User Guide

AUTODIAGNOS[™] TPMS D TOOL

1. SPECIFICATIONS

Battery Type:	Rechargeable Lithium Ion	
Battery Life:	Approximately 1,000 activations per full charge.	
Dimensions (Max. L, W, D):	7.9" x 4.7" x 1.6" (20.0 cm x 12.0 cm x 4.0 cm).	
Case Material:	High Impact ABS.	
Response Frequency:	Main frequencies: 315 MHz and 433.92 MHz (supporting most specific frequencies).	
Low Battery Indication:	LCD bar graph display.	
Weight:	Approx. 2 lbs.	
Temperatures:	Operating: -4° F to 131° F (-20° C to +45° C). Storage: -4° F to 131° F (-20° C to +45° C).	



Product content:

- TPMS D Tool
- USB cable
- RJ45 cable
- OBDII Module
- Software CD
- Quickstart Guide

Optional accessories:

• Tire Tread Depth Gauge

2. IMPORTANT SAFETY INSTRUCTIONS

Do not discard. Retain for future reference.

This device complies with Part 15 of the FCC Rules

Operation is subject to the following two conditions:

- 1. This device will not cause harmful interference, and
- 2. This device will accept any interference received, including interference that may cause undesired or improper operation.

WARNING: This product emits electromagnetic and electronically generated waves that may interfere with the safe operation of **pacemakers**.

Individuals that have pacemakers should never use this product.



WARNING:



Do not use on live electrical circuits. Must read instructions before use. Wear safety goggles. (User and bystanders). Risk of entanglement.

Read the Safety and Recycling information at the end of this user guide.

3. CAUTIONS

READ THESE INSTRUCTIONS BEFORE USING YOUR TPMS D TOOL

Your Tire Pressure Monitoring (TPM) tool has been designed to be durable, safe, and reliable when properly used.

All **TPMS TOOLS** are intended to be used only by qualified and trained automotive technicians or a in light industrial repair shop environment. Please read all instructions below before using. Always follow these safety instructions. If you have any questions pertaining to the safe or reliability use of this tool, please call your local dealer.

1. Read All Instructions

All warnings on the tool and in this manual should be adhered to. All operating instructions should be followed.

2. Retain Instructions

The safety and operating instructions should be retained for future reference.

3. Heed Warnings

User and bystanders must wear safety goggles and must-read instructions before use. Do not use on live electrical circuits, risk of entanglement.

4. Cleaning

Clean with a soft dry cloth, or if necessary, a soft damp cloth. Do not use any harsh chemical solvents such as acetone, thinner, brake cleaner, alcohol, etc. as this may damage the plastic surface.

5. Water & Moisture

Do not use this tool where contact or immersion in water is a possibility. Never spill liquid of any kind onto the tool.

6. Storage

Do not use or store the tool in an area where it is exposed to direct sunlight or excessive moisture.

7. Use

To reduce the risk of fire, do not operate the tool in the vicinity of open containers or flammable liquids. Do not use if the potential for explosive gas or vapors exists. Keep the tool away from heat generating sources. Do not operate the tool with the battery cover removed.

4. FUNCTION KEYS

(0)	Power ON /OFF switch		Test or trigger sensor.
ОК	Next, continue or confirm.	C	Cancel, previous step.
	Navigate to select "up ".		Navigate to select " down ".
	Navigate to select " left ".		Navigate to select " right ".



4.1. HEADER ICONS



4.2. BOTTOM ICONS



Go back to the home page.

Send sensor data to the ECU.

Delete the current sensor data displayed.

Send sensor data to the printer.

Edit the job info.

Paste sensor information.



Press wey to turn on device, the **TPMS TOOL**.

The tool displays the start screen.



Wait a few seconds and the tool displays the main menu.

The tool is ready to operate.



To power off the tool, press and hold (about 3 seconds) the

🕐 key.

6. OPERATING INSTRUCTIONS

6.1. TPMS TOOLOVERVIEW

Read and diagnose sensors, OBDII ECU reset and transfer data to ECU.



Note: With some vehicles, if the vehicle is in "learn mode" the vehicle will also confirm that the TPM sensor has communicated to the ECM with a series of horn beeps.

Service Procedure

Before servicing the tires/wheels, using your **TPMS TOOL**, trigger each of the vehicle's sensors to make sure they are working properly.

This will eliminate the liability associated with replacing previously damaged or defective sensors. This procedure will not change the vehicle settings because the vehicle has yet to be put into learn/retraining mode. This procedure allows you to quickly identify damaged or defective sensors, because some vehicles do not report a damaged or defective sensor condition on the instrument cluster for up to 20 minutes.

Note: If the sensors do not trigger, please refer to the Troubleshooting section of this Guide.

Perform tire/wheel service.

For vehicles that require retraining, please see to Section 2.0

With the vehicle in learn mode, begin by triggering the driver's front left (LF) wheel sensor. Some vehicles will provide an audible chirp confirming that the sensor ID has been learned by the vehicle on board computer.

The communication between the sensor and the on-board computer is also confirmed on LCD display of the **TOOL**.

The same procedure should be followed on all wheel sensors, in a clockwise rotation, until all the vehicle sensors have been retrained.

After triggering the driver's rear wheel sensor, some vehicles will chirp twice indicating that the TPM system has been retrained.

For vehicles that do not require retraining, we recommend you trigger each wheel sensor, one final time, to make sure they are working correctly prior to releasing the vehicle to the customer.



REDI-SENSOR

Various functions regarding the REDI-Sensor.



From the main menu, select REDI



Manual Selection







	REDI	
SE10001		
SE10002		
SE10004		
SE10005		
SE10002A		
SE10003A		
SE10004A		

REDI UNLOCK

Select Unlock.







UNLOCK REDI-SENSOR

While holding the sensor above the tool's antenna, press the trigger button to unlock





OK

Once unlocked, the REDI Sensor is now ready for use



TPMS

IMPORTANT:

Vehicle specific information in this manual is used as an example and may not represent specific instructions each make and model may require. When performing various functions with the tool, it is important to refer to the on-screen prompts and/or repair manual information.

Warning! For best sensor triggering, hold the tool against the tire sidewall right above the sensor.



1. SERVICE TPMS

This is to trigger all the sensors on the vehicle and reprogram the id's in the ECU via relearn





SELECT THE MMY

This is to choose the Make-Model-Year selection mode manually or with the VIN bar code of the vehicle.





SELECT CAR MANUFACTURER



SELECT VEHICLE MAKE			
ACURA	CADILLAC	FREIGHTLINER	
ALFA ROMEO	CHEVROLET	GENESIS	
ASTON MARTIN	CHRYSLER	GMC	
AUDI	CODA	HONDA MOTORC.	
BENTLEY MOTORS	DODGE	HONDA	
BMW MOTORCYCLE	FERRARI	HUMMER	
BMW	FIAT	HYUNDAI	
BUGATTI	FISKER AUTOMOTI.	INFINITI	
BUICK	FORD	ISUZU	

SELECT VEHICLE MODEL



SEI	LECT VEHICLE MODEL	
CSX ILX MDX NSX RDX RL TLX TL	TSX ZDX	= Cor
TLX		- 110



SELECT YEAR







select the VIN Scan option.

The following screen displays the VIN location on the vehicle.

Select the Service function.



Trigger all wheels.



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The data transfer to the **ECU** is complete. **OBDII** module must be unplugged from the **DLC** connector.

CUSTOMER PERSONALIZATION

This is to personalize the results of the vehicle with its information, Customer name, license plate number, VIN number and the mileage. This information will be written on the printed label.











JOB INFO		
CUSTOMER	JOHN SMITH	
PLATE #	XYZ1234	
VIN #	A5432Q2456F8G935S	
MILEAGE	42069	

The blank information screen appears, press



to edit the fields.



Use arrow keys to select a letter/character.





= Previous

This information will be saved in the history menu. To recover the previous job information, see section "**History**".

Manual Relearn

From the main vehicle screen, select Relearn.



Select Manual.





SELECT RELEARN PROCEDURE









MANUAL RELEARN PROCEDURE

- OBDII dongle is not required
- Confirm TPMS sensors are properly installed
- Adjust tire pressures to placard value
- Apply parking brake

V

- Turn vehicle to ON/RUN
- Use the MENU button to choose the Vehicle info menu in the DIC
- Scroll thumbwheel until Tire Pressure is

PRESS ON TO CONTINUE

Each Vehicle will have its own specific procedure to manually relearn the sensors to the ECU. Follow the instructions on screen to complete the relearn procedure

Placard Adjustment

This is for Adjusting internal placard values when changing tire types or load sizes.





Please read disclaimer regarding proper placard procedures

PLACARD

Notice: To determine appropriate Placard Pressures, always follow Tire Load and Inflation Standards. Maintain the overall circumference to +/- 3% of original size, and the required load rating located on the manufacturing placard. Refer to the vehicle owner's manual for any specific safety advice regarding the application of replacement tires.

OK = Continue C = Previous

PRESS 🐼 TO CONTINUE

Turn the ignition ON, Keep the engine OFF

Connect the OBD Module to the tool and vehicle, and allow the tool to capture the internal values

PLACARD

Ensure OBD Module is connected to the tool, and to the vehicle's ECU, then press OK

PRESS ON TO RETRIEVE VALUES



The tool will display the current stored values.





Select the axle you wish to change, then press OK







SELECT PSI



Change the PSI value using the arrow keys. Select OK

Once updated, use the trigger button to write the new values to the ECU





Read TPMS DTC Codes

DTC = Diagnostic Trouble codes.

This is for reading only the TPM codes. This menu is currently available for: Acura, Honda, Hyundai, Infiniti, Kia, Lexus, Mitsubishi, Nissan, Subaru and Toyota.







Turn the ignition **ON**, Keep the engine **OFF**.

Plug OBDII module to the OBDII port on vehicle, and turn ignition **ON**, with the engine **OFF**

DTC CODES		
Code Description		
C2171/71	Transmitter ID Not Registered In Main Mode	
C2171/71	VSS (Vehicle Speed Sensor) or ESS (Engine Speed Sensor) Signal Malfunction	
PRESS C TO GO BACK		



The DTC Codes and descriptions are displayed on-screen.

OK

= Continue

C

= Previous

Keyfob Test

This is to test the strength of the RF signal of the keyfob.

ACAR

Select Keyfob



1) Select the frequency





/		SELECT KEYFOB FREQUENCY	ОК	
_ 1	307.87 MHz		= Continu	е
_ 1	311.90 MHz 313.84 MHz			
	315 MHz 433 MHz			
	455 MHZ		= Previou	S

HELF

TPMS

2) Read instructions



	C
KEYFOB	1
	= Cor
HOLD KEYFOB IN FRONT OF THE TOOL	= Pre
PRESS 💿 BETWEEN EACH TEST	



3) Test results

PASS: KEYFOB is working within its range to the device.





To reset the device and start a new test.

FAIL: Low signal strength, indicates low battery, replace battery (recommended).



Part

View OEM and Programmable sensor part Numbers.









SELECT SENSOR		
OE	EZ-Sensor Schrader	
Continental	Intellisens	
REDI-SENSOR	MAX T.O.T.A.L	
Alligator Sens.it	MOBILETRON	
BWD / STANDARD	Orange	
DILL 5001	PDQ	
Direct Fit	STEELMAN Select	
Dynamic Pro-Select	TYC Sensor	
ECH / NAPA	U-Pro	





HELP

This feature is used to assist the user to troubleshoot TPMS issues.





Select the help topic.





To continue information texts.

TPMS	
Image: ServiceImage: Ser	OK = Continue C = Previous
HELP	
TPMS light stays "solid" after driving and successful transfer	ОК
TPMS light "flashing" after driving and successful transfer	= Continue
Letters "TPMS" on the dashboard are lit	C
Sensor not detected	
OBDII connection failure	= Previous
HELP	
TPMS light stays "solid" after driving and successful transfer	ОК
1- PRESSURE INCORRECT Ensure tiress press. matches vehicle spec	= Continue
with inflator. Compare by	
triggering sensors. 2 - TEMPERATURE INCORRECT	C
Trigger sensors to verify temperature.	Duraniana

= Previous

Follow instructions on the screen.

SENSOR

The tool works with most known aftermarket programmable sensors with the options to create the new sensor IDs and /or to duplicate sensor ID(s) from original sensor(s). This section focuses on other aftermarket sensors. For information about the REDI-Sensor.

See the "REDI" Section



1.1. SELECTION BY SENSOR MODEL







Scroll up and down to select a brand.

SELECT SENSOR		
OE Alligator Sens.it BWD / STANDARD DILL 5001 Direct Fit Dynamic Pro-Select ECH / NAPA EZ-Sensor Schrader Intellisens	MAX T.O.T.A.L MOBILETRON Orange PDQ STEELMAN Select TYC Sensor U-Pro	OK = Continue C = Previous

Sensor Programming (Copy)

This section is to recover a sensor ID if the "old" sensor can be cloned.



Scroll Right and left to select the COPY option.



COPY





Position the sensor in front of the tool antenna to check the sensor.



TO TRIGGER THE SENSOR



ACURA/CSX/2008 READ SENSOR TRIGGER PROCESSING

Sensor data is displayed.

ACURA/CSX/2008



Sensor ID: ABC33623 Pressure: 34.6 PSI Temperature: 74°F

READ SENSOR

PRESS OK TO PROGRAM





Sensor Programming (Create)

This section is to create a Make-Model-Year specific sensor if the "old" sensor can't be cloned. The new sensor IDs are generated randomly by the tool and may not be the same as the original one. Perform TPMS reset (see section 2) is required when replacing new sensors.



Scroll Right and left to select the **CREATE** option.



ACURA/CSX/2008 Program Sensor



Position the sensor in front of the tool antenna to send ID to the new sensor.

PRESS 🐼 TO PROGRAM

ACURA/CSX/2008 PLEASE WAIT... UPLOADING...

Wait a few seconds.

The tool verifies that the ID uploaded.





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The sensor is created.

ACURA/CSX/2008

SENSOR

Sensor ID: ABC33623 Pressure: 0.00 PSI Temperature: 74°F

SUCCESSFUL TRANSFER

HISTORY

This feature is to list previous activity.

Select History







	HISTORY			
	Make/Model/Year	Date	Reset	OK
	ACURA/CSX/2008	3/1/20		
	BUICK/Regal/2014	2/28/20		= Continue
	FORD/Escape/2013	2/20/20		
	FORD/Mustang/2008	2/13/20		C
	CHEVROLET/Equinox/2015	1/13/20	OK	
	DODGE/Charger/2010	12/22/20v		= Previous
Select the vehicle to revisit.				

The screen of the selected vehicle with the last state of triggers appears.

It is possible to continue to trigger the vehicle from this screen.





the sensor.

SETTINGS



Select each settings function.



	LANGUAGE	Select displayed language among English, Cestina, Dansk, Deutsch, Español, Français, Italiano, Magyar, Nederlands, Norsk, Polski, Portugues, Romã Nä, Suomi, and more.
(refer	UNITS	Change the air pressure, temperature, and tread display (kPa, Bar or PSI with F° or C°). Tread: (32nds or mm)
HEX DEC	FORMAT	Change the format of sensor ID display. (Hexadecimal or Decimal)
	BUZZER	Turn sound and buzzer to ON or OFF
	AUTO OFF	Time to turn off the device automatically after not being operated. (1 minute – Never)
	REGION	To select the area of work, AMERICA, EUROPE, JAPAN, KOREA, or RUSSIA.
(<i>i</i>)	ABOUT	View Tool information such as Serial Number, Software Version, Subscription status, and more.
	UPDATE/WIFI	Set up the local WiFi Network and update the tool wirelessly via WiFi Connection

WiFi Setup/ WiFi Update

Set up the local WiFi Network and update the tool wirelessly via WiFi Connection





Select WiFi.



The tool will display all WiFi information. To set up a new network, select "WiFi Activated" and change the option to "YES"



The tool will scan for all available networks, select your preferred network with OK



The tool will begin connecting to the network. Once connected, the tool will say "**CONNECTED**" once complete. You are now ready to update the tool.



	WIFI SETTINGS	
WIFI ACTIVATED SSID PASWORD	: YES : WIFINET 1 : *****	
WIFI STATUS	: CONNECTED	
SCAN TO CHANGE NETWORK		

Updating the Tool via a WiFi connection

Ensure the tool is connected to a local WiFi connection before performing this process. *See WiFi Setup section on pg. 33*



1. In Settings, Go to WiFi/Update

2. Select Update



3. Select the check mark icon to begin the update process

•The tool will begin updating. **DO NOT** turn off the tool during the update process.*



ter approximately 30 - 45 minutes the tool wi confirm that it is up-to-date.

OK

SUPPORT

View important support information and operating hours



Example of support page:

SUPPORT

TECH SUPPORT 800-265-1818 techsupport-us@continental.com

HOURS OF OPERATION (EST) Mon - Fri 8am - 8pm

www.autodiagnostpms.com

TIRE TREAD

This feature allows by using the gauge tool option to measure the tread depth tire.





If the **Tire Tread Depth Gauge** is not plugged in, the tool will prompt you to plug it in.



Check for the green light on the back of the **Tire Tread Depth Gauge**.

The **label** icon appears in the header.





Once plugged in, the tool prompts to select the number of wheels.

	TIRE TREAD DEPTH	
	4 WHEELS	
	5 WHEELS	
	6 WHEELS	OK
	7 WHEELS	OK
		= Continue
		- Continue
		e
е		= Previous

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The tool is ready for depth measurements.





To scroll wheels.





Press the button on the back of the **Tire Tread Depth Gauge** to start the depth measurement.



Follow the instructions displayed on the screen for all the wheels.







1.WAITING OUTER / CENTER / INNER 2.MEASURE PROCESSING 3.RELEASE



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At each wheel, press the button on the back of the **Tire Tread Depth** Gauge to start the tread depth measurement



Once all the wheels are measured, all the depth measures are displayed.

Results are color coded

- GREEN = Good
- YELLOW = Worn
- RED = Needs Replacing





Tire tread depth results can be recovered from "History". Refer to page 31.

MISCELLANEOUS

1. CHARGE

Low Battery Indication

The tool incorporates a low battery detection circuit. Battery life provides an average of 800 sensor tests per charge (approximately 160 to 200 vehicles) **Battery indicator status:**



When 0% is flashing the tool will turn off after 10 seconds.



The battery is charging.

The battery has an issue, please contact after sales service.

DO NOT use the tool with low battery status (0-25%) because the transmission and emission may not be reliable.

When charging, the battery light is red and becomes green when the battery is fully charged.





> Directly plug the charger to the tool and plug the supply in an appropriate outlet.

Battery replacement

It's recommended to return the tool to the factory for battery replacement.

2. TROUBLESHOOTING

If the **TPMS TOOL** is unable to trigger one or more of the sensors, using either electronic or magnetic activation, please use the following troubleshooting guide:

- 1. 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.
- 2. The sensor, module or ECU itself may be damaged or defective.
- 3. The sensor may be the type that periodically triggers on its own and is not designed to respond to a triggering frequency.
- 4. Your TPMS TOOL may require a software upgrade.
- 5. Check "Auto Off" time settings for screen display.
- 6. Your TPMS TOOL is damaged or defective.

3. UPDATING

Update via Autodiagnos TPMS Update Manager PCSoftware

- 1. Connect the TPMS tool to the USB port and power the tool ON.
- 2. Insert the CD, supplied with your tool, into the PC drive and click on the Autodiagnos[™] TPMS Update Manager icon to start the program.
- 3. A screen will appear that says, "Welcome to the Install Shield Wizard for Autodiagnos™ TPMS Update Manager." Click "Next >"
- 4. A window will appear to choose destination location, click "Next >"
- 5. Follow instructions until the window with the "Finish" button appears.
- 6. Click "Finish" when the Autodiagnos TPMS Update Manager installation is complete.
- 7. Note: To order annual update software part number, please contact your point of same for availability and pricing.

USB UPDATING

Before updating by USB, ensure that the battery is fully charged.

- 1. Connect the USB cable from the **TPMS TOOL** to the **PC**. Turn the device on.
- 2. Start the Autodiagnos TPMS Update Manager software.
- 3. A screen will appear indicating "Update Device".

You can also print "**Valve IDs**" from here as well. Press "**Yes**" to update to the latest software version. An update will take several minutes to complete. The status bar on the display will indicate the percentage of update completed.

Warning!

Do not disconnect the TPMS TOOL from the PC or turn off your computer during the update process. This may result in serious damage to the tool.

1. SAFETY BATTERY AND CHARGE INFORMATION

You must read and understand all safety instructions and warnings in this manual before using or charging your tool containing lithium polymer batteries.

Operating environment

Remember to follow any special current regulations any area, and always switch off your device when its use is prohibited or when it may cause interference or danger.

Use the device only in its normal operating positions.

Your device and other kitted parts may contain small parts. Keep them out of the reach of small children.

About Charging

Use only the charger supplied with your device. Use of another type of charger will result in malfunction and/or danger. Use of an approved charger will void the tool warranty

When the red LED turns off, the charge is complete.

About the Charger

Do not use the charger in a high moisture environment. Never touch the charger when your hands or feet are wet.

Allow ventilation around the charger when using it. Do not cover the charger with paper or other objects that will reduce cooling. Do not use the charger while it is inside a carrying case.

Connect the charger to a proper power source. The voltage requirements are found on the product case and/or packaging.

Do not use the charger if the charger and/or wires have become damaged. Do not attempt to service the charger unit. There are no serviceable parts inside. Replace the unit if it is damaged or exposed to excess moisture.

This charger is not a toy and should not be used by children or infirmed persons without proper training or supervision.

Do not use it as a power source for anything other than the TPMS tool that the charger is kitted with. Unplug the charger before attempting to clean it.

About the Battery

CAUTION: This unit contains an end user non-serviceable internal Lithium Polymer battery. The battery can burst or explode from excessive heat or pressure, releasing hazardous chemicals. To reduce the risk of fire or burns, do not disassemble, crush, pierce or dispose of the battery or the tool in fire or water. Do not short circuit or short the contacts with a metal object.

Use the specified charger that came with the TPMS tool.

The tool must be returned to the factory for battery replacement.

Opening the tool or tampering with the seal placed on the tool, if broken will void the warranty

Safety for Lithium Polymer battery use

NEVER leave the battery unattended during the charging process. The device must not be placed on a flammable surface during charging. A ceramic platter or metal box are two examples of a suitable surface to charge the TPMS tool on.

Charge the Lithium Polymer battery **ONLY** with the charger provided.

NEVER use a Ni-MH (Nickel Metal Hydride) type battery charger to charge a Lithium Polymer battery.

NEVER charge the battery immediately after tool use and while the tool is still hot. Let the TPMS tool cool down to ambient temperature; no longer warm to the touch.

If you see some smoke or some liquid out of the tool, stop charging immediately. Disconnect the charger and place the tool in an isolated area for at least 15 minutes. **DO NOT USE THE TOOL AGAIN**, contact Technical Support for assistance

Keep a fire extinguisher suitable for electrical fires handy while charging the battery. In the unlikely event that the Lithium Polymer battery will

ignite, **DO NOT** use water to extinguish the fire. Use only a suitable fire extinguisher rated for electrical fires or some sand or fire extinguisher described above.

Dispose of Lithium Polymer batteries in accordance with local material disposal regulations. Do not dispose of Lithium Polymer battery in the trash.

The Lithium Polymer battery is not suitable for children under 14 years. Keep Lithium Polymer batteries out of reach of children.

To prevent leakage or other hazardous conditions, do not store the tool above **60°C** (140°F). Never leave the tool (inside a car for example) where temperatures could exceed **60°C** (140°F). Store the tool in a dry place to avoid contact with liquids. Only store the tool on a nonflammable, heat resistant, non-conductive surface, and away from all flammable materials or sources.

A Lithium Polymer battery should be stored with a minimum charge of **30%**. If you store completely discharged, it will quickly become unusable.

If you don't use the battery for a long time, you have to regularly charge the battery (every 6 months) to be over the minimum charge of **30%**.

If you don't follow these safety precautions, you may cause serious personal injury and damage to property; you may even cause a fire!

The **ATEQ** Company disclaims any responsibility for damage sustained in case of non-compliance with these safety instructions.

Using a Lithium Polymer battery has a high risk of fires and can cause serious damages to property and persons, the user agrees to accept the risk and responsibility.

The **ATEQ** Company couldn't control the proper use of the battery for each customer (charge, discharge, storage etc.); it cannot be held responsible for damage to persons and property.

2. RECYCLING





The crossed-out wheeled dustbin means that the product must be taken to separate collection at the product end-of life. This applies to your tool but also to any enhancements marked with this symbol. Do not dispose of these products as unsorted municipal waste. For further information, please contact **ATEQ**.

3. TECHNICAL SUPPORT

Continental's technical support team is available Monday – Friday 8:00 AM – 5:00 PM ET. When contacting the support team, be prepared to answer the following questions:

- What tool model is it? What is the tool's serial number?
- Is the internal software up to date? Updating your tool solves the majority of issues.
- If you are working on a vehicle, what car make, model and year are you servicing?
- What sensors are you using? Please note the brand and physical appearance of the sensors.

The technical support team may be reached at **800-265-1818** or by email during non-working hours at **techsupport-us@continental.com**

TIRE PRESSURE MONITORING TECHNICIAN GLOSSARY

Activate- A low frequency (LF wireless signal is sent through tool antenna to the sensor inside the tire. This allows technician to read tire pressure, id number, temp and battery status without driving the vehicle.

Aftermarket sensor-A replacement sensors supplied by local auto parts stores or tire suppliers. The sensor may not physically look like the OE sensor. Your tool has special programming software based on the specific sensor brand.

Auto relearn- Sensor id numbers are sent to the ecu after driving the vehicle for a specified time. Your tool will indicate the required driving time under service TPMS icon.

Battery life- Sensors have an internal lithium ion battery which cannot be replaced. Typical sensor battery life

Is somewhere between 5-10 years. Your tool will display "no sensor detected" on the screen if a sensor's battery has failed. A DTC may also be set in the TPM ECU.

Cloneable or Cloning- Used only by aftermarket sensor brands to copy the ID number and commonly skip the relearn procedure. Not recommended by OE vehicle manufacturers. Always relearn the TPM system when changing a sensor.

Cross talk- When the TPMS tool signal gets "confused" by another sensor signal. Example: you have replaced an old sensor, but it is in close proximity to the new sensor during your relearn. The old sensor should be removed from the service bay as it maybe transmitting different data and is being detected by the tool.

Delta pressure- A rapid change in tire pressure up or down used as an alternative method to LF activation. Refer to service manual as well as tool on screen instructions. Common on GM prior to 2009 and many European systems.

Diagnostic Trouble Code (DTC)- A diagnostic message indicating a system fault and faulted condition for an observed malfunction; OBDII compliant codes are typically displayed in an a five-character alphanumeric format.

Direct system- The most common design used by a majority of OEMs is 4 to 6 TPM sensors with valves mounted inside the tire. The pressure of the tire is measured by the sensor mounted inside, which communicates that information to the vehicle's internal computer via radio frequency (RF).

High line- Vehicle's fitted with low frequency (LF) transmitters near each wheel that force the TPMS sensors to transmit data to the vehicle. The vehicle dash will display tire pressure by wheel location. Also called an advanced system. Many luxury vehicles show pressure and temperature. Some vehicle manufacturers offer upgrade accessory options including high line. Example: 2015/2016 Toyota Camry is standard with a "low line" system, but an optional colored dash display will be a used in a high line system. Be sure to select the correct sensor(s) for the corresponding system when ordering replacement sensor(s).

Hybrid sensor-a type of programmable aftermarket sensor. The technician selects make/model and year and trigger activation with the TPMS tool within 1-3 seconds.

ID number- A specific decimal or hexadecimal numeric value assigned to each sensor at manufacturing. This number can also be given to programmable sensors via a TPMS tool. This allows ECU to "see" specific tire locations by each sensor for resetting or relearning the TPM system. In many cases the ID number is physically printed on sensor body, but it may not be easy to read. Your tool will display the sensor id number.

Indirect system- This system design does not have a physical sensor with a valve inside the tire. The system instead calculates low pressure from (ABS) anti-lock brake system wheel speed sensor data. Reset instructions are in your tool when air pressure is adjusted. However, a full function diagnostic scan tool with graphing is required to verify/diagnose abs wheel speed sensors.

Learn mode- In learn mode the vehicle's receiver and ECU are activated to pick up the wireless signals being transmitted from the sensor inside the tire (direct system). Your TPMS tool will show vehicle specific instructions such as using a key fob, cycling ignition switch, pressing brake pedal, etc. during learn mode. A spare tire may have a functioning sensor and can be included in learn mode.

Low line-system - A low line system does not show pressure by wheel location – just a symbol indicating that pressure is low on one of the tires. Low line sensors should not be used on high systems. Example: Hyundai Genesis Coupes use Low line systems, but Genesis Sedans use hi line systems.

Malfunction Indicator Lamp (MIL)- A warning lamp that illuminates on the vehicle's dash when the TPM system has detected a TPM system issue. A solid light indicates pressure lower than the OE vehicle manufacturer recommends. A relearn or reset is required to turn the light off. A flashing warning lamp indicate component issues.

Multi-application sensor- Aftermarket sensors that are pre-programmed with a variety of manufacturer protocols on the sensor chip. Follow OE, make, model and year relearn procedures when installing these sensors.

OBDII TPMS- using a stand-alone TPMS tool or diagnostic scan tool capture ID numbers to transmit to the vehicle ECU via the OBDII interface and data link connector. These systems are common on Japanese and Korean models and can be used on select domestic vehicles to also put vehicle into learn mode.

OE sensors-pre-programmed with single software protocol.

Placard- A decal on inside of the vehicle driver's door with factory recommended air pressure and tire size specification. Required by TREAD Act for all manufacturers as of 2007

Programmable sensor- A "blank" TPM sensor supplied by aftermarket parts companies. A technician must program the correct make, model and year software protocol using the TPMS tool. Instructions to create an ID or copy an ID will be shown on the tool.

Protocol- The specific OE software inside the sensor chip that is required to match the manufacturer make, model and year.

Radio frequency (RF)- The radio wave specified by FCC for car manufacturers tire pressure monitoring systems in North America. Service and parts catalogs will indicate 314.9,315, 433.92, or 434 MHz These values may also be printed on sensor body. Your TPMS tool will also show the system/sensor frequency in MHz

Rolling Mode- An electronic mode utilized by TPMS sensors when the vehicle is in motion (defined by a minimum speed). This is the active mode for regular sensor transmission. Sensor transmission frequency during this mode can vary by manufacturer, but is generally every 60 seconds.

Service Kits-A kit of TPMS valve components such as gaskets, grommets, seals, valve cores, screws and caps that need to be serviced during tire changes. Remember, the valve is important to ensuring tire pressure is maintained for safety and fuel economy.

Sleep Mode- Sensor battery life is conserved during periods of time vehicles are not being used. Example: shipment to the new car dealer. The sensor will enter a state of which no information or data is transferred to the vehicle. This may vary by manufacturer and another term is storage mode. Stationary Relearn Mode- A mode when the vehicle is not being driven. Example: a vehicle is in your service bay overnight. The transmission of sensor information has been reduced to save battery life. Not every OE uses the same method.

TREAD act-THE US Federal law that mandated all vehicles under 10,000 pounds be have a TPM system beginning in 2007. Many vehicles prior to 2007 are equipped with TPM systems.

Trigger Tool- A generic term used for any hand-held tool with or without a display to activate a direct RPM sensor by a low frequency (LF) wireless signal; also called an activation or exciter tool. **Universal Sensor**- An aftermarket parts term used to describe a sensor that can work on more than a

single make/model and year.

Vehicle Programming- A term sometimes used in place of term "relearn" or "reset the light". **Vehicle Relearning**- The steps performed and shown on the TPMS tool for the technician to follow when adjusting tire pressure, rotating tires or replacing a TPM sensor. Relearns fall into three types: auto relearn, stationary or OBDII

Wireless Auto Locate (WAL)- WAL systems show pressure by tire location. Aftermarket sensor suppliers often list a second part number to cover WAL applications. WAL are used on - Chryslers, Jeeps and Mercedes vehicles where Schrader is the OEM supplier. Using incorrect part number can result in TPMS warning lamps turning on even when tire pressure is correct.