INSTALLATION

Thanks for purchasing **our T&T meter**, before operating this unit, please read carefully the instruction sheet and retain it for future reference.

⚠ Notice

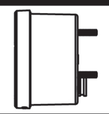
1.This meter work on DC 12 volts applications only.
2.For proper installation, please follow the steps described in the instruction. Any damages caused by wrong installation shall be imputed to the users.
3.Don't break or modity the wire terminals. To avoid any short circuit, do not pull the wires out 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.

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.

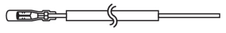
1-1 Accessories

1 Meter X 1



2 Speed sensor X 1

3 RPM WIRE (TYPE **A**) X 1



4 RPM WIRE (TYPE **B**) X 1

5 M8/ S type speed sensor bracket X 1

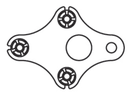
6 M10/ S type speed sensor bracket X 1

7 M5X5L Hexagon screw X 2

8 D6 X 5L mm magnet x6

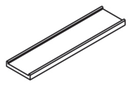
9 2.5 mm spanner x1

10 Meter bracket X 1

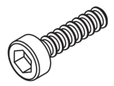


11 Handle bar clamp X 1

12 Rubber X 1



13 M6 X 18L screw X 1



14 M5 X P0.8 nut X 3

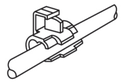
15 M6 X P1.0 nut X 1

16 M5 washer X 3

17 M6 washer X 1

18 Aluminum bush X 1

19 Mid-way connector X 8



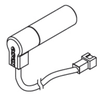
NOTE Please contact your local distributor if the items received in the box are not the same as the one listed above.

1-2 Optional accessories

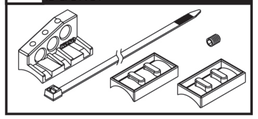
1 Disc magnet screw

5/16-18 X 22.1L
M5 X P0.8 X 12L
M6 X P1.0 X 12.6L
M6 X P1.0 X 19.7L
M6 X P1.0 X 24L
M8 X P1.25 X 22.5L M8 X P1.25 X 27.5L
M8 X P1.25 X 29L M10 X P1.25 X 28.3L

2 Active speed sensor



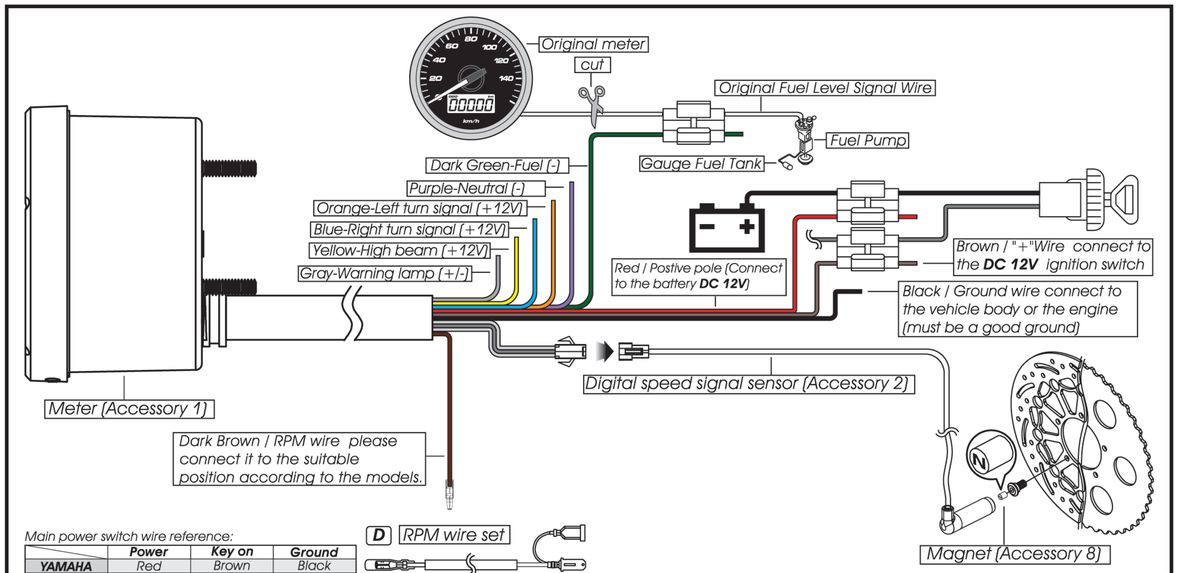
3 L TYPE speed sensor backet



NOTE The optional active speed sensor can read up to 20 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.

2-1 Wiring installation instruction



Main power switch wire 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 and year.

RPM wire reference:

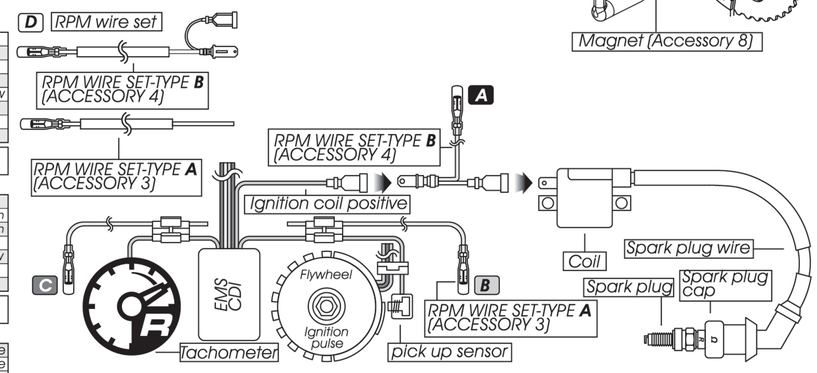
YAMAHA	Yellow / Black	BUELL	Pink
HONDA	Yellow / Green	CAGIVA	Gray / Green
SUZUKI	Yellow / Blue	DUCATI	Gray / Green
KAWASAKI	Light Blue	H-D	Pink
APRILIA	Gray / Violet	MV	Gray / Yellow
BMW	Black	TRIUMPH	Red
BENELLI	Gray / Violet		

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

Fuel indicator wire 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, do not connect in parallel with the original wire - otherwise the fuel gauge won't display.
The wrong installation of the fuel wire might damage the instrument.

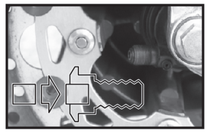


NOTE When connecting the power wire, please follow carefully the instruction. If the red & brown wires are connected in parallel, the meter won't work properly.

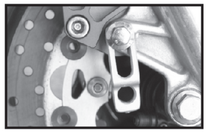
⚠ The RPM wire installation

A. Connect the RPM wire (type **B**) to the ignition coil positive pole.
B. Connect the RPM wire (Type **A**) to the pick up sensor.
C. Connect in 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 proper RPM wire information from the service manual of your bikes.)
D. Use the method mentioned above to install the RPM wire.
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 C>B>A, we will suggest you to check different ways if you have problems to get the RPM signal.

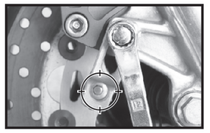
2-2 Installation instruction



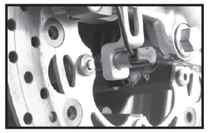
Put the magnet into the brake disc screw hole.



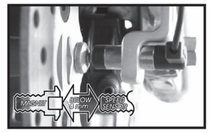
Install the s type sensor bracket.



Adjust the sensor bracket position to make sure the sensor is facing the magnet to prevent bad speed signal.



Install the speed sensor on the bracket.

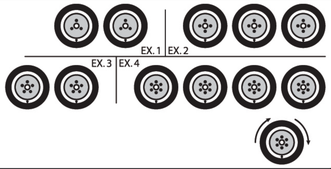


In order to get a good speed signal, the distance between the speed sensor and magnet should be under 8mm.

Try it!

Higher number of magnets installed on the disk brake will result in a faster speed display on the gauge.
The letter "N" on the magnets must face the speed sensor in order to pick up correctly the speed.

EX 1: If the disk brake has 3 screws, you can install 1 or 3 magnets.
EX 2: If the disk brake has 4 screws, you can install 1,2 or 3 magnets.
EX 3: If the disk brake has 5 screws, you can install 1 or 5 magnets.
EX 4: If the disk brake has 6 screws, you can install 1,2,3 or 6 magnets.



3-1 Basic function instruction

Tachometer
- Display range: 0~10,000 RPM

Telltales
- Repeater (Green)
- Warning (Red)
- Neutral (Green)
- High beam (Blue)

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

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

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

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).

Clock
- 24H

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

3-2 Functions

●Speedomete	Display range: 0~360 km/h (0~225 MPH) Display unit: km/h or MPH
○Display internal	<0.5 second
○Odometer	Display range: 0~99999 km (mile), reset automatically after 99999 km (mile).
○Trip meter A/B	Display range: 0~999.9 km (mile), reset automatically after 999.9 km (mile). Display unit: 0.1 km (mile).
○Tire circumference	Setting range: 300~2,500 mm Setting unit: 1 mm, Sensitive point: 1~20
●Tachometer	Display range: 0~10,000 RPM
○The shift light	Setting range: 8,000~10,000 RPM。 Setting unit: 100 RPM。
○Warning	Light on (F-OFF) Flash (F-ON)
○The RPM input signal number setting	Setting range 0.5, 1~24
○The RPM input pulse	Setting range: HI (The positive wave pulse) Lo (The negative wave pulse)
●Fuel meter	Display range: 6 levels Display unit: Each level represent 16.6 % Setting range: 100Ω, 250Ω, 510Ω, 1200Ω, SW
●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.
●Backlight brightness Right	Setting range: 1-5 (Darkest)~5-5 (Brightest) Setting unit: Each level represents 20 %
●Effective voltage	**DC 12 V**
●Effective temperature range	-10~+60°C
●Meter standard	JIS D 0203 S2
●Meter size	85.5 X 54.5mm
●Meter weight	Around 330 g
●Indicator light color	Repeater-green, Warning-Red, Neutral-green, High beam-blue

NOTE Design and specification are subject to change without notice!

3-3 Button function instruction

Press the Select button
1. In main screen, press the Select button to enter the MAX record display.
2. In setting screen, press the Select button to choose the function you want to set.

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

Press the Adjust button
1. In main screen, press the Adjust button to choose the odometer, trip A, trip B, clock, volt.
2. In the setting screen, press the Adjust button to change the setting numbers. If you keep pressing down the Adjust button the number will increase quikly.

Hold the Adjust button for 3 seconds
1. In the main screen, hole the Adjust button for 3 seconds to reset the trip A, trip B and the MAX record.
2. In the ODO screen, hole the Adjust button for 3 seconds to switch between the km/h and mile.

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

Hold the Select + Adjust buttons for 3 seconds
1. In the main screen, hold the Select+Adjust buttons at the same time for 3 seconds to enter the setting screen.

3-4 Main function instruction (Select button)

- In main screen (ODO). Press the **Select button** one time to enter the Max. record screen.
- Hold the **Adjust button** for 3 seconds to reset Max. record.

- In Max. record screen. Press the **Select button** one time to go back to the main screen (ODO).

- Main screen

3-5 Main function switch instruction (Adjust button)

●*In main screen (ODO). Press the **Adjust button** one time to enter the trip A screen.*

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

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

●*Hold the **Adjust button for 3 seconds** to reset Trip B.*

●*In Trip B screen. Press the **Adjust button** one time to enter the clock screen.*

●*In the clock screen. Press the **Adjust button** one time to enter the volt screen.*

●*In the volt screen. Press the **Adjust button** one time to go back to the main screen (ODO).*

3-6 Setting screen instruction

1. *Shift light value setting*

2. *Shift light flashing ON/OFF*

3. *Circumference*

4. *sensing point*

5. *Piston numbers*

6. *Signal type*

7. *Fuel gauge resistance*

8. *Clock*

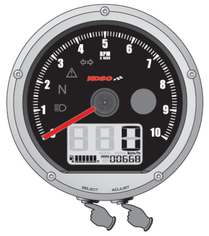
9. *Backlight brightness*

10. *Internal ODO display*

11. *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 **Select & Adjust button** to enter the setting screen.*

4-1 Shift light setting

●***EX. Set the shift light at 8,500 RPM.***

●*Press the **Select button** to move to the digit you want to set.*

●*Press the **Adjust button** to change the value.*

Note *Setting range: 1000~10,000 RPM*
Setting unit: 100 RPM

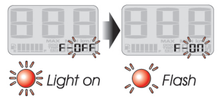
●*Press the **Select button** one time to enter the shift light warning setting screen.*

●*EX. The shift light is set from 8,000 RPM to 8,500 RPM.*

4-2 Shift light warning setting

●***EX. To set F-ON (Flashing ON) shift light warning.***

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



●*Press the **Select button** once to enter the tire circumference setting screen.*

●*EX. The shift light warning is set form F-OFF to F-ON.*

4-3 Tire circumference setting

●***EX. If the tire circumference is 1,300 mm.***

●*Press the **Select button** to move to the digit you want to set.*

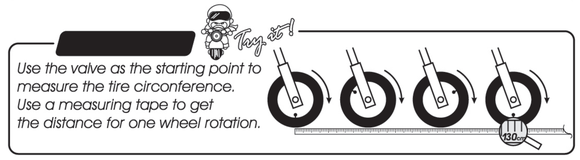
●*Press the **Adjust button** to change the value.*

Note *Setting range: 300~2500.*
Setting unit: 1mm

⚠ 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.*



●*Press the **Select button** one time to enter the sensor point setting screen.*

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

4-4 Sensor point setting

●***EX. If the sensor point is set at 06P.***

●*Press the **Select button** to move to the digit you want to set.*

●*Press the **Adjust button** to change the value.*

Note *Setting range: 01P~20P.*
Setting unit: 01P.

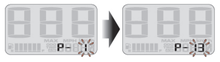
●*Press the **Select button** once to enter the piston numbers setting screen.*

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

4-5 Pistion numbers 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 **Adjust 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 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** once to enter the Signal type setting screen.

4-6 Signal type setting

●**EX. Change the setting to Lo.**
●Press the **Adjust 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 **Select button** once to enter the fuel resistance setting screen.
●EX. The input pulse setting as been changed from Hi to Lo.

4-7 Fuel gauge resistance setting

●**EX. The fuel gauge need to be set to 510Ω.**
●Press the **Adjust button** to change the setting.

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 connected to the negative (-) wire

●Press the **Select button** once to enter the clock setting screen.
●EX. The setting has been changed from 100Ω to 510Ω.

4-8 Clock setting

●**EX. Set the clock at 0:05.**
●Press the **Select button** to move to the digit you want to set.

●Press the **Adjust button** to change the value.

Note This is a 24 H clock.

●Press the **Select button** once to enter the backlight brightness setting screen.
●EX. The clock has been set from 0:00 to 0:05.

4-9 Backlight brightness setting

●**EX. Change the brightness to 3-5 (60% brightness.)**
●Press the **Adjust button** to change the value.

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 **Select button** once to enter the odometer display screen.
●EX. The backlight brightness has been set from 5-5 to 3-5

4-10 Odometer display

●Press the **Select button** one time to enter the external odometer setting screen.
●EX. The internal odometer display is 12500 km.

4-11 Odometer display

●**EX. Set the odometer to 5000 km (mile).**
●Press the **Select button** to move to the digit you want to set.

●Press the **Adjust button** to change the value.

●Press the **Select button** once to go back to the main screen.
●EX. The odometer setting has been changed from 0 to 5,000 km (mile).

●The main screen

5 Fuel gauge resistance reference

YAMAHA	JOG 50	100Ω
	JOG 100	100Ω
	RS 100	100Ω
	RSZ 100	100Ω
	SV MAX 125	100Ω
	Cygnus 125	100Ω
	New Cygnus 125	100Ω
	GTR 125	100Ω
	LC 135	100Ω
	NEW LC 135	100Ω
	LAGENDA	100Ω
	S-MAX	100Ω
	T-MAX	100Ω
HONDA	MSX	250Ω
	WAVE 110	510Ω
	GN5	510Ω
	PCX	100Ω

KYMCO	GOING 100	510Ω
	JR 100	510Ω
	SR G4 125	510Ω
	V-LINK GP 125	510Ω
	KTR	100Ω
	RACING	1200Ω
	QUANNON	1200Ω
SYM	S-PRO 100	100Ω
	Wolf 125	100Ω
PGO	G-MAX	100Ω
	X-HOT	100Ω
AEON	Elite	100Ω
	CO-IN	100Ω
	MY 150	100Ω

Note For any other vehicle, please using learning mode.

6 Trouble shooting

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

Trouble	Check item
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 wires and fuse might be broken. →The battery is too old to supply enough **DC 12V** power to make the meter work.
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 **4-3 & 4-4**.
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 4-4 & 4-6.***
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 **4-7**.
The clock is incorrect.	●***Did you connect the wires correctly*** →***Check the positive wire (Red) connectsed to the battery, and the main positive wire (Brown) connected to the main switch.***

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