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› ARTILAUURA GPS Speedometer and Tachometer User Manual

ARTILAUURA AR-CX8191B

ARTILAUURA GPS Speedometer & Tachometer User Manual

Model: AR-CX8191B

Brand: ARTILAUURA

1. PRODUCT OVERVIEW

The ARTILAUURA GPS Speedometer and Tachometer is a versatile 2-in-1 gauge designed for a wide range of vehicles including motorcycles, boats, trucks, buses, and cars. It provides accurate speed readings via GPS signal and engine RPM, along with essential indication lights. Its robust, waterproof design ensures reliable performance in various environments.

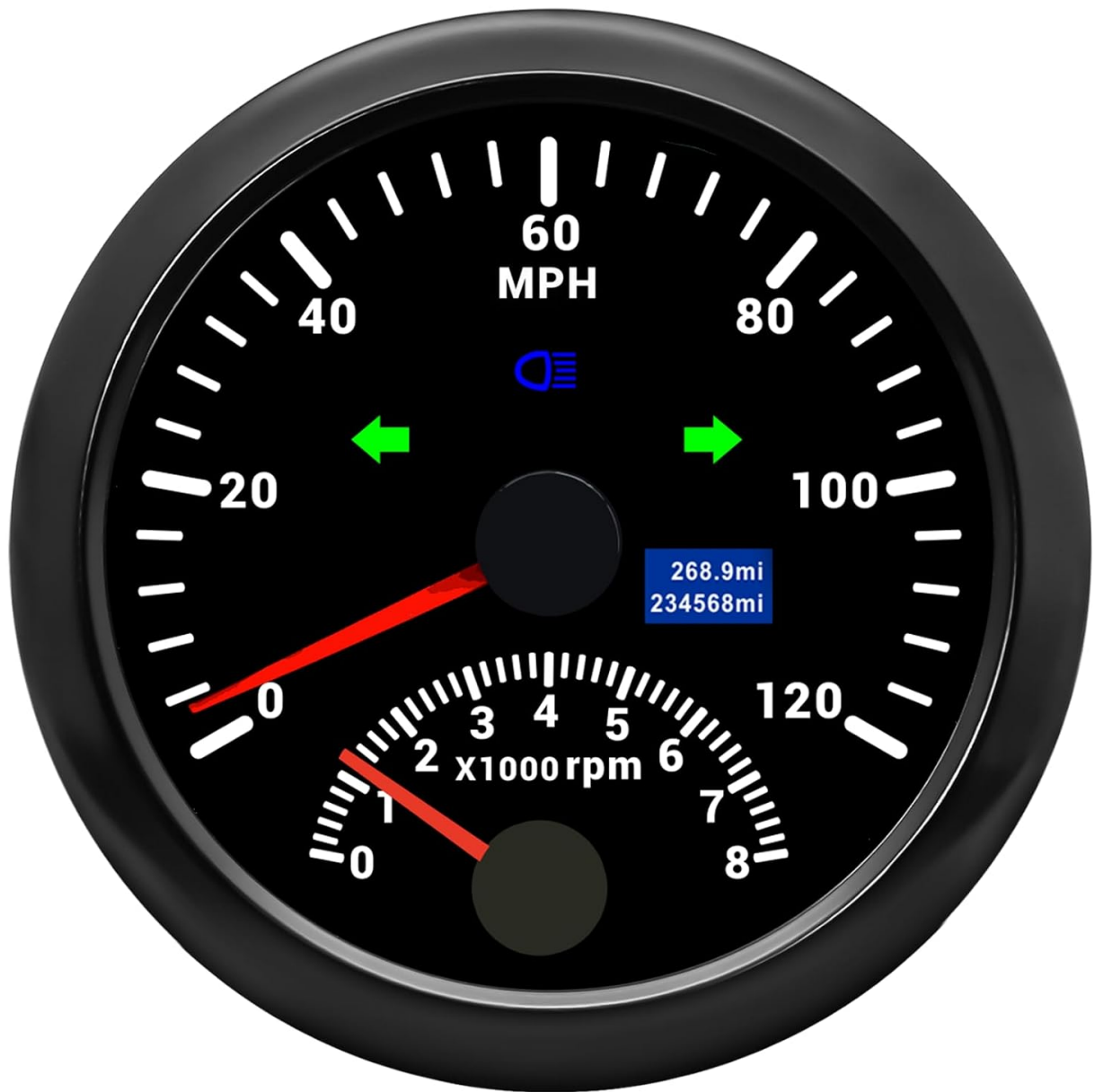


Figure 1.1: Front view of the ARTILAUURA GPS Speedometer and Tachometer.

2. KEY FEATURES

- **Dual Functionality:** Combines GPS speedometer (0-120MPH) and tachometer (0-8000 RPM) in one unit.
- **Indication Lights:** Features integrated lights for LEFT turn, HIGH BEAM, and RIGHT turn.
- **Mileage Tracking:** Includes a mileage range of 0-99999.9 miles.
- **Durable Construction:** Made with Stainless Steel 316L Bezel, Rubber, and Anti-fog Glass.
- **IP67 Waterproof Rating:** Fully sealed against dust, rain, and splashes, suitable for marine and all-weather use.
- **Wide Applicability:** Compatible with motorcycles, boats, trucks, buses, cars, and off-road vehicles.
- **High Precision GPS:** Signal comes directly from the satellite signal receiver (GPS Antenna), eliminating the need for additional speed sensors. Offers quick location confirmation and short start-up time.

Speedometer with Tachometer

Speedometer:120MPH

Tachometer:8000RPM



Figure 2.1: Displaying the speedometer (0-120MPH) and tachometer (0-8000RPM) ranges.

2in1 Multifunction Gauge



Dimension:
85mm(3-3/8")



Indication Light:
LEFT, HIGH BEAM, RIGHT



Working Voltage:
12V/24V

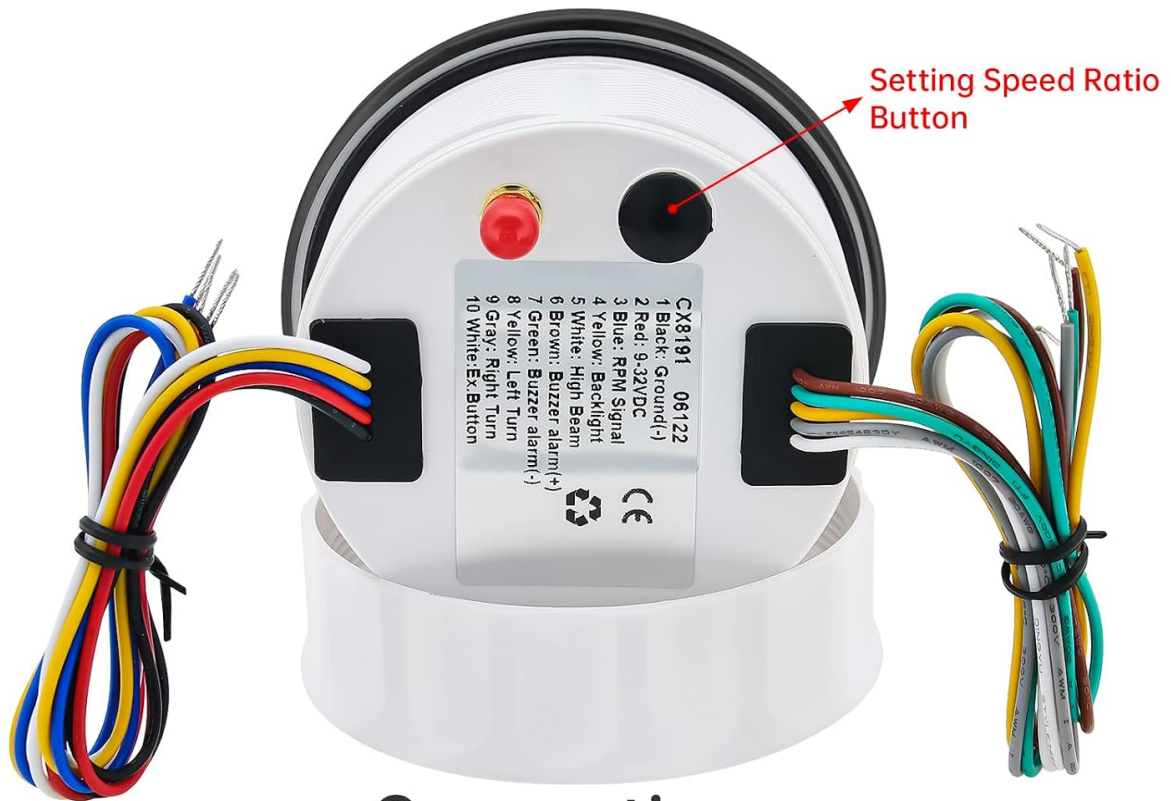
Figure 2.2: Key features including 85mm (3-3/8") dimension, indication lights, and 12V/24V working voltage.

Video 2.3: Demonstrating the ARTILAUURA GPS Speedometer and Tachometer's features and waterproof capability.

3. PACKAGE CONTENTS

Upon opening your ARTILAUURA GPS Speedometer and Tachometer package, you should find the following items:

- 1x ARTILAUURA GPS Speedometer and Tachometer Gauge
- 1x GPS Antenna
- 1x Multi-plug Socket (Wiring Harness)
- 1x Installation Instruction Manual



Connecting

- | | |
|--|--|
| 1.Black:Ground(-) | 6.Brown: Buzzer alarm(+) |
| 2.Red:9-32VDC | 7.Green: Buzzer alarm(-) |
| 3.Blue: RPM Signal | 8.Yellow: Left Turn |
| 4.Yellow:Backlight | 9.Gray: Right Turn |
| 5.High Beam | 10. White:Ex.Button |

Figure 3.1: All components included in the product package.

4. SPECIFICATIONS

| Specification | Value |
|-------------------|--|
| Model Number | AR-CX8191B |
| Speedometer Range | 0-120 MPH |
| Tachometer Range | 0-8000 RPM |
| Gauge Diameter | 85mm (3-3/8") |
| Working Voltage | 9-32VDC |
| Waterproof Rating | IP67 |
| Materials | Stainless Steel 316L Bezel, Rubber, Anti-fog Glass |

| Specification | Value |
|--------------------------------|--------------------------|
| Product Dimensions (L x W x H) | 3.81 x 3.81 x 2.2 inches |
| Item Weight | 6.4 ounces |

5. INSTALLATION GUIDE

Follow these steps for proper installation of your ARTILAUURA GPS Speedometer and Tachometer:

1. **Prepare the Panel:** Before installation, create a hole with a diameter of 85mm (3-3/8") in your dashboard or panel. Ensure there is a clearance of at least 55mm (2-3/16") behind the panel to accommodate the gauge.
2. **Insert the Gauge:** Carefully insert the gauge into the prepared hole.
3. **Secure the Gauge:** Use the provided mounting ring and screw down to firmly secure the gauge in place.
4. **Connect Wiring:** Refer to the wiring diagram in Section 6 for correct electrical connections.
5. **Install GPS Antenna:** Place the GPS antenna in a location with a clear view of the sky for optimal signal reception. Avoid placing it under metal covers or in enclosed spaces.



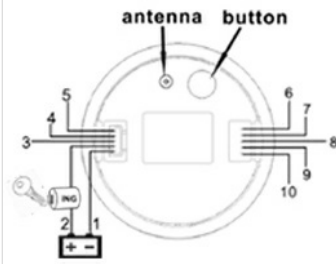
Figure 5.1: Visual guide for gauge installation and panel preparation.



Figure 5.2: Example of the gauge installed in a car dashboard.

Owner's Manual

GPS installation instructions



Connection

- 1 Black : Ground(-)
- 2 Red : 9~32VDC(+)
- 3 Blue : RPM signal
- 4 Yellow : BackLight
- 5 White : High Beam
- 6 Brown: Buzzer alarm(+)
- 7 Green: Buzzer alarm(-)
- 8 Yellow: Left Turn
- 9 Gray: Right Turn
- 10 White: External Button



Installed in front



Can't receive GPS signal

| Diesel Engine | |
|---------------------------|-------------|
| Gear Number | Speed Ratio |
| Speed Ratio = Gear Number | |

| Outboard | |
|----------|-------------|
| Poles | Speed Ratio |
| 4 | 2 |
| 6 | 3 |
| 8 | 4 |
| 10 | 5 |
| 12 | 6 |

| Inboard Gas Engine | | |
|--------------------|-------|-------------|
| Cylinder | Cycle | Speed Ratio |
| 4 | 4 | 2 |
| 6 | 4 | 3 |
| 8 | 4 | 4 |
| 10 | 4 | 5 |
| 12 | 4 | 6 |

Figure 5.3: Example of the gauge installed in a boat dashboard.

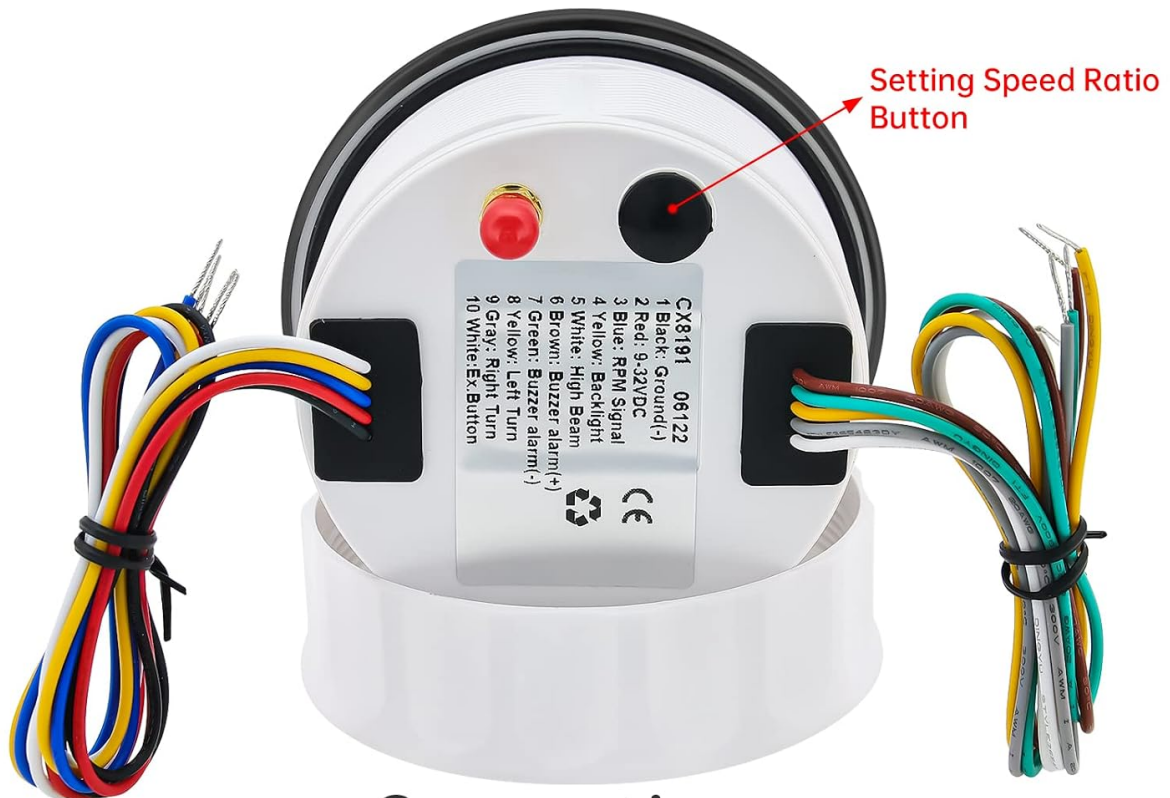
6. WIRING DIAGRAM

The multi-plug socket includes 10 wires. Ensure each wire is connected to its corresponding function as detailed below:

| Wire Color | Function |
|------------|------------------------------|
| Black | Ground (-) |
| Red | 9-32VDC (Power +) |
| Blue | RPM Signal |
| Yellow | Backlight |
| White | High Beam |
| Brown | Buzzer Alarm (+) |
| Green | Buzzer Alarm (-) |
| Yellow | Left Turn Signal |
| Gray | Right Turn Signal |
| White | External Button (Ex. Button) |



Figure 6.1: Rear view of the gauge showing dimensions and wiring harness connection points.



Connecting

| | | | |
|---|--------------------|---|--------------------------|
|  | 1.Black:Ground(-) |  | 6.Brown: Buzzer alarm(+) |
|  | 2.Red:9-32VDC |  | 7.Green: Buzzer alarm(-) |
|  | 3.Blue: RPM Signal |  | 8.Yellow: Left Turn |
|  | 4.Yellow:Backlight |  | 9.Gray: Right Turn |
|  | 5.High Beam |  | 10. White:Ex.Button |

Figure 6.2: Close-up of the wiring connections and their corresponding functions.

7. GPS SETUP AND OPERATING INSTRUCTIONS

The gauge features a setting mode for adjusting the speed ratio and an overspeed alarm. The default stroke is a single accumulative mileage that will not be cleared when power is off. Long press the button to clear it.

- Entering Setting Mode:** Press and hold the rubber button on the back of the meter for 3 seconds to enter the setting mode. Release the button after 3 seconds to exit the setting mode.
- Adjusting Values:** When in setting mode, press and hold the button to increase the value. Release the button and press it again to decrease the value. The longer the button is held down, the faster the value changes. The minimum step value is 0.1, and the adjustable range is 1.0-360.
- Saving Speed Ratio:** After adjusting the speed ratio to meet your requirements, release the button. After 3 seconds, the tachometer will automatically save the result you set. If the settings do not meet your requirements, please reset them.
- Overspeed Alarm Adjustment:** After power on, short press the button on the back of the instrument twice to enter the overspeed alarm adjustment mode. Then, press and hold the button on the back to display the overspeed alarm adjustment. Press and hold repeatedly to continue adjusting the value. It is

automatically saved after 5 seconds. If the settings do not meet your requirements, please reset them.

5. **GPS Signal Acquisition:** Turn on the instrument. The gauge will search for a GPS signal, and the LCD will display "gps--". If there is still no GPS signal after 3 minutes, the LCD will display "Err".



Figure 7.1: Instructions for GPS setup, including speed ratio and overspeed alarm settings.

8. TROUBLESHOOTING

This section provides solutions to common issues you might encounter:

- **No GPS Signal (Displaying "gps--" or "Err"):**
 - Ensure the GPS antenna is placed in an open area with a clear view of the sky, free from obstructions like metal roofs or dense foliage.
 - Check the connection of the GPS antenna to the gauge. Ensure it is securely plugged in.
 - Allow sufficient time (up to 3 minutes) for the gauge to acquire a signal after power-on.
- **Inaccurate Speed Reading:**
 - Verify that the GPS antenna has a strong signal.
 - Ensure the speed ratio setting (if applicable for specific applications) is correctly configured as per Section 7.
- **Tachometer Not Working or Inaccurate:**
 - Check the RPM signal wire connection (Blue wire) to your engine's RPM output.
 - Ensure the engine type (Diesel/Gas) and cylinder/gear number settings are correctly configured for the tachometer to read accurately. Refer to the tables in Figure 5.1 for guidance on speed ratio settings for different engine types.
- **Gauge Not Powering On:**
 - Check the power (Red wire) and ground (Black wire) connections. Ensure they are securely connected to a stable 9-32VDC power source.
 - Verify that the fuse in your vehicle's electrical system, if any, is intact.
- **Indication Lights Not Functioning:**
 - Check the connections for the Left Turn (Yellow), Right Turn (Gray), and High Beam (White) wires.

9. MAINTENANCE

To ensure the longevity and optimal performance of your ARTILaura GPS Speedometer and Tachometer, follow these simple maintenance guidelines:

- **Cleaning:** Use a soft, damp cloth to clean the gauge face and body. Avoid abrasive cleaners or solvents that could damage the anti-fog glass or housing.
- **Connections:** Periodically check all electrical connections to ensure they remain secure and free from corrosion.
- **Antenna Placement:** Ensure the GPS antenna remains in a position with an unobstructed view of the

sky.

- **Water Exposure:** While the gauge is IP67 waterproof, prolonged submersion or high-pressure water jets should be avoided to prevent potential damage to the wiring connections.
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10. WARRANTY AND SUPPORT

ARTILAUURA products are manufactured to high standards and undergo rigorous quality control. For warranty information, technical support, or service inquiries, please contact ARTILAUURA customer service through the retailer where you purchased the product or visit the official ARTILAUURA store online.

Please retain your purchase receipt as proof of purchase for any warranty claims.

For additional resources and product information, you may visit the [ARTILAUURA Store on Amazon](#).
