



Thank you for purchasing KOSO dual EGT meter. before operating the unit, please read the instruction thoroughly and retain it for the future reference.

### Notice

1. The LCD meter does work on AC and 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:

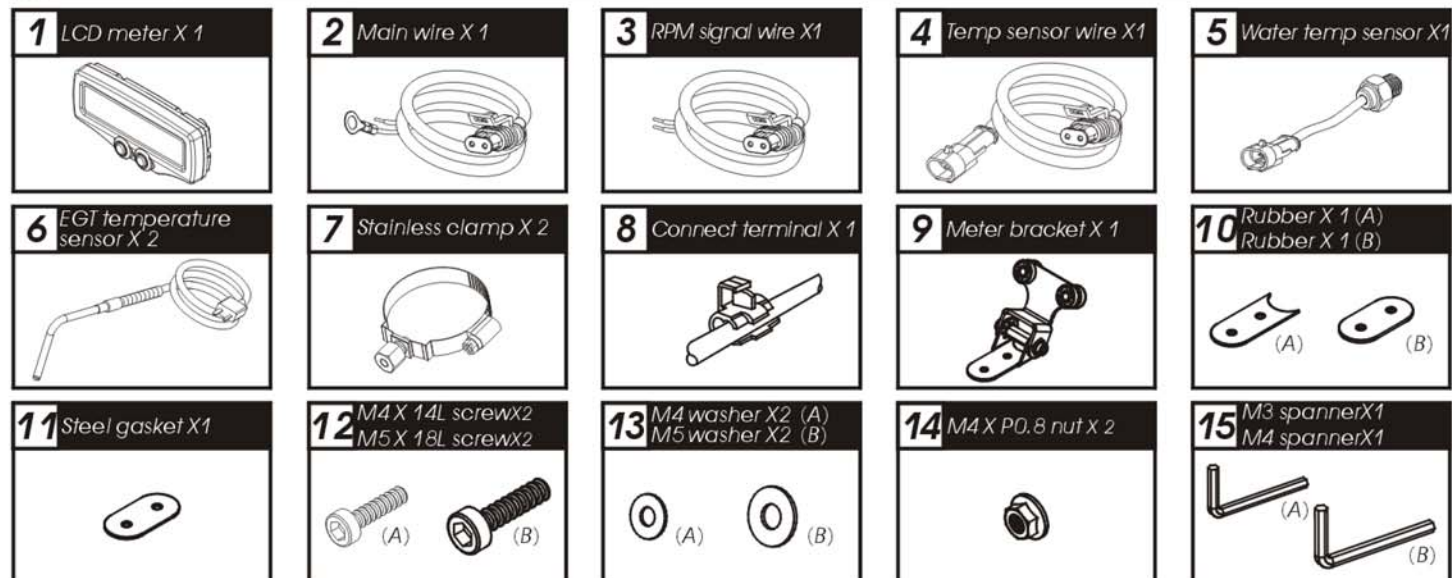
**NOTE** You could get the installation details from the information behind the mark.

**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.

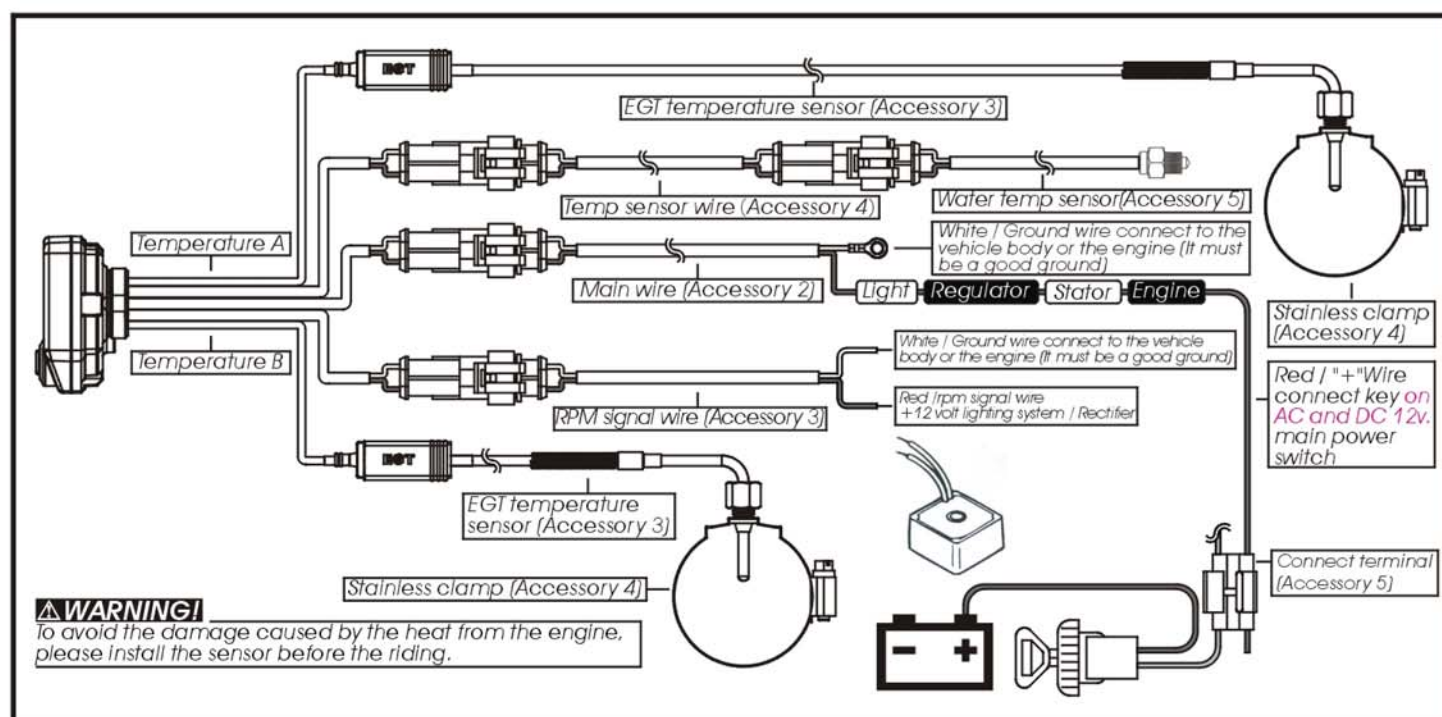
**CAUTION!** Some processes must be followed to avoid the damage to the vehicle.

### 1 Accessory

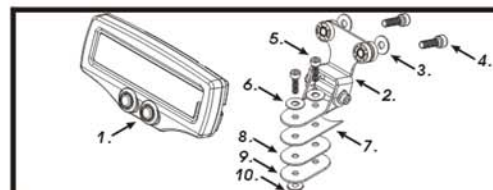


**NOTE** Please contact the local distributor if the items you open are not the same, with the above-listed one.

### 2-1 Wiring installation instructions



### 2-2 Installation instructions



When installing, please follow the process.

1. LCD meter (Accessory 1)
2. Meter bracket (Accessory 6)
3. M5 gasket X 2 (Accessory 12-B)
4. M5 X 18L screw X 2 (Accessory 11)
5. M4 X 18L screw X 2 (Accessory 10)
6. M4 gasket X 2 (Accessory 12-A)
7. Rubber (Accessory 7)
8. Rubber (Accessory 8)
9. Steel gasket (Accessory 9)
10. M4 X P0.8 nut X 2 (Accessory 13)

### 3-1 Basic function instruction

**Select button**  
● In main screen, press down the **Select button** to switch °C to °F.

88300 → 88266

**Over heat warning setting (EGT A/B)**

- Setting range : 200~1,000°C (392~1832°F)
- Setting unit : 1°C (°F)

88499 → 88500

**Over heat warning setting (Water temperature)**

- Setting range : 60~250°C (140~482°F)
- Setting unit : 1°C (°F)

88250 → 88100

**RPM shift light**

- Setting range : 1,000~15,000 RPM
- Setting unit : 100 RPM

88500 → 88500

**EGT A/B**

- Display range : 100~1,200°C (250~2100°F)
- Display unit : 1°C (°F)

88500

**Adjust button**

- In main screen, press down the **Adjust button** switch thermometer to top thermometer record.

**Adjust button X 3 seconds**

- In top thermometer record, press down the **Adjust button** for 3 seconds to reset the record.

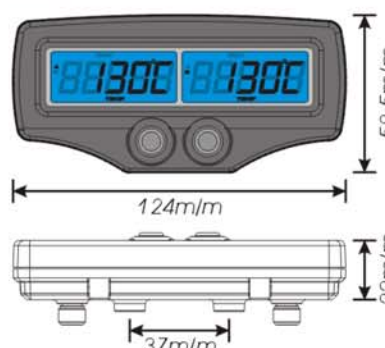


**Water temperature**

- Display range : 0~250°C (32~482°F)
- Display unit : 1°C (°F)

88250

### 3-2 Function, setting instruction



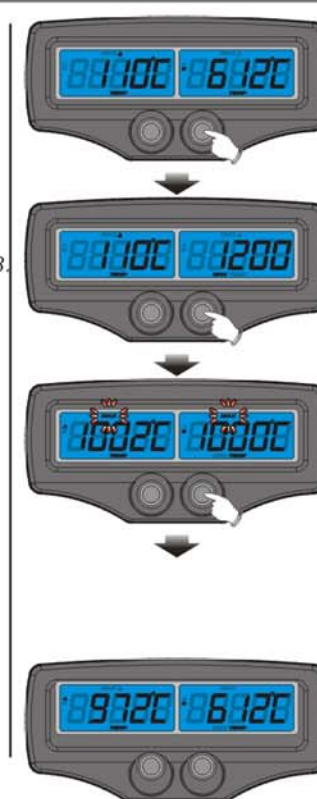
|                               |                                                                  |
|-------------------------------|------------------------------------------------------------------|
| ● temperature                 | Display unit: °C & °F for alternative                            |
| ● EGT A/B                     | Display range : 100~1,200°C (250~2100°F) Display unit : 1°C (°F) |
| ● Water temperature           | Display range : 0~250°C (32~482°F) Display unit : 1°C (°F)       |
| ○ Over heat warning (EGT A/B) | Setting range : 200~1,000°C (392~1832°F) Setting unit : 1°C (°F) |
| ○ Over heat warning (Water)   | Setting range : 60~250°C (140~482°F) Setting unit : 1°C (°F)     |
| ● Tachometer                  | Display range : 15,000 RPM Display unit : 10 RPM                 |
| ○ RPM Input pulse             | Setting range : 0.5, 1, 1.5, 2, 2.5, 3, 4, 5, 6                  |
| ○ Shift light                 | Setting range : 1,000~15,000 RPM Setting unit : 100 RPM          |
| ● Max. EGT record             | Display range : 100~1,200°C (250~2100°F) Display unit : 1°C (°F) |
| ● Max. Water record           | Display range : 0~250°C (32~482°F) Display unit : 1°C (°F)       |
| ● Max. RPM record             | Display range : 15,000 Display unit : 10 RPM                     |
| ● Effective voltage           | AC and DC 12v.                                                   |
| ● Effective temperature range | -30~+60°C                                                        |
| ● Meter standard              | JIS D 0203                                                       |
| ● Meter size                  | W124 X L58.5 X H22 mm                                            |
| ● Meter weight                | Around 170g                                                      |

**NOTE** Design and specifications are subject to change without notice!

### 4-1 Function switch instruction

#### 4-1-1 Adjust button function instruction

- Press select button once to switch screen like below.
- Press Adjust button once to switch screen from water TEMP/EGTB to water TEMP/RPM.
- Press Adjust button once to switch screen from RPM/EGTA to RPM/EGTB.
- Press Adjust button once to switch screen from RPM/EGTB to Water TEMP/EGT A.
- Press Adjust button once to switch screen from water TEMP/EGTA to water TEMP/EGT B.



- In Max record screen, press the **Adjust button** once to switch from Max record to the main screen.
- Press select button once to switch screen like below.
- Press down the **Adjust button** for 3 seconds to reset the MAX record.
- The main screen.

#### 4-1-2 Select button function instruction



### 4-2 Function setting instruction

#### ● In main screen



● In main screen, Press down the **Select & Adjust X 3 seconds** to enter the RPM pulse setting.

#### ● RPM pulse setting



● EX. You want to set the RPM input pulse at 2 (4 Stroke, 4 piston).  
● Press the **Adjust** button to choose the setting value.  
● EX. Now the RPM input pulse setting is 1 (4 Stroke, 2 piston)



▲ Now the setting number is flashing!

**NOTE** The RPM input pulse setting range is : 0.5, 1, 1.5, 2, 2.5, 3, 4, 5, 6.

| The setting | The corresponding stroke and piston number | The corresponding RPM signal number per ignition |
|-------------|--------------------------------------------|--------------------------------------------------|
| 0.5         | 4C-1P                                      | 2 RPM signals per 1 ignition.                    |
| 1           | 2C-1P                                      | 1 RPM signal per 1 ignition.                     |
| 1.5         | 4C-3P                                      | 2 RPM signals per 3 ignition.                    |
| 2           | 2C-2P                                      | 1 RPM signal per 2 ignition.                     |
| 2.5         | 4C-5P                                      | 2 RPM signals per 5 ignition.                    |
| 3           | 2C-3P                                      | 1 RPM signal per 3 ignition.                     |
| 4           | 2C-4P                                      | 1 RPM signal per 4 ignition.                     |
| 5           | 4C-10P                                     | 2 RPM signals per 10 ignition.                   |
| 6           | 2C-6P                                      | 1 RPM signal per 6 ignition.                     |

▲ **CAUTION!** 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.



● EX. Now the RPM input pulse setting is changed from 1 (4 Stroke, 2 piston) to 2 (4 Stroke, 4 piston).  
● Press **Select** button to enters the shift light setting screen.

#### ● The shift light setting



● EX. The RPM shift light you want to set is 12,000 RPM.  
● Press the **Adjust** button to choose the setting value.

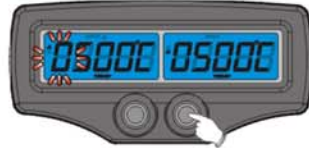


**NOTE** The setting range: 1,000~15,000 RPM.  
Setting unit: 100 RPM.

▲ Now the shift light and the setting value is flashing!

● EX. Now the shift light setting is changed from 1,000 RPM to 12,000 RPM.  
● Press the **Select** button to enter the EGT A setting.

#### ● EGT A warning function setting



● EX. We would like set EGT A warning temperature at 700C  
● Press the **Select** button to move to the digit you want to set.



**NOTE** The setting range: 200~1,000°C (392~1832°F)  
Display unit : 1°C (°F)

▲ Now the water temperature logo and the setting value are flashing!

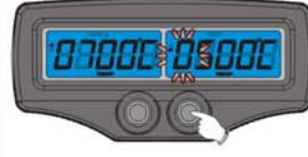
#### 4-1-3 Select+Adjust button function instruction X3



● Press down the **Adjust & Select** button for 3 seconds to enter setting screen. (Check section 4-2 for detail)



#### ● EGT B warning function setting



● Press the **Adjust** button to choose the setting value.



● EX: Dual EGT A setting we would like change from 500C to 700C  
● Press select button 4 times to enter ECT B warning setting screen.

● EX. We would like set EGT B warning temperature at 900C  
● Press the **Select** button to move to the digit you want to set.



**NOTE** The setting range: 200~1,000°C (392~1832°F)  
Display unit : 1°C (°F)

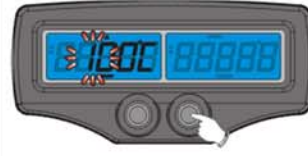
▲ Now the water temperature logo and the setting value are flashing!

● Press the **Adjust** button to choose the setting value.



● EX: Over temperature setting we would like change from 500C to 900C  
● Press Select button to enter water temp warning setting screen.

#### ● Temperature alarm setting



● EX: You want to set the temperature alarm at 120C.  
● Press the **Select** button to move to the digit you want to set.



**NOTE** The setting range: 60~250°C (140~482°F)  
Display unit : 1°C (°F)

▲ Now the water temperature logo and the setting value are flashing!

● Press the **Adjust** button to choose the setting value.



● EX: The temperature alarm A setting is changed from 100 C to 120 C.  
● Press select button once to enter warning display timing setting screen.

#### ● Alarm display timing setting



● EX: We would like to set warning display timing to 15 seconds  
● Press the **Adjust** button to choose the setting value.

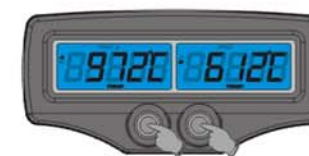


**NOTE** The setting range: 10~60s  
Display unit: 1s

▲ The timing digital could be set is flash now

● EX.: The timing we already adjust from 10 seconds to 15 seconds

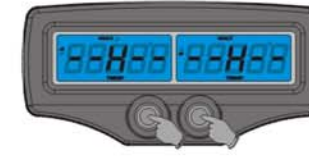
● Press **Select** button, to back the main screen.



● The main screen.

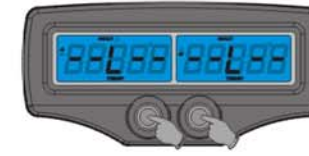
### 4-3 TROUBLE SHOOTING.

#### ● Over temperature warning screen



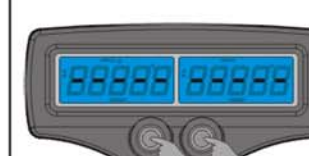
● --H-- Means that the temperature is too high to detect. (1200°C/ 2100°F)

#### ● Low temperate warning screen



● --L-- Means that the temperature is too low to detect. (100°C/ 250°F)

#### ● Signal lose warning screen



● ----- means can not reach the signal from sensor

▲ Please check the signal wiring situation. If the signal wiring is broken or falling off, the meter will display the wrong data or nothing like the example above

### 5-1 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.<br>→ Please make sure the wiring is connected. The wiring and fuse are not broken.<br>→ The battery is broken or the battery is too old to supply enough power (AC and DC 12v.) to make the meter work. | Tachometer does not appear or appear incorrectly. | ● Please check the RPM sensor wiring is connected correctly.<br>● Please check the spark plug is R type or not. If not, please replace the spark plug with the R type spark plug.<br>● Please check your setting.<br>→ Please refer to the manual 4-2. |
| The meter shows wrong information.           | ● Please check the voltage of your battery, and make sure the voltage is over AC and DC 12v.                                                                                                                                                     | Temp does not appear or appear incorrectly.       | ● Please check the sensor.<br>→ Does the wiring break or falling off ?                                                                                                                                                                                 |

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