

Scanner OBD2

FNRFD10



CONTENTS

User warnings	>>>	02
1.Product introduction	>>>	02
2. Safety precautions	>>>	02
3. Package contents	>>>	03
4. Installation and configuration	>>>	03
5.Diagnosis mode and code clearing	>>>	03
6. Common issues and troubleshooting	>>>	04
7. Technical Specifications	>>>	04

Read the entire manual carefully before use.

It is essential to understand all the operations described in this manual: from correct installation to diagnostic procedures and fault code clearing. A thorough reading helps prevent damage to the vehicle or scanner and ensures effective and safe use.

Do not use in explosive or solvent-contaminated environments.

The device is not rated for use in potentially explosive atmospheres (e.g., in the presence of gasoline vapors, solvents, or flammable gases). Diagnostic operations under such conditions may trigger sparks or dangerous overheating.

Dispose of the device and batteries according to local regulations (WEEE).

The casing contains batteries and electronic components that, if disposed of with regular waste, can pollute the environment. Take the product to an authorized electrical and electronic equipment collection center (WEEE), or follow your municipality's waste disposal guidelines.

Do not open the enclosure: the internal electronics are not repairable.

The FNRFD10 casing is sealed and welded to ensure waterproofing and protection from accidental contact. Attempts to open or repair it yourself can compromise electrical safety and void the warranty.

Keep out of reach of children and pets.

Small parts and electrical contacts may cause shocks or choking if accidentally swallowed. Always store the scanner in the included hard case immediately after use, in a place inaccessible to children.

1. Product Introduction

Product Introduction

The FNRFD10 is a small plug-and-play OBD2 scanner that plugs directly into the vehicle's diagnostic port, requiring no external power supply. Using Bluetooth Low Energy 5.0, it sends data to the "YMOBD" app (iOS/Android), where you can:

Read and clear DTCs from all control units (engine, ABS, airbag).

Monitor real-time parameters such as RPM, temperature, and battery voltage, with overlay graphs.

Perform sensor tests (O₂, MAP, EGR, catalytic converter) and check emission status (I/M readiness).

A quick and affordable tool designed for mechanics and enthusiasts who want to diagnose their vehicle wherever they are.

2. Safety Precautions

Connect the scanner with the engine and ignition off.

Before plugging the FNRFD10 into the OBD-II port, make sure the engine and ignition are completely off. Inserting it with the ignition on or the engine running may cause sparks or electronic damage, potentially harming both the diagnostic unit and the vehicle's control module. Avoid exposure to extreme temperatures.

The scanner is designed to operate between -20 °C and +65 °C.

Temperatures outside this range may affect the accuracy of internal sensors and reduce the lifespan of electronic components. Do not leave the device exposed to direct sunlight for long periods or in excessively cold environments.

Do not use while driving.

All code reading, clearing, and monitoring operations must be performed with the vehicle stopped and safely parked. Distractions or incorrect posture while driving can cause accidents: always stop the vehicle before connecting or consulting data through the app.

Protect the unit from moisture and liquids.

The YMOBD body is not waterproof: contact with water, heavy rain, or corrosive liquids can cause internal short circuits. If the vehicle is wet or in high humidity, disconnect the device first and thoroughly dry the OBD-II port.

Check the vehicle battery voltage.

Operation is guaranteed for voltages between 9 V and 16 V DC, drawn directly from the OBD port. Voltages outside this range may affect readings and, in extreme cases, damage the scanner. If the battery is discharged or there are electrical issues with the vehicle, recharge or fix the problem before proceeding with diagnostics.

Avoid strong electromagnetic fields.

Strong interference (proximity to radio transmitters, starting heavy engines, or industrial equipment) can disrupt the Bluetooth connection and alter transmitted data. Move to a safe distance from such sources before starting the diagnosis.

Use original accessories for updates.

For USB-C connection (firmware updates and auxiliary power), use only the supplied cable or certified equivalents. Non-compliant cables may cause malfunctions during firmware updates and void the warranty.

3. Package contents

- FNIRSI® FD10 OBD2 Scanner
- 60 cm OBD-II extension cable
- Hard case with zipper closure
- USB-C cable for firmware updates
- Multilingual quick guide
- 12-month warranty card

4. Installation and setup

1. Locate the OBD-II port
Usually under the dashboard, driver's side, near the steering wheel.
2. Insert the scanner
Firmly push the FD10's OBD-II connector until it clicks into place.
3. Turn on the ignition
Turn the ignition to "ON" without starting the engine: the green LED will light up.
4. Install the app
Download "FNIRSI OBD" from the App Store or Google Play.
5. Bluetooth pairing
6. Open the app and enable Bluetooth.
7. Select the device "FD10-XXXX" from the list.
8. Wait for the blue LED to stay on: connection established.
9. Vehicle configuration
10. Follow the app's guided procedure to select make, model, and year.



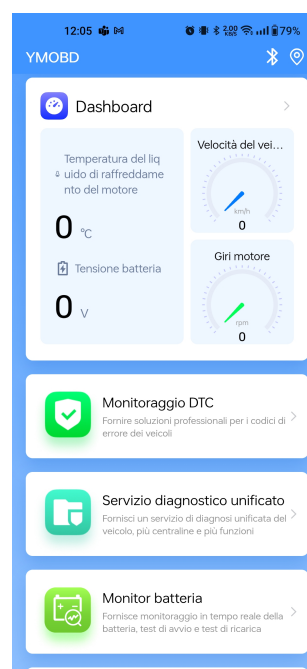
5. Diagnosis mode and code clearing

6.1 Reading Fault Codes (DTCs)

- In the app, tap Diagnosis → Read Codes.
- The app will query the ECU and display a list of Diagnostic Trouble Codes (DTCs) along with descriptions.
- Save or export the report if needed.

6.2 Clearing DTCs

- Resolve the mechanical or electrical issue indicated by the fault code.
- In the app, tap Clear Codes and confirm the operation.
- The red LED will blink while the clearing process is in progress.
- Perform a new scan to verify that the codes have been successfully removed.



6. Troubleshooting Common Issues

Symptom: No Bluetooth connection

Probable cause: Bluetooth is turned off or the scanner is not powered

Recommended solution: Turn on Bluetooth on your smartphone, make sure the device's green LED is on, then try pairing again.

Symptom: Solid red LED

Probable cause: Communication error with the ECU

Recommended solution: Turn off the ignition, unplug the YMOBD scanner, wait 10 seconds, then plug it back in.

Symptom: The app does not detect the ECU

Probable cause: Ignition is off or the vehicle's OBD2 protocol is not supported

Recommended solution: Turn on the ignition, update the firmware and the app, and verify that the vehicle is OBD2 compliant.

Symptom: Fault codes cannot be cleared

Probable cause: The issue has not been resolved or the DTCs are permanent

Recommended solution: Fix the reported issue, then use the app to attempt code clearing again.

Symptom: Live data is inconsistent or cuts out

Probable cause: Battery voltage is too low or there is electromagnetic interference

Recommended solution: Ensure the battery provides at least 12 V, check the vehicle's ground connection, and restart the app.

7. Technical Specifications

Supported protocols:

ISO 9141-2, ISO 14230-4 (KWP2000), ISO 15765-4 CAN, SAE J1850 PWM/VPW

Wireless connection:

Bluetooth Low Energy 5.0

Operating voltage:

From 9 V to 16 V DC (powered via OBD port)

Power consumption:

Less than 45 mA at 13 V

Operating temperature:

From -20 °C to +65 °C

Storage temperature:

From -40 °C to +85 °C

Dimensions:

48 mm × 26 mm × 22 mm

Weight:

Approximately 25 grams

Status LED indicators:

Green = power on

Blue = Bluetooth connection active

Red = error or diagnostic in progress

