



- Thank you for purchasing our product. This product is a multifunction meter and is easy to install. Before using, please read the instructions carefully and retain them for future reference.

## ⚠ Attention!

- For installation, please follow the steps described. Any damage caused by wrong installation shall be imputed to the users.
- To avoid a short circuit from occurring do not pull or modify the wires during installation.
- Do not disassemble or change any parts. Opening and disassembling this unit will void any warranty.
- Maintenance and repairs should be executed by our professionals only.

☞ Symbol description:

### NOTE

⚠ Some procedures must be followed to avoid damages to the instrument.

⚠ **WARNING!** Certain procedure must be followed to avoid damages to yourself, to the vehicle or others.



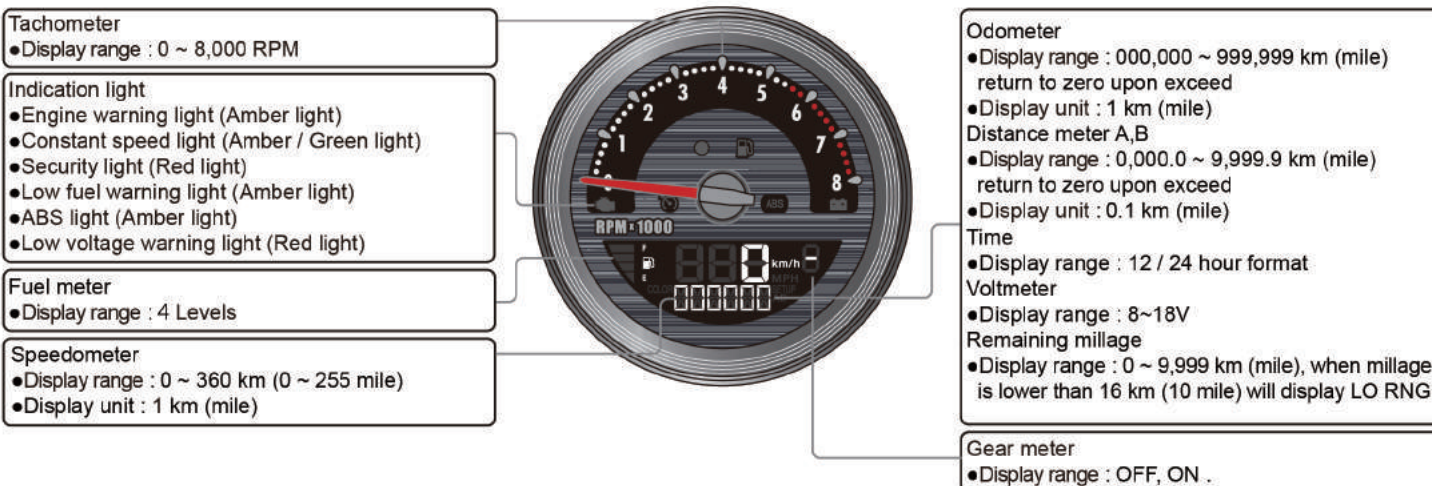
## 1 Accessories

### 1 LCD Meter X1



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

## 2-1 Overview



## 2-2 Features and settings description

● Speedometer	Display range : 0 ~ 360 km (0 ~ 255 mile) switchable Display unit : 1 km (mile)	● Voltmeter	Display range : 8 ~ 18 V
○ Display interval	<0.5 second	● Backlight brightness	Setting range : 1/5(darkest)~ 5/5(brightest)
○ Internal and external odometer	Display range : 000,000~999,999 km (mile) return to zero upon exceed Display unit : 1 km (mile)	○ Backlight color	Setting range : 0~360
○ Trip meter A,B	Display range : 0,000.0~9,999.9 km (mile) returns to zero upon exceed Display unit : 0.1 km (mile)	● Operating voltage	DC 12 V
● Gear meter	Display range : OFF, ON .	● Operating temperature	-20~85 °C
● Tachometer	Display range : 0 ~ 8,000 RPM	○ Storage temperature	-30~90 °C
● Fuel meter	Setting range : OFF, original fuel kit(PN 6120008A) , Sportster fuel switch, CUS (User define)	● Specifications	JIS D 0203 (S2)
○ Fuel tank volume	Setting range : OFF/ 1.0 ~ 9.9 US gallons	● Meter Size	D 94.7 X 55.8 mm
● Clock	Setting range : 12 / 24 hour format	● Meter Weight	Around 165 grams
		● Indication light	Engine warning light (Amber light) Constant speed light (Amber / Green light) Security light (Red light) Low fuel warning light (Amber light) ABS light (Amber light) Low voltage warning light (Red light)

**NOTE** Design and specification may change without further notice.

## 2-3 Main menu functions



- In the total mileage screen, press the **button once** to switch to Trip A screen.
- In the total mileage screen, hold the **button for 3 seconds** to enter into the setting screen. (refer to setting 3)



- Trip A screen, press the **button once** to switch to Trip B screen.
- Hold the **button for 3 seconds** to clear the Trip A recordings.



- Trip B screen, press the **button once** to switch to the mileage maintenance screen.
- Hold the **button for 3 seconds** to clear the Trip B recordings.



- In the clock screen, press the **button once** to switch to the voltage screen.



- In the voltage screen, press the **button once** to switch to the total mileage screen.

## 3 Settings and features index screen



- In the total mileage screen, hold the **button for 3 seconds** to enter into the setting screen.



### 3-1 Clock settings



- In the clock settings screen, hold the **button for 3 seconds** to enter into the setting screen.



- EX : Set clock from 0:00 AM to 1:05 AM.
- Hold the **button for 3 seconds** to return to the clock settings main screen.



- Example : If want to set time to 12 hours format.
  - Press the **button once** to select desired setting value.
- ⚠ Now the setting value will blink.



- Clock settings main screen.
- Press the **button once** to enter next setting.



- EX : Set time settings from 24 hours format to 12 hours format.
- Hold the **button for 3 seconds** to enter time into the (hour / minute) setting screen.



- Example : To set clock as 1:05 AM.
- Hold the **button for 3 seconds** to move the cursor to the desired settings level.



⚠ Now the setting value will blink.

- Press the **button once** to select desired setting value.



**NOTE** Setting range :  
Hour : 1~12 (12 h) / 0~23 (24 h)  
Minute : 00~59 minutes.



### 3-2 Speed unit settings



- In the speed unit settings main screen, hold the **button** for 3 seconds to enter into the main screen.



- **Example** : To set speed unit to MPH(mile).
- Press the **button** once to select the desired value.

⚠ Now the setting value will blink.

**NOTE** Setting range : km/h, km and MPH, mile.

**NOTE** Total mileage and distance meter unit will vary according to the speed unit.



- **EX** : Set speed unit from km/h, km to MPH, mile.
- Hold the **button** for 3 seconds to return to the speed unit settings main screen.



- Speed unit settings main screen.
- Press the **button** once to enter next setting.

### 3-3 Backlight brightness settings (Mode/ Brightness/ Color)



- In the backlight (mode /color / brightness) settings main screen, hold the **button** for 3 seconds to enter into the settings screen.



- In the backlight (mode) settings main screen, hold the **button** for 3 seconds to enter into the settings screen.



- **Example** : To set the mode to Night mode.
- Press the **button** once to select the desired value.

⚠ Now the setting value will blink.

**NOTE** Setting Auto(automatically switch according to the light : day mode display for the bright environment and Night mode display for the dark environment), Day mode, Night mode.



- **EX** : Set background from Auto mode to Night mode.
- Hold the **button** for 3 seconds to return the backlight (mode) settings main screen.



- Press the **button** once to enter the backlight brightness(day) settings main screen.



- In the backlight brightness(day) settings main screen, hold the **button** for 3 seconds to enter into the settings screen.



- **Example** : To set the backlight brightness (day) to 4/5 (80%).
- Press the **button** once to select the desired value.

⚠ Now the setting value will blink.

**NOTE** Setting range : 3/5~ 5/5 (Brightest), 3 different levels available. Setting unit : 20% per level.

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



- **EX** : The backlight brightness (day) setting is changed from 5/5 (100%) to 4/5 (80%).
- Hold the **button** for 3 seconds to return the backlight brightness (day) settings main screen.



- Press the **button** once to enter the backlight (ALL : LCD+TAC+DIA) color (day) settings main screen.



- In the backlight (ALL : LCD+TAC+DIA) color (day) settings main screen, hold the **button** for 3 seconds to enter into the settings screen.



- **Example** : To set backlight (ALL : LCD+TAC+DIA) color (day) to 160.

**NOTE** Setting mode : Manual adjustment , Automatic adjustment.

Automatic

- Press the **button** once to enter the Automatic adjustment mode.

Manual

- Hold the **button** for 3 seconds to enter the Manual adjustment mode.

Automatic



- The color will be displayed automatically.
- Press the **button** once to choose the color .

**NOTE** Setting range : 0~359.

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





- EX : The backlight (ALL : LCD+TAC+DIA) color (day) setting is changed from 360 to 160.

Manual



- Hold the **button** for 3 seconds to move the cursor to the desired settings level.



⚠ Now the setting value will blink.

- Press the **button** once to select desired setting value.



**NOTE** Setting range : 0(Red)~360(White).

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



- EX : The backlight (ALL : LCD+TAC+DIA) color (day) setting is changed from 360 to 160.

- Hold the **button** for 3 seconds to return the backlight (ALL : LCD+TAC+DIA) color (day) settings main screen.



- Press the **button** once to enter the backlight (LCD) color (day) settings main screen.



- In the backlight (LCD) color (day) settings main screen, hold the **button** for 3 seconds to enter into the settings screen.



- Example : To set backlight (LCD) color (day) to 200.

**NOTE** Setting mode : Manual adjustment , Automatic adjustment.

Automatic

- Press the **button** once to enter the Automatic adjustment mode.

Manual

- Hold the **button** for 3 seconds to enter the Manual adjustment mode.

Automatic



- The color will be displayed automatically.
- Press the **button** once to choose the color .

**NOTE** Setting range : 0~359.

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



- EX : The backlight (LCD) color (day) setting is changed from 160 to 200.

Manual



- Hold the **button** for 3 seconds to move the cursor to the desired settings level.



⚠ Now the setting value will blink.

- Press the **button** once to select desired setting value.



**NOTE** Setting range : 0(Red)~360(White).

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



- EX : The backlight (LCD) color (day) setting is changed from 160 to 200.

- Hold the **button** for 3 seconds to return the backlight (LCD) color (day) settings main screen.



- Press the **button** once to enter the backlight (TAC) color (day) settings main screen.





- In the backlight (TAC) color (day) settings main screen, hold the button for 3 seconds to enter into the settings screen.



- Example : To set backlight (TAC) color (day) to 358.

**NOTE** Setting mode : Manual adjustment , Automatic adjustment.

Automatic

- Press the button once to enter the Automatic adjustment mode.

Manual

- Hold the button for 3 seconds to enter the Manual adjustment mode.

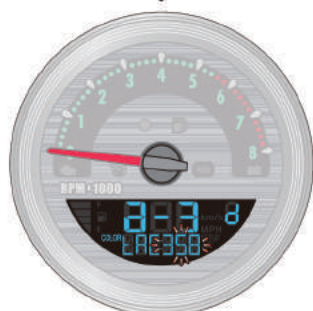
Automatic



- The color will be displayed automatically.
- Press the button once to choose the color .

**NOTE** Setting range : 0~359.

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



- EX : The backlight (TAC) color (day) setting is changed from 160 to 358.

Manual



- Hold the button for 3 seconds to move the cursor to the desired settings level.



⚠ Now the setting value will blink.

- Press the button once to select desired setting value.



**NOTE** Setting range : 0(Red)~360(White).

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



- EX : The backlight (TAC) color (day) setting is changed from 160 to 358.
- Hold the button for 3 seconds to return the backlight (TAC) color (day) settings main screen.



- Press the button once to enter the backlight (DIA) color (day) settings main screen.



- In the backlight (DIA) color (day) settings main screen, hold the button for 3 seconds to enter into the settings screen.



- Example : To set backlight (DIA) color (day) to 250.

**NOTE** Setting mode : Manual adjustment , Automatic adjustment.

Automatic

- Press the button once to enter the Automatic adjustment mode.

Manual

- Hold the button for 3 seconds to enter the Manual adjustment mode.

Automatic



- The color will be displayed automatically.
- Press the button once to choose the color .

**NOTE** Setting range : 0~359.

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





- EX : The backlight (DIA) color (day) setting is changed from 160 to 250.

Manual



- Hold the **button** for 3 seconds to move the cursor to the desired settings level.



⚠ Now the setting value will blink.

- Press the **button** once to select desired setting value.



**NOTE** Setting range : 0(Red)~360(White).

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



- EX : The backlight (DIA) color (day) setting is changed from 160 to 358.
- Hold the **button** for 3 seconds to return the backlight (DIA) color (day) settings main screen.



- Press the **button** once to enter the backlight brightness(night) settings main screen.



- In the backlight brightness(night) settings main screen, hold the **button** for 3 seconds to enter into the settings screen.



- Example : To set the backlight brightness (night) to 2/5 (40%).

- Press the **button** once to select the desired value.

⚠ Now the setting value will blink.

**NOTE** Setting range : 1/5(Darkest)~ 5/5 (Brightest), 5 different levels available. Setting unit : 20% per level.

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



- EX : The backlight brightness (night) setting is changed from 3/5 (60%) to 2/5 (40%).
- Hold the **button** for 3 seconds to return the backlight brightness (night) settings main screen.



- Press the **button** once to enter the backlight (ALL : LCD+TAC+DIA) color (night) settings main screen.



- In the backlight (ALL : LCD+TAC+DIA) color (night) settings main screen, hold the **button** for 3 seconds to enter into the settings screen.



- Example : To set backlight (ALL : LCD+TAC+DIA) color (night) to 160.

**NOTE** Setting mode : Manual adjustment , Automatic adjustment.

Automatic

- Press the **button** once to enter the Automatic adjustment mode.

Manual

- Hold the **button** for 3 seconds to enter the Manual adjustment mode.

Automatic



- The color will be displayed automatically.
- Press the **button** once to choose the color .

**NOTE** Setting range : 0~359.

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



- EX : The backlight (ALL : LCD+TAC+DIA) color (night) setting is changed from 360 to 160.

Manual



- Hold the **button** for 3 seconds to move the cursor to the desired settings level.



⚠ Now the setting value will blink.

- Press the **button** once to select desired setting value.



**NOTE** Setting range : 0(Red)~360(White).

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





- EX : The backlight (ALL : LCD+TAC+DIA) color (night) setting is changed from 360 to 160.
- Hold the **button** for 3 seconds to return the backlight (ALL : LCD+TAC+DIA) color (night) settings main screen.



- Press the **button** once to enter the backlight (LCD) color (night) settings main screen.



- In the backlight (LCD) color (night) settings main screen, hold the **button** for 3 seconds to enter into the settings screen.



- Example : To set backlight (LCD) color (night) to 200.
- NOTE** Setting mode : Manual adjustment , Automatic adjustment.

Automatic

- Press the **button** once to enter the Automatic adjustment mode.

Manual

- Hold the **button** for 3 seconds to enter the Manual adjustment mode.

Automatic



- The color will be displayed automatically.
- Press the **button** once to choose the color .

**NOTE** Setting range : 0~359.

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



- EX : The backlight (LCD) color (night) setting is changed from 160 to 200.

Manual



- Hold the **button** for 3 seconds to move the cursor to the desired settings level.



⚠ Now the setting value will blink.

- Press the **button** once to select desired setting value.



**NOTE** Setting range : 0(Red)~360(White).

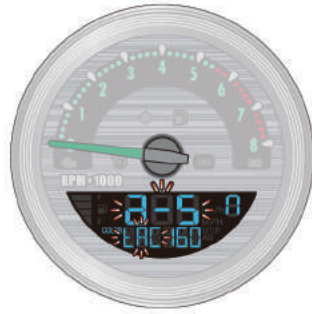
**NOTE** The backlight color will change immediately after you set the value.



- EX : The backlight (LCD) color (night) setting is changed from 160 to 200.
- Hold the **button** for 3 seconds to return the backlight (LCD) color (night) settings main screen.



- Press the **button** once to enter the backlight (TAC) color (night) settings main screen.



- In the backlight (TAC) color (night) settings main screen, hold the **button** for 3 seconds to enter into the settings screen.



- Example : To set backlight (TAC) color (night) to 358.

**NOTE** Setting mode : Manual adjustment , Automatic adjustment.

Automatic

- Press the **button** once to enter the Automatic adjustment mode.

Manual

- Hold the **button** for 3 seconds to enter the Manual adjustment mode.



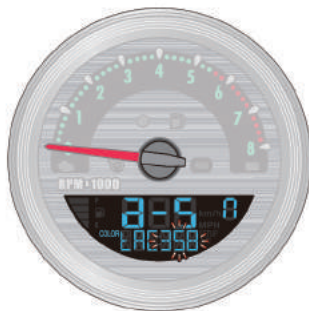
## Automatic



- The color will be displayed automatically.
- Press the **button once** to choose the color.

**NOTE** Setting range : 0~359.

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



- EX : The backlight (TAC) color (night) setting is changed from 160 to 358.

## Manual



- Hold the **button for 3 seconds** to move the cursor to the desired settings level.

**NOTE** Setting range : 0~359.

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

- Press the **button once** to select desired setting value.

**NOTE** Setting range : 0(Red)~360(White).

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



- EX : The backlight (TAC) color (night) setting is changed from 160 to 358.
- Hold the **button for 3 seconds** to return the backlight (TAC) color (night) settings main screen.



- Press the **button once** to enter the backlight (DIA) color (night) settings main screen.



- In the backlight (DIA) color (night) settings main screen, hold the **button for 3 seconds** to enter into the settings screen.



- Example : To set backlight (DIA) color (night) to 250.

**NOTE** Setting mode : Manual adjustment , Automatic adjustment.

Automatic

- Press the **button once** to enter the Automatic adjustment mode.

Manual

- Hold the **button for 3 seconds** to enter the Manual adjustment mode.

## Automatic



- The color will be displayed automatically.
- Press the **button once** to choose the color.

**NOTE** Setting range : 0~359.

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



- EX : The backlight (DIA) color (night) setting is changed from 160 to 250.

## Manual



- Hold the **button for 3 seconds** to move the cursor to the desired settings level.

**NOTE** Setting range : 0~359.

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

- Press the **button once** to select desired setting value.

**NOTE** Setting range : 0(Red)~360(White).

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





- EX : The backlight (DIA) color (night) setting is changed from 160 to 250.
- Hold the **button** for 3 seconds to return the backlight (DIA) color (night) settings main screen.



- Press the **button** once to return to the backlight (mode /color / brightness) settings main screen.



- Backlight (mode /color / brightness) settings main screen.
- Press the **button** once to enter next setting.

### 3-4 Gear display settings



- In the gear display settings screen, hold the **button** for 3 seconds to enter into the settings screen.



- Press the **button** once, and select whether to turn on the gear display function.

⚠ Now the setting value is flashing!

**NOTE** Setting range : ON, OFF.



- Hold the **button** for 3 seconds to return to the gear display settings main screen.



- Gear display settings main screen.
- Press the **button** once to enter next setting.

### 3-5 Fuel settings



- In the fuel settings main screen, hold the **button** for 3 seconds to enter into the sub settings screen.

3-5-1



- In the fuel type screen, hold the **button** for 3 seconds to enter into the fuel type settings screen.



- EX : To set the fuel type to CUST (user define).
- Press the **button** once to select the desired value.

⚠ Now the setting value will blink.

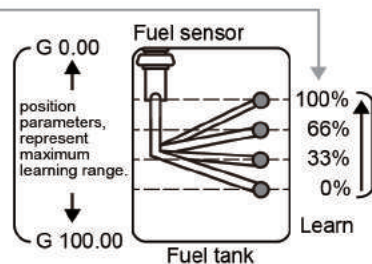
**NOTE** Settings range:  
 1.OFF (Fuel display. off)  
 2.SPo SW(Sporster fuel volume switch)  
 3.F-KIT (Fuel Kit PN.6120008A)  
 4.CUST (User define)



- Example : To set fuel type from OFF to CUST (user define).
- Hold the **button** for 3 seconds to enter into the user define mode.



- User define mode  
Needs to learn the position of 0% (E), 33%, 66%, 100% (F) fuel volume.



- Fuel volume 0% position learning screen.
- confirm that there is low fuel before learning.
- Allow the vehicle to be still for 10 ~ 15 seconds in order to steady the liquid surface.
- Press the **button** once to learn the current fuel position.
- Hold the **button** for 3 seconds to enter into the next fuel volume position learning screen.



- Fuel volume 33% position learning screen.
- confirm that there is 1/3 fuel volume in fuel tank before learning.
- Allow the vehicle to be still for 10 ~ 15 seconds in order to steady the liquid surface.
- Press the **button** once to learn current fuel position.
- Hold the **button** for 3 seconds to enter into the next fuel volume position learning screen.





- Fuel volume 66% position learning screen.
- confirm that there is 2/3 fuel volume in fuel tank before learning.
- Allow the vehicle to be still for 10 ~ 15 seconds in order to steady the liquid surface.
- Press the **button once** to learn current fuel position.
- Hold the **button for 3 seconds** to enter into the next fuel volume position learning screen.



- Fuel volume 100% position learning screen.
- confirm that there is 3/3 fuel volume in fuel tank before learning.
- Allow the vehicle to be still for 10 ~ 15 seconds in order to steady the liquid surface.
- Press the **button once** to learn current fuel position.
- Hold the **button for 3 seconds** to enter into the learning conformation screen.



- Learning conformation screen.
- Hold the button once to save the current learning results, then automatic return to fuel type settings screen.
- If an error occurs in the learning process, it will display "Error" when saving. Then abandon this learning and return to fuel type screen.
- Hold the **button for 3 seconds** to renounce current learning result and return to the sub settings screen.

SAVE → DONE

SAVE → Error0

SAVE → Abort



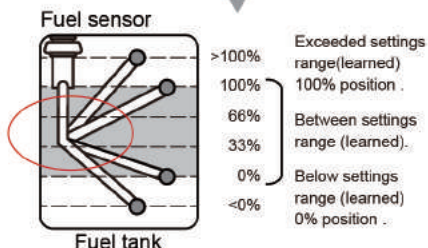
- In the Fuel type settings screen.
- Press the **button once** to enter the next setting.

**NOTE** Setting range:

- When set to OFF or SPo SU, will return to fuel type settings screen.
- When set to other settings, will enter next setting option.



- Fuel position indicator. surface position, if it exceeds the range it is recommended to reset the fuel volume parameters to acquire more precise fuel volume and range information.



- Press the button to enter fuel volume settings.



- In fuel tank volume settings screen, hold the **button for 3 seconds** to enter into the settings screen.



- **Example** : To set fuel volume as ON.
- Press the **button once** to select desired setting value.

⚠ Currently setting value will blink.

**NOTE** Setting range : ON,OFF.



- **EX** : To set the fuel tank volume to ON.
- Hold the **button for 3 seconds** to enter the fuel volume settings screen.

**NOTE** When set to OFF, will return to sub setting screen.



- **Example** : To set fuel volume to 4.7.
- Hold the **button for 3 seconds** to move the cursor to desired setting level.

GAL 4.5 → GAL 4.7

⚠ Now the setting value will blink.

- Press the **button once** to select desired setting value.

GAL 4.5 → GAL 4.6 → GAL 4.7

**NOTE** Setting range : 1.0 ~ 9.9 gallons

**NOTE** Volume calculation method checks for the total volume of the fuel tank and low fuel indicating volume in the user manual of vehicle, then substitutes it into the equation below :  
total vol. - (low fuel vol. / 2) = setting value.  
Then enter the result into the setting value.



- **EX** : Set fuel volume value from 4.5 to 4.8.
- Hold the **button for 3 seconds** to return to fuel volume settings screen.



- Press the **button once** to return to the fuel settings main screen.



- Fuel settings main screen
- Press the **button once** to enter next setting.



### 3-6 Total internal and external mileage settings



- In the total mileage settings main screen, hold the **button** for **3 seconds** to enter into the sub settings screen.

3-6-1



- **Example** : Current total internal mileage display is 5 km.
- Press the **button** **once** to enter into the total external mileage settings screen.

⚠ User unable to adjust or remove total internal mileage.

**NOTE** Display range : 0 ~ 999,999 km (mile).

3-6-2



- In the total external mileage settings main screen, hold the **button** for **3 seconds** to enter into the settings screen.



- **Example** : To set external total distance value to 50,000 km.
- Hold the **button** for **3 seconds** to move the cursor to the desired settings level.



⚠ Now the setting value will blink.

- Press the **button** **once** to select desired setting value.



**NOTE** Setting range : 0 ~ 999,999 km (mile).



- **EX** : Set the total external mileage from 0 to 50,000 km.
- Hold the **button** for **3 seconds** to return to the total external mileage settings main screen.



- Total external mileage settings main screen.
- Press the **button** **once** to return to total mileage settings main screen.



- Total mileage settings main screen.
- Press the **button** **once** to return to startup screen.

### 4 Trouble Shooting

The following situation does not indicate malfunction of the meter. Please check the following points, before taking it in for repairs.

Trouble	Check item
The meter doesn't work when the power is on.	<ul style="list-style-type: none"> <li>● The power doesn't supply to the meter.                             <ul style="list-style-type: none"> <li>→ Please make sure the wiring is connected. The wiring and fuse are not broken.</li> <li>→ The battery is broken or the battery is too old to supply enough power DC 12V to make the meter work.</li> </ul> </li> </ul>

※ If the problems persist after viewing the steps above, please contact your local distributors.