



Thank you for purchasing KOSO tachometer, 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.

NOTE 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

1 Meter X 1	2 RPM wire set (Type A) X 1	3 RPM wire set (Type B) X 1	4 Connect terminal X 4
5 Meter bracket X 1	6 Handle bar clamp X 1	7 Rubber X 1	8 M6 X 18L screw X 1
9 M4 X P0.7 nut X 2	10 M6 X P1.0 nut X 1	11 M4 washer X 2	12 M6 washer X 1
13 Aluminum bush X 1	14 Manual		

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

1-2 Option accessory

1 U-type meter bracket	2 Mirror hole meter bracket	3 Universal adhesive bracket
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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:

	Power	Key on	Ground
YAMAHA	Red	Brown	Black
HONDA	Red	Red / Black	Green
SUZUKI	Red	Black	Green
KAWASAKI	White	Brown	Black / Yellow
KYMC	Red	Black	Green
SYM	Red	Black	Green
PGO	Red / White	Orange	Black

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

RPM wiring reference:

	Power	Key on	Ground
YAMAHA	Yellow / Black	BUELL	Pink
HONDA	Yellow / Green	CAGIVA	Gray / Green
SUZUKI	Yellow / Blue	DUCATI	Gray / Green
KAWASAKI	Light Blue	H-D	Pink
APRILIA	Gray / Violet	MV	Gray / Yellow
BMW	Black	TRIUMPH	Red
BENELLI	Gray / Violet		

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

NOTE The temperature will disappear if you don't install & connect the temperature sensor with the meter.

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.

NOTE The RPM wire installation

- Please wrap the RPM wire at least 5 times around the spark plug.
- Please use tape to fix the RPM (Type A) wire onto the spark plug wire.
- Please use tape to fix the RPM wire (Type A) on the spark plug cap.
- Please use tape to fix the RPM wire (Type A) on the coil positive pole wire. For some models with the coil negative wire, please tape the RPM wire (Type A) on the negative wire to get the RPM signal. (For example, the YAMAHA V-max 1200)
- Please connect the RPM wire (Type B) to connect to the ignition coil positive pole.
- Please wrap the RPM wire (Type B) on the spark plug wire by connecting the male and female connector.
- Please connect the RPM wire (Type A) to the pickup.
- Please parallel the RPM wire (Type A) with the original tachometer signal wire (This method is available only when the original speedometer comes with a tachometer on it. You could get the RPM wire information from the service manual of your bikes.)
- For the models comes with the new ignition coil, please wrap the RPM wire (Type A) at least 5 times around the spark plug as the above drawing.

For multi-ignition models, we will suggest you to get the signal on the first ignition.
The best signal source will be in order as D>C>B>A, we will suggest you to check different ways if you have problems to get the RPM signal.

2-2 Installation instructions

When installing, please follow the process.

1. Lcd meter (Accessory 1)
2. Meter bracket (Accessory 5)
3. M5 washer X 2 (Accessory 11)
4. M5 X P0.8 nut X 2 (Accessory 9)
5. M6 X P1.0 screw (Accessory 10)
6. M6 washer (Accessory 12)

A Use the meter bracket (Accessory 5), handle bar clamp (Accessory 6), rubber (Accessory 7) and the nut to install the speedometer on the handle bar.

B Use the aluminum bush (Accessory 13) to install the speedometer on the handle bar stem.

3-1 Basic function instruction

Tachometer

- Display range: 0~15,000 RPM.
- Display unit: 100 RPM.

Shift light

- Setting range: 0~15,000 RPM.
- Adjusting unit: 500 RPM.
- Regarding the setting, please check 4-2.

Adjust button **Select button**

● 500 RPM (Yellow light) ● Over-RPM (Red light)

Dimensions: 36 mm, 48 mm, 53 mm, 57 mm

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3-2 Function, setting instruction

● Tachometer	Display range: 0~15,000 RPM Display unit: 100 RPM	○ Stroke / piston setting	2 Stroke: 1, 2 pistons 4 Stroke: 1, 2, 3, 4 pistons
○ Over RPM shift light	Setting range: 0~15,000 RPM Setting unit: 500 RPM	● Effective voltage	DC12V
○ Top RPM record	Top RPM record Range: 0~15,000 RPM (Reset by button)	● Effective temperature range	-10~+60°C
		● Meter standard	JIS D 0203
		● Meter size	D48 X 52.8 mm
		● Meter weight	Around 117 g

NOTE Design and specification are subject to change without notice!

4-1 Shift light setting

In main screen, press down the **Select & Adjust X 3 seconds** to enter the shift light setting screen.

Press the **Adjust button** to choose the setting number.
EX. Now the shift light setting is 6000 RPM.

⚠ Now the yellow light is on, and the red light keeps flashing.

NOTE The over RPM warning setting range: 0~15,000 RPM. Adjust unit: 500 RPM.

Press the **Select button** 3 times, to back the main screen.
EX. Now the shift light setting is changed from 6,000 RPM to 9,000 RPM.

4-2 Cycle / Piston / Input signal setting

In main screen, press down the **Select & Adjust X 3 seconds** to enter the shift light setting screen.

Press the **Select button** one time to enter the cycle, pistons setting.

CAUTION!

- Make sure the correct cycle and pistons before setting.
- Make sure the setting is correct, or the RPM output will be incorrect.
- We define the engine with the ignition system ignites every 360 degree as 2-cycle and the engine with the ignition system ignites every 720 degree as 4-cycle.
- Most of the 4-cycle bikes with one single piston are igniting every 360 degree once, so the setting should be the same as the bike with 2-cycle and one piston engine.

Press the **Adjust button** to select the Cycle and pistons number you want to set.
EX. Now the setting is 2, it means 2 Cycle / 1 piston or 4 Cycle / 2 pistons.

⚠ Now the red light is on, and the yellow light keeps flashing.

NOTE

Piston	1	2	3	4
2	Scale 2	Scale 4	—	—
4	Scale 1	Scale 2	Scale 3	Scale 4

Press the **Select button** to enter the RPM impulse setting.
EX. Now the Cycle, Pistons setting is changed from 2 to 4 (4 Cycle / 4 Pistons)

Press the **Adjust button** to select the RPM impulse.

⚠ Now the yellow & red light keep flashing simultaneously.

NOTE The impulse setting range is between 1 (the positive impulse) & 0 (the negative impulse)

NOTE If the tachometer can't detect the signal (No RPM is displayed on the screen), you could choose another setting, and check it again.

Press **Select button**, to back the main screen.
EX. The impulse setting is changed from 0 to 1.

5 Top RPM record reset

In main screen, press the **Select button** to enter the top RPM record.

Press down the **Select button** for 3 seconds to reset the record.
EX. The top RPM record is 10,000 RPM.

⚠ Now the red light is on.

NOTE The top RPM record range: 0~15,000 RPM.

Press the **Select button** to back to the main screen.
EX. Now the top RPM record is reset.

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.	<ul style="list-style-type: none"> ● 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 (DC 6V) to make the meter work. 	Tachometer does not appear or appear incorrectly.	<ul style="list-style-type: none"> ● Please check the RPM sensor wiring is connected correctly. ● Please check your setting. → Please refer to the manual 4-1.
The meter shows wrong information.	<ul style="list-style-type: none"> ● Please check the voltage of your battery, and make sure the voltage is over DC 6V. 	The setting is not fixed, the top RPM record doesn't work	<ul style="list-style-type: none"> ● The power wiring connection is wrong → Please check the power wires connection is correct or not. ● The voltage of your battery is too low → Please make sure that the voltage is over DC 6V.

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