



● Thank you for purchasing 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.

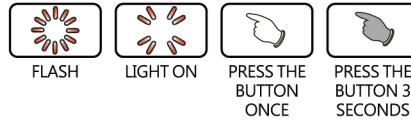
◎ MARK MEANING:

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

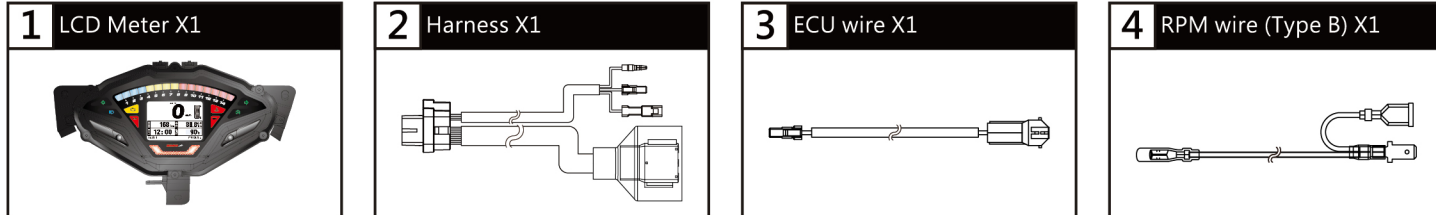
△ Some processes must be followed to avoid the affection caused by wrong installation.

⚠ **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.

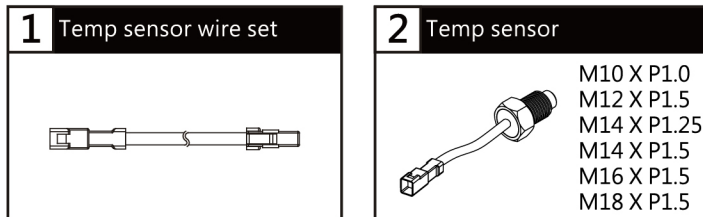


## 1-1 Accessories



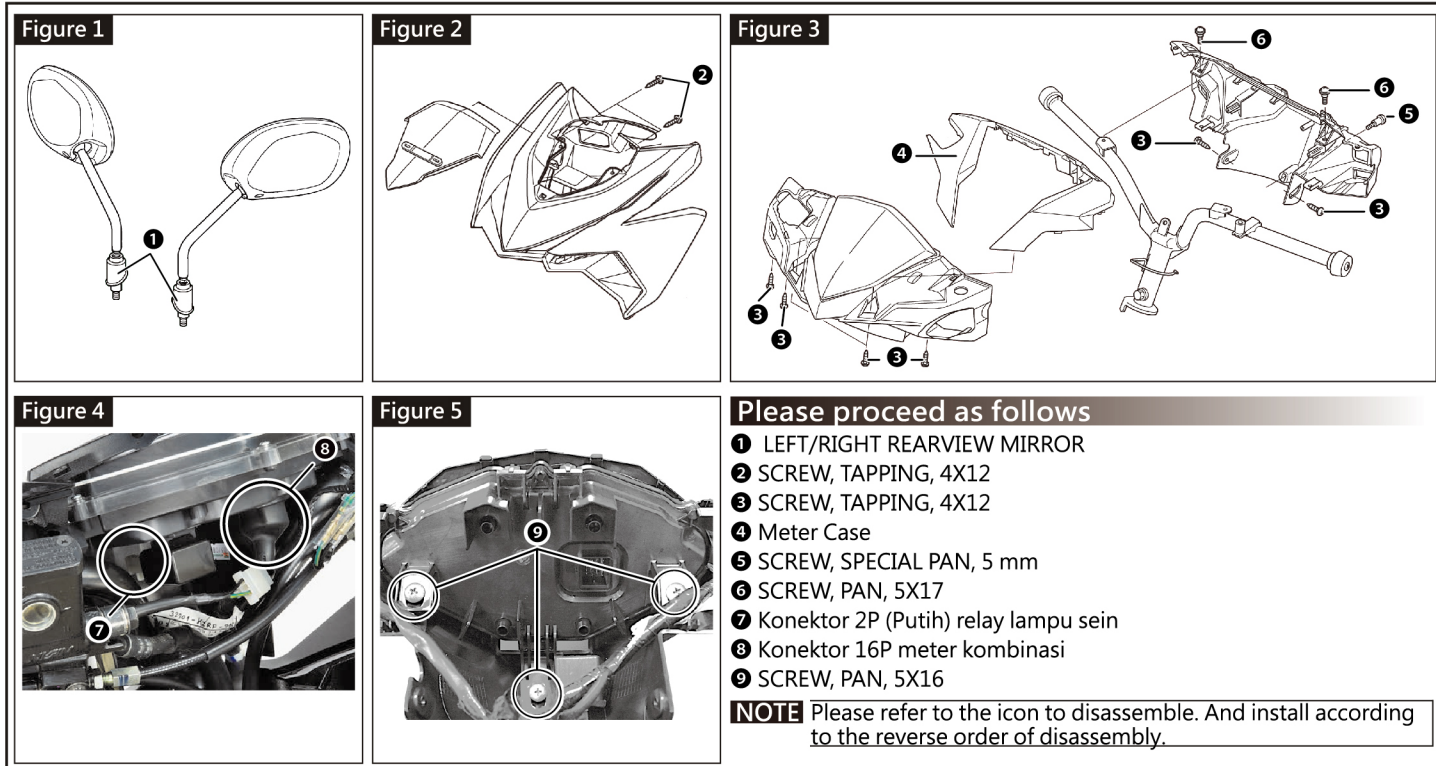
**NOTE** Contact your local distributor, if the items received in the box are not the same as the items listed above.

## 1-2 Optional accessories

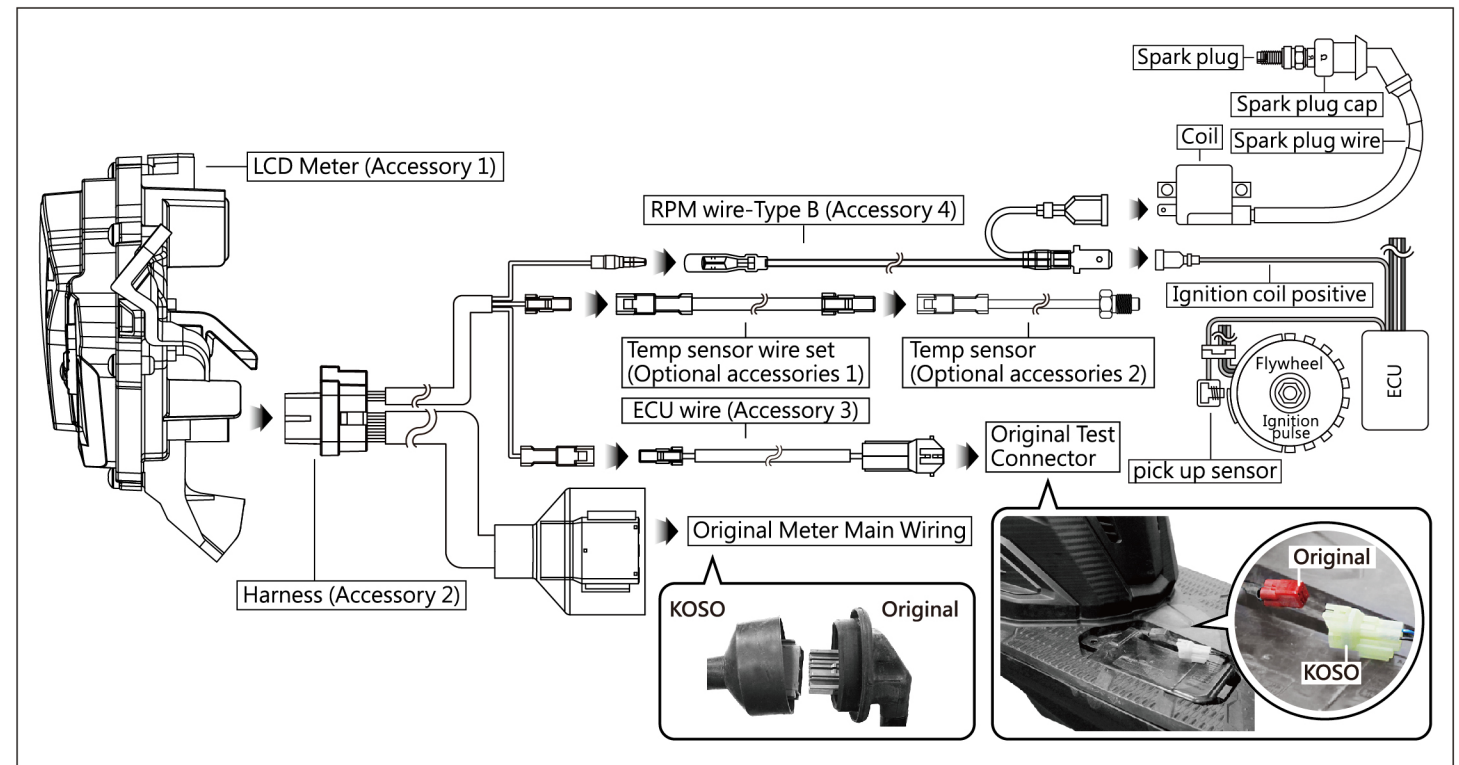


**NOTE** Some of the optional accessories might not be available in your country. Contact your local distributor to get more details.

## 2-1 Installation description



## 2-2 Wiring installation instructions



## 3-1 Basic function instruction

- Tachometer**
  - Display range : 0 ~ 15,000 RPM
- Indicator**
  - Turn signal (Green light)
  - High beam (Blue light)
  - Engine check (Yellow light)
  - Oil (Red light)
  - Idling stop (Green light)
  - High beam light (Red light)
  - IMMO Signal (Red light)
  - Shift light indicator (Red light)
- Clock**
  - 24H
- Thermometer**
  - Display range : 0 ~ 250 °C
  - Display unit : 1 °C
- A/F ratio meter**
  - Display range : 12.1 ~ 17.5
  - Display unit : 0.1
- Speedometer**
  - Display range : 0 ~ 199 km/h
- Fuel Level**
  - Display range : 10 levels
  - Display unit : Each level represents 10 %
- Odometer**
  - Display range : 0 ~ 99,999 km
  - Display unit : 1 km
- Trip meter A · B**
  - Display range : 0 ~ 9,999.9 km
  - Display unit : 0.1 km
- Motor oil maintenance millage**
  - Display range : 0 ~ 9,999.9 km
  - Display unit : 0.1 km
- Voltmeter**
  - Display range : DC 8 ~ 18 V

## 3-2 Back light color change instruction

● There are 8 backlight colors available for you to choose, and the colors are in order as white, yellow, orange, red, purple, blue, light blue and then green.

**NOTE** The back light change function can only work when the engine is on.

**NOTE** The method to switch the backlight color. Turn the head light switch from low beam to high beam and then wait for around 0.5~3 seconds, then switch it back to the low beam. If you switch the head light switch too fast, sometimes the backlight won't be changed.

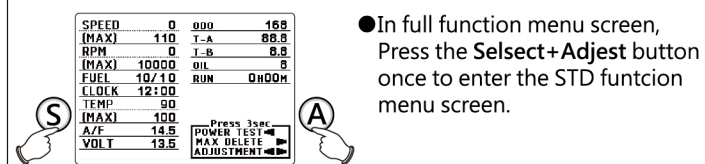
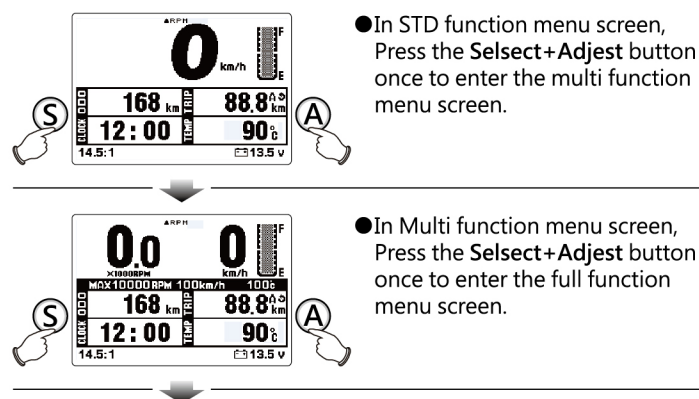
### 3-3 Functions, settings description

|   |  |   |   |
|---|--|---|---|
| ●Speedometer                                | Display range : 0 ~ 199 km/h<br>Display unit : 1 km/h  | ○External Temp. Sensor                                | Display range : 250 °C  |
| ●Speedometer (LED Bar)                      | Display range : 0 ~ 150 km/h<br>Display unit : 10 km/h   | ●Fuel meter   | Display range : 10 level<br>Display unit : Each level represents 10 %   |
| ○Mode                                       | Display range : REMORA-A、REMORA-B、REMORA-C   | ○Fuel signal  | Display range : 10~50 %<br>Display unit : Each level represents 10 %  |
| ○Display interval                           | <0.5 sec   | ○Full fuel  | Display range : 0 ~ 40 Ω<br>Display unit : 1 Ω  |
| ○Odometer                                   | Display range : 0 ~ 99,999 km<br>Display unit : 1 km   | ○Empty fuel   | Display range : 80 ~ 300 Ω<br>Display unit : 1 Ω  |
| ○Trip meter A、B                             | Display range : 0 ~ 9,999.9 km<br>Display unit : 0.1 km  | ●Clock  | 24H   |
| ○Motor oil maintenance millage              | Display range : 0 ~ 9,999.9 km<br>Display unit : 0.1 km  | ●Voltmeter  | Display range : DC 8.0 ~ 18.0 V<br>Display unit : DC 0.1 V  |
| ○Overspeed warning setting (LED Bar)        | Display range : 30 ~ 199 km/h<br>Display unit : 1 km/h   | ○Low voltage warning (excessive low & excessive high) | Display range : DC 8.0 ~ 12.5 V / DC 14.5 ~ 18.0 V<br>Display unit : DC 0.1 V   |
| ○Max. speed record                          | Display range : 0 ~ 199 km/h   | ●Throttle position sensor / TPS (LED Bar)             | Display range : 0 ~ 100 %   |
| ○Tire section width                         | Setting unit : 300 ~ 2,500 mm  | ○Mode   | Setting unit : REMORA-A、REMORA-B、REMORA-C   |
| ○Sensing point                              | Setting unit : 1 ~ 60 points   | ●Back light brightness                                | Display unit : 1(darkest) ~ 5(brightest)<br>Setting unit : Each level represents 20 %   |
| ●RPM  | Display range : 0 ~ 19,900 RPM<br>Display unit : 100 RPM   | ○Back light color                                     | Setting range : white、yellow、orange、red、purple、blue、light blue、green、Loop switch  |
| ●RPM (LED Bar)                              | Display range : 0 ~ 15,000 RPM<br>Display unit : 1,000 RPM   | ○LCD background                                       | Display unit : white, black   |
| ○Display interval                           | <0.5 sec   | ○RPM Bar  | Display unit : 0/5(close) ~ 5/5(brightest)  |
| ○Max. rotating speed                        | Display range : 0 ~ 19,900 RPM   | ○LCD Contrast   | Display unit : 1/5(light) ~ 5/5(heavy)  |
| ○Cycle / piston setting                     | Display range : 0.5、1、2  | ●Power TEST Target distance timer test                | Display unit : 20 ~ 500 m<br>Setting unit : 10 m  |
| ○Shift warning setting                      | Display range : 3,000 ~ 19,900 RPM<br>Setting unit : 100 RPM                                       | ○Power TEST Target timer test                         | Display unit : 5 seconds ~ 60 seconds<br>Setting unit : 5seconds  |
| ○Mode                                       | Setting range : REMORA-A、REMORA-B、REMORA-C   | ●Voltage  | DC 12 V   |
| ○Shift light warning setting                | Shift warning setting range : 3,000~15,000 RPM<br>Pre-shift warning setting range : -0 ~ 3,000 RPM | ○Operating temperature                                | -10 + 60 °C   |
| ●Engine hour                                | Display range : 0 ~ 999 hours 59 minutes   | ○Specification  | JIS D 0203 S2   |
| ●Digital thermometer (cylinder temperature) | Display range : 0 ~ 250 °C<br>Display unit : 1 °C  | ○Meter Size   | 296 x 175 x 93.6 mm   |
| ○Thermometer                                | Setting range : 50 ~ 250 °C<br>Setting unit : 1°C  | ○Meter Weight   | Around 557 g  |
| ○Max. temperature record                    | Display range : 0 ~ 250 °C   | ○Indicator  | Turn signal (Green light) Idling stop (Green light)<br>High beam (Blue light) High beam light (Red light)<br>Engine check (Yellow light) IMMO Signal (Red light)<br>Oil (Red light) Shift light indicator (Red light) |
| ●Fuel consumption                           | Display range : 12.1 ~ 17.5<br>Display unit : 0.1  |   |   |
| ○Over lean setting                          | Setting range : 10.1 ~ 19.9<br>Display unit : 0.1  |   |   |
| ○Over rich setting                          | Setting range : 10.0 ~ 19.8<br>Display unit : 0.1  |   |   |

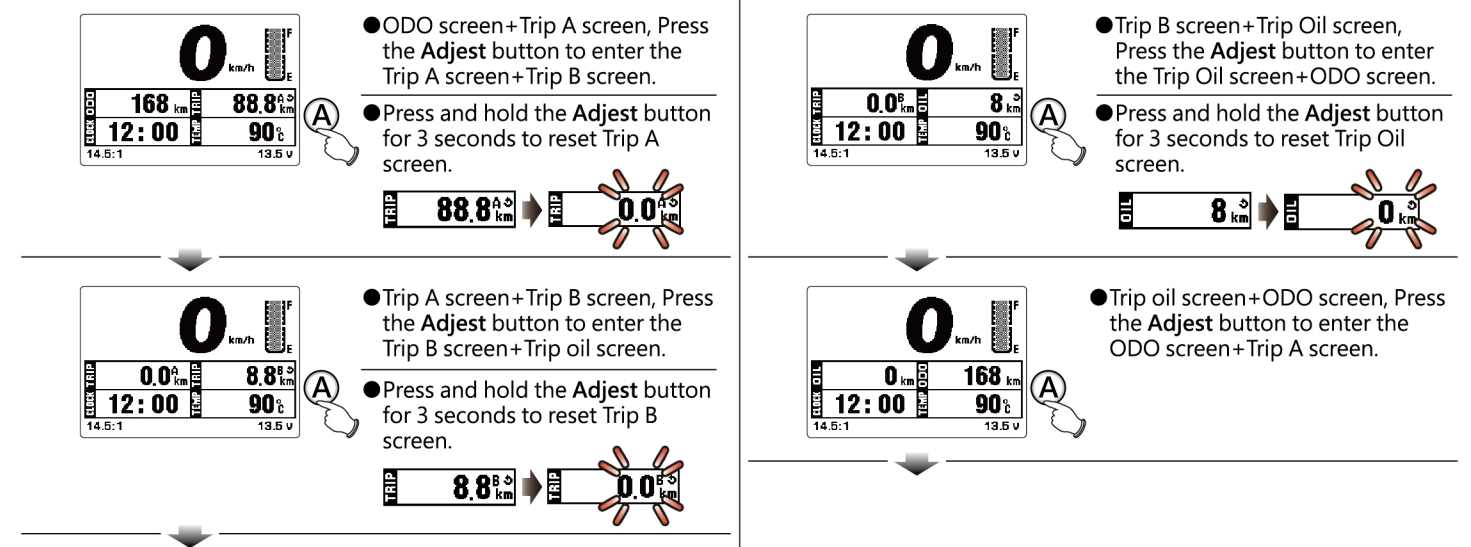
**NOTE** The IMMO indicator will flash once every 5 seconds during KEY OFF status as warning.  
The IMMO indicator will light on when low fuel during KEY ON status as warning.  
The IMMO indicator will light on when voltage abnormal during KEY ON status as warning.

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

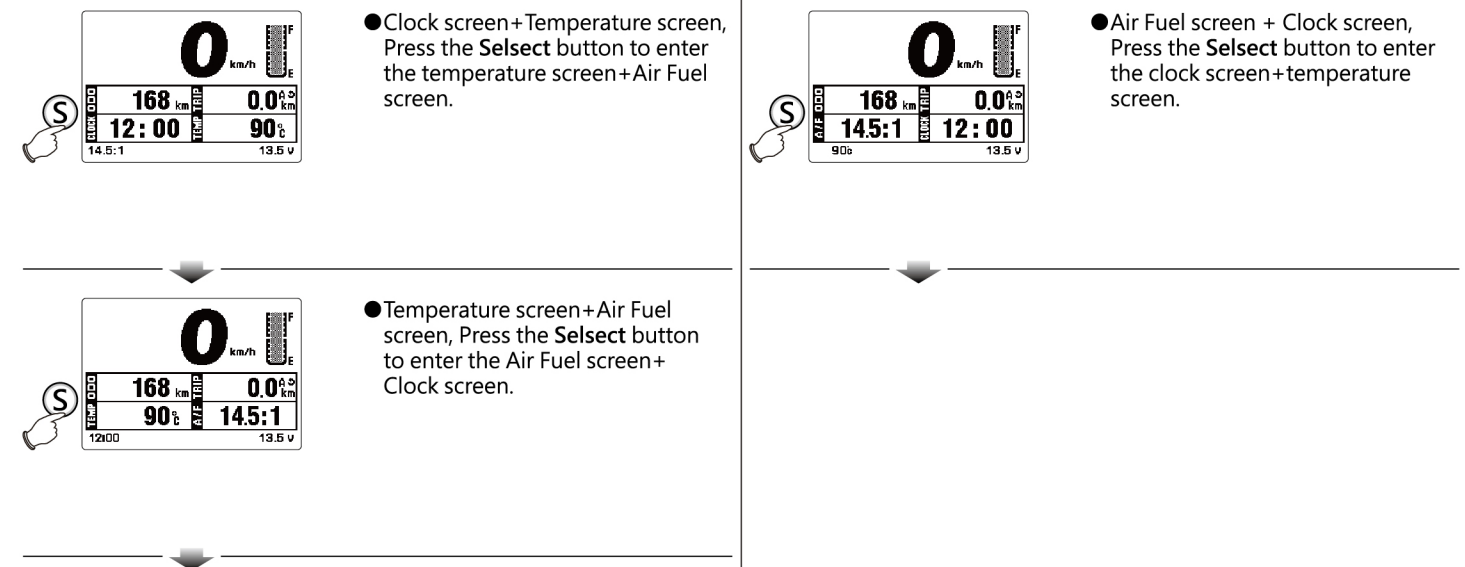
### 3-4 Main menu switching description



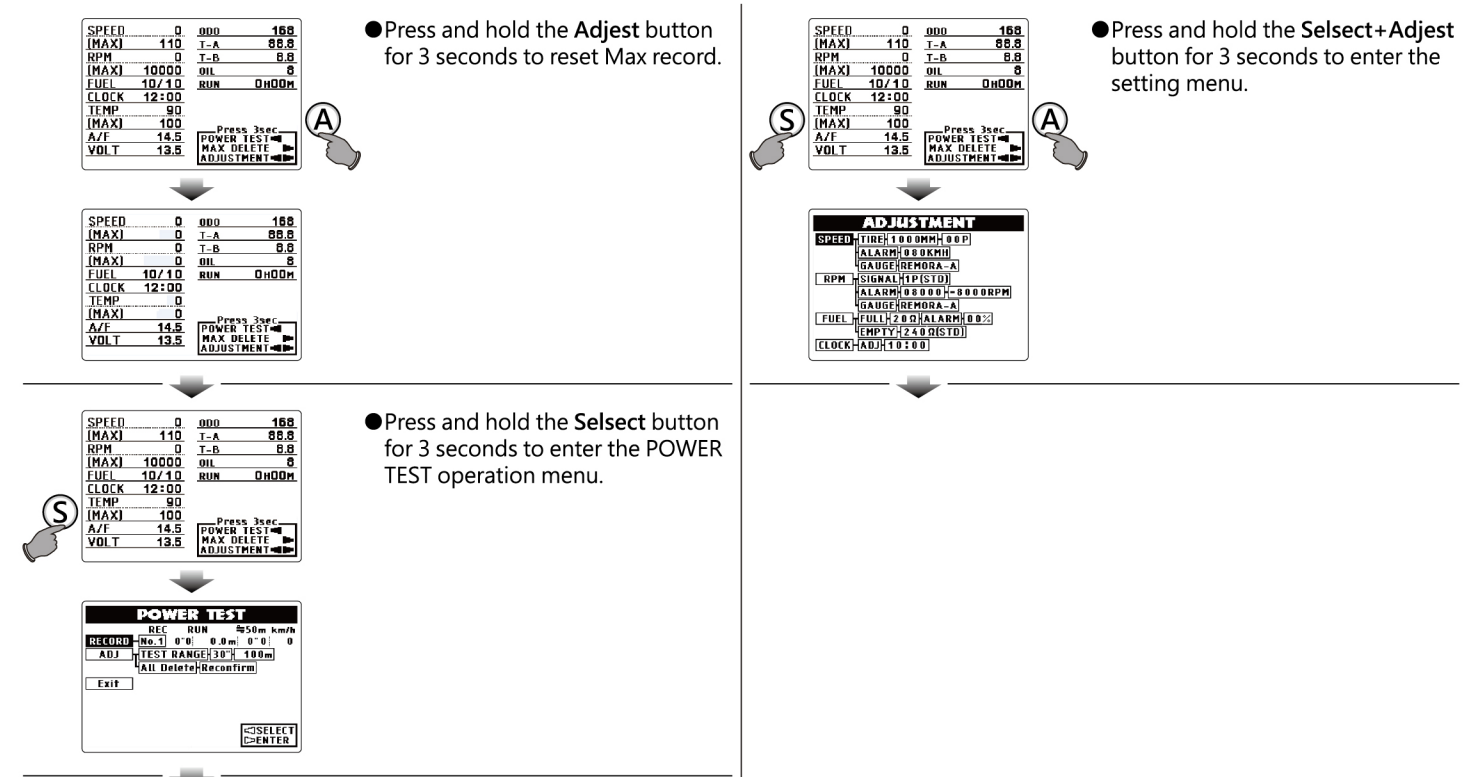
### 3-5 Function menu instruction (Adjust)



### 3-6 Function menu instruction (Selselect)



### 3-7 Full function menu instruction



## 4 Setting screen & POWER TEST operation setting

KOSO REMORA MULTI-METER FOR Honda Vario 150 Fi - Information for power test setting -



Please scan QR code for information.

## 5 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"> <li>● The power doesn't supply to the meter.</li> <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 12 V) to make the meter work.</li> </ul> | Fuel meter does not display or display error.      | <ul style="list-style-type: none"> <li>● Check your fuel tank.</li> <li>● Check the wiring harness.</li> <li>→ Is the wire connected properly.</li> </ul>                        |
| The meter shows incorrect information or keep performing system reboot. | <ul style="list-style-type: none"> <li>● Check the voltage of your battery, and make sure the voltage is over DC 12 V.</li> </ul>   | Thermometer does not display or display error.     | <ul style="list-style-type: none"> <li>● Make sure the ECU wire is connected properly.</li> <li>→ check the ECU wire is connected correctly.</li> </ul>                          |
| Speed meter does not display or display error.                          | <ul style="list-style-type: none"> <li>● Make sure the speed sensor is connected properly.</li> <li>→ check the speed sensor wire is connected correctly.</li> <li>● Check the setting.</li> <li>→ Please check the settings menu, the speed of the settings are correct.</li> </ul>                    | A/F ratio meter does not display or display error. | <ul style="list-style-type: none"> <li>● Make sure the ECU wire is connected properly.</li> <li>→ check the ECU wire is connected correctly.</li> </ul>                          |
| RPM meter does not display or display error.                            | <ul style="list-style-type: none"> <li>● Check the setting.</li> <li>→ Please check the settings menu, the RPM of the settings are correct.</li> <li>● Make sure the RPM wire is connected properly.</li> <li>→ check the RPM wire wire is connected correctly.</li> </ul>                              | TPS does not display or display error.             | <ul style="list-style-type: none"> <li>● Make sure the ECU wire is connected properly.</li> <li>→ check the ECU wire is connected correctly.</li> </ul>                          |
|   |   | The clock is incorrect.                            | <ul style="list-style-type: none"> <li>● Check the setting.</li> <li>→ Please check the settings menu, the clock settings are correct.</li> </ul>                                |
|   |   | Oil Temp Display Error.                            | <ul style="list-style-type: none"> <li>● Might be caused by abnormal power.</li> <li>→ Please disconnect the power for 5 seconds or longer, then reconnect the power.</li> </ul> |

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