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USERS GUIDE

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CONTENT

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Preface

Dear users, in order to better operate your E-bike, please carefully read the manual of VA35 display before use. We will tell you every details 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.

1.Dimensions

1.1 Material and color

VA35 product housing is made of black PC and and tempered glass material,and the color is black matte. The material of the housing is allowed to be used normally at the temperature of - 20 ℃ to 60 ℃ , and good mechanical properties can be guaranteed.

Figure and dimension drawing (unit: mm)

L5 switch

RBT switch

M3 switch

1.2 Optional Button Description

Switch	Photo	Remark
L5-1		PAS level，Headlight、Setting、Walk assist（Basic version)
L5-2		Add :Left and right turn signals（Need to match the controller protocol to expand this function)）
RBT-USB		Add: TYPE -C port (5V,1A)

RBT-USB（LR）		Based on the RBT-USB switch, the left and right turn functions have been added （Need to match the controller protocol to expand this function)）
M3-R		Optional with high-frequency card swiping function

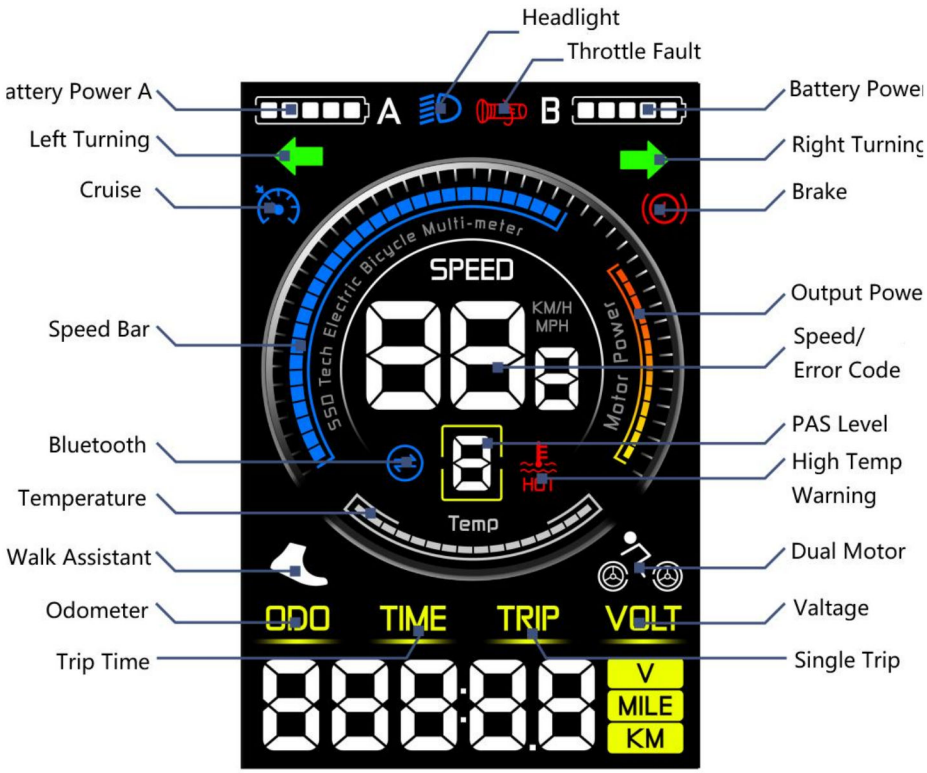
2.Function overview and button definitions

2.1 Function description

VA35provides you with a variety of functions and displays to meet your riding needs：

- Battery capacity
- Speed
- Distance (including trip and ODO),
- Walk assistance display
- Backlight
- Error code
- Multiple setting parameters

2.2 Normal Display area



VA35 normal display interface

2.3 Button definition

There are five buttons on the KVA35 display.In the following description, button is replace by the text [POWER], button is replace by the text [SET], button is replace by the text [UP], button is replace by the text [DOWN], button is replace by the text [HEADLIGHT].

3.User reminder

Pay attention to safety during use. Do not plug and unplug the display when it is powered on.

Avoid bumping the display as much as possible.

The film used for the display is a waterproof film. Please do not tear it off to avoid affecting the waterproof performance of the display.

Please do not change the background parameter setting of the display at will, otherwise the normal riding cannot be guaranteed.
When the display cannot be used normally, it shall be sent for repair as soon as possible.

4. 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.

Please tighten the screws when fixing the display.

5.Operation introduction

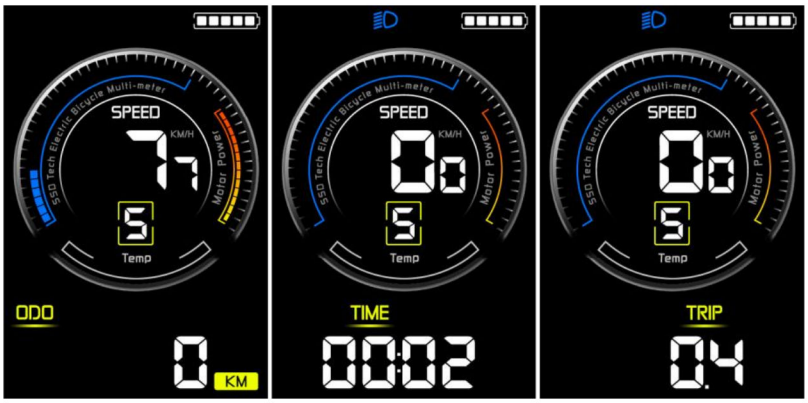
5.1 Power on/off

After hold the [POWER] button, the display starts to work and provides the working power supply of the controller. In the power on state, hold the [POWER] 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.

5.2 User interface

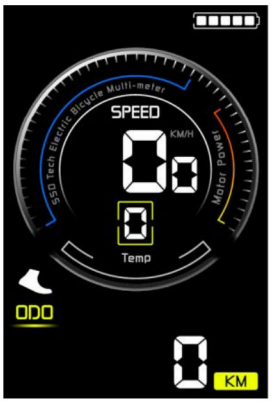
The normal interface can be displayed after power on. The interface can display the real-time power value of the electric bike, the real-time speed , the mileage of a single ride (TRIP), the total mileage (ODO), the power assist level (PAS), and the short press [POWER] can switch to the average speed , maximum speed , single trip time (TRIP TIME), single trip (TRIP).



ODO　　Single Trip Time　　Single Trip

5.3 Walk assistance

Long press [DOWN] for 2 seconds,E-bike would enter the state of walking assistance. The E-bike travels at a constant speed of 6 km/h.

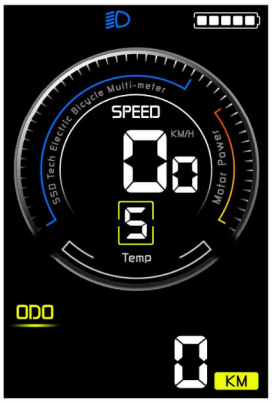


Walk Assistant Mode

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

5.4 Headlight On/Off

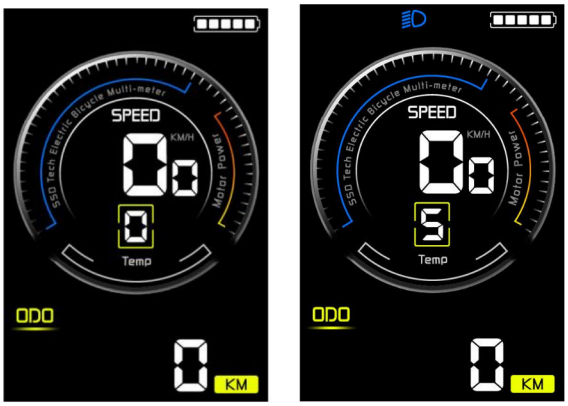
Short press the [HEADLIGHT] button to display the interface as shown, and the icon appears, indicating that the lights have been turned on. Short press the [UP] button again to turn off the lights.



Headlight

5.5 PAS level selection

Short press the [UP] or [DOWN] button to switch the power assist level of the E-bike and change the output power of the motor, and the default output PAS level range of the display is 0-5 .



PAS level selection interface

5.6 Battery indicator

There are a total of five levels of power in the display. when it is fully charged, the white grid is full.

Battery indicator

5.7 Error code

When the e-bike electronic control system fails, the display will automatically display ERROR code. For the definition of the detailed error code, see Appendix 1.

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.

6. General settings

In the power-on state, when there is no speed, short press the [SET] button, and then the display will enter the setting state. In the settings list interface, short press the [Power] button to switch the setting items.

6.1 Backlight brightness setting

In the settings interface, short press the [UP] or [DOWN] button to switch the backlight brightness level. Press and hold [Power] to exit the setting item. The backlight level 1-3 is adjustable, and the brightness increases as the number increases.

Blacklight brightness setting

6.2 Unit Setting

In the setting interface, short press the [UP] or [DOWN] button to switch units. Press and hold [Power] to exit the setting item. There are two options: KM/H and MPH.

Unit setting interface

6.3 Single Trip Clearance

Short press [Power] to enter the setting item. In the settings interface, short press the [UP] or [DOWN] button to switch between YES and NO. Press and hold [Power] to exit the setting item. y indicates that the trip need to be cleared, and n indicates that it is not cleared.

TRIP clearance interface

6.4 Wheel Size Setting

In the wheel diameter setting interface, short press the [UP] or [DOWN] button to select the corresponding wheel diameter number, and press and hold [Power] to exit the setting item. The values can be set: 16inch, 18inch, 20inch, 22inch, 24inch, 26inch, 700C, 27.5inch and 28inch.

Wheel size setting interface

6.5 Speed Limit Setting

In the speed limit setting interface, short press the [UP] or [DOWN] button to select the corresponding speed limit, and press and hold [Power] to exit the setting item. The setting range is 12-40km/h.

Speed limit setting interface

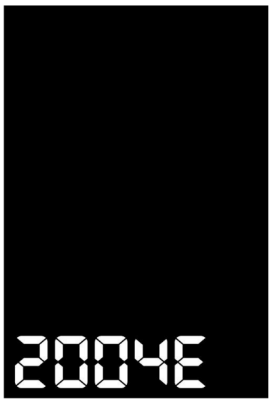
6.6 Button Switch Setting

Short press [Power] to enter the setting item. The setting parameters can be selected L5,L5 (LR), RBT, M3RF,M3, and the switch type can be selected by pressing the [UP] button and the [DOWM] button. Press and hold [Power] to exit and save the modifications.

BUTTON SWITCH Setting Interface

7. Software Version Interface

In the power on state, no speed at the same time, long press [MODE] + [UP] + [DOWN] three buttons together, it will display the current software version information, it is convenient for the maintenance of the display for after-sale service.



Software Version Interface

8. Preparation Before Startup

Please read the instruction carefully before using the display. Before switching on the power, make sure that the connectors are securely mated and switch on the power supply of the E-Bike.

9. FAQ

Q: Why can’t turn on the display?
A: Please check whether the battery is turned on or the leakage lead wire is broken

Q: How to deal with the error code display?
A: Contact the e-bike maintenance station in time.

10. Quality Assurance and Warranty Scope

I, Warranty Information:
1, King-Meter will be responsible for all faults arising during normal operation that are caused by a quality defect.
2, The warranty time is 24 months from the day the display leaves the factory.
II, The following are not covered by warranty:
1, Shell opened.
2, Connector damaged.
3, After display out of factory, the shell is scratched or damaged.
4, Lead wire of display scratch or break.

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

6, Product exceeded warranty period.

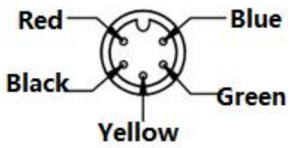
11. Version

The instruction manual of this display is the operation manual of the general software version (version 1.0) of Tianjin King-Meter Technology Co., Ltd. The version of the display software used on some vehicles may be slightly different from this manual, and the actual version used shall prevail

Appendix 1： Error Code Definition

Error Code	Definition
0x21	Current Abnormal
0x22	Throttle Abnormal
0x23	Motor phase problem
0x24	Motor Hall defect
0x25	Brake Abnormal
0x30	Communication Abnormal between display and controller
0x31	Power button sticking fault
0x34	6KM walk assist button sticking fault

Appendix 2： Pin Definition



JuLet-male connctor

Pin color	Definition
Red	VCC （36V/48V/60V）
Black	GND
Yellow	TX (The display outputs signals, and sends to the controller)
Green	RX (The display input signals, and receives the signal from the controller)
Blue	KEY

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