





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 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

A WARNING! Some processes must be followed to avoid damages to yourself or the public

A CAUTION! Some processes must be followed to avoid the damage to the vehicle

000 Flash Light on

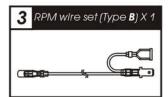
button

Press the Press down the button one time for 3 seconds

1-1 Accessory





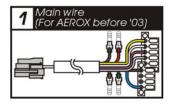


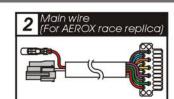




NOTE Please check if the accessories come with the meter is the same as above when you open the box. If not, please contact the local

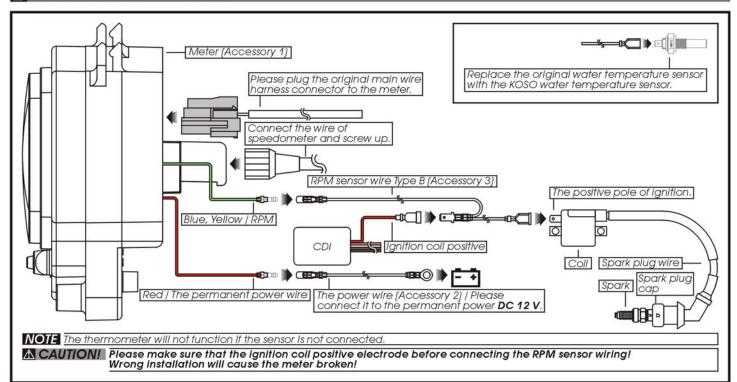
1-2 Option accessory



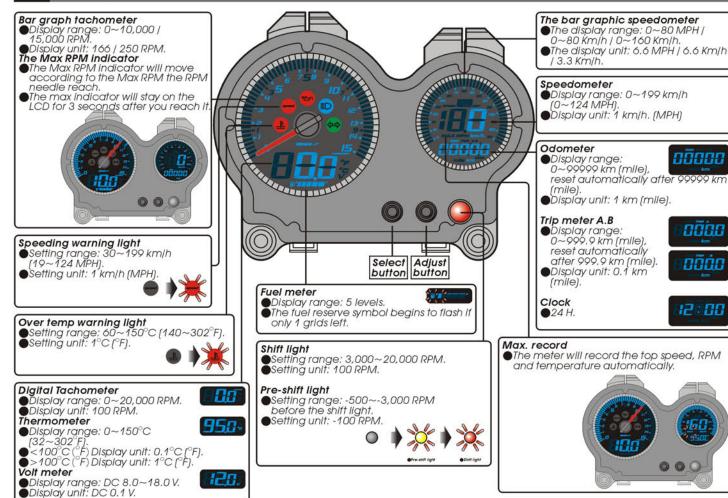


NOTE Some of the optional parts may be unsold in your area, please check it with the local distributor for the further information.

2 Wiring installation instructions



3-1 Overview



3-2 Function, setting instruction

Speedometer	Display range: 0~199 km/h (0~124 MPH)	Thermometer	Display range: 0~150°C (32~302°F)	
	Display unit: 1 km/h (MPH)		<100°C(°F)Display unit: 0.1°C (°F)	
Bar graph speedometer	Display range: 0~80 MPH 80 160 km/h		>100°C(°F)Display unit: 1°C (°F)	
	Display unit: 6.6 MPH 6.6 3.3 km/h	ODIsplay internal	< 0.5 second	
Display Internal	< 0.5 second	Over temp warning light	Setting range: 60~150°C (140~302°F)	
)Odometer	Display range: 0~99999 km (mile),		Setting unit: 1°C (°F)	
	reset automatically after 99999 km (mile)	Top temperature record (Max.) Display range: 0~150°C (32~302°F)		
	Display unit: 1 km (mile)	●Fuel meter	Display range: 5 levels	
Trip meter A.B	Display range: 0~999.9 km (mile),		Display unit: Each level represents 20 %	
	reset automatically after 999.9 km (mile)	Olnsufficient fuel warning	The fuel reserve symbol begins to flash if	
	Display unit: 0.1 km (mile)		Only 1 grids left	
Speeding warning light	Setting range: 30~199 km/h (19~124 MPH)	● Clock	24 H	
		●Volt meter	Display range: DC 8.0~18.0 V	
	Setting unit: 1 km/h (MPH)		Display unit: DC 0.1 V	
Top speed record (Max.)	Display range: 0~199 km/h (0~124 MPH)	 Backlight brightness adjust 	Setting range: 1-5 (Darker)~5-5 (Brighter)	
Tire circumference	Setting range: 50~210 %		Setting unit: adding 20 % each	
compensation	Setting unit: 1 %		adjustment (5 segments)	
Needle tachometer	Display range: 0~10,000 15,000 RPM	●Backlight color change	Setting range: red, orange, yellow,	
	Display unit: 166 / 250 RPM		green, blue, light blue, purple, white	
Digital tachometer	Display range: 0~20,000 RPM	■Target speed timer	Setting range: 30~195 km/h	
	Display unit: 100 RPM		(20~120 MPH) Setting unit: 5 km/h (MPH)	
Bar graph tachometer	Display range: 0~10,000 15,000 RPM	●Target distance timer	Setting range: 1/32~30/32 mile	
	Display unit: 166 / 250 RPM	15 may 155	(50~1,500 M)	
Display internal	< 0.5 second		Setting unit: 1/32 mile (50 M)	
Shift light	Setting range: 3,000~20,000 RPM Setting unit: 100 RPM	■Effective voltage	DC 12 V	
		●Effective temperature rang	ge -10~+60°C	
Pre-shift light	Setting range: -500~-3,000 RPM before	■Meter standard	JIS D 0203 S2	
	the shift light	●Meter size	169.4 X 131.2 X 89.8 mm	
	Setting unit: -100 RPM	■Meter weight	Around 422 g	
Max. RPM record (Max.)	Display range: 0~20,000 RPM	●Indicator light color	High beam-blue, Turn signal-green	
The RPM input signal number setting			Oll-red, Speeding-red	
	Setting range: 0.5, 1, 1.5, 2, 2.5, 3, 4, 5, 6		RPM shift light yellow / red	
The RPM input pulse	Setting range: HI (The positive wave pulse)		Temperature alarm-red	

Lo (The negative wave pulse)

NOTE Design and specification are subject to change without notice!

3-3 Button function instruction

- Press the Select button for one time
 In main screen, press the Select button to switch the displayed function between digital trachometer, thermometer and the voltage meter. (3-5)
 In Power test screen, press the Select button to choose the test you want to use. (5)
 In setting main screen, press the **Select button** to enter or exit the setting function. (4)
- In setting screen, press the **Select button** to move the setting digit. (4) When the meter is off, turn on the clock function. (3-4)

- Hold pressing down the Select button for 3 seconds.

 In main screen, hold pressing down the Select button for 3 seconds to switch the bar graphic tachometer range. [3-5]

 In power test screen, hold pressing down the Select button for 3 seconds to return to the main screen. [5]
- In setting screen, hold pressing down the **Select button** for 3 seconds to return to the main screen. (4)

- Press the Adjust button for one time.

 In main screen, press the Adjust button one time to to switch the displayed function between adometer. Into A, TripB, clock, and the Max record. (3-6)
 In power test screen, press the Adjust button one time to reset the record, stop the test, or back to the stand-by screen. (5)
 In the main setting screen, press the Adjust button to switch between the setting functions. (3-8)
 In setting screen, press the Adjust button to adjust the setting value. (4)
- In setting screen, press the **Adjust button** to adjust the setting value. (4) When the meter is off, turn on the clock function. (3-4)

- Hold pressing down the Adjust button for 3 seconds.

 In main screen, hold pressing down the Adjust button for 3 seconds to rest the Trip A, Trip B, or the Max record. Depending on which function you are. (3-6) In main screen (with odometer displayed), hold pressing down the Adjust button for 3 seconds to adjust the bar graphic speedometer range and unit.
- on setting screen, hold pressing down the **Adjust button** for 3 seconds to return to the main screen. (4)

Hold pressing the Adjust button.

●in setting screen, hold pressing the Adjust button to increase the setting value faster. (4)

Press the Select & Adjust button together for one time.

• Press the both Select & Adjust buttons together for one time to enter the power test function.(5)

Hold pressing the Select & Adjust button for 3 seconds.

Hold pressing the both Select & Adjust buttons for 3 seconds to enter the setting screen. [4]

3-4 Stand by function instruction



When the meter is off, press the button once to turn on the clock function.



●The clock will display 30 seconds after wake up.

3-5 The Select button function in main screen



- Now you are in the digital tachometer display, and press the Select button once to switch the digital tachometer to thermometer.
- In the main screen, hold pressing down the Select button for 3 seconds to change the bar





- In the digital thermometer screen, press the **Select button** once to switch the thermometer to voltage meter.
- ...In thermometer screen, hold pressing down the Select button for 3 seconds to switch the temperature unit between metrical and imperial.





In voltage meter screen, press the Select **button** once to switch the voltage meter back to the digital tachometer.

3-6 The Adjust button function in main screen



- ●In odometer screen, press the Adiust button one time to switch the odometer to
- In main screen with the odometer function, hold pressing down the Adjust button for 3 seconds to switch the bar graphic speedometer range and the speed unit.





- In Trip A screen, press the Adjust button for once to switch the Trip A to Trip B.
- In Trip A screen, hold pressing down the Adjust button for 3 seconds to reset the





- ●In Trip B screen, press the Adjust button once to switch the Trip B to the Max record
- ■In Trip B screen, hold pressing down the Adjust button for 3 seconds to reset the





In Clock screen, press the Adjust button once to switch the clock to the max record.



- In Max record screen, press the Adjust **button** once to return to the odometer.
- ●In Max record screen, hold pressing down the Adjust button for 3 seconds to reset the



3-7 Back light color change instruction



- In main screen, switch the high / low beam switch
- one time to change the backlight color.

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



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.



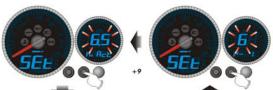


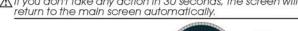
3-8 Setting screen instruction



In setting screen, press the **Adjust button** to switch to the function you want to set. The setting function is in order as target speed timer, target distance timer, the speeding warning setting, the shift light setting, the pre-shift light, the over temperature warning light, the tire circumference, the RPM input signal setting, the clock setting, the backlight brightness setting. brightness setting.

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











4 Entering setting screen



In main screen, hold pressing down both Select & Adjust button for 3 seconds to enter the setting screen.



- After the setting, press the Select button
- once to exit the function setting.

 EX. Now the target speed timer is changed from 0~30 km/h to 0~110 km/h.



In setting screen, press the Adjust button once to choose the target speed timer setting.



●Press the **Adjust button** once to switch to the target distance timer setting screen.

Now the 1 on the LCD is flashing!



4-1 The target speed timer setting

- Press the Select button to enter the target speed timer setting.
- ÉX. Now the target speed timer setting is $0 \sim 30 \, \text{km/h}$

Now the 1 on the LCD is flashing!

The speed unit in this setting will be changed together with the setting you made at 3-6.

you just want to make this function setting, you ould press down the **Select button** for 3 seconds to

●If you press the Select button one more time, you will back to the main setting screen.





Setting range: 30~195 km/h (20~120 MPH). Setting unit: 5 km/h (MPH).



- **4-1.5** The target distance timer setting ●Press the **Select button** to enter the target
- distance timer setting ●EX. Now the target distance timer setting is 1/32 mile (50 M).

 \triangle Now the LCD is changed to 1.5 and keeps flashina!

If you press the Select button one more time, you will back to the main setting



- ●EX. You want to set the target distance setting at 2/32 miles (100 meters.)

 Press the Adjust button to adjust the value.
- Now the setting value is flashing!

NOTE Setting range: 1/32~30/32 mile (50~1,500 M).

Setting unit: 1/32 mile (50 M)





●EX. After checking the reference table, we need to set the RPM input signal

Press the Adjust button to adjust the value. Now the digit under setting is flashing!

NOTE The RPM input signal setting value is as 0.5, 1,1.5,2,2.5,3,4,5,6.

The setting	the corresponding stroke and pistons number.		The corresponding RPM signal number per ignition	
0.5	_	4C-1P	2 RPM signals per ignition.	
1	2C-1P	4C-2P	1 RPM signal per ignition.	
1.5	_	4C-3P		
2	2C-2P	4C-4P	1 RPM signal per 2 ignition.	
2.5	-	4C-5P		
3	2C-3P	4C-6P	1 RPM signal per 3 ignition.	
4	2C-4P	4C-8P	1 RPM signal per 4 ignition.	
5		4C-10P	1 RPM signal per 5ignition.	
6	2C-6P	4C-12P	1 RPM signal per 6 ignition.	

Most of the 4-cycle blkes with one single piston are igniting every 360 degree once, so the setting should be the same as the blke with 2-cycle and one piston enaine.



- ●Press the Select button once to exit the
- EX. Now the RPM input signal number setting is changed from 1 to 2.



•Press the Adjust button once to switch to the RPM input signal pulse setting.

 \bigwedge Now the 6 on the LCD is flashing!



4-6.5 The RPM input signal pulse setting

- Press the Select button once to enter the RPM input signal pulse setting.
- ■EX. Now the current setting is Hi
- Λ Now the 6.5 on the LCD is flashing!
- Press the **Select button** one more time to exit the setting



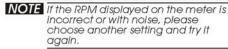


- EX. We want to change the setting to Lo.
- (The negative signal pulse.)

 Press the Adjust button to choose the

NOTE We define the RPM input pulse as Hi (The positive pulse) & Lo (The negative pulse.)

<u>Now the pulse setting is flashing!</u>





- •Press the Select button once to exit the
- ●EX. Now the RPM input signal pulse setting is changed from Hi to Lo.



Press the Adjust button once to switch to the clock setting \bigwedge Now the 6.5 on the LCD is flashing!



4-7 The clock setting

- Press the Select button once to enter the clock settina
- ●EX. Now the current clock setting is 0:00.

Now the 7 on the LCD is flashing

Press the Select button to move the setting diait, exit, and enter the settina





●EX. We would like to set the clock at 0:05. Press the **Select button** to switch to the

NOTE This is a 24 H clock. The setting is in order from hour to minutes.



Press the Adjust button to adjust the value. Now the minute digit of the clock setting



- •Press the Select button once to exit the
- ●EX. The clock setting is changed from 0:00



•Press the Adjust button once to switch to the backlight brightness setting.

Now the 7 on the LCD is flashing!



4-8 The backlight brightness setting

- ●Press the **Select button** once to enter the backlight brightness setting.
- ●EX. The current backlight brightness setting

 \bigwedge Now the 8 on the LCD is flashing!

Press the Select button to move the setting digit, exit and enter the setting.





- ●EX. We would like to change the brightness to 3-5 (60 % brightness.)

 Press the Adjust button to adjust the value.
- **Now the brightness setting value is**

NOTE The setting range: 1-5 (Darkest) ~ 5-5 (Brightest), 5 different levels for choosing. Setting unit : 20 % per level.

The backlight brightness will change immediately after you adjust the setting value.



- •Press the Select button once to exit the
- ●EX. The backlight brightness setting is changed from 5-5 to 3-5.



Press the Adjust button to choose other

 \bigwedge Now the 8 on the LCD is flashing!

5 The power test function



•In main screen, hold pressing the Adjust & Select button together to enter the power



△ WARNING!

Please use this function at racetrack to avoid traffic accidents.

●In power test screen, press the **Select button** once to choose the target speed timer test

NOTE Please start the test when the blke

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

In power test screen, you could press the Select button to switch between the target speed test & the target distance test



5-1 Target speed timer test

- Press the Adjust button to reset the record and enter the target speed timer test function.
- ●EX. The target speed timer test setting is 0~110 Km/h, and the test result is as following, time 19"20 seconds. The Max speed is 110 Km/h, and the Max RPM is 10,000 RPM.

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



move the timer will start

automatically after you

stops the bike.

to count the time and stop

When the bike moves, the timer will start automatically

Now the **is** is flashing

NOTE About the setting, please check 4-1 in the instruction for your reference.













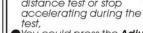


↑ During the test, the will keep flashing!

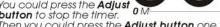








●You could press the Adjust button to stop the timer.







5-2 Target distance timer test

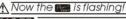
△ WARNING! Please use this function at racetrack to avoid traffic accidents.

- ●Press the Adjust button to reset the record and enter the target distance timer test
- EX. The target distance timer test setting is 2/32 miles (100 meters), and the test result is as following, time 10"27 seconds. The Max speed is 63 Km/h, and the Max RPM is 8 DOD RPM

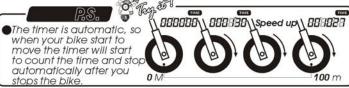




When the bike moves, the timer will start automatically.



NOTE About the setting, please check 4-1.5 in the instruction for your reference.

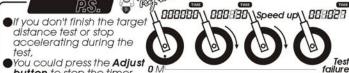








- ●When you reach the target distance you set (100 M . 2/32 mile), the timer will stop counting (10"27 second).
- fyou just want to check the record, you could press lown the **Select button** for 3 seconds to back to the
- If you want to test it again, press the Adjust button to clear the record and enter th target speed timer test screen again.
- Press the Select button one time to enter





•When you reach the target speed you set $(0\sim110 \text{ km/h})$, the timer will stop counting (19"20 second).

f you just want to use the function one time, press down the **Select button** for 3 seconds to save the

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

Press the Select button one time to enter the target distance timer test screen.



You could press the Adjust button to stop the timer. Then you could press the Adjust button one time to

039

888888 888888

clear the record and enter the target speed timer test screen.





We would like to set the clock at 0:05.

Now the hour digit of the clock setting is

MOTE That is g 24 H clock. The setting is in

Press the Adjust button to adjust the value

Press the Select buffer once to exit the

●EX The clock setting is changed from 0.00 to 0.05

Press the Adjust button once to switch to

4-8 The backlight brightness setting

 Press the Select button to move the setting digit, exit and enter the setting.

We would like to change the brightness to 3-5 (60 % brightness.)
 Post the Actual buffer to odjust the value.

Now the brightness setting value is

The setting range: 1-5 (Darkest) ~ 5-5 (Brighfest), 5 different levels for

◆Press the Select buffer once to exit the setting.
EY. The backlight brightness setting is changed from 5-5 to 3-5.

 Press the Adjust button to choose other setting.
 ∆ Now the 8 on the CCD is finishing!

The backlight brightness will change immediately after you adjust the setting value.

Press the Select button once to enter the

ocklight brightness setting.
The current bocklight brightness setting.

▲ Now the 7 on the LCD is floating

6 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.	connected. The wiring and fuse are not broken. → The battery is broken or the battery is too old to supply enough power (DC 12V) to make the meter work. Please check the voltage of your battery, and make sure the voltage is over DC 12V.	Tachometer does not appear or appear incorrectly.	Please check the RPM sensor wiring is connected correctly.
			◆Please check the sensor. →Does the wiring break or falling off?
information.		When switch off, the needle doesn't return to 0. The odometer and trip meter is not	Olt is possible that the permanent power wire is not connected well. →Please check the red positive wire is connect well or not.
or appear incorrectly.	correctly.	accumulated or accumulated wrong data. The clock is incorrect.	

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