

# Table of Contents

|                               |    |
|-------------------------------|----|
| Statement.....                | 1  |
| Introduction .....            | 2  |
| Functional Description.....   | 4  |
| Product Troubleshooting ..... | 7  |
| Compliance Information.....   | 12 |
| Warranty And Service .....    | 14 |

## Statement

- This manual is designed for the use of FCAR products; it cannot be copied or stored in any form (electronic, mechanical, photocopying, recording or otherwise) without prior written permission being secured from Shenzhen FCAR Technology Co., Ltd.
- This manual is intended for professional vehicle repair technicians.
- This manual provides the operation methods for FCAR products only, and the company accepts no responsibility for the consequences caused by attempting to use the operation methods on other equipment.
- This manual is written in accordance with the existing configuration and functions of the product, and is subject to change without notice if the product adds new configurations and functions.

If you have any questions, please contact us by the following ways:

Headquarters: 8F, Chuangyi Bldg., No. 3025 Nanhai Ave., Nanshan, Shenzhen, China 518060

Factory: West 1F, Bldg. B, Hengchao Industrial Park, Tangtou North Ave., Bao'an, Shenzhen, China 518108

Tel: 0086-755-82904730

Fax: 0086-755-83147605

E-mail: [marketing@szfcar.com](mailto:marketing@szfcar.com)

Website: <http://www.fcar.com>

## Introduction

The Wireless Diagnostic Interface is a multi-brand device which comes with the FCAR tool kit. It is designed to connect wirelessly with the FCAR Display Tablet, as a vehicle communication interface (VCI) for vehicle data transmission. Thanks to the wireless BT technology, with which you are allowed to work freely around the vehicle.

This interface device can communicate with vehicles' electronic control units (ECUs), guaranteeing performance and speed that redefine multi-brand diagnostics. The development of this interface has been focused on reducing the communication time, and ensuring the tool is practical to use.



The FCAR diagnostic platform combines the VCI device and the display tablet with technical information into ensuring quick and simple access to the vehicle to perform comprehensive diagnostics applications.

## **Wireless Communication**

The Wireless Diagnostic Interface supports BT communication. It can transmit vehicle data to the FCAR Display Tablet without a physical connection. The working range of the transmitter through BT communication is about 300 feet (about 100 m). A signal lost due to moving out of range automatically restores itself when the display unit is brought closer to the VCI unit.

For detailed information about VCI connection with the FCAR display tablet, please refer to the FCAR User Manual.

## **USB Connectivity**

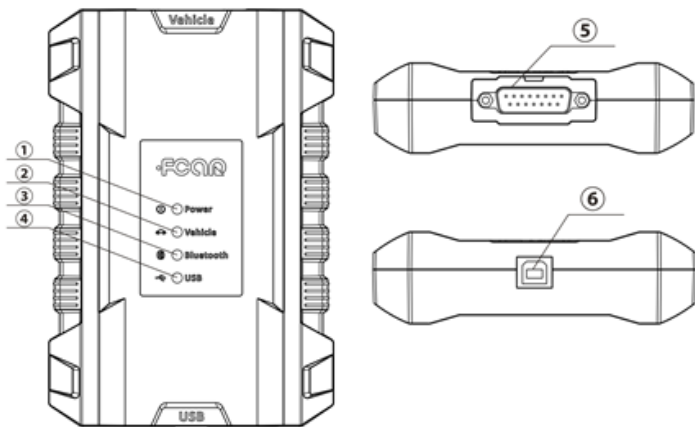
The VCI device also provides a direct connection to the FCAR display tablet or a PC via a USB 2.0 full-speed connection. All of the electronics are contained in the device shell, making it a compact and rugged vehicle communication tool.

## **Power Source**

The Wireless Diagnostic Interface operates on 12-volt vehicle power, which it receives through the vehicle data connection port. The unit powers on whenever it is connected to an OBD II/EOBD compliant data link connector (DLC).

## Functional Description

The Wireless Diagnostic Interface device package, which includes the unit, user manual, and a CD with driver program and update agent, comes along with the FCAR/FCAR Mini tool kit. Please refer to the FCAR User Manual for additional information.



| No. | Name                | Description                                   |
|-----|---------------------|-----------------------------------------------|
| ①   | Power Indicator     | Lights up when powered (connected to the car) |
| ②   | Diagnostic light    | Lights up when connected to vehicle           |
| ③   | Bluetooth indicator | Lights up when connected to tablet PC         |
| ④   | USB indicator       | Lights up when connected to tablet PC         |

|   |                            |                                                                                           |
|---|----------------------------|-------------------------------------------------------------------------------------------|
| ⑤ | DB15 Interface             | Connect to the main testing line, connect to the vehicle through the diagnostic connector |
| ⑥ | USB interface<br>(B shape) | Connect to tablet PC or upgrade VCI box                                                   |

Table 1 – Status LEDs and Interface on the Front Panel

### **Vehicle Data Connector**

The vehicle connector connects the device to the vehicle's DLC via a standard DB15 – Pin OBD II cable.

## Status LEDs

There are 5 status LEDs on the front panel of the VCI device, which indicates its working status as well as the hardware conditions, and are very useful for troubleshooting the device's communication or connection to the Vehicle, display tablet and/or the PC. See [Table 1](#) for detailed description of the status LEDs.

## USB Port

The USB port provides the easiest connection between the device and the display tablet via a USB cable, and is used to control the device from the software application running on the Auto Diagnostic System Display Tablet, as F7S Auto Diagnostic System, F6S Auto Diagnostic System, F6 PLUS Auto Diagnostic System.

## Technical Specifications

| Item                   | Description                                       |
|------------------------|---------------------------------------------------|
| Communications         | ✦ BT V4.0<br>✦ USB 2.0                            |
| Wireless Frequency     | 2.4 GHz                                           |
| Input Voltage Range    | 12 VDC                                            |
| Supply Current         | 300 mA @ 12 VDC                                   |
| Operating Temperature  | 0°C to 50°C (ambient)                             |
| Storage Temperature    | -20°C to 70°C (ambient)                           |
| Dimensions (L x W x H) | 164 mm (6.46") x 112 mm (4.41") x 31.5 mm (1.24") |
| Weight                 | 0.30 kg (0.661 lb)                                |

## Capabilities

When used in conjunction with the display table, the Wireless Diagnostic Interface device is able to perform the following functions:

- ✦ Auto diagnostics to read and clear the error memory, to display system parameters and the status of the ECU;
- ✦ Activation, adjustments and configurations that are essential for ensuring a complete repair;
- ✦ Resetting the service lights or the airbag systems;
- ✦ Configuration of the ECUs, keys and remote controls, etc.

## Product Troubleshooting

This part describes problems that you may encounter while using the VCI device.

### Vehicle Linking Error

A communication error occurs if the interface device fails to communicate with the vehicle's control module when performing diagnostic procedures. You need to do the following check-ups:

1. Verify that the ignition is ON.
2. Check if the interface device's OBD II connector is securely connected to the vehicle's DLC.
3. Turn the ignition off and wait for about 10 seconds. Turn the ignition back to on and continue the operation.

Verify the control module is not defective.

If these issues have been addressed, verified, and you are still having trouble, please contact technical supports for assistance. Refer to the FCAR User Manual for additional information.

## Firmware Update

FCAR periodically releases updates to the device's drivers. Updates are necessary to solve specific problems and to ensure the VCI device is working properly with the OEM software. If you are experiencing any problems during use, always make sure that you have the latest device software and drivers.

## Update Online

This function allows you to update the software for the device through the Fcar Display Tablet. Make sure the Display Tablet is connected to the VCI device.

# Compliance Information

## FCC COMPLIANCE

FCC ID: 2AJDD-MAXIBTVCI

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) this device must accept any interference received, including interference that may cause undesired operation.

**Warning:** Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

**NOTE:** This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation.

This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures: i . Reorient or relocate the receiving antenna. ii . Increase the separation between the equipment and receiver. iii. Connect the equipment into an

outlet on a circuit different from that to which the receiver is connected. iv.  
Consult the dealer or an experienced radio/TV technician for help.

### **FCC Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance 20cm between the radiator & your body.

### **RoHS COMPLIANCE**

This device is declared to be in compliance with the European RoHS Directive 2011/65/EU.

### **CE COMPLIANCE**

This product is declared to conform to the essential requirements of the following Directives and carries the CE mark accordingly:

EMC Directive 2004/108/EC

R&TTE Directive 1999/5/EC

Low Voltage Directive 2006/95/EC

## Warranty And Service

### Limited One Year Warranty

FCAR warrants to its customers that this product will be free from all defects in materials and workmanship for a period of one (1) year from the date of the original purchase, subject to the following terms and conditions:

- 1) The sole responsibility of FCAR under the Warranty is limited to either the repair or, at the option of FCAR, replacement of the device at no charge with Proof of Purchase.
- 2) This warranty does not apply to damage due directly or indirectly, to misuse, abuse, negligence or accidents, repairs or alterations outside our Service Center or facilities, criminal activity, improper installation, normal wear and tear, or to lack of maintenance.
- 3) FCAR shall not be liable for any incidental or consequential damages arising from the use, misuse, or mounting of the device. Some states do not allow limitations on how long an implied warranty lasts, so the above limitations may not apply to you.
- 4) All information in this manual is based on the latest information available at the time of publication and no warranty can be made for its accuracy or completeness. FCAR reserves the right to make changes at any time without notice.

### Service Information

If you have any questions, please contact your local distributor or visit our website at [www.FCAR.com](http://www.FCAR.com).

If it becomes necessary to return the tool for repair, contact your local distributor for more information.