AWOLIMEI P21

AWOLIMEI P21 Head-Up Display User Manual

Model: P21

1. Product Overview

The AWOLIMEI P21 is a dual-system LCD car head-up display designed to project essential vehicle data directly onto its screen, allowing drivers to view information without looking down. This enhances driving safety by keeping critical data within the driver's line of sight. It supports both OBD2 and GPS modes, offering versatility for various vehicle types.



Figure 1: AWOLIMEI P21 Head-Up Display Unit

2. Package Contents

Please verify that all items are present in the package:

- P21 HUD Unit
- Suction Cup Holder
- User Manual
- Non-slip Mat
- OBD Cable
- USB Cable

3. Compatibility

The P21 HUD supports two main operating modes: OBD2 and GPS.

- **OBD2 Mode:** Applicable to most gasoline cars manufactured after 2008. This mode reads data directly from the vehicle's onboard diagnostic system.
- **GPS Mode:** Applicable to any car, regardless of make, model, or year. This mode relies on satellite signals to display data.

Important Note on OBD Mode Incompatibility:
The following vehicle types and models may not be compatible with OBD mode and should use GPS mode:

- **Japan:** Suzuki, Mazda Atenza, 2013 Toyota Avanza, Lexus (is250, ex250, ES300H), Infiniti (QX50, Q50, Q501), Honda (Jazz, CRV), and models produced before 2008.
- **USA:** Dodge, JEEP, Sail, Chrysler, and vehicles manufactured before 2004.
- **All French & Italy vehicles:** FIAT, Maserati, Lamborghini, DS, Logo, Citroen, Renault, Simka, Amirka, etc.
- **South Korea:** 2013 Hyundai Sonata, 2017 Kia Soul PS, select hybrids, diesel vehicles, etc.
- Pick-up trucks and cars with modified computer systems.

4. Setup

4.1 Installation

The P21 HUD can be installed using either the provided suction cup holder for windshield mounting or the non-slip mat for dashboard placement. Choose the option that provides the best visibility and stability in your vehicle.

4.2 Connecting the Device

1. Locate your vehicle's OBD port (typically under the dashboard on the driver's side).
2. Connect the provided OBD cable to the OBD port and to the P21 HUD unit.
3. Alternatively, use the USB cable to power the device for GPS mode operation.



Figure 2: The HUD powers on automatically when the engine starts and turns off when the engine stops.

4.3 Mode Switching

If your car does not meet the OBD protocol requirements (e.g., pre-2008 models or incompatible types), you must switch to GPS mode. This switch should be performed within 5 seconds of powering on the device. Refer to the device's on-screen menu for specific instructions on how to switch modes.

5. Operating Instructions

5.1 Data Display

The P21 HUD can display a comprehensive range of vehicle data, depending on the operating mode (OBD2 or GPS). Data points include:

- Driving Time
- Driving Speed
- Driving Distance
- Voltage Display
- Turbo Pressure
- Intake Air Temperature
- Transmission Temperature
- Engine Load
- Engine Speed (RPM)
- Number of Satellites (GPS mode)
- System Time
- Satellite Time (GPS mode)
- Climbing/Downhill Slope Angle



Figure 3: The P21 HUD displaying various real-time vehicle data.



Figure 4: GPS+Beidou satellite connection for accurate positioning and speed data.



Figure 5: Accurate display of climbing and downhill slope angles, with warnings for slopes exceeding 30 degrees.

5.2 Display Interfaces

The P21 HUD offers 11 different display interfaces, allowing users to customize the layout and prioritize the data most relevant to them. These interfaces can be cycled through using the device's control buttons.



Figure 6: Examples of the 11 available display interfaces.

5.3 Language Settings

The device supports 12 languages, which can be freely switched through the settings menu for ease of understanding and navigation.



Figure 7: The P21 HUD supports 12 languages for user convenience.

5.4 Alarm Functions

The P21 HUD includes several alarm functions to alert the driver to critical vehicle conditions:

- **Coolant Temperature Alarm:** Alerts when engine coolant temperature exceeds a set threshold (e.g., 120°C).
- **RPM Alarm:** Alerts when engine RPM exceeds a set threshold (e.g., 6000 r/min).
- **Over-speed Alarm:** Alerts when vehicle speed exceeds a set limit (e.g., 150 Km/h).
- **Voltage Alarm:** Alerts when vehicle voltage drops below or exceeds a safe range (e.g., 14.9V).



Speed Alarm



Voltage Alarm



RPM Alarm



Water Temperature Alarm

5.5 Ambient Light

The P21 HUD features customizable ambient lighting. You can switch the ambient light to your preferred color through the device settings.

6. Maintenance

To ensure the longevity and optimal performance of your P21 HUD, follow these simple maintenance guidelines:

- Keep the device clean by wiping it with a soft, dry cloth. Avoid abrasive cleaners or solvents.
- Ensure the cables are not pinched or damaged during installation or use.
- Avoid exposing the device to extreme temperatures or direct sunlight for prolonged periods when not in use.

7. Troubleshooting

7.1 No Display / Incorrect Data in OBD Mode

If the device does not display data or shows incorrect readings in OBD mode, it may be due to vehicle incompatibility. As mentioned in the Compatibility section, some vehicles (especially pre-2008 models or specific makes/models) do not fully support the OBD protocol required by the device.

- **Solution:** Switch the device to GPS mode. This must be done within 5 seconds of powering on the unit. Refer to the device's menu for mode switching instructions.

7.2 Fault Code Clearing

The P21 HUD has the capability to display and clear fault codes from your vehicle's engine control unit (ECU) when operating in OBD mode. This can be useful for diagnosing and resolving minor issues.



Figure 8: The HUD can display fault information and offers a clear function.

To clear fault codes, navigate to the fault code section in the device's menu and select the clear option. Always consult a qualified mechanic for persistent or serious vehicle issues.

7.3 Speed Up Test

The device can perform a speed-up test, showing the acceleration time from 0 to 100 km/h. This is an informational feature and not a diagnostic tool.



Figure 9: The HUD displaying acceleration time during a speed-up test.

7.4 Turbo Pressure Display

For vehicles equipped with a turbocharger, the P21 HUD can display real-time turbo pressure, reflecting the engine's performance.



Figure 10: Real-time display of turbo pressure.

8. Specifications

Feature	Specification
Product Dimensions	4.53 x 1.1 x 3.23 inches
Item Weight	5.29 ounces (150 Grams)
Material	Plastic
Model Number	P21
ASIN	B0BG228BCS
UPC	723497750271
First Available	September 20, 2022

9. Quality Assurance

Our products have passed CEFCCROHS certification, ensuring high quality and compliance with relevant standards. Each unit undergoes two inspections by the quality inspection department before shipment to guarantee reliability and performance.

Ask a question about this manual

Ask about setup, troubleshooting, compatibility, parts, safety, or missing instructions. Manuals+ will review the question and use this page's manual context to help answer it.

Name

Anonymous

Email

you@example.com

After a successful submission, we securely hash the supplied account or form email before sending it to Microsoft Advertising for conversion attribution. Privacy details.

Question

Example: How do I reset this device or fix this error?

Details

Model number, symptoms, what you tried, or the section of the manual you are using.

Submit question