XTOOL

User Manual

TP-series TPMS Diagnostic Tool

Version 3.0

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Shenzhen Xtooltech Intelligent Co., LTD

Please read this user manual carefully before using TP-series TPMS Diagnostic Tool, referred to as the "the tool" throughout this document. When reading the manual, please pay attention to the words "Note" or "Caution" and read them carefully for appropriate operation. Due to technical updates, software update, etc., some of the pictures shown on the manual might not be fully accurate. Product images and description only for reference purpose, so please see the subject produce.

OPERATION INSTRUCTIONS

For safe operation, please follow the instructions below:

- Keep the device away from heat or fumes when in use.
- If the vehicle battery contains acid, please keep your hands and skin or fire sources away from the battery during testing.
- The exhaust gas of the vehicle contains harmful chemicals. Please ensure adequate ventilation.
- Do not touch the vehicle cooling system components or exhaust manifolds when the engine is running due to the high temperatures reached.
- Make sure the car is securely parked, Neutral is selected or the selector is at the P or N position to prevent the vehicle from moving when the engine starts.
- Make sure the (DLC) Diagnostic Link Connector is functioning properly before starting the test to avoid damage to the Diagnostic Computer.
- Do not switch off the power or unplug the connectors during testing. Doing so may damage the ECU (Electronic Control Unit) and/or the Diagnostic Computer.

CAUTIONS!

- Avoid shaking, dropping or dismantling the scan tool as it may damage the internal components.
- Do not use excessive force;
- Do not expose the screen to strong sunlight for a long period.
- Please keep the scan tool away from water and moisture.
- Store and use the scan tool only within the temperature ranges identified in the Technical Specifications section.
- Keep the unit away from strong magnetic fields.
- Please use soft and non-abrasive cleaner and soft cotton cloth to clean keyboard and display screen. Do not use solvent (like alcohol) to clean device.

AFTERSALES-SERVICES

XTOOL strives to provide best-in-class support!

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CONTENT

1. GENERAL INTRODUCTION

TP-series (TP150/TP200) is a smart TPMS Diagnostic Tool powered by Xtooltech. This product support TPMS DTC code check & live data for most of the vehicles on the market, 315/433MHz tire-pressure sensor check, read OEM sensor ID and program it into Xtool universal tire-pressure sensors. This tool can perform such functions:

- Check TPMS sensors (read sensor ID / pressure / temperature / battery status)
- TPMS diagnostics (DTC check & clear / read sensor ID)
- Program Xtool universal tire-pressure sensors
- TPMS relearn
- Check OEM TPMS sensors
- Etc.…

MAIN UNITS

- **F400**
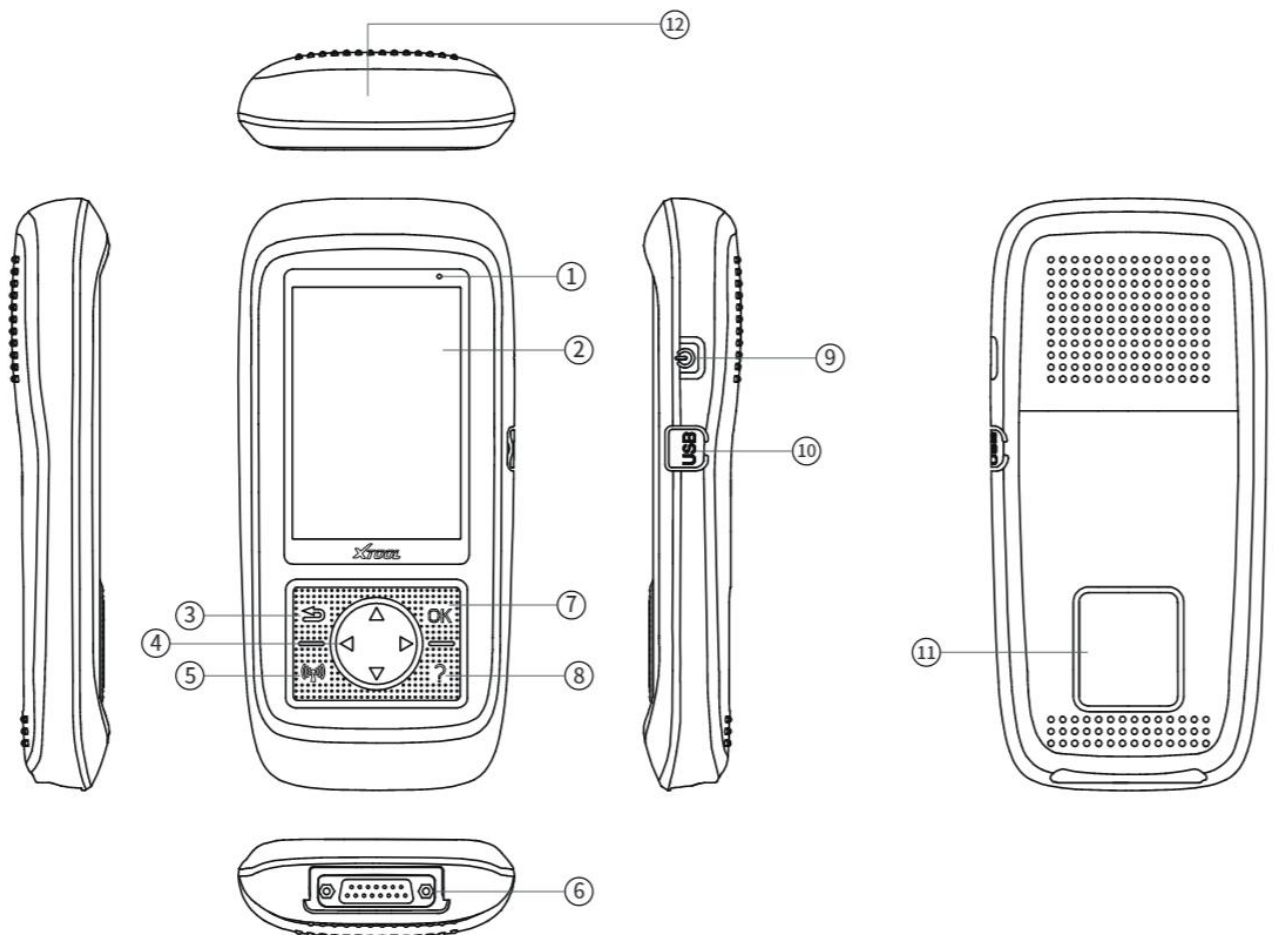
① **Power Indicator:** This light will turn red when charging.
② **Screen:** Shows contents on the device.
③ **Return button:** Go back to previous menu or cancel selections.
④ **Direction buttons:** Use these buttons to choose or select functions.
⑤ **Activate/Program button:** When activate/program sensors, click this button to trigger them.
⑥ **DB15 port:** Connects to the OBD port for vehicle communications, and also used for charging the device.
⑦ **OK button:** Confirm selection and start operations.
⑧ **Help button:** Shows detailed information for operations.

⑨ **Power button:** Turn on & off the device.
⑩ **USB Type-C port:** Charge the device or transfer data to PC.
⑪ **Nameplate:** Shows vital information of the device.
⑫ **Sensor triggering area:** When activating/programming sensors, put them close to this area.

VEHICLE COMMUNICATION
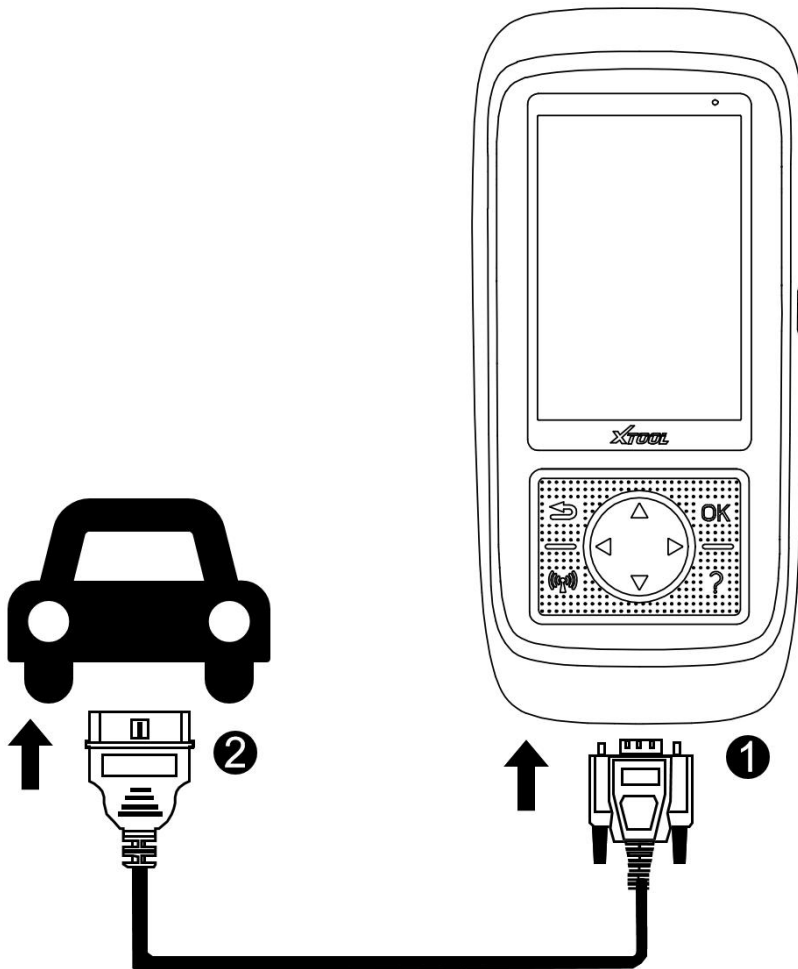
The picture below shows how the device connects to the vehicle.

1. Turn on the ignition switch of the vehicle, and turn on the device.
2. Connect the DB15 plug of the cable to the device.
3. Find the OBD port on the vehicle, and plug the OBD socket of the cable inside it.
4. Now you are ready for TPMS diagnostics.

⚠ *Note: The vehicle's DLC is not always located under the dash; for the location of the DLC, please refer to the vehicle owner's manual.*


- **Precautions for Diagnosis**

1. The voltage range on the car: +9~+16V DC;

2. The electronic control systems of different models are very complicated. If you encounter situations where it is impossible to test or a large amount of test data is abnormal, you can search for the ECU of the vehicle and select the menu for the model on the ECU nameplate;

3. If the vehicle type or electronic control system to be tested is not found in the diagnostic function, please update the vehicle diagnostic software to the latest version or consult the XTOOL technical service department;

4. Only wiring harnesses provided by XTOOL and designed for the scan tool are permitted to be used with this scan tool to avoid damage to the vehicle or the tool;

5. When running a Diagnostics function, DO NOT shut down the scan tool directly. You should cancel the task before returning to the main interface and then shutting down the tool.

SENSOR TRIGGERING

The picture on the left shows how the device can trigger the tire-pressure sensor.
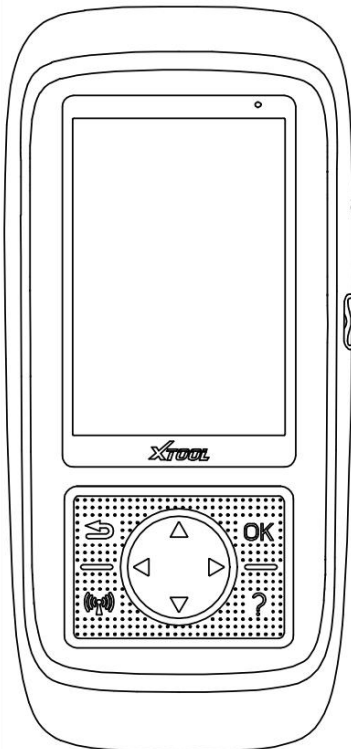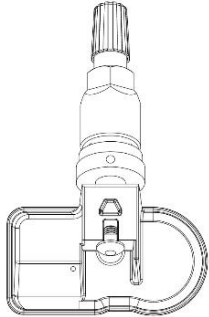
    1. Select activation or program menu on the device;

    2. Put the device close to the sensor (if the sensor is already installed inside the tire, close to the valve);

3. Click ![button icon] button to start triggering.

> ⚠ *Note: When triggering sensors, we suggest to put the sensor that needs to be triggered 10 cm (4 inch) close to the device. And to avoid interference, please put other sensors 2 meters (7 feet) away from the device if possible.*

CHARGING THE DEVICE

The scan tool may need to be charged before first use. Use the proper power adapter (either 120 VAC North American or 240 VAC European version) and attach it onto the AC/DC charger.

Plug the AC/DC charger into a wall outlet and charging this scan tool by USB Type-C port.

The device can also be charged with PC or OBD connection, and the tool can be used when charging.

In order to keep the device in best performance, please fully charge the battery. We suggest to charge at least 2 hours before usage for the first time.

2. TPMS FUNCTIONS

By selecting the TPMS menu on the main screen, this tool can perform various TPMS-related functions like diagnostics, check sensors and provide learning instructions.

MAIN MENU & MODEL SELECTION

- Select the TPMS menu and get into the vehicle selection page.
- Then select the vehicle area. The area is determined by where the manufacturer is founded, like you need to get into America menu to find Ford.
- Then select the manufacturer, the model and the model year.

> ⚠ **_Note: Sometimes there are vehicles that are in the same model year, but with different sensors or different frequencies. You can check the repair manual, or check the OEM sensor itself to get inside the correct menu._**
>
> ⚠ **_Note: There are some models that are using indirect TPMS systems. Those models do not have sensors inside so they are mostly not supported._**

Tp150		TPMS		TPMS		BMW		BMW 3Series	
(!) TPMS	Recent test	▶ 1 China V5.70		1 Abarth		▶ 1 1Series		▶ 1999-2002 (315MHz)	
		2 Asia V5.70		2 Alfa Romeo		2 2Series		1999.03-2011.02 (indirect)	
		3 America V5.70		3 Audi		3 3Series		2000- 2006 (433MHz)	
Options	Update	4 Enrope V5.70		4 Bentley		4 3Series		2017.01-2009.08 (433MHz)	
				▶ 5 BMW		5 4Series		2011.10-2013.11 (433MHz)	
				6 Citroen		6 5Series		2014-2019 (433MHz)	
				7 Fiat		7 5Series GT			
(i) About				8 Lamborghini		8 6Series			
				9 Lancia		9 7Series			
				10 Maybach		10 I3			
					01/24		01/31		

When you selected the model, you can choose one of the functions below:

- **Sensor Check:** Check the sensor that has already installed inside the vehicle.
- **Diagnostics:** Check & clear the fault codes that are inside the system, and check the sensor IDs saved inside the system.
- **Programming:** Program XTOOL tire-pressure sensors to make them fit inside the vehicle.
- **Relearn:** After installation, if the ID of the sensor doesn't match the sensor ID inside the vehicle, check the relearning steps to match those IDs.
- **Sensor Information:** Check the information on the OEM sensors and XTOOL sensors.

Function
Trigger sensors
Tire pressure diagnosis
Programming sensors
▶ Learning step
OEM Sensor information

> ⚠ **_Note: Not all the models support all those functions listed above. Please check the support list on our official website to see if the tool can perform the functions you need._**

SENSOR CHECK & TRIGGERING

When checking the sensors, the tool will tell you which tire should be triggered first, with the tire highlighted on the screen. You can also select the tire to be triggered using the directions buttons.
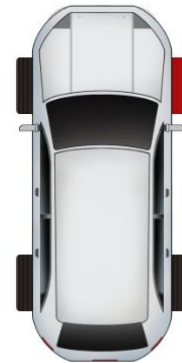
When triggering, put the top of the tool close to the sensor (or the valve on the tire) and click 📶 button.

The tool will scan the closest sensor around and show the data from the sensor when detected.

ID	kPa	degC	Power

TPMS DIAGNOSTICS

Before performing diagnostics, please check "Vehicle Communication" and connect the device to the vehicle.

When you click "diagnostics" menu, the device will try to establish connections to the vehicle.

When connected, the tool will check the info from TPMS and show it on the screen.

The screen will also show the fault codes that are present inside the system; click "View Fault Code" to check details, and click "Clear fault code" to clear them.

> ⚠ *Note: If you checked the sensors before going into diagnostics, the sensor ID will show the IDs that were found when triggering them.*
>
> ⚠ *Note: Before clearing the fault codes, make sure you have fixed the problem that are described by the fault codes.*

Connecting…

Use the divice connect with vehicle's OBD interface, open ignition lock, read ID information which is saved from ECU.

Tire	Sensor ID	OBD ID
LF		31424122
RF		31424121
FR		31424123
RR		31424121

The quantity of fault code : 2

▶View Fault Code | Clear Fault Code

SENSOR PROGRAMMING

You can program Xtool sensors by this menu. Programmed sensors can be installed into the tires, replacing the OEM sensor.

There are 4 ways to program the sensors, and the method will be listed as follows.

AUTO-CREATE ID

This function allows you to program up to 8 sensors at once with random-generated IDs. As the IDs are likely to be different with the IDs stored inside the vehicle, relearn is needed after the sensor is installed.

To program the sensor(s), select "auto-create ID" on the tool, and put all the sensor(s) you need to program close to the top of the tool. The tool will automatically scan the sensor(s) around it and show it(them) on the screen.

The screen will show the S/N of the sensor(s) when detected; check iif the S/N is correct.

If so, click 📶 button to start programming; if not. Click "Back" button and detect again.

Acquiring sensor' Sinformation…

Attention: Before programming,take the sensor which is waiting for programming, next to the programming device within 25 cm,and the opposite other sensors away from the programming device1m.

The detected TPMS sensors (Show the front of eight)

NO	SN(Last 8)	Select
1	1A0246B7	✓
2	1A0246B7	✓
3	1A0246B7	✓
4	1A0246B7	✓
5	1A0246B7	✓
6	1A0246B7	✓
7	1A0246B7	✓
8	1A0246B7	✓

Programming progress

NO	SN(Last 8)	Programming
1	1A0246B7	
2	1A0246B7	▰▰▱
3	1A0246B7	▰▱▱
4	1A0246B7	▱▱
5	1A0246B7	▰▰▱
6	1A0246B7	▰▰▱
7	1A0246B7	▰▰▰
8	1A0246B7	▰▱

Programming progress

NO	SN(Last 8)	ID number
1	1A0246B7	✗
2	1A0246B7	1A0246B7
3	1A0246B7	1A0246B7
4	1A0246B7	1A0246B7
5	1A0246B7	1A0246B7
6	1A0246B7	1A0246B7
7	1A0246B7	1A0246B7
8	1A0246B7	1A0246B7

" OK " =Select   " 📶 " =Program   " ⮌ " =Back   " OK " =Confirm   " ⮌ " =Back   " OK " =Confirm

MANUALLY INPUT ID

This allows you to input the sensor ID manually and program it into one sensor. If the ID you wrote into the sensor doesn't match the ID that are saved inside the system, you need to do a relearn after installation.

To program the sensor, select "manually input ID" on the tool, then input the ID, press OK key to confirm.

Put the sensor you need to program close to the top of the tool. The tool will automatically scan the sensor and show it on the screen.

The screen will show the S/N of the sensor when detected; check iif the S/N is correct.

If so, click ((•)) button to start programming; if not. Click "Back" button and detect again.

> ⚠ **_Note: The ID could be decimal (0-9) or hexadecimal (0-9,A-F). Make sure you are using the correct ID format; it could be changed in settings._**

Input Id Manually		Programming		Programming	

Please input the sensor's ID (8 bits)

0	1	2	3	4	5
6	7	8	9	A	B
C	D	E	F	⊗	

Programming progress

NO	SN(Last 8)	Programming
1	1A0246B7	▰▱
2		
3		
4		
5		
6		
7		
8		

Programming progress

NO	SN(Last 8)	ID number
1	1A0246B7	1A0246B7
2		
3		
4		
5		
6		
7		
8		

Press OK to confirm   " ↰ " =Back   " OK " =Confirm   " ↰ " =Back   " OK " =Confirm

COPY ID VIA ACTIVATION

This allows you to get the ID from activation and program the ID in XTOOL sensor.

Before doing that, make sure you have already checked the sensors on the vehicle.

After checking the sensors on the tire, go to "Copy ID via activation,", press "OK" to view activated sensor information.

Select the tire you want to replace the sensor, then go to programming.

Put the sensor you need to program close to the top of the tool. The tool will automatically scan the sensor and show it on the screen.

The screen will show the S/N of the sensor when detected; check iif the S/N is correct.

If so, click [icon] button to start programming; if not. Click "Back" button and detect again.

Tire	ID(HEX)	P(kPa)	T(°C)	B(v)
LF	57680987	230	24	3.0
RF	57680917	0	24	2.8
FR	57680387	300	24	2.3
RR	57680907	0	24	2.2

Copy via trigger — Tire pressure sensor information:

▶ Trigger   Programming

Programming — Programming progress

NO	SN(Last 8)	Programming
1	1A0246B7	[bar]
2		
3		
4		
5		
6		
7		
8		

" ↩ " =Back   " OK " =Confirm

Programming — Programming progress

NO	SN(Last 8)	ID number
1	1A0246B7	1A0246B7
2		
3		
4		
5		
6		
7		
8		

" ↩ " =Back   " OK " =Confirm

COPY ID VIA ECU INFO

This allows you to get the ID from TPMS info and program the ID in XTOOL sensor.

Before doing that, make sure you have already done diagnostics to the TPMS.

After diagnostics, go to "Copy ID via ECU info,", press "OK" to view sensor information.

Select the tire you want to replace the sensor, then go to programming.

Put the sensor you need to program close to the top of the tool. The tool will automatically scan the sensor and show it on the screen.

The screen will show the S/N of the sensor when detected; check iif the S/N is correct.

If so, click [icon] button to start programming; if not. Click "Back" button and detect again.

Programming — The detected TPMS sensors (Show the front of eight)

Tire	ID(HEX)	Select
LF	57680987	✓
RF	5768091 7	✓
FR	57680387	✓
RR	57680907	✓

" OK " =Select   " (( )) " =Program

Programming — Programming progress

NO	SN(Last 8)	ID number
1	1A0246B7	57680987
2	1A0246B6	57680917
3	1A0246B5	57680387
4	1A0246B4	57680907
5		
6		
7		
8		

" ↩ " =Back   " OK " =Confirm

TPMS RELEARN

Sometimes when new sensors are installed into the vehicle, the TPMS light will light up as the vehicle won't recognize the sensor. Usually this is because the ID in the sensor is not matched with the ID in the vehicle, and you can solve this by relearn TPMS.

This tool will show the guide for the entire relearning procedure and provide help on some of the steps (like triggering sensors, write IDs into the system, etc.)

> ⚠ **_Note: Some vehicle will need extra steps on the procedures introduced below. Please refer to the guide shown on the device when actual processing._**

Here are several ways to do TPMS relearn to your vehicle:

AUTOMATIC RELEARN: Some vehicles can automatically recognize new sensors when driving. Usually when doing automatically relearn, get all 4 wheels on standard tire pressure, and take the vehicle on a drive (normally ⩾25km/h or 15mph) for about 20 minutes (or longer). The vehicle will automatically recognize new sensors and the TPMS light will turn off.

OBD RELEARN: Some vehicles need to rewrite the sensor IDs inside the system. Normally when doing that, plug the too onto the OBD port of the vehicle, and click "OBD relearn" on the screen. The device will write the ID into the system.

STATIONARY RELEARN: Some vehicles can get into sensor relearn mode by triggering some specific actions. When you get in this mode, activate the sensors one by one and the vehicle will recognize every sensor once you activate it.

COPY SENSORS: Actually, this is not a relearn procedure. The sensor IDs for some of the vehicles are unchangeable, so when this shows up on the relearn menu, go back and check if the sensor IDs are the same with the original one. If it is not matched with the original one and you are using XTOOL sensors, go to "Programming" menu and copy the sensors via activation or OBD.
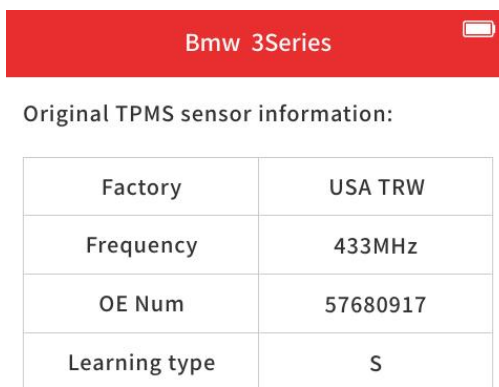
SENSOR INFORMATION

The database integrated into this tool records the information for most of the OEM sensors that comes with the vehicle when it's out from factory. To check that, go to the menu and it will show the parts number, manufacturer, etc.

This can also check the status of Xtool sensors. Use the same menu and trigger the Xtool sensor, and it will show information like serial number, sensor ID, program time, etc. on the screen.

Bmw 3Series

Original TPMS sensor information:

Factory	USA TRW
Frequency	433MHz
OE Num	57680917
Learning type	S

RECENT TEST

This is a shortcut in the main menu. Click this to get back to the last model that you went in before, with all the info saved inside the tool.

3. SETTINGS

Click the Settings button to adjust the default settings.

WIFI SETTINGS

Select available Wi-Fi hotspot and connect. For more information, please check "Update".

UPDATE

Use this menu to update the software. For more information, please check "Update".

PRESSURE UNIT SETTINGS

Select the pressure unit shown on the device. You can choose between kPa, psi or BAR.

TEMPERATURE UNIT SETTINGS

Select the pressure unit shown on the device. You can choose between deg C and deg F.

SENSOR ID FORMAT SETTINGS

Select the sensor ID format shown on the device. You can choose between decimal or hexadecimal.

DISTRICT SETTINGS

Select the area that the vehicle is manufactured.

⚠ ***Note: The same model that are manufactured for different markets may use different sensors or different frequencies. Please check district settings before you working on vehicles.***

AUTO POWER-OFF SETTINGS

Set the standby time before the device turns off automatically.
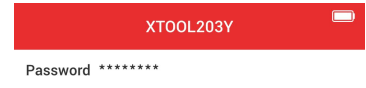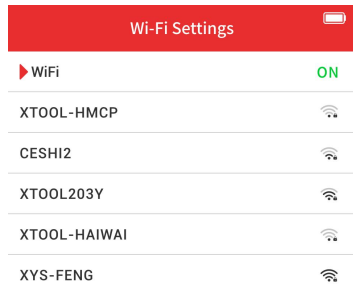
SOUND SETTINGS

Select whether you need to turn on the beep sound when clicking the buttons.

4. UPDATE

This tool can be updated by Wifi connection or PC update tool. We will be introduce them one by one.
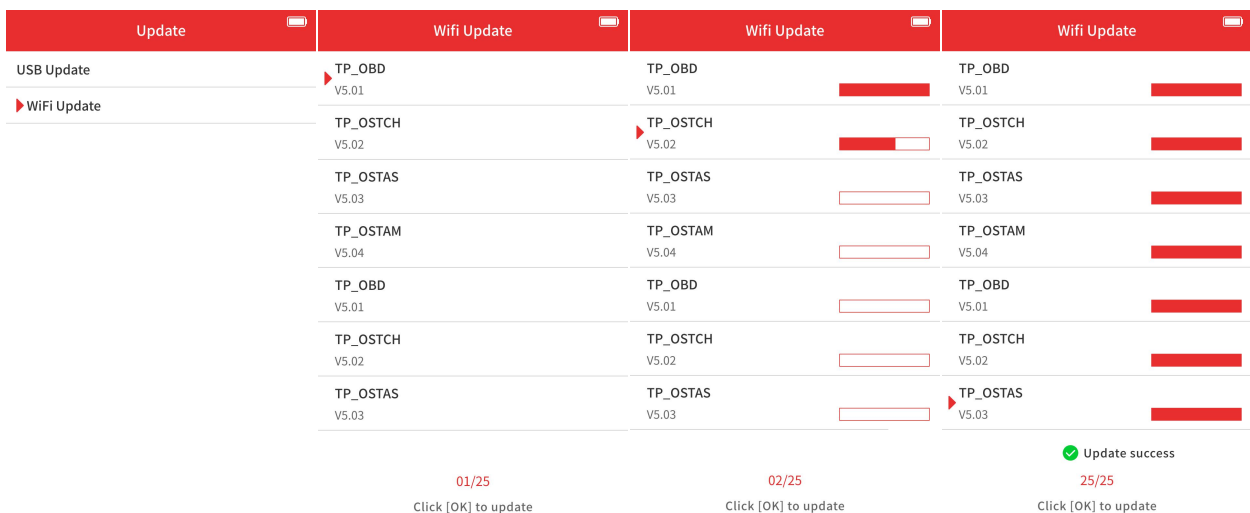
WI-FI UPDATE

Before doing that, please go to Wifi settings, turn on Wi-Fi and select the network you want to connect. Input password, then click [icon] to connect.

Wi-Fi Settings	
WiFi	ON
XTOOL-HMCP	
CESHI2	
XTOOL203Y	
XTOOL-HAIWAI	
XYS-FENG	

XTOOL203Y	
Password ********	

Click[(icon)]to connect

[	]	$	@	#	%	^	*	+	=
0	1	2	3	4	5	6	7	8	9
q	w	e	r	t	y	u	i	o	p
a	s	d	f	g	h	j	k	l	⌫
⇧	z	x	c	v	b	n	m	(	)

Then go to update menu. The device will automatically search for updates, and show them on the screen. You can select all of them and click "OK" to update.

Update	Wifi Update	Wifi Update	Wifi Update
USB Update	TP_OBD V5.01	TP_OBD V5.01	TP_OBD V5.01
WiFi Update	TP_OSTCH V5.02	TP_OSTCH V5.02	TP_OSTCH V5.02
	TP_OSTAS V5.03	TP_OSTAS V5.03	TP_OSTAS V5.03
	TP_OSTAM V5.04	TP_OSTAM V5.04	TP_OSTAM V5.04
	TP_OBD V5.01	TP_OBD V5.01	TP_OBD V5.01
	TP_OSTCH V5.02	TP_OSTCH V5.02	TP_OSTCH V5.02
	TP_OSTAS V5.03	TP_OSTAS V5.03	TP_OSTAS V5.03
			✓ Update success
	01/25	02/25	25/25
	Click [OK] to update	Click [OK] to update	Click [OK] to update

The device will automatically update the software. After the update is done, we suggest to restart the device to apply the updates.
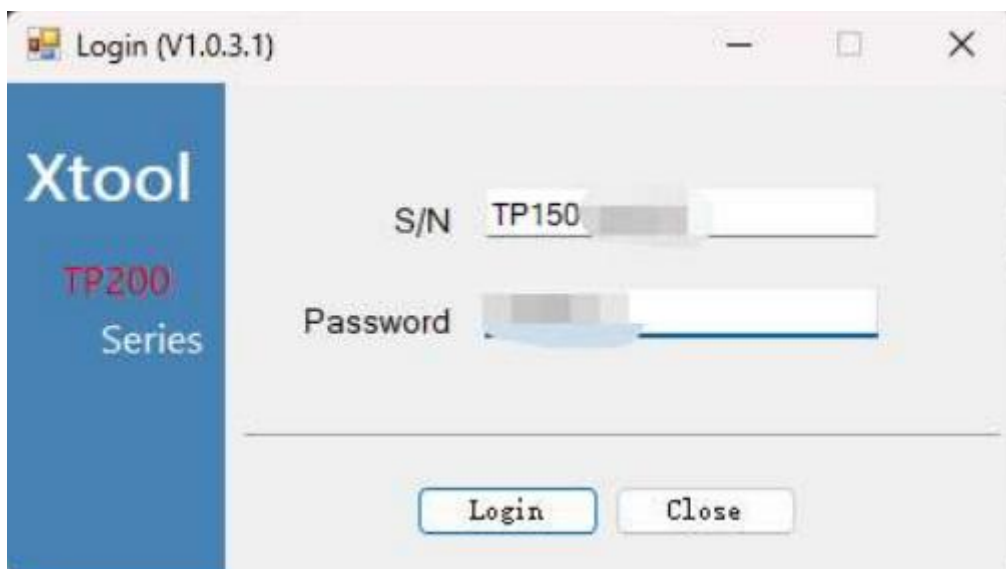
PC UPDATE

Download "TP200 Installer" on XTooltech official website.

Link: https://down.xtooltech.com/misc/TP200Installer_v1.0.3.0.zip
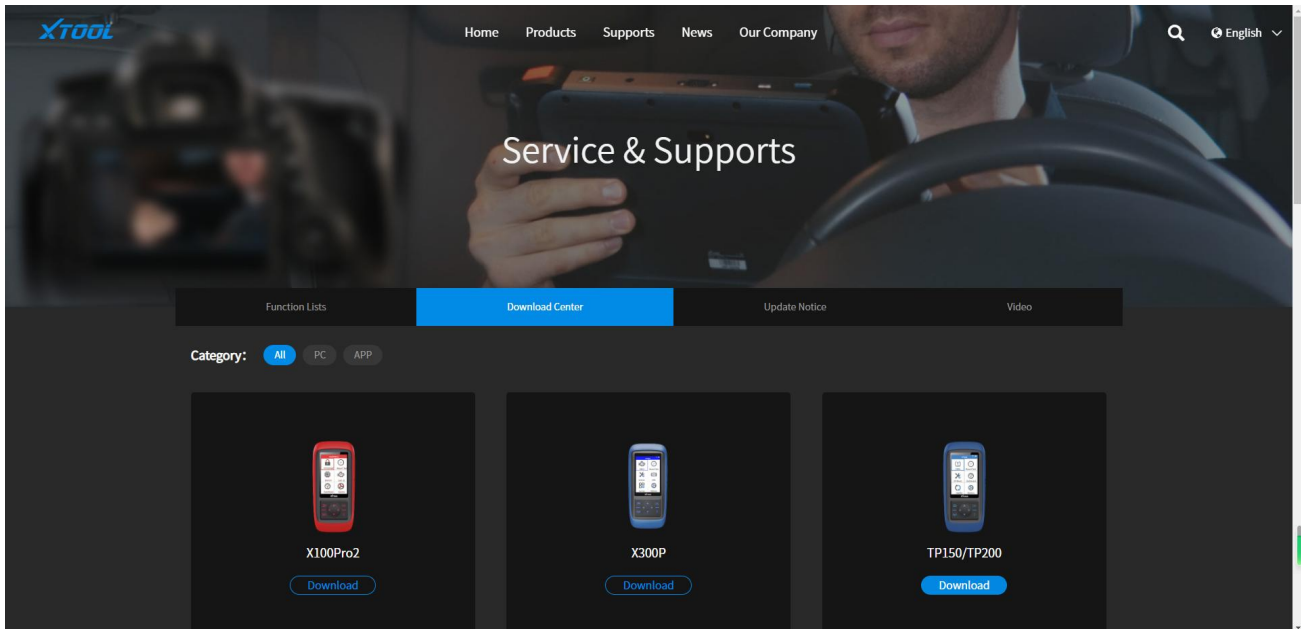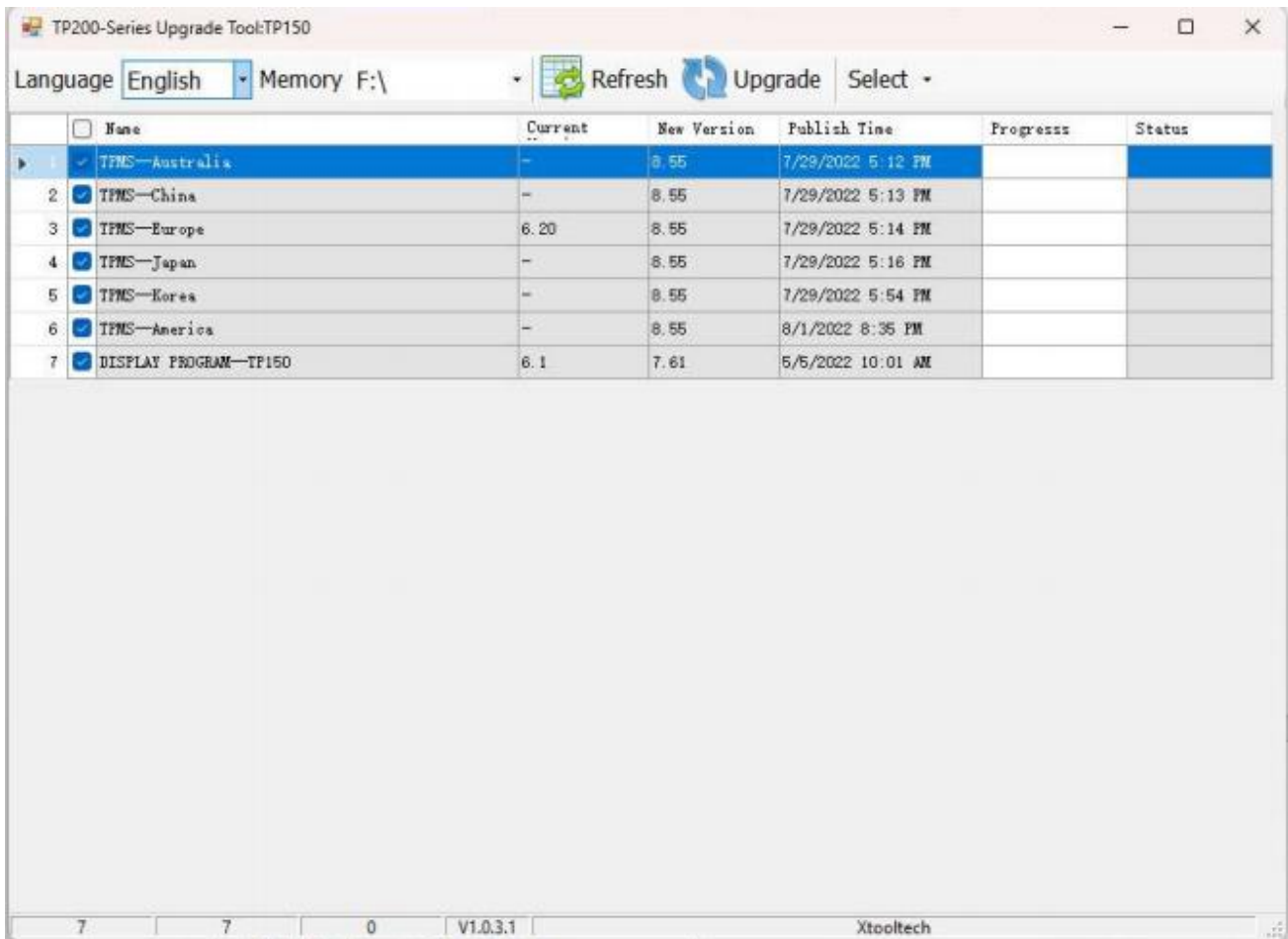

 Install TP200 Installer, and connect the tool to the PC.

After installation is done, log in the app by putting in the serial number and password. You can find them in the qualification certificate, or go to Settings – About and check.

Select the language that you need and make sure the app recognized the correct disk symbol. Click "Upgrade" to do the updates. Normally this will take around 5 minutes, depending on the network status.

	Name	Current	New Version	Publish Time	Progress	Status
1	TPMS—Australia	–	8.55	7/29/2022 5:12 PM		
2	TPMS—China	–	8.55	7/29/2022 5:13 PM		
3	TPMS—Europe	6.20	8.55	7/29/2022 5:14 PM		
4	TPMS—Japan	–	8.55	7/29/2022 5:16 PM		
5	TPMS—Korea	–	8.55	7/29/2022 5:54 PM		
6	TPMS—America	–	8.55	8/1/2022 8:35 PM		
7	DISPLAY PROGRAM—TP150	6.1	7.61	5/5/2022 10:01 AM		

After update completed, restart the device to make sure the updated software has been applied.

5. WARRANTY & SERVICES

Shenzhen XTOOLtech Intelligent Co., LTD.(the Company) warrants to the original retail purchaser of this XTOOL device that should this product or any part thereof during normal usage and under normal conditions be proven defective in material or workmanship that results in product failure within **ONE YEAR** from the date of purchase, such defect(s) will be repaired, or replaced (with new or rebuilt parts) with Proof of Purchase, at the Company's option, without charge for parts or labor directly related to the defect(s).

The Company shall not be liable for any incidental or consequential damages arising from the use, misuse, or mounting of the device.

This warranty does not apply to:

1) Products subjected to abnormal use or conditions, accident, mishandling, neglect, unauthorized alteration, misuse, improper installation/repair, or, improper storage;
2) Products whose mechanical serial number or electronic serial number has been removed, altered, or defaced;
3) Damage from exposure to excessive temperature or extreme environmental conditions;
4) Damage resulting from connection to, or use of any accessory or other product not approved or authorized by the Company;
5) Defects in appearance, cosmetic, decorative, or structural items such as framing and non-operating parts;
6) Products damaged from external causes such as fire, dirt, sand, battery leakage, blown fuse, theft, or improper usage of any electrical source.

6. APPENDIX

TRADEMARKS

XTOOL is a registered trademark of Shenzhen XTOOLtech Intelligent CO., LTD.

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This manual is designed for the usage of the TP-series TPMS Diagnostics Tool and provides operating instructions and product descriptions for users of this scan tool.

Use the device only as described in this manual. XTOOL is not responsible for any consequences of violating the laws and regulations caused by using the product or its data information.

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