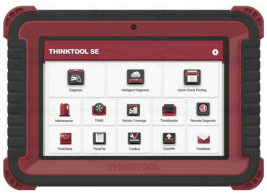
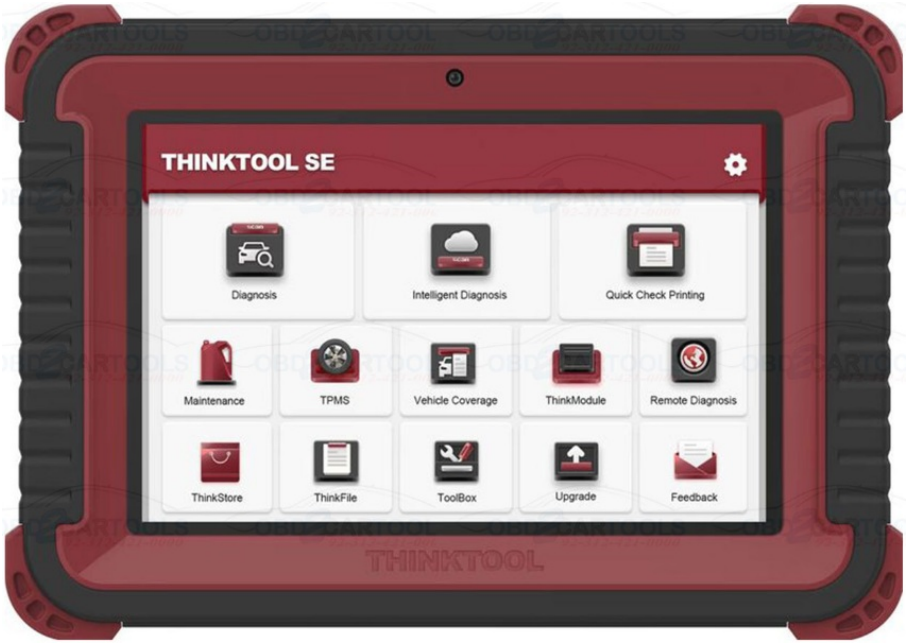


THINKCAR TKX08 Modular Comprehensive Automotive Diagnostic Tool User Guide

THINKCAR TKX08 Modular Comprehensive Automotive Diagnostic Tool User Guide



Contents

Quick Start Manual

Initial Use

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

Turn on the Machine

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

Language Setting

Select the target language from the languages displayed on the interface.

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 there is no Wi-Fi network is available nearby, you can try “Portable Mobile Hotspot”

Choose Time Zone

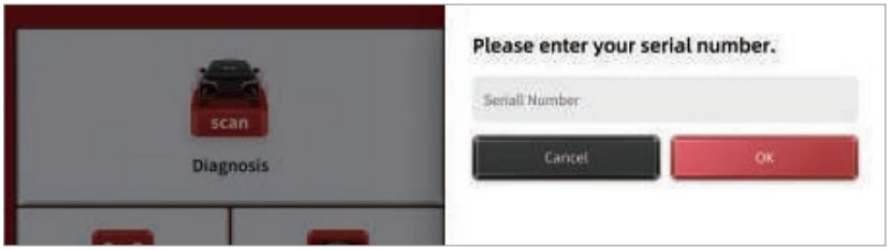
Choose the time zone of the current location, then the system will automatically configure the time.

User Agreement

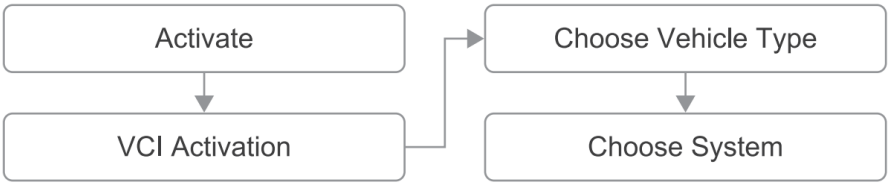
Please read all the terms and conditions of the user agreement carefully. Choose “Agree to the above terms”, and tap”Next”.

Bind the VCI

Input the serial number (SN) to activate the VCI. You could find the SN on the back of VCI or device.

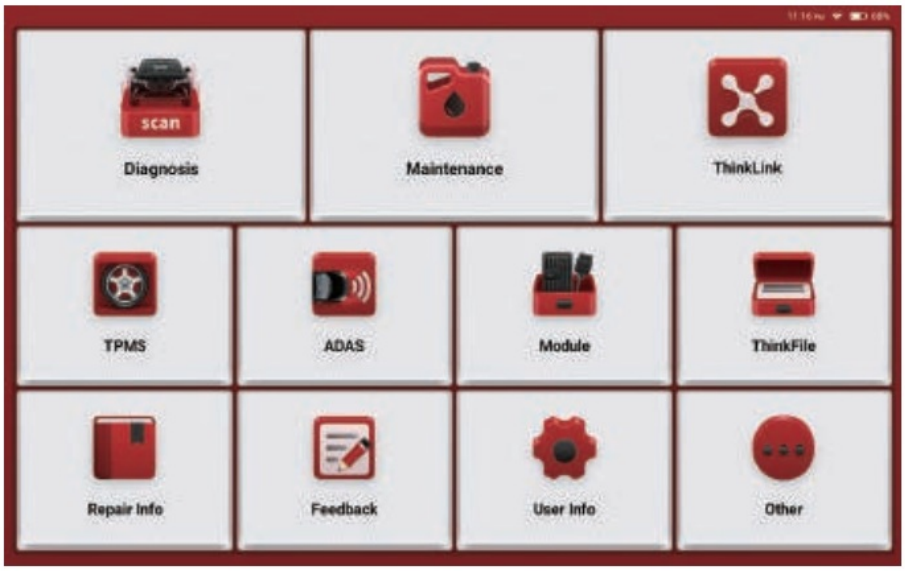


Diagnosis Flowchart



Function Menu

After startup, the system will automatically enter the homepage:



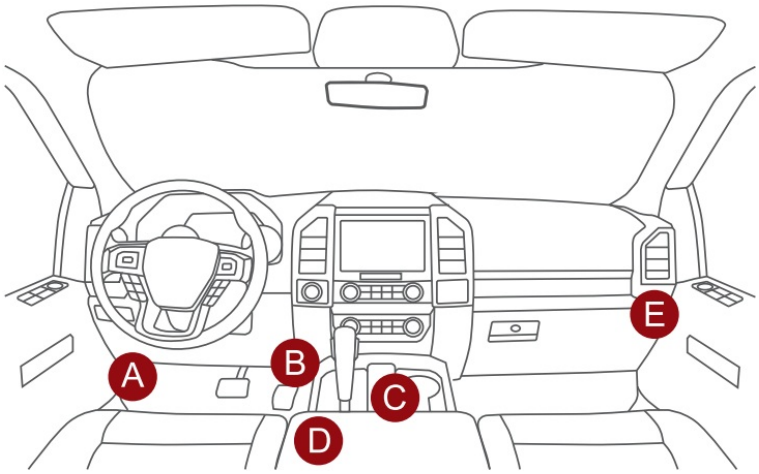
Charging

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 charging process has been completed and you shall disconnect the device.

VCI Connections

Connect the THINKLINK LITE VCI to OBDII port of vehicle through the OBD Diagnostic Cable. The vehicle OBDII port is usually located under the dashboard, on the driver's side above the pedals. Below are five locations for the most common OBDII ports.



Introduction

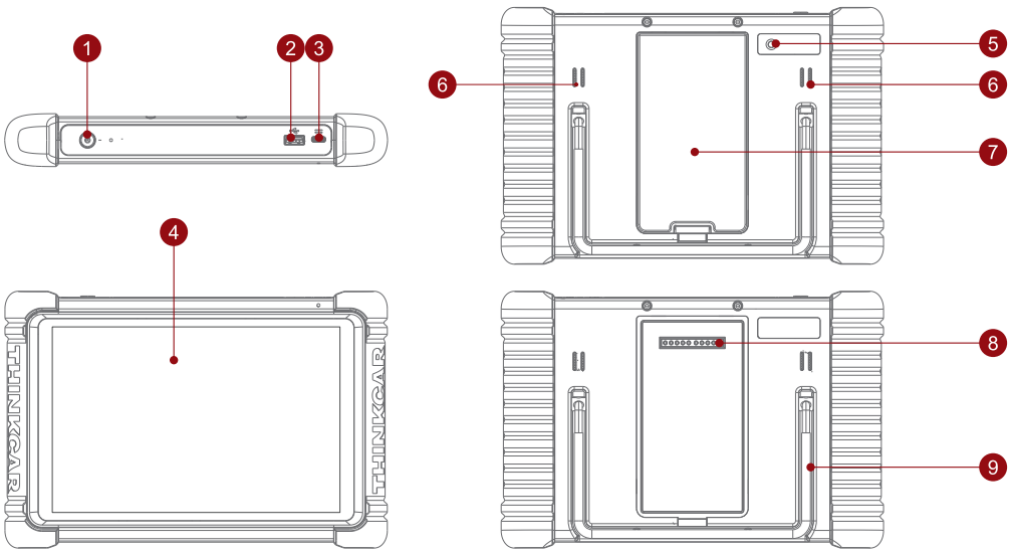
Product Profile

THINKTOOL 195 is the new generation of modular high-end intelligent diagnostic equipment. Besides the powerful local vehicle diagnosis functions, real-time remote diagnosis is also enabled.

THINKTOOL 195 supports voice and video communication, and provides massive 1 technical maintenance expert support anytime. THINKTOOL 195 remote service merchants and certified technicians can implement remote diagnosis services online according to maintenance needs, and remotely solve auto repair problems for you.

Components & Controls

THINKTOOL 195



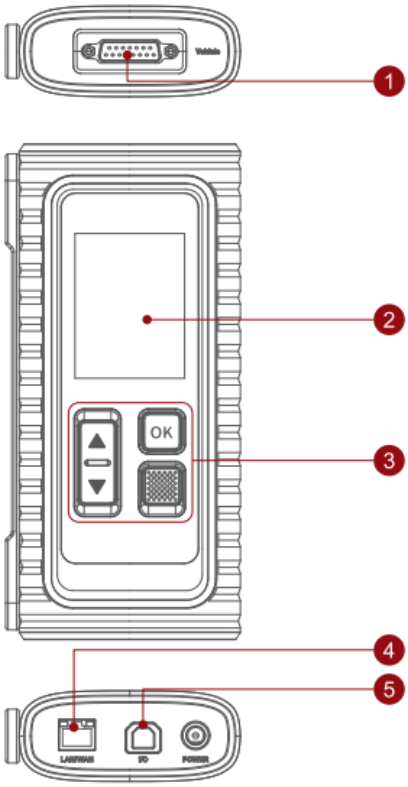
1. **Power Key:** Long press to power on or off Click to sleep or wake the device
2. **USB Port:** Reserved for add-on modules and other devices with similar port.
3. Type-C Port: Connect the supplied charger for charging.
4. Display
5. 8 Megapixel Rear Camera
6. Speaker
7. **Backplane:** Remove the backplane of the tablet, and install function modules on the back-end.
8. **Pin:** Be used for communication between the function expansion module and the device.

9. **Adjustable bracket:** supports three states of hanging, supporting and normal

Parameters

Operating System	Android 10.0
Memory	4G
Storage	128G
Battery	12600mAh/3.8V
Screen	9 inches
Camera	8MP Rear Camera
Network	Wi-Fi, 802.11 b\g\n\a\ac
Bluetooth	Bluetooth 5.1
Working Environment	14°F~122°F(-10°C~50°C)
Storage Environment	-4°F~140°F(-20°C~60°C)

THINKLINK LITE Remote Diagnostic Device



1. **Diagnostic port:** DB-15 OBD II port, connect to the OBD Diagnostic Cable.
2. **Display:** Display working status.
3. **Operation buttons:** perform up, down, confirm and return operations on the screen.
4. **LAN/WAN port:** Connect to the Internet.
5. **I/O data Port:** Type B USB port is used for wired connection between the host and VCI.

Parameters

Memory	256M
Storage	8G
Display	2.8 inches
Working Voltage	9-18V
Working Environment	14°F~122°F(-10°C~50°C)
Storage Environment	-4°F~140°F(-20°C~60°C)

Diagnosis

Diagnostic function, covers the mainstream car brands on the market, supporting intelligent diagnosis and traditional diagnosis, including OBDII full-function diagnosis. Full-system diagnosis includes: read fault code, clear fault code, read real-time data stream, special function, actuation test. A diagnosis report can be generated after the diagnosis.

VINSCAN

VINSCAN supports quick access to the test vehicle system, no need to manually select the vehicle system. Click “Diagnostics” on the home page of the device, and then click the “VINSCAN” button to enter the function page.

A. Intelligent diagnosis: The user can connect the vehicle through the diagnosis line to read the VIN from the vehicle ECU. Then compare the read VIN with the server to obtain vehicle information for quick diagnosis. It solves the disadvantages that the diagnosis can only be made by selecting the menu level by level in the past, which is slow and easy to choose wrongly.
B. Enter VIN: Manually enter the VIN code of the vehicle, and then click “OK” to enter the diagnosis function.

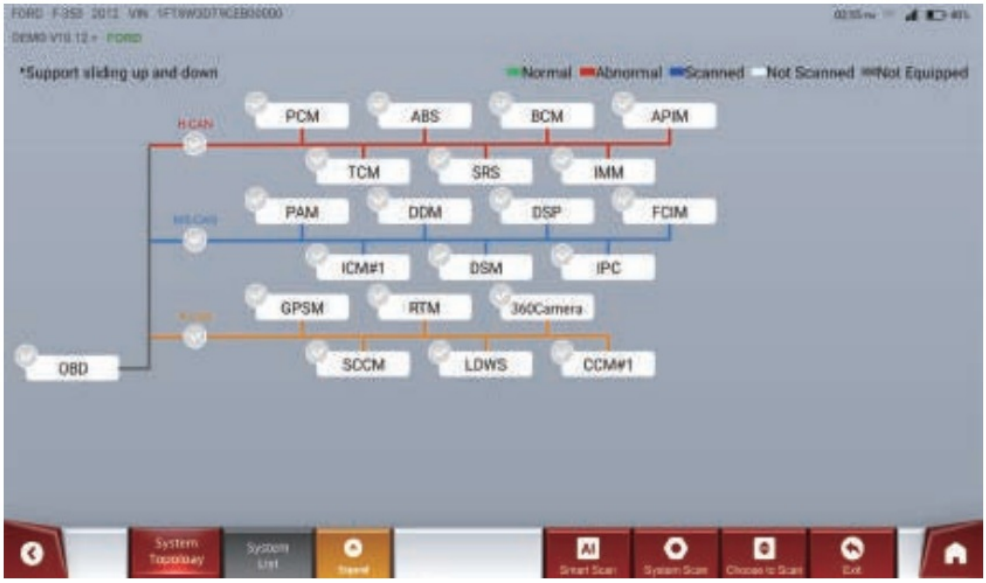
Manual Diagnosis

A. Select vehicle type: Click the vehicle model software icon on the diagnosis interface, enter “OK” and enter the diagnosis menu. Diagnosis menus may be different for different car models.
B. Select diagnosis method: After successfully communicating with the vehicle, it will enter the diagnosis function selection interface. THINKTOOL 195 supports the system topology map function.

1. Smart Scan: It enables you to quickly access all the Electronic Control Units of the vehicle and generate a

detailed report about vehicle health.

2. System Scan: To check how many systems the car is equipped with.
3. Choose to Scan: Choose the target automotive electronic control system to scan.



System and Function

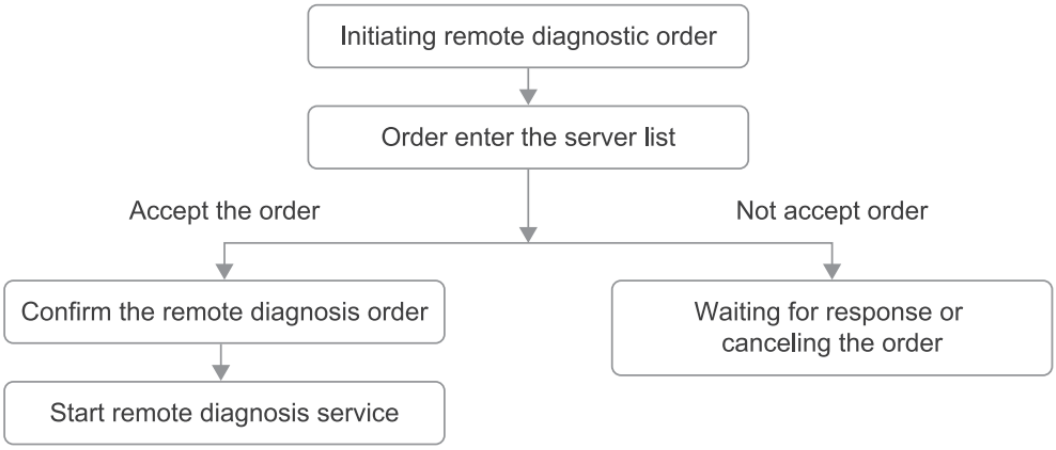
A. Click the Electronic Control Units module, and the screen will enter the function selection interface.
B. Click to select the function to perform.

1. **Version Information:** Read the current version information of the automotive ECU.
2. **Read Fault Code:** Read the DTC in the ECU memory to help maintenance personnel locate the cause of the failure.
3. **Clear Fault Code:** The system will automatically delete the existing fault codes.
4. **Read Data Stream:** View and capture (log) real-time data from ECUs.
5. **Actuation Test:** Used to test whether the execution components in the electronic control system can work normally

THINKLINK

Remote Diagnosis is a service system that integrates remote diagnostic platforms and professional remote diagnostic device. Including remote service platforms, remote diagnostic device (repair), and THINKLINK Remote Service Box(server).

Remote diagnosis flowchart



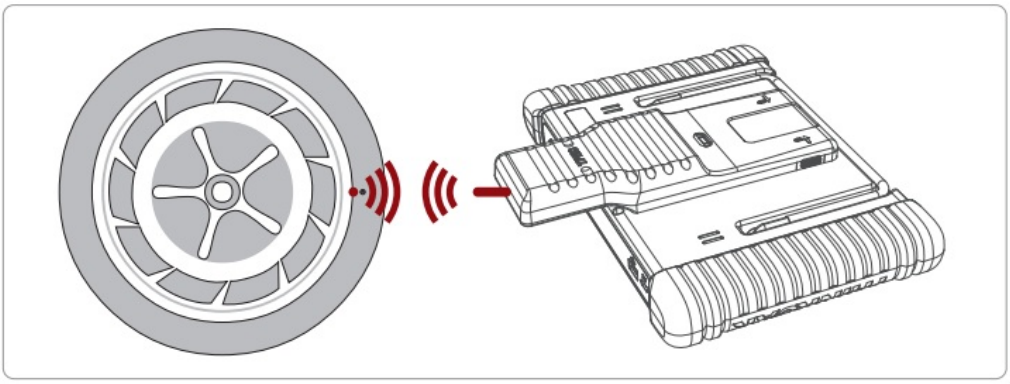
Connect and start remote diagnosis

1. Shut down vehicle ignition switch.
2. Connect THINKLINK LITE to the OBD II diagnostic port of the vehicle. (
   Note: it is suggested that during remote diagnosis, the battery of the vehicle should be connected with an external charging power supply to avoid battery loss of the vehicle and the failure of the vehicle to start due to the long time of remote diagnosis.
3. Connect one end of the delivered network cable to the LAN/WLAN port of the THINKLINK LITE and the other end to the network modem LAN jack.
   Note: it is suggested that during remote diagnosis, the battery of the vehicle should be connected with an external charging power supply to avoid battery loss of the vehicle and the failure of the vehicle to start due to the long time of remote diagnosis.
4. Turn on the ignition switch.
5. After the connection between THINKTOOL 195 (repairer) and service box (server) is successful, it enters the remote diagnosis mode.
6. In the remote diagnosis area of THINKTOOL 195, select an appropriate server for (text, voice, or video)communication.
7. After reaching an agreement with the server, the other side will create a service order, and the repairer will wait for the remote diagnosis service.
   Note: using the “Remote Service” function at the bottom of the dialog box, you can initiate a server to remotely operate your device.

TPMS

Working with THINKTPMS Module, THINKTOOL 195 supports tire pressure sensor activation, reading, diagnosis, learning and programming functions.

- Read tire pressure sensors ID, pressure, temperature, battery status.
- Activate THINKCAR tire pressure sensors, achieving original factory level.
- Cover more than 98% car models in the market.



Maintenance

The current maintenance functions supported by THINKTOOL 195 are: Oil Reset, Elec. Throttle Adaption, Steering Angle Reset, Battery Matching, ABS Bleeding, Break-pad Reset, DPF Regeneration, Gear Learning, IMMO Service, Injector Coding, TPMS Reset, Suspension Matching, AFS Reset, A/T Learning, Sunroof Initialization, EGR Adaption, ODO Reset, Airbag Reset, Transport Mode, A/F Reset, Stop/Start Reset, NOx Sensor Reset, AdBlue Reset (Diesel Engine Exhaust Gas Filter), Seat Calibration, Coolant Bleeding, Tyre Reset, Windows Calibration, Language Change, Clutch Matching, ECU ReSet, FRM Matching, Gateway Module Data Calibration, Rainfall Light Sensor, Turbocharging Matching, IMMO PROG(optional).”

Module

The device supports optional function modules, list as below:

- THINK Printer: Thermal printer, can be used with the device or moduledock, quickly print diagnostic reports anytime and anywhere.
- THINK Video Scope: Ultra long custom coil pipeline design, flexible bending with durable materials, suitable for a variety of complex environments. Multiple uses with 3 kinds of special connectors (Hook, side view mirror, magnet). Supports 720P HD image. With 6 auxiliary lights for brighter light, it is easy to use in dark environment.
- THINKEASY Battery Test Clip: Display the health status of the battery, and detect the damaged part. Check the starting system and charging system of your vehicle. Low battery inspection. Support all 12V with starting lead acid batteries
- THINK Thermallmager: 320*240 ultra-high pixels with its own thermal tracking points, which can be used for image superposition (refers to the coincidence of real image and thermal image collectedby the camera, so as to achieve more accurate positioning). The thermal sensitivity reaches 0.07°C(32.126F), which is more accurate. Higher image acquisition resolution is displayed on the high-definition display. THINK Thermal Imager has a large number of car diagnostic fault thermal comparison maps. Technicians can accurately locate vehicle faults by image comparison.
- THINK Scope Box: Equipped with 4 channels 100MHz bandwidth, sampling rate reaches up to 1GS/s. Combined with the device screen to achieve full touch control operation. Special automatic maintenance and detection menu and high-definition waveform display make it more convenient to use.
- THINK Battery Tester: Detect the battery voltage, resistance service life, current and other battery information. Combined with the high-resolution screen of the device and high-precision data monitoring to make the detection efficiency greatly improved.”

Other function

ADAS

Advanced driver assistance systems (ADAS) is an electronic component in vehicles that include a variety of vehicle safety functions such as automatic emergency braking (AEB), lane departure warning (LDW), lane keeping assistance, blind spot detection, night vision cameras, and self-adaptive lighting.

The static calibration function of ADAS defaults to the disable status. it need to be used with ADAS calibration tool of THINKCAR for activation. It is mainly for calibrating driver assistance systems such as cameras and radars, e.g. front-facing cameras for lanes departure warning systems, radar sensors for ACC (self-adaptive Cruise control) or cameras for self-adaptive headlights.

ThinkFile

It is used to record and establish the file of the diagnosed vehicles. The file is created based on the vehicle VIN and check time, including all VIN-related data such as diagnostic reports, data stream records and pictures.

Repair Info

A. OBD Fault Code Library: You can enquire the definition of OBD fault codes.
B. Coverage List: You can enter the Vehicle brand, model, year and other information to enquire the support functions and diagnostic system.
C. Learning materials: You can view the operation playback of the special functions of each brand model, to help users study the operation of the special functions online without connecting the vehicle.
D. User Manual: You can find the E-Manual in here.

Other

Remote Assistance:
Support remote technicians or after-sales personnel to operate the device, and guide and solve problems encountered during the use of the device.

Message
You can view the service providers authorized for the remote diagnosis function. Feedback to them about problems in use and get help with vehicle diagnosis and repairs.

Voltage Check
Read the voltage change value before and after the engine starts through the OBD II port.

User Info

Support user information modification and setting. Including: VCI management, Firmware Fix, Data Stream Sample, Business Information/Customer Management, System Settings, etc.

Warranty Terms

- This warranty applies only to users and distributors who purchase THINKCAR products through normal procedures.
- Within one year from the date of delivery, THINKCAR warrants its electronic products for damages caused by defects in materials or workmanship.

- Damages to the equipment or components because of abuse, unauthorized modification, use for non-designed purposes, operation in a manner not specified in the instructions, etc. are not covered by this warranty.
- The compensation for dashboard damage caused by the defect of this equipment is limited to repair or replacement. THINKCAR does not bear any indirect and incidental losses.
- THINKCAR will judge the nature of the equipment damage according to its prescribed inspection methods. No agents, employees or business representatives of THINKCAR are authorized to make any confirmation, notice or promise related to THINKCAR products.

SAR Information Statement
Your Modular Comprehensive Automotive Diagnostic Tool is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radiofrequency (RF) energy set by the Federal Communications Commission of the U.S. Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health. The exposure standard for Modular Comprehensive Automotive Diagnostic Tool employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the FCC is 1.6 W/kg. * Tests for SAR are conducted with the Modular Comprehensive Automotive Diagnostic Tool transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the Modular Comprehensive Automotive Diagnostic Tool while operating can be well below the maximum value. This is because the Modular Comprehensive Automotive Diagnostic Tool is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output. Before a Modular Comprehensive Automotive Diagnostic Tool model is available for sale to the public, it must be tested and certified to the FCC that it does not exceed the limit established by the government adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the FCC for each model. The highest SAR value for this Modular Comprehensive Automotive Diagnostic Tool when worn on the body, as described in this user guide, is 0.35 W/Kg (Body-worn measurements differ among Modular Comprehensive Automotive Diagnostic Tool. While there may be differences between the SAR levels of various Modular Comprehensive Automotive Diagnostic Tool and at various positions, they all meet the government requirement for safe exposure. The FCC has granted an Equipment Authorization for this Modular Comprehensive Automotive Diagnostic Tool with all reported SAR levels evaluated as in compliance with the FCC RF exposure guidelines. SAR information on this Modular Comprehensive Automotive Diagnostic Tool is on file with the FCC and can be found under the Display Grant section of **http://www.fcc.gov/oet/fccid** after searching on FCC ID: 2AUARTKTOOL195 Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications Industry Association (CTIA) web-site at **http://www.wow-com.com**. * In the United States and Canada, the SAR limit for Modular Comprehensive Automotive Diagnostic Tool used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.
The SAR test distance is 0mm. 5150-5250 indoor use only

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

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

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.

SAR Information Statement
Your Modular Comprehensive Automotive Diagnostic Tool is a radio transmitter and receiver. It is designed and manufactured not to exceed the emission limits for exposure to radiofrequency (RF) energy set by the Innovation, Science and Economic Development Canada of the Canada Government. These limits are part of comprehensive guidelines and establish permitted levels of RF energy for the general population. The guidelines are based on standards that were developed by independent scientific organizations through periodic and thorough evaluation of scientific studies. The standards include a substantial safety margin designed to assure the safety of all persons, regardless of age and health. The exposure standard for Modular Comprehensive Automotive Diagnostic Tool employs a unit of measurement known as the Specific Absorption Rate, or SAR. The SAR limit set by the ISED is 1.6 W/kg. * Tests for SAR are conducted with the Modular Comprehensive Automotive Diagnostic Tool transmitting at its highest certified power level in all tested frequency bands. Although the SAR is determined at the highest certified power level, the actual SAR level of the Modular Comprehensive Automotive Diagnostic Tool while operating can be well below the maximum value. This is because the Modular Comprehensive Automotive Diagnostic Tool is designed to operate at multiple power levels so as to use only the power required to reach the network. In general, the closer you are to a wireless base station antenna, the lower the power output. Before a Modular Comprehensive Automotive Diagnostic Tool is available for sale to the public, it must be tested and certified to the ISED that it does not exceed the limit established by the government adopted requirement for safe exposure. The tests are performed in positions and locations (e.g., at the ear and worn on the body) as required by the ISED for each model. The highest SAR value for this Modular Comprehensive Automotive Diagnostic Tool when worn on the body, as described in this user guide, is 0.35W/Kg (Body-worn measurements differ among Modular Comprehensive Automotive Diagnostic Tool, depending upon available accessories and ISED requirements). While there may be differences between the SAR levels of various Modular Comprehensive Automotive Diagnostic Tool and at various positions, they all meet the government requirement for safe exposure. The ISED has granted an Equipment Authorization for this Modular Comprehensive Automotive Diagnostic Tool with all reported SAR levels evaluated as in compliance with the ISED RF exposure guidelines. SAR information on this Modular Comprehensive Automotive Diagnostic Tool is on file with the FCC and can be found under the Display Grant section of **https://smssgs.ic.gc.ca/** after searching on IC: 26415-TKTOOL195 Additional information on Specific Absorption Rates (SAR) can be found on the Cellular Telecommunications Industry Association (CTIA) web-site at **http://www.wow-com.com**. * In the United States and Canada, the SAR limit for Modular Comprehensive Automotive Diagnostic Tool used by the public is 1.6 watts/kg (W/kg) averaged over one gram of tissue. The standard incorporates a substantial margin of safety to give additional protection for the public and to account for any variations in measurements.
The SAR test distance is 0mm. 5150-5250 indoor use only

IC Statement
This device complies with Industry Canada’s licence-exempt RSSs. Operation is subject to the following two conditions:

1. This device may not cause interference; and
2. This device must accept any interference, including interference that may cause undesired operation of the device.

The term “IC: “ before the certification/registration number only signifies that the Industry Canada technical specifications were met.
This product meets the applicable Industry Canada technical specifications.

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Thinkcar Tech Inc
Service Line: 1-909-757-1959
Customer Service Email: support@thinkcar.com
Official Website: www.thinkcar.com
Products tutorial, videos, Q&A and coverage list are available on Thinkcar official website.

THINKCAR
LEADING TECH IN DIAGNOSTICS

Documents / Resources

	THINKCAR TKX08 Modular Comprehensive Automotive Diagnostic Tool [pdf] User Guide TKX08 Modular Comprehensive Automotive Diagnostic Tool, TKX08, Modular Comprehensive Automotive Diagnostic Tool, Comprehensive Automotive Diagnostic Tool, Automotive Diagnostic Tool, Diagnostic Tool

References

- CTIA - Home
- Spectrum Management System
- User Manual