BANVIE ES002

BANVIE Car Alarm System with RFID Push Engine Start Button and Keyless Go System User Manual

Model: ES002

1. Product Overview

The BANVIE Car Alarm System with RFID Push Engine Start Button and Keyless Go System provides enhanced vehicle security and convenient engine starting. This system integrates a push-button start mechanism with RFID immobilizer technology to prevent unauthorized vehicle operation.

Figure 1: Complete BANVIE Car Alarm System components. This image displays the main control unit, the engine start/stop push button, the RFID sensor ring, two RFID keys, and associated wiring harnesses.

2. Package Contents

Verify that all items are present in the package:

- 1 x Car Engine Push Starter Host
- 1 x Push Start Stop Button
- 1 x RFID Sensor Ring
- 2 x RFID Keys (one master card, one ID card)
- 1 x Installation Wire Harness
- 1 x User Manual (this document)

Figure 2: RFID Keys. The package includes a Master card (marked 'M') for managing other RFID keys and standard ID cards for daily use.

3. Key Features

- **Push Button Start/Stop:** Convenient single-button operation for engine ignition and shutdown.
- **RFID Engine Lock:** Advanced immobilizer function requiring an authorized RFID key within 2-5 cm of the sensor ring to disarm the system.
- **Anti-Theft Protection:** The system automatically re-arms after 15 seconds if the start button is not pressed after disarming. The host unit locks 30 seconds after the engine stalls.
- **Service Mode:** Allows bypassing the immobilizer using the ID card for direct engine start, useful for vehicle servicing.
- **Code Learning:** The Master RFID card can delete lost ID cards and program new ones.
- **Compatibility:** Designed for 12V vehicles and can integrate with existing car alarm or keyless entry systems.
- **Dashboard Functionality:** Supports open acoustics and dashboard power functions.

4. Installation Guidelines

Warning: Professional installation by a qualified car alarm installer is highly recommended due to the complexity of vehicle electrical systems.
This system is designed for 12V DC vehicles. Ensure your vehicle's electrical system matches this requirement.

4.1 Pre-Installation Considerations

- **Steering Wheel Lock:** If your vehicle has a mechanical steering wheel lock, a spare key will be required to keep the steering wheel unlocked.
- **Chip Key/Immobilizer:** If your vehicle uses a chip key or has an original immobilizer system, an extra bypass module (e.g., ASIN B075TH5B91) may be necessary. This module allows the BANVIE system to override the factory immobilizer.
- **Placement of RFID Sensor Ring:** Install the RFID sensor ring in a hidden location, accessible only to the driver, with a sensing distance of approximately 2-5 cm.

Figure 3: Push Start Button Integration. This image illustrates how the push start button can replace a traditional key ignition, showing various installation scenarios within a vehicle's dashboard.

Figure 4: RFID Sensor Ring Placement. The RFID sensor ring should be installed in a discreet location, allowing the RFID key to be brought within 3-5 cm for system authorization.

4.2 Wiring Diagram (General Guidance)

Refer to the included installation wire harness and the detailed wiring diagram in the physical user manual for specific connections. General connections typically include:

- Power (12V constant)
- Ground
- ACC (Accessory)
- IGN1 (Ignition 1)
- IGN2 (Ignition 2, if applicable)
- Start Signal
- Brake Pedal Input
- RFID Sensor Ring Connection
- Push Start Button Connection

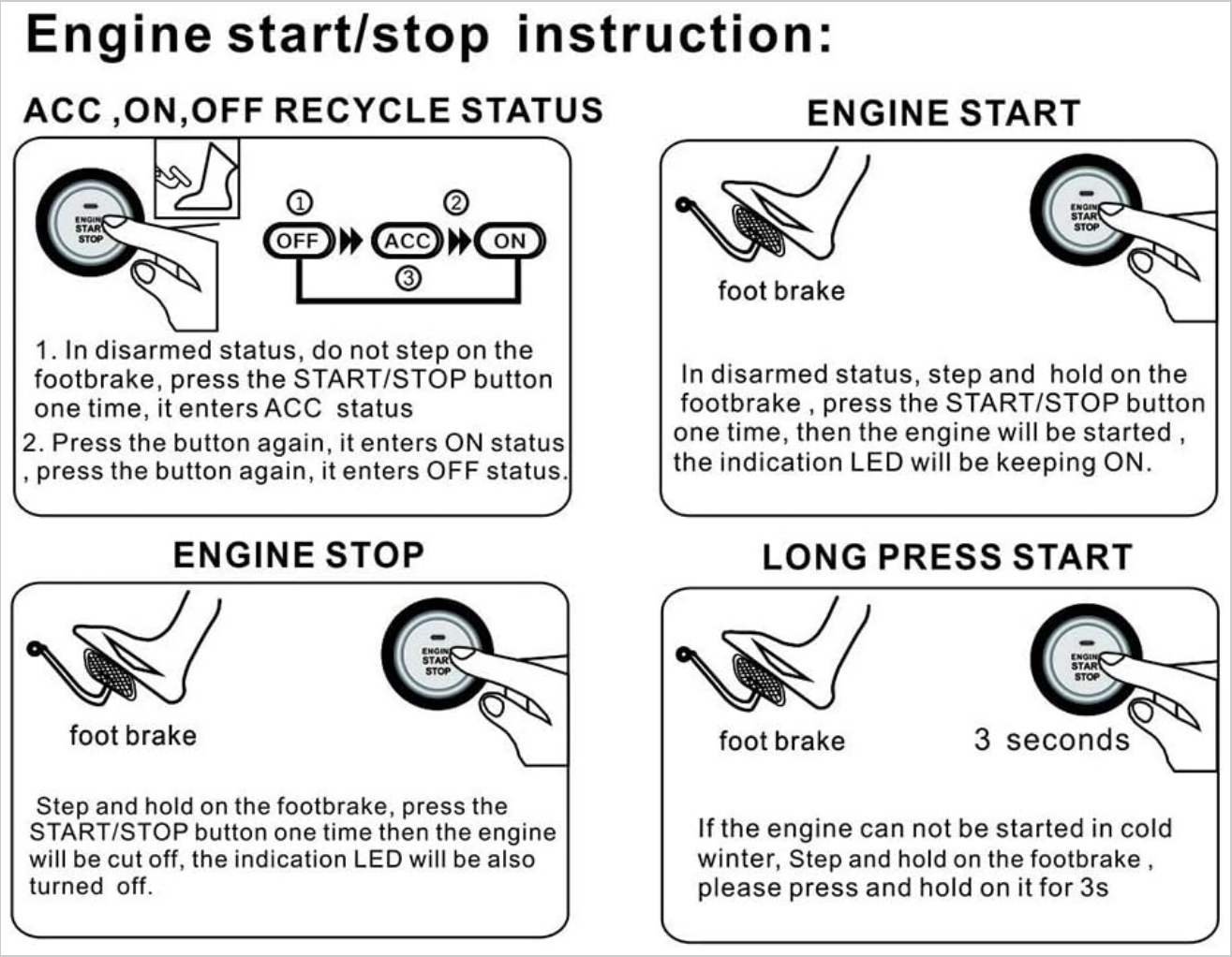

Figure 5: Main Control Host. This image shows the central processing unit of the BANVIE system, where all wiring connections are made.

5. Operating Instructions

5.1 Disarming the System (RFID Authentication)

Before starting the engine, bring an authorized RFID key (Master or ID card) within 2-5 cm of the hidden RFID sensor ring. The system will emit a "Bi Bi" sound, indicating it is disarmed and ready for engine start.

5.2 Engine Start/Stop Procedures

Figure 6: Engine Start/Stop Instruction Diagram. This diagram visually explains the steps for ACC, ON, OFF status, engine start, engine stop, and long press start functions.

1. **ACC, ON, OFF Recycle Status:**
    - In disarmed status, without stepping on the foot brake, press the START/STOP button once to enter ACC status.
    - Press the button again to enter ON status (dashboard and accessories powered).
    - Press the button a third time to enter OFF status.
2. **Engine Start:**
    - In disarmed status, step and hold the foot brake.
    - Press the START/STOP button once. The engine will start, and the indication LED on the button will remain ON.
3. **Engine Stop:**
    - Step and hold the foot brake.
    - Press the START/STOP button once. The engine will cut off, and the indication LED will turn OFF.
4. **Long Press Start (for cold weather):**
    - If the engine cannot be started normally in cold conditions, step and hold the foot brake.
    - Press and hold the START/STOP button for approximately 3 seconds until the engine starts.

5.3 Service Mode

The ID card can be used to enter a service mode, which bypasses the immobilizer. In this mode, the user can push start the engine directly without needing the ID card for authentication. This is useful for mechanics or when the vehicle needs to be moved without the primary RFID key.

6. Maintenance and Security

6.1 RFID Key Management (Code Learning)

The Master RFID card (marked 'M') has special functions for managing other RFID keys:

- **Deleting Lost Cards:** If an ID card is lost, the Master card can be used to delete all former ID cards from the system's memory. This renders the lost card non-functional.
- **Learning New Cards:** After deleting old cards, the Master card can then be used to program any new RFID card with a new code, effectively replacing lost or damaged cards.

6.2 System Re-arming

For enhanced security, the system will automatically re-enter arming mode after 15 seconds if the start button is not pressed after disarming. Additionally, the main host unit will automatically lock 30 seconds after the engine has stalled.

7. Troubleshooting

This section provides general troubleshooting tips. For complex issues, professional assistance is recommended.

- **Engine does not start after pressing button:**
  - Ensure the system is disarmed by bringing an authorized RFID key near the sensor ring (listen for "Bi Bi" sound).
  - Verify the foot brake is pressed firmly during the start attempt.
  - Check vehicle battery voltage.
  - If in cold weather, try the "Long Press Start" procedure (hold button for 3 seconds).
  - Confirm all wiring connections are secure and correct.
- **System does not disarm with RFID key:**
  - Ensure the RFID key is within 2-5 cm of the sensor ring.
  - Try a different authorized RFID key if available.
  - Check for any metallic obstructions near the sensor ring that might interfere with the RFID signal.
- **Engine starts but immediately stalls:**
  - This could indicate an issue with the vehicle's original immobilizer not being properly bypassed. Ensure a bypass module is correctly installed if required for your vehicle.
  - Consult a professional installer.

8. Specifications

Attribute	Value
Brand	BANVIE

Model Number	ES002
Material	ABS
Color	Black (main unit), Blue (RFID keys)
Host Unit Dimensions	10.5 x 8.5 x 3.2 cm (approx. 4.2 x 3.1 x 1.2 inches)
Operating Voltage	DC 12V
Item Weight	12.3 ounces
Compatible Devices	Cars
Noise Level	10 dB
Remote Control Included	No

9. Warranty and Support

Information regarding specific warranty terms and customer support contact details is not provided in this document. Please refer to the product packaging or the seller's website for warranty information and technical support contacts.