



# INSTRUCTION



Thank you for purchasing **KOSO XR-SRN+ DIGITAL LCD meter**. Before installing, please check the instruction carefully.

## Notice

- 1.The lcd 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

<b>1</b> Lcd meter X 1	<b>2</b> RPM wire set (Type A) X 1	<b>3</b> RPM wire set (Type B) X 1	<b>4</b> Temp sensor wire set X 1
<b>5</b> PT 1/8 water temp sensor X 1	<b>6</b> Digital speed signal sensor X 1	<b>7</b> D6 X 5L mm magnet X 6	<b>8</b> Connect terminal X 12
<b>9</b> M8/ S type speed sensor bracket X 1	<b>10</b> M10/ S type speed sensor bracket X 1	<b>11</b> M5 x 5L Hexagon socket screw X 2	<b>12</b> 2.5 mm spanner X 1
<b>13</b> 4 mm spanner X 1	<b>14</b> Meter bracket (for handle bar)	<b>15</b> M5 washer X 3	<b>16</b> M5 X 12L screw X 2
<b>17</b> M5 X 18L screw X 3			

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

## 1-2 Option accessory

<b>1</b> Oil temp sensor adapter M12 X P1.5 X 15L M14 X P1.25 X 15L M14 X P1.5 X 15L M16 X P1.5 X 15L M18 X P1.5 X 15L M20 X P1.0 X 15L M20 X P1.5 X 15L	<b>2</b> Water temp sensor adapter M14 M16.M18 M22.M26 mm	<b>3</b> Cylinder head temp sensor M10. M14 mm	<b>4</b> Temp sensor M10 X P1.0 M12 X P1.5 M14 X P1.25 M14 X P1.5 M16 X P1.5 / M18 X P1.5
<b>5</b> Disc magnet screw 5/16-18 X 22.1L M5 X P0.8 X 12L M6 X P1.0 X 12.6L M6 X P1.0 X 19.7L M6 X P1.0 X 24L M8 X P1.25 X 22.5L M8 X P1.25 X 27.5L M8 X P1.25 X 29L M10 X P1.25 X 28.3L	<b>6</b> Meter bracket (for stem)		

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

## 2-1 Wiring installation instructions

**Main switch wiring reference:**

	"+" Color	"-" Color
YAMAHA	Brown	Black
HONDA	Brown	Black
SUZUKI	Black	Green
SYM	Black	Green

**Fuel indicator wiring reference:**

	YAMAHA	HONDA	SUZUKI	SYM
Green	Yellow/white	Yellow/white	Yellow/white	Yellow/white

**NOTE** The color listed above may differ depending on the model.

**CAUTION!** The fuel sensor is electronic type, please don't parallel connection with the original otherwise the fuel gauge won't display. **The wrong installation of the fuel wiring may cause the meter break.**

**NOTE** When connecting the power wiring, please follow the instruction. If you connect the red & brown wiring in parallel will cause the meter work improperly.

**CAUTION!** We provide 3 ways to get the RPM signal from spark plug wire, the coil, or the pick-up on ignition control box. If there are interruptions, you could change the sensor wiring to get better signal.

**CAUTION!** Just wrap the RPM wire (A) around the spark plug wire. Do not connect them! We also suggest you to replace the "R" type spark plug in the mean time to get better signal.

For the model more than one piston, please catch the signal from the first cylinder coil wire.

For the model with more than one piston, please just connect the rpm sensor wiring to one of the ignition coil positive electrodes.

**Please make sure that the ignition coil positive electrode before connecting the RPM sensor wiring! Wrong installation will cause the meter broken!**

**NOTE** If you don't connect the fuel wiring, the fuel gauge will not display.

**NOTE** The north (N) side of magnet must face to the sensor when installing.

## 2-2 Installation instructions

- Put the magnet into the brake disc screw hole.
- Install the s type sensor bracket.
- Adjust the sensor bracket position to make sure that the sensor could face the magnet to prevent bad speed signal or no signal!
- Install the speed sensor on the bracket.
- Adjust the distance between sensor and magnet. We suggest you to make sure the distance is under 8 mm for catching good speed signal.

**P.S.** You could make the speed more precise by adding the magnets. when installing the magnet, please put the magnet with N-mark side face the outside and put them averagely to avoid wrong signal.

EX. 1: If your disk has 3 screws, you could install 1 or 3 magnets to catch the speed.

EX. 2: If your disk has 4 screws, you could install 1 - 2 or 4 magnets to catch the speed.

EX. 3: If your disk has 5 screws, you could install 1 or 5 magnets to catch the speed.

EX. 4: If your disk has 6 screws, you could install 1 - 2 - 3 or 6 magnets to catch the speed.

**After finishing the magnet installation and sensor point setting, please move your tire to test the speedometer work or not.**

## 3-1 Basic function instruction

**Fuel levels**

- Display range: 10 levels.
- The fuel reserve symbol begins to flash if only 3 grids left.

**Water temperature levels**

- Display range: 20~120°C (68~248°F), and display as 10 level.
- Display unit: one level is similar to 10°C (50°F).

**Odo meter**

- Display range: 0~99999.9 km (mile), reset automatically after 99999.9 km.
- Display unit: 0.1 km (mile).

**Trip meter A.B**

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

**Tachometer**

- Display range: 0~18,000 RPM.
- Display unit: 100 RPM.

**Thermometer**

- Display range: 0~120°C (32~248°F).
- Display unit: 0.1°C (°F).

**Clock**

- 24H.

**Volt meter**

- Display range: DC 8~18 V

**MAX record**

- The meter will record the top speed, RPM and temperature automatically.

**Speedometer**

- Display range: 0~360 km/h (0~225 MPH)
- Display unit: km/h (MPH).



3-2 Function, setting instruction

●Speedometer	Display range: 0~360 km/h (0~225 MPH) Display unit: km/h & MPH for alternative
○Display interval	<0.5 second
○Odometer	0~99999.9 km, reset automatically after 99999.9 km (mile)
○Trip A,B meter	0~999.9 km, reset automatically after 999.9 km (mile)
○Top speed record	Display range: 0~360 km/h (0~225 MPH)
○Tire circumference	Setting range: 300~2,500 mm Setting unit: 1 mm · Sensor point: 1~20
●Tachometer	Display range: 0~18,000 RPM ; Display unit: 100 RPM
○Display interval	<0.5 second
○MAX RPM record	Display range: 0~18,000 RPM
○The RPM input signal number setting	Setting range: 0.5, 1~24.
○The RPM input pulse	Setting range: Hi (The positive wave pulse), Lo (The negative wave pulse)
●Temperature	Display unit: °C & °F for alternative
●Digital water temperature	Display range: 0~120°C (32~248°F) Display unit: 0.1°C (°F)
●Water temperature levels	Display range: 20~110°C (68~230°F), 10 level Display unit: 1 level=10°C (50°F)
○Top temperature record	Display range: 0~120°C (32~248°F)

●Fuel levels	Display range: 10 levels Setting range: 100 Ω, 250Ω, 510 Ω, 1200Ω, SW
○Fuel warning	Setting range: 10~50% ; Setting unit: 10%
●Clock	24 H
●volt meter	Display range: DC 8~DC 18 V. Flashing warning when voltage lower than 11.5 V or higher than 15.5 V.
●Top speed timer	The record including, Speed : 0~360 km/h (0~225 MPH). Distance : 0~999 m (0~3280 feet). Timer : 0~9'59"99 seconds.
●Effective voltage	DC 12 V
●Effective temperature range	-10~+60°C
●Meter standard	JIS D 0203 D3
●Meter size	116.3 X 72.4 X 32.3 mm
●Meter weight	Around 286 g
●Indicator light	Neutral (green light ), High beam (blue light ) Low beam (green light), Winker (green light) Hazard (Red light), Oil pressure (Red light) Water temperature light (Red light)

NOTE Design and specification are subject to change without notice!

3-3 The button function instruction

Press the Select button

1.In main screen, press the **Select button** to choose the display of clock, volt, water temperature.

2.In setting screen, press the **Select button** to choose the function you want to set.

Press the Adjust button

1.In main screen, press the **Adjust button** to choose the display of odometer, trip A, trip B, RPM or the MAX record.

2.In power test screen, press the **Adjust button** to reset the record, stop the testing, or restart the test

3.In setting screen, press the **Adjust button** to make the number setting.

Hold pressing the Adjust button

1.In setting screen, to add the setting value fast.

Hold pressing the Adjust button for 3 seconds

1.In main screen, hold pressing the **Adjust button for 3 seconds** to reset the trip A, trip B, or the MAX record.

Hold pressing the Select button for 3 seconds

1.In main screen, hold pressing the **Select button for 3 seconds** to switch between the fuel levels screen and the water temperature levels screen.

2.In power test screen, hold pressing the **Select button for 3 seconds** to back to the main screen.

3.In setting screen, hold pressing the **Select button for 3 seconds** to back to the main screen.

Press the Select + Adjust button


1.In main screen ,press the **Select + Adjust button** to enter the power test screen.

Press the Select + Adjust button for 3 seconds


1.In main screen ,press the **Select + Adjust button for 3 seconds** to enter the setting screen.

CAUTION! For safety reason - only when the vehicle is stop, then you could adjust the setting or operate the function.

3-4 Main function switch instruction (Adjust button)




●In main screen (ODO), press the **Adjust button** one time to enter the Trip A screen.




●In Trip A screen, press the **Adjust button** one time to enter the Trip B screen.

●Hold pressing the **Adjust button for 3 seconds** to reset the Trip A record.




●In Trip B screen, press the **Adjust button** one time to enter the tachometer screen.

●Hold pressing the **Adjust button for 3 seconds** to reset the Trip B record.




●In tachometer screen, press the **Adjust button** one time to enter the Max. record screen.




●In Max. Record screen, press the **Adjust button** one time to go back to the main screen (ODO).

●Hold pressing the **Adjust button for 3 seconds** to reset the Max. record.

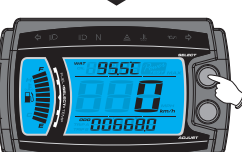
3-5 Main function switch instruction (Select button)



●In clock screen, press the **Select button** one time to enter the voltage screen.




●In voltage screen, press the **Select button** one time to enter the water temperature screen.




●In water temperature screen, press the **Select button** one time to go back to the clock screen.

3-6 Main function switch instruction (Select button x 3)



●In main screen, hold pressing the **Select button for 3 seconds** to switch between the fuel levels screen and the water temperature levels screen.



NOTE If you don't install the fuel wiring, the fuel will not display.



WARNING! Please use this function at racetrack to avoid traffic accidents.

In main screen, press the **Select button** one time to enter the top speed test screen.

NOTE Please only start the test when the bike is completely stop.


If you had the previous power test record , it will display the record first. You must clear the record before starting a new test.

Press the **Adjust button** to clear the record and enter the top speed test screen.

EX. Now you could see the record you have before. It displays the top speed is 180 km/h, the distance to reach the top speed is 510 m, the time you need to reach the top speed is 10.20 seconds.

If you just want to check the record, you could press the **Select button for 3 seconds** to back to the main screen.

When the bike moves, the timer will start automatically.

Now the  is flashing!

NOTE The top speed test range:  
Speed: 0~360 km/h (0~225 MPH).  
Distance: 0~999m (3280 feet) .  
Timer: 0~9'59"99 seconds.

The setting unit will change together with the speed unit setting (4-1).

3-8 Setting screen instruction

●In setting screen,press the **Adjust button** to choose the setting screen. The setting screen is in order as below: unit setting (speed, temperature), tire circumference and sensing point, PRM input pulse, fuel gauge, clock, backlight brightness, internal odometer display, external odometer setting.

NOTE If you don't take any action in 30 seconds, the screen will return to the main screen automatically.

Main screen

Main screen

external odometer setting

When you reach the top speed (180 km/h), the meter will stop counting the distance (510 m), and time (10.20 seconds).

If you just want to use the function one time, press down the **Select button for 3 seconds** to save the records and back to the main screen.

If you want to test it again, press the **Adjust button** to clear the record and enter the target speed timer test screen again.



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.	●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 <b>(DC 12V)</b> to make the meter work.	<b>Tachometer does not appear or appear incorrectly.</b>	● <b>Please check the RPM sensor wiring is connected correctly.</b> ● <b>Please check the spark plug is "R" type or not. If not, please replace the spark plug with the "R" type spark plug.</b> ● <b>Please check your setting.</b> → <b>Please refer to the manual 4-3.</b>
<b>The meter shows wrong information.</b>	● <b>Please check the voltage of your battery, and make sure the voltage is over DC 12V.</b>	Fuel gauge does not appear or appear incorrectly.	●Please check your fuel tank. →Is there any fuel inside ? ●Please check the wiring. →Do you connect the wiring correctly ? ●Please check the setting. →Please refer to the manual <b>4-4.</b>
Speed does not appear or appear incorrectly.	●Please make sure the speed sensor is connected correctly. ●Please check the tire-size setting. →please refer to the manual <b>4-2.</b>	<b>Temp does not appear or appear incorrectly.</b> The clock is incorrect.	● <b>Please check the sensor.</b> → <b>Does the wiring break or falling off ?</b> ●Do you connect the wiring correctly. →Please check the positive wire (red) connects to the battery, and main switch positive wiring (brown) connects to the main switch.

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