Product Specification

08/2019

Product	TFT Display
Mode	TFT 750C-RisunMotor
Abbreviation	750C
Client	
Customer	
audit	
Supplier	Risun Intelligent Technology Co., Ltd.
Tel	TEL:+86 21 64782671-8013
Email	sales@RisunMotor.com

Risun Intelligent Technology Co., Ltd.

1．Product Name

✧ TFT display

✧ Model : TFT 750C

2．Suppliers

✧ Risun Intelligent Technology Co., Ltd.

✧ Email : sales@risunmotor.com

3．Electrical Parameters

✧ 3.2inch IPS screen

✧ 36V/48V/52V/60V/72V battery supply

✧ Rated operating current : 40mA

✧ Off leakage current < 1uA

✧ Max output current to controller : 100mA

✧ Operating temperature : -20～70℃, Storage temperature : -30～80℃

4．Dimensions & Material

✧ Product shell is ABS, transparent window is made with high strength Acrylic.

✧ Dimensions : host/L110mm*W68.2mm*H68mm

5．Features

✧ Suitable for low temperature，Max -20℃.

✧ High-contrast 3.2inch IPS colorful matrix screen.

✧ Ergonomic external button design, easy to operate.

✧ **Speed display:** AVG SPEED, MAX SPEED, SPEED (Real-time).

✧ **Kilometer / Mile:** Can be set according to customers' habits.

✧ **Smart battery indicator:** Provide a reliable battery indicator.

✧ **5-level Assist**

✧ **Mileage indicator:** Odometer/ Trip distance/ Clock/ Riding time.

✧ **Power indicator:** real time power indicator, digital or analog.

✧ **Error code indicator.**

✧ **Software upgraded:** Software can be upgraded through UART.

6. TFT screen instructions
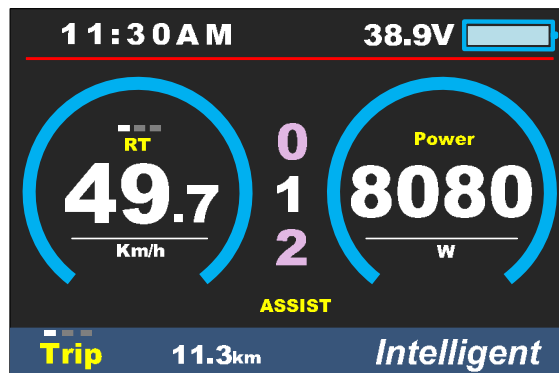

7. Functional Description

7.1 Power On/Off

Press and hold Power button for 1 second can turn on/off the display. The Display can automatically shut down when there is no operate & ride for X minutes（X could be 0~9）.

*If the display has been set password power on, you need to input the right password before start.

7.2 Assist level operating

Short press UP/DOWN button can change the assist level. Top assist level is 5, 0 for neutral.
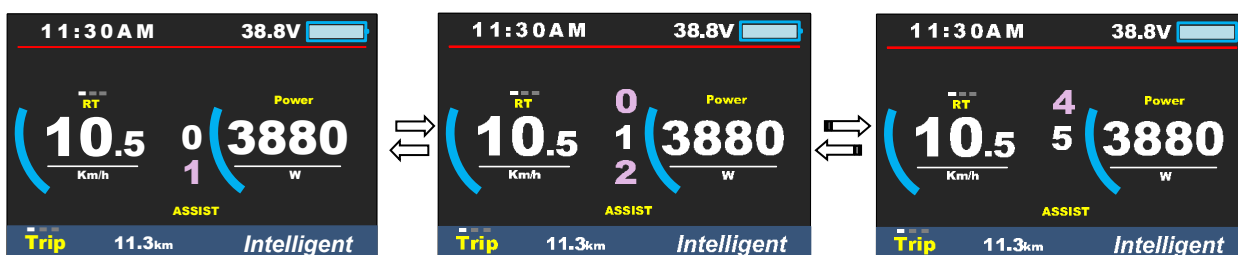
7.3 Speed mode switch

Short press MENU button can change the speed mode, Speed->AVG Speed->MAX Speed.

*If there is no operation for 5 seconds, display will return Speed (Real-Time) display automatically.

7.4 Mileage mode switch

Short press POWER button can change the mileage mode, Trip->ODO-> Time.

7.5 Headlight/backlight On/Off

Press and hold UP button for 1 second can turn on/off the headlight, and the scree will switch to the corresponding mode.

*The motor does not work when the battery voltage is low, Display still can keep the headlight on for a while when E-bike is in riding.
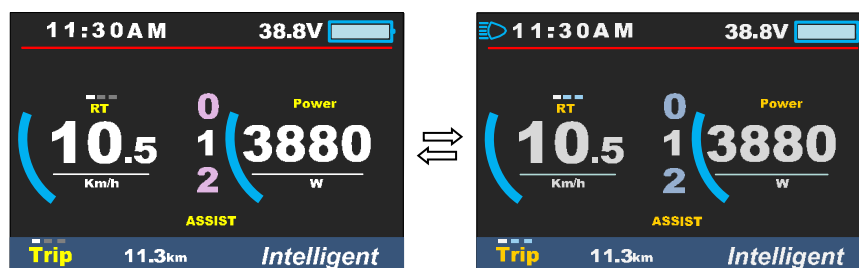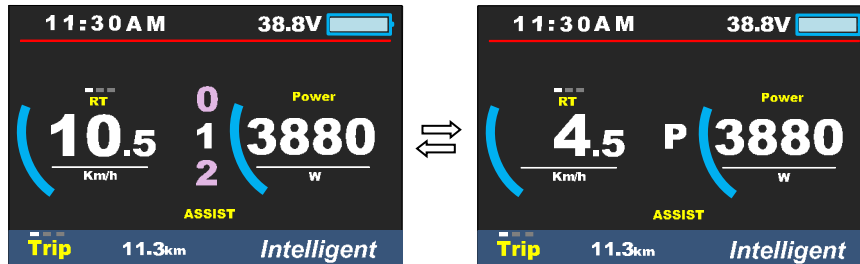

Daytime mode   night mode

7.6 Walking mode (6km)

Press and hold DOWN button for 2 second can get into walking mode, out of the mode when release the button.

* This feature needs to be supported by controller.

7.7 Data cleanup

Press and hold UP & DOWN buttons together for 1 second can reset several temporary data, temporary data include **AVG Speed / MAX Speed / Trip / Time**.

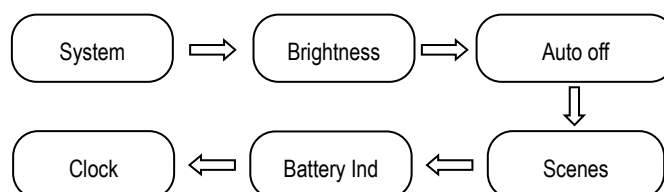* These temporary data can't be erased by power off.

8.   Parameter setting

Double press MENU button (press interval less than 0.3 second) can get into setting menus, press POWER button to change Display Setting / Basic setting, press UP/DOWN buttons to change the parameter setting, press MENU button can switch to next item. Double press MENU button will exit from menu.

* Display will automatically quit menu when there is no operation for 30 seconds.

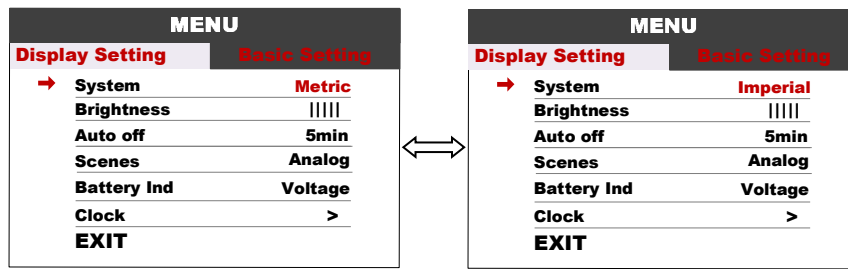* For safety reasons, display can't get into MENU when riding.

* Display will quit MENU when start riding.
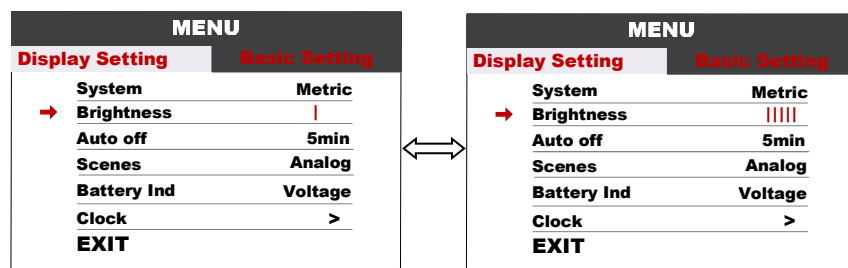
The order of parameters are as follow.

8.1 System: Press Up / Down button to switch between Metric / Imperial.
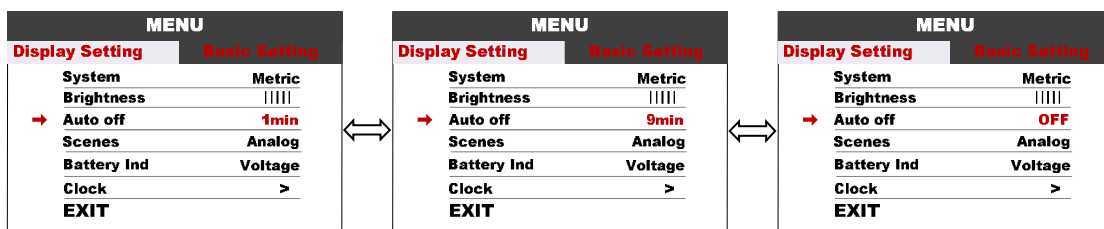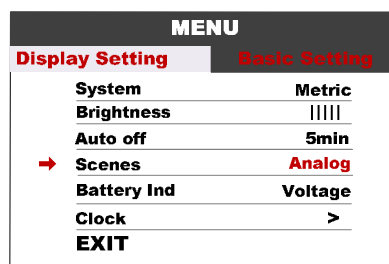
MENU	
Display Setting	**Basic Setting**
➡ System	Metric
Brightness	‖‖‖
Auto off	5min
Scenes	Analog
Battery Ind	Voltage
Clock	>
EXIT	

⟷

MENU	
Display Setting	**Basic Setting**
➡ System	Imperial
Brightness	‖‖‖
Auto off	5min
Scenes	Analog
Battery Ind	Voltage
Clock	>
EXIT	

8.2 Brightness : Press Up / Down button to change the brightness of the backlight, I is darkness，‖‖‖ is brightness. The daytime mode defaults to ‖‖‖‖, and the night mode defaults to ‖.

MENU	
Display Setting	**Basic Setting**
System	Metric
➡ Brightness	I
Auto off	5min
Scenes	Analog
Battery Ind	Voltage
Clock	>
EXIT	

⟷

MENU	
Display Setting	**Basic Setting**
System	Metric
➡ Brightness	‖‖‖
Auto off	5min
Scenes	Analog
Battery Ind	Voltage
Clock	>
EXIT	

8.3 Auto off : Press UP/DOWN button to change the auto power off time, from 1 to 9 or OFF, the number represent time (minutes) to shutdown, default value is 5 minutes.
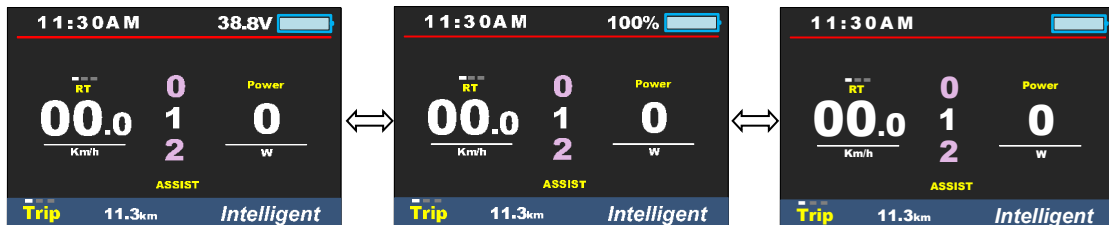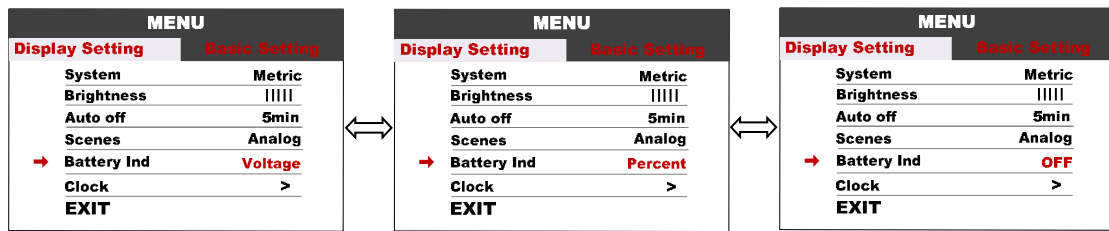
MENU	
Display Setting	**Basic Setting**
System	Metric
Brightness	‖‖‖
➡ Auto off	1min
Scenes	Analog
Battery Ind	Voltage
Clock	>
EXIT	

⟷

MENU	
Display Setting	**Basic Setting**
System	Metric
Brightness	‖‖‖
➡ Auto off	9min
Scenes	Analog
Battery Ind	Voltage
Clock	>
EXIT	

⟷

MENU	
Display Setting	**Basic Setting**
System	Metric
Brightness	‖‖‖
➡ Auto off	OFF
Scenes	Analog
Battery Ind	Voltage
Clock	>
EXIT	

8.4 Scenes: Only support Analog scenes.

MENU	
Display Setting	**Basic Setting**
System	Metric
Brightness	‖‖‖
Auto off	5min
➡ Scenes	Analog
Battery Ind	Voltage
Clock	>
EXIT	

8.5 Battery Ind: Press UP/DOWN button to change the battery indicator, Voltage / Percentage / OFF.
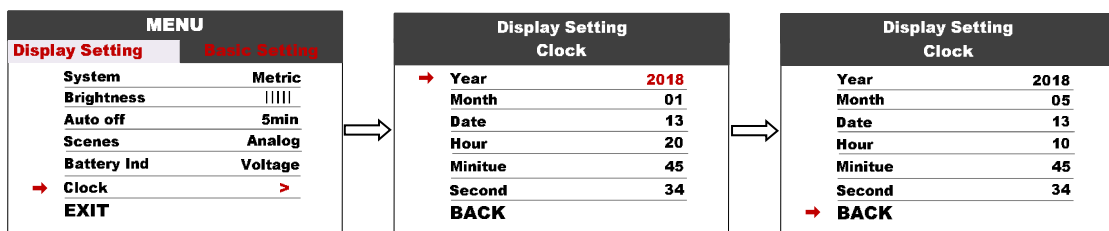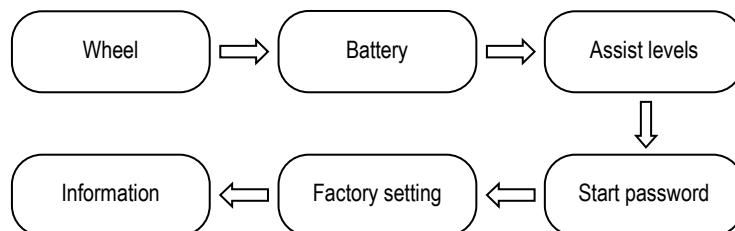
*Accurate percentage needs communication with battery.

MENU		MENU		MENU	
Display Setting	Basic Setting	**Display Setting**	Basic Setting	**Display Setting**	Basic Setting
System	Metric	System	Metric	System	Metric
Brightness	IIIII	Brightness	IIIII	Brightness	IIIII
Auto off	5min	Auto off	5min	Auto off	5min
Scenes	Analog	Scenes	Analog	Scenes	Analog
➡ Battery Ind	Voltage	➡ Battery Ind	Percent	➡ Battery Ind	OFF
Clock	>	Clock	>	Clock	>
EXIT		EXIT		EXIT	

Voltage	Percentage	OFF

8.6 Clock: Clock setting, press MENU button get into the clock setting menu, press UP/DOWN button to set Year/Month/Day/Hour/Min/Sec.

| MENU		Display Setting Clock		Display Setting Clock	
Display Setting	Basic Setting				
System	Metric	➡ Year	2018	Year	2018
Brightness	IIIII	Month	01	Month	05
Auto off	5min	Date	13	Date	13
Scenes	Analog	Hour	20	Hour	10
Battery Ind	Voltage	Minitue	45	Minitue	45
➡ Clock	>	Second	34	Second	34
EXIT		BACK		➡ BACK	

Basic Setting

Wheel ⟹ Battery ⟹ Assist levels

Information ⟸ Factory setting ⟸ Start password

8.7 Wheel: Press UP/DOWN can change the wheel setting, optional wheel diameter is 16/18/20/22/24/26/27/27.5/28/29/30/31 inch, 51cm~255cm represent wheel circumference (this needs controller support).
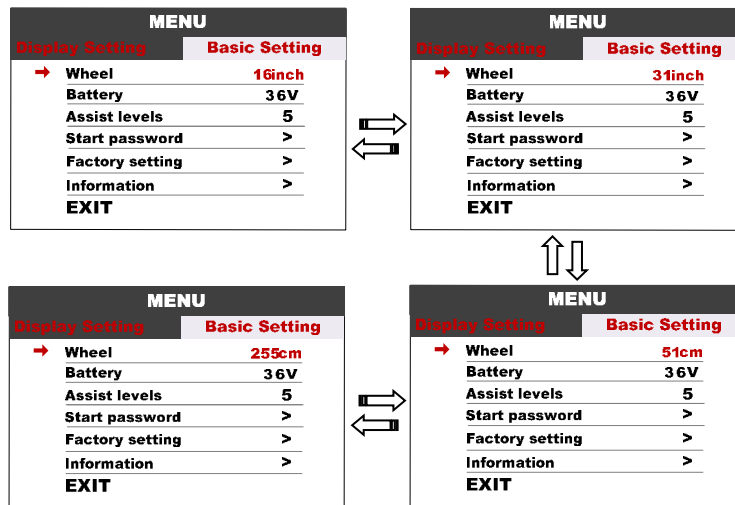
8.8 **Battery**: Press UP/DOWN will change battery voltage setting, optional value is 36V/48V/52V/60V/72V.
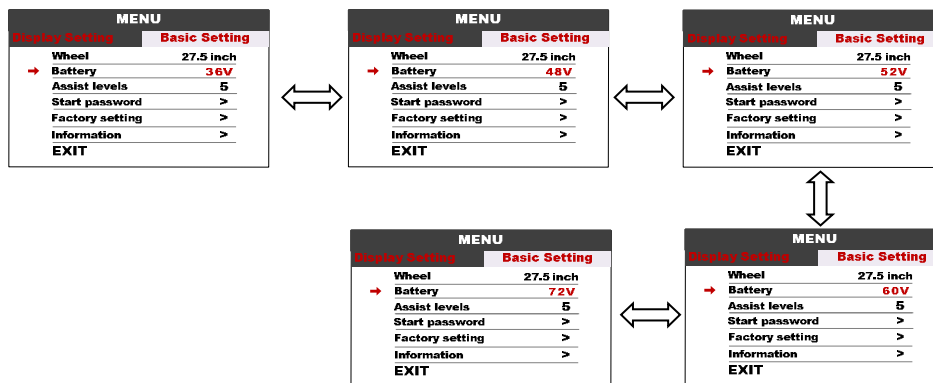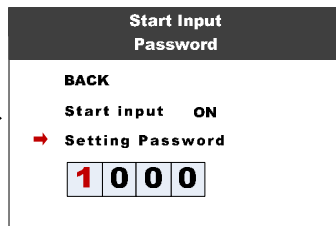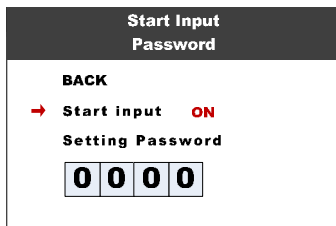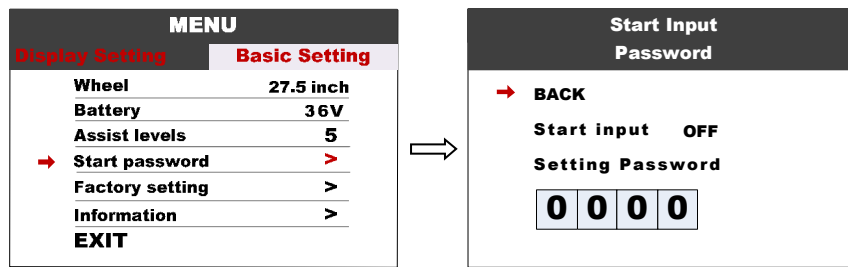

8.9 **Assist levels**: Only support 5-level.
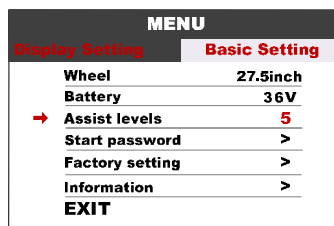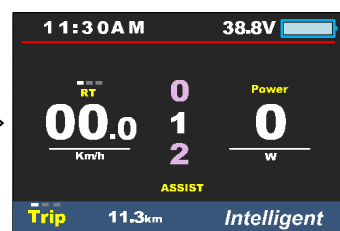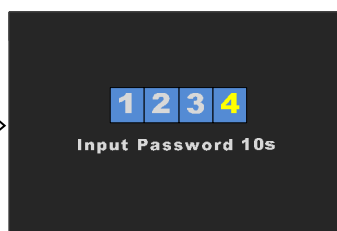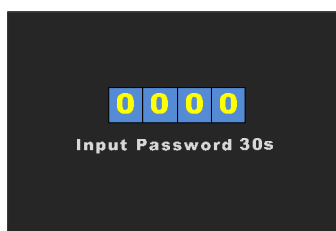

8.10 **Start password**: Press MENU button get into the password setting menu. If you had set Start input ON, you must input right password before power on, password is accorded to your setting.
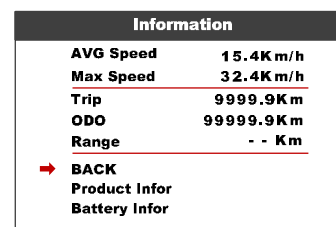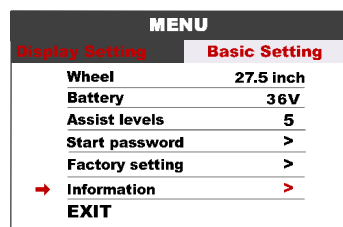
MENU	
Display Setting	Basic Setting
Wheel	27.5 inch
Battery	36V
Assist levels	5
➡ Start password	>
Factory setting	>
Information	>
EXIT	

Start Input Password

➡ BACK

Start input　OFF

Setting Password

`0` `0` `0` `0`

Start Input Password

BACK

➡ Start input　ON

Setting Password

`0` `0` `0` `0`

Start Input Password

BACK

Start input　ON

➡ Setting Password

`1` `0` `0` `0`

Start Input Password

BACK

Start input　ON

➡ Setting Password

`1` `2` `3` `4`

You need to input the right password before start with 30 seconds, display will power off automatically if the password was wrong three times.

`0` `0` `0` `0`

Input Password 30s

`1` `2` `3` `4`

Input Password 10s

11:30AM　　38.8V

RT

00.0
Km/h

0
1
2
ASSIST

Power

0
W

Trip　11.3km　*Intelligent*

8.11 Factory setting: Press MENU button enter Restore Factory Settings item, set YES will restore all parameter to factory settings.

Restore Factory Settings

➡ BACK

　YES

Restore Factory Settings

　BACK

➡ YES

　...

8.12 Information: Show information of the E-bike.

MENU	
Display Setting	Basic Setting
Wheel	27.5 inch
Battery	36V
Assist levels	5
Start password	>
Factory setting	>
➡ Information	>
EXIT	

Information

AVG Speed	15.4Km/h
Max Speed	32.4Km/h
Trip	9999.9Km
ODO	99999.9Km
Range	- - Km

➡ BACK
Product Infor
Battery Infor

8.13 Product info: Get into this item can show hardware version software version…

8.14 Battery info : Get into this item can show all information of battery, including Voltage, Capacity, Cycle times, Health, Temperature of battery, Remaining Capacity, Full Charge Capacity.

*These information needs to be supported by battery communication.


9. Error Code define

750C can show warning message, ⬚ icon shows on the screen, and show error code at the bottom of the screen, error code from 01~30, definition see the table below.

Error Code	Error description	Handle
01H	Communication checksum error	Check the cable connection
02H	Controller protection	Check three-phase power line.
03H	three-phase power error	Check three-phase power line connection
04H	Battery low	Charge the battery
05H	Brake error	Check the brake connection.
06H	Turn error	Check turn to connect.
07H	Hall error	Check the hall connection
08-FFH	Reserved	Please contact the manufacturer for error definitions
30H	Communication Error	Check the cable connection

| 11:30AM | 38.8V | 11:30AM | 38.8V |

(Display screen showing: RT 00.0 Km/h, 0 1 2, Power 0 W, ASSIST, Trip 11.3km, Error 30H)

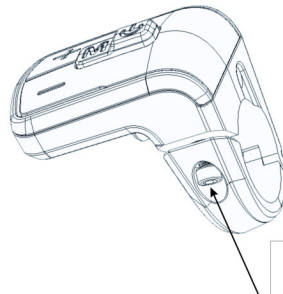(Display screen showing: RT 00.0 Km/h, 0 1 2, Power 0 W, ASSIST, Trip 11.3km, Error 07H)
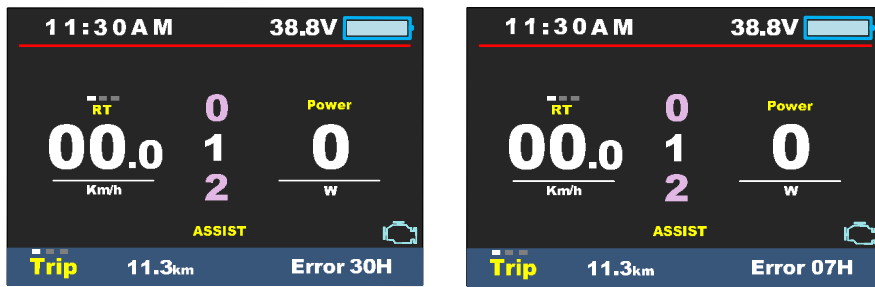
10． Assembly instructions

Please pay attention to the screw's torque value, damaged caused by excessive torque is not within the scope of the warranty.
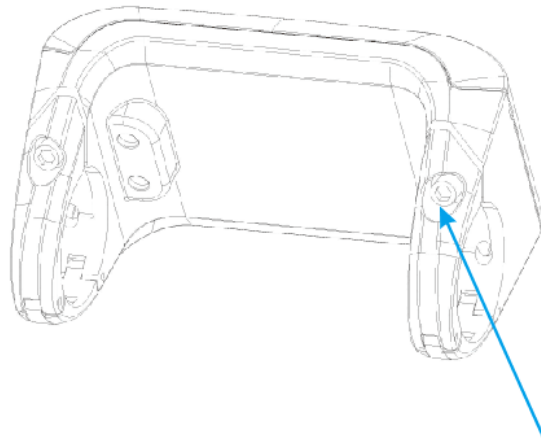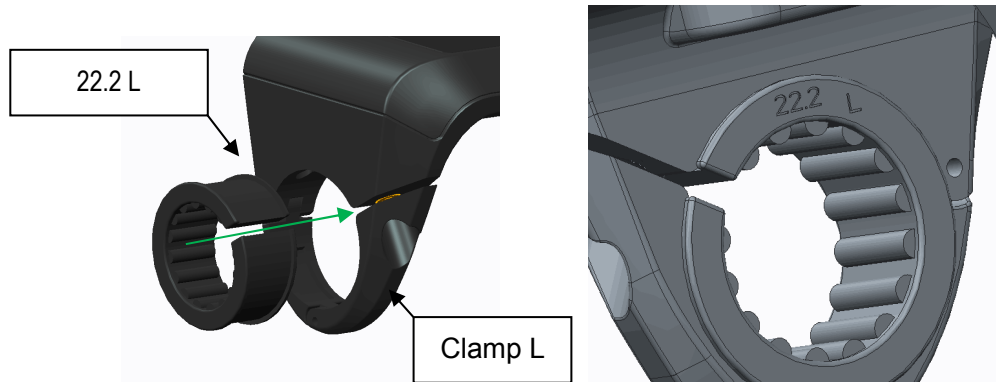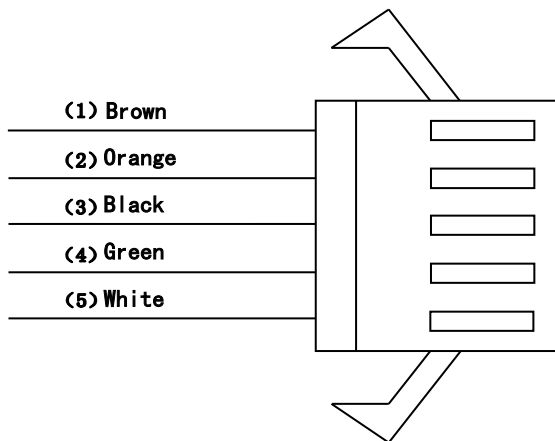
M4*10
STD=0.1N.M
MAX=0.2NM

M3*8
STD=0.25N.M
MAX=0.4N.M

Clamps suit for 3 size of handlebar, 31.8mm, 25.4mm, 22.2mm, there are transfer rings for 25.4mm and 22.2mm（marked with L or R）, transfer ring must be assembled with the special

directions, pay attention to the green arrow below.

11． Connector descriptions

(1) Brown
(2) Orange
(3) Black
(4) Green
(5) White

1、 Brown wire :   Anode(36V/48V/60V/72V)
2、 Orange wire :   Power cord to the controller
3、 Black wire :   GND
4、 Green wire :   RxD (controller -> display)
5、 White wire :   TxD (display -> controller)

12． Certification

CE / IP65 (water proof) / ROHS.