

PULSE ENGINE HOURMETER PET-3200R

●Be sure to read all instructions before use and handle this product properly.
Keep this manual at hand for future reference.

⚠ DANGER !

- Turn off the engine before installing this unit. Installing it with the engine running may result in death or injury.
- Install this unit after the engine, engine oil and coolant have cooled down. Otherwise, you may get burn.

⚠ CAUTION !

- Keep this unit out of reach of children to avoid accidental ingestion.
- Do not perform wiring with wet hands so as not to get an electric shock.
- Do not burn in an incinerator to avoid the risk of rupture.

- © Please note that we are not responsible for any damages or lost earnings caused by this manual or by using this unit, or any claims made by third parties.
- © The contents of this manual and the details of this unit are subject to change without notice for improvement.
- © This manual has been created with utmost care to ensure its quality. However, if you have any questions or find any mistakes, please contact us.

● Handling instructions

- ① Use this unit by winding an antenna lead around an ignition cable.
- ② Install this unit such that the distance between the unit and the ignition cable is less than 50 cm.
- ③ Install this unit at a place where the temperature is below 60°C.
- ④ Install this unit at a place free from rain and rain drops to avoid malfunctions.
- ⑤ Avoid severe shocks.
- ⑥ This unit cannot be disassembled.
- ⑦ The battery cannot be replaced.
- ⑧ Note that we are not responsible for any accidents caused by improper use or any breakage such as caused by disassembly.
- ⑨ Do not wipe this unit with organic solvent such as thinner.
- ⑩ Install this unit at a place free from gasoline, oil, etc.

● Specifications

Measurable engine type	Gasoline
Measuring method	Pulse detection system
Indication of cumulative operating time : Up to 9999 hours and 59 minutes	(hr. / min.) 0000 : 00 → 9999 : 59
Reset function	Available
Battery life	Approx . 5 years (after shipment from the factory)
Operating temperature	-10°C ~ +60°C
Storage temperature	-10°C ~ +60°C
Water resistance	Splash-proof
Dimensions (L×W×H)	30×30×15mm
Main body weight	15 g
Accessories	Antenna lead (50cm) Velcro Tapes A & B Instruction manual

● Features

This hourmeter counts and records cumulative operating time actuated by induction pulses from the ignition cable of engines.
You can easily measure the time simply by winding the antenna lead around the ignition cable.
If necessary, you can reset the measured data with the attached reset tool.

● Purpose of use

The unit can be used to judge the approximate timing of regular inspections and maintenance as well as for record-keeping. Also, it can be used for management of time such as the operating time of rental/lease products and endurance time of engine. Do not use this unit for improper purposes.

● How to install

■ Using velcro tapes

- ① Connect one end of the antenna lead only to this unit, as shown in Figure 1.
- ② Remove any oil from the back surface of this unit with mild detergent, etc., and attach a velcro tape A (notched) to the back surface, as shown in figure 2.
※ Attach a velcro tape A without covering the reset pins.
- ③ Remove any oil from the adhering surface of this unit with mild detergent, etc., and attach a velcro tape B to a flat surface of the engine or the neighboring part.
※ Select an installation location that leaves enough length for the antenna lead.

Install this unit preferably on a horizontal place, free from both vibration and high temperature. Otherwise, the unit may drop off.

- ④ Attach a velcro tape A of this unit to a mating velcro tape B.

● How to use

- ① Wind the other end of the antenna lead around the ignition cable by three turns and fix it temporarily, as shown in Figure 1.
- ② Once the engine is started, a colon (:) on the LCD panel starts blinking to show that the unit is in operation.
- ③ When the engine is shut off, the colon also stops blinking to show that the unit is out of operation.
- ④ The unit counts cumulative operating time 0000:00 to 9999:59 and automatically returns to 0000:00.

● Operation check

- ① Start the engine and check whether colon (:) on the LCD panel blinks with the engine idling (low speed) and at high-speed rotation. If the colon does not blink, wind the antenna lead around the ignition cable by a few more turns. (This will increase the intensity of the pulse signals.)
- ② Once the normal performance is confirmed, use insulating tape, etc. to fix the antenna lead around the ignition cable.
- ③ As an initial check, compare the time displayed on the LCD panel with the actual

● How to reset

Bring the wire or iron clip into contact with the two reset pins on the back of the unit simultaneously, as shown in Figure 3.

This will reset the indication to 0000:00.

※ Save the data before you reset.

● How to install

Figure-1

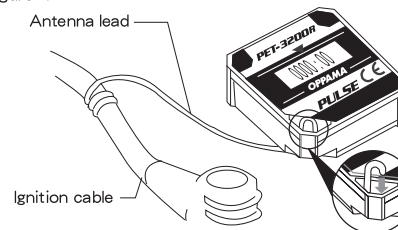


Figure-2

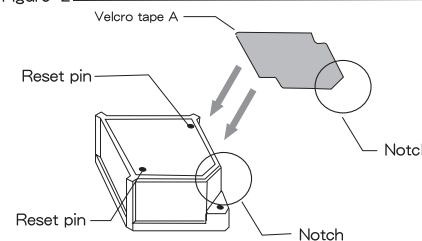
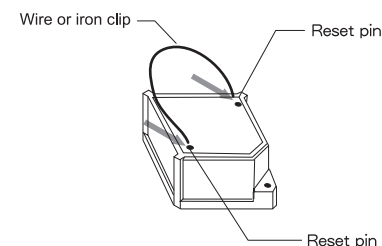


Figure-3



WARRANTY STATEMENT

Oppama Industry Co., Ltd. agree to repair or replace Oppama tachometer with free of charge any when it was found to be defective under normal use and care. Meanwhile, warranty stands void in case of the following :

1. Lack of evidence of purchasing in fairly, such as Invoice, Receipt or others.
2. Remove the component, such as unscrew a screw, opening the cover etc.
3. Given a shock, such as dropping etc. (It is very sensitive product)
4. It has been waterlogged. (It is not water proof products)

This warranty is for one year from the date of purchase, and is extended to the original purchaser only and is not transferable.

Instruction to claim the warranty,

- (1) Keep receipt or invoice and fill in the details in this warranty card in every time when you purchase our products.
- (2) Contact with the shop owner or a Oppama distributor in your country or Oppama home page, and inform your problem.
- (3) Provide the products to the person in charge of shop or the distributor with evidence or details of your purchasing.

IMPORTANT

Complete this warranty card at the time of purchase and keep a copy for your records.

YOUR RECORD OF PURCHASING

(You can use this form to record your purchase details.)

Date of Purchase : Year / Month / Date

Shop Name :

Shop Contact Number :

Shop Address :

Your Name and Contact Number :

This warranty is provided by Oppama Industry Co., Ltd.
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※ Do not use this unit on diesel engines or direct ignition engines.