

INSTRUCTION



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

Notice

1. DC 12V applications only.
2. For installation, please follow the steps described in manual. Any damage caused by wrong installation shall be imputed to the users.
3. To avoid the short circuit, please don't pull the wire when installing. Don't break or modify the wire terminal.
4. Do not disassemble or change any parts excluding the manual description.
5. The interior examination or maintenance should be executed by our professionals.

MARK MEANING:

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

Some processes must be followed to avoid the affection caused by wrong installation.

WARNING! Some processes must be followed to avoid damages to yourself or the public.

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

1-1 Accessory

1 LCD meter X 1	2 Passive speed sensor X 1	3 RPM wire set (A TYPE) X 1	4 RPM wire set (B TYPE) X 1
5 M8/ S type speed sensor bracket X 1	6 M10/ S type speed sensor bracket X 1	7 Hexagon socket screw X 2	8 D6 X 5L mm magnet X 6
9 2.5 mm spanner X 1	10 Meter bracket X 1	11 Handle bar clamp X 1	12 M6 X 10L screw X 1
13 M5 X P0.8 nut X 3	14 M6 X P1.0 nut X 1	15 M5 washer X 3	16 M6 washer X 1
17 Aluminum bush X 1	18 Connect terminal X 8	19 Rubber X 1	

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

2-1 Wiring installation instructions

Wiring Diagram Labels:

- Purple—Neutral (-)
- Orange—Left-turn signal (+12V)
- Blue—Right turn signal (+12V)
- Yellow—High beam (+12V)
- Gray—Warning lamp (-)
- LCD meter (Accessory 1)
- Red / Positive pole (Connect to the battery DC 12V)
- Brown / "+" Wire connect key on DC 12V main power switch
- Black / Ground wire connect to the vehicle body or the engine (It must be a good ground)
- Dark brown—RPM Signal wire
- Speed sensor wiring
- Digital speed signal sensor (Accessory 2)
- Magnet (Accessory 8)
- RPM wire set
- Ground (TYPE B)
- Ground (TYPE A)
- Ignition coil positive
- EMS CDI
- Flywheel
- Ignition pulse
- Tachometer
- pick up
- Coil
- Spark plug wire
- Spark
- Spark plug cap

NOTE Speed Sensor is a "Hall Sensor".

Please choose either Type A or Type B RPM wire according to the need and then follow the instruction below to install at the proper position.

Main switch wiring reference:

	"+" Color	"-" Color
YAMAHA	Brown	Black
HONDA	Brown	Black
SUZUKI	Black	Green
SYM	Black	Green

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

NOTE When connecting the power wiring, please follow the instruction. If you connect the red & brown wiring in parallel will cause the meter work improperly.

NOTE We provide 2 ways to get the rpm signal-sensor a & sensor b. If there are interruptions, you could change the sensor wiring to get better signal.

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

Type B
Please check the polarity of your Ignition coil, before you connect the RPM sensor type B there. An incorrect installation can lead to a defect of the meter or destroy the electrical system of your vehicle.

Transistor Ignition: If your vehicle has a transistor ignition system, connect the tach to the negative pole of the ignition coil.

CDI ignition: If your vehicle has a CDI ignition system, connect the speed sensor to the positive pole of the ignition coil.

Type A
Wrap the wire of the speed sensor type A in tight coils around the spark plug wire and secure the end with tape to prevent unwinding.

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.

NOTE Maybe it is necessary to use a longer bolt in adequate quality.

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.

The active speed sensor could be installed by the metal parts to detect the speed.

EX. 1 The disc screw.

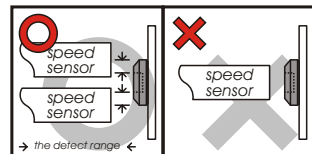
EX. 2 The disc to detect the disc gap. (Please make sure the distances between the gaps are the same in advance to avoid wrong speed signal.)

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 20 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.

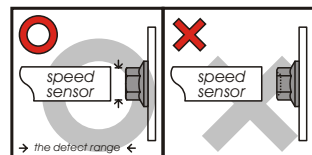
EX. 1



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.

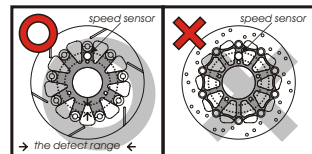


The hexagon screw

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

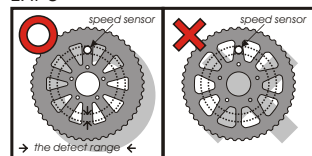


The disc

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!

3-1 Basic function instruction

Tachometer

- Display range: 10,000 RPM

Telltails

- Repeater (Green)
- Reserve (RED)
- Neutral (Green)
- High beam (Blue)
- RPM Shift light (RED)

Clock

- 24 H

Trip meter

- Display range: 0~999.9 km (mile), reset automatically after 0~999.9 km (mile).
- Display unit: 0.1 km (mile).

Speedometer

- Display range: 0~360 km/h (0~223 MPH)
- Display unit: km/h & MPH for alternative

Odometer

- Display range: 0~99,999.9 km (mile), reset automatically after 99,999.9 km (mile)
- Display unit: 0.1 km (mile)

3-2 Function, setting instruction

● Speedometer	Display range: 0~360 km/h (0~223 MPH) Display unit: km/h & MPH or alternative	○ RPM input pulse	Display range: 1, 2, 3, 4
○ Odometer	Display range: 0~99999.9 km (mile), reset automatically after 99999.9 km (mile) Display unit: 0.1 km (mile)	● Clock	24 H
○ Trip meter	Display range: 0~999.9 km (mile), reset automatically after 0~999.9 km (mile). Display unit: 0.1 km (mile).	● Effective temperature range	-10~+60°C
○ Tire circumference	Setting range: 300~2,500 mm Setting unit: 1 mm · Sensor point: 20	● Meter standard	JIS D 0203 S2
● Tachometer	Display range: 10,000 RPM	● Meter size	85.5 X 54.5 mm
		● Meter weight	Around 330 g
		● Telltales	Repeater (Green) High beam (Blue) Reserve (RED) RPM Shift light (RED) Neutral (Green)

NOTE Design and specification are subject to change without notice!

4-1 Select button function instruction

● In ODO function, press the **Select button** one time to switch to the clock function.

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

● The main screen.

● In clock function · Press the **Select button**, to back the main screen.

4-2 Adjust button function instruction

● In main screen, you could press down the **Adjust button** for 3 seconds to change the speed unit.

4-3 Select+Adjust button function instruction

● Press down the **Select & Adjust button** for 3 seconds to enter setting screen. (Check section 5-1 for detail)

5-1 Function setting instruction

● In main screen, press down the **Select & Adjust X 3 seconds** to enter the Tire circumference and sensor point setting.

● EX. The tire circumference is 1,300 mm.

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

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

NOTE The tire circumference setting range: 300~2,500 mm, and the digit you set is from left to right in order.

CAUTION!

- Please measure the tire circumference (the tire you will install the sensor on) and make sure the number of magnet sensor point (You could install the magnet into the disc screw or the sprocket screw.)
- 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.

● EX. The tire circumference setting is changed from 1,000 mm to 1,300 mm.

● Press the **Select button** for three times to enter the sensor point setting.

● EX. The sensor point you want to set is 6.

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

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

NOTE The sensor point setting range: 1~20 points. You could change the setting from left to right.

● EX. the sensor point setting is changed from 1 to 6

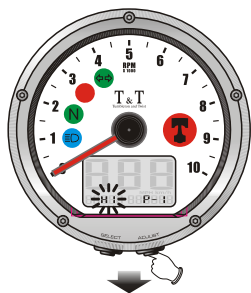
● Press the **Select button** to enter the RPM signal input setting.

● EX. the sensor point setting is changed from 1 to 6

● Press the **Select button** to enter the RPM signal input setting.

P.S.

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

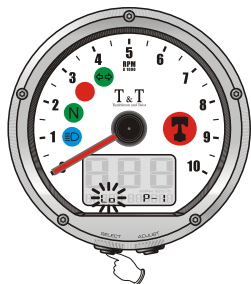


- EX. We would like to change the setting to Lo. (The negative impulse)
- Press the **Adjust button** to choose the input signal you want to set.

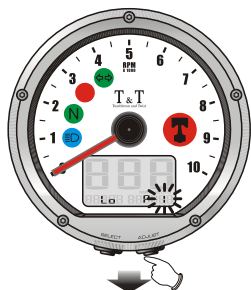


NOTE The impulse setting range is between HI (the positive impulse) & Lo (the negative impulse)

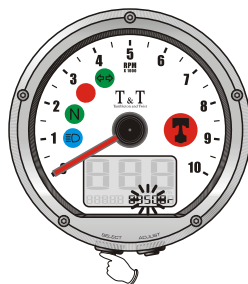
NOTE If the tachometer can't detect the signal (No RPM is displayed on the screen), you could choose another setting, and check it again.



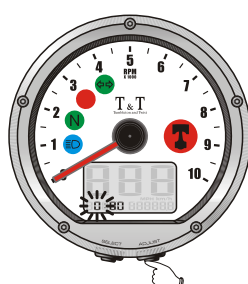
- EX. The impulse setting is changed from Lo to HI.
- Press the **Select button** to enter the RPM pulse setting.



- Enter the number of ignition signals per crankshaft revolution ("P" value). This may vary according to the vehicle manufacturer/model and type of engine:
- If a 4-stroke engine fires at every second crankshaft revolution, enter P=0.5 (on 1-, 2- and 3-cylinder 4-stroke engines with one ignition coil for each cylinder)
- If a 4-stroke engine fires once per crankshaft revolution, enter P=1 (on 2-, 4- and 6-cylinder 4-stroke engines with one ignition coil for two cylinders)
- 2-stroke engines fire once per crankshaft revolution; enter P=1
- In the case of vehicles which have a distributor (mostly cars), you can enter P values up to 4, according to the number of cylinders.
- If you do not know how often your engine fires per crankshaft revolution, start by assuming the standard setting (P=1) — the instrument cannot be damaged if you do this. If an incorrect engine rpm is displayed, you should vary the P value by entering it manually until the figure displayed is realistic.
- Example illustration: The setting is changed from P=1 to P=2.
- Press the selection button and change to the function for setting the shift warning



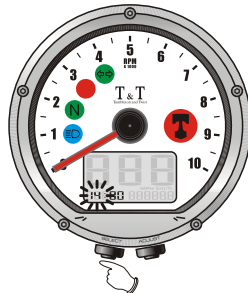
- EX: Now the shift light setting is changed from 8,000RPM to 9,500 RPM.
- Press the **Select button** one time to enter the clock setting.



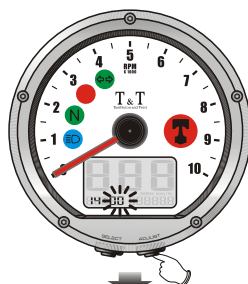
- EX. To change the setting to 14:00.
- Press the **Adjust button** to choose the setting number.



NOTE Setting range: 0~23 H.



- EX. Now the setting is changed from 0:00 to 14:00.
- Press the **Select button** to enter the minute setting.

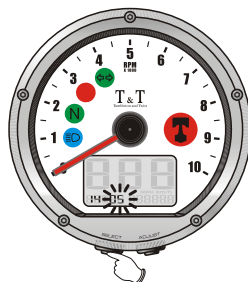


- EX. To change the setting to 14:05.
- Press the **Adjust button** to choose the setting number.

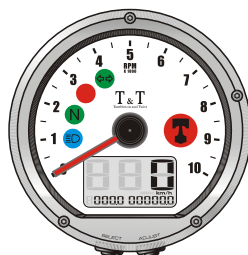


▲ Press the **Select button** to move to the digit you want to set.

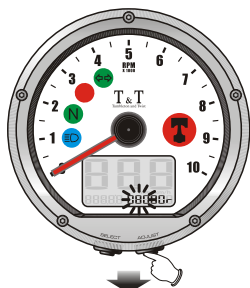
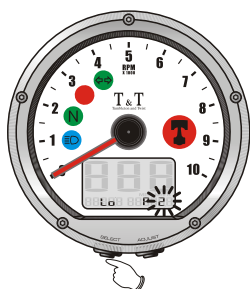
NOTE Setting range: 0~59 minutes.



- EX. Now the setting is changed from 14:00 to 14:05.
- Press **Select button**, to back the main screen.



- The main screen.



- EX: You want the shift light to light on at 9500 RPM Please change the shift light setting value to 9500 directly.
- Press the **Adjust button** to choose the setting number.



NOTE Display range : 3,000~10,000 RPM
Display unit : 100 RPM

5 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. Speed does not appear or appear incorrectly.	●The power doesn't supply to the meter. →Please make sure the wiring is connected. The wiring and fuse are not broken. ●Please make sure the speed sensor is connected correctly. ●Please check the tire-size setting. →please refer to the manual 5-1 .
The clock is incorrect.	●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.

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