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CDWTPS reserves the right to make changes at any time without notice.

Visit our website at <u>www.cdwtps.com</u> For Technical Assistance, send us email at support@cdwtps.com



# **One-Year Limited Warranty**

Subject to the conditions of this limited warranty, Wenzhou Chedunwang Electronic Technology Co., Ltd. ("CDWTPS") warrants its customer that this product is free of defects in material and workmanship at the time of its original purchase for a subsequent period of one (1) year.

In the event this product fails to operate under normal use, during the warranty period, due to defects in materials and workmanship, CDWTPS will, at its sole option, either repair or replace the product in accordance with the terms and conditions stipulated herein.

#### Terms and Conditions

1 If CDWTPS repairs or replaces the product, the repaired or replaced product shall be warranted for the remaining time of the original warranty period. No charge will be made to the customer for replacement parts or labor charges incurred by CDWTPS in repairing or replacing the defective parts.

2 The customer shall have no coverage or benefits under this limited warranty if any of the following conditions are applicable:

a) The product has been subjected to abnormal use, abnormal conditions, improper storage, exposure to moisture or dampness, unauthorized modifications, unauthorized repair, misuse, neglect, abuse, accident, alteration, improper installation, or other acts which are not the fault of CDWTPS, including damage caused by shipping.

b) The Product has been damaged from external causes such as collision with an object, or from fire, flooding, sand, dirt, windstorm, lightning, earthquake or damage from exposure to weather conditions, an Act of God, or battery leakage, theft, blown fuse, improper use of any electrical source, or the product was used in combination or connection with other product, attachments, supplies or consumables not manufactured or distributed by CDWTPS.

3 The customer shall bear the cost of shipping the product to CDWTPS. And CDWTPS shall bear the cost of shipping the product back to the customer after the completion of service under this limited warranty.

4 CDWTPS does not warrant uninterrupted or error-free operation of the product. If a problem develops during the limited warranty period, the consumer shall take the following step-by-step procedure:

a) The customer shall return the product to the place of purchase for repair or replacement processing, contact your local CDWTPS distributor or visit our website <u>www.cdwtps.com</u> to get further information.

b) The customer shall include a return address, daytime phone number and/or fax number, complete description of the problem and original invoice specifying date of purchase and serial number.

c) The customer will be billed for any parts or labor charges not covered by this limited warranty.

d) CDWTPS will repair the Product under the limited warranty within 30 days after receipt of the product. If CDWTPS cannot perform repairs covered under this limited warranty within 30 days, or after a reasonable number of attempts to repair the same defect, CDWTPS at its option, will provide a replacement product or refund the purchase price of the product less a reasonable amount for usage.

e) If the product is returned during the limited warranty period, but the problem with the product is not covered under the terms and conditions of this limited warranty, the customer will be notified and given an estimate of the charges the customer must pay to have the product repaired, with all shipping charges billed to the customer. If the estimate is refused, the product will be returned freight collect. If the product is returned after the expiration of the limited warranty period, CDWTPS' normal service policies shall apply and the customer will be responsible for all shipping charges.

5 ANY IMPLIED WARRANTY OF MERCHANTABILITY, OR FITNESS FOR A PARTICULAR PURPOSE OR USE, SHALL BE LIMITED TO THE DURATION OF THE FOREGOING LIMITED WRITTEN WARRANTY. OTHERWISE, THE FOREGOING LIMITED WARRANTY IS THE CONSUMER'S SOLE AND EXCLUSIVE REMEDY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. CDWTPS SHALL NOT BE LIABLE FOR SPECIAL, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES, INCLUDING BUT NOT LIMITED TO LOSS OF ANTICIPATED BENEFITS OR PROFITS, LOSS OF SAVINGS OR REVENUE, LOSS OF DATA, PUNITIVE DAMAGES, LOSS OF USE OF THE PRODUCT OR ANY ASSOCIATED EQUIPMENT, COST OF CAPITAL, COST OF ANY SUBSTITUTE EQUIPMENT OR FACILITIES, DOWNTIME, THE CLAIMS OF ANY THIRD PARTIES, INCLUDING CUSTOMERS, AND INJURY TO PROPERTY, RESULTING FROM THE PURCHASE OR USE OF THE PRODUCT OR ARISING FROM BREACH OF THE WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT TORT, OR ANY OTHER LEGAL OR EQUITABLE THEORY, EVEN IF CDWTPS KNEW OF THE LIKELIHOOD OF SUCH DAMAGES. CDWTPS SHALL NOT BE LIABLE FOR DELAY IN RENDERING SERVICE UNDER THE LIMITED WARRANTY, OR LOSS OF USE DURING THE PERIOD THAT THE PRODUCT IS BEING REPAIRED.

6 Some states do not allow limitation of how long an implied warranty lasts, so the one-year warranty limitation may not apply to you (the Consumer). Some states do not allow the exclusion or limitation of incidental and consequential damages, so certain of the above limitations or exclusions may not apply to you (the Consumer). This limited warranty gives the Consumer specific legal rights and the Consumer may also have other rights which vary from state to state.

# **Safety Information**

For your own safety and the safety of others, and to prevent damage to the equipment and vehicles, read this manual thoroughly before operating your TPMS trigger tool. The safety messages presented below and throughout this user's manual are reminders to the operator to exercise extreme care when using this device. Always refer to and follow safety messages and test procedures provided by vehicle manufacturer. Read, understand and follow all safety messages and instructions in this manual.

## Safety Message Conventions Used

We provide safety messages to help prevent personal injury and equipment damage. Below are signal words we used to indicate the hazard level in a condition.

#### A DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury to the operator or to bystanders.

#### A WARNING

Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury to the operator or to bystanders.

#### A CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in moderate or minor injury to the operator or to bystanders.

## **Important Safety Instructions**

And always use your TPMS Service Tool as described in the user's manual, and follow all safety messages.

#### A WARNING

- Do not route the test cable in a manner that would interfere with driving controls.
- Do not exceed voltage limits between inputs specified in this user's manual.
- Always wear ANSI approved goggles to protect your eyes from propelled objects as well as hot or caustic liquids.
- Fuel, oil vapors, hot steam, hot toxic exhaust gases, acid, refrigerant and other debris produced by a malfunction engine can cause serious injury or death. Do not use the TPMS Service Tool in areas where explosive vapor may collect, such as in below-ground pits, confined areas, or areas that are less than 18 inches (45 cm) above the floor.
- Do not smoke, strike a match, or cause a spark near the vehicle while testing and keep all sparks, heated items and open flames away from the battery and fuel / fuel vapors as they are highly flammable.
- Keep a dry chemical fire extinguisher suitable for gasoline, chemical and electrical fires in work area.
- Always be aware of rotating parts that move at high speed when an engine is running and keep a safe distance from these parts as well as other potentially moving objects to avoid serious injury.
- Do not touch engine components that get very hot when an engine is running to avoid severe burns.

- Block drive wheels before testing with engine running. Put the transmission in park (for automatic transmission) or neutral (for manual transmission). And never leave a running engine unattended.
- Do not wear jewelry or loose fitting clothing when working on engine.

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# 1 Using This Manual

We provide tool usage instructions in this manual. Below are the conventions we used in the manual.

# 1.1 Bold Text

Bold text is used to highlight selectable items such as buttons and menu options.

Example:

Press the ENTER button to select.

# 1.2 Symbols and Icons

## 1.2.1 Solid Spot

Operation tips and lists that apply to specific tool are introduced by a solid spot •.

Example:

When System Setup is selected, a menu that lists all available options displays. Menu options include:

- Languages
  - Unit
  - Beep
- Keypad Test
- LCD Test

## 1.2.2 Arrow Icon



An arrow icon indicates a procedure.

Example

To change menu language:

1. Scroll with the arrow keys to highlight Language on the menu.

2. Press the Yes button to select.

## 1.2.3 Note and Important Message

### Note

A NOTE provides helpful information such as additional explanations, tips, and comments.

Example:

### NOTE

Test results do not necessarily indicate a faulty component or system.

### Important

IMPORTANT indicates a situation which, if not avoided, may result in damage to the test equipment or vehicle.

Example:

#### IMPORTANT

Do not soak keypad as water might find its way into the TPMS Service Tool.

# **2** Introduction

## 2.1 About CDW-T100

CDW-T100 is a professional TPMS diagnostic and maintenance tool which is capable of activating and decoding universal TPMS Sensors, programming TPMS sensors and diagnosing the original car tire pressure monitoring system. It can provide a complete solution for the TPMS service segment of the automotive aftermarket.

### 2.1.1 Descriptions

This section illustrates external features, ports and connectors of the tool.





- 1 LCD Display Shows menus, test results and operation tips.
- 2 Function Keys / Shortcut keys three keys that correspond with "buttons" on some screens for executing special commands or provide quick access to most frequently used applications or functions.
- 3 No Key Cancels a selection (or action) from a menu or generally returns to previous screen.
- 4 Trigger Key Executes sensor trigger function.
- 5 HELP Key Displays help information.
- 6 Yes Key Confirms a selection (or action) from a menu.
- 7 Direction Keys select an option or scroll through a screen of data or text.
- 8 **Power Switch** Turns on/off the TPMS Service Tool and press and hold for 5 seconds for emergency reboots.
- 9 USB Port Provides a USB connection between the TPMS Service Tool and PC / laptop.
- 10 TF Card Port holds the TF memory card for data backup and software update.

#### IMPORTANT

Do not use solvents such as alcohol to clean keypad or display. Use a mild nonabrasive detergent and a soft cotton cloth.

#### 2.1.2 Accessories

This section lists the accessories that go with the TPMS Service Tool. If you find any of the

following items missing from your package, contact your local dealer for assistance.

- 1 **Programmable Sensor** for changing the original broken sensor.
- 2 OBDII Cable connecting with the vehicle to test OBDII function and TPMS system.
- 3 **USB Cable** provides connection between the TPMS Service Tool and a computer to upgrade the tool and charges the built-in battery.
- 4 Battery Charger charges built-in battery via wall plug.
- 5 Quick Start Guide provides brief operation instructions for the usage of the scanner.
- 6 User Manual Provides the detailed operation instructions for the usage of the scanner.
- 7 Warranty Card A warranty card is required if you need any repair or replacement from us.
- 8 **Card Reader** Refers to containing TF card as storage device to connect the computer for updates.
- 9 Carry Bag stores the TPMS Service Tool and its accessories.

### 2.1.3 Technical Specifications

Display: Backlight, 240\*320 TFT color display Working Temperature: -10 to 60 °C Storage Temperature: -20 to 70°C Power Supply: 3.7V/2200mAH Li-polymer battery, 3.3V USB power Dimensions (L\*W\*H): 200\*100\*38mm Gross Weight: 1.5kg Radio reception: 315 MHz and 433MHz

# **3 Getting Started**

This section describes how to provide power to the TPMS Service Tool. It provides a brief introduction of applications loaded on the TPMS Service Tool, an introduction of symbol and icons displayed on the screen and how to power on/off and charge the tool.

# 3.1 Power on/off the TPMS Service Tool

The CDW-T100 is powered on/off by pressing the power

switch. To power on/off the tool

- 1. Press the power switch to power on the tool, and the unit will display the Main Menu.
- Hold the power switch for one 1 seconds and the release to power down the CDW-T100. The tool powers down automatically after a period of inactivity. Please refer to 8.6 Auto Power-off Interval for details.

# 3.2 Charging the TPMS Service Tool

The CDW-T100 is shipped with fully charged battery, but due to self-drain it may require charging, it is recommended to charge the tool over 3 hours before first use.

The unit charges on any of the following sources

5-volt wall plug

• USB connection to personal computer

#### IMPORTANT

Use the battery charger or USB cable included in the CDW-T100 tool kit ONLY. The use of un-approved power supplies may damage the tool and will void the tool warranty.

## 3.2.1 Charging via Wall Plug

To charge via wall plug

- 1. Find the power port at left side of the tool.
- 2. Connect the tool to power source with the battery charger provided.

### 3.2.2 Charging via Personal Computer with USB Cable

The TPMS Service Tool can also be charged through the USB port.

To charge via USB cable

1.Insert the small end of the USB cable to the USB port at the right side of the TPMS Service Tool and the large end to a computer.

# 3.3 Application Overview

When the TPMS Service Tool boots up, the Main Menu displays. This screen shows all applications loaded on the unit.

The following applications are preloaded into the TPMS Service Tool

- OBDII leads to OBDII screens for all 9 generic OBD system tests.
- **TPMS** leads to screens for TPM sensor activation, programming, TPMS Diagnose and sensor learning process.
- RKE&RF leads to screens for checking RF Remote Keyless Entry (key FOB).
- Latest Test leads to screens for access the last tested sensor data.
- Settings leads to screens for adjusting default settings to meet your own preference.
- Data Manager leads to screens for access to data records.
- Update leads to screen for updating the scanner.



Figure 3-1 Sample Home Screen

# 3.4 Tool Symbols and Icons

This section provides a brief introduction of symbols and icons of tool display.

No.	Indicator	Description
1	B	Indicates internal battery volume.
2	(11-	Indicates the TPMS tool is sending signals to the tire sensor for activation and test.
3	+	Indicates battery charging.

# 4 OBD II

OBD II menu lets you access all OBD service modes. According to ISO 9141-2, ISO 14230-4, and SAE J1850 standards, the OBD application is divided into several sub programs, called 'Service \$xx'. Below is a list of OBD diagnostic services:

- Service \$01 request current powertrain diagnostic data
- Service \$02 request powertrain freeze frame data
- Service \$03 request emission-related diagnostic trouble codes
- Service \$04 clear/reset emission-related diagnostic information
- Service \$05 request oxygen sensor monitoring test results
- Service \$06 request on-board monitoring test results for specific monitored systems
- Service \$07 request emission-related diagnostic trouble codes detected during current or last completed driving cycle
- Service \$08 request control of on-board system, test or component
- Service \$09 request Vehicle Information

When OBD II application is selected from Home screen, the scanner starts to detect the communication protocol automatically. Once the connection has established, a menu that lists all of the tests available on the identified vehicle displays. Menu options typically include:

- System Status
- Read Codes
- Freeze Frame Data
- Clear Codes
- Live Data
- I/M Readiness
- O2 Sensor Test
- On-board Monitor Test
- Component Test
- Vehicle Information
- Modules Present
- Code Lookup

#### NOTE

Not all function options listed above are applicable to all vehicles. Available options may vary by the year, model, and make of the test vehicle. A "Not supported the mode!" message displays if the option is not applicable to the vehicle under test.

# **5 TPMS Operations**

This section illustrates how to use the TPMS Service Tool including how to activate & decode TPM sensor data, how to do TPMS diagnosis and how to program OEM sensors etc.



To test the TPMS:

- 1. Choose Settings--Area from the Main Menu and select the area you work.
- 2. Highlight TPMS from the Main Menu and press the YES key to start.



Figure 5-1 Sample Application Menu

On each screen that appears, select the correct option and then press the YES key. Do this until the complete vehicle information is entered.

-	Salest Veto	80 TI	- ant	
Conset.	9,00		Contract 2000	1000
heat	Collins .	455	cts:	1 <b>1000</b>
	Owner .	ATT Dave	301401 (2100 10:00084 (2100122)	105A Carthie: VT0 2014(11-2009/13) 2/
	Onate	Arsia	2010/00/001011/LinitAntypiper/decidedates	TTAKE Darrow Automs
	the last	478.0	2014/01-2010/1200284eg	Server Lawrence Management
	- maint	8.4	Access to real success at leaving	
		- 278	state and (server)	
		100	STREET: UNIVERSITY SHARES	
			anorthi adoritati mtakaia	

Figure 5-2 Sample Vehicle Selection Menu

#### NOTE

The selected vehicle is remembered by the tool when a test is started. It is very convenient for workshops to trigger TPM sensors of the same vehicle.

## 5.1 TPMS Sensor Activate

It enters all wheel mode which provides a vehicle icon on the screen to give user prompts for each wheel. In this mode, each TPM has wheel locations of LF (Left Front), RF (Right Front), RR (Right Rear), LR (Left Rear) and spare (if the car has a spare tire).

1. In all wheel mode, the solid spot flashes at the wheel to be tested. Depending on the sensor type, place the tool to the correct position to insure sensor activation and decode. Below is a chart illustrating how to correctly place the tool.

No.	Sensor Type	Illustration	Description
	LF Activated Sensors		The tool should be placed alongside the valve stem.
1	Ford branded LF Activated Sensors		The tool should be held 180°away from the valve stem.
2	Magnet Activated Sensors		If the TPM requires a magnet, place the magnet over the stem and then place the tool alongside the stem
3	Delta Y activated sensors	Table 5-1	If the sensor requires tire deflation (of the order of 10PSI), the icon Y will appear on screen. Please deflate the tire and place the tool alongside the stem

Table 5-1

2. Press Activate to test the TPM. If test passes, TPM data is briefly displayed for 3 seconds and then the solid spot on the vehicle icon moves around to prompt that the next wheel should be tested. Or manually move around vehicle using UP/DOWN arrow keys.

	10	001856E4 H
	۳	240Kpa
	. 1	84.0/F
	80	Normal
-	Fring	315562

Figure 5-5 Sample All Wheel Test Data Screen

- TPM data is stored and can be accessed by selecting a wheel location and press the YES key.
  Depending on test results, one of the following possible scenarios may display.

No.	Sensor Type	Illustration	Description
-----	-------------	--------------	-------------

1	Successful Sensor Read		TPMS sensor was successfully activated and decoded. The CDW-T100 emits a series of tones and displays pressure at wheel location.
2	Failed Sensor Read	8 =	The search period expires without reading a TPM. The CDW-T100 emits a single audible beep and displays "No sensor detected." Repeat the test process to verify.
3	Duplicate ID	8. ===	A sensor with a duplicate ID has been read. The CDW-T100 emits three audible beep and displays "Sensor ID duplicate." Clear data and re-read sensors.
Table 5-2			

#### NOTE

Operator can press the **NO** key to abort the sensor activation and return to previous menu at any time.

## 5.2 TPMS Diagnose

The TPMS Diagnose function lets users retrieve/clear TPMS DTCs, read live data and perform special functions, helping technicians to quickly find out faulty TPMS and turn off MILs.

### 5.2.1 Read Sensor ID

- To Read Sensor ID
  - 1. Select TPMS--Diagnose from the available Menu.
  - 2. Choose Read ID after the tool communicate with the car successfully.

Diagnosis	
Sensor ID	-
ECU Information	
Read Codes	
Clear Codes	
Live Data	
OBD Releam	
Service Function	

Figure 5-6 Sample Sensor ID Menu

 The sensor ID information will be displayed. Press F2 button to save the sensor ID or F1 or N button to exit.

Sensor ID 🚥		
Tyres	OBD	
Front left tire ID	83670C10	
ID	836717F4	
Rear right tire ID	834C4511	
Rear left lire ID	8728A631	
Spare tre ID		
OK(F1)	Save(F2)	

Figure 5-7 Sample Sensor ID Screen

## 5.2.2 Read Version Information

To Read Version Information

- 1. Select **TPMS--Diagnose** from the available Menu.
- 2. Choose Read Version Information after the tool communicate with car successfully.

	Diagnosis	
Sensor ID		
ECU Informati	ion .	
Read Codes		
Clear Codes		
Live Data		
OBD Releam		
Service Funct	ion	

Figure 5-8 Sample ECU Information Menu

3.The version information will be displayed. Press  ${\bf F2}$  button to save the version information or  ${\bf F1}$  or  ${\bf N}$  button to exit.

ECU Information		
Diagnostic Variant	42	
Diagnostic Version	09	
Active Diagnostic Session	1	
ECU Software Mode	Running in Application	
Hardware part number	91333201 AA	
OK(F1)	Save(F2)	

Figure 5-9 Sample ECU Information Screen

## 5.2.3 Read Codes

▶ To Read Codes

- 1. Select TPMS--Diagnose from the available Menu.
- 2. Choose Read Codes after the tool communicate with the car successfully.

Diagnosis	
Sensor ID	
ECU Information	
Reat Codes	
Clear Codes	
Live Data	
OBD Releam	
Service Function	

Figure 5-10 Sample Read Codes Menu

3. The fault codes will be displayed if have. Press F1 button to save the fault codes or F3 or N button to exit.

ID .	Status	Description
U010300	Stored	Lost Communication With Electric Gear Shift Module-
		ve(F1)

### 5.2.4 Erase Codes

To Erase Codes

- 1. Select **TPMS--Diagnose** from the available Menu.
- 2. Choose Erase Codes after the tool communicate with the car successfully.

Diagnosis	
Sensor ID	
ECU Information	
Read Codes	
Clear Codes	
Live Data	
OBD Relearn	
Service Function	

Figure 5-12 Sample Clear Codes Menu

3. There will be a notice displayed. Press F3 button to continue the operation or F1 or N button to exit.

Clear (	Codës 🗰
OTCs and freeze d	ata wil he cleared!
Are you sure	
No(F1)	Yes(F2)

Figure 5-13 Sample Clear Codes Screen

### 5.2.5 Live Data

To check Live Data

1. Select **TPMS--Diagnose** from the available menu.

2. Choose Live Data after the tool communicate with the car successfully.

-

Figure 5-14 Sample Live Data Menu

3.The live data will be displayed. Press F1 button to Pause, F2 button to enter graph screen, F3 button to Save or N button to exit.

Live Data		
Name	Value	Unit
ECU Status	Normal Mode	V
Battery voltage	13.6	PSI
Left Front Tire	35	
Altitude		
Compensated		
Pressure		
Pause(F1)	Graph(F2)	Save(F3)

Figure 5-15 Sample Live Data Screen

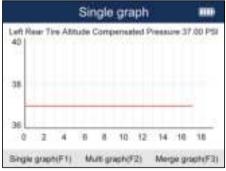


Figure 5-16 Sample Single Graph Screen

### 5.2.6 OBD Learning

To enter OBD Learning

1.Select TPMS--Diagnose from the available Menu.

2. Choose OBD Learning after the tool communicate with the car successfully.

	Diagnosis	
Sensor ID		
ECU Information		
Read Codes		
Clear Codes		
Live Data		
OBD Relearn		
Service Function		

Figure 5-17 Sample OBD Relearn Menu

3. The screen will show as Figure 4 if all sensors are activated. If not, you need to input sensor ID manually and press F1 button to continue the operation.

OBD F	Relearn 🏢	ř.
Disasa maka mus al	l unur unbielo sussess	
감독 같은 것은 것은 것이 없었다.	I your vehicle sensors You have 5 sensor(s)	
가슴 옷에 많아 좀 안 가지 않는다.	you want to enter	
the sensor l	ID manually?	
No(F1)	Yes(F3)	

Figure 5-18 Sample OBD Relearn Screen

4.If learning successfully, please re-activate the sensors and sensor pressure information will be displayed on the cluster. If failed, the cluster will not display the sensor pressure information and the TPMS MILs will turn on.

OBD Relearn 🚥		
Front left tire ID	33670C10	
Front right tire ID	836717F4	
Rear right tire ID	834C4511	
Rear left tire ID	8728A631	
Spare tire ID		
OK(F1)	Edit(F3)	

Figure 5-19 Sample OBD Relearn Screen

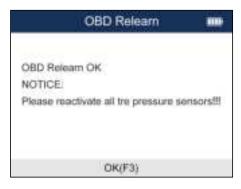


Figure 5-20 Sample OBD Relearn Screen

### 5.2.7 Service Function

To enter Service Function

1.Select TPMS--Diagnose from the available Menu.

2. Choose Service Function after the tool communicate with the car successfully.

	Diagnosis	
Sensor ID		
ECU Information	1	
Read Codes		
Clear Codes		
Live Data		
OBD Releam		
Service Function	ų.	1

Figure 5-21 Sample Service Function Screen

3.Choose the available function and follow the instructions on the tool to continue the operation.

# 5.3 TPMS Sensor Programming

The TPMS Programming function lets users to program the sensor data to the CDWTPS sensors and replace faulty sensor. There are following four options available when doing programming.

- Manual Create
- Copy By Activation
- Automatic Create
- Copy By OBD

### 5.3.1 Manual Create

The Manual Create function lets users to input the sensor ID manually.



To create sensor ID manually:

- 1. Highlight **TPMS** from the Main Menu and select the vehicle model as need.
- 2. Select **Programming--Manual Create** from the available menu.



Figure 5-22 Sample Programming Menu

3. Input the sensor ID in the dialog box and press **Y** to continue.

0	1	2	3	.4
5	6	7	8	9
A	8	С	DEC	HEY
D	E	F:	DEC	nev

Figure 5-23 Sample Manual Create Screen

4. Place a new CDWTPS sensor near the TPMS tool (around 0-20 cm).

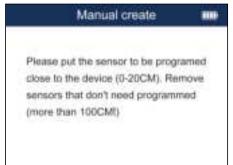


Figure 5-24 Sample Manual Create Screen

- 5. Press F3 to start the programming when the tool detect the sensor.
- 6. Press F1 to exit after the programming successfully.



Figure 5-25 Sample Programming Screen

### 5.3.2 Clone By Activation

The Clone By Activation function lets users automatically write in the retrieved original sensor data to the CDWTPS Sensor which is used after the original sensor is triggered.

To Clone by activation:

- 1. Highlight **TPMS** from the Main Menu and select the vehicle model as need.
- 2. Select Programming--Clone by Activation from the available menu.
- 3. Place the tool near the original sensor to be copied and press Activate to continue.
- 4. After trigger successfully, press Y to continue.

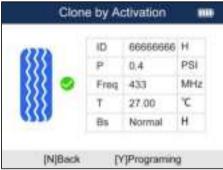
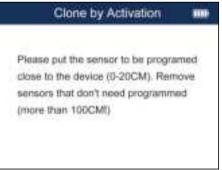


Figure 5-25 Sample Activation Screen

5. Place a new CDWTPS sensor near the TPMS tool (around 0-20 cm).



23 CDW-T100 TPMS Service Tool

#### Figure 5-26 Sample Activation Screen

- 6. Press F3 to start the programming when the tool detect the sensor.
- 7. Press F1 to exit after the programming successfully.



Figure 5-27 Sample Activation Screen

### 5.3.3 Automatic Create (1-4 sensors)

The Automatic Create function is to program CDWTPS sensors by applying random IDs created according to the test vehicle when it is unable to obtain the original sensor ID.

To create sensor ID automatically:

- 1. Highlight **TPMS** from the Main Menu and select the vehicle model as need.
- 2. Select Programming--Automatic Create from the available menu.

Programming	-
Manual create	
Clone by Activation	
Automatic create(1-4)	1
Clone by OBD	

Figure 5-28 Sample Automatic Create Menu

3. Place new CDWTPS sensors(1-4) near the TPMS tool (around 0-20 cm).

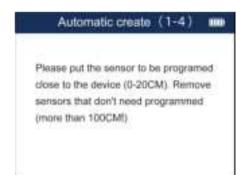


Figure 5-29 Sample Automatic Create Screen 4. Press F3 to start the programming when the tool detect the sensor.



Figure 5-30 Sample Sensor Detection Screen

8. Press **F1** to exit after the programming successfully.



Figure 5-31 Sample Programming Success Screen

### 5.3.4 Clone By OBD

This function lets users to write in the saved sensor information to CDWTPS sensors after performing Read IDs from Vehicle in Learning function.



To create sensor ID manually:

1. Highlight **TPMS** from the Main Menu and select the vehicle model as need.

2.Select Programming--Clone by OBD from the available menu.

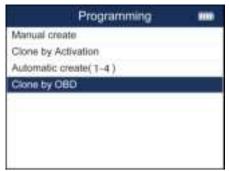


Figure 5-32 Sample Clone by OBD Menu

- 3. Connect the TPMS tool with the vehicle via OBDII cable and turn the ignition on.
- 4. Select the sensor ID to be copied after reading ID information successfully and press Y to continue.



Figure 5-33 Sample ID Copy Screen

5. Place a new CDWTPS sensor near the TPMS tool (around 0-20 cm).

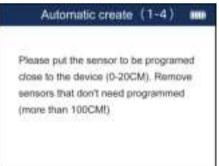


Figure 5-33 Sample Programming Screen

- 6. Press F3 to start the programming when the tool detect the sensor.
- 7. Press F1 to exit after the programming successfully.

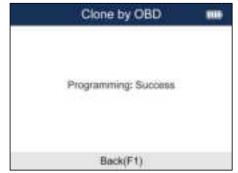


Figure 5-34 Sample Programming Success Screen

## 5.4 Study Help

This part introduces the relevant information of the sensor, such as manufacturer, sensor frequency, OE number, learning type, learning method and learning steps etc.

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To check Sensor Learning Process:

- 1. Scroll with the UP/DOWN arrow keys to highlight **TPMS** from the Main Menu and press the **YES** key to start.
- 2. On each screen that appears, select the correct option and then press the **YES** key. Do this until the complete vehicle information is entered.
- Scroll with the UP/DOWN arrow keys to highlight Sensor Learning Process and press the YES key to confirm.
- 4. The detailed process information will be displayed.

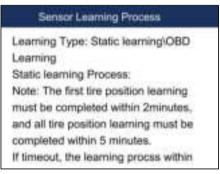


Figure 5-35 Sample Sensor Learning Process Screen

# 6 RKE & RF Monitor

This section illustrates how to check RF Remote Keyless Entry (key FOB) with the trigger tool. The CDW-T100 tests 315MHz and 433MHz key fobs only, and checks only for a signal present.

To test the check RF Remote Keyless Entry:

1. Scroll with the UP/DOWN arrow keys to highlight RKE & RF Monitor from the Main Menu and press the **YES** key to start.



Figure 6-1 Sample Application Menu

2. Hold the Key Fob close to the tool, and press the function buttons on the FOB. If the button works and the FOB is sending a signal, the tool will beep and the following screen displays.

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		0	%		

Figure 6-2 Sample RKE& RF Monitor Screen

3. Press the NO key to exit.

# 7 Latest Test

Latest Test leads to screens for historic test records and can save 25 records at most.

- To test the TPM sensors:
  - Scroll with the UP/DOWN arrow keys to highlight Latest Test from the Main Menu and press the YES key to start.



Figure 7-1 Sample Latest Test Screen

28 CDW-T100 TPMS Service Tool Scroll with the UP/DOWN arrow keys to choose one test record from the history diagnostic records and press the YES key to start.



Figure 7-2 Sample Vehicle Record Screen

3. Choose the function you need to start the operation.

# 8 Settings

This section illustrates how to program the TPMS Service Tool to meet your specific needs.

When Setup application is selected, a menu with available service options displays. Menu options typically include

- Language
- About
- Keypad Test
- Beep Set
- Display Test
- Automatic Power-off
- ID Format
- Pressure Unit
- Temperature Unit
- Unit
- Area

### 8.1 Language

Selecting Language opens a screen that allows you to choose system language. The TPMS Service Tool is set to display English menus by default.

To configure system language

1. Scroll with the **UP/DOWN** arrow keys to highlight **Language** from Setup menu and press the **YES** key.



#### Figure 8-1 Sample Language Setup Screen

2. Press the UP/DOWN arrow key select a language and press the YES key to confirm and return.



Figure 8-2 Sample Language Selection Screen

## 8.2 About

Selecting **About** option opens a screen that shows information about your scan tool, such as serial number, which may be required for product registration.

- To view information of your scan tool:
  - 1. Scroll with the arrow keys to highlight About from Settings menu and press the ENTER key.
  - 2. A screen with detailed information of the scanner displays.

5		
Tyres	OBD	
Front left tire ID	B3670C10	
Front right tire ID	B36717F4	
Rear right tire ID	834C4511	
Rear left lire ID	8728A631	
Spare tre ID		
OK(F1)	Save(F	52)

Figure 8-3 Sample Tool Information Screen

3. Press the **Back** key to exit.

## 8.3 Keypad Test

Selecting Keypad Test option opens a screen that allows you to check the functionality of the keypad.

To test the keypad:

- 1. Scroll with the arrow keys to highlight Keypad Test from Settings menu and press ENTER key.
- 2. Press any key to start test. The virtue key corresponding with the key you pressed will be highlighted on the screen if it works correctly.

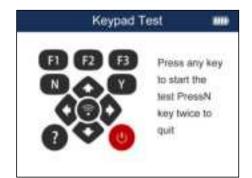


Figure 8-4 Sample Keypad Test Screen

3. To guit the test, press N key twice.

## 8.4 Beeper Set

Selecting Beep Set opens a dialog box that allows you to turn on/off the beeper.

To turn on/off the beeper

1. Scroll with the UP/DOWN arrow keys to highlight Beep Set from Settings menu and press the

YES key.

2. Press the UP/DOWN arrow key select an item and press the YES key to save and return.

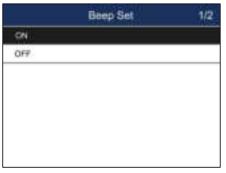


Figure 8-5 Sample Beeper On/Off Selection Screen

# 8.5 Display Test

Selecting Display Test option opens a screen that allows you to check the functionality of the display.

#### To test the display:

1. Scroll with the arrow keys to highlight Display Test from Settings menu and press the ENTER key to start test. Check if there are any missing spots in the LCD screen.



Figure 8-6 Sample LCD Test Screen

2. To quit the test, press the **Back** key.

## 8.6 Automatic Power-off Interval

Selecting Auto Power-off opens a dialog box that allows you to set automatic power-off interval of the trigger tool to save battery life. Auto power off is not operational when charging. The maximum interval is 20 minutes and the minimal is 1 minute.

To change auto power off interval:

- 1. Use the **UP/DOWN** arrow key to select **Auto Power-Off** from Settings screen and press the **YES** key to confirm.
- 2. Use the UP/DOWN key to increase or decrease time, and press the YES key to save and return.

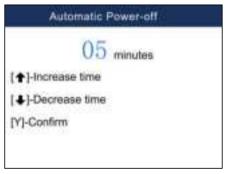


Figure 8-7 Sample Auto Power-off Interval Screen

# 8.7 ID Format

Selecting ID format opens a dialog box that allows you to set ID data to be displayed in hexadecimal or decimal format.

- ►
- To change the ID display format
- 1. Scroll with the arrow key to highlight ID Format from Setup menu and press the YES key.
- 2. Press the UP/DOWN arrow key select a format and press the YES key to save and return.



Figure 8-8 Sample ID Format Screen

## 8.8 Pressure Unit

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Selecting Pressure Unit opens a screen that allows you to set the pressure unit in kPa, PSI or bar.

- To configure pressure unit
  - 1. Scroll with the **UP/DOWN** arrow keys to highlight **Pressure Unit** from Setup menu and press the **YES** key.
  - 2. Press the UP/DOWN arrow key select an item and press the YES key to save and return.

	Pressure Unit	1/3
Kp#		
Pai		
Bar		

Figure 8-9 Sample Pressure Unit Selection Screen

## 8.9 Temperature Unit

Selecting Temperature Unit opens a screen that allows you to set the temperature unit Celsius or Fahrenheit degrees.



To configure temperature unit

1. Scroll with the **UP/DOWN** arrow keys to highlight **Temperature Unit** from Setup menu and press the **YES** key.

2. Press the UP/DOWN arrow key select an item and press the YES key to save and return.

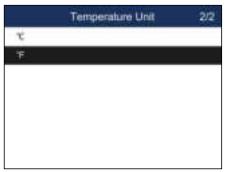


Figure 8-10 Sample Temperature Unit Selection Screen

## 8.10 Area

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Selecting Area opens a screen that allows you to select the area you work in.

- To configure area
- Scroll with the UP/DOWN arrow keys to highlight Area from Settings menu and press the YES key.

2. Highlight the area you work in before starting the test. And the tool will load the new database for the selected area.

	Area 🚥
Australia	D
America	
Europe	
Japan	
South Korea	
China	

Figure 8-11 Sample Area Selection Screen

# 9 Update

The scanner can be updated to keep you stay current with the latest development of diagnosis. This section illustrates how to register and update your scan tool.

To update your scanner, please follow the three steps as below:

- Step1: Obtain an CDWTPS ID.
- Step2: Register the product with the product serial number.
- Step3: Update the product by the update application CTPMS Centre.

# 9.1 Create a CDWTPS ID

### 9.1.1 PC Upgrade Software Registration

1. On the PC computer, open the CTPMS Centre software that has been downloaded and installed. Or find the CTPMS Centre software on the USB flash drive in the accessory and open it. Click the Register button to enter the account registration page.

2. Enter your E-mail account, then click Send Verification Code, find the verification code sent by the system in your E-mail letters, then enter the verification code and password. Click the Register button again, and the system will automatically complete your account registration.



Figure 9-1 registration

### 9.1.2 Product Activation

1. Find Product Serial Number

Find the serial number of this product on the label on the back of the device host. You can also find the serial number of the product in the device host, in the About menu in the Settings icon.

2. Login to the system and activate the product

#### Activation Method I.

Step 1: On your PC, open the CTPMS Centre software, go to the account login page, and then login to your account.



Figure 9-2 Login

Step 2: Click the Activate button, enter the product serial number and click Activate.

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Figure 9-3 Enter the serial number and click Activate

## 9.2 Upgrading

Before upgrading, make sure your PC is connected to the Internet and that you have created an account and activated the product.

1. Remove the TF card from the CDW-T100 device and connect it to your PC through a card reader.



2. On your computer, find the installed CTPMS Centre En program and double-click it to open it. Go to the account login page, enter your account number and password, and then click Login.



Figure 9-4 Login Account

3. In the left menu bar, click Download. The system will display the contents that can and need to be updated, click the "Update" button, the system will automatically upgrade the CDW-T100.

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•				
•				

Figure 9-5 Click to update

#### Batch update.

- 1. Select the check button in the Name column and check all the items that need to be updated.
- 2、Click the Update button.

#### Individual update.

- 1. Single select the check boxes in front of the items that need to be updated.
- 2. Click the Update button.

FCC Warning Statement: Changes or modifications to this unit 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.

## **FCC Radiation Exposure Statement**

The device has been evaluated to meet general RF exposure requirement. The device can be used in portable exposure condition without restriction.