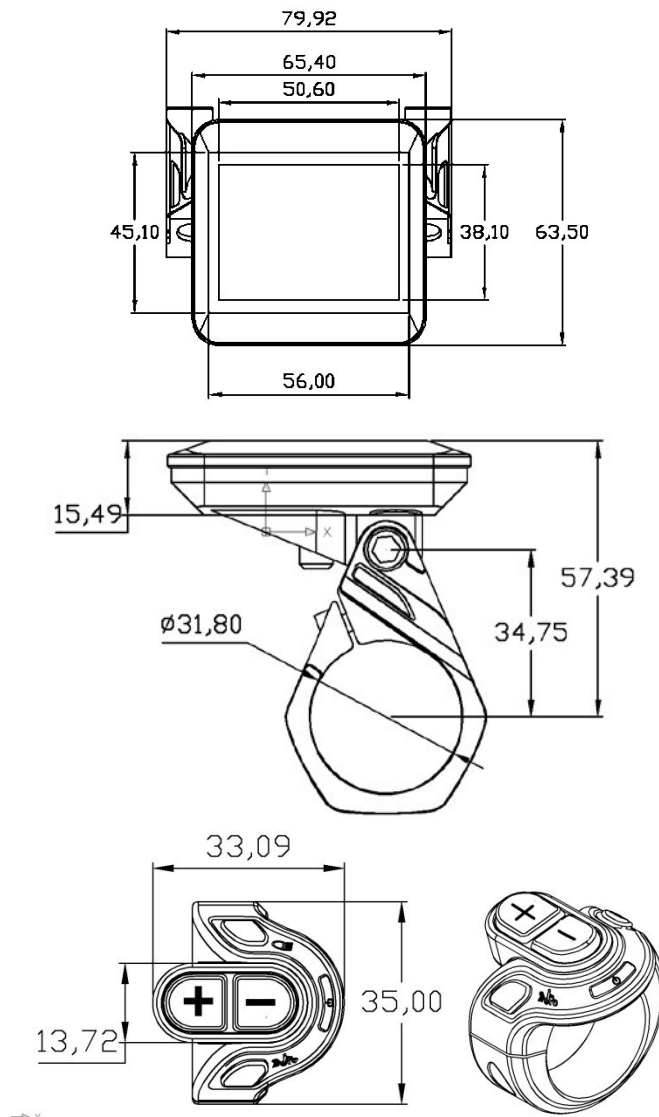# SHOGUN

EBX5 Display Manual

1 Appearance and outline

This production is a combination of mental bottom base and glass cover.

Usually can work at environment temperature from -20℃ to 60℃

Size (Unit: mm)

Note: the buttons has cable connecting with the display.
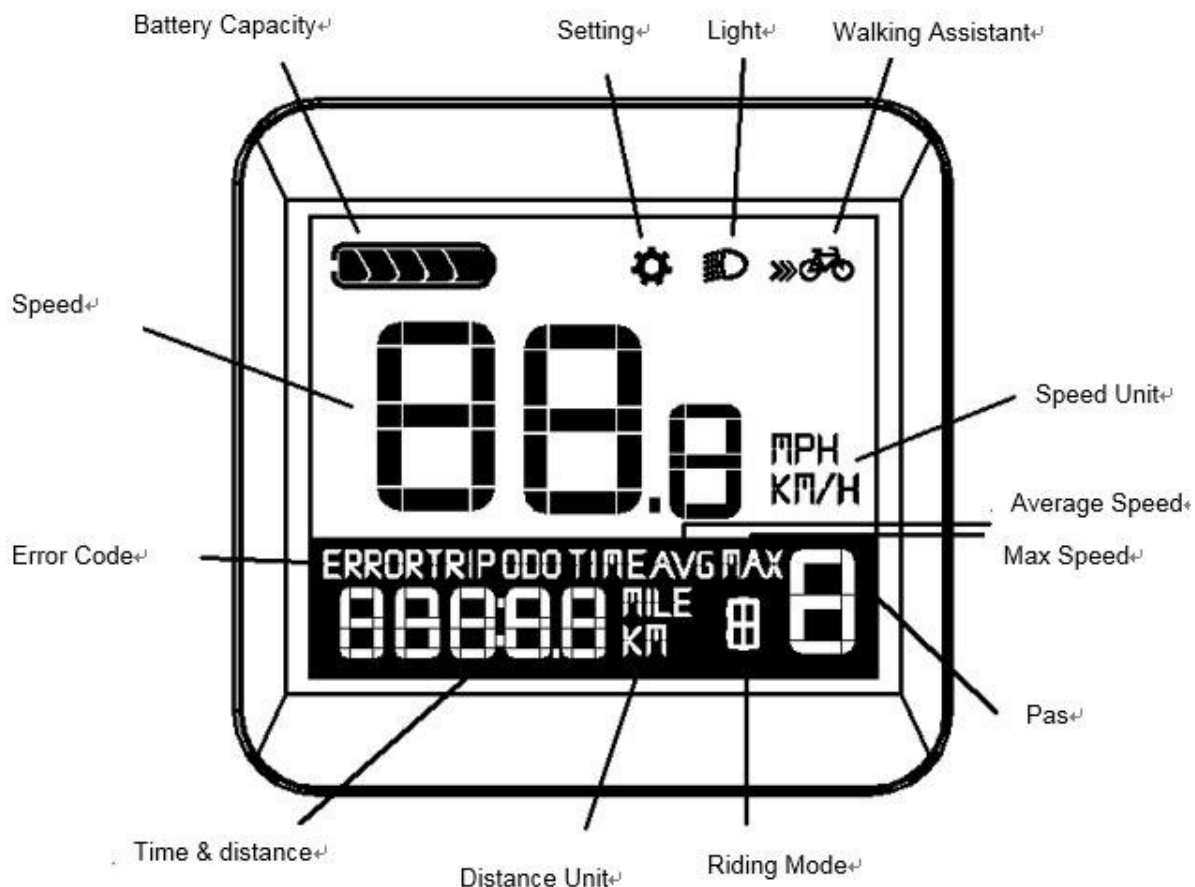
Power ⏻

Adding +

Minus -

Light ▣Ɗ

Walking assistant 🚶

2 Product Functions

This production can show contents enclose

◆ Battery capacity

◆ Speed

◆ Miles (single trip and total)

◆ Single trip riding period

◆ Pas level

◆ Light on/ off

◆ Walking assistant

◆ Error code

◆ Riding mode

◆ Parameter: wheel size, speed limitation, backlight, pas level, pas default

data, unit, ISO ◆ Adjustment of backlight brightness

3 Display Area

Battery Capacity

Setting   Light   Walking Assistant

Speed

Speed Unit

MPH
KM/H

Average Speed

Error Code

ERROR TRIP ODO TIME AVG MAX

MILE
KM

Max Speed

Pas

Time & distance

Distance Unit   Riding Mode

4   Installation

Please fix the product on the handlebar and connect cable well. Do not connect cable when battery on.

Remark: Locking the remote support should be careful and it is easy broken over one certain Nm.

5 Operation Introduction

5.1   Turn On/ Off

Pressing "power" button over 3 seconds and turn-on the system, vice versa, pressing same button over 3 seconds can turn-off the system.

5.2   Speed & Distance

After turning on system, the product will show current speed and distance; one-click "power" button will show different content like current speed, total distance- average speed, single trip- max speed, and single trip period. See 6.8 to reset the trip.

Current speed/ ODO (total distance)
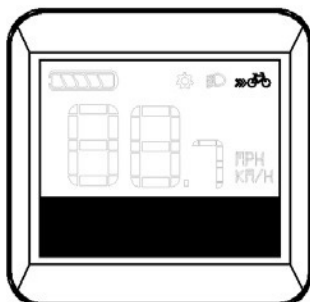

Average speed/ single trip distance

Max Speed/ single trip time period

5.3   Light On/ Off
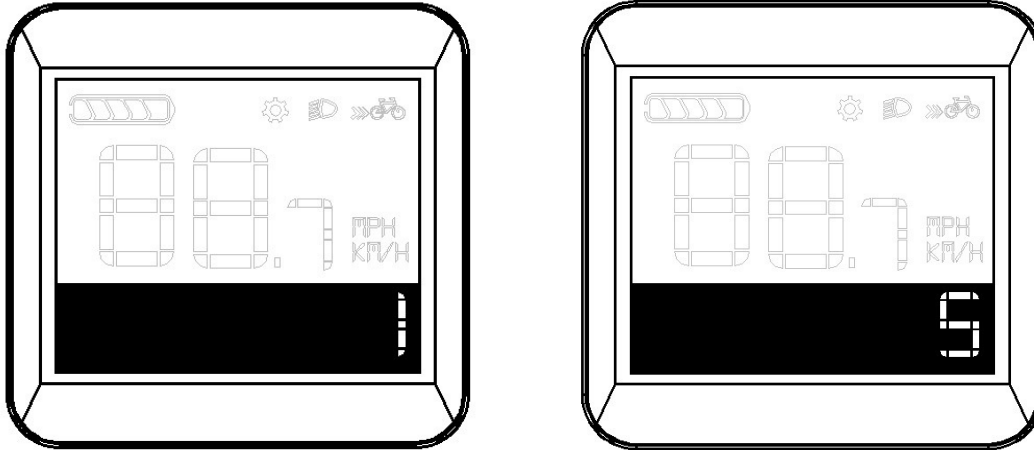
Long press "light" button can turn on/off the light.

5.4 Walking Assistant

Long press and hold the "walking assistant" button will provide walking assistant function.
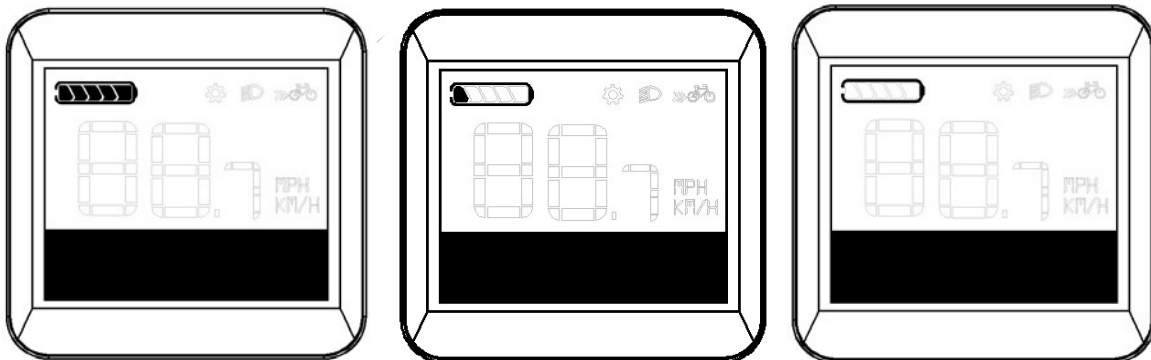
5.5 Pas Level Adjustment

Press "adding" or "minus" can change pas level among "0~5", "5" is max. The default starting pas is "1".

Pas "1" Pas "5"

5.6 Battery Capacity

The battery icon has 5 sections to show capacity, showing 5 sections means battery is full, and if only lifting last one section will keep shining and warn to recharge.
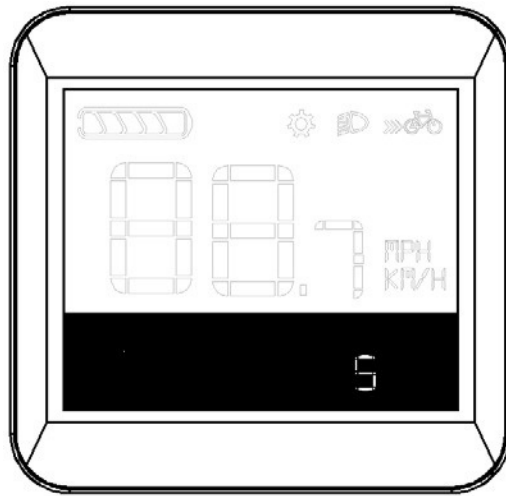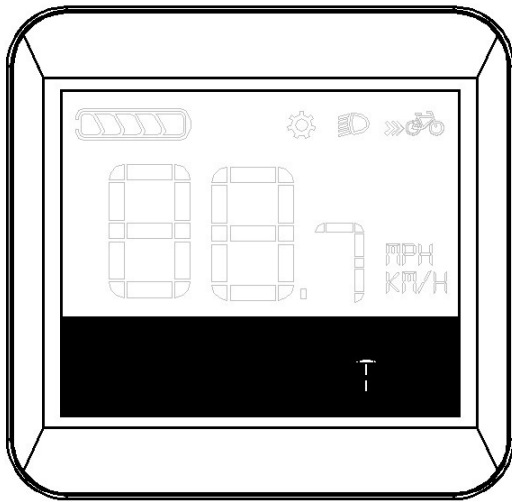

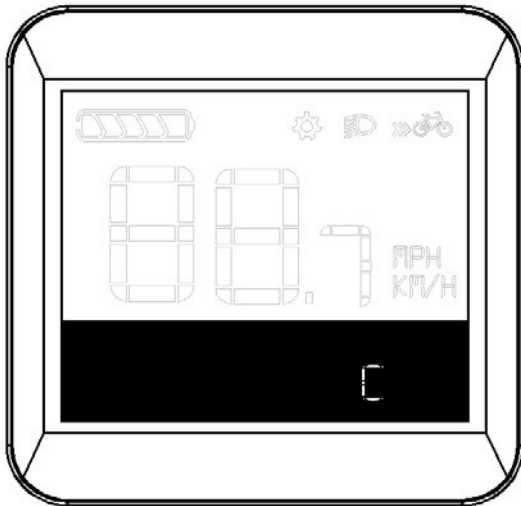Full Charge Status Low Battery Status Powerless Status

5.7 Riding Mode

Pressing "walking assistant" button can change riding mode sequence, T (Tour) -S (Sport) -C（Customized）-E（Eco）-T（Tour）.
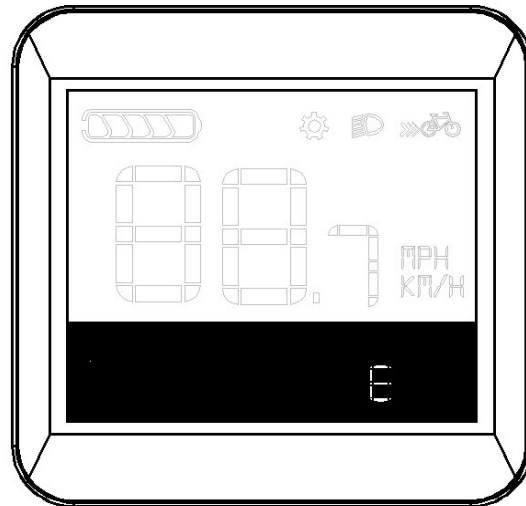
REMARK： Some version cancel this function and not show T (Tour)（Customized）-E（Eco）-T（Tour）.

T mode S mode

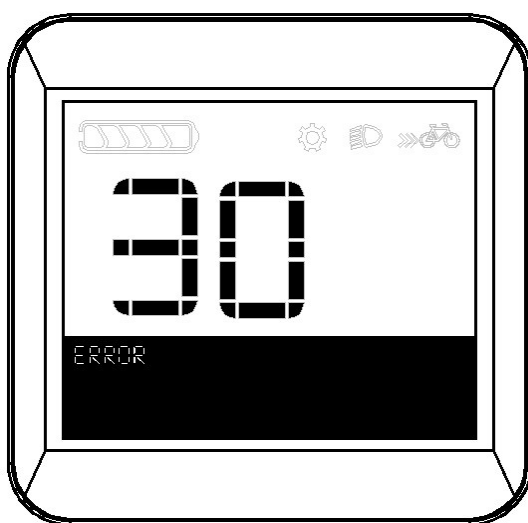C mode   E mode

5.8 Brightness Adjustment

The product can auto-adjust brightness and light on/off according to the environment under auto mode. Long press the "light" button can turn off the auto function. Restart system will turn on the auto function again.

5.9   Error Code

Error Code List

Error Code
Sample

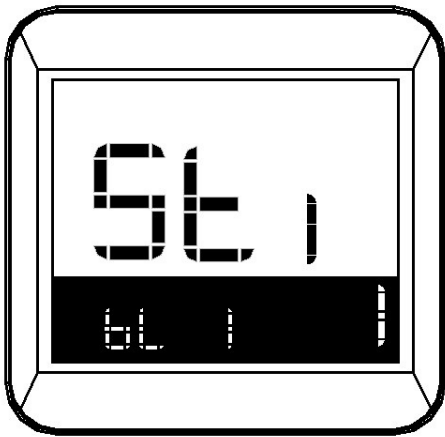| Error Code	Definition	Solution
21	Abnormal Current	Restart, contact supplier if necessary
22	Throttle Error	check if brake recovered before system is
24	HALL signal Error	on Check power cable, contact supplier if
25	Brake Error	necessary Check brake before switch on
28	Other Errors	Restart, upgrade programme or replace
30	Abnormal Communication	controller
31	ON/OFF button stuck	Check display connection
32	Abnormal work voltage	Check keys or replace display
33	Self-check failure	Replace display
34	WALK button stuck	Replace display
		Check keys or replace display

6 Settings

When speed is 0, long press "adding" and "minus" together will enter setting mode 1, press "power" button can adjust "backlight brightness", "wheel size", "metric-inch conversion". Long press "adding" and "minus" again immediately after entering setting mode 1 will enter into setting mode 2, can adjust "pas level", "default pas", "light sensor".

6.1 Turn On/ Off

BL means backlight, can adjust "1~3" level, "1" is low, "2" is middle and "3" is high, default is "1", press "adding" and "minus" can adjust and "power" button can save the change and enter next setting.

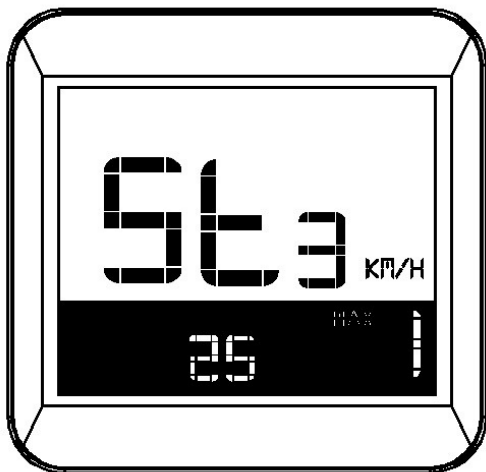Backlight setting

6.2 Wheel Size

Press "adding" or "minus" can change wheel size like 16inch, 18 inch, 20inch, 22inch, 24inch, 26inch, 700C, 28inch, and 29inch, press "power" button can save the change and enter next setting.
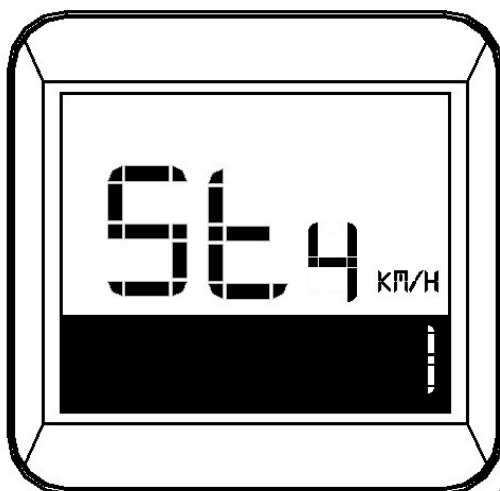

Wheel Size setting

6.3 Speed Limit

Speed limit function can set max assistant speed, system will stop assistant if over speed limit to protect the driver. User can set speed limit from 12 Km/h to 40 Km/h, and the default value is 25 Km/h. Press "adding" and "minus" button can change value and press "power" button to save and enter next setting.
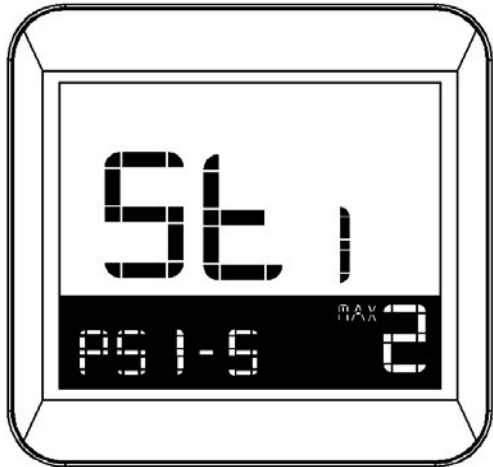

Speed limit setting

6.4 Unit Setting

User can have "matric-inch conversion" change the unit between "Km/h" and "MPH" by pressing "adding" or "minus" , and press "power" to save and quit setting.

Unit setting

6.5 Pas Setting

Pas ranging including 0-3, 1-3, 0-5, 1-5, 0-7, 1-7, 0-9, and 1-9, default is 0-5. Press "adding" and "minus" button can change value and press "power" button to save and enter next setting.

Pas setting

6.6 Pas Default Value

Pas default value including 0, 1, 2, and 3, default is 1. Press "adding" and "minus" button can change value and press "power" button to save and enter next setting.

Pas default Value

6.7 Light Sensor Value

"P" is light sensor value, the bigger the less sensitivity, which means less requirement on the
environment light to auto turn on the light. Press "power" to save and quit setting.

6.8 Resestting the trip

1.Power the HMI system.

2.Press the"+" and"-"for 3 second

3.Press the"+" and"-"and stay on the option "CLF"

4.Short press the " M" button and it will display "NO"

5.Press the"+" and"-"to choose "YES"

6.Press the" M" for 3 second and the mileage record will be reset.

7. Specifications

7.1 Key Data

Display Type	LCD	Support Modes	0-5
Normal Voltage	24 / 36 /	Cover Colour	Black/White
Communication	48V UART	Size(L*W*H)	65.4*63.5*15.5mm

7.2 Information Displayed

1) Battery Level
2) Indicator Assistance
3) Level E-bike Speed
4) Average Speed
5) Maximum Speed
6) Walk function
7) Total Distance

8) Trip Distance
9) Wheel size Parameters Settings
10) Unit change, Km or Mile
11) Error Code Indication
12) Light ON/OFF
13) Riding mode(Optional)

SHOGUN

EBX5 Display Manual