THINKCAR®
www.thinkcar.com

THINKTPMS G1
User Manual

Thinkcar Tech Inc

Follow us on

@thinkcar.official   @ObdThinkcar

THINKCAR

Version: V1.00.001

Safety Precautions

Read all safety warnings and instructions. Failure to heed these warnings and instructions may result in electric shock, fire and/or serious injury.

Save all safety warnings and instructions for future reference.

- There are no user serviceable parts. Have the device serviced by a qualified repair person using only identical replacement parts. This will ensure that the safety of the device is maintained. Disassembling the device will void the warranty right.
- CAUTION: This device contains an internal Lithium Polymer battery. The battery can burst or explode, releasing hazardous chemicals. To reduce the risk of fire or burns, do not disassemble, crush, pierce or dispose of the battery in fire or water.
- This product is not a toy. Do not allow children to play with or near this item.
- Do not expose the device to rain or wet conditions.
- Do not place the device on any unstable surface.
- Never leave the device unattended during charging process. The device must be placed on a nonflammable surface during charging.
- Handle the devicewith care. If the device is dropped, check for breakage and any other conditions that my affect its operation.
- Put blocks in front of the drive wheels and never leave the vehicle unattended while testing.
- Do not operate the tool in explosive atmospheres, such as in the presence of flammable liquids, gases, or heavy dust.
- Keep the device dry, clean, free from oil, water or grease. Use a mild detergent on a clean cloth to clean the outside of the device when necessary.
- People with pacemakers should consult their physician(s) before use. Electromanetic fields in close proximity to heart pacemaker could cause pacemaker interference or pacemaker failure.
- Use the device only with the THINKCAR specific diagnostic tool that comes loaded with the TPMS module.
- Do not install programmed TPMS sensors in damaged wheels.
- While programming a sensor, do not place the device close to several sensors at the same time, or the diagnostic tool will detect more sensors, which may result in programming failure.
- The warnings, precautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situatins that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied, by the operator.

FCC Statement

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 dital 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 installaton. 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.
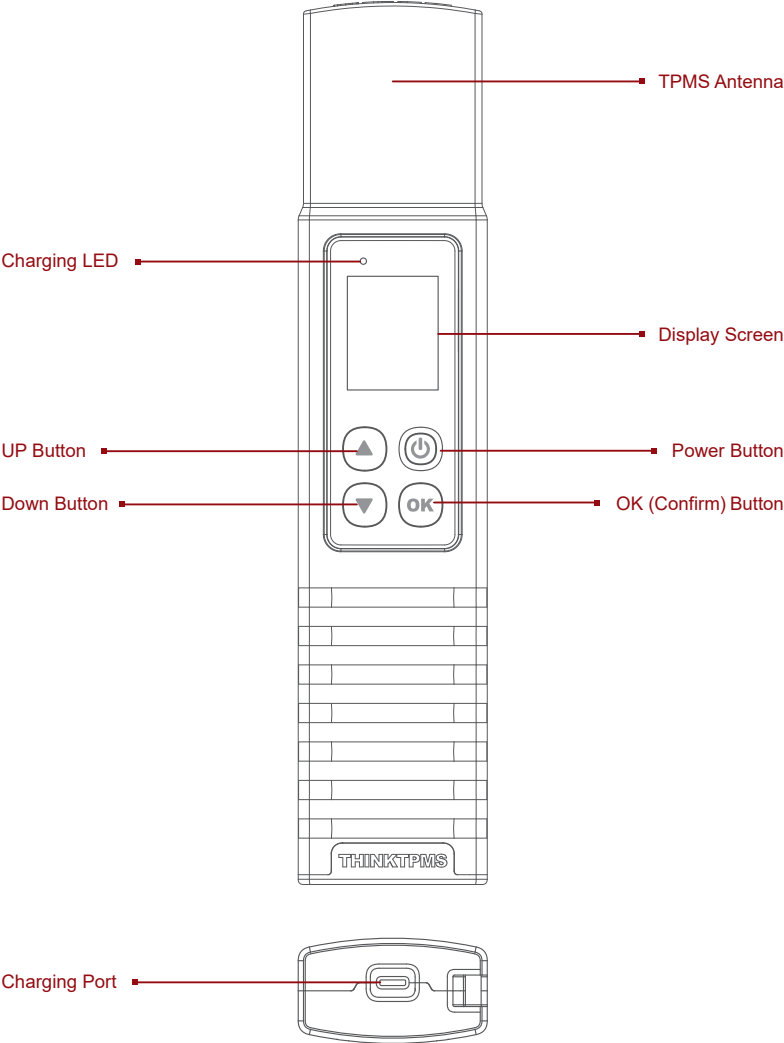- Consult the dealer or an experienced radio/TV technician for help.
This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20cm between the radiator & your body. This transmitter must not be colocated or operating in conjunction with any other antenna or transmitter.

Contents

Product Introduction

THINKTPMS G1 is a professional TPMS (Tire Pressure Monitoring System) service tool, with the ability to activate, read, relearn and program TPMS sensors. It can activate the pressure information by receiving signals via low or high radio frequency and reset TPMS module via OBD interface.

THINKTPMS G1 needs to work with the Thinkcarspecfic diagnostic tool to perform the TPMS sensor activation, programming and relearn functions.
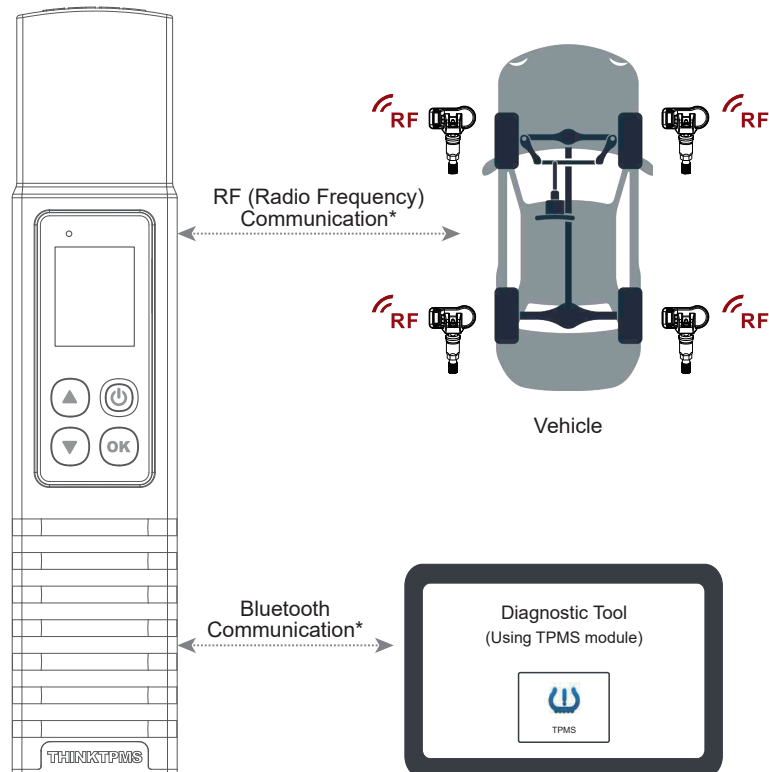
TPMS Antenna

Charging LED

Display Screen

UP Button

Power Button

Down Button

OK (Confirm) Button

THINKTPMS

Charging Port

1

Product Parameters

Screen	1.77 inches
Resolution	168*128 pixel
Input voltage	5V
Working current	≤1A
Working Temperature	32°F~122°F (0°C~50°C)
Storage Temperature	-4°F~140°F (-20°C~60°C)

Working Principle

The working principle is shown in the following figure:

RF
RF
RF
RF

RF (Radio Frequency)
Communication*

Vehicle

Bluetooth
Communication*

Diagnostic Tool
(Using TPMS module)

TPMS

THINKTPMS

Initial Use

Charging

Plug one end of the charging cable into the charging port of the THINKTPMS G1, and the other end to an external power adaptor, then connect the power adaptor to the AC outlet. While being charged, the LED illuminates red. Once the LED changes into green, it indicates the charging is complete.

Powering On/Off

Press the ⏻ button for about 3 seconds to turn it on. A beep will sound and the screen will light up.
Press the ⏻ button for about 3 seconds to turn it off.

Basic Operations

▲/▼	Switches to different tire positions.
⏻	Press it for about 3 seconds to turn it on/off. • Screen On: Press it once to enter hibernate mode. • If the device is not charged and there is no operation made for 30 minutes, it will automatically power off. • If the device is charging and there is no operation made for 5 minutes, it will automatically enter hibernate mode to conserve battery power. • Screen Off (hibernate): Press it once to wake it up.
OK	Press it to confirm the current operation.

Binding

Binging：
For initial use, user needs to bind the THINKTPMS G1 to the mobile phone or diagnostic tool.

- Binding on the ThinkDiag+ APP.
  1. Tap TPMS on the menu of the ThinkDiag+ APP.
  2. Tap Activate.
  3. The following screen will pop up.

4. Enter the required information. After inputting，tap Activate. It will be display in the Bound list automatically.

- Binding on the Diagnostic tool
  1. Tap TPMS on the Job menu of the diagnostic tool
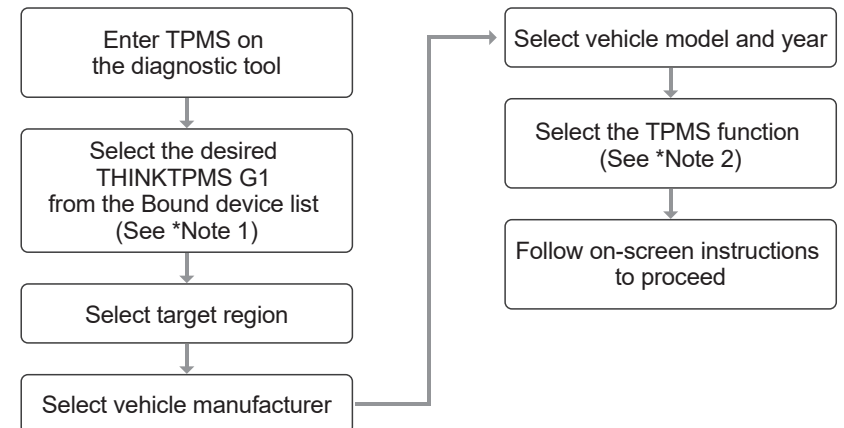 2. Tap Bind.
  3. The following screen will pop up.

4. Enter the required information. After inputting, tap Bind. It will be displayed in the Bound list automatically.

   *Repeat steps 3~4 to bind multiple THINKTPMS G1 devices to the diagnostic tool.

How to Use

For initial use, please follow the flow chart below to start using it.

*Notes:
1. This step shall apply when multiple THINKTPMS G1 devices are bound to the diagnostic tool. If only one THINKTPMS G1 is bound to the diagnostic tool, keep the device ON and tap OK to ignore this step. If it is your first time using the THINKTPMS G1, please bind it before doing any TPMS operations.
2. For indirect TPMS vehicle, only the Learning function is supported. For vehicle using Direct TPMS, it generally includes: Activation, Programming, Learning and Diagnosis. The available TPMS functions may vary for different vehicles being serviced.

TPMS Operations

|	ID(HEX)	kPa	MHz	℃	Battery status
FL					
FR					
RR					
RL					
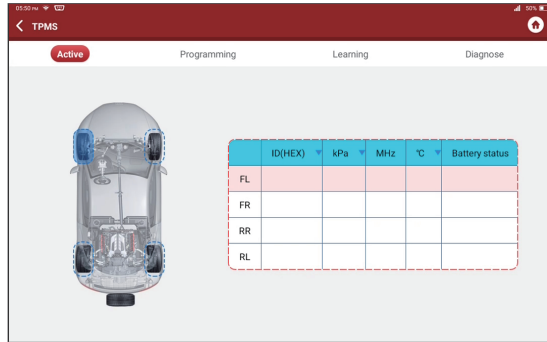
1. Activate Sensor

This function allows users to activate TPMS sensor to view sensor data such as sensor ID, tire pressure, tire frequency, tire temperature and battery condition.

*Note:The tool will do TPMS test in a sequence of FL (Front Left), FR (Front Right), RR (Rear Right), LR (Rear Left) and SPARE, if the vehicle has the option for the spare. Or, you can use the▲/▼button to move to the desired wheel for testing.

For universal sensors, place the THINKTPMS G1 alongside the valve stem, point toward the sensor location, and press the OK button. Once the sensor is successfully activated and decoded, THINKTPMS G1 will vibrate slightly and the screen will display the sensor data.
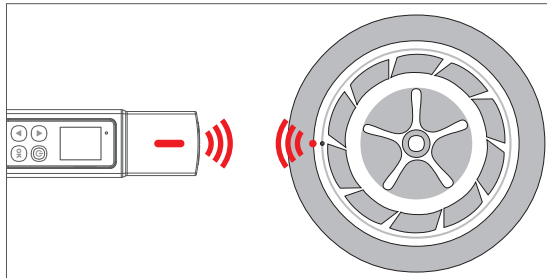
*Notes:
- For early magnet-activated sensors, place the magnet over the stem and then place the THINKTPMS G1 alongside the valve stem.
- If the TPMS sensor requires tire deflation (of the order of 10PSI), then deflate the tire and place the THINKTPMS G1 alongside the stem while pressing the OK button.

2. Program Sensor

This function allows users to program the sensor data to the THINKCAR-sensor and replace faulty sensor with low battery life or one that is not functioning.
There are three options available for programming THINKCAR-sensor: Auto Create, Manual Create and Copy by Activation.

*Note: Do not place the device close to several sensors at the same time, or the diagnostic tool will detect more sensors, which may result in programming failure.

Method 1- Auto Create

This function is designed to program the THINKCAR-sensor by applying random IDs created according to the test vehicle when it is unable to obtain the original sensor ID.

1.Select the wheel which needs to be programmed on the diagnostic tool, place a THINKCAR-sensor close to the TPMS antenna of the THINKTPMS G1, and tap Auto to create a new random sensor ID.
2.Tap Program to write in the new created sensor ID to the THINKCAR-sensor.

*Note: If Auto is selected, the TPMS Relearn operation needs to be performed after programming all required THINKCAR-sensor.

Programme

Currently created ID: 0xAAB7EF78

| Back | Programming |
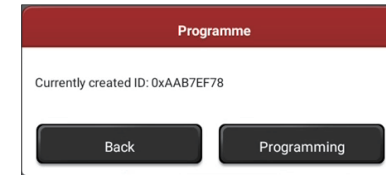
Method 2 - Manual Create

This function allows users to manually enter sensor ID. Users can enter the random ID or the original sensor ID, if it is available.
1.Select the wheel which needs to be programmed on the diagnostic tool, place a THINKCAR-sensor close to the TPMS antenna of the THINKTPMS G1, and tap Manual.
2.Use the on-screen virtual keypad to input a random or original (if available) sensor ID and tap OK.

*Note:Do not enter the same ID for each sensor.

3.Follow the on-screen prompts to write in the sensor ID to the THINKCAR-sensor.

*Notes:
- ✔ If a random ID is entered, please perform the TPMS Relearn function after programming is finished. If the original ID is entered, there is no need to perform Relearn function.
- ✔ If a vehicle does not support Learn function, please select the Manual option to enter the original sensor ID manually, or trigger the original sensor at the activation screen to get its information, before programming the THINKCAR-sensor.
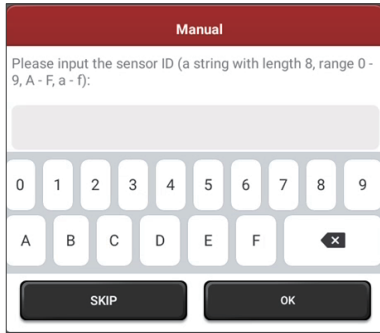

Method 3 - Copy By Activation

This function allows users to write in the retrieved original sensor data to the THINK-CAR-sensor. It is used after the original sensor is triggered.

1.From the activation screen, select the specific wheel position and trigger the original sensor. After the information is retrieved, it will be displayed on the screen.
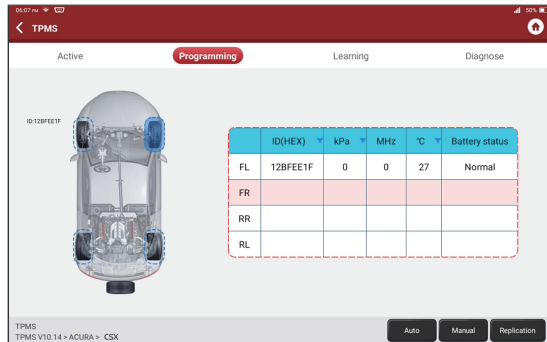
2.Place a THINKCAR-sensor close to the TPMS antenna of the THINKCAR, and tap Replication (Copy by activation).
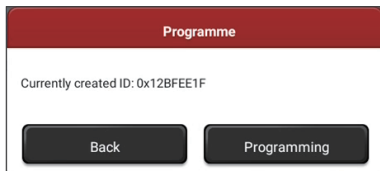
3.Tap Programme to write in the copied sensor data to the THINKCAR-sensor.

*Note: Once programmed with Replication, the THINKCAR-sensor can be installed in the wheel directly to be mounted on the vehicle and the TPMS warning light will turn off.

3. TPMS Relearn

This function is used to write the newly programmed sensor IDs into the vehicle's ECU for sensor recognition.
Relearn operation applies only when the newly programmed sensor IDs are different from the original sensor IDs stored in the vehicle's ECU.
There are three ways available for Relearn: Static Learning, Self-Learning and Relearn by OBD.

## Method 1 - Static Learning

Static learning requires the vehicle to be put into learning / retraining mode, and then follow the on-screen prompts to complete it.

Method 2 - Self-Learning

For some vehicles, the learning function can be completed by driving. Refer to the on-screen learning steps to do the operation.

Method 3 - Relearn by OBD

This function allows the diagnostic tool to write the sensor IDs to the TPMS module. To perform relearn by OBD, firstly activate all sensors, and then use the diagnostic tool together with the included VCI to complete the learning steps following the on-screen instructions.
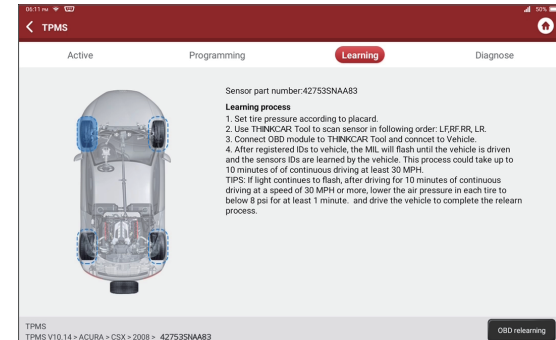
Q&A

Q: Why does my THINKTPMS G1 always stay on welcome screen?
A: If the device keeps displaying the welcome screen, it indicates that it is not in TPMS function mode. If the diagnostic tool is performing the TPMS function, the device will switch to the corresponding function mode.

Q: Why is my THINKTPMS G1 always displayed in English even the system language of my diagnostic tool is set as non-English?
A: The system language of the device varies with the system language of the diagnostic tool that binds it. Currently only English and simplified Chinese are available on the device. If the device detects the system language of the diagnostic tool is non-Chinese, it will change into English automatically no matter which language the diagnostic tool is set as.

Q: My THINKTPMS G1 does not respond to the diagnostic tool.
A: In this case, please carefully check the following:
 • Whether the device is successfully bound to the diagnostic tool.
 • Whether the desired device is ticked in the Bound list.
 • Whether the device is powered on.
 • Whether the device is damaged or defective.

Q: Why does my THINKTPMS G1 automatically power off?
A: Please check the following:
 • Whether the device is fully discharged.
 • If the device is not being charged and there is no operation on the device for 30 minutes, it will automatically power off to conserve battery power.

Q: My THINKTPMS G1 can not trigger one or more sensors.
A: Please check the following:
 • Whether the device is damaged or defective.
 • Whether the sensor, module or ECU itself may be damaged or defective.
 • The vehicle does not have a sensor even though a metal valve stem is present. Be aware of Schrader rubber style snap-in stems used on TPMS systems.
 • You device may require a firmware upgrade.

Q: What to do if my THINKTPMS G1 encountered some unexpected bugs?
A: In this case, a firmware upgrade is required. On the TPMS version selection screen, tap Firmware Update to upgrade it.

Warranty Terms

This warranty applies only to users and distributors who purchase THINKCAR TECH INC products through normal procedures. Within one year from the date of delivery, THINKCAR TECH 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 TECH does not bear any indirect and incidental losses. THINKCAR TECH will judge the nature of the equipment damage according to its prescribed inspection methods. No agents, employees or business representatives of THINKCAR TECH are authorized to make any confirmation, notice or promise related to THINKCAR TECH products.

Service Line: 1-833-692-2766
Customer Service Email: support@thinkcarus.com
Official Website: www.thinkcar.com
Products tutorial, videos, Q&A and coverage list are available on Thinkcar official website.

Follow us on

@thinkcar.official   @ObdThinkcar