KOSO
Feel The Speed

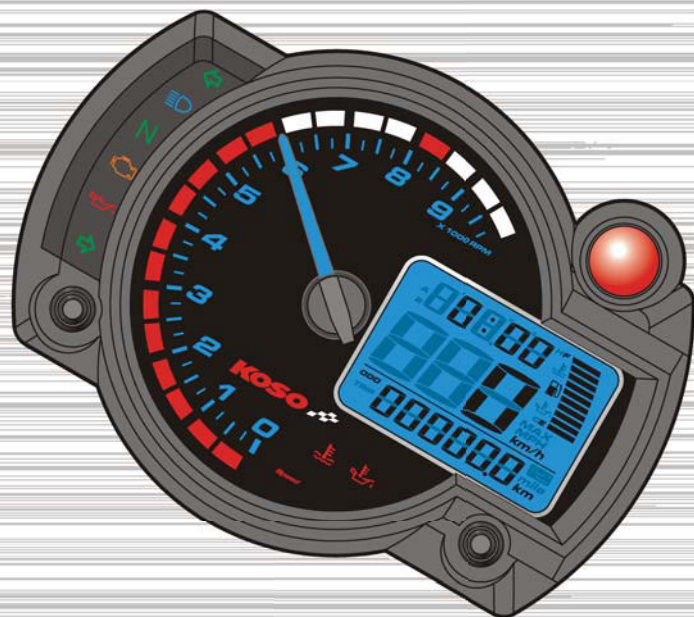BA015B25

BA015B15

RX2N

INSTRUCTION

GP style meter
CDI & FI

INTRODUCTION

Thank you for purchasing KOSO RX2N GP style meter , 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. Don't break or modify the wire terminal. To avoid the short circuit, please don't pull the wire when installing.
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.

👆 Press the button one time

👇 Press down the button for 3 seconds

Content

⚠ We recommend that you finish the relative setting before operating to assure the operation of meter.

3-1 Auto-checking screen

Off

↓

Check 1

↓

Check 2

↓

Check 3

↓

Check 4

Check 5

↓

Check 6

↓

Check 7

↓

Check 8

↓

On
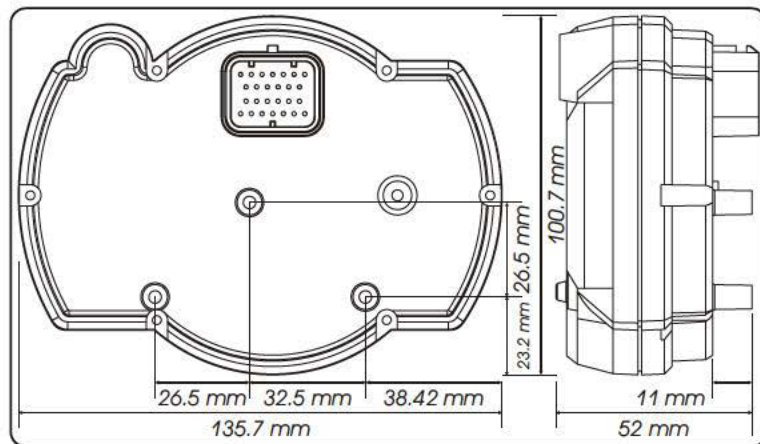
NOTE *It will enter the setting screen automatically when the first time you start it.*

RX2N *Oil style meter* CDI & FI P04

3-2 Meter size

100.7 mm

26.5 mm

23.2 mm

26.5 mm 32.5 mm 38.42 mm

135.7 mm

11 mm

52 mm

RX2N *Oil style meter* CDI & FI P05

The max RPM recall indicator light
- The indicator light will move according to the current RPM.
- The max RPM indicator light will show you the max RPM you reach and light on for 3 seconds.

Tachometer (10,000 RPM)
- Display unit: 250 RPM.

Tachometer (20,000 RPM)
- Display unit: 500 RPM.

Tachometer (10,000 RPM)
- Display range: 0~10,000 RPM.
- Display unit: 250 RPM.

Tachometer (20,000 RPM)
- Display range: 0~20,000 RPM.
- Display unit: 500 RPM.

Clock
- 24H

Digital thermometer (Water & oil temperature)
- Display range: 0~250°C (32~482°F)
- Display unit: 0.1°C (°F)

The RPM shift light (10,000 RPM)
- Setting range: 1,000~10,000 RPM.
- Setting unit: 100 RPM.

The RPM shift light (20,000 RPM)
- Setting range: 1,000~20,000 RPM.
- Setting unit: 100 RPM.

Pre-Shift light
- Setting range: -500~-3,000 RPM before the shift light.
- Setting unit: 100 RPM.
- Regarding the setting, please check 5-2.
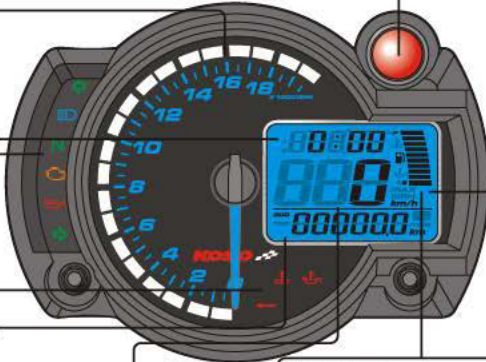
Max. record
- The meter will record the top speed, RPM and temperature automatically.

Speeding warning light
- Setting range: 30~360 km/h (20~225 MPH).
- Setting unit: 1 km/h (MPH).
- Regarding the setting, please check 5-1.

Over heat warning light (Water & oil temperature)
- Setting range: 60~250°C (140~482°F).
- Setting unit: 1°C (°F).
- Regarding the setting, please check 5-3.5-4.

Indicators lights
- Turn signal light (Green)
- High beam light (Blue)
- Neutral light (Green)
- EOBD light (Amber)
- Engine oil pressure light (Red)

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).

Speedometer
- Display range: 0~360 km/h (0~225 MPH)
- Display unit: km/h & MPH for alternative.
- Regarding the setting, please check 4-4.

Fuel meter
- Display range: 10 levels.
- Setting range: 100 Ω, 510 Ω, fuel switch, no display.

Fuel warning
- Setting range: 10~50 %
- Setting unit: 10 %
- Regarding the setting, please check 5-8.

Level thermometer (Water & oil temperature)
- Display range: 20~120°C (68~248°F), 10 levels.
- Display unit: Each level represents 10°C (50°F)

RX2N
RX2N

●Speedometer	Display range: 0~360 km/h (0~225 MPH)
	Display unit: km/h & MPH for alternative
○Display internal	<0.5 second
○Odometer	Display range: 0~99999.9 km (mile),
	reset automatically after 99999.9 km (mile).
○Trip meter A/B	Display range: 0~999.9 km (mile),
	reset automatically after 999.9 km (mile)
○Speeding warning light	Setting range: 30~360 km/h (20~225 MPH)
	Setting unit: 1 km/h (MPH)
○Top speed record	Display range: 0~360 km/h (0~225 MPH)
○Tire circumference	Setting range: 300~2,500 mm
	Setting unit: 1 mm · Sensitive point: 1~60 Points
●Tachometer	Display range: 0~10,000 / 20,000 RPM
	Display unit: 250 / 500 RPM
○Display internal	<0.5 second
○Shift light	Setting range: 1,000~10,000 / 20,000 RPM
	Setting unit: 100 RPM
○Pre-shift light	Setting range: -500~-3,000 RPM before the shift light
	Setting unit: 100 RPM
○Max. RPM record	Display range: 0~10,000 / 20,000 RPM
○RPM input pulse	Setting range: 0.5, 1, 1.5, 2, 2.5, 3, 4, 5, 6.
●Thermometer	Display unit: °C & °F for alternative
●Digital thermometer (Water & oil temperature)	Display range: 0~250°C (32~482°F) Display unit: 0.1°C (°F)
●Level thermometer (Water & oil temperature)	Display range: 20~120°C (68~248°F), 10 levels Display unit: Each level represents 10°C (50°F)
○Display internal	<0.5 second
○Over heat warning light (Water & oil temperature)	Setting range: 60~250°C (140~482°F) Setting unit: 1°C (°F)
○Top temperature record	Display range: 0~250°C (32~482°F)
●Fuel meter	Display range: 10 levels
	Display unit: Each level represents 10 %
	Setting range: 100 Ω, 510 Ω, fuel switch, no display
○Insufficient fuel warning	Setting range: 10~50 %
	Setting unit: 10 %
●Clock	24 H
●Perpetual calendar	Setting range: 2,000~2,099 A. D
●Target speed timer	Setting range: 30~360 km/h (20~225 MPH)
	Setting unit: 5 km/h (MPH)
●Target distance timer	Setting range: 1/32~20/32 mile (50~1,000 M)
	Setting unit: 1/32 mile (50 M)
●Top speed timer	The record including,
	1. Speed: 0~360 km/h (0~225 MPH)
	2. Distance: 0~999 M (0~3,280 feet)
	3. RPM: 0~10,000 / 20,000 RPM
	4. Timer: 0~9'59"99 second.
●Effective voltage	DC 12 V
●Effective temperature range	-10~+60°C
●Meter standard	JIS D 0203 S2
●Meter size	135.7 X 100.7 X 52 mm
●Meter weight	Around 240 g
●Indicator light color	Neutral-green, High beam-blue, Turn signal-green, EOBD-amber, Oil-red, Speeding-red, RPM shift light yellow / red.

NOTE Design and specification are subject to change without notice!

Select button

1. In main screen, press the **Select button** to choose the display of clock, water temperature or oil temperature.
2. In power test screen, press the **Select button** to choose the function you want to use.
3. In setting screen, press the **Select button** to choose the function you want to set.

Select button X 3 seconds

1. When the temperature is in the main screen, you could press down the "Select" button for 3 seconds to switch the temperature unit.
2. In power test screen, press down the **Select button** for 3 seconds to back to the main screen.
3. In setting screen, press down the **Select button** for 3 seconds to back to the main screen.

Adjust button

1. In main screen, press the **Adjust button** to choose the display of odometer, trip A, trip B 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 setting. If you keep pressing down the **Adjust button** the setting number will increase fast.

Adjust button X 3 seconds

In main screen, press down the **Adjust button** for 3 seconds to reset the trip A, trip B, or the Max. Record.

Press down the Adjust button

In setting screen, to add the setting value fast.

Select & Adjust X 3 seconds

In main screen, press down the **Select & Adjust buttons** at the same time for 3 seconds to enter the setting screen.

⚠ CAUTION! | For safety reason - you could adjust the setting or operate the function only when the bike is stop.

In the setting screen, press down the **Select button** for 3 seconds to back to the main screen.

In main screen, press down the **Select & Adjust button** at the same time for 3 seconds to enter the setting screen.

In main screen, press the **Select & Adjust button** one time to enter the power test screen.

In power test screen, press down the **Select button** for 3 seconds to back to the main screen.

In any screen, you could press down the **Select buttons** for 3 seconds to back to the main screen.

In main screen, press the **Select button** to choose the function combination you want to display on the screen.

The alternative combination is as the circle we list: clock+fuel gauge → water temperature+fuel gauge → water temperature+oil temperature level gauge → oil temperature+water temperature level gauge → clock+fuel gauge.

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

● When the temperature is in the main screen, you could press down the "Select" button for 3 seconds to switch the temperature unit.

● In ODO function, press the **Adjust button** one time to switch to the trip A function.

● In trip A screen, press the **Adjust button** one time to switch to the trip B function.

● Press down the **Adjust button** for 3 seconds to reset the trip A.

● In trip B screen, press the **Adjust button** one time to switch to the Max.record function.

● Press down the **Adjust button** for 3 seconds to reset the trip B.

● In Max. record screen, press the **Adjust button** one time to switch to the ODO function.

● Press the **Select button** one time to check the oil temperature record.

● Press down the **Adjust button** for 3 seconds to reset the Max.record.

● The displayed odometer setting

● The real odometer record setting

● The backlight brightness setting

● The perpetual calendar setting

Adjust button

● In main screen, press down the **Select & Adjust button** at the same time for 3 seconds to enter the setting screen.

● The setting screen is in order as the following drawing, please use the setting order for your reference when you want to set the meter.

● The clock setting

● Speeding warning light setting

● The fuel gauge resistance and insufficient fuel warning setting

● The RPM shift light setting

● Over heat warning light (Water temperature) setting

● Over heat warning light (Oil temperature) setting

● The target speed timer / target distance timer setting

● Tire circumference and sensor point setting

● RPM input pulse & signal impulse setting

NOTE If you enter the setting screen for 30 seconds and don't press the button, it will back to the main screen automatically.

- In a 1 screen, press the *Select button* to enter the speeding warning light setting screen.
- EX. Now the speeding warning light setting is 60 km/h.

P.S. Try it!

The speeding light will light on when the speed reaches your speeding warning setting.

- EX. The speeding warning light you want to set is 65 km/h.
- Press the *Select button* to move to the digit you want to set.

⚠ Now the speeding warning light and the setting value is flashing!

NOTE The speeding warning light setting range: 30~360km/h (20~225 MPH). Setting unit: 1 km/h (MPH).

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

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

- Press the *Select button* to return to a 1 setting screen.
- EX. Now the setting is changed from 60 km/h to 65 km/h.

NOTE When you leave this screen, the setting is finished.

- Press the *Adjust button* to select the other setting screens.

If you just want to make this function setting, you could press down the *Select button* for 3 seconds to back to the main screen.

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- In a 2 screen, press the **Select button** to enter the RPM shift light setting screen.
- EX. Now the RPM shift light setting is 7,000 RPM.

P.S.

The red color shift light will light on according to the shift light setting number.

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

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

NOTE The setting range: 1,000~10,000 / 20,000 RPM. Setting unit: 100 RPM.

- Press the **Select button** to enter the pre-shift light setting.
- EX. Now the shift light setting is changed from 7,000 RPM to 12,000 RPM.

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P.S.

The yellow color pre-shift light will light on according to the shift light setting number.

- EX. You want the pre-shift light to light on at 10,500 RPM
- The equation is as following,
  The shift light setting value(12,000 RPM) - The pre-shift light setting value, (X)= 10,500 (The RPM you want the pre-shift light to light on.)
→ The setting value of pre-shift light= 1,500.
  It means that you should set the pre-shift light setting as 1,500.
- Press the **Adjust button** to choose the setting value.

⚠ Now the pre-light and the setting number is flashing!

NOTE The setting range: -500~-3,000 RPM. Setting unit: 100 RPM.

- Press the **Select button** to return to a 2 setting screen.
- EX. Now The pre-shift light setting is changed from 500 RPM to 1,500 RPM.

NOTE When you leave this screen, the setting is finished.

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● Press the *Adjust button* to select the other setting screens.

> If you just want to make this function setting, you could press down the *Select button* for 3 seconds to back to the main screen.

● In a 3 screen, press the *Select button* to enter the over heat warning light (Water temperature) setting screen.
● EX. Now the over heat warning light (Water temperature) setting is 100.0°C.

P.S. Try it!

The over heat warning light (Water temperature) will flash when the temperature reached your setting.

● EX. You want to set the over-heat warning light (Water temperature) at 102.0°C.
● Press the *Select button* to move to the digit you want to set.

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

NOTE The over heat warning light setting range: 60~250°C (140~482°F).
Setting unit: 1°C (°F).

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

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

● Press the *Select button* to return to a 3 setting screen.
● EX. Now the setting is changed from 100.0°C to 102.0°C.

NOTE When you leave this screen, the setting is finished.

● Press the *Adjust button* to select the other setting screens.

If you just want to make this function setting, you could press down the *Select button* for 3 seconds to back to the main screen.

● In a 4 screen, press the *Select button* to enter the over heat warning light (Oil temperature) setting screen.
● EX. Now the over heat warning light (Oil temperature) setting is 100.0°C.

P.S. *Try it!*

The over heat warning light (Oil temperature) will flash when the temperature reached your setting.

● EX. You want to set the over-heat warning light (Oil temperature) at 102.0°C.
● Press the *Select button* to move to the digit you want to set.

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

NOTE The over heat warning light setting range: 60~250°C (140~482°F). Setting unit: 1°C (°F).

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

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

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●Press the *Select button* to return to a 4 setting screen.
●EX. Now the setting is changed from 100.0°C to 102.0°C.

NOTE When you leave this screen, the setting is finished.

●Press the *Adjust button* to select the other setting screens.

If you just want to make this function setting, you could press down the *Select button* for 3 seconds to back to the main screen.

Power TEST

●In a 5 screen, press the *Select button* to enter the target speed timer and target distance timer setting screen.
●EX. Now the target speed timer setting is 0~50 km/h and the target distance timer setting is 1/32 mile (50 M).

●EX. You want to set the target speed timer setting at 0~110 km/h.
●Press the *Adjust button* to choose the setting value.

⚠ Now the target speed value is flashing!

NOTE The target speed timer setting range: 30~360 km/h (20~225 MPH). Setting unit: 5 km/h (MPH).

●Press the *Select button* to enter the target distance timer setting screen.
●EX. Now the target speed timer is changed from 0~50 km/h to 0~110 km/h.

●EX. You want to set the target distance timer setting at 2/32 mile (100M).
●Press the *Adjust button* to choose the setting value.

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⚠ *Now the target distance value is flashing!*

NOTE The target distance timer setting range: 1/32~20/32 mile (50~1,000 M). Setting unit: 1/32 mile (50M).

● Press the **Select button** to return to a **5** setting screen.
● EX. Now the target distance timer setting is changed from 1/32 mile (50 M) to 2/32 mile (100 M).

NOTE When you leave this screen, the setting is finished.

● Press the **Adjust button** to select the other setting screens.

↪ If you just want to make this function setting, you could press down the **Select button** for 3 seconds to back to the main screen.

● In a 6 screen, press the **Select button** to enter the tire circumference and sensor point setting screen.
● EX. Now the tire circumference setting is 1,000 mm, and the sensor point is 1.

⚠ **CAUTION!**
● Please measure the tire circumference.
● The speed displayed on the meter will be affected by the setting, please make sure the setting number is correct before you make the setting.

P.S. *Try it!*

You could define the valve as the starting point and the terminal point to measure the wheel circumference with a measuring tape.

● EX. You want to set the circumference at 1,300 mm.
● Press the **Select button** to move to the digit you want to set.

⚠ *Now the setting value is flashing!*

NOTE The tire circumference setting range: 300~2,500 mm. Setting unit: 1 mm.

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

- Press the *Select button* to enter the sensor point setting screen.
- EX. Now the circumference setting is changed from 1,000 mm to 1,300 mm.

- EX. The sensor point you want to set is 6.
- Press the *Select button* to move to the digit you want to set.

⚠ Now the sensor point setting value is flashing!

NOTE The sensor point setting range: 1~60 points.

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

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- Press the *Select button* to return to a 6 setting screen.
- EX. Now the sensor point setting is changed from 1 to 6.

NOTE When you leave this screen, the setting is finished.

- Press the *Adjust button* to select the other setting screens.

↻ If you just want to make this function setting, you could press down the *Select button* for 3 seconds to back to the main screen.
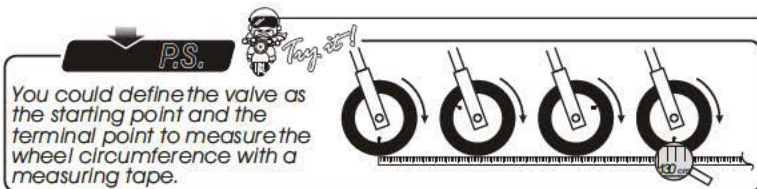
- In a 7 screen, press the Select button to enter the RPM input pulse setting screen.
- EX. Now the RPM input pulse setting is 1 (4 Stroke, 2 piston) and the signal impulse setting is Hi (The positive impulse).

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

⚠ 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 value	The corresponding stroke and pistons number.		The corresponding RPM signal number per ignition.
0.5	———	4C-1P	2 RPM signals per 1 ignition.
1	2C-1P	4C-2P	1 RPM signal per 1 ignition.
1.5		4C-3P	2 RPM signals per 3 ignition.
2	2C-2P	4C-4P	1 RPM signal per 2 ignition.
2.5		4C-5P	2 RPM signals per 5 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 10 ignition.
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.

- Press the Select button to enter the signal impulse setting screen.
- EX. Now the RPM input pulse setting is changed from 1 (4 Stroke, 2 piston) to 2 (4 Stroke, 4 piston).

- EX. The signal impulse you want to set is Lo (The negative impulse).
- Press the Adjust button to choose the setting value.

NOTE The impulse setting range is between Hi (The positive impulse) & Lo (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 the Select button to return to a 7 setting screen.
- EX. Now the signal impulse setting is changed from Hi P to Lo.

NOTE When you leave this screen, the setting is finished.

- Press the Adjust button to select the other setting screens.

If you just want to make this function setting, you could press down the Select button for 3 seconds to back to the main screen.

- In a 8 screen, press the *Select button* to enter the fuel gauge resistance and insufficient fuel warning setting screen.
- EX. Now the fuel gauge resistance setting is 100 Ω and the insufficient fuel warning setting is 30 %.

P.S.

Thy it !

Usually the fuel gauge resistance is 100 Ω on YAMAHA system, and 510 Ω on HONDA system.
The insufficient fuel warning setting: When the fuel is less than your setting, the fuel level gauge will flash to warn you.

- EX. You want to change the fuel resistance setting to 510 Ω.
- Press the *Adjust button* to choose the setting value.

⚠ Now the resistance setting value is flashing!

NOTE The fuel gauge resistance setting range : 100 Ω, 510 Ω, fuel switch.
The switch setting is for the fuel switch only, can't be used for the fuel level sensor.
If you don't install the fuel wiring, the fuel gauge will not display.

- Press the *Select button* to enter the insufficient fuel warning setting screen.
- EX. Now the fuel gauge setting is changed from 100 Ω to 510 Ω.

- EX. You want to set the insufficient fuel warning setting at 20 %.
- Press the *Adjust button* to choose the setting value.

⚠ Now the insufficient setting value is flashing!

NOTE The insufficient fuel warning setting range: 10~50 %. Setting unit: 10 %.

- Press the *Select button* to return to a 8 setting screen.
- EX. Now the setting is changed from 30 % to 20 %.

NOTE When you leave this screen, the setting is finished.

- Press the *Adjust button* to select the other setting screens.

If you just want to make this function setting, you could press down the *Select button* for 3 seconds to back to the main screen.

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RX.2N of style meter CDI & FI **P.33**

●In a 9 screen, press the *Select button* to enter the clock setting screen.
●EX. Now the time is 0:00.

●EX. You want to set the clock at 12:05.
●Press the *Adjust button* to choose the setting value.

⚠ *Now the hour value is flashing!*

NOTE *This is a 24 H clock.*

●Press the *Select button* to enter the minute setting screen.
●EX. Now the hour is changed from 0 to 12.

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

⚠ *Now the minute value is flashing!*

●Press the *Select button* to return to a 9 setting screen.
●EX. Now the setting is changed from 0 to 5.

NOTE *When you leave this screen, the setting is finished.*

●Press the *Adjust button* to select the other setting screens.

If you just want to make this function setting, you could press down the Select button for 3 seconds to back to the main screen.

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● In a 10 screen, press the *Select button* to enter the perpetual calendar setting screen.
● EX. Now the perpetual calendar setting is 2000/01/01 Saturday.

● EX. You want to set the perpetual calendar at 2009/07/17.
● Press the *Adjust button* to choose the setting value.

⚠ Now the setting value is flashing!

NOTE If you choose to turn off the calendar function, press the *Select button* to return to a 10 screen.
Then you could press the *Adjust button* to select other setting screens.

● Press the *Select button* to enter the year setting screen.

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

⚠ Now the setting value is flashing!

NOTE The year setting range : 2000~2099.

NOTE When you adjust the year and date, the day will adjust automatically.

● Press the *Select button* to enter the month setting screen.
● EX. Now the year setting is changed from 2000 to 2009.

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

⚠ Now the setting value is flashing!

NOTE The month setting range: 1~12.

NOTE When you adjust the year and date, the day will adjust automatically.

● Press the *Select button* to enter the date setting screen.
● EX. Now the month setting is changed from 1 to 7.

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

● Now the setting value is flashing!

NOTE The date setting range : 1~31.

NOTE When you adjust the year and date, the day will adjust automatically.

● Press the *Select button* to return to a 10 setting screen.

● EX. Now the setting is changed from 01 to 17.

NOTE When you leave this screen, the setting is finished.

● Press the *Adjust button* to select the other setting screens.

If you just want to make this function setting, you could press down the *Select button* for 3 seconds to back to the main screen.

● In a 11 screen, press the *Select button* to enter the backlight brightness setting screen.

● EX. Now the backlight brightness is 5 (The brightest setting).

● EX. You want to set the brightness at 3.

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

● Now the setting value is flashing!

NOTE The backlight brightness setting range : 1~5.

NOTE The brightness adjust setting is only effective in the LCD brightness.

● Press the *Select button* to return to a 11 setting screen.

● EX. Now the setting is changed from 5 to 3.

NOTE When you leave this screen, the setting is finished.

● Press the *Adjust button* to select the other setting screens.

If you just want to make this function setting, you could press down the *Select button* for 3 seconds to back to the main screen.

● The real odometer record is for you to check how long the meter already worked.
● In a 12 screen, press the *Adjust button* to select the other setting screens.
● EX. Now the real odometer record is 10,168 km.

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

● In a 13 screen, press the *Select button* to enter the displayed odometer setting setting screen.
● EX. Now the ODO is 0 km.

● EX. You want to set the displayed odometer as 3,000 km.
● Press the *Select button* to move to the digit you want to set.

⚠ Now the setting value is flashing!

NOTE The setting range: 0~99,999 km.
Setting unit: 1 km/h (MPH).

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

● Press the *Select button* to return to a 13 setting screen.
● EX. Now the setting is changed from 0 km to 3,000 km.

NOTE When you leave this screen, the setting is finished.

●Press the *Adjust button* to select the other setting screens.

> If you just want to make this function setting, you could press down the *Select button* for 3 seconds to back to the main screen.

●In main screen, press the *Select & Adjust button* one time to enter the power test screen.

●In power test screen, press the *Select button* to choose the test you want to do. The test function is in order as target speed timer, target distance timer, top speed timer.

●In power test screen, press the *Select button* to switch from the target speed timer to target distance timer.
●EX. Now it is in the target speed timer screen, and the setting is 0~110 km/h.

●In power test screen, press the *Select button* to switch from the target distance timer to the top speed timer screen.
●EX. Now the screen switch from the target speed timer screen to the target distance timer screen, and the setting is 2/32 mile (0~100 M).

●In power test screen, press the *Select button* to switch from the top speed timer to the target speed timer.
●EX. Now the screen switch from the target distance timer screen to the top speed timer screen.

Rotated text along left side: The record display screen / The record display screen if no record

Rotated text: Enter the testing screen if no record / Enter the testing screen

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

● In power test screen, press the **Select button** one time to enter the target speed timer test screen.

NOTE Please start the test when the bike stops.

⚠ If you have the 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 target speed timer test screen.
● EX. Now you could see the record you have before. It displays the target speed timer setting as 0~110 km/h, the test result: 19"20 seconds. The top speed is 110 km/h during the test., The Max. RPM is 10,000 RPM during the test.

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

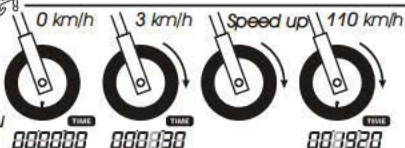● When the bike moves, the timer will start automatically.

⚠ Now the [Power Test] is flashing!

NOTE About the power test setting, please check 5-5.

P.S. Try it!

The timer is automatic, so when your bike start to move the timer will start to count the time and stop automatically after you stops the bike.

0 km/h — 000000 · 3 km/h — 000830 · Speed up · 110 km/h — 001920

⚠ During the test, the [Power Test] will keep flashing!

● When you reach the target speed you set (0~110 km/h), the timer will stop counting (19"20 second).

↩ 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.

P.S. Try it!

If you don't reach the target speed or stop accelerating during the test, you could press the **Adjust button** to stop the timer. Then you could press the **Adjust button** one time to clear the record and enter the target speed timer test screen.

0 km/h — 000000 · 3 km/h — 000830 · Speed up · Test failure — 002920
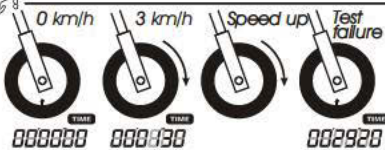
The record display screen

Enter the testing screen if no record

Enter the testing screen

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

- In power test screen, press the *Select button* 2 times to enter the target distance timer test screen.

NOTE Please start the test when the bike stops.

⚠ If you have the 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 target distance timer test screen.
- EX. Now you could see the record you have before. It displays the target speed timer setting as 2/32 mile (100 M), the test result: 10"27 seconds. The top speed is 63 km/h during the test., The Max. RPM is 8,000 RPM during the test.

If you just want to check the record, you could press down 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 About the power test setting, please check 5-5.

P.S. *Try it!*

The timer is automatic, so when your bike start to move the timer will start to count the time and stop automatically after you stops the bike.

TIME 000000   TIME 000330   Speed up   TIME 001027
0 M   100 m
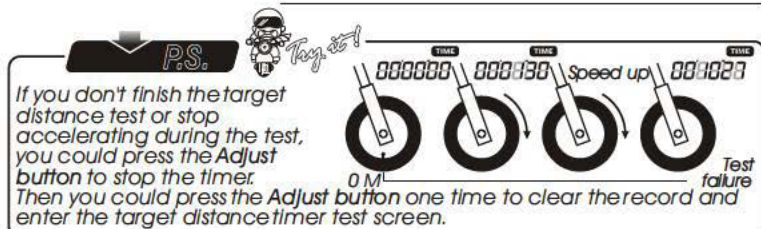
⚠ During the test, the will keep flashing!

- When you reach the target distance you set (100 M . 2/32 mile), the timer will stop counting (10"27 second).

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.

P.S. *Try it!*

If you don't finish the target distance test or stop accelerating during the test, you could press the *Adjust button* to stop the timer.
Then you could press the *Adjust button* one time to clear the record and enter the target distance timer test screen.

TIME 000000   TIME 000330   Speed up   TIME 001027
0 M   Test failure

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

● In power test screen, press the *Select button* 3 times to enter the top speed test screen.

NOTE Please start the test when the bike stops.

⚠ If you have the 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 Max. RPM is 10,000 RPM during the test, the time you need to reach the top speed is 10"20 seconds.

If you just want to check the record, you could press down 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. Distance: 0~999 M (3280 feet) RPM: 0~10,000 / 20,000 RPM. Timer: 0~9'59"99 seconds.

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

Enter the testing screen if no record

The record display screen

Enter the testing screen

Next page

P.S. Try it!

The timer is automatic, so when your bike start to move the timer will start to count the time and stop automatically after you stops the bike.

0 km/h   3 km/h   Speed up   180 km/h 179 km/h
When the speed decreases, the timer will stop.

0 M   510 m
TIME   TIME   TIME
000000   000330   003020

⚠ During the test, the 🔲 will keep flashing!

● 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.

The following situation do not indicate 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 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 12V) to make the meter work.
The meter shows wrong information.	● Please check the voltage of your battery, and make sure the voltage is over DC 12V.
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 5-6.
Tachometer does not appear or appear incorrectly.	● Please check the RPM sensor wiring is connected correctly. ● Please check the spark plug is R type or not. If not, please replace the spark plug with the R type spark plug. ● Please check your setting. → Please refer to the manual 5-7.
Temp does not appear or appear incorrectly.	● Please check the sensor. → Does the wiring break or falling off ?
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 5-8.

Trouble	Check Item
The clock is incorrect. The odometer and trip meter is not accumulated or accumulated wrong data. When switch off, the needle doesn't return to 0.	● It is possible that the positive wire is connected wrongly. → Please check is the red positive wire connect to the permanent power or battery and the brown positive wire is connected to the key on switch positive pole. ● It is possible that the permanent power wire is not connected well. → Please check the red positive wire is connect well or not.

※ If still can't solve the problems according to the steps above, please contact with distributors or us.
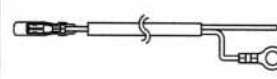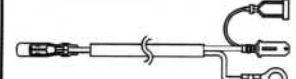
1-1 Accessory

1 Meter X 1

2 Main wiring X 1

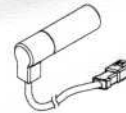**3** RPM wire (Type **A**) X 1

4 RPM wire (Type **B**) X 1
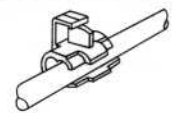
5 Temp sensor wire X 2

6 TH-01 water temp sensor X 2

7 SA-02 Active speed sensor (with JST water-proof connector)

8 Mid-way connect X 11

9 M8 / S type speed sensor bracket X 1

10 M10 / S type speed sensor bracket X 1

11 M5 X 5L hexagonal bolt X 2

12 2.5 mm spanner X 1

13 3 mm spanner X 1

14 Meter bracket X 1

15 M4 screw X 3

16 M4 gasket X 3

17 M6 X 35L screw X 2

18 M8 X 30L screw X 2

19 M6 screw X 2

20 M8 screw X 2
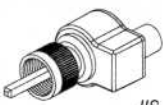
21 M6 gasket X 2

22 M8 gasket X 2

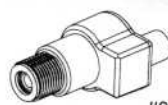**NOTE** Please contact the local distributor if the items you open are not the same, with the above-listed one.

1-2 Option accessory

1 Digital speed signal sensor — JIS TYPE a
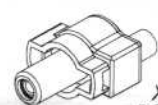
2 Digital speed signal sensor — JIS TYPE A

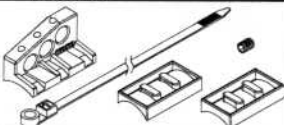**3** Digital speed signal sensor — RUNNER

4 Digital speed signal sensor — SR X-FIGHT BOOSTER

5 L type speed sensor bracket

6 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

7 Water temp sensor adapter
M14
M16.M18
M22.M26 mm

8 Cylinder head temp sensor
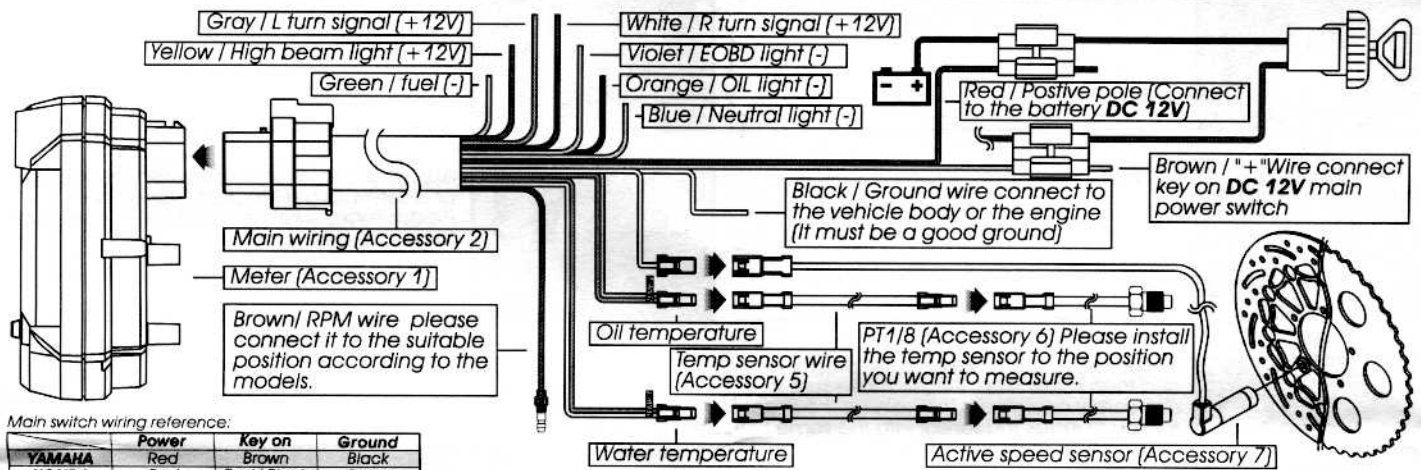M10.
M14 mm

9 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

10 Temp sensor wire set (2 M)

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

Gray / L turn signal (+12V)
Yellow / High beam light (+12V)
Green / fuel (-)
White / R turn signal (+12V)
Violet / EOBD light (-)
Orange / OIL light (-)
Blue / Neutral light (-)
Red / Postive pole (Connect to the battery DC 12V)
Black / Ground wire connect to the vehicle body or the engine (It must be a good ground)
Brown / "+"Wire connect key on DC 12V main power switch
Main wiring (Accessory 2)
Meter (Accessory 1)
Brown/ RPM wire please connect it to the suitable position according to the models.
Oil temperature
Temp sensor wire (Accessory 5)
PT1/8 (Accessory 6) Please install the temp sensor to the position you want to measure.
Water temperature
Active speed sensor (Accessory 7)

Main switch wiring reference:

	Power	Key on	Ground
YAMAHA	Red	Brown	Black
HONDA	Red	Red / Black	Green
SUZUKI		Black	Green
KAWASAKI	White	Brown	Black / Yellow
KYMCO	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:

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
BENNELLI	Gray / Violet		

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

Fuel indicator wiring reference:

YAMAHA	Green	KYMCO	Yellow / White
HONDA	Yellow / White	SYM	Yellow / White
SUZUKI	Yellow / White	PGO	Gray
KAWASAKI	Black / L Green		

⚠ 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.**

F RPM wire set
Ground
RPM wire set-type A (Accessory 3)
RPM wire set-type B (Accessory 4)
Ignition coil positive
Coil
Spark plug wire
Spark
Spark plug cap
EMS CDI
Flywheel ignition pulse
RPM wire set-type A (Accessory 3)
pick up
Tachometer
D
E

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.

⚠ The RPM wire installation
A. Please wrap the RPM wire at least 5 times around the spark plug.
A1. Please use tape to fix the RPM (Type **A**) wire onto the spark plug wire.
A2. Please use tape to fix the RPM wire (Type **A**) on the spark plug cap.
A3. 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)
B. Please connect the RPM wire (type **B**) to connect to the ignition coil positive pole.
B1. Please wrap the RPM wire (type **B**) on the spark plug wire by connecting the male and female connector.
C. Please connect the RPM wire (Type **A**) to the pick up.
D. 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.)
E. 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.
F. Please use the method mentioned above to install the RPM wire, and then connect the ground wire to the frame body or the engine. (Please make sure that the ground is a good ground.)
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.

1. NEW
2. NEW
1. NEW
2. NEW
3. NEW
7. NEW
6. NEW
7. NEW
4. NEW
7. NEW
8. NEW
4. NEW
5.
9.
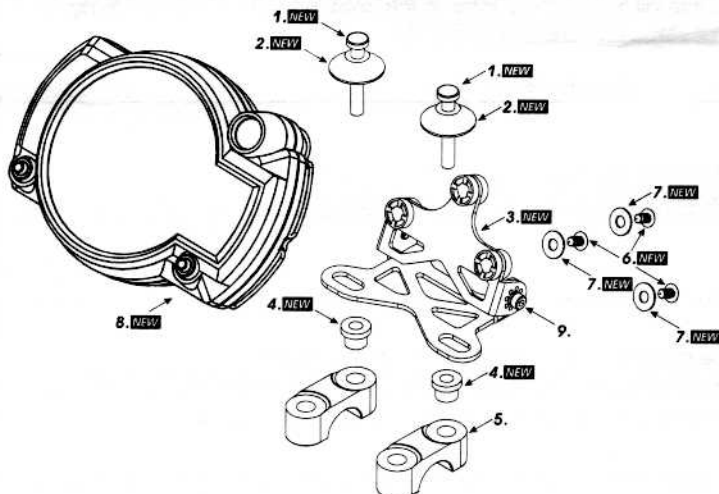
When installing, please follow the process

1. M6 or M8 screw X 2 (Accessory 17.18)
2. M6 or M8 aluminum screw bush X 2 (Accessory 19.20)
3. Bracket (Accessory 14)
4. M6 or M8 gasket X 2 (Accessory 21.22)
5. Handle bar bracket

NOTE You could also install it (meter bracket) on the original meter bracket.

6. M5 screw X 3 (Accessory 15)
7. M5 gasket X 3 (Accessory 16)
8. Meter (Accessory 1)
9. Meter bracket micro-adjustment screw

NOTE You could choose the angle first and then use the screw to fix the angle.

NOTE The handle bar bracket screw and screw hole will differ depending on different model. We suggest you to use the additional assembly (item 1.2.4) to fit it.
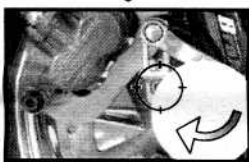
Loose the screw on the caliper

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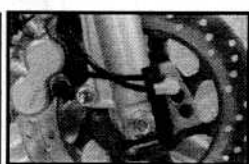
Please adjust the bracket to the proper angle and then screw it up. Please make sure the disc screw could pass the hole on the bracket for you to install the sensor into the same hole for catching the speed signal.

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.

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.**

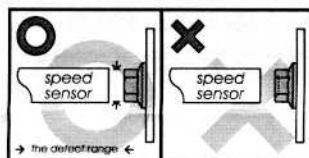EX. 1
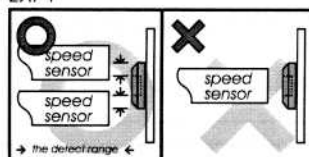
The hexagon socket disc screw
The best detect area: The edge of the hexagon socket screw.
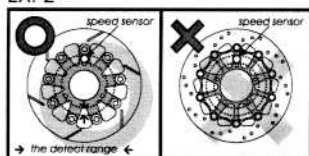⚠ Please don't catch the signal from the middle hole of the hexagon socket screw to avoid wrong signal.

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.
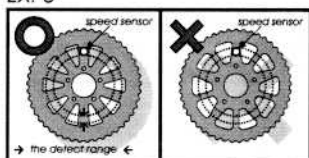
EX. 2

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

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!