



TAZER JL JEEP WRANGLER JL

Also compatible with
Jeep Gladiator JT

User's Guide

For Firmware [11.2.0-031220](#)

The **Tazer JL Lite** is an electronic plug-in device for the following vehicles:

2018-2020 Jeep Wrangler JL

2020 Jeep Gladiator JT

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New firmware is available periodically, always free and posted to the Z Automotive website. Use

[ZPU \(Z Automotive Programming Utility\)](#), also on the website, to install the firmware over USB.

Feature List

Tazer JL Lite features can be broken into two categories:

- **Vehicle Settings** are changes made to the Jeep such as tire size, gear ratios or settings which accommodate other upgrades. **These changes will continue to operate after the Tazer JL Lite is unplugged.**
- **Live Functions** are operations the Tazer JL Lite performs live, **only while it is physically connected.**

Vehicle Settings

- change tire size
- change gear ratio
- change Transfer Case LOW ratio
- enable/disable TPMS system
- set TPMS pressure warning limit, front and rear, between 25psi and 85psi
- one-touch return-to-stock – quick “Unmarry” function returns to stock.

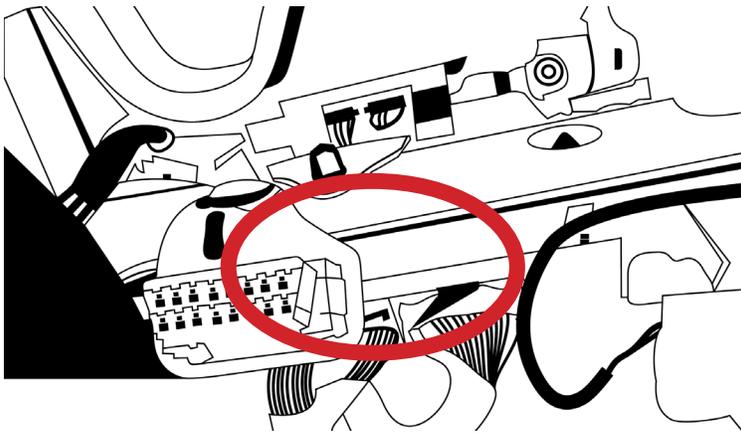
Live Functions

- AutoStopStart Disable – Tazer JL Lite will **automatically remember** the last state of the auto stop/start system and set it for you the next time you start the vehicle
- disconnect sway bar in 2WD up to 30mph
- Light Show – 6 preset and 3 make-your-own light shows that flash all the exterior lights – perfect for car shows/first responders/off-road visibility – controlled from key fob or steering wheel buttons – can be enabled in-motion for use in parades, off-road and for legal police/EMS applications
- Cooldown Mode – turn on engine fans on-demand when the ignition is on and the engine is not running
- Line Lock – lock the front brakes for an easy burnout
- Rock Crawl – lock all four brakes with a steering wheel button combo to hold the vehicle still, especially helpful when off-road
- Winch Mode – raise idle RPM to user-selected value between 1250 and 2000 RPM with a button press

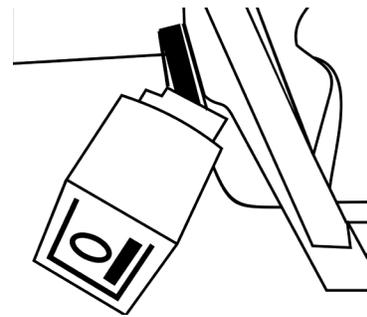
- Display DTCs – display Diagnostic Trouble Codes to see why the Check Engine light may be on.
- Clear CELs – reset check engine light and DTC codes

Installation

Installation is a matter of unplugging the SGW module above the OBD2 diagnostic connector and plugging the Tazer JL Lite in its place. Simply locate the SGW and unplug its two connectors by pressing the tab with your index finger and gently pulling straight down on the wires. Plug those two connectors into the Tazer JL Lite.



- The Tazer JL Lite is intended to be left plugged in, as many of its features (Live Functions) only work when installed.
- The Tazer JL Lite should be Unmarried and removed before dealer service.
- The Tazer JL Lite will go to sleep 30 seconds after the Jeep shuts down.
- It does not need to be plugged in for any of the features in the Vehicle Settings to remain operational.



Vehicle Settings

This section explains how to use the Tazer JL Lite to change the vehicle settings for feature activation.

Menu Navigation

- For all functions involving the dash (EVIC) display, the EVIC screen first needs to be in a state where it's showing the AUDIO screen. Use the left and up/down arrows to set the EVIC

display like this. Once the display is in this state, press and hold the steering wheel LEFT ARROW, and tap the Cruise "CANCEL" button to enter the settings menu. Pressing LEFT ARROW and CANCEL will advance through the menu

items. To change/select a setting, press and hold LEFT ARROW and tap the Cruise “ON/OFF” (center) button.

- Advance through the menu slowly.
- You can exit the menu quickly and safely by holding the left arrow and

pressing the cruise RES button.

- If the text is overwritten by another message, press the left arrow and the display will revert back to the Audio display.

If you made any changes in the setup menu, be sure to scroll to “**full reboot?**” and “select” it. **This step is critical after changing settings**, or you may find that the dash doesn’t shut down, which **can result in a dead battery**.

Some settings require two sleep/wake cycles. The quickest way to do this is to turn the ignition off, leave the car, close the driver’s door and walk away with the key. Wait about 60 seconds **AFTER** the dash goes dark, then re-enter. Do this twice.

Exit the menu quickly and safely by HOLDING the LEFT ARROW and TAPPING the Cruise “RES” button.

The **setup menu** is accessed with the **ignition ON but engine NOT running**.
The menu items are listed in the order in which they will display.

- **Light Shows:** Activate pre-programmed and custom light shows, even when the engine isn’t running.
- **Clear CELs:** Clear the check engine light and diagnostic codes stored in the PCM, TCM, ABS, and AWD modules.
- **Display DTCs:** Cycles through Diagnostic Trouble Codes
- **Marry/Unmarry:** **To advance to any of the vehicle settings, you will first need to “Marry” the Tazer JL Lite to the vehicle.** When you select this option, the Tazer JL Lite will download your car’s **current** (presumably stock) settings. This should take around 15 seconds. **Do not disturb this process.** Once complete, you will be able to advance to the **Settings** choices.

Select “UNMARRY” to return the vehicle to stock.

After unmarrying, advance to the “full reboot?” option and select it, allowing a full **2.5 minutes** for the Tazer JL Lite to reboot all systems – the

Uconnect will reboot twice in this time, the dash will reset, and when it’s finished, the red security dot on the dash will turn on and back off. **A few sleep cycles might be required for all changes to take effect.**

- **Submenus:** Once married, you can advance through several sub-menus. Select a submenu using the method described above.

Submenu Perf:

performance-based options

- **Set Tire Size:** Use this setting to change the calibration for tire size. Use the left arrow and cruise +/- buttons to raise or lower the value, then select it (left arrow and cruise on/off) to save the new setting.
- **Set Gear Ratio:** Use this setting to change the calibration for axle gear ratio. Use the left arrow and cruise +/- buttons to raise or lower the value, then select it (left arrow and cruise on/off) to save the new setting.
- **Set Transfer Case LOW ratio:** Use this setting to change the calibration for 4LOW gear ratio. Use the left arrow and cruise +/- buttons to raise or lower the value, then select it (left arrow and cruise on/off) to save the new setting.

Submenu Tire:

TPMS and tire size options

- **Set TPMS:** Turn the tire pressure monitoring system on or off.
- **Set Tire Pressures Front/Rear:** Change the TPMS warning pressures – use the left arrow and cruise +/- buttons to raise or lower the pressure, then select it to save the new setting. (**The car’s computer will only recognize a Minimum of 25psi.**)

- **Firmware Version Display:** Shows the current Tazer JL Lite firmware revision.
- **Serial Number Display:** Shows your Tazer JL Lite's serial number which is used to upgrade your Tazer JL Lite to a Tazer JL Mini
- **Unmarry Key:** Displays the current one-time use Unmarry Key. [See Page 8](#)
- **Full Reboot:** Will reset vehicle modules and the Uconnect system twice. This takes 2.5 minutes to complete and should be performed after any Vehicle Settings are changed – Uconnect will reboot twice, the dash will reset, and when it's finished, the red security dot on the dash will turn on and back off. Once complete, shut off the vehicle, open and close the driver door and wait for a minute to be sure the dash turns off.

Live Menu Settings

This section explains how to use the Tazer JL Lite's live functions – these are activated with the same button presses as the Settings Menu, but **while the engine is RUNNING**. These features **will only work if the Tazer JL Lite remains plugged in**. Please note that Trac Kill will be enabled after initial setup.

- **Light Show:** This is one method of activating the light shows. Selecting this will activate the first show, unless ZPU was used to change the startup show. There are 9 light shows – you can toggle through all 9, then back to OFF.
- **Display Tazer JL Lite Firmware Revision:** Displays the Tazer JL Lite's current firmware version: "TZ JL: x.x.x." (ie "TZJL:11.2.0")

Non-Menu Live Settings

Some **live** functions of the Tazer JL Lite are **not accessed via a menu**, but rather work automatically or with **button presses**.

- **Light Shows:** The Tazer comes pre-configured with 6 light shows out of the box, plus 3 "make your own" light shows that you can configure with the ZPU utility. There are two ways to control the light shows on the Tazer:
 - Keyfob:** The light show can be turned on by pressing unlock-
unlock-lock-unlock from the keyfob. This will start the first light show in the sequence (depending on which show it's configured to start with). Pressing unlock again will advance to the next enabled show. Pressing lock will turn off the light shows. You may lock the vehicle while

the shows are on by pressing the button on the door handle or using the key.

Dash Menu: You can start the show by setting the dash to “Audio” mode, then press the left arrow and tap cruise CANC button.

“Lightshow?” will display on the dash. Hold left arrow and tap cruise on/off (center) button to turn on the first light show in the sequence. Again to advance to the next show. Exit the menu (left arrow and CANC) to turn off the show.

- **Start/Stop Kill:** Set the Start/Stop system as you wish, enabled/disabled, and the Tazer JL will set it that way then next time you start the vehicle.
- **Traction Kill:** Set the traction control system as you wish, enabled/disabled, and the Tazer JL will set it that way then next time you start the vehicle.
- **Sway Bar in 2WD:** Press the Sway bar button while in 2WD and it will disconnect or re-connect as if it were in 4WD. It will automatically re-connect at 30MPH and disconnect when the Jeep comes back to a full stop.
- **Cooldown Mode:** With the ignition on but engine not running, press the

right arrow and cruise cancel button at the same time to turn the engine fan on High. They will also turn off automatically if the battery voltage drops below 11V.

- **Winch Mode:** With the engine running, press the left arrow and cruise RES buttons at the same time. The engine will rise to the RPM selected in the live menu (default 2000). There may be a few seconds delay before it changes. It will NOT raise if you touch the accelerator pedal, and will cancel if you do.
- **Line Lock:** While in 2WD, press and hold the left arrow and cruise set(+) buttons. Continue to hold and pump the brakes twice, firmly. The Jeep will stay held using only the front brakes while you press on the accelerator to do a burnout. “LineLock” will be displayed in the cluster.
- **Rock Crawl (patent pending):** Press and hold the left arrow and cruise set(-) button, and pump the brakes twice. The Jeep will hold using all four brakes while you can work the pedals to apply torque, and release the buttons when you’re ready to move. “RockCrawl” will be displayed in the

cluster.

- **Partial Reboot:** Press left arrow and cruise RES with the ignition set to RUN and engine is not running, and

the Tazer will reset several systems including the PCM (engine adaptives), RF Hub, Instrument cluster, ABS, BCM.

Configuration

Configuration of the Tazer is accomplished by using the supplied USB cable connected to a PC or Mac, using the ZPU Programming Utility. The ZPU User Guide explains how to install ZPU and how to perform firmware updates. **If you misplace or damage your USB cable, you can replace it with any common “USB Lite B” data/charging cable.**

Please see the accompanying “Light Show Configuration Guide” to configure your Tazer’s light show options.

The Unmarry Key

When you select “Unmarry” from the Tazer menu, all of your settings will revert to whatever they were when you originally Married your Tazer.

If you receive a Tazer second-hand, or lose access to your vehicle without unmarrying your Tazer and receive the **“Not VIN XXXX”** error:

1. Navigate to the “UM Key” item in the Tazer’s EVIC menu, described on [page 10](#).
2. Write this key down, and visit this URL to purchase our Unmarry Service, where you’ll be prompted to enter that key: <https://www.zautomotive.com/product/unmarry-key/>
3. Return to the UM Key option in the EVIC menu and hit (Left Arrow + Cruise+/-) to begin entering the code provided with your purchase.
4. Press Left + Cruise On/Off to proceed to the next character.
5. Once you’ve entered the last (eighth) digit, your Tazer will report whether the unmarry has succeeded or failed.

Tazer JL Mini Upgrade

Your Tazer JL Lite can be upgraded to a Tazer JL Mini, which supports many more options for changing vehicle settings. Visit this link for the full list: <https://www.zautomotive.com/zpu/instructions/TazerJLMiniUserGuide1120.pdf>

1. Navigate to the “Serial Number” item in the Tazer’s EVIC menu, described on [page 6](#).
2. Visit this URL to purchase an upgrade activation key. You’ll be prompted to enter the serial number: <https://www.zautomotive.com/product/activation-key/>
3. Return to the Serial Number option in the EVIC menu and hit (Left Arrow + Cruise+/-) to begin entering the code provided with your purchase.
4. Press Left + Cruise On/Off to proceed to the next character.
5. Once you’ve entered the last (eighth) digit, your Tazer will report whether the activation has succeeded or failed.

Common Troubleshooting Questions

Symptom	Cause	Solution
No menu in EVIC	EVIC display has to be in state where it can display radio station name	Set EVIC so it's showing radio station name. This would be the the "Audio" menu on JL Dash screen
Changed a setting and it didn't take effect	Needs a sleep/wake cycle and/or radio reboot	See the instructions above in the "Settings Menu" section, about sleep cycling and radio rebooting.
Changed gear ratio and "service AWD" is showing	Incorrect gear ratio chosen or setting didn't initialize	Vehicle needs a sleep cycle and short drive to fully initialize.
Manual transmission, changed tire size and have ESS error	ESS re-learn procedure not completed.	Please see the ESS relearn procedure on the support page for Tazer JL Lite.

Z Automotive cannot be held responsible misuse or consequential damages.

If you are in doubt, email support@zautotech.com.

Please be aware that modifying your vehicle in any way can affect your vehicle's warranty, longevity, handling, etc.

Please use with caution, and AT YOUR OWN RISK.

USING THE LIGHT SHOW FEATURE ON PUBLIC ROADS: IMPERSONATING A POLICE OFFICER IS A FELONY. LIGHT SHOW IS INTENDED FOR CAR SHOW/TRACK/OFF ROAD USE ONLY.

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