INSTALLATION

Thank you for purchasing KOSO MSX DB-03 speedometer, before operating the unit, please read the instruction thoroughly and retain it for the future reference.

⚠ Notice

1. This meter work on DC 12 volts applications only.
2. For proper installation, please follow the steps described in the instruction sheets. Any damages caused by wrong installation shall be imputed to the users.
3. Don't break or modify the wire terminals. To avoid any short circuit, do not pull the wires out of the terminal when installing.
4. Do not disassemble or change any parts.
5. Opening the instrument will void any warranty. Maintenance or repair should be executed by our professionals only.

Flash   Light on

Press the Button once   Press the Button 3 seconds

MARK MEANING:

⚠	Some procedures must be followed to avoid damages to the instrument.
⚠WARNING!	Some procedures must be followed to avoid injuries to the user or others.
⚠ CAUTION!	Some procedures must be followed to avoid damages to the vehicle.
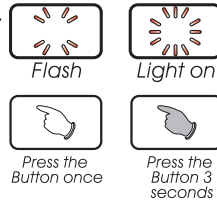
1-1 Accessory

1 LCD meter X 1	2 Main wiring harness X 1	3 Temp sensor wire set X 1	4 Meter bracket X 1
5 Twin adhesive X1	6 M6 Screw ×1	7 M6 X P1.0 nut X 1	8 M4 x 10 Screw×2
9 M6 Washer ×1	10 M5 Washer ×2	11 5 mm spanner X 1	

NOTE Please contact your local distributor if the items received in the box are not the same as the one listed above.

1-2 Optional accessories

| 1 Active speed sensor | 2 Passive speed sensor | 3 L TYPE speed sensor backet | 4 S TYPE speed sensor backet |

NOTE The optional active speed sensor can read up to 60 pulses and do not require the installation of any magnets to pick up the speed signal. Note that the passive speed sensor supplied with the instrument can read up to 6 pulses.
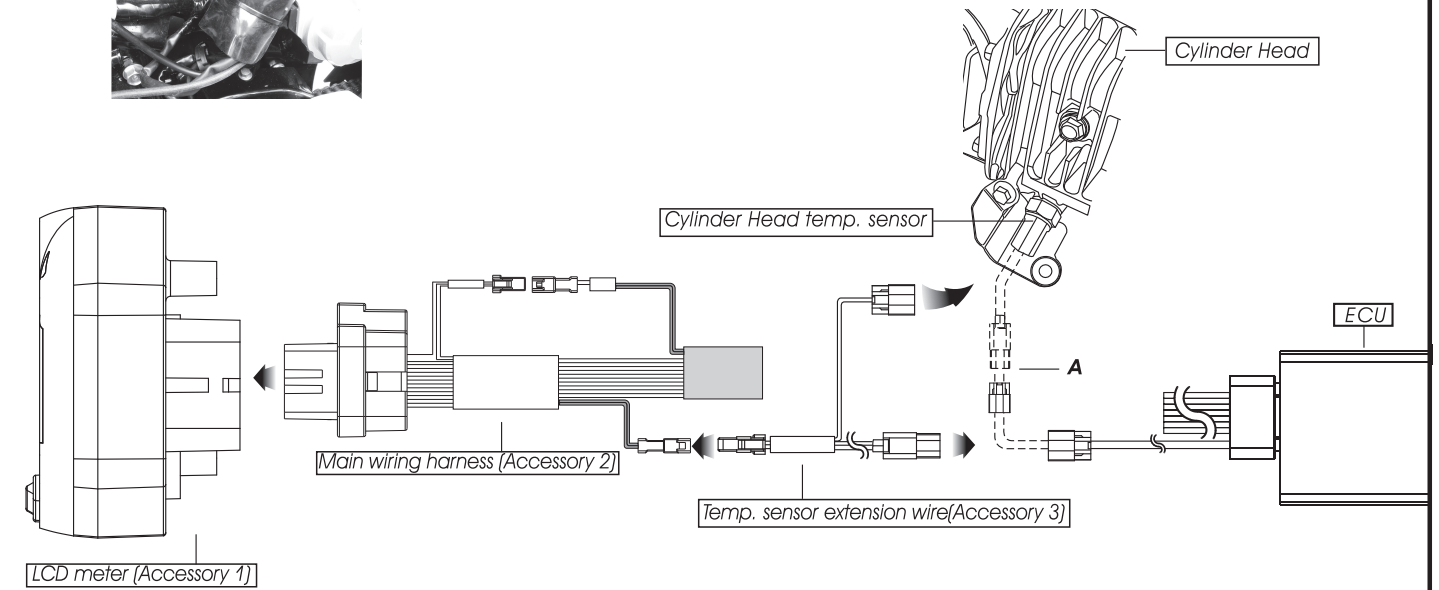
NOTE Some of the optional accessories might not be available in your country. Contact your local distributor to get more details.

2-2 Wiring installation instruction
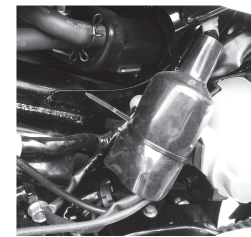
NOTE Make sure the connection between the main harness and properly made. Put the harness into the rubbercover and use the tie wrap to secure everything in place.

NOTE Disconnect the wiring harness in between the ECU and them sensor and install properly the signal wire daptor. Refer to letter A on wiring diagram above.

Cylinder Head

Cylinder Head temp. sensor

ECU

A

Main wiring harness (Accessory 2)

Temp. sensor extension wire(Accessory 3)

LCD meter (Accessory 1)

2-2 Installation instruction

When installing, please follow the process.

❶ Twin adhesive X1 (Accessory 5)
❷ LCD meter (Accessory 1)
❸ Meter bracket (Accessory 4)
❹ M5 Washer X2(Accessory 10)
❺ M4 Screw X2(Accessory 8)
❻ M6 Washer X1(Accessory 9)
❼ M6 Screw X1(Accessory 6)
❽ M6 x P1.0 nut X1(Accessory7)

MOTO / SCOOTER S type speed sensor bracket instruction

Loose the screw on the caliper

Install the speed sensor.

Install the S type bracket on the caliper.

Adjusting the distance between the sensor and screw to get the best speed signal. Please make sure the distance is under 2 mm to get the best signal.

Please adjust the bracket to the proper angle and then screw it up. Please make sure the disc screw could pass the hole on the bracket for you to install the sensor into the same hole for catching the speed signal.

Please install the L bracket and the anti-slip rubber on the front fork and adjust it to the proper height and angle.

Please install the speed sensor into the proper hole on the bracket.

Please use the cable tie to fix the bracket on the front fork. Please make sure the disc screw could pass the hole on the bracket for you to install the sensor into the same hole for catching the speed signal.
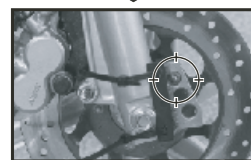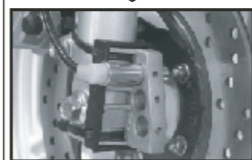
Adjusting the distance between the sensor and screw to get the best speed signal. Please make sure the distance is under **2 mm** to get the best signal.

⚠ S/L TYPE SPEED SENSOR BRACKET could work perfect with Passive(Accessary 1) or Active(Accessary 2) speed sensor.

⚠ To use Active speed sensor, you will need disc magnet screws.

P.S. Try it!

The active speed sensor could be installed by the metal parts to detect the speed.
EX. 1 The disc screw.
EX. 2 The disc to detect the disc gap. (Please make sure the distances between the gaps are the same in advance to avoid wrong speed signal.)
EX. 3 The sprocket to detect the disc gap. (Please make sure the distances between the gaps are the same in advance to avoid wrong speed signal.)
We will suggest you to catch the speed from the disc screws. The more the sensor points are, the better the speed accuracy is. The maximum sensor points the speed sensor could detect is 60 points per turn.

⚠ After installation, please use your hand to turn the tire to see is everything ok. The LED on the active speed sensor will light up once the signal is detected.

⚠ When install Passive(Accessary 1) speed sensor, the clearance between brake disc and gear bracket should not be over 1.5mm.
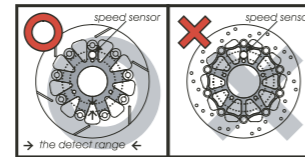
EX. 1

speed sensor / speed sensor / the detect range
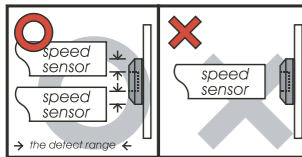
The hexagon socket disc screw
The best detect area: Please detect the edge of the hexagon socket screw.
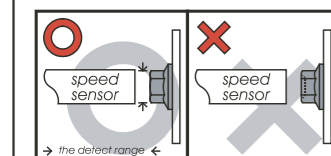⚠ Please don't catch the signal from the middle hole of the hexagon socket screw to avoid wrong signal.

EX. 2

speed sensor / speed sensor / the detect range

The disc
The best detect area: Please detect the speed signal from the gaps of the disc.
⚠ Please note that there are discs with the gaps in different difference, and this method will not work on it!
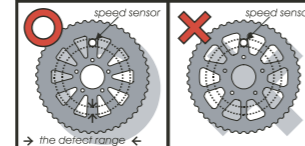
EX. 3

speed sensor / speed sensor / the detect range

The hexagon screw
The best detect area: The middle of the screws.
⚠ Some hexagon screw center is with a small hole in the center in this case, we will suggest you to catch the signal from the edge of the screw like the hexagon socket screw.

The sprocket
The best detect area: Please detect the speed signal from the gaps of the sprocket.
⚠ Please note that there are sprockets with the gaps in different difference, and this method will not work on it!

3-1 Basic function instruction

Tachometer
● Display range: 0~10,000 / 0~12,000 / 0~15,000 RPM.
● Display unit:
10,000 RPM-Each level represents 166 RPM,
12,000 RPM-Each level represents 200 RPM,
15,000 RPM-Each level represents 250 RPM

The RPM Red, Yellow shift light
● Setting range: 1,000~15,000 RPM
● Setting unit: 100 RPM
● Warning: Light on (F-OFF), Flash (F-ON)

Speedometer
● Display range: 0~360 km/h (0~225 MPH)
● Display unit: km/h (MPH) for alternative

Temperature warning
● Setting range：60~185℃ (140~365°F)
● Setting unit：1℃(°F)

Speeding warning
● Setting range: 30-360 km/h (19~225 MPH)
● Setting unit: 1 Km/h (MPH)

Thermometer
● Setting range：-40~185℃ (-40~365°F)
● Setting unit：0.1℃ (°F)
● Display-------℃(-------°F) if temperature sensor is not connected.

Digital Volt meter
● Display range: DC 8~DC 18 V
● Flashing warning when Voltage lower than 11.5 V or higher than 15.5 v.

Clock
● 24H

Odometer
● Display range:
0~99999 km (mile), reset automatically after 99999 km.
● Display unit: 1 km (mile).

Trip meter A.B
● Display range: 0~999.9 km (mile), reset automatically after 999.9 km.
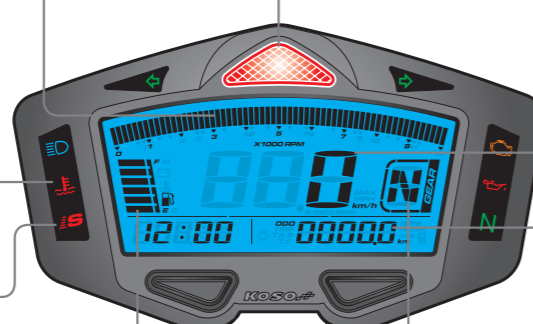● Display unit: 0.1 km (mile).

Total hour meter
● Display range: 0~99999 H.
● Display unit: 1 H.

Hour meter A.B
● Display range: 0.0~999.9 H.
● Display unit: 0.1 H.

Fuel Level
● Display range: 6 levels.
● The fuel level begins to flash when only 1 level is left.

Gear meter
● Display range: N, 1, 2, 3, 4, 5, 6, 7, 8, 9

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

3-2 Function

● Speedometer	Display range: 0~360 km/h (0~225 MPH)	○ The RPM input signal number setting	Setting range: 0.5, 1~24
	Display unit: km/h or MPH	● The RPM input pulse	Setting range: HI (The positive wave pulse)
○ Display internal	<0.5 second		Lo (The negative wave pulse)
○ Odometer	Display range: 0~99999 km (mile), reset automatically after 99999 km (mile).	● Temperature unit	Display unit: ℃ & °F
○ Trip meter A/B	Display range: 0~999.9 km (mile), reset automatically after 999.9 km (mile). Display unit: 0.1 km (mile).	● Thermometer	Display range:-40 ~ 185 ℃ (-40~365 °F) Display range:0.1℃ (°F)
● Speeding warning	Display range: 30~360 km/h (19~225 MPH) Display unit: 1 km/h (MPH)	○ Display internal	<0.5 second
		○ Over heat warning (Water temperature)	Setting range:60 ~ 185 ℃ (140 ~ 365 °F) Setting range:1℃ (°F)
● Total hour meter	Display range: 0~99999 H. Display unit: 1 H.	○ Top temperature record	Display range: 0~250℃ (32~482°F)
● Hour meter A.B	Display range: 0.0~999.9 H. Display unit: 0.1 H.	● Gear meter	Display range: N, 1, 2, 3, 4, 5, 6, 7, 8, 9
		● Fuel meter	Display range: 6 levels
○ Tire circumference	Setting range: 300~2,500 mm Setting unit: 1 mm		Display unit: Each level represents 16.6 % Setting range:100Ω,250Ω,270Ω,510Ω,1200Ω,SW
○ Sensitive point	Setting range: 1~40 Setting unit: 1	● Clock	24 H
		● Volt meter	Display range: DC 8~18 V. Flashing warning when Voltage lower than 11.5 V or higher than 15.5 v.
○ Gear	Front gear setting range:10~20 Rear gear setting range:25~45	● Backlight brightness light	Setting range: 1-5 (Darkest)~5-5 (Brightest) Display unit: Each level represents 20 %
● Tachometer	Display range: 0~10,000 / 0~12,000 / 0~15,000 RPM. Display unit: 10,000 RPM-Each level represents 166 RPM, 12,000 RPM-Each level represents 200 RPM, 15,000 RPM-Each level represents 250 RPM	● Backlight color	Setting range: blue, orange, purple
		● Effective voltage	DC 12V
		● Effective temperature range	-10~+60℃
○ Display internal	<0.5 second	● Meter standard	JIS D 0203 S2
○ The RPM Red, Yellow shift light	Setting range: 1,000~15,000 RPM Setting unit: 100 RPM	● Meter size	120 X 68.5 X 44.1 mm
		● Meter weight	Around 127.3 g
○ Warning	Light on (F-OFF) Flash (F-ON)	● Indicator light color	Neutral-green, High beam-blue, Repeater-green, EOBD-amber, Oil-red, Temperature alarm-red, Speeding warning-red, RPM shift light (Red, Yellow)
○ MAX RPM record	Display range: 0~10,000 / 0~12,000 / 0~15,000 RPM		

NOTE Design and specifications are subject to change without notice!

3-3 Button function instruction

Press the Left button
1.In main screen, press the Left button to choose the clock, volt, water temperature or MAX record display.
2.In setting screen, press the Left button to choose the function you want to set.
3.When the meter is off, press the Left button to wake up the clock.

Hold the Left button for 3 seconds
1.In setting screen, hole pressing the Left button for 3 seconds to go back to the main screen.

Press the Right button
1.In main screen, press the Right button to choose the odometer, trip A, trip B, total hour meter, hour meter A or hour meter B display.
2.In setting screen, press the Right button to change the setting numbers. If you keep pressing down the Right button the number will increase quikly.
3.When the meter is off, press the Right button to wake up the clock.

Hold pressing the Right button for 3 seconds
1.In the main screen, hole the Right button for 3 seconds to reset the trip A, trip B, hour meter A, hour meter B and the MAX record.

Hold the Right button
1.In the setting screen, hold the right button to add quikly the set value.

Hold pressing the Right+Left for 3 seconds
1.In main screen, hole the Right+Left buttons at the same time for 3 seconds to enter the setting screen.
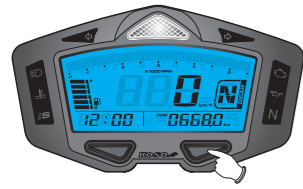
3-4 Stand by function instruction

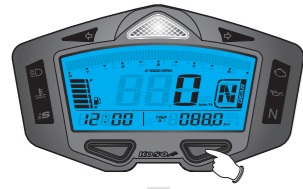● When the meter is off, press Right or Left button to wake up the clock .

● The clock will display 30 seconds after wake up.

3-5 Main function instruction (Right button)

●In main screen (ODO). Press the Right button one time to enter the Trip A screen.

●In Trip A screen. Press the Right button one time to enter the trip B screen.

●Hold the Right button for 3 seconds to reset Trip A.

●In Trip B screen. Press the Right button one time to enter the total hour meter screen.

●Hold Right button for 3 seconds to reset Trip B

●In the total hour meter screen. Press the Right button one time to enter the hour meter A screen.

●In the hour meter A screen. Press the Right button one time to enter the hour meter B screen.

●Hold the Right button for 3 seconds to reset hour meter A record.

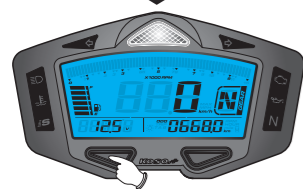●In hour meter B screen. Press the Right button one time to go back to the main screen.

●Hold the Right button for 3 seconds to reset hour meter B record.

3-6 Main function switch instruction (Left button)

●In the clock screen, press the Left Button one time to enter the volt screen.

●In the volt screen, press the Left Button one time to enter the water temperature screen.

●In the water temperature screen, press the Left Button one time to enter the MAX record screen.

●In the MAX record screen, press the Left Button one time to back to the clock screen.

3-7 Setting screen instruction

1. Speed and Temp. unit
2. Speeding warning setting
3. RPM red shift light value setting and flashing ON/OFF
4. RPM yellow shift light value setting and flashing ON/OFF
5. Temperature warning setting
6. Tire circumference/Gear Sensitive point
7. Signal type and piston numbers
8. RPM range
9. Fuel gauge resistance
10. Clock
11. Backlight colors and brightness
12. Gear meter
13. Internal ODO display
14. Extenal ODO setting

⚠ The screen will return to the main screen after 30 seconds if no button is press.

4 Entering setting screen

●In the main screen, hold for 3 seconds the Left & Right button to enter the setting screen.

4-1 Unit setting (Speed, Temperature)

●Press the Left button one time to enter the speed unit setting screen.
⚠ Now, a1 is flashing on the screen!

●EX. To change the setting from MPH to km/h.
●Press the Right button to change the setting.

⚠ The odometer & trip meter value will change according to the speed unit.

●Press the Left button one time to enter the temperature setting screen.

●EX. To change the setting from °C to °F.
●Press the Right button to change the setting.

⚠ The temperature unit is now flashing!

●Press the Left button once to go back to the a1 screen.
●EX. The temperature unit setting is changed from °C to °F.

●Press the Right button once to enter the speeding warning setting screen.
⚠ Now the a1 is flashing!

4-2 Speeding warning setting

●Press the Left button once to enter the speeding warning setting screen.
⚠ Now the a2 is flashing!

●EX. We want to change the setting to 80 km/h.
●Press the Left button to move to the digit you want to set.
●Press the Right button to change the setting.

Note	Setting range: 30~360 km/h
	(19~225 MPH)
	Setting unit: 1 Km/h (MPH)

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

●Press the Left button once to go back to the a2 screen.
●EX. Now the setting is changed from 60 km/h to 80 km/h .

●Press the Right button once to enter the red shift light setting screen.
⚠ Now the a2 is flashing!

4-3 Red shift light setting

●EX. Set the red shift light at 9,500 RPM.
●Press the Left button to move to the digit you want to set.

●Press the Right button to change the value.

Note	Setting range: 100~15,000 RPM
	Setting unit: 100 RPM

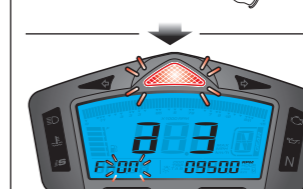●Press the Left button one time to enter the red shift light warning setting screen.
●EX. The red shift light is set from 9,000 RPM to 9,500 RPM.
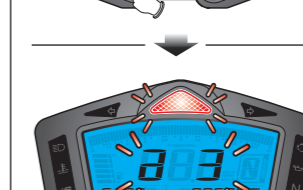
●EX. To set F-ON (Flashing ON) red shift light warning.
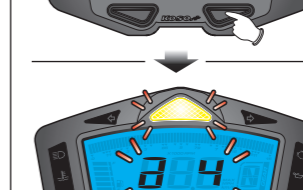●Press the Right button to change the setting value.

⚙ Light on   ⚙ Flash

●Press the Left button one time to go back to the a3 screen.
●EX. The red shift light warning is set form F-OFF to F-ON.

●Press the Right button once to enter the yellow shift light setting screen.
⚠ Now, a3 is flashing on the screen!

4-4 Yellow shift light setting

●EX. Set the yellow shift light at 8,500 RPM.
●Press the Left button to move to the digit you want to set.
●Press the Right button to change the setting.

Note	Setting range: 100~15,000 RPM
	Setting unit: 100 RPM

- Press the Left button once to enter the yellow shift light warning setting screen.
- EX. The yellow shift light as been set from 8,000 RPM to 8,500 RPM.

- EX. To set F-ON (Flashing ON) for Yellow shift light warning.
- Press the Right button to change the setting value.

☀ Light on   ☀ Flash

- Press the Left button once to go back to the a4 screen.
- EX. The yellow shift light warning as been set form F-OFF to F-ON.

- Press the Right button once to enter the over temp warning (Water temperature) setting screen.
⚠ Now, a4 is flashing on the screen!

P.S. Try it!

If you set the RPM yellow shift light at 8,500 RPM, the red shift light will light on at 9,500.

yellow shigt light(8,500 RPM)   red shift light(9,500 RPM)

4-5 Over temp warning setting (water temperature)
- EX.Set the over temp warning value at 105°C.
- Press the Left button to move to the digit you want to set.

- Press the Right button to change the value.

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

- Press the Left button once to go back to the a5 screen.
- EX. Now the over temp warning (water temperature) as been set form 100°C to 105°C.

- Press the Right button once to enter the tire circumference and sensor point setting screen.
⚠ Now, a5 is flashing on the screen!

P.S. Try it!

The temperature light will go ON when the temperature reached your setting.

4-6 Tire circumference/Gear/Sensitive point
- Please select a desired setting screen
  4-6-1.Tire circumference and Gear setting
  4-6-2.Tire circumference and Sensitive point setting

- Ǵ Gear point setting (Refer4-6-2set)

- Ś Sensitive point setting (Refer4-6-2set)

Tire circumference setting
- EX. If the tire circumference is at 1,300 mm.
- Press the Left button once to enter the tire circumference setting screen.
- Press the Left button to move to the digit you want to set.

- Press the Right button to change the value.

Note Setting range: 300~2500. Setting unit: 1mm Default value：1535 mm

⚠ CAUTION!
- Measure the circumference of tire which the sensor will be installed and keep note of the number of sensor points.
- The speed displayed on the meter will be affected by the setting. Make sure the tire size and the number of sensor point is correct before you set the value.

P.S. Try it!

Use the valve as the starting point to measure the tire circonference.
Use a measuring tape to get the distance for one wheel rotation.

- EX. Now the tire circumference is set from 1,000 to 1,300 mm.

4-6-1 Front / Rear gear setting
- EX.Change the setting to 17
- Press the Right button to change the value.

Note Front gear setting range: 10~20 Setting unit: 1 Default value：15

- EX.Now the Front range has been changed from is 15 to 17.

- EX.Change the setting to 37
- Press the Right button to change the value.

Note Rear gear setting range: 25~45 Setting unit: 1 Default value：34

- EX.Now the Rear range has been changed from is 34 to 37.

4-6-2 Sensitive point setting
- EX. If the sensor point is set at 06P.
- Press the Left button once to enter the sensor point setting screen.
- Press the Left button to move to the digit you want to set.

- Press the Right button to change the value.

Note Setting range: 1~40 Setting unit: 1

- EX. The sensor point is now set from 01P to 06P.

4-7 RPM input signal setting
- EX. You want to connect the RPM signal wire to the pick up signal and there are 13 flywheel signals per turn.
- Press the Left button once to enter the RPM input signal setting screen.
- Press the Right button to change the value.

Note Setting range: 0.5, 1~24.

The setting value.	The corresponding stroke and pistons number		The corresponding RPM signal number per ignition.
0.5	——	4C-1P	2 RPM signals per 1ignition.
1	2C-1P	4C-2P	1 RPM signal per 1 ignition.
2	2C-2P	4C-4P	1 RPM signal per 2 ignition.
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	2 RPM signals per 10ignition.
6	2C-6P	4C-12P	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. Change the setting to Lo.
- Press the Left button once to enter the input pluse setting screen.
- Press the Right button to change the value.

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

Note If the RPM displayed on the meter is incorrect, choose another setting and try it again.

- Press the Left button once to go back to the a7 screen.
- EX. The input pulse setting as been changed from is Hi to Lo.

- Press the Right button once to enter the RPM range setting screen.
⚠ Now, a7 is flashing on the screen!

4-8 RPM setting range
- EX. Set the RPM range is at 15000 RPM.
- Press the Left button once to enter the RPM range setting screen.
- Press the Right button to change the value.

Note Setting range: 0~10,000 RPM, or 0~12,000 RPM, or 0~15,000 RPM

- Press the Left button once to go back to the a8 screen.
- EX. Now the RPM range has been changed from is 10,000 to 15,000 RPM.

- Press the Right button once to enter the fuel resistance setting screen.
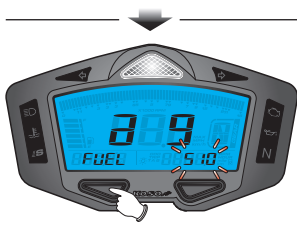⚠ Now, a8 is flashing on the screen!

4-9 Fuel gauge resistance setting
- EX. The fuel gauge need to be set to 510Ω.
- Press the Left button once to enter the fuel resistance setting screen
- Press the Right button to change the value.

Note The fuel gauge resistance setting range:100Ω, 250Ω, 510Ω, 1200Ω, SW (turn off).

Note When Fuel Setting is set to "SW", the fuel level symbol will light up when fuel level signal wire is connected to the negative (-) wire.

- Press the Left button once to go back to the a9 screen.
- EX. The setting has been changed from 100Ω to 510Ω.

- Press the Right button once to enter the clock setting screen.
  ⚠ Now, a9 is flashing on the screen!
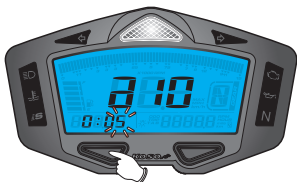
4-10 clock setting

- EX. Set the clock at 0:05.
- Press the Left button once to enter the clock setting screen.
- Press the Left button to move to the digit you want to set.

0:00 ➤ 0:00 ➤ 0:00

- Press the Right button to change the value.

0:00 ➤ 0:00 ➤ 0:05

Note This is a 24 H clock.

- Press the Left button once to go back to the a10 screen.
- EX. The clock has been set from 0:00 to 0:05.

- Press the Right button once to enter the backlight brightness and color setting screen.
  ⚠ Now, a10 is flashing on the screen!

4-11 Backlight brightness & color setting

- Press the Left button once to enter the backlight color setting screen.
- Press the Right button to change the value.

C-bl ➤ C-Or ➤ C-Pu
Blue   Orange   Purple

Note Color setting screen:
C- bl(Blue)、C- Or(Orange)、
C- Pu(Purple)。

- EX. Change the backlight brightness to 3-5 (60% brightness.)
- Press the Left button once to enter the backlight brightness setting screen.
- Press the Right button to change the value.

5-5 ➤ 3-5

Note Setting range: 1-5 (Darkest) ~ 5-5 (Brightest), 5 different levels available.
Setting unit: 20% per level.
The backlight brightness will change immediately after you set the value.

- Press the Left button once to go back to the a11 screen.
- EX. The backlight brightness has been set from 5-5 to 3-5.

- Press the Right button once to enter the gear learning setting screen.
  ⚠ Now, a11 is flashing on the screen!
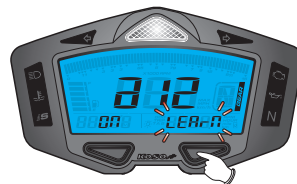
4-12 Gear learning setting

⚠ If the tire circumference, sensing point (4-6) or the RPM input signal (4-7) change, the meter need to start over the the gear learning mode.

- Press the left button once to choose turn on or off the gear indicator display.
- Press the right button to choose the setting mode.

ON   OFF
ON   OFF

- Press the Left button once. The LEArN word is flashing!

LEArN

- Hold the Right button for 3 seconds to enter the gear learning setting screen.

Note If you don't want the meter to learn the gear position, then press the right button once to enter the odometer display screen. (see 4-13)

- Start riding when "GO" is flashing.

Note Hold the right button for 3 seconds to quit the learning and return to the previous screen.

Abort ➤ ON LEArN

STEP 1

1 ➤ 1 2

- When the number 1 is flashing. Put the motorcycle in 1st gear and start riding slowly the motorcycle until the meter detect the correct gear. Once the meter has detected the 1st gear, the screen will automatically switch to number 2.

STEP 2

2 ➤ 2 3

- When the number 2 is flashing. Put the motorcycle in 2nd gear and start riding slowly the motorcycle until the meter detect the correct gear. Once the meter has detected the 2nd gear, the screen will automatically switch to number 3.

STEP 3

3 ➤ 3 4

- When the number 3 is flashing. Put the motorcycle in 3rd gear and start riding slowly the motorcycle until the meter detect the correct gear. Once the meter has detected the 3rd gear, the screen will automatically switch to number 4.

STEP 4

6 ➤ dONE

- Ex: The main screen now display the number 6. If your motorcycle have 7 gears, slow down and wait until the meter goes back to the main screen.

4-13 Odometer display

●Press the Right button once to enter the odometer setting screen.
●EX. The odometer display is 12500 km.

4-14 Odometer setting

●EX. Set the odometer to 15000 km.
●Press the Left button once to enter the external odometer setting screen.
●Press the Left button to move to the digit you want to set.
●Press the Right button to change the value.

●Press the Left button once to go back to the a14 screen.
●EX. The odometer setting has been changed from 7750 to 15000 km.

●Press the Right button once to go back to the main screen.
⚠ Now, a14 is flashing on the screen!

●Main screen.

6 Trouble shooting

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

Trouble	Check item
The meter doesn't work when the power is on.	●The power is not supplied properly to the meter. →Make sure the wiring harness is connected correctly. The wiring or fuse might be broken. →The battery is too old to supply enough DC 12V power to make the meter work properly.
The meter shows wrong information.	●Check the voltage of your battery, and make sure the voltage is over DC 12V.
Speed does not appear or appear incorrectly.	●Make sure the speed sensor is connected properly. ●Check the tire-size setting. →Refer to the manual 4-6.
Tachometer does not appear or appear incorrectly.	●Check the RPM wire is connected correctly. ●Check if the spark plug is a "R" type. If not, replace the spark plug with the "R" type spark plug. ●Check your setting. →Please refer to the manual 4-7.
Temp does not appear or appear incorrectly.	●Check the temp sensor. →Did the wire broke or disconnect?
Fuel gauge does not appear or appear incorrectly.	●Check your fuel tank. →Is there any fuel inside the tank? ●Check the wiring harness. →Is the wire connected properly? ●Check the setting. →Refer to the manual 4-9.
The clock is incorrect.	●Do you connect the wires correctly. →Check the positive wire (Red) connected to the battery, and the main positive wire (Brown) connected to the main switch.

※If the problems still can't be solve, please contact your local distributor to get assistance.

5 Fuel gauge resistance reference

YAMAHA	JOG 50,100	100Ω	KYMCO	GOING 100	510Ω
	RS 100	100Ω		JR 100	510Ω
	RSZ 100	100Ω		SR G4 125	510Ω
	SV MAX 125	100Ω		V-LINK GP 125	510Ω
	Cygnus 125	100Ω		KTR 150	100Ω
	New Cygnus 125	100Ω		RACING 125,150	1200Ω
	GTR 125	100Ω		QUANNON 150	1200Ω
	LC 135	100Ω		G5 125,150	1200Ω
	NEW LC 135	100Ω		G6 150	100Ω
	LAGENDA 110	100Ω		VJR 50, 110	1200Ω
	S-MAX 150	100Ω	SYM	S-PRO 100	100Ω
	T-MAX 530	100Ω		Wolf 125	100Ω
	MIO 110	100Ω	PGO	G-MAX 125	100Ω
	AEROX 50	100Ω		X-HOT 125,150	100Ω
	BWS 125	100Ω		I'ME 125	100Ω
HONDA	MSX 125	250Ω		J BUBU 115	700Ω
	WAVE 110	510Ω		AF 125,150	700Ω
	GN5 110	510Ω		G-MAX 150	700Ω
	SH-150i	510Ω	AEON	Elite 250	100Ω
	PCX 125	100Ω		CO-IN 125	100Ω
	CBR 250	180Ω		MY 125,150	100Ω
GILERA	RUNNER 50	100Ω		OZ 125,150	100Ω
PEUGEOT	SpeedFight 50	100Ω	Hartford	Mini 125	100Ω
APRILIA	SR 50	100Ω		HD 150	100Ω
SUZUKI	V125	100Ω			