Instruction Manual



llonan R P M Tachometer

PRODUCT FEATURES

- Small ABS housing 40×60×17,5mm
- ■Beautiful white LED display at night
- ■100-20.000RPM
- Non-resettable Hourmeter: 0-9,999,9hours
- Resettable Hourmeter: 0-9.999.9hours
- ■Max. rpm memory & recall
- Selectable display-updating-speed (0.3/0.6sec)
- ■Clock (12H)

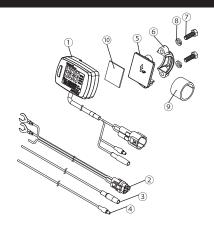
- Handle clamp (for 7/8" or 1") included
- ■Power DC10-16 (regular 12V), 9V with PP3 battery available
- Setting & operation can be simply done by one button.
- ■Accurate & reliable
- Waterproof

! CAUTION

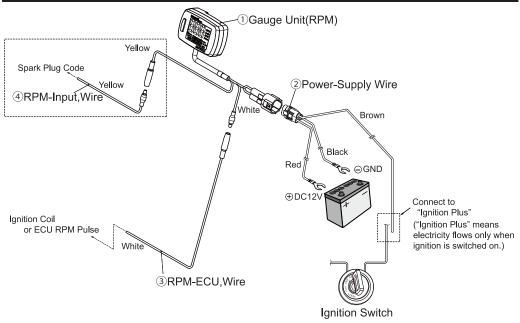
- Read all instructions before use.
- Designed to be used on 12V system vehicle.
- (NANO-II Tachometer does NOT work with a 6V system or battery-less system.)
- ■NANO-II Tachometer might not work normally when used together with other device that emits much noise.
- ■Use NANO-II Tachometer for the intended purpose of use.
- ■NANO-II Tachometer is for universal use, so it needs wiring for installation. (If you are not sure about installation, consult an experienced dealer,)
- Do the wiring referring to the vehicle owner's manual.
- Do NOT disassemble NANO-II Tachometer. It may be damaged and water may come in.
- Do NOT leave NANO-II Tachometer in high heat when not used for a long time.
- Do NOT hit, drop and/or give a shock on NANO-II Tachometer. It may be damaged.
- Avoid contact with gasoline, brake fluid or other chemicals. It may be damaged.
- ■After installation, check to see if all the parts are correctly installed,
- and to see if all the screws are properly tightened.
- Inspect all installed parts after 100km driving. Periodical inspection is required every 500km(300mile). If anything unusual found while driving, pull over at a safe place to check.
- Because of the nature of LCD, display might be less-visible in some angle, Modify the mounting angle to have better view. Do not be all eyes on the less-visible display during driving, might cause serious accident.

COMPONENTS

NO.	DESCRIPTION	REMARKS	Q'TY
1	Gauge Unit (RPM)		1
2	Power-Supply Wire	L=1200	1
3	RPM-ECU,Wire	L=700	1
4	RPM-Input,Wire	L=700	1
(5)	Mounting Bracket(upper)		1
6	Mounting Bracket(lower)		1
7	Hex Head Screw	M5X15	2
8	Spring Washer	M5	2
9	Rubber Band	70X12X2t	1
10	Double-sided Tape	25X25X0.5t	1



WIRING



OEM Wiring Color List

	RED	BROWN	BLACK	YELLOW
	DC12V⊕	IGNITION PLUS⊕	GND⊕	RPM INPUT
HONDA	BATTERY⊕	black/brown or pink/blue	green	yellow/green or yellow/blue
YAMAHA	BATTERY⊕	red/white or light brown	black or black/white	orange/green or yellow/black
SUZUKI	BATTERY⊕	orange/green	black/white	yellow/blue or black/yellow
KAWASAKI	BATTERY⊕	brown/white	black/yellow	red/yellow or blue/white

*OEM Wiring Color List is only for your reference. Wiring color might be different between the model, country, or model year. Please check with the vehicle owner's manual or voltmeter.

HOW TO INSTALL

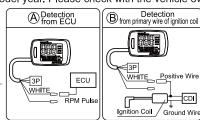
- /!\ Disconnect the ground wire from the negative post of vehicle's battery before installation.
- 1. Install \$\summa Mounting Bracket(Upper) & \$\summa Mounting Bracket(Lower) onto the handlebarusing \$\tilde{Z}\$Hex Head Screw & ®Spring Washer. **For 7/8" handlebars, use 9Rubber Band.
- 2. Mount ①Gauge Unit on the installed ⑤Mounting Bracket(Upper) using ⑩Double-Sided Tape.
 - ♠ Degrease and clean the surface of handlebar where @Double-Sided Tape is put.
- 3. Refer to the **WIRING** & the vehicle owner's manual and connect each wire. *OEM Wiring Color List is only for your reference. Wiring color might be different between the model, country, or model year. Please check with the vehicle owner's manual or voltmeter.

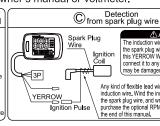
CDI

RPM PULSE **DETECTION**

You have three choices to detect the pulse A or B or C.

⚠DO NOT detect two or more different pulses. NANO-II DOES NOT display the right RPM.





the spark plug wire MUST BE connected t connect it to any other wires. The main un nay be damagéd by high voltage. Any kind of flexible lead wire can be used as the RPM induction wire. Wind the induction wire 5-6 times on the spark plug wire, and wrap it with vinyl tape. Or purchase the optional RPM induction wire shown at

- 4. After the wiring, refer **HOW TO SET** and do the setting.
- 5. After the setting, check it works, if no problem, finish the installation.

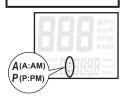
HOW TO SET

Button Icon's Definition

=Press button

2sec = Hold down button for 2sec.

⚠ Read all instructions of HOW TO SET before setting.



to enter

Turn ignition on.

Press button until " (\S) SEt" appears.

※(§) is displayed during setup mode all the time.



Hold down button for 2 seconds to enter the clock setup mode.

2sec

clock setup

"CLO" in the upper display and 12:00(factory default) or the preset time in the lower display appear.



Hold down button for 2 seconds for clock setting.

2sec

HOUR flashes.



Press button to select HOUR (1~12),hold down button for 2 seconds to fix, then MINUTE flashes.



Press button to select MINUTE (00~59),hold down button for 2 seconds to fix.

2sec

The display automatically go to the next tachometer setup mode.

(PPR=Pulse Per Rotation)

"PPr" in the upper display and "1P1r"(factory default) or the pre-set PPR in the lower display appear.



Hold down button for 2 seconds for PPR setting.



"1P1r", "1P2r" and "2P1r" alternate every 2 seconds.



Hold down button for 2 seconds at the intended PPR.



The display automatically go to the next display update setup mode.

display update setup (A or b)

**Display-updating-speed for current RPM can be selected from 0.3sec or 0.6sec. If 0.3sec is too fast for your eyes, change to 0.6sec.

"dIS" in the upper display and "A" or if pre-set "b" in the lower display appear.



Hold down button for 2 seconds for display update setting.



"A" and "b" alternate every 2 seconds.



Hold down button for 2 seconds at the intended one to decide. (A=0.3sec, b=0.6sec)



The display automatically goes back to the normal operation mode.



NORMAL OPERATION

current RPM & Non-resettable hourmeter

Current RPM in the upper display and non-resettable hourmeter with icon "HR" in the lower display appear.



current RPM & resettable hourmeter

Current RPM in the upper display and resettable hourmeter with **flashing** icon "HR" in the lower display appear.



2sec To reset hourmeter, hold down

button for 2 seconds.
The lower display shows "00:00:00".

current RPM & clock

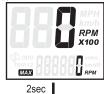
Current RPM in the upper display and clock in the lower display appear.





Current RPM in the upper display and Max. RPM with icon "MAX" in the lower display appear.

current RPM & Max. RPM



To reset Max. RPM, hold down button for 2 seconds. The lower display shows "0".

current RPM & setup mode

Current RPM in the upper display and "(\$) SEt" in the lower display in the lower display appear.



Press button to go back to current RPM & Non-resettable hourmeter.



TROUBLESHOOTING

NANO-II is NOT turned on

Check each wiring & each connector. Check if 12V battery flows.

RPM is NOT displayed

Wire connection of the RPM input or ECU input may be incorrect. Check vehicle owner's manual to see if the wires are connected correctly.

Unstable/wrong RPM is displayed

RPM pulse seems not to be detected correctly.
Check the wiring of RPM pulse input and each connector.
"PPR(Pulse Per Rotation)" setup seems not to be correct.
Check if the correct PPR is set

LCD display is Black

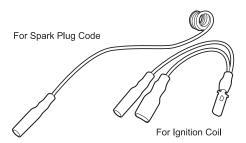
The LCD display becomes black when exposed to direct sunlight while not riding. This is because of the nature of LCD, and is NOT a defect. Avoid the exposure of the main unit to direct sunlight when not riding.

Frozen Display

In case the display is frozen, disconnect the 3-P connector of the main unit for a few seconds and connect it again to restart. Or disconnect the negative wire of the battery to cut the power supply for a seconds, and the connect it again to restart.

OPTIONAL PARTS

RPM Induction Wire Set, <PART#40841> This optional wire set will simplify the wiring work and NO wire splicing is necessary.



HOW TO USE

