

# USERS GUIDE

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# AND 5167



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## **Preface**

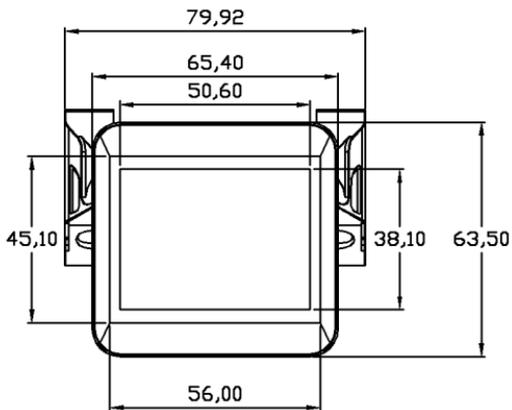
Dear users,

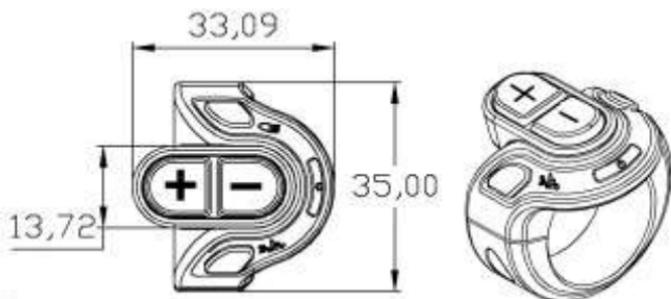
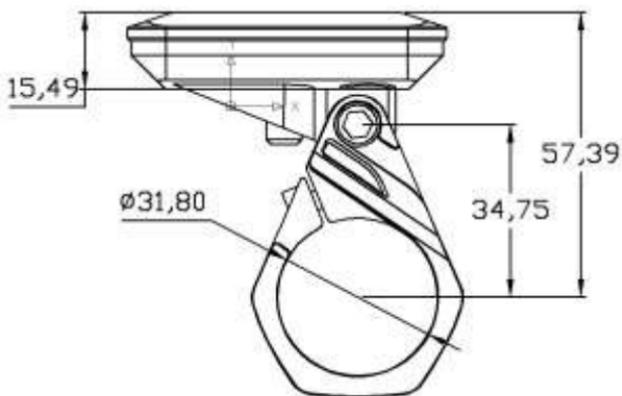
To ensure better performance of your e-bike, please read through the And 5167 product introduction carefully before using it. We will use the brief words to inform you of all the details (including hardware installation, setting and normal use of the display) when using our display. Meanwhile, the introduction will also help you solve possible confusion and barriers.

## 2. Appearance and Size

AND 5167 adopts combined method of metal bottom shell and glass cover plate, Temperature of shell material allows from -20 C to 60 for normal using to ensure good mechanical performance.

Dimensional drawing (Unit: mm)





AND7193 button cable is connected to the bottom of display. In the following statements,  button is replaced by “switch” + button is replaced by word “**plus**”, — button is replaced by word “**minus**”,  button is replaced by word “**headlight**”,  button is replaced by word “**Push**”

### 3. Function Summary

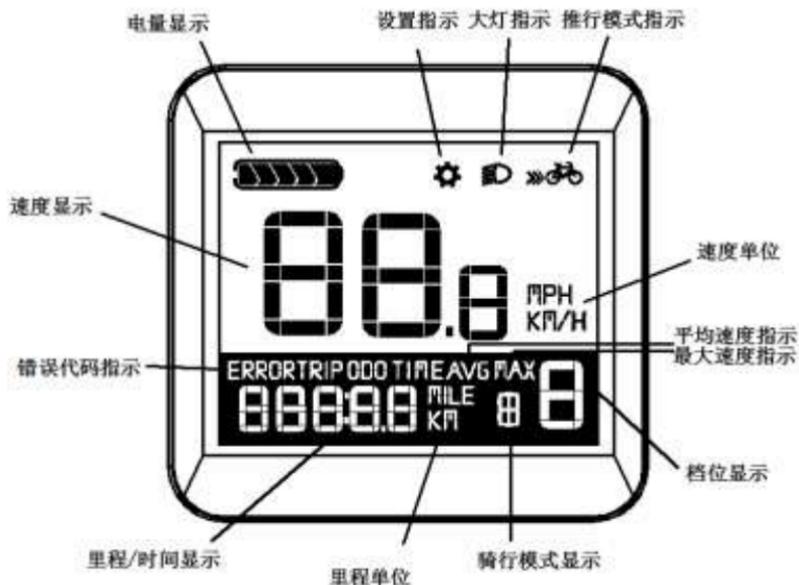
AND 5167 shows the contents:

- ◆ Battery indicator
- ◆ Speed display (real time speed display)
- ◆ Mileage display (Including single mileage display and ODO)
- ◆ Single time riding time display
- ◆ PAS level
- ◆ Headlight turn on and off
- ◆ 6km/h Walk assistant function
- ◆ Error code display
- ◆ Riding mode display
- ◆ Multiple setting parameters: wheel diameter, speed

limit ,backlight,gear range,initial value of gear,unit,sensitive value.

- ◆ Automatic control brightness of backlight

#### **4. Normal display area**



AND 5167 normal display area

## 5. Notes For Users

Be careful during using display, do not plug in and out when electrified. To avoid bumps as much as possible. Display need to be repaired as soon as possible when it can not work.

## 6. Installation instruction

This product is LCD liquid crystal display ,it need to be installed on handlebar of bike .After fixed, the connector of the display will be installed with the connector of the controller.

## 7. Normal operation

### 7.1 On/Off

Hold and press “**Switch**”for 3 seconds , display starts to work and provide controller power supply .In the boot state,holding and pressing“**Switch**”button can shutdown E-bike power supply. In the shutdown state,display no longer uses power of battery, leakage current of the display is less than 1uA. If do not use E-bike for 10 minutes, display will be shutdown automatically.

### 7.2 Speed/Mileage display ( Cumulative mileage /single time mileage /single time riding time )

Open display, display default shows real time speed、total mileage.Short press“**Switch**”button to switch display information.Shown in order: real time speed、accumulative mileage →average speed,single mileage→Max.speed,single time riding time.

Hold and press “headlight” in single time mileage or single riding time interface to clear single time mileage and single riding time at the same time.



Real time speed ,accumulative mileage



Average speed,single time mileage



Max.speed、single time riding time

### 7.3 Turn on headlight

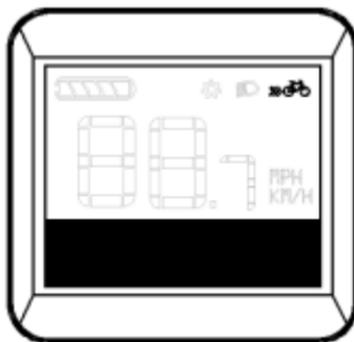
Hold and press “headlight” button to turn on or off headlight ,display notice controller to turn on headlight of E-bike.



Turn on headlight display interface

## 7.4 6km/h walk assist

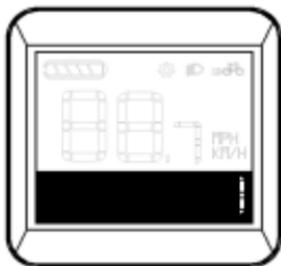
Hold and press “**walk assist**” to enter electronic power boost mode, E-bike travels at a constant speed of 6 kilometers per hour.



6km/h walk assist interface

## 7.5 PAS level adjustment

Short press “**plus**” or “**minus**” button to switch E-bike PAS level, change motor output power, display default output power range is from 0-5, 1 gear is the Mini. power, 5 gear is the Max. gear. Display default boot is 1 gear.



1 gear display



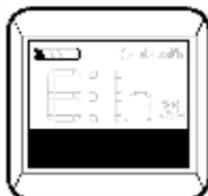
5 gear display

## 7.6 Battery indicator

Five segments all are on when at full state. When it is at low voltage, the last segment will flash to warn .



Max.power display



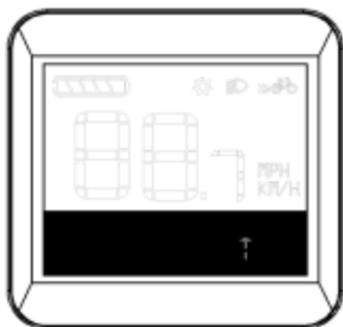
low power display



under voltage

## 7.7 Riding mode display

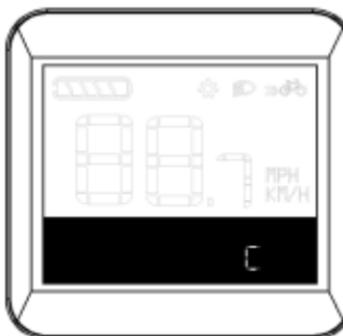
Short press“**Push**”button to switch riding mode.**T** (Tour) -**S** (Sport) -**C** (Customized) -**E** (Eco) -**T** (Tour).



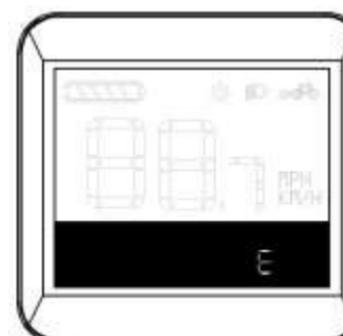
T mode



S mode



C mode



E mode

## 7.8 Display light brightness auto adjustment

When brightness of surrounded environment changed, it will adjust brightness of display lamp automatically through built-in photosensitive element. When the external environment turn dark, backlight brightness will become dimmed, also it will turn bright when backlight brightness become bright. Meanwhile the display will turn off headlights automatically to ensure the rider can read riding information

comfortably.

After turn on light automatically and press “**headlight**” button to turn off light and photosensitive function, re-open display and restore photosensitive function.

## 7.9 Error code display

When the electronic control system fails ,display will show error code automatically .The fault interface can be removed when fault is excluded .E-bike can not continue to drive after failure.



Error code display interface

See the following table for the definition of detailed error code :

Error Code	Definition	Solution
21	Current abnormal	Check whether the three phases of the motor shorted
22	Handle abnormal	Check whether handle is restored to initial state

23	Motor lack of phase	Check if the phase line is good ; Check whether the motor phase line is Connected to the controller
24	Motor hall Abnormal signal	No hall controller:check whether the phase line is good with hall controller: check whether hall is in good condition
25	Braking abnormal	Before turn on display,check whether Brake is reset
30	Communication abnormal	Check whether display and controller Connect in good condition

## 8. General setup

Press “**plus**” and “**minus**” buttons at the same time to enter setting item1 at the speed of 0, short press “**switch**” to select the setting item as follows : backlight level--wheel diameter-speed limit-metric system-backlight level , press “**plus**” and “**minus**” buttons at the same time to enter setting item 1 then loose button, and then press “**plus**” and “**minus**” to enter setting item 2, short press “**switch**” to select setting items as follows :Gear range-default range-sensing threshold-gear range.

### 8.1 Backlight brightness setting

BL stands for backlight can set parameters1,2,3 which mean brightness of backlight, 1 is the darkest, 2 is standard

lightness, 3 is the brightness. Factory default value of the display is 1. Short press “**plus**” and “**minus**” can change backlight brightness parameters. Press “**switch**” button to confirm the selection of backlight brightness and enter next setting item.



Backlight brightness setting interface

## 8.2 Wheel diameter

Wheel diameter setting can be set to : 16inch、18 inch、20inch、22inch、24inch、26inch、700C、28inch、29inch. Factory default wheel diameter is 700C. Press “**plus**” and “**minus**” to switch wheel diameter, press “**switch**” button to confirm the selection of diameters which corresponding to bikes and enter next setting item at the same time.



Diameter setting interface

### 8.3 Speed limit setting

Speed limit can be set max.riding speed of E-bike .When the motor exceeds setting value, controller stops power supply to motor to protect riding safety of riders. Range of the Max. limit speed setting value from 12Km/h to 40Km/h .Default value of the Max.riding speed is 25Km/h. Press “**plus**” and “**minus**” to switch limit speed value, press“**switch**”button to select limit speed value which corresponding to bikes and enter to next setting item at the same time.



Speed limit setting interface

## 8.4 Unit setting

Unit setting can set display speed and mileage units, default factory is metric system ,short press “**plus**” or “**minus**” to switch metric unit (Km/h) and English unit(MPH). Hold and press “**switch**”button to confirm setting, and then enter normal working interface.



Unit setting interface

## 8.5 Gear range setting

Gear range including 0-3,1-3,0-5,1-5,0-7,1-7,0-9,1-9.Factory default gear rang is 0-5.Press “**plus**” or “**minus**” to switch gear range, press “**switch**” to confirm the selection of display gear range and enter next setting item at the same time.



Gear range setting interface

## 8.6 Gear initial value

Initial value of gear including : 0,1,2,3.Gear initial value of factory default is 1 gear.Press “**plus**” or “**minus**” to switch initial value of gear, press “**switch**” to confirm the selection of initial value of gear and enter next setting item at the same time.



Initial value of gear setting interface

## 8.7 Photosensitive setting

P stands for sensing threshold, adjustment this parameter is to adjust the sensitivity of light function to outside environment, the larger the value, the lower the sensitivity, that is automatically open headlight required weaker ambient light. Press “**plus**” or “**minus**” button to adjust sensing threshold, hold and press “**switch**” to confirm setting, and then enter normal working interface.



Photosensitive value setting interface

## 9. Lead connection diagram



Connect with controller



display outlet end



Butt line end

Standard connector thread order table

Standard sequence	Wire color	Definition
1	Red (VCC)	Display power cord
2	Blue(K)	Power of controller
3	Black(GND)	Gnd
4	Green(RX)	Receiving data
5	Yellow(TX)	Transmitting data

**Notes: some displays are with waterproof cables, wires hidden inside the wire cover.**

## 10. Display printing code

Display printing code is divided into two lines.

The first line: 500101201

5001 stands for customer code

012 is JK-LCD product code

01 stands of 5001 customized the first model of JK-LCD.

The second line: 2016-07-1301

2016-07 stands for the date of departure from

factory is July,2016

1301 stands for display program number

## **11. FAQ and Questions**

Ask: why can not be opened?

Answer: Check whether the battery has turned on or whether the leakage lead is broken

Ask:How handle with failure code of display?

Answer: Timely go to repairing site to repair.

## **12. Quality Warranty and Coverage**

一、Warranty information

The company will be responsible for the limited warranty during the warranty period due to the failure caused by the product's own quality problems.

The LCD display function warranty: 24 months from the delivery time of the display out of the factory.

二、 The following situations do not belong to warranty scope

- 1、 Shell opened
- 2、 connectors have been broken
- 3、 After display out of factory,the shell is scratched or damaged.
- 4、 Lead wire of display scratch or break
- 5、 Failure or damage caused by force majeure(e.g.fire, earthquake, etc.)
- 6、 Product exceeded warranty period

### **13. Software Version**

This operating instruction is general-purpose software (version V1.3). Some of the version of the e-bike LCD may have slightly difference,all subject to actual use version.