



● Thank you for purchasing the our product. Before installing, please read the instruction carefully and keep it for future reference.

⚠ Attention!

- For installation, please follow the steps described in manual. Any damage caused by wrong installation shall be imputed to the users.
- Don't break or modify the wire. To avoid the short circuit, please don't pull the wire when installing.
- Do not disassemble or change any parts excluding the manual description.
- The interior examination or maintenance should be executed by our professionals.

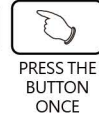
◎ MARK MEANING:

NOTE You could get the installation details from the information behind the mark.

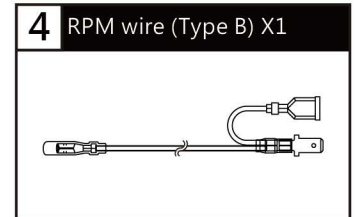
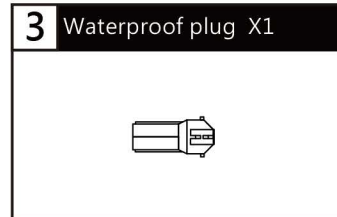
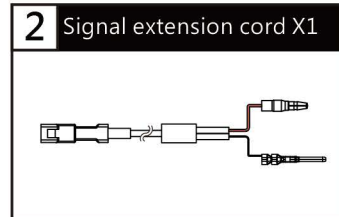
⚠ Some processes must be followed to avoid the affection caused by wrong installation.

⚠ **WARNING!** Some processes must be followed to avoid damages to yourself or the public.

⚠ **CAUTION!** Some processes must be followed to avoid the damage to the vehicle.

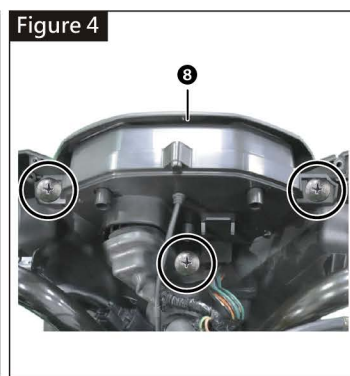
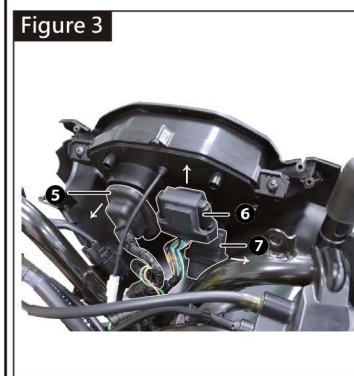
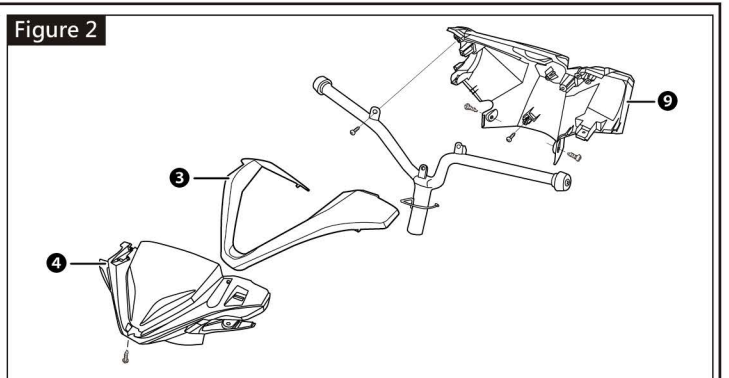
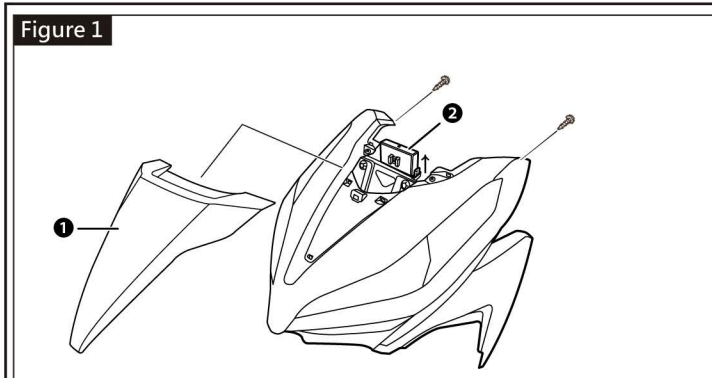


1 Accessories



NOTE Contact your local distributor, if the items received in the box are not the same as the items listed above.

2-1 Practical Installation Instruction

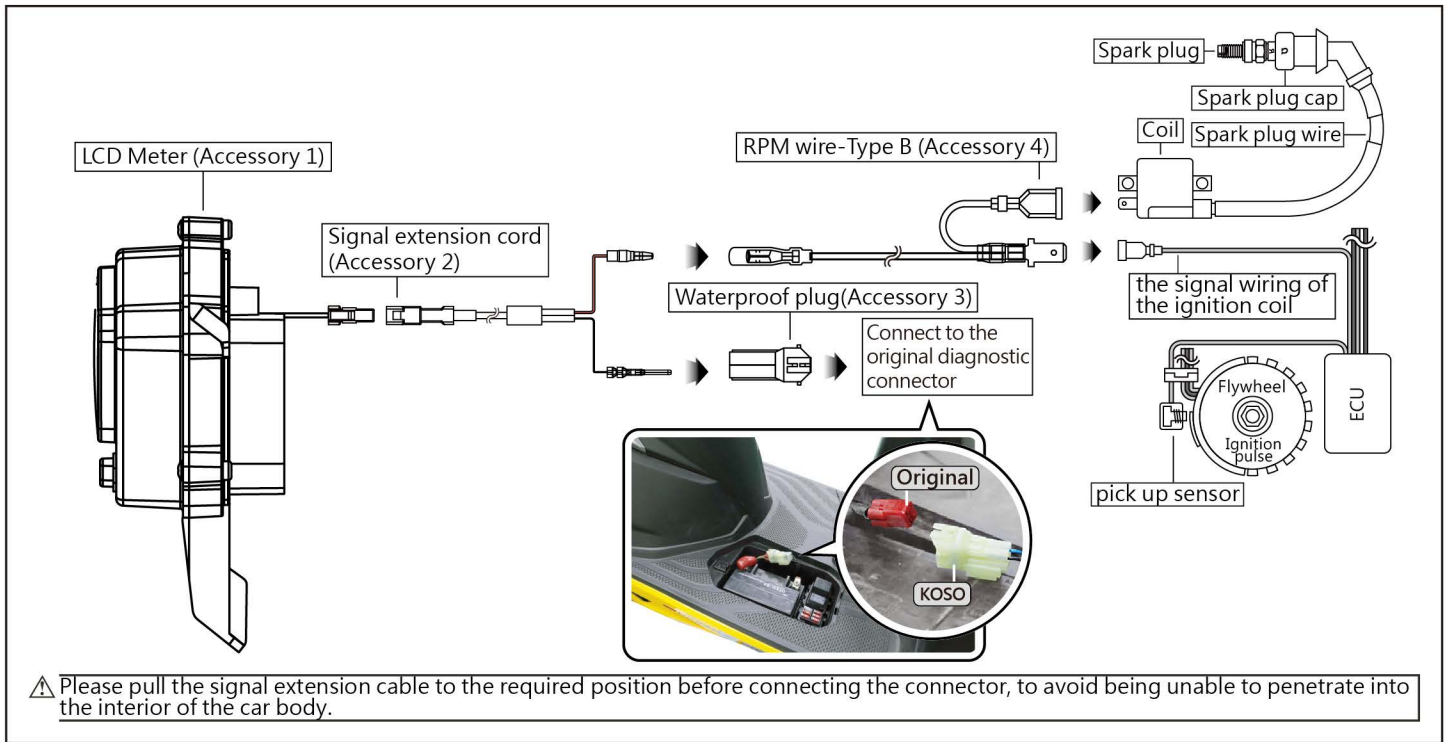


Please proceed as follows

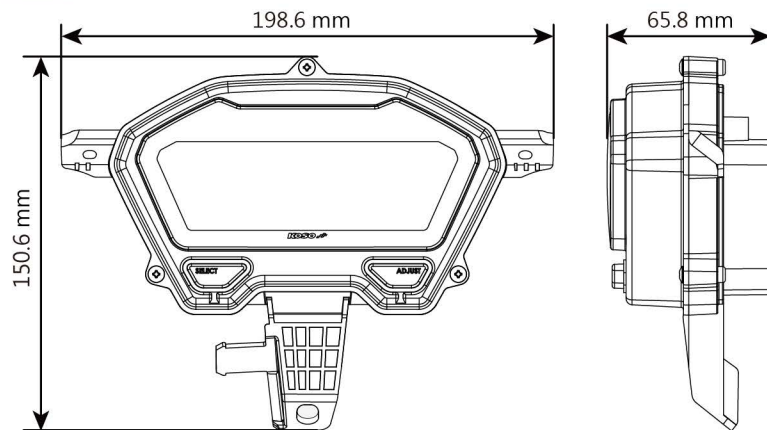
- 1 Cover
- 2 ECU
- 3 Meter Case
- 4 Handle cover 1
- 5 Main wiring harness
- 6 Power wiring box
- 7 Relay
- 8 LCD Meter
- 9 Handle cover 2

NOTE Please refer to the icon to disassemble. And install according to the reverse order of disassembly.

2-2 Wiring Installation Instructions



3-1 Meter Size














3-2 Basic Function Instruction

<p>Indicator</p> <ul style="list-style-type: none"> ● Left indication light(Green) ● Keyless light(Amber) ● High beam light(Blue) ● Engine light(Amber) ● Temperature alarm(Red) ● Idling Indicator(Green) ● Low battery light(Red) ● Right indication light(Green) ● IMMO anti-theft light/ Over rev warning light1(Red) ● Over rev warning light2(Red) ● RPM shift light (Red) 	<p>LCD Bar</p> <ul style="list-style-type: none"> ● Display range : 0~34 grid ● Display unit : 500 RPM/grid (250 RPM/grid) 	<p>Fuel meter</p> <ul style="list-style-type: none"> ● Display range : 6 levels ● Warning range : Petrol Light Flashing (Level 1 or below) 	<p>Odometer</p> <ul style="list-style-type: none"> ● Display range : 0 ~ 999,999 km(mile) ● Display unit : 1 km(mile)
<p>Max. rotating speed</p> <ul style="list-style-type: none"> ● Display range : 0~20,000 RPM <p>Max. speed record</p> <ul style="list-style-type: none"> ● Display range : 0~199 KMH (MPH) <p>Max. temperature record</p> <ul style="list-style-type: none"> ● Display range : 0~200 °C(°F) 			<p>Trip meter A · B</p> <ul style="list-style-type: none"> ● Display range : 0.0 ~ 9,999.9 km(mile) ● Display unit : 0.1 km(mile)
<p>Voltmeter</p> <ul style="list-style-type: none"> ● Display range : DC 8.0~18.0 V ● Display unit : DC 0.1 V <p>Clock</p> <ul style="list-style-type: none"> ● 24H 			<p>A/F ratio meter</p> <ul style="list-style-type: none"> ● Display range : 12.1 ~ 16.5 ● Display unit : 0.1 <p>Thermometer</p> <ul style="list-style-type: none"> ● Display range : 0 ~ 220 °C ● Display unit : 1 °C

3-3 Functions, Settings Description

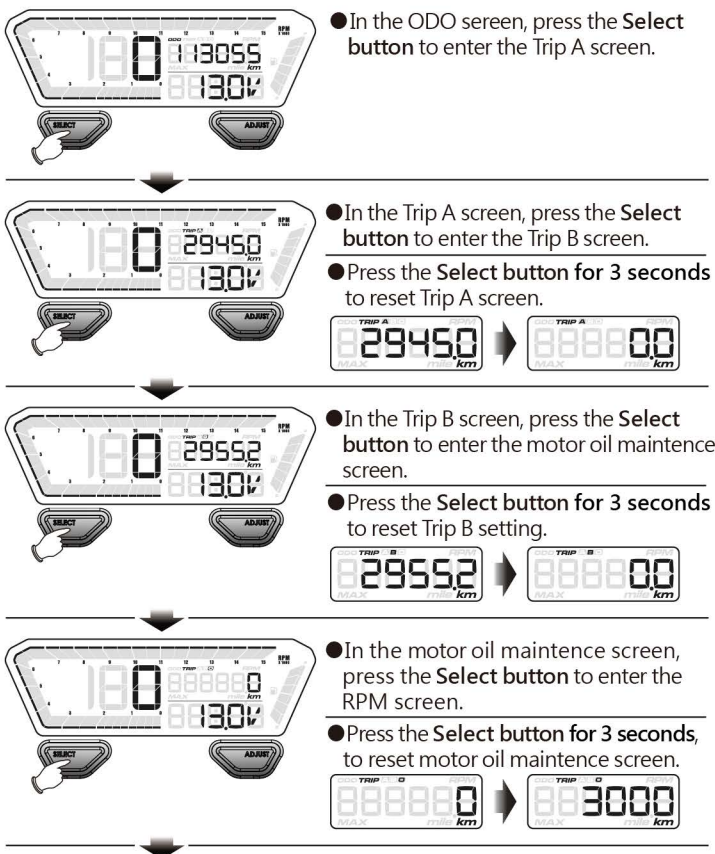
● Speedometer	Display range : 0 ~ 199 km/h(MHP) Display unit : 1 km/h(MHP)
○ Odometer	Display range : 000,000 ~ 999,999 km(mile) Display unit : 1 km(mile)
○ Trip meter A、B	Display range : 0.0 ~ 9,999.9 km(mile) Display unit : 0.1 km(mile)
○ Motor oil maintenance	Display range : 0,000 ~ 9,999 km(mile) Display unit : 1 km(mile)
○ Max. speed record	Display range : 0 ~ 199 KMH(MPH)
○ Tire circumference percentage	Setting range : 50~200%
● Tachometer	Display range : 0 ~ 20,000 RPM Display unit : 100 RPM
○ Tachometer(LCD Bar)	Display range : 0~34 grid Display unit : 500 RPM/grid(250 RPM/grid)
○ Max. rotating speed	Display range : 0 ~ 20,000 RPM
○ Shift light warning	Setting range : 3,000 ~ 19,900 RPM Setting unit : 100 RPM
● Digital thermometer	Display range : 0 ~ 220 °C Display unit : 1 °C
○ Max. temperature record	Display range : 0 ~ 200 °C(°F)
● A/F ratio meter	Display range : 12.1 ~ 16.5 Display unit : 0.1
● Fuel meter	Display range : 6 levels
○ Fuel signal	Display range : Petrol Light Flashing (Level 1 or below)
● Clock	Display range : 00:00~23:59 (24H)
● Digital voltmeter	Display range : DC 8.0 ~ 18.0 V Setting unit : DC 0.1 V

○ Low voltage warning	Setting range : DC 8.0 ~ 12.5 V Setting unit : DC 0.1 V
● Back light brightness	Setting range : 1/5(Darkest) ~ 5/5(Brightest) Setting unit : 1 level (20 %)
○ Back light color	White, Red, Orange, Yellow, Green, Blue, Light blue, Purple
● Unit	Speed unit : km, mile Temperature unit : °C (Celsius) and °F (Fahrenheit) High beam setting : TYPE1, TYPE2
● Voltage	DC 10 V ~ 16 V
● Operating temperature	-10 + 60 °C
● Specification	JIS D 0203 S2
● Meter Size	198.6 x 150.6 x 65.8 mm
● Meter Weight	Around 325 g
● Indicator	Left Indication light (Green)  Keyless light (Amber)  High beam light (Blue)  Engine light (Amber)  Temperature alarm (Red)  Idling Indicator (Green)  Low battery light (Red)  Right Indication light (Green)  IMMO anti-theft light/ Over rev warning light1 (Red)  Over rev warning light2 (Red)  RPM shift light (Red) 

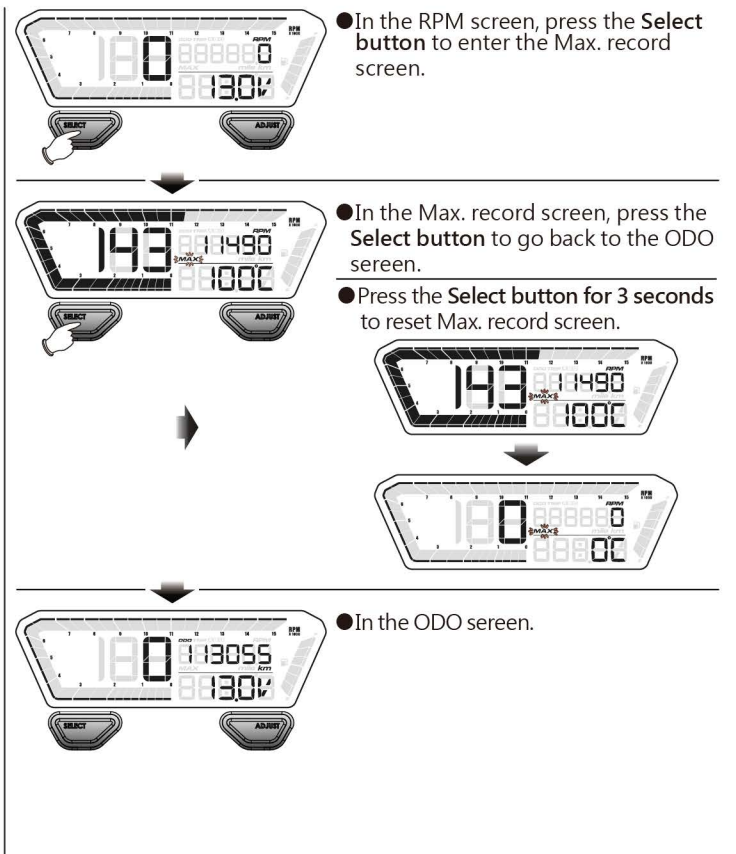
NOTE Under the key off mode, after setting the anti-theft alarm, the IMMO anti-theft light would flash every five seconds as the warning.

NOTE Any design and specification changes, will not be notify.

4-1 Select Button Function Instruction

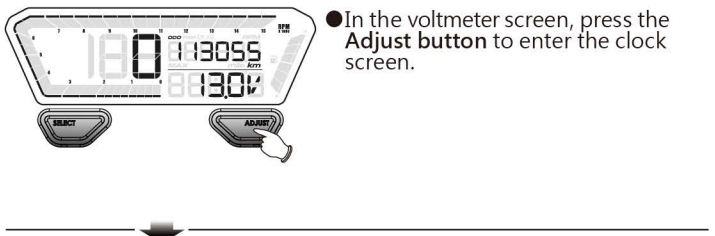


- In the ODO screen, press the **Select** button to enter the Trip A screen.
- In the Trip A screen, press the **Select** button to enter the Trip B screen.
- Press the **Select** button for 3 seconds to reset Trip A screen.
- In the Trip B screen, press the **Select** button to enter the motor oil maintenance screen.
- Press the **Select** button for 3 seconds to reset Trip B setting.
- In the motor oil maintenance screen, press the **Select** button to enter the RPM screen.
- Press the **Select** button for 3 seconds, to reset motor oil maintenance screen.

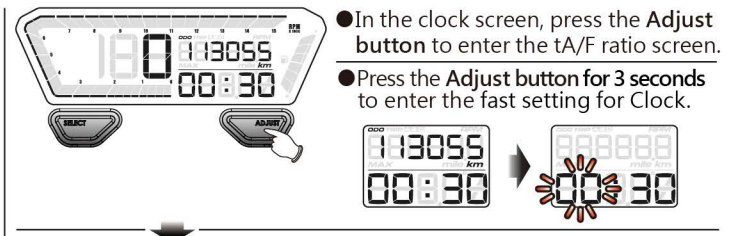


- In the RPM screen, press the **Select** button to enter the Max. record screen.
- In the Max. record screen, press the **Select** button to go back to the ODO screen.
- Press the **Select** button for 3 seconds to reset Max. record screen.
- In the ODO screen.

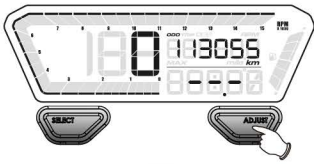
4-2 Adjust Button Function Instruction



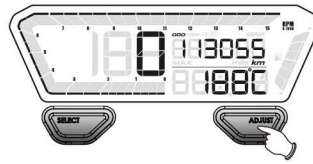
- In the voltmeter screen, press the **Adjust** button to enter the clock screen.



- In the clock screen, press the **Adjust** button to enter the tA/F ratio screen.
- Press the **Adjust** button for 3 seconds to enter the fast setting for Clock.

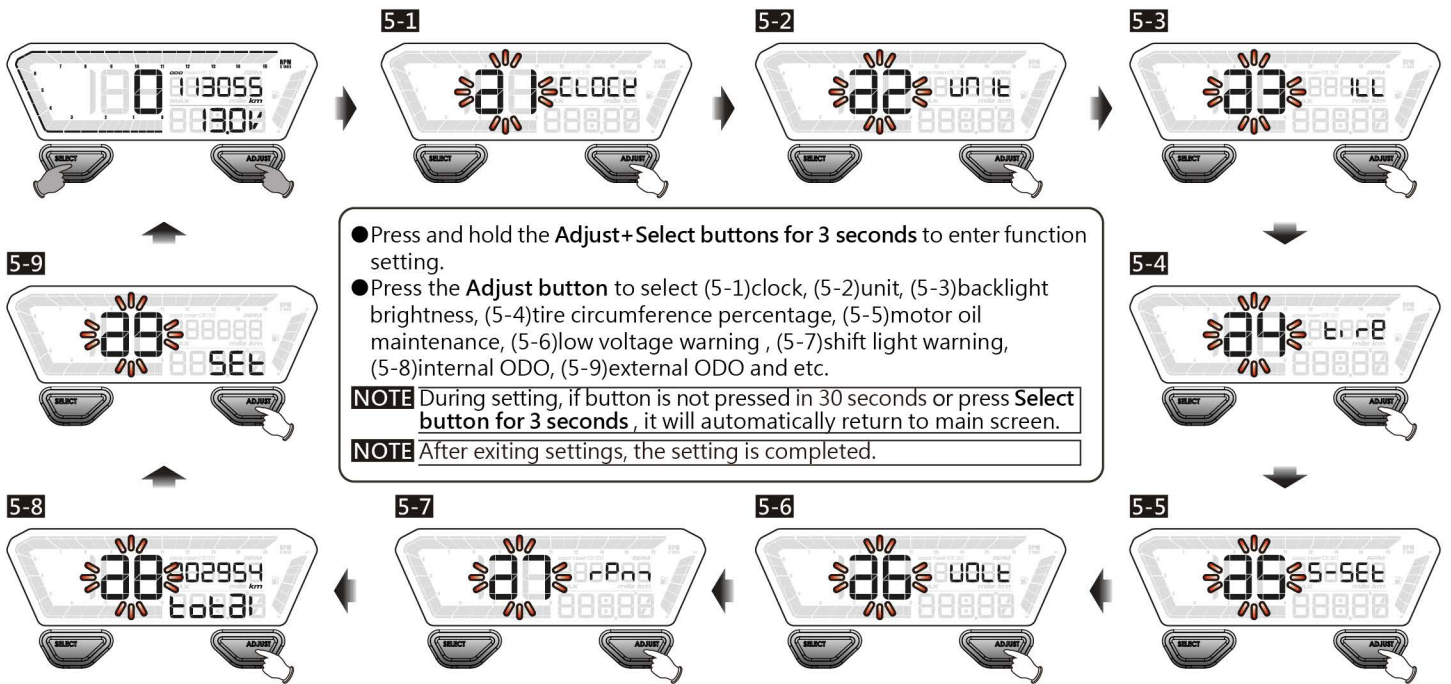


● In the A/F ratio screen, press the **Adjust** button to enter the thermometer screen.



● In the thermometer screen, press the **Adjust** button to go back to the voltmeter screen.

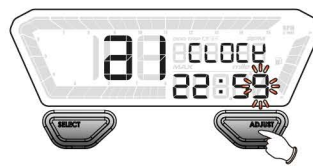
5 The Settings Screen Description



5-1 Clock Setting



● Press the **Select** button to enter the clock setting.



● Press the **Adjust** button to choose the setting number.



● **Example** : To set time(hour) as 10 hours.
 ● Press the **Adjust** button to choose the setting number.



● **EX** : Set minute from 59 minute to 50 minutes.
 ● Press the **Select** button to go back to the time setting.

⚠ Now the setting value is flashing!
NOTE Cursor moving order is :
 Hour → Digit in ten minutes → Digit in minutes

NOTE Setting range : 0 ~23 (24H)
 Default value : 23



● **EX** : Set hour from 23:00 to 22:00.
 ● Press the **Select** button to enter time adjustment minute setting.



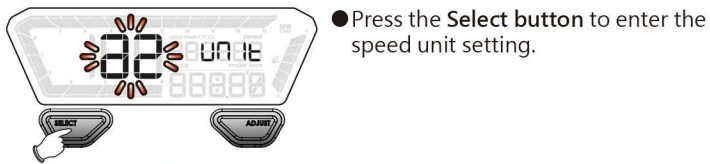
● Press the **Adjust** button to enter next operation setting.



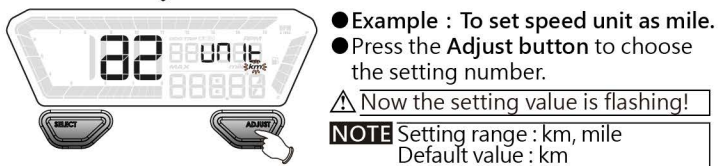
● **Example** : To set time(minute) as 50 minutes.
 ● Press the **Select** button to move to the digit you want to set.

⚠ Now the setting value is flashing!
NOTE Setting range : 00~59 minutes
 Default value : 59

5-2 Unit(Speed, Temperature, High Beam Signal) Setting



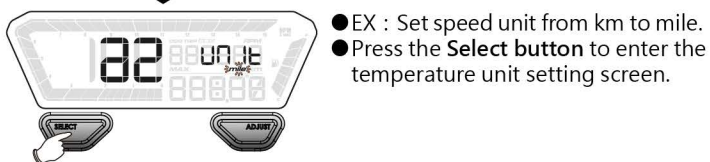
- Press the **Select** button to enter the speed unit setting.



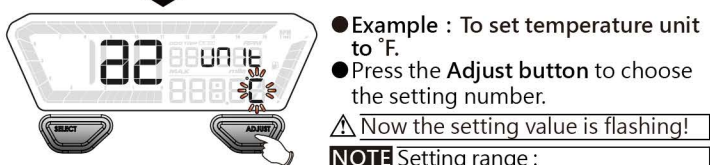
- **Example** : To set speed unit as mile.
- Press the **Adjust** button to choose the setting number.

⚠ Now the setting value is flashing!

NOTE Setting range : km, mile
Default value : km



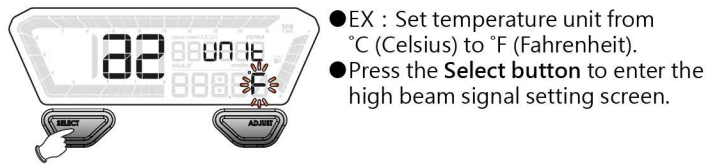
- **EX** : Set speed unit from km to mile.
- Press the **Select** button to enter the temperature unit setting screen.



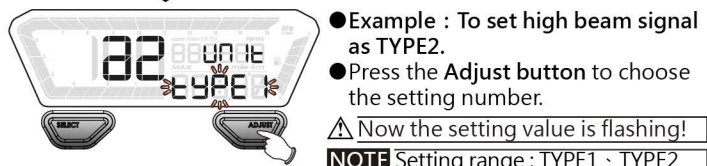
- **Example** : To set temperature unit to °F.
- Press the **Adjust** button to choose the setting number.

⚠ Now the setting value is flashing!

NOTE Setting range :
°C (Celsius) and °F (Fahrenheit)
Default value : °C (Celsius)



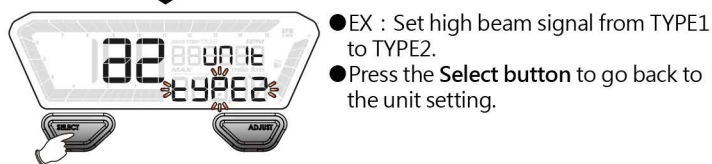
- **EX** : Set temperature unit from °C (Celsius) to °F (Fahrenheit).
- Press the **Select** button to enter the high beam signal setting screen.



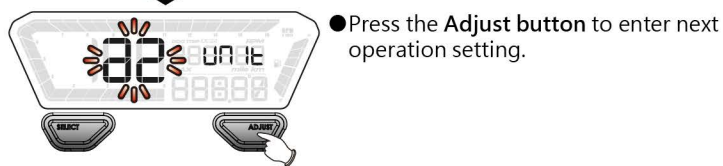
- **Example** : To set high beam signal as TYPE2.
- Press the **Adjust** button to choose the setting number.

⚠ Now the setting value is flashing!

NOTE Setting range : TYPE1 · TYPE2
Default value : TYPE1

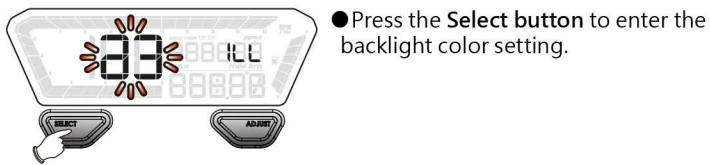


- **EX** : Set high beam signal from TYPE1 to TYPE2.
- Press the **Select** button to go back to the unit setting.

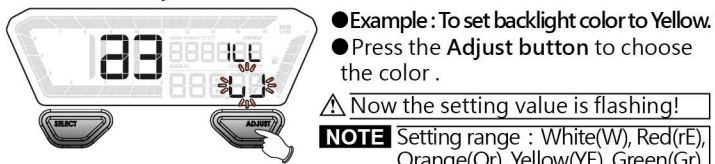


- Press the **Adjust** button to enter next operation setting.

5-3 Backlight Setting(Color/Brightness)



- Press the **Select** button to enter the backlight color setting.

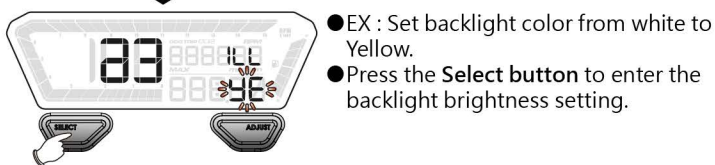


- **Example** : To set backlight color to Yellow.
- Press the **Adjust** button to choose the color .

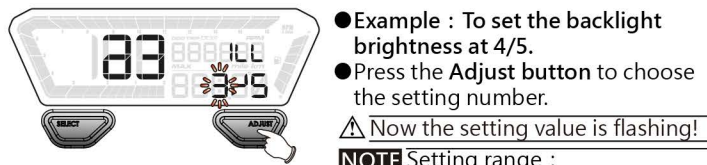
⚠ Now the setting value is flashing!

NOTE Setting range : White(W), Red(rE), Orange(Or), Yellow(YE), Green(Gr), Blue(bl), Light blue(ln), Purple(Pu).
Default value : White(W).

NOTE The backlight color will change immediately after you set the value.



- **EX** : Set backlight color from white to Yellow.
- Press the **Select** button to enter the backlight brightness setting.

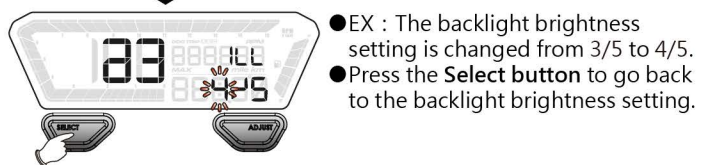


- **Example** : To set the backlight brightness at 4/5.
- Press the **Adjust** button to choose the setting number.

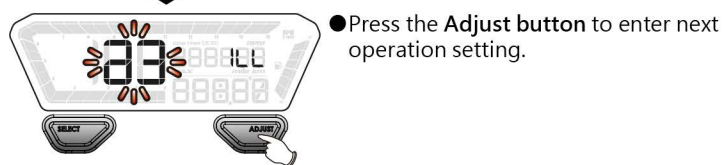
⚠ Now the setting value is flashing!

NOTE Setting range :
1/5 (Darkest) ~ 5/5 (Brightest),
5 different levels available.
Default value : 3/5

NOTE The backlight brightness will change immediately after you set the value.

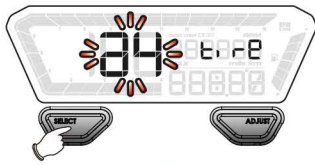


- **EX** : The backlight brightness setting is changed from 3/5 to 4/5.
- Press the **Select** button to go back to the backlight color setting.



- Press the **Adjust** button to enter next operation setting.

5-4 Tire Circumference Percentage Setting



- Press the **Select** button to enter the tire circumference percentage setting.



Please reset this setting value when you change a different size tire.

- **Example** : The new tire circumference is 1,527 mm. The calculation equation is as below.
- The new tire circumference 1,527mm ÷ the original tire circumference 1,454 mm X (100%)=The setting value (105%).
- Press the **Select** button to move to the digit you want to set.

⚠ Now the setting value is flashing!

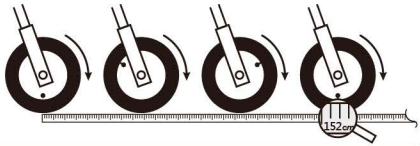
NOTE Cursor's order : hundred → ten → digit

NOTE Setting range : 50~199%
Default value : 110%

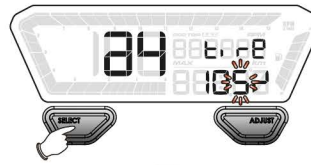
P.S.



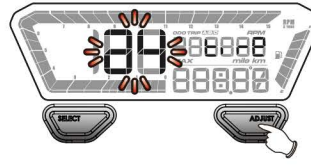
- You can use the tire valve as the starting point and measure the wheel circumference with a measuring tape.



- Press the **Adjust** button to choose the setting number.



- **EX** : The tire circumference percentage setting is changed from 110 % to 105 %.
- Press the **Select** button to go back to the tire circumference percentage setting.



- Press the **Adjust** button to enter next operation setting.

P.S.



When changing gears or tire size, it can adjust the tire percentage (%) parameter to calibrate speed.

1. When switching tire size

$$\text{Tire percentage (\%)} = \frac{1,527}{1,454} \times 100 = 105$$



Tire size from small to large



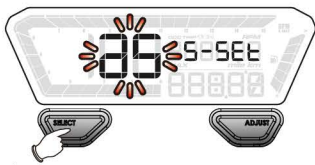
Tire size from large to small



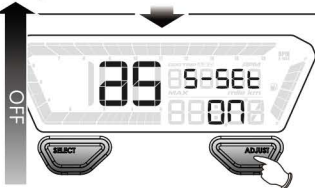
Tire percentage (%)

$$= \frac{1,381}{1,454} \times 100 = 95 \%$$

5-5 Motor Oil Maintenance Setting



- Press the **Select** button to enter the motor oil maintenance setting.

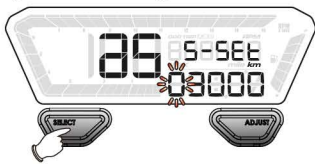


- Press the **Adjust** button, and select whether to turn on the motor oil maintenance function.
- Select ON to enter the motor oil maintenance setting.

⚠ Now the setting value is flashing!

NOTE Setting range : OFF,ON
Default value : ON

NOTE Select OFF to return to the motor oil maintenance main screen.



- **Example** : To set motor oil maintenance as 2,000 km.
- Press the **Select** button to move to the digit you want to set.

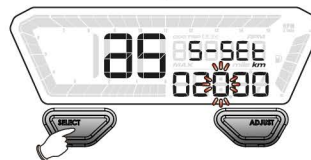
⚠ Now the setting value is flashing!

NOTE Cursor's order : million → thousand → hundred

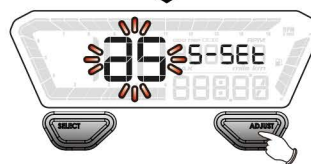
NOTE Setting range : 500~10,000 km
Default value : 3,000 km



- Press the **Adjust** button to choose the setting number.

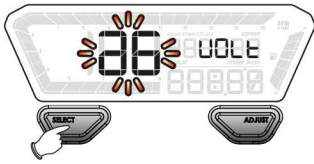


- **EX** : The motor oil maintenance setting is changed from 3,000 km to 2,000 km.
- Press the **Select** button to go back to the motor oil maintenance setting.



- Press the **Adjust** button to enter next operation setting.

5-6 Low Voltage Warning Setting



- Press the **Select** button to enter the low voltage warning setting.



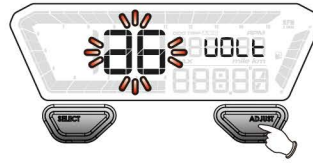
- EX : Set low voltage warning value from DC 11.5 V to DC 11.0 V.
- Press the **Select** button to go back to the low voltage warning setting.



- Example : To set low voltage warning value to DC 11.0 V.
- Press the **Select** button to move to the digit you want to set.

⚠ Now the setting value is flashing!

NOTE Setting range : DC 9.0~12.5 V
Default value : 11.5 V

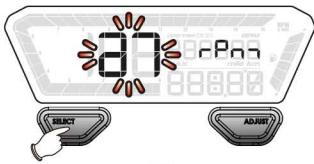


- Press the **Adjust** button to enter next operation setting.



- Press the **Adjust** button to choose the setting number.

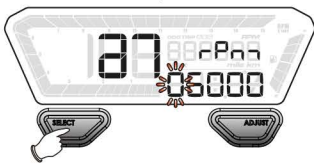
5-7 Shift Light Warning Setting



- Press the **Select** button to enter the shift light warning setting.



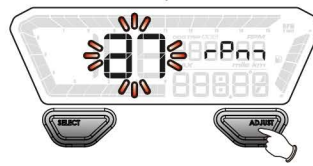
- EX : Set shift light warning value from 8,000 RPM to 12,000 RPM.
- Press the **Select** button to go back to the shift light warning setting.



- Example : To set shift light warning value to 12,000 RPM.
- Press the **Select** button to move to the digit you want to set.

⚠ Now the setting value is flashing!

NOTE Setting range : 3,000~19,900 RPM
Default value : 8,000 RPM

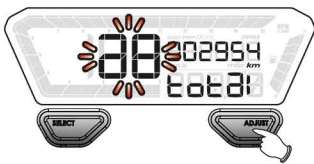


- Press the **Adjust** button to enter next operation setting.



- Press the **Adjust** button to choose the setting number.

5-8 Internal ODO Setting

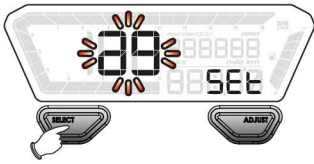


- EX : Currently internal ODO inspect as 2,954 km.
- Press the **Adjust** button to enter the main external ODO setting screen.

⚠ User unable to adjust or clear internal ODO.

NOTE Display range :
000,000~999,999 km(mile)

5-9 External ODO Setting



- Press the **Select** button to enter the external ODO setting.

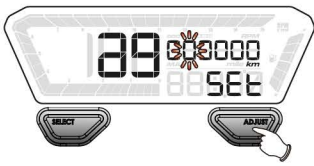


- **Example** : To set external total distance value to 12,500 km.
- Press the **Select** button to move to the digit you want to set.

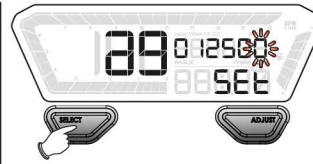
⚠ Now the setting value is flashing!

NOTE Cursor's order : million→thousand→hundred→ten→digit

NOTE Setting range :
000,000~999,999 km
Default value : 000,000 km



- Press the **Adjust** button to choose the setting number.



- EX : Set external total distance value from 0 km to 12,500 km.
- Press the **Select** button to go back to the ODO setting.



- In the ODO setting.
- Regardless of the screen, press **Select** button for 3 seconds and return to the main screen.

6 Trouble Shooting

The following situations do not indicate malfunction of the meter. Check the following points before taking it in for repairs.

Trouble	Check item	Trouble	Check item
The meter doesn't work when the power is on.	<ul style="list-style-type: none"> ● The power doesn't supply to the meter. → Please make sure the wiring is connected. The wiring and fuse are not broken. → The battery is broken or the battery is too old to supply enough power (DC 12 V) to make the meter work. 	Fuel meter does not display or display error.	<ul style="list-style-type: none"> ● Check your fuel tank.
The meter shows incorrect information or keep performing system reboot.	<ul style="list-style-type: none"> ● Check the voltage of your battery, and make sure the voltage is over DC 12 V. 	Thermometer does not display or display error.	<ul style="list-style-type: none"> ● Make sure the original diagnostic connector is connected properly. → check the original diagnostic connector is connected correctly.
Speed meter does not display or display error.	<ul style="list-style-type: none"> ● Make sure the speed sensor is connected properly. → check the speed sensor wire is connected correctly. ● Check the setting. → Please check the settings menu, the speed of the settings are correct. 	A/F ratio meter does not display or display error.	<ul style="list-style-type: none"> ● Make sure the original diagnostic connector is connected properly. → check the original diagnostic connector is connected correctly.
RPM meter does not display or display error.	<ul style="list-style-type: none"> ● Make sure the RPM wire is connected properly. → check the RPM wire wire is connected correctly. ● Wrong signal connection. → Please connect to the signal wiring of the ignition coil. 	The clock is incorrect.	<ul style="list-style-type: none"> ● Check the setting. → Please check the settings menu, the clock settings are correct.

※If the problems still can not be solve, please contact your local distributor to get assistance.