corresponding to the controller.

Operation Introduction

Power on/off

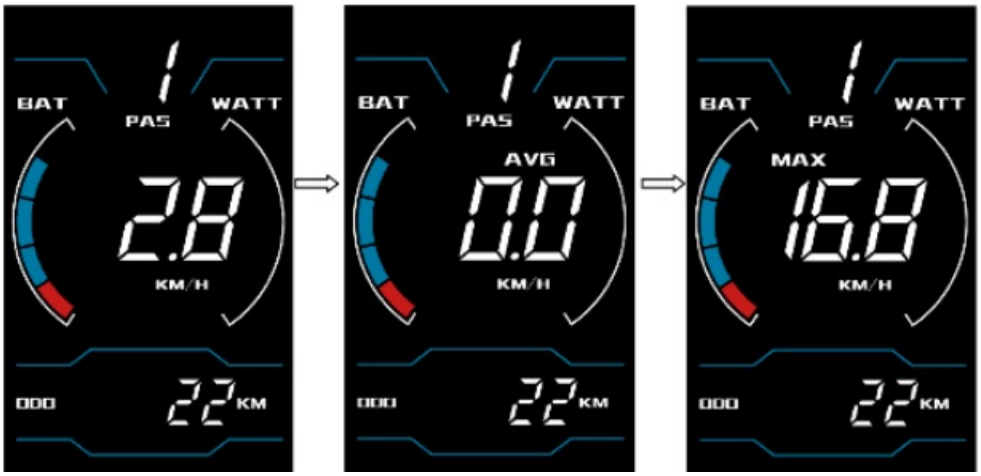
- After holding the [MODE] button, the display starts to work and provides the working power supply of the controller. In the power-on state, hold the [MODE] button to turn off the power supply of the e-bike.
- In the power-off state, the display no longer uses the power supply of the battery, and the leakage current of the display is less than 1uA.
- If the e-bike is not used for more than 10 minutes, the display will power off automatically. The battery button may need to be pressed for 3+ seconds to take the battery out of sleep mode.

User interface

K5303 User interface

Speed / Single Trip / ODO Speed

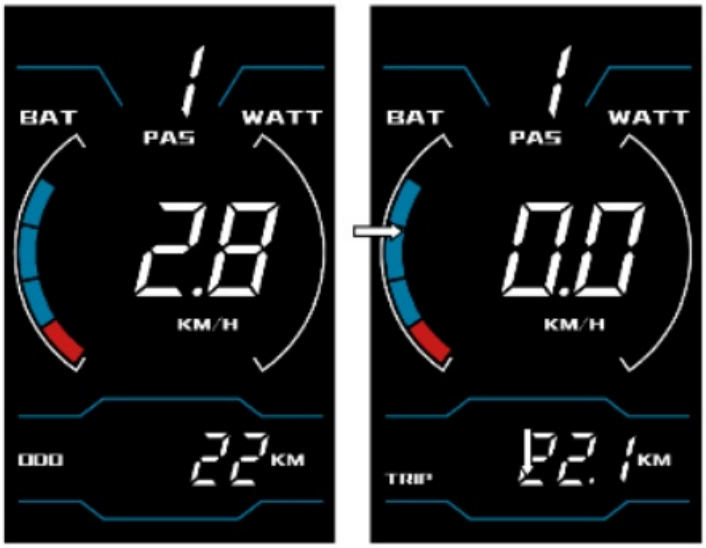
Short press the [MODE] button to switch the speed information, and speed (real-time speed), AVG (average speed), and max (maximum speed) are displayed respectively, as shown in the figure.



Single Trip/ODO

Long press the [MODE]+ [DOWN]button to switch the mileage information, and the indication is: ODO (cumulative

mileage) ➔TRIP (single trip), as shown in the figure:



ODO Trip Single Trip

Walk Assist Mode

When the display is turned on, hold the [DOWN] button for 3 seconds, and the e-bike will enter the state of walk assist mode. The e-bike travels at a constant speed of 4mph (6kmhl.

Headlight on interface

The walk assist mode function can only be used when the user pushes the e-bike. Do not use it when riding.

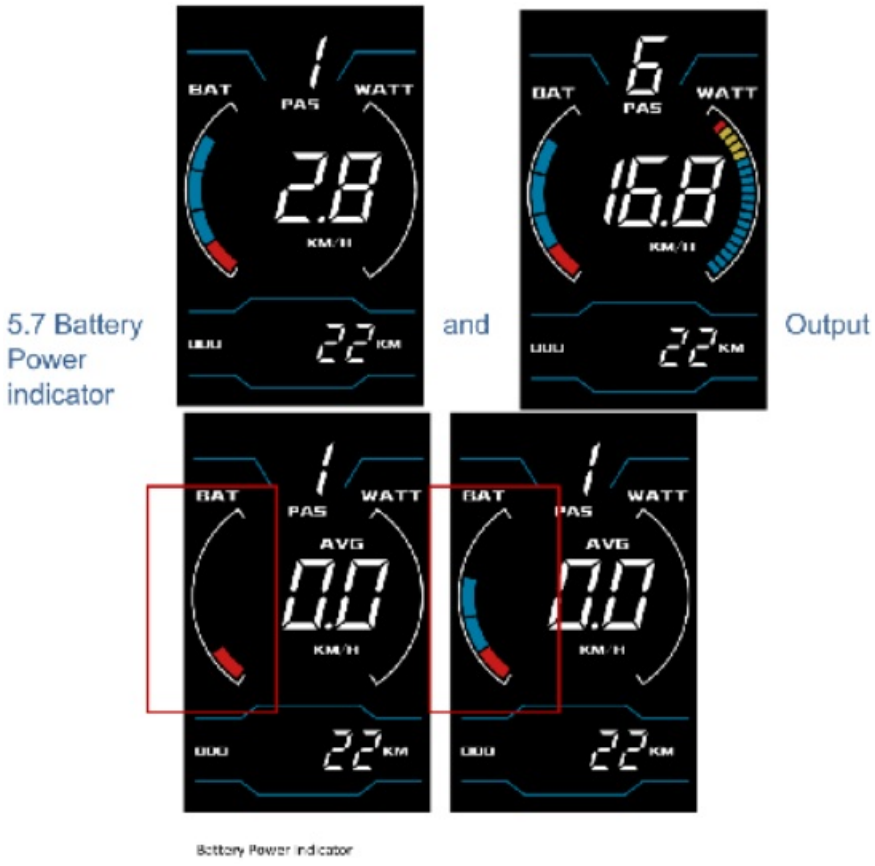
Headlight On/Off

Hold the [UP] button to display the interface as shown, and the icon appears, indicating that the lights have been turned on. Long press the [UP] button again to turn off the lights.

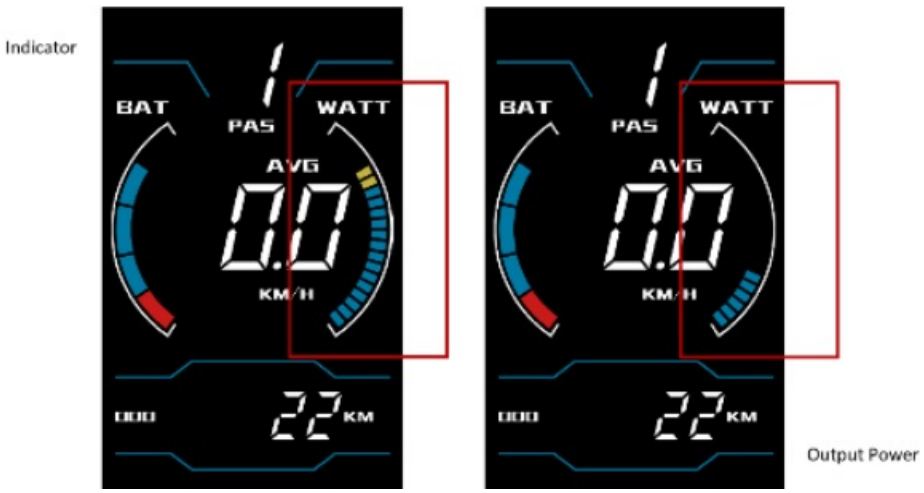
Headlight on interface

PAS Level Selection

- Short press the [UP] or [DOWN] button to switch the PAS level, the motor output power will be changed accordingly by the PAS level of the E-bike.
- The default range of the PAS level is 0-6 levels. Level 1 is the lowest output level, and the level 5 is the highest output power level of the motor.



Battery Power Indicator



User Settings

Preparation before startup

- Ensure that the connectors are firmly connected and turn on the power supply of the e-bike.

General setting

- Press and hold the [model button to power on the display. In the power-on state, press and hold the [UP] and [DOWN] buttons for 2 seconds at the same time, and the display enters the setting state.

Trip Clearance

- The TRIP reset setting item can clear the single trip information of the display. After entering the setting item, the default option is n, press the [UP] or [DOWN] button to switch to y, and long press M button to save and exit to the main interface

Back Light Setting

- The backlight setting is used to set the backlight brightness. 1, 2, and 3 levels indicate the backlight brightness levels. 1 is the darkest, 2 is the standard brightness, and 3 is the brightest.
- The default value is 1. Press the [UP]or [DOWN] button to change the backlight brightness parameter, and long press the [MODE] button to save and exit to the main interface

Metric and Imperial Unit Setting

- Enter the setting state, ST1 means imperial system selection, short press the [UP]/[DOWN] button to switch between metric units (Km) and imperial units (Mph).
- Short press the [MODE] button to confirm the setting, and then enter the ST2 setting interface.

Wheel Size Setting

- LD stands for wheel size. The settable values are: 16,18,20,22,24,26,?00C,28 and 29. Select the e-bike wheel size by pressing [UP]/ [DOWN], to ensure the accuracy of the display speed and the trip distance.
- Short press [MODE] to confirm and enter the speed limit setting interface.

Wheel Size Setting Interface

Exit settings

- In the setting state, long press the [MODE]button (more than 2 seconds) to confirm to save the current setting

and exit the current setting state.

Class 2/Class 3 Selection

- **NOTICE-** Before selecting 28MPH Class 3 E-Bike settings, check local regulations regarding the use of Class 3 E-bikes. They are usually different from Class 2 E-Bike laws. It is also important to check with your insurance provider regarding the use and coverage of Class 3 E-Bikes.
- Press and hold the [UP] and [DOWN] buttons at the same time for 2 seconds to enter the general setting interface. Then simultaneously press [MODE] and [UP] buttons for 2 seconds to enter the class selection interface.
- **C2**″ is shown identifying Class 2 (20MPH top speed) parameters that are in use.
- Use [UP] to select C 3 (Class 3 parameters of 28MPH top speed and 20MPH throttle speed). Use the [DOWN]to go back to C2 parameters.
- After entering the 4-digit password 2453, short press the [MODE] button to confirm. Long press [MODE] to exit.

Class 2/3 Interface

- If no operation is performed within one minute, the meter will automatically exit the setting state.

Restore Default Setting

- DEF stands for restore default parameter. Press [UP] and hold [MODE] at the same time for 2s, to enter the restore default parameter interface.
- Switch Y/N through [UP] and [DOWN]. Y means the default parameters need to be restored. Long press [MODE] to confirm. If choosing Y, you need to input the permission password to restore the default parameter.

Restore Default Setting Interface

- **Input the password:** 0368. Short press [MODE] to shift, and use [UP] and [DOWN] to increase/decrease input value. After entering the 4-digit password, short press [MODE] to confirm.
- When the default is restored successfully, it will exit automatically.

- In the restore default, battery power, ODO, and trip distance are not restored, the power-on password could be restored.

Error code

- When the e-bike electronic control system fails, the display will automatically display an ERROR code. For the definition of a detailed error code, see Appendix 11.

Error code interface

- Only when the fault is eliminated, can exit the fault display interface, the e-bike will not continue to run after the fault occurs.

Version

- This user manual is for a general-purpose UART-5S protocol software (version V1.0). Some versions of the e-bike LCD may have slight differences, which should depend on the actual use version.

10–Over Voltage –Check battery, Controller, and All connections
11–Under Voltage—Check battery, Controller, and All connections
12–Speed Feedback Fault—Check the motor connection and Controller
13—Overtemperature–Controller or Motor—Let the system cool and Check connections
14–Voltage Fault—Check battery and Connections
15–Abnormal Output—Check all connections
16–CPU Fault CPU—Check controller and All connections
17–Runaway Protection—Check battery and All connections
18–Assistance sensor Fault—Check PAS or Torque sensor and connections
19–Speed sensor Fault—Check motor and connections
20–Communication Fault—Check all connections, Display and Controller
21–Over current or MOSFET Fault (Controller)—Check Controller and All Connections
22–Throttle Fault—Check Throttle connections
23–Phase Fault (motor)—Check motor and Connection
24–Hall Fault—Check motor and Connection
25–Brake error—Check brake lever sensor connection and lever movement. It will also display if holding the bra ke while turning the bike on (let go of the brake if this happens and it should go away).
30–Controller communication fault—Check Controller and All connections
31–Battery communication fault—Check battery, Controller, and Connections
32–Controller and battery communication fault Check battery, Controller, and Connections

Documents / Resources

	retrospec K5303 ebike Meter [pdf] User Guide 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 30, 31, 32, K5303 ebike Meter, K5303, ebike Meter, Meter

References

- User Manual