



Thank you for purchasing KOSO GP style speedometer. before operating the unit, please read the instruction thoroughly and retain it for the future reference.

### Notice

1. The meter is apply for DC 12V.
2. For installation, please follow the steps described in manual. Any damage caused by wrong installation shall be imputed to the users.
3. To avoid the short circuit, please don't pull the wire when installing. Don't break or modify the wire terminal.
4. Do not disassemble or change any parts excluding the manual description.
5. 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.

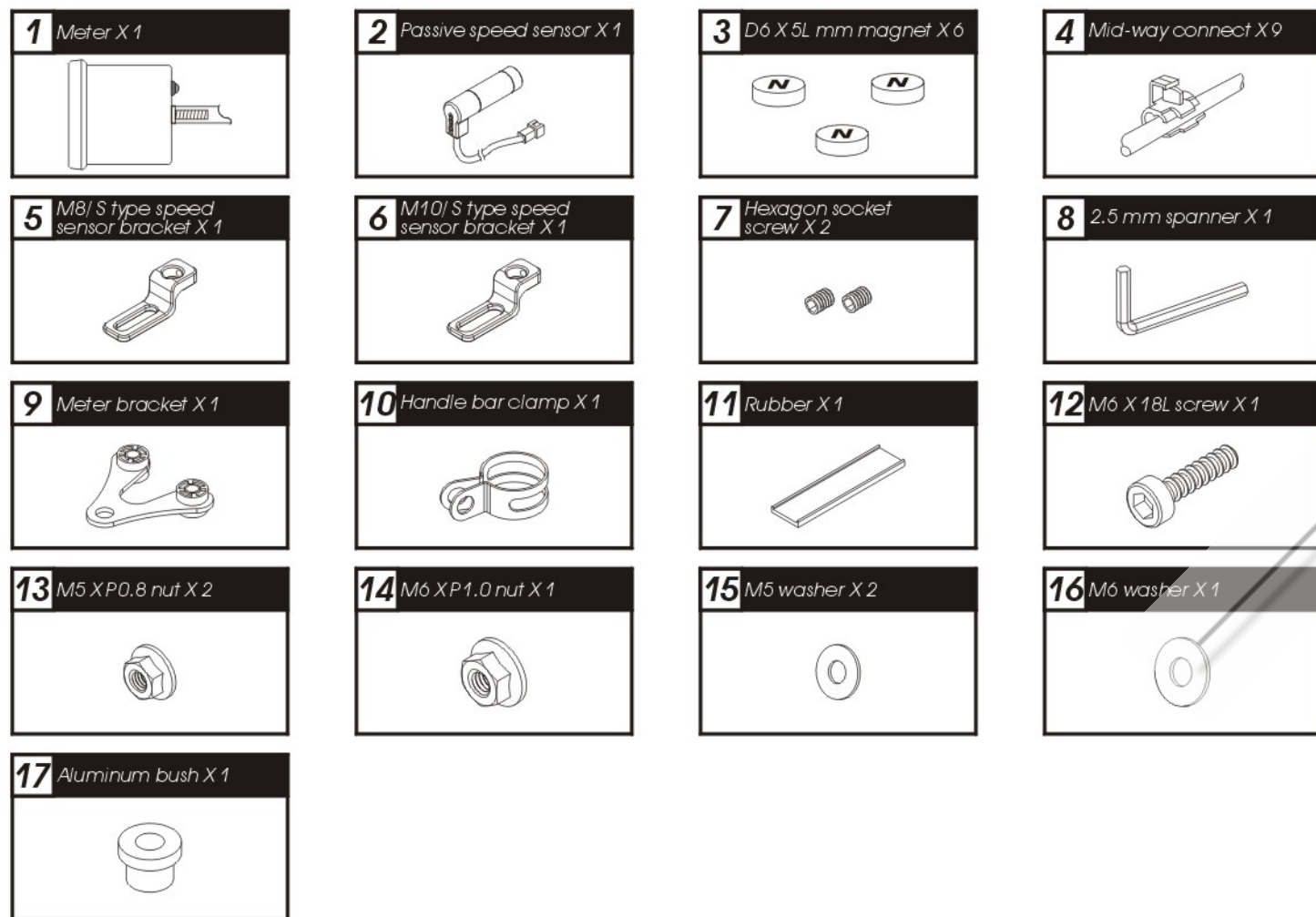
**▲** Some processes must be followed to avoid the affection caused by wrong installation.

**▲ 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.

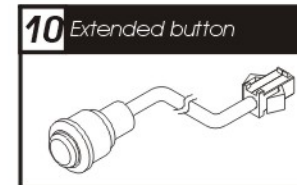
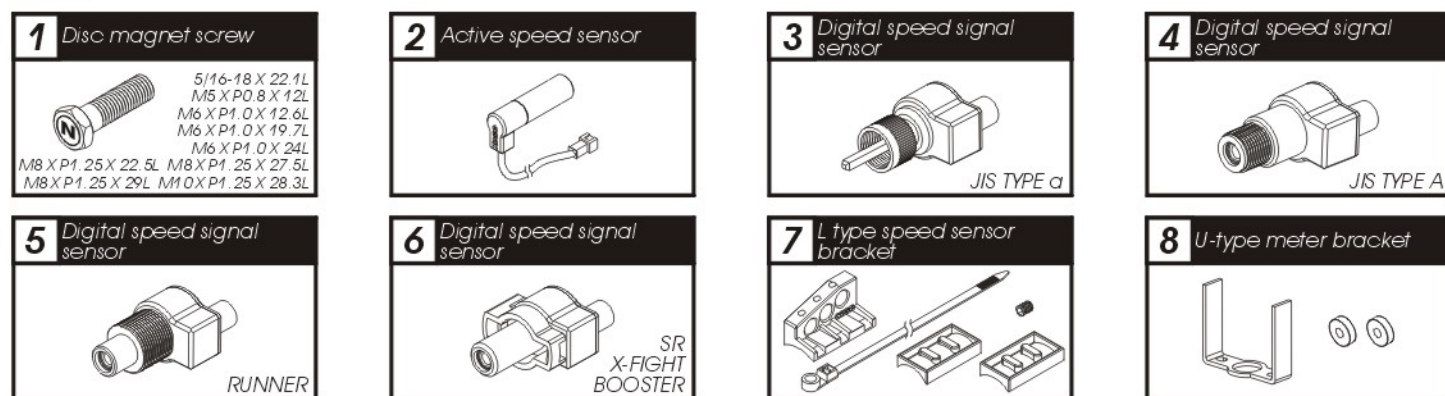


### 1-1 Accessory



**NOTE** Please contact the local distributor if the items you open are not the same, with the above-listed one.

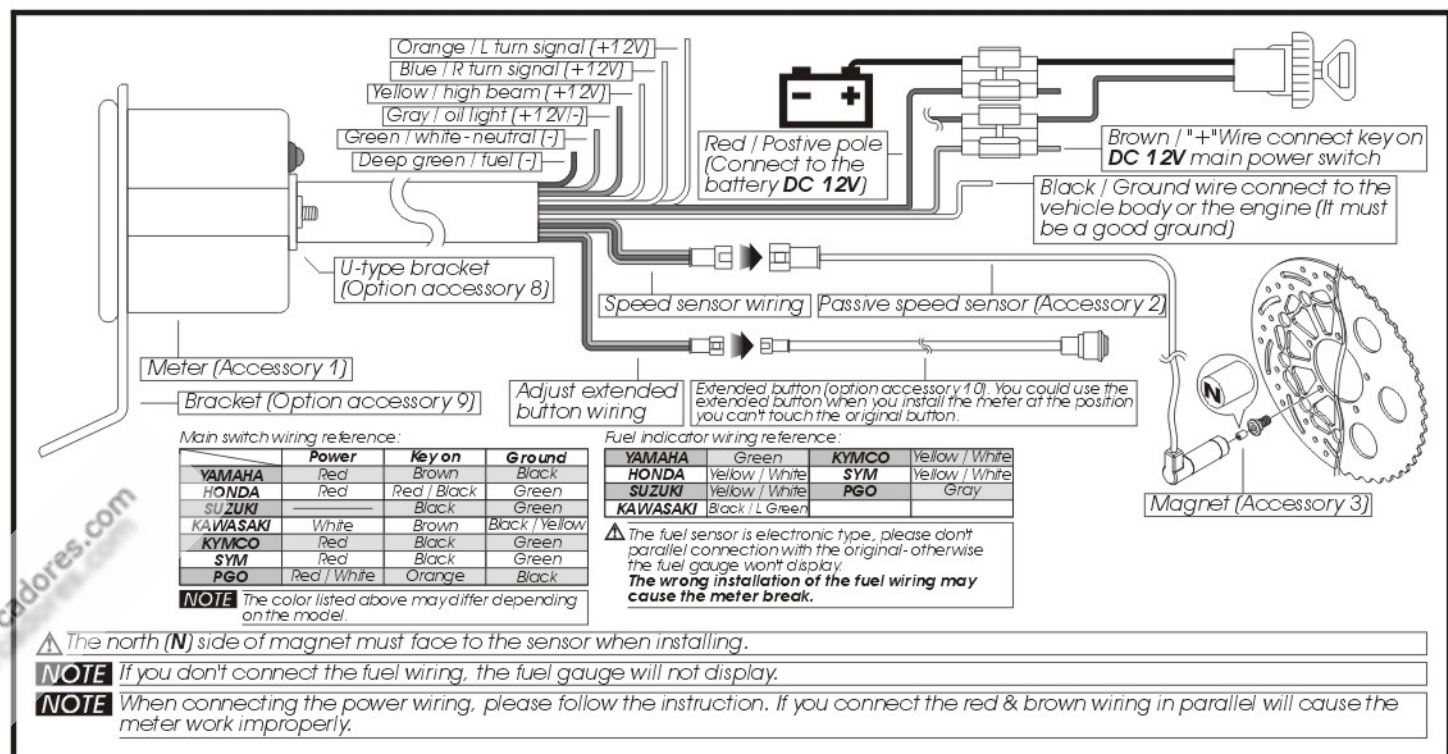
### 1-2 Option accessory



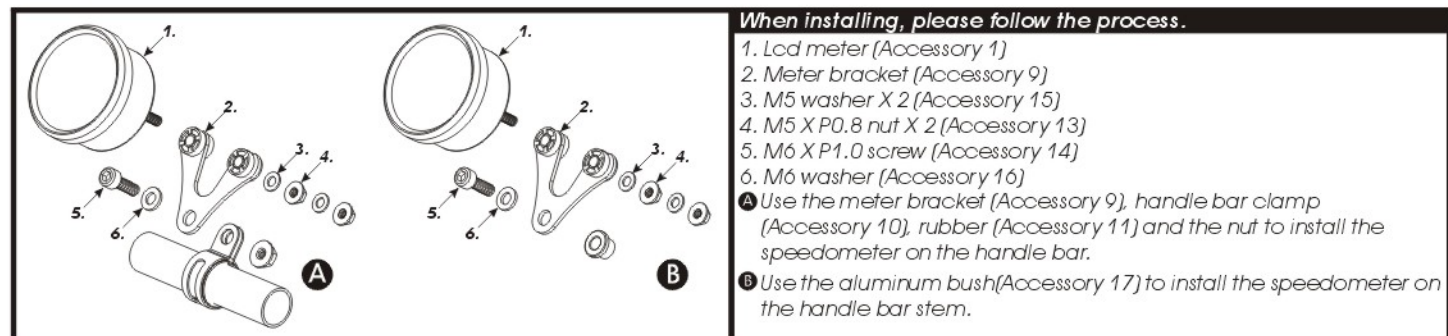
**NOTE** The advantage of the active speed sensor is as following. 1. You don't need to install the magnet in the opposite position of the speed sensor. 2. You could set up the sensor signal input up to 60 points, and the speed displayed will be more accurate. Please note that the speed sensor attached in the kit is passive speed sensor, and the maximum speed signal it could read is 6 points.

**NOTE** Some of the option accessories may not sell. For the details, please contact the local distributor.

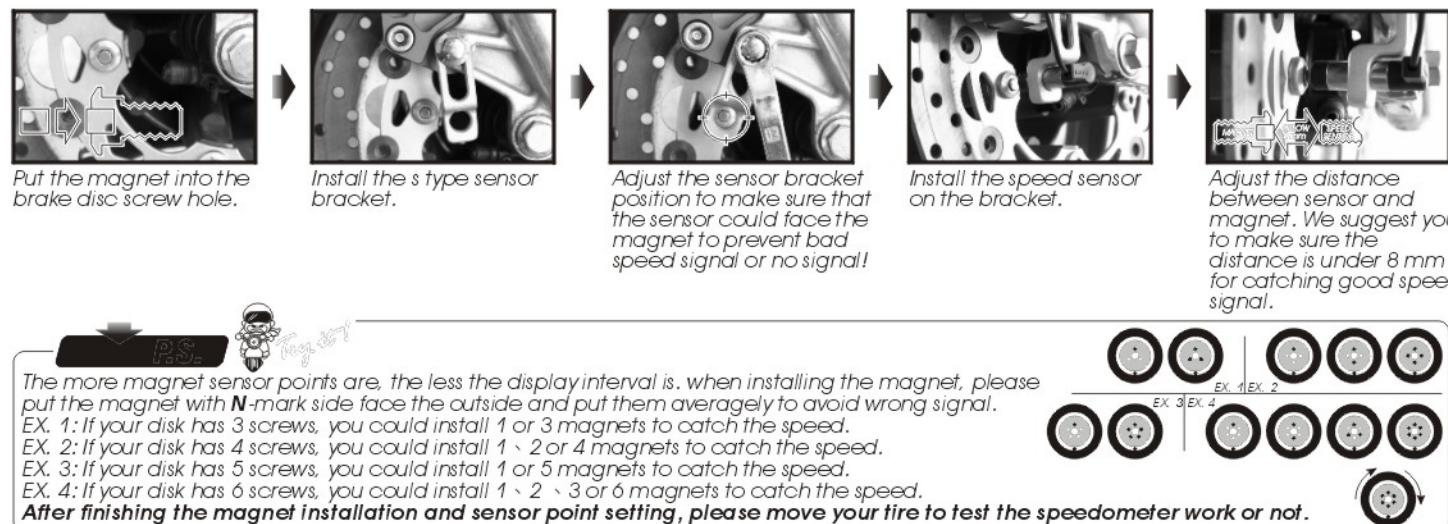
### 2-1 Wiring installation instructions



### 2-2 Installation instructions



### 2-3 Installation instructions





**3-1A.B Overview****Odo meter**

- Display range: 0~99999 km, reset automatically after 99999 km.
- Display unit: 1 km.

**Trip meter**

- Display range: 0~999.9 km, reset automatically after 999.9 km.
- Display unit: 0.1 km.

**Fuel symbol**

- Display range: 6 grids.
- The fuel reserve symbol will begin to flash if only one grid left.



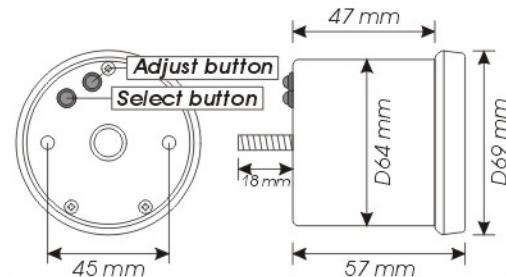
**Speedometer (160 km/h)**

- Display range: 0~160 km/h.
- Display unit: km.



**Speedometer (260 km/h)**

- Display range: 0~260 km/h.
- Display unit: km.

**Adjust button**

- In the main screen, to press the **Adjust button** to switch between odometer and trip meter.
- In the trip meter screen, to press down the **Adjust button** for 3 seconds to reset the trip meter.

**3-1C.D Overview**

High-contrast 160.260 km/h

**Odo meter**

- Display range: 0~99999 km, reset automatically after 99999 km.
- Display unit: 1 km.

**Trip meter**

- Display range: 0~999.9 km, reset automatically after 999.9 km.
- Display unit: 0.1 km.

**Fuel symbol**

- Display range: 6 grids.
- The fuel reserve symbol will begin to flash if only one grid left.



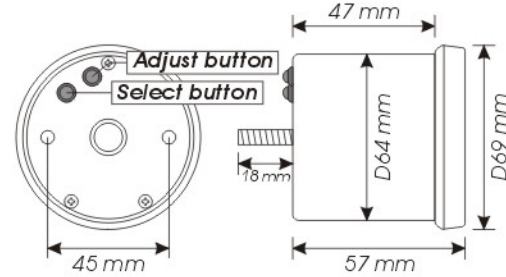
**Speedometer (160 km/h)**

- Display range: 0~160 km/h.
- Display unit: km.



**Speedometer (260 km/h)**

- Display range: 0~260 km/h.
- Display unit: km.

**Adjust button**

- In the main screen, to press the **Adjust button** to switch between odometer and trip meter.
- In the trip meter screen, to press down the **Adjust button** for 3 seconds to reset the trip meter.

**3-2 Specification**

- Tire circumference setting Setting range: 300~2,500 mm  
Setting unit: 1 mm • Sensor point: 1~60
- Fuel gauge Display in 6 grids (Around 1.6% for each grid)
- Fuel resistance setting 100 Ω • 510 Ω
- Effective voltage DC12V

- Effective temperature range -10~+60°C
- Meter standard JIS D 0203 S2
- Meter size D64 X 57 mm
- Meter weight Around 190 g

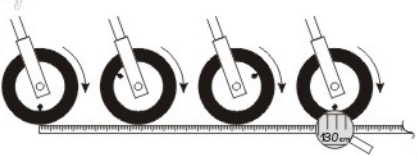
**NOTE** Design and specification are subject to change without notice!**NOTE** If you enter the setting screen for 30 seconds and don't press the button, it will back to the main screen automatically.**4-1 Tire circumference and sensor point setting**

In main screen, press down the **Select & Adjust X 3 seconds** to enter the Tire circumference and sensor point setting

**CAUTION!**

- Please measure the tire circumference (the tire you will install the sensor on) and make sure the number of magnet sensor point (You could install the magnet into the disc screw or the sprocket screw.)
- The speed displayed on the meter will be affected by the setting, please make sure the setting number is correct before you make the setting.

You could define the valve as the starting point and the terminal point to measure the wheel circumference with a measuring tape.



Press the **Adjust button** to change the setting.

⚠ Now the 0 is flashing!



Press the **Select button** for three times to enter the sensor point setting.  
EX. The tire circumference setting is changed from 1,000 mm to 1,300 mm.

EX. The tire circumference is 1,300 mm. Press the **Select button** to move to the digit you want to set.  
EX. Now the original setting is 1,000 mm.

⚠ Now the 1 is flashing!

**NOTE** The tire circumference setting range: 300~2,500 mm, and the digit you set is from left to right in order.

Next page



EX. The sensor point you want to set is 6. Press the **Select button** to move to the digit you want to set.  
EX. Now the original setting is 1 point.

⚠ Now the 0 is flashing!

**NOTE** The sensor point setting range: 1~60 points. You could change the setting from left to right.

**NOTE** Only when you use the active speed sensor, then you could make the sensor point setting over 6 points.



The active speed sensor could be installed besides the mental parts such as the disc screws, the brake disc to detect the gap of the disc, the gear plate to detect the frequency of the teeth on the gear. We will suggest you to use the method of detecting the disc screw for speed signal. The more the signals are, the better the speed accuracy is. Please note that the max signal the active speed sensor could read is 60 points per turn. **The LED on the active speed sensor will light up once the signal is detected.**

**4-2 The fuel gauge resistance setting**

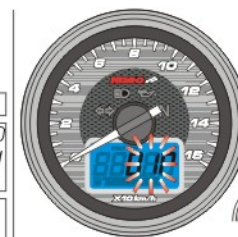
In main screen, press down the **Select & Adjust X 3 seconds** to enter the Tire circumference.



Press the **Select button** 3 times to enter the fuel gauge resistance setting screen.

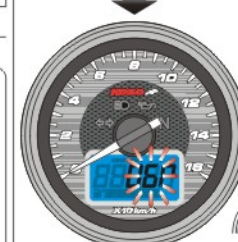


Usually the fuel gauge resistance is 100 Ω on YAMAHA system, and 510 Ω on HONDA system.

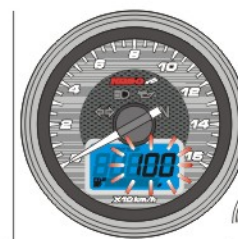


Press the **Adjust button** to choose the setting number.

⚠ Now the sensor point setting number is flashing!



Press **Select button** 2 times, to back the main screen.  
EX. the sensor point setting is changed from 1 to 6.



Press the **Adjust button** to choose the setting number.  
EX. Now the fuel gauge resistance setting is 100 Ω.

⚠ Now the resistance setting number is flashing!

**NOTE** The fuel gauge resistance setting range: 100 Ω, 510 Ω. If you don't install the fuel wiring, the fuel gauge will not display.



Press **Select button** 1 times, to back the main screen.  
EX. Now the fuel resistance setting is changed from 100 Ω to 510 Ω.

**5 Trouble shooting**

The following situation do not indicate malfunction of the meter. Please check the following before taking it in for repair.

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.               <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>	Fuel gauge does not appear or appear incorrectly.	<ul style="list-style-type: none"> <li>● Please check your fuel tank.               <ul style="list-style-type: none"> <li>→ Is there any fuel inside?</li> </ul> </li> <li>● Please check the wiring.               <ul style="list-style-type: none"> <li>→ Do you connect the wiring correctly?</li> </ul> </li> <li>● Please check the setting.               <ul style="list-style-type: none"> <li>→ Please refer to the manual 4-2.</li> </ul> </li> </ul>
The meter shows wrong information.	<ul style="list-style-type: none"> <li>● Please check the voltage of your battery, and make sure the voltage is over DC 12V.</li> <li>● Please make sure the speed sensor is connected correctly.</li> <li>● Please check the tire-size setting.               <ul style="list-style-type: none"> <li>→ please refer to the manual 4-1.</li> </ul> </li> </ul>	The odometer and trip meter is not accumulated or accumulated wrong data. When switch off, the needle doesn't return to 0.	<ul style="list-style-type: none"> <li>● It is possible that the positive wire is connected wrongly.               <ul style="list-style-type: none"> <li>→ Please check is the red positive wire connect to the permanent power or battery and the brown positive wire is connected to the key on switch positive pole.</li> </ul> </li> <li>● It is possible that the permanent power wire is not connected well.               <ul style="list-style-type: none"> <li>→ Please check the red positive wire is connect well or not.</li> </ul> </li> </ul>

※If still can't solve the problems according to the steps above, please contact with distributors or us.