



Orange Programmable Sensor System

www.orangetpmsusa.com

OPSS Generation 2



Rev. 2-2010



OPSS GEN. 2 MANUAL

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To ensure correct operation and service, read the following instructions before operating the OPSS Gen. 2 tool.

OPSS GENERATION 2 USE

The *Orange Programmable Sensor System, Generation 2* interacts with the tire pressure sensor through wireless (radio frequency) communication to:

- Retrieve data from the tire pressure sensor
- Verify the identities of each tire pressure sensor mounted on vehicle
- Assist a technician to reset TPMS on vehicle

OPSS INTRODUCTION





= 9 volt battery - install in back of tool prior to operation

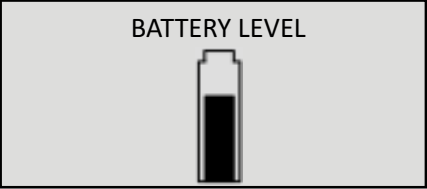
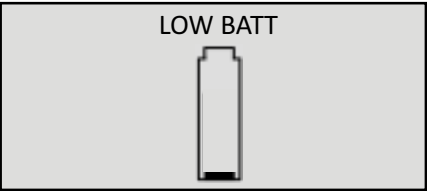


= USB Connection - to connect with computer to download software updates


POWER KEY

KEY	FUNCTION
	<p>1st Function: press the power key to power on the tool</p> <p>Second Function: press and hold power key after powering on to display battery status</p>


FIRST FUNCTION	
At power on, the tool displays the Orange Electronic logo.	
Then it displays the software revision number.	<p>OPSS Version 001-01</p>
Finally, the tool displays the vehicle selection menu.	<p>VEHICLE SELECTION > ACURA AUDI BENTLEY</p>

SECOND FUNCTION	
When the tool is powered on, press and hold the power key to display the battery level.	<p>BATTERY LEVEL</p> 
<p>If the battery power is low, "LOW BATT" will flash and the tool will turn off.</p> <p>Replace the 9V battery to restore power to tool.</p>	<p>LOW BATT</p> 

CANCEL KEY


KEY	FUNCTION
	<p>First Function: press and hold the cancel key (C) for 3 seconds to power off the tool</p> <p>Second Function: press the cancel key (C) to return to previous page without modifying a parameter</p>

TRANSMIT KEY


KEY	FUNCTION
	Starts the acquisition cycle for a sensor

<p>After selecting vehicle from “Vehicle Selection” on the main page and the screen indicates “(TEST) READ SENSOR,” press the transmit key to gather sensor information</p>	<div style="border: 1px solid black; padding: 5px; background-color: #f0f0f0;"> <p style="text-align: center; margin: 0;">HONDA</p> <p style="text-align: center; margin: 5px 0;">(C) RETURN TO MENU (TEST) READ SENSOR</p> </div>								
<p>After pressing the transmit key, the message “TRIGGER PROCESSING” is displayed</p>	<div style="border: 1px solid black; padding: 5px; background-color: #f0f0f0;"> <p style="text-align: center; margin: 0;">HONDA</p> <p style="text-align: center; margin: 5px 0;">STEP: 1 of 5 (C) : STOP TRIGGER PROCESSING</p> </div>								
<p>After a few seconds, the tool will vibrate and display the tire sensor data</p>	<div style="border: 1px solid black; padding: 5px; background-color: #f0f0f0;"> <p style="text-align: center; margin: 0;">HONDA</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">8CD9F011</td> <td style="width: 50%;">34.45PSI</td> </tr> <tr> <td>84°F</td> <td>BAT: >50%</td> </tr> <tr> <td>NORMAL FIXED</td> <td>315 MHz</td> </tr> <tr> <td colspan="2" style="text-align: center; padding-top: 5px;"> (C) MENU (T) START </td> </tr> </table> </div>	8CD9F011	34.45PSI	84°F	BAT: >50%	NORMAL FIXED	315 MHz	(C) MENU (T) START	
8CD9F011	34.45PSI								
84°F	BAT: >50%								
NORMAL FIXED	315 MHz								
(C) MENU (T) START									







SELECTION KEY

KEY	FUNCTION
	Press the selection key to open a menu, enter a parameter or confirm a parameter








ARROW KEYS


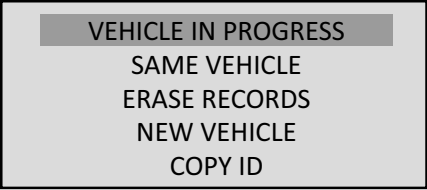


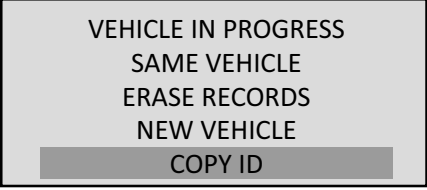

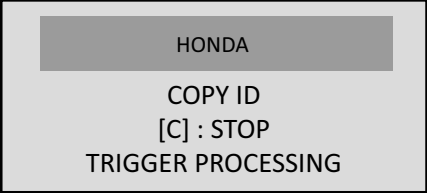
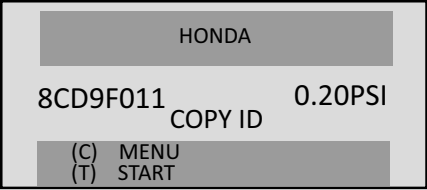




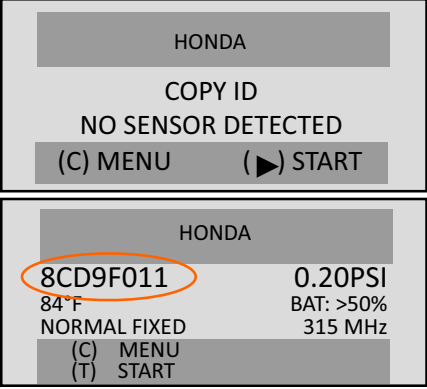
KEY	FUNCTION
	Scroll up/down or increase/decrease numerical values

KEYPAD SUMMARY

 Power on and battery status	 Transmit key, to force a test cycle
 Navigation through menu and adjust parameters up and down	 Selection key, press to enter chosen function or validate a parameter
 Cancel and power off key, press to return to the previous menu without parameter validation or press and hold to turn off tool	 Keypad, key in sensor identification number

TESTING A TPMS SENSOR AND STORED ID WRITE

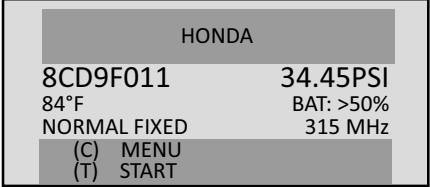
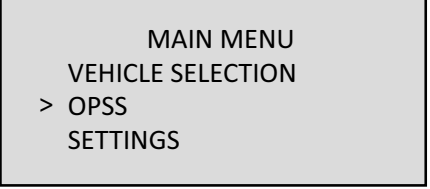
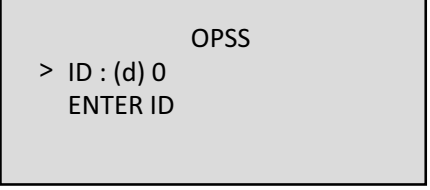
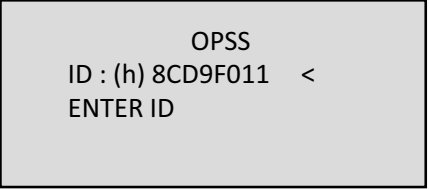
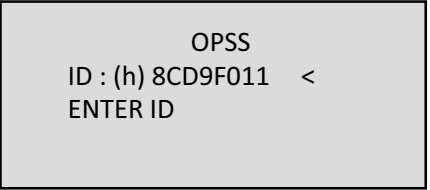
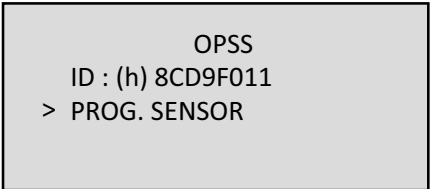
<p>Step 1: From the main menu, select the Vehicle Selection option with the selection () key.</p>	<p style="text-align: center;">MAIN MENU > VEHICLE SELECTION OPSS SETTINGS</p>
<p>Step 2: Proceed to select the desired vehicle manufacturer using the arrow keys () and validate with the selection key ()</p>	<p style="text-align: center;">SELECTION FORD GMC > HONDA</p>
<p>Step 3: Proceed to desired manufacturer model using the arrow keys () and validate with the selection key () After choosing model, indicate production year using the selection key ()</p>	<p style="text-align: center;">HONDA CR-V (STEEL) > Civic Civic (Hybrid)</p>
<p>Step 4: Hold the tool within a few inches of the TPMS sensor and press the transmit key () . The tool will begin to locate and receive data from the selected tire sensor, indicated by the message TRIGGER PROCESSING.</p>	<p style="text-align: center;">HONDA STEP: 1 OF 5 [C] : STOP TRIGGER PROCESSING</p>
<p>Step 5: The screen will indicate that the sensor ID number has been stored into the tool's memory.</p>	<p style="text-align: center;">HONDA ID STORED</p>
<p>Step 6: Display will show sensor information.</p>	<p style="text-align: center;">HONDA 8CD9F011 34.45PSI 84°F BAT: >50% NORMAL FIXED 315 MHz (C) MENU (T) START</p>

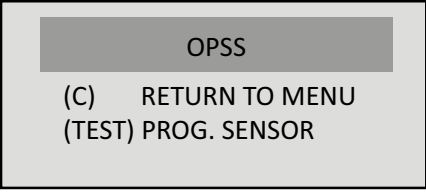
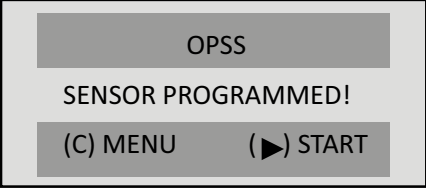
<p>Step 7: Press the cancel key () to display sensor menu.</p>	
<p>Step 8: To write the sensor ID that was just detected to a new Orange sensor, use the arrow keys () to select () 'COPY ID' to display sensor information. Load blank Orange sensor into OPSS2 tool.</p>	
<p>Step 9: After loading new Orange sensor into the OPSS2 tool, press the transmit key () to begin writing the new sensor ID number.</p>	
<p>Step 10: The tool will display 'COPY ID' and write the OE sensor ID number onto the new Orange sensor.</p>	
<p>NOTE: If 'NO SENSOR DETECTED' appears on the screen during COPY ID, the ID-write feature is still functioning. To verify if correct ID, follow the procedures below.</p> <ul style="list-style-type: none"> - If 'NO SENSOR DETECTED,' press (). -  to select 'SAME VEHICLE' with (). - Make note of ID stored. - Insert copied Orange sensor and press (). - Verify the new ID number is the same as the old. 	

NO VALVE RESPONSE:

If the instrument does not receive any information from the tire sensor or if the sensor is not compatible with the parameters, the tool will stop the learning cycle and display '**no sensors detected.**'

REPLACING A TPMS SENSOR AND MANUAL ID WRITE

<p>Step 1: Repeat steps 1 through 5 of testing a TPMS sensor to display sensor information.</p>	
<p>Step 2: Press the C key to return to the main menu. From the main menu, select (↵) OPSS to enter sensor writing menu.</p>	
<p>Step 3: Once in the sensor writing menu, press the selection key (↵) to input sensor ID. Arrow will move from left side to right side of screen. (clear old numbers by pressing C)</p>	
<p>NOTE: When entering ID, toggle between (d) decimal and (h) hexadecimal with arrow keys (↕). - Choose (d) decimal if sensor ID contains numbers only. - Choose (h) hexadecimal if sensor ID contains numbers and letters.</p>	
<p>Step 4: Once the sensor ID has been entered, press the selection key (↵) again to move arrow to left side of screen. The 'ENTER ID' message will change to 'PROG. SENSOR.'</p>	
<p>Step 5: Place the new Orange TPMS sensor in the top of the tool and select (↵) 'PROG. SENSOR' to begin programming the replacement sensor.</p>	

<p>Step 6: To program the original sensor ID onto the new TPMS sensor, press the transmit key (📡).</p>	
<p>Step 7: The new sensor is now programmed with the old sensor's ID number. The sensor is ready to be installed on the vehicle.</p>	



ADJUSTING OPSS SETTINGS

<p>Step 1: From the main menu, select 'Settings' with the selection key (↵).</p>	<p style="text-align: center;">MAIN MENU VEHICLE SELECTION OPSS > SETTINGS</p>
<p>Step 2: Use the up and down arrow keys (↑/↓) and select (↵) the feature to be adjusted. Note: After adjusting setting, use the (C) key to return to main menu.</p>	<p style="text-align: center;">SETTINGS > UNITS : kPA / °C FORMAT: AUTO BUZZER ON : YES</p>
<p>Units: Press the selection key (↵) to enter unit selection and use the arrow keys (↑/↓) to highlight desired units (kPa/°C or PSI/°F) and select with (↵).</p>	<p style="text-align: center;">UNITS SELECTION > kPA / °C PSI / °F</p>
<p>Format: Change the display format between decimal and hexadecimal with (↑/↓). The preset setting is AUTO that automatically changes format based on input.</p>	<p style="text-align: center;">FORMAT > AUTO DECIMAL HEXADECIMAL</p>
<p>Buzzer: User can select if the tool will vibrate after receiving tire sensor information. Scroll to 'BUZZER ON' on settings scree, press selection key (↵) and use arrows (↑/↓) to toggle between 'YES' or 'NO.'</p>	<p style="text-align: center;">SETTINGS UNITS : PSI / °F FORMAT : AUTO BUZZER ON : YES <</p>
<p>Backlight/Contrast: User can adjust the brightness and contrast of display. Press selection key (↵) to move cursor to right of display and use the arrows (↑/↓) to adjust ±1%. Tip: a brighter display will consume battery more quickly</p>	<p style="text-align: center;">SETTINGS BUZZER ON : YES BACKLIGHT : 60% CONTRAST : 55% <</p>
<p>Auto-off: User can adjust how quickly the tool will turn off after a period of non-use. This feature can also be disabled. Press select (↵) to move cursor to right of display and use arrow keys to select desired auto-off amount of time.</p>	<p style="text-align: center;">SETTINGS BACKLIGHT : 60% CONTRAST : 55% > AUTO OFF : DISABLED</p>
<p>Zone: User can modify the zone between America, Europe, Asia and Other.</p>	<p style="text-align: center;">SETTINGS CONTRAST : 55% AUTO OFF : 1 MIN > ZONE : AMERICA</p>

CHOOSING PREFERRED LANGUAGE

<p>Step 1: From the main menu, select 'Language' with the selection key (↵).</p>	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>MAIN MENU</p> <p>OPSS</p> <p>SETTINGS</p> <p>> LANGUAGE</p> </div>
<p>Step 2: From the language menu, three languages are available for selection: English, Spanish and French.</p> <p>Use the selection key (↵) select preferred language.</p>	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>LANGUAGE</p> <p>> ENGLISH</p> <p>ESPAÑOL</p> <p>FRANCAIS</p> </div>
<p>Step 3: Once the preferred language has been chosen, display will automatically return to main menu.</p>	<div style="border: 1px solid black; padding: 5px; text-align: center;"> <p>MAIN MENU</p> <p>> VEHICLE SELECTION</p> <p>OPSS</p> <p>SETTINGS</p> </div>

UPDATING OPSS SOFTWARE

To access the latest software version for your OPSS Generation 2 Tool, please visit:

www.orangetpmsusa.com/registration

NOTICE

This device complies with Part 15 of the FCC Rules and with RSS-210 of Industry Canada. Operation is subject to the following two conditions:









- (1) This device may not cause harmful interference
- (2) This device must accept any interference received, including interference that may cause undesired operation

Warning: Any changes or modifications in construction of this device which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

APPENDIX

OPSS TECHNICAL SPECIFICATIONS	
Dimensions	152mm x 82mm x 33mm
Battery	9V
Communications port:	USB
Display:	4 line LCD, 65mm x 32mm
Weight:	220g
Temperatures:	Operational: 5°C to 45°C / 41°F to 113°F Storage: 0°C to 60°C / 32°F to 140°F
Relative humidity:	70-80%



OPSS Safety Tips	
	<p>SWITCH ON SAFELY</p> <p>Do not switch on the device when wireless tool is prohibited or when it may cause interference or danger.</p>
	<p>SWITCH OFF WHEN REFUELING</p> <p>Do not use the device when filling vehicle with gasoline. Do not use near fuel or chemicals.</p>
	<p>SWITCH OFF NEAR BLASTING</p> <p>Adhere any restrictions. Do not use the tool when blasting is in progress.</p>
	<p>USE SENSIBLY</p> <p>Use only in normal conditions as indicated in product instructions. Do not touch the antenna unnecessarily.</p>
	<p>QUALIFIED SERVICE</p> <p>Only qualified personnel may install or repair this device.</p>
	<p>ENHANCEMENTS AND BATTERIES</p> <p>Use only approved enhancements and batteries for the OPSS tool. Do not connect incompatible products.</p>
	<p>WATER RESISTANCE</p> <p>The tool is not water resistant - keep it dry.</p>
	<p>CONNECTING TO OTHER DEVICES</p> <p>When connecting to any other device, read user guide for detailed safety instructions. Do not connect incompatible products.</p>



This device is a radio transmitter and receiver.

OPSS CARE AND MAINTENANCE

The OPSS tool is a product of superior design and craftsmanship and should be treated with care. Follow the suggestions below to help maintain warranty coverage:

- Keep the device dry. Precipitation, humidity and all types of moisture may contain minerals that will corrode electronic circuits. If device does get wet, remove the battery and allow the device to dry completely before replacing.
- Do not use or store the tool in dusty, dirty areas to keep electronic components clean.
- Do not store the device in hot areas. High temperatures can shorten the life of electronic devices, damage batteries and warp or melt certain plastics.
- Do not store the device in cold areas. When the device returns to its normal temperature, moisture can form inside the device and damage electronic circuit boards.
- Do not attempt to open the device other than instructed in this guide.
- Do not drop, knock or shake the device. Rough handling can break internal circuit boards and mechanics.
- Do not use harsh chemicals, cleaning solvent or strong detergent to clean the device. Do not paint the device. Paint can clog the moving parts and prevent proper operation.
- Do not touch the main display with hard or angular materials. Objects like earrings or jewelry may scratch the display.
- Use a soft, clean and dry cloth to clean the device.
- Use only the supplied antenna. Unauthorized antennas, modifications or attachments could damage the device and may violate regulations governing radio devices.

All of the above suggestions apply equally to your device, battery or any enhancements. If device is not working properly, contact Orange Electronic N.A.

RF CERTIFICATION INFORMATION

This device meets guidelines for exposure to radio waves.

This device is a radio transmitter and receiver. It is designed not to exceed the limits for exposure to radio waves recommended by international guidelines. These guidelines were developed by the independent scientific organization ICNIRP and include safety margins designed to assure the protection off all persons, regardless of age and health.

For further information see ICNIRP "guidelines for limiting exposure to time-varying electric, magnetic and electromagnetic fields (up to 300 GHz)" or contact Orange Electronic N.A.

The SAR value for this device is less than 5A/m. This value is the reference level for general public exposure to time varying electric and magnetic fields (unperturbed rms values) for the 3-150 kHz frequency range.

WARRANTY POLICY

Orange Electronic products are guaranteed from material defects for 365 days after the date of purchase. If the product fails under normal circumstances within the first year, Orange Electronic will repair or replace the product. To obtain repair or replacement sensors under warranty, return the product to the original place of purchase. Proof of purchase and date of purchase are required to validate the warranty claim.

Orange Electronic is not liable for any direct or consequential loss or property damage arising from use of product.

Note: Warranty does not cover tire valves or screws for tire valves. The tire valves and screws need to be replaced when rotating tires, changing tires or changing the TPMS sensors. If installing/reinstalling a TPMS sensor, new valves and screws should be used.

Warning:

1. Only use Orange Electronic TPMS replacement parts to use with original Orange Electronic TPMS parts. Using other brands will not allow the system to work and void the warranty.
2. The power connection is NOT COMPATIBLE with the USB interface. Please do not plug in any USB devices.

QUESTIONS

Any questions pertaining to warranty information or other questions not answered in the preceding pages can be answered by the OPSS2 place of purchase or by Orange Electronic's service phone or e-mail address:

800-691-0283

sales@oenatpms.com

For updated TPMS information and Orange products, visit the Orange Electronic website:

www.orangetpmsusa.com

Thank you for your purchase and enjoy your new Orange Programmable Sensor System!

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