GODIAG GT100+

GODIAG GT100+ OBDII Breakout Box User Manual

Model: GT100+
Brand: GODIAG

Introduction

The GODIAG GT100+ OBDII Breakout Box is a state-of-the-art testing platform engineered for comprehensive OBDII protocol communication detection, ECU maintenance, diagnosis, programming, and coding. This enhanced version offers advanced capabilities including CAN BUS protocol support and real-time voltage and current display. It serves as an indispensable tool for automotive professionals, enabling efficient and safe ECU operations both on the bench and within the vehicle.

Key Features

- **ECU Bench Tool:** Allows powering an ECU on the bench for diagnostics, vehicle immobilizer, and security work, using either the included power adapter or the OBDII port.
- **Added CAN BUS and K-LINE Protocol:** Checks all OBD2 diagnostic socket pins, including non-standard protocols (ports 1, 9, 3, 11, 12, 13, and 8), and tests CAN BUS and K-LINE protocols.
- **Communication, Power, and Grounds Verification:** Verifies network communication, proper power, and ground supply before connecting expensive scan tools, preventing potential damage.
- **Easy Operation With Banana Plug & Current Display:** Features simple operation and additional functionalities for ECM/ECU repair. Connects via banana plug or DB25 connector, providing power to ECU and displaying electronic current value for connection verification.
- **Power ECU when Replacing Battery:** Provides auxiliary power to the vehicle through the breakout box to sustain power supply during battery replacement.

Setup Guide

Package Contents



Figure 1: Full Accessories Package. Includes the GT100+ unit, OBD 2-in-1 extension cable, 12V power supply, DB25 colored jumper cable, 24pcs xWire accessories, and 6pcs xBanana plugs with 120 ohm resistor.

Initial Connection and Power-Up

To begin, connect the 12V power supply to the DC (12V) input port on the left side of the GT100+ unit. Press the 'POWER' switch on the bottom panel to turn on the device. The display screen will illuminate, showing voltage and current readings. Ensure the power display is normal and the signal lights indicate a correct connection.

Video 1: Overview of Godiag GT100+ OBDII Breakout Box features and initial power-up.

Connecting to ECU for Bench Testing

For bench testing, connect the DB25 colored jumper cable to the DB25 port on the right side of the GT100+ unit. Use the individual labeled wires from the jumper cable to connect to the corresponding pins on the ECU module, following the ECU's wiring definition. Ensure all connections are secure and correct.



Figure 2: Setup for ECU module bench testing and programming using the GT100+.
Video 2: Demonstrates the process of setting up the GT100+ for ECU bench programming.

Operation

OBDII Protocol Communication Detection

Connect the OBD 2-in-1 extension cable to the 'Car Connect' port on the GT100+ unit. Plug the OBDII male connector into your vehicle's OBDII port. The indicator lights on the GT100+ will show the communication status of each pin, allowing you to verify proper communication before proceeding with diagnostics.

Video 3: Detailed demonstration of OBD2 breakout box test platform functionalities, including communication detection.

Voltage and Current Display

The GT100+ features a digital display that shows real-time voltage and current. This function is crucial for verifying the power supply to the ECU and ensuring the connected cables are functioning correctly. If the current display shows an abnormal value, it may indicate a wiring issue or a faulty ECU module.



Figure 3: Close-up view of the banana plug connections and the digital voltage and current display on the GT100+.

ECU Connection Modes

The GT100+ supports both single and multiple ECU connection modes. This allows for flexible programming and diagnostic operations, whether you are working with one ECU or need to connect several control modules simultaneously for complex tasks.



Figure 4: Diagram illustrating single ECU connection and multiple ECU connection modes with the GT100+.

Key Programming and Immobilizer Module Activation

The GT100+ can be used to activate the dashboard or immobilizer module for various vehicle brands like VW, Porsche, Mitsubishi, and Toyota, especially in all-keys-lost scenarios. This allows for pre-activation before using other programming tools.
Video 4: Shows the GODIAG GT100+ working with a GPT Adapter on a MAZDA3 ECU, demonstrating a specific programming application.

Power Supply During Battery Replacement

When replacing a vehicle's battery, the GT100+ can provide continuous auxiliary power to prevent loss of vehicle data or settings. Connect the GT100+ to a separate 12V power source (e.g., another battery) and then to the vehicle's OBDII port to maintain power during the battery swap.

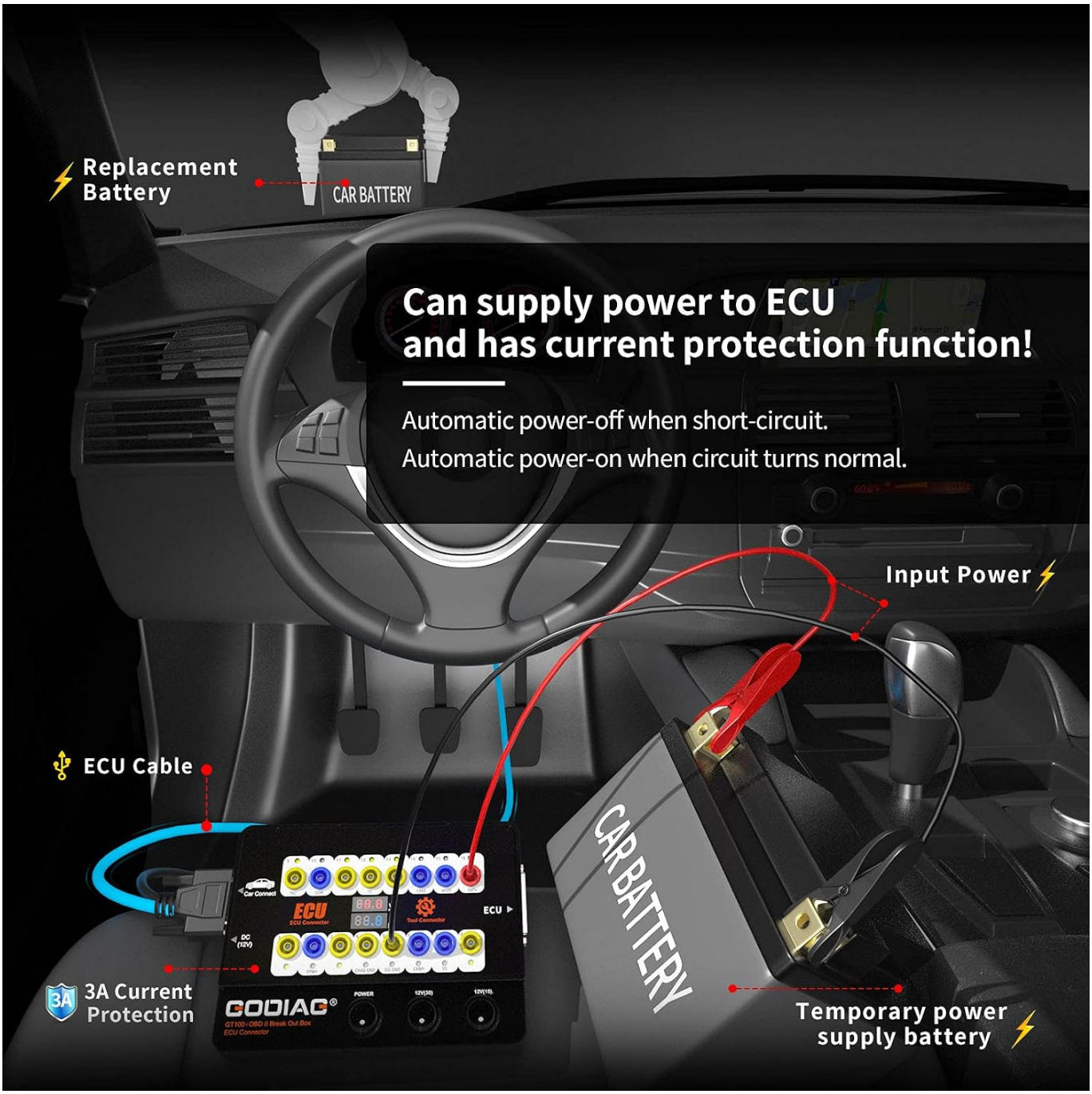


Figure 5: Illustration of using the GT100+ to supply power to the vehicle during battery replacement.

Maintenance

Keep the device clean and free from dust and moisture. Store it in a cool, dry place when not in use. Regularly inspect cables and connectors for any signs of wear or damage. Avoid dropping the device or exposing it to extreme temperatures.

Troubleshooting

- **No Power:** Ensure the 12V power supply is correctly connected and functioning. Check the power switch on the GT100+.
- **No Communication:** Verify all cable connections are secure. Check the indicator lights on the GT100+ for specific pin communication status. Ensure the vehicle's ignition is on if testing in-car.
- **Incorrect Voltage/Current Readings:** Double-check wiring to the ECU. A fluctuating or incorrect reading may indicate a faulty

connection or a problem with the ECU itself.

- **Software/Programming Issues:** Refer to the specific diagnostic tool's user manual for software-related troubleshooting. Ensure the GT100+ is providing stable power and communication.

Specifications

- **Brand:** GODIAG
- **Product Dimensions:** 7.48"L x 5.32"W x 1.38"H
- **Display Resolution:** 480 x 800 pixels
- **Item Weight:** 1.98 pounds
- **Item Model Number:** GT100+
- **Special Features:** Voltage and current display, converts car OBD2 interface to 16 pin for signal detection and electrical level conversion, diagnoses and programs single ECU by connecting diagnostic tool or ECU programmer, connects with any diagnostic tool to tell whether car communication is good or not.



Figure 6: Dimensions of the GT100+ unit and its packaging.

Warranty and Support

For detailed warranty information and technical support, please refer to the official GODIAG website or contact their customer service. A digital user manual (PDF) is also available for download from the product's Amazon page for comprehensive guidance.

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