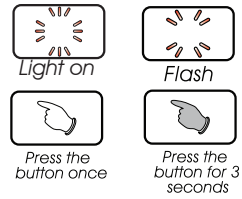
# INSTALLATION

*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 9~12 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:***

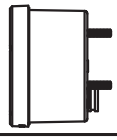
⚠ *Some procedures must be followed to avoid damages to the instrument.*

⚠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.*

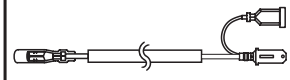
## 1 Accessories

**1** *Meter X 1*



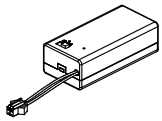
**2** *RPM WIRE (TYPE* A*) X 1*

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

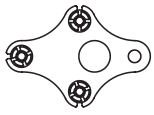


**4** *Power Cable X 1*

**5** *Battery case X 1*

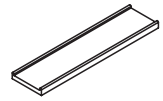


**6** *Meter bracket X 1*

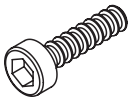


**7** *Handle bar clamp X 1*

**8** *Rubber X 1*



**9** *M6 X 18L screw X 1*



**10** *M5 X P0.8 nut X 3*

**11** *M6 X P1.0 nut X 1*

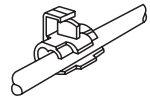
**12** *M5 washer X 3*

**13** *M6 washer X 1*

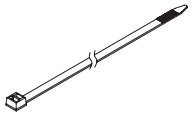
**14** *Aluminum bushing X 1*

**15** *Ground wire X 1*

**16** *Mid-way connector X 3*

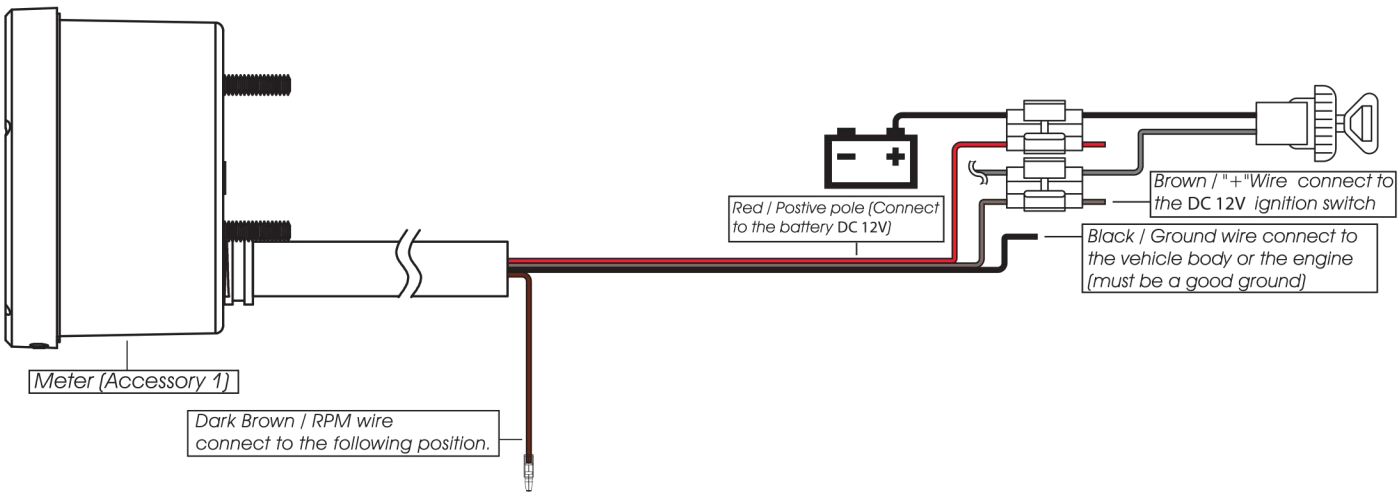


**17** *Tie Wrap X 1*



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

## 2 Wiring installation instruction




*Main power switch wire reference:*

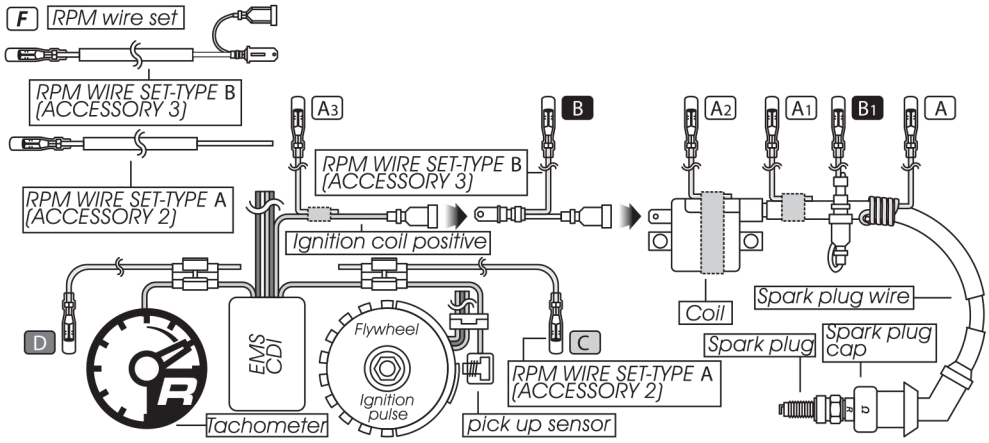
| | Power | Key on | Ground |
|---|---|---|---|
| YAMAHA | Red | Brown | Black |
| HONDA | Red | Red / Black | Green |
| SUZUKI | ——— | Black | Green |
| KAWASAKI | White | Brown | Black / Yellow |
| KYMCO | Red | Black | Green |
| SYM | Red | Black | Green |
| PGO | Red / White | Orange | Black |

**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.*

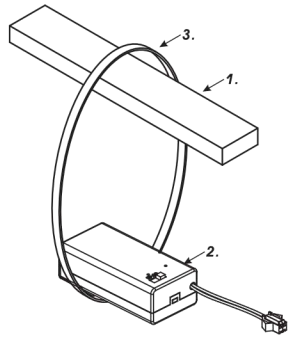



**NOTE** *When connecting the power wire, please follow the instruction. Connecting the red & brown wires in parallel, will cause the meter to work improperly.*

⚠ *The RPM wire installation*

A. *Wrap the RPM wire at least 5 times around the spark plug wire.*
A1. *Use adhesive tape to attach the RPM wire (Type A) onto the spark plug wire.*
A2. *Use adhesive tape to attach the RPM wire (Type A) on the spark plug cap.*
A3. *Use adhesive tape to attach the RPM wire (Type A) on the coil positive pole wire. For some models with the negative coil wire, tape the RPM wire (Type A) on the negative wire to get the RPM signal. (For example, the YAMAHA V-max 1200)*
B. *Connect the RPM wire (type B) to the ignition coil positive pole.*
B1. *Wrap the RPM wire (type B) on the spark plug wire by connecting the male and female connectors.*
C. *Connect the RPM wire (Type A) to the pick up sensor.*
D. *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 bike service manual.)*
E. *For the applications with the new model of ignition coil, wrap the RPM wire (Type A ) at least 5 times around the spark plug as shown on the above drawing.*
F. Use the method mentioned above to install the RPM wire, and then connect the ground wire to the bike body or the engine (must be 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.

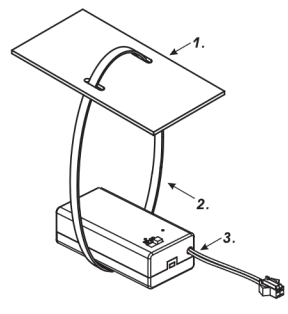
## 2-2 *Installation of the battery case on the frame.*




***For proper installation, follow the steps bellow.***

1. *Find a proper location to install the battery case.*
2. *Install the battery case on the frame.*
3. *Secure the battery case using the Tie Wrap.*

## 2-3 *Installation of the battery case on the fairing.*




***For proper installation, follow the steps bellow.***

1. *Find a proper location to install the battery case and drill 2 holes.*
2. *Pass the Tie Wrap through the 2 holes.*
3. *Secure the battery case using the Tie Wrap.*

## 3-1 Basic function instruction

Tachometer
●Display range: 0~10,000 RPM


Shift light
●Setting range: 0~10,000 RPM
●Setting unit: 500 RPM
●Warning: Light on , Flash

## 3-2 Functions

| | |
|---|---|
| ●Tachometer | Display range: 0~10,000 RPM |
| ○Display internal | <0.5 second |
| ○The RPM input signal number setting | Setting range 0.5, 1~6 |
| ○The RPM input pulse | Setting range: HI (positive wave pulse)<br>Lo (negative wave pulse) |
| ●Backlight brightness Right | Setting range: 5 different levels available.<br>Setting unit: Each level represents 20 % |
| ○The shift light | Setting range: 0~10,000 RPM<br>Setting unit: 500 RPM |
| ○Warning | Light on<br>Flash |
| ●Effective voltage | DC 9~12 V |
| ●Effective temperature range | -10~+60°C |
| ●Meter standard | JIS D 0203 S2 |
| ●Meter size | 120 X 68.5 X 44.1 mm |
| ●Meter weight | Around 127.3 g |

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

## 3-3 Main function instruction (operating mode)


●In operating mode. Press the Select button once to enter the maximum RPM recorded.


●Hold the Adjust button for 3 seconds to reset maximum RPM recorded.

## 3-4 Setting screen instruction


1.Piston number setting


2.Signal type setting


3.Backlight brightness setting


4.Shift light setting


5.Shift light warning setting

Back to piston setting.

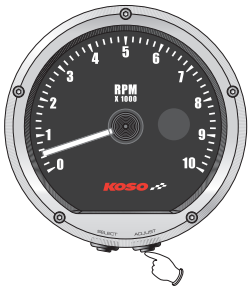
⚠ The screen will return automatically to the operating mode after 10 seconds if no buttons has been pressed.

**NOTE** In the Setting Mode, press the Select button for 3 seconds to enter the operating mode.

## 4 Entering setting mode

●*In the Operating Mode, hold the* Select & Adjust button *for 3 seconds to enter the Setting Mode.*

### 4-1 Piston number setting



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

Note *Setting range: 0.5, 1~6.*

| Setting value | 2 Strokes Setting | 4 Strokes Setting | RPM per spark |
|---|---|---|---|
| 0.5 | ——— | 1 pist. | 2 RPM signals per 1 spark. |
| 1 | 1 pist. | 2 pist. | 1 RPM signal per 1 spark. |
| 1.5 | ——— | 3 pist. | 2 RPM signals per 3 sparks. |
| 2 | 2 pist. | 4 pist. | 1 RPM signal per 2 sparks. |
| 2.5 | ——— | 5 pist. | 2 RPM signals per 5 sparks. |
| 3 | 3 pist. | 6 pist. | 1 RPM signal per 3 sparks. |
| 4 | 4 pist. | 8 pist. | 1 RPM signal per 4 sparks. |
| 5 | ——— | 10 pist. | 2 RPM signals per 10 sparks. |
| 6 | 6 pist. | 12 pist. | 1 RPM signal per 6 sparks. |

⚠ CAUTION! *Some 4 strokes engines with one piston are igniting every 360 degree. To get the proper RPM, the setting should be the same as a 2 strokes engine with one piston.*

●*Press the* Select button *once to enter the Signal type setting.*

### 4-2 Signal type setting

●*Press the* Adjust button *to change the value.*
1=Hi, 0=Lo

Note *We define the RPM input pulse as Hi (positive pulse) & Lo (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 backlight brightness setting.*

### 4-3 Backlight brightness setting

●*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 shiftlight setting.*

### 4-4 Shift light setting

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

Note *Setting range: 0~10,000 RPM*
*Setting unit: 500 RPM*

●*Press the* Select button *once to enter the shift light warning setting.*

### 4-5 Shift light warning setting

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

*Light on* *Flash*

●*Press the* Select *button for* 3 seconds *to enter the Operating Mode.*