

XHINKCAR THINKCAR

LEADING TECH IN DIAGNOSTICS

Version: V1.00.001

Statement: XHINKCAR | THINKCAR owns the complete intellectual property rights for the software used by this product. For any reverse engineering or cracking actions against the software, XHINKCAR | THINKCAR will block the use of this product and reserve the right to pursue their legal liabilities.

FCC Requirement

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

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.

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:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

FCC WARNING

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. End user must follow the specific operating instructions for satisfying RF exposure compliance. This transmitter must not be co-located or operating in conjunction with any other antenna or transmitter.

The mobile device is designed to meet the requirements for exposure to radio waves established by the Federal Communications Commission (USA). These requirements set a SAR limit of 1.6 W/kg averaged over one gram of tissue. The highest SAR value reported under this standard during product certification for use when properly worn on the body is 0.929 W/kg.

For body operation, this device has been tested and meets FCC RF exposure guidelines when used with any accessory that contains no metal and that positions a minimum of 0mm from the body. Use of other accessories may not ensure compliance with FCC RF exposure guidelines.

IC Requirement

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

(1) This device may not cause interference.

(2) This device must accept any interference, including interference that may cause undesired operation of the device.

L'émetteur/récepteur exempt de licence contenu dans le présent appareil est conforme aux CNR d'Innovation, Sciences et Développement économique Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes:

1) L'appareil ne doit pas produire de brouillage;

2) L'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

IC WARNING

Cet équipement est conforme aux limites d'exposition aux rayonnements ISED établies pour un environnement non contrôlé. L'utilisateur final doit suivre les instructions spécifiques pour satisfaire les normes. Cet émetteur ne doit pas être co-implanté ou fonctionner en conjonction avec toute autre antenne ou transmetteur.

Le dispositif portatif est conçu pour répondre aux exigences d'exposition aux ondes radio établie par le développement énergétique DURABLE. Ces exigences un SAR limite de 1,6 W/kg en moyenne pour un gramme de tissu. La valeur SAR la 0,929W/kg plus élevée signalée en vertu de cette norme lors de la certification de produit à utiliser lorsqu'il est correctement porté sur le corps.

Copyright Information

Copyright © 2022 by THINKCAR TECH CO., LTD (hereinafter referred to as "THINKCAR"). All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying and recording or otherwise, without the prior written permission of THINKCAR. The information contained herein is designed only for the use of this unit. THINKCAR is not responsible for any use of this information as applied to other units.

Neither THINKCAR nor its affiliates shall be liable to the purchaser of this unit or third parties for damages, losses, costs, or expenses incurred by purchaser or third parties as a result of: Accident, misuse, or abuse of this unit, or unauthorized modifications, repairs, or alterations to this unit, or failure to strictly comply with THINKCAR operating and maintenance instructions. THINKCAR shall not be liable for any damages or problems arising from the use of any options or any consumable products other than those designated as Original THINKCAR Products or THINKCAR Approved Products.

Formal statement: The names of other products mentioned in this manual are intended to explain how to use this equipment, and the registered trademark ownership still belongs to the original company.

This equipment is designed for professional technicians or maintenance personnel.

Trademark

All THINKCAR trademarks, service marks, domain names, logos, and company names referred to in this manual are either trademarks, registered trademarks, service marks, domain names, logos, company names of or are otherwise the property of THINKCAR or its affiliates. In countries where any of the THINKCAR trademarks, service marks, domain names, logos and company names are not registered, THINKCAR claims other rights associated with unregistered trademarks, service marks, domain names, logos, and company names. Other products or company names referred to in this manual may be trademarks of their respective owners. You may not use any trademark, service mark, domain name, logo, or company name of THINKTOOL or any third party without permission from the owner of the applicable trademark, service mark, domain name, logo, or company name.

You may contact us by visiting www.thinkcar.com or writing to THINKCAR TECH CO., LTD., Room 2606, Block#4, Tian'an Cloud Park, Bantian, Longgang District, Shenzhen, China, to request written permission to use Materials on this manual for purposes or for all other questions relating to this manual.

Safety Precautions and Warnings

To avoid personal injury, property loss, or accidental damage to the product, read all of the information in this section before using the product.

Handle equipment carefully

Do not drop, bend, or puncture the tool, or insert extra objects into or place heavy objects on the device. The vulnerable components inside may be damaged.

Do not disassemble or modify the equipment

The device is a sealed device with no user-serviceable parts inside. All internal repairs must be performed by an authorized maintenance organization or qualified technician. Attempts to disassemble or modify the device will void the warranty.

Do not try to replace the internal battery

The internal rechargeable lithium battery must be replaced by an authorized maintenance organization or qualified technician. Contact the dealer for factory replacement.

Adapter information

Avoid immersing the device in water or placing it in a location where it may absorb moisture or other liquids. During normal use, the charging device may become hot. Please ensure that there is good ventilation while charging device.

If any of the following situation occurs, please unplug the charging device:

- The charging device is exposed to rain, liquid or in an environment with excessive overlap.
- The charging device showed physical damage.
- Cleaning the charging device.

Data and Software Protection

Do not delete unknown files or change the names of files or directories created by others, otherwise the device software may not run.

 Note: Access to network resources makes the device vulnerable to computer viruses, hackers, spyware, and other malicious behaviors, and may damage the device, software, or data. Make sure that you are using firewalls, anti-virus software and anti-spyware software to provide adequate protection for your computer and keep these softwares up to date.

Preccautions on Using this tool

- Make sure the ignition switch in the OFF position when plugging and unplugging the diagnostic connector.

Preccautions on Operating Vehicle's ECU

- Do not disconnect battery or any wiring cables in the vehicle when the ignition switch is on, to avoid damage to the sensors or the ECU.
- Do not place any magnetic objects near the ECU. Disconnect the power supply to the ECU before performing any welding operations on the vehicle.
- Use extreme caution when performing any operations near the ECU or sensors. Ground yourself when you disassemble PROM, otherwise ECU and sensors can be damaged by static electricity.
- When reconnecting the ECU harness connector, be sure it is attached firmly, otherwise electronic elements, such as ICs inside the ECU, can be damaged.

Content

1. Quick Start Manual	1
1.1 Initial Use.....	1
1.1.1 Turn on the Machine	1
1.1.2 Language Setting.....	1
1.1.3 Connect Wi-Fi.....	1
1.1.4 Choose Time Zone	2
1.1.5 User Agreement.....	2
1.1.6 Create an Account	2
1.1.7 VCI Activation	3
1.2 Diagnosis Flowchart	3
1.3 Function Menu	4
1.4 Charging	5
1.5 Battery	5
1.6 VCI Connections	5
1.7 Modules Installation.....	6
2. Introduction	6
2.1 Product Profile	6
2.2 Components & Controls	7
2.3 Parameters	9
3. Begin to Use	10
3.1 Intelligent Diagnosis	10
3.2 Diagnosis	10
3.2.1 Manual Diagnosis	10
3.2.2 Smart Scan	11
3.2.3 System Scan	12
3.2.4 Choose to Scan	13
3.2.5 System and Function	13
3.3 Quick Check Printing	17
3.4 Maintenance	18
3.4.1 Oil Reset	18
3.4.2 Elec. Throttle Adaption	18
3.4.3 Steering Angle Reset	19
3.4.4 Battery Matching	19
3.4.5 ABS Bleeding	19
3.4.6 Break-pad Reset	19
3.4.7 DPF Regeneration	20
3.4.8 Gear Learning	20
3.4.9 IMMO Service	20
3.4.10 Injector Coding	20
3.4.11 TPMS Reset	20
3.4.12 Suspension Matching	20
3.4.13 AFS Reset	21
3.4.14 A/T Learning	21
3.4.15 Sunroof Initialization	21
3.4.16 EGR Adaption	21
3.4.17 ODO Reset	21
3.4.18 Airbag Reset	21
3.4.19 Transport Mode	21
3.4.20 A/F Reset	22
3.4.21 Stop/Start Reset	22
3.4.22 NOx Sensor Reset	22
3.4.23 AdBlue Reset (Diesel Engine Exhaust Gas Filter)	22
3.4.24 Seat Calibration	22

3.4.25 Coolant Bleeding	22
3.4.26 Tyre Reset	22
3.4.27 Windows Calibration	22
3.4.28 Language Change	22
3.4.29 AC System Relearn/Initialization	22
3.4.30 Intelligent Cruise Control System	22
3.4.31 Engine Power Balance Monitoring	22
3.4.32 Gas Particulate Filter Regeneration	23
3.4.33 Motor Angle Calibration	23
3.4.34 High Voltage Battery Diagnostics	23
3.4.35 IMMO PROG (optional)	23
3.5 TPMS Diagnosis	23
3.6 ADAS	24
3.7 Module	25
3.8 Oscilloscope	27
3.9 Multimeter	27
3.10 Remote Assistance	27
3.11 ThinkFile	28
3.12 Repair Info	28
3.12.1 Fault Code Enquiry	28
3.12.2 Learning materials	28
3.13 Update	28
3.14 Feedback	29
4. User Info	30
4.1 VCI	30
4.2 Activate VCI	30
4.3 Activate TPMS	30
4.4 Fix VCI firmware/system	31
4.5 Data Stream Sample	31
4.6 My Order	31
4.7 Profile	31
4.8 Change Password	31
4.9 Wi-Fi	31
4.10 Diagnostic Software Clear	32
4.11 Business Information	32
4.12 Customer Management	32
4.13 Diagnostic Record	32
4.14 Photo Album	32
4.15 Screen Recorder	32
4.16 Settings	32
4.16.1 Check for Updates	33
4.16.2 Sleep Time	33
4.16.3 Privacy Policy	33
4.16.4 System Upgrade	33
4.16.5 Units	33
4.16.6 T-Code	33
4.16.7 Clear Cache	33
4.16.8 Mode Switch	33
4.16.9 Restore Factory Settings	34
4.17 Hotkey Setting	34
5.FAQ	34

1. Quick Start Manual

1.1 Initial Use

The following settings should be made when you initially use the device.

1.1.1 Turn on the Machine

After pressing the power button, images will be shown on the screen as follows.



1.1.2 Language Setting

Select the system language from the languages list displayed on the interface.



1.1.3 Connect Wi-Fi

The system will automatically search all available Wi-Fi networks. Please connect to the trusted Wi-Fi.

 Tips: Wi-Fi must be set. If no Wi-Fi network is available nearby, you can try "Portable Mobile Hotspot".



1.1.4 Choose Time Zone

Choose the time zone of your current location, then the system will automatically configure the time according to your selection.



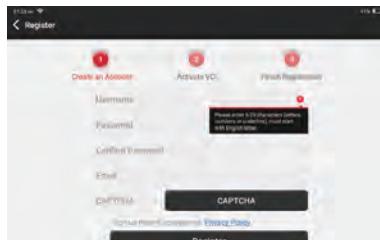
1.1.5 User Agreement

Please read all the terms and conditions of the user agreement carefully. Choose “Agree all the above terms”, and tap “Next” to complete the registration process.



1.1.6 Create an Account

You need to register an account with your email address. If you already have an account got from other THINKCAR products, you may directly log in with the existing account.



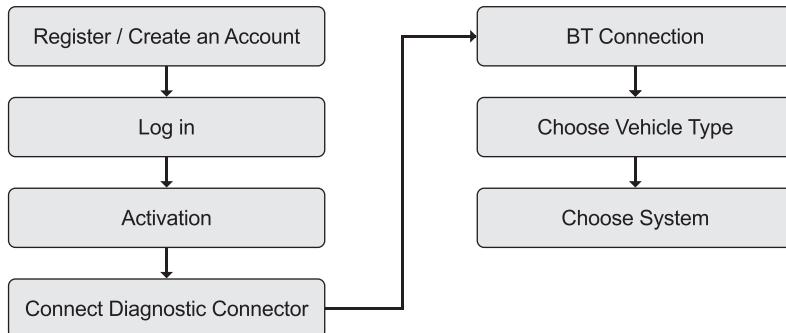
1.1.7 VCI Activation

Input the VCI's serial number and activation code to activate and bind the VCI (Vehicle Communication Interface).

⚠️ Tips: The activation code is an 8-digit number and is pasted on the "password letter".



1.2 Diagnosis Flowchart



1.3 Function Menu

After startup, the system will automatically enter the homepage:



It mainly includes the following features:

- The device and diagnostic connector support wired communication and Bluetooth communication.
- Support powerful intelligent VIN recognition technology, which is convenient, fast and efficient.
- Quick check: Automatic Identification of Vehicle Information, Auto Checking and Report Printing.
- Modular expansion: Support 6 optional modules; printer, work light, video scope, battery tester, thermal imager, wireless TPMS tool.
- It can detect faults in the electronic control systems of most high-end, medium-end, and low-end vehicles in Asia, Europe, the United States and China. Powerful diagnostic functions include reading fault codes, clearing fault codes, reading data streams, action tests, and other special functions.
- Maintenance function: matching, coding, programming of most vehicles' programmable modules, and most commonly used maintenance and reset functions: Oil Reset; Elec. Throttle Adaption; IMMO Service; Injector Coding; Break-pad Reset; Steering Angle Reset; ABS Bleeding; AFS Reset; Battery Matching; A/T Learning; DPF Regeneration; EGR Adaption; TPMS Reset; Sunroof Initialization; Suspension Matching; Gear Learning; Airbag Reset; ODO Meter Reset; AdBlue Reset; A/F Reset; Coolant Bleeding; Language Change; NOx Sensor Reset; Seat Calibration; Stop/Start Reset; Transport Mode; Tyre Reset; Windows Calibration; AC System Relearn/Initialization; Engine Power Balance Monitoring; Gas Particulate Filter Regeneration; High Voltage Battery Diagnostics; Intelligent Cruise Control System; Motor Angle Calibration; IMMO PROG (optional).
- TPMS: with wireless TPMS tool (optional), TPMS activation, programming and learning functions can be supported.
- Diagnostic software, client-side and firmware can be updated online.
- Feedback: In the process of diagnosis, if the software or function is abnormal, please feed back to us. Our professionals will follow up and deal with it in time.

1.4 Charging

Follow the steps below to charge the device:

- Use the charger to connect the device and the power socket to charge.
- When the battery status displays  , the device is charging.

When it displays  , the battery is fully charged.

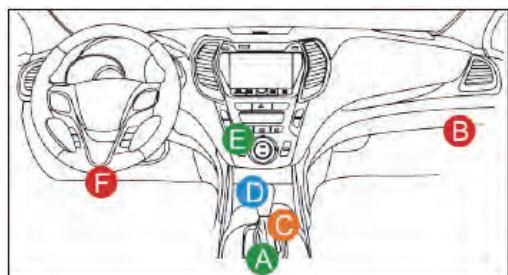
1.5 Battery

- It is normal that the tablet won't turn on at charging if the battery has not been used for a long time or it is exhausted. Please turn on the tablet again after charging for a while.
- Please charge the tablet only with the original charger in the package. THINKCAR assumes no responsibility for damages and losses caused by charging with chargers not supplied by the company.
- The battery can be recharged repeatedly. However, as the battery is wearable, the standby time of the tablet might be shortened after long-time use. Please avoid frequent repeated charging so as to prolong battery life.
- The battery charging time varies with temperature and battery status.
- When the battery power is low, the system will pop up a prompt reminding you to connect the charger. When the battery power is too low, the device will turn off automatically.

1.6 VCI Connections

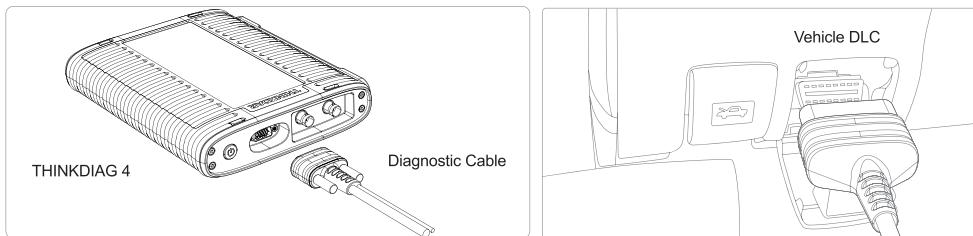
Connection steps as below:

- (1) Locate your vehicle's DLC socket. DLC is usually 12 inches away from the center of the instrument panel (dash), under or around the driver's side. If the DLC cannot be found, please refer to the vehicle's service manual to locate it.



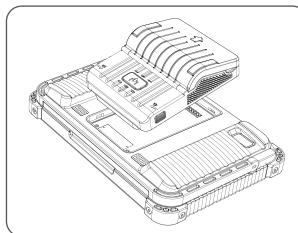
A	Opel, Volkswagen, Audi
B	Honda
C	Volkswagen
D	Opel, Volkswagen, Citroen
E	Changan
F	Hyundai, Daewoo, Kia, Honda, Toyota, Nissan, Mitsubishi, Renault, Opel, BMW, Mercedes-Benz, Mazda, Volkswagen, Audi, GM, Chrysler, Peugeot, Regal, Beijing Jeep, Citroen and most prevailing models

- (2) Connect VCI to your vehicle. Connect the VCI to your vehicle through the diagnosis cable - one end 15 pin, and the other end 16 pin (standard OBD II interface). Most vehicles' DLC are standard OBD II interface. If your vehicle DLC is not standard OBD II interface, you need to use the corresponding adapter.



1.7 Modules Installation

Compatible THINKCAR modules (TPMS Module, Printer, WorkLight, Thermal Imager, Battery Tester, etc.) can be installed after unscrewing to take out the backplane on the rear side of the tablet.

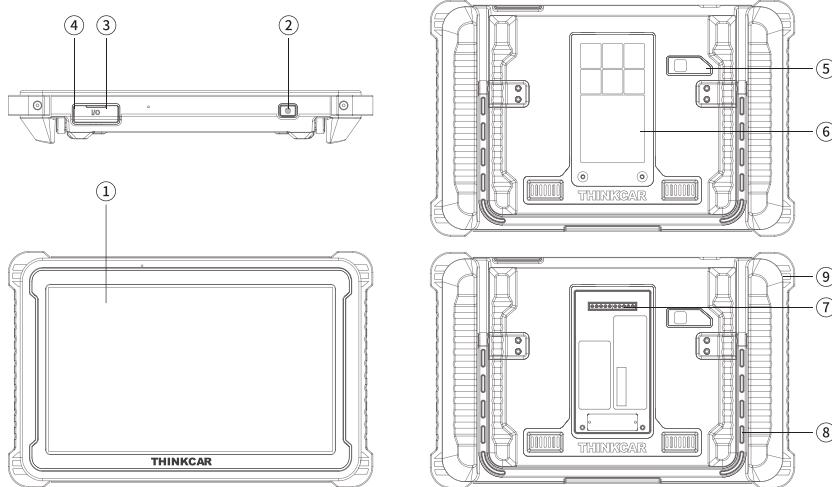


2. Introduction

2.1 Product Profile

This product is a new generation of modular high-end intelligent diagnostic equipment. It supports full systems and full functions diagnosis on most Europe, American and Asian vehicles. Especially, working with the new generation Vehicle Communication Interface (THINKDIAG 4), it features oscilloscope and multimeter functions for specific electrical and electronic measurement and monitoring. In addition, TPMS Module is included as a standard accessory with this model, so powerful TPMS functions (activation, programming, relearn) can be easily performed.

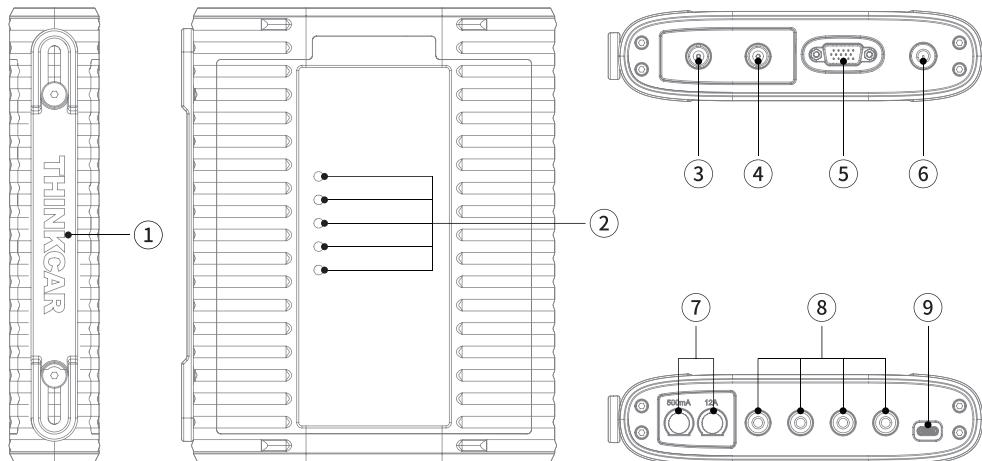
2.2 Components & Controls



No.	Function
1	Display
2	Power Key: Hold the button for 3 seconds to turn the device on, or off, and 10 seconds for a forced restart. Press the button to turn on or turn off the screen.
3	Type C Port: connect the supplied charger for charging.
4	USB Port: Reserved for add-on modules and other devices with similar port.

5	Rear Camera
6	Backplane: Remove the backplane of the tablet, and install function modules on the backend.
7	Pin: Be used for communication between the function expansion module and the device.
8	Adjustable Kickstand: Able to keep the device standing on the desk, or hang the device on the steering whel with 180 degree rotation.
9	Rubber Protection Sheet

THINKDIAG 4 Multifunctional Diagnostic Box



- ① Handle
- ② Indicator Lights
- ③ Oscilloscope Channel 2
- ④ Oscilloscope Channel 1

- ⑤ DB15 Diagnostic Cable Connection Interface
- ⑥ Power ON/OFF
- ⑦ Fuse
- ⑧ Connection Interface for Multimeter Probes
- ⑨ Type C Connection Interface

Icon	Indicator	Light color	Interpretation
	Power status	Red	Device powered on
	Battery status	Red / Green	Red: charging battery; Green: battery fully charged
	VCI connection mode for diagnosis	Red / Blue	Red blinking: Tablet connected VCI via USB for vehicle diagnosis Blue blinking: Tablet connected VCI via Bluetooth for vehicle diagnosis
	Vehicle communicating status	Blue	Blue blinking: data communicating with vehicle
	VCI connection mode for measurement	Red / Blue	Red blinking: Tablet connected VCI via USB for measurement Blue blinking: Tablet connected VCI via Bluetooth for measurement

2.3 Parameters

Operating System	Android 10.0
Memory	4G
Storage	128G
Battery	12600mAh\3.7V
Screen	12 inches
Camera	Rear camera 13.0MP