

# **INGENE>X>T**

**EXTEND THE POWER**

## **USER MANUAL**

**GHOST, BOOST 50,  
BOOST SR & BONUS**



**VERSION 2.3.0 - 2023**

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**YOUR MODULE IS PROGRAMMED WITH PRESET SETTINGS. YOU CAN CHANGE THEM ACCORDING TO YOUR PREFERENCES. PAY SPECIAL ATTENTION TO THE CHANGES YOU WILL MAKE, THEY COULD AFFECT THE PERFORMANCE OF SOME FEATURES.**

# CONNEXION

## After installing the module in your car:

**1** Find the Ingenext WiFi access point on your smartphone, tablet or laptop. The name of the access point (AP) will be "Ingenext\_xxxxxx" , with the last portion being the unique serial number for each module.

**2 Log in with the following password: ingenext**

**3** On IOS devices , a captive screen will appear (the same type when you log into an hotel AP). Then click on the "Cancel" button and click on "Use without Internet " option at the bottom. You also need to make sure that you are not connected to a VPN. [See figure 1](#)

**4** Open a new web browser page and type 192.168.0.1 in the address bar. A window will ask you to change the default AP password. You then need to choose a personal password with a combination of letters and numbers with at least 8 characters. [See figure 2](#)

# CONNEXION

5 After changing the password, you will be disconnected from the active WIFI AP connection from the module. You then need to reconnect to the WIFI AP with your new password and return to the web browser window. We recommend using the “Forget this network” option to make adding the new password easier. [See figure 3](#)

6 We also recommend that you deactivate the "Auto-join" feature for the Ingenext AP in the WIFI settings of your wireless device. [See figure 4](#)

**On some Android devices you might need to turn off the cellular data function in order to be able to access the Ingenext app web page.**

# CONNEXION

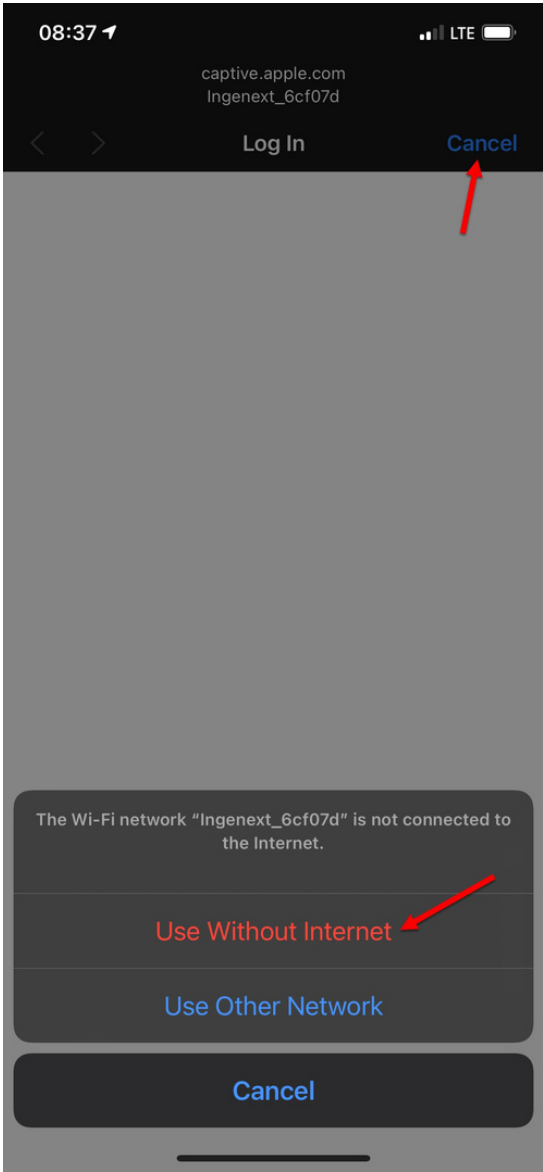


Figure 1

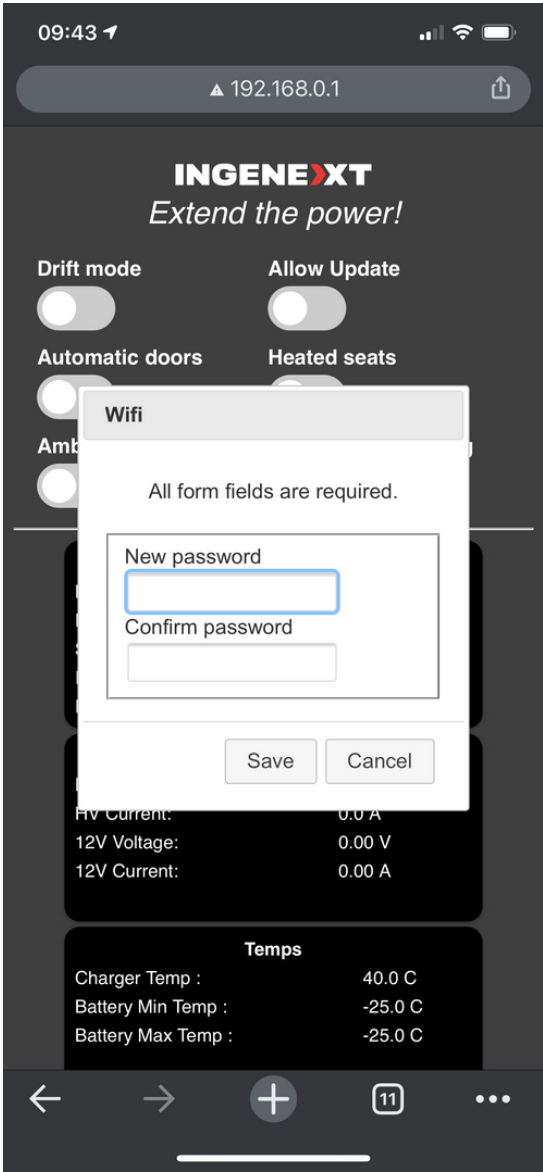


Figure 2

# CONNEXION

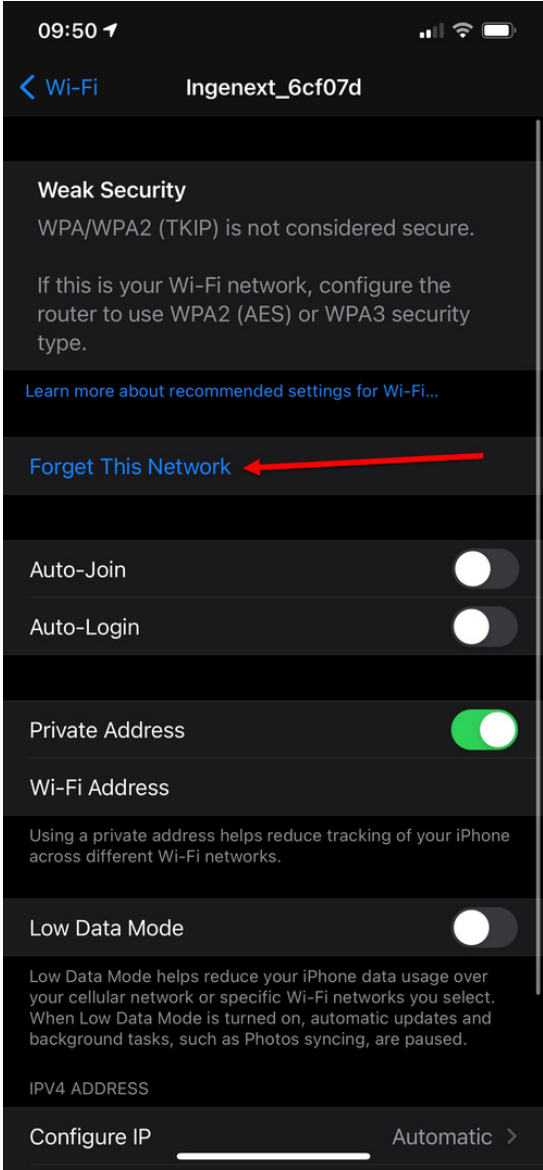


Figure 3

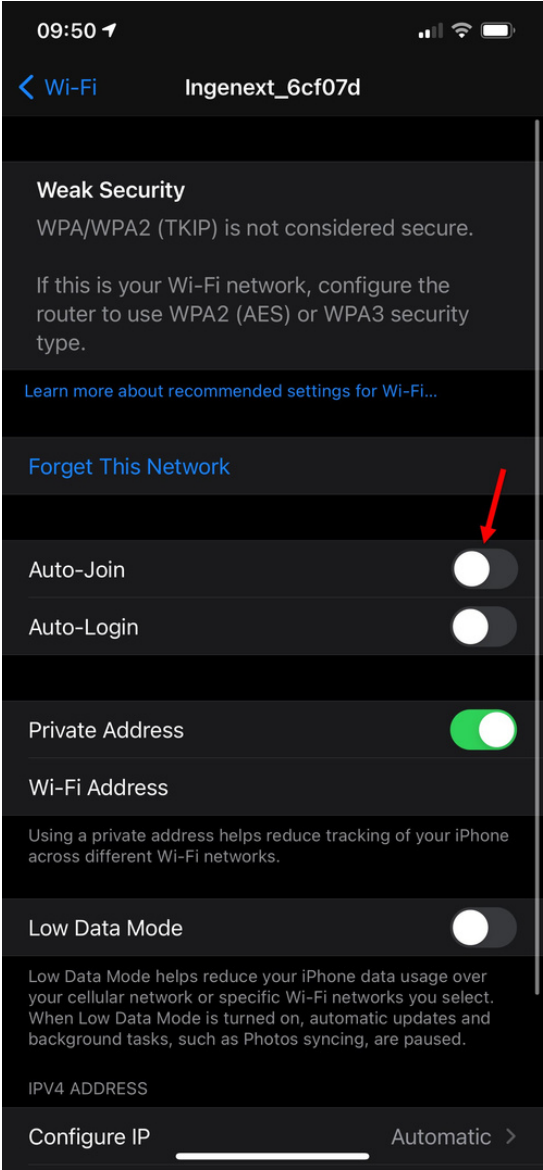


Figure 4

# BATTERY PACK HEATING

➤ The battery pack heating function only works if the high voltage battery is below 30 °C.

➤ To activate this function, the vehicle must be started with the driver seated in the driver's position and the PRND selector showing on the user interface of the car (brake pedal depressed).

➤ The passenger can also activate this function while the car is driving too.

# DRIFT MODE

You can only activate it when the car is in Park. The drift mode deactivate all the following driving aids :

- Automatic emergency braking
- Regenerative braking
- Stability control system.
- Traction control system.



# DRIFT MODE

➤ To activate the Drift Mode, you must first enable it in the Ingenext app. See figure 5. Then you must restart the car by going in the Safety & Security menu and click on the POWER OFF button. [See figure 5](#)

➤ The center display in the car will go off. Wait 5 seconds and depress the brake pedal to restart the car. Once the car is restarted , the center display should show a telltale of a yellow car drifting and multiple alarm message related to the driving aids being turned off should be shown . [See Figure 6](#)

To deactivate the Drift Mode, you must:

- 
- Turn off the feature in the Ingenext app
  - Restart your car and wait 5 seconds
  - Press the brake pedal to restart the vehicle

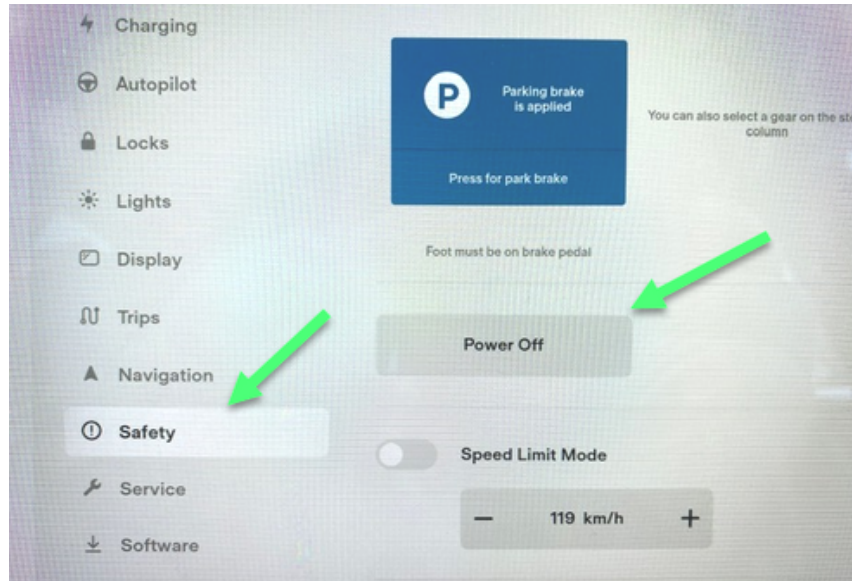


Figure 5

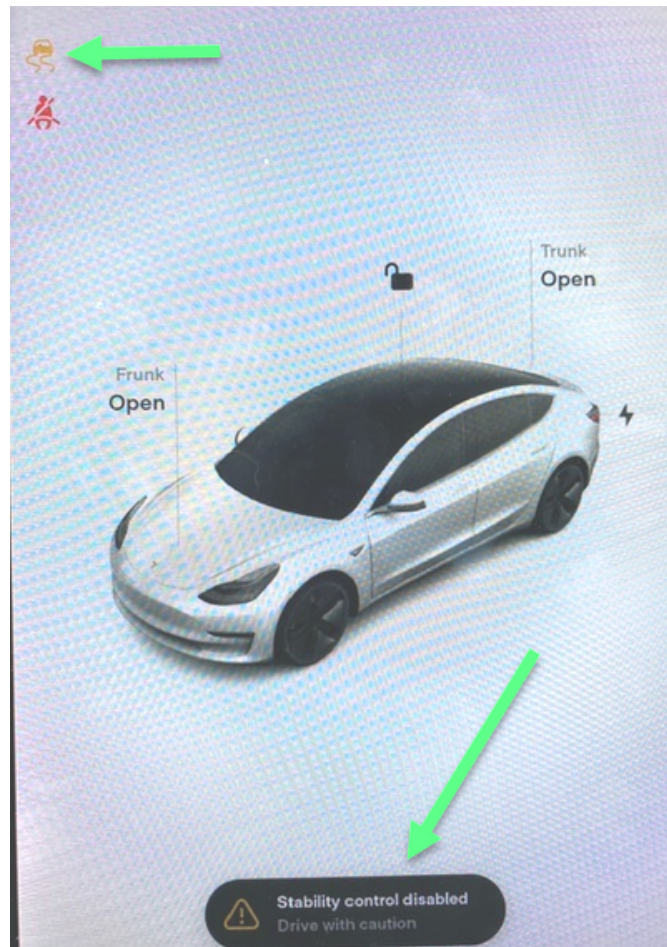


Figure 6

# WIPER MANUAL MODE

For the wipers manual mode to work, the wipers mode on the center display of the car need to be set in AUTO. See [Figure 7](#)

In the Ingenext app, the manual wiper control is always enabled once your module is installed : the long cycle (normal mode) is activated by default if the short cycle option button is OFF and the short cycle takes over if the option is ON.

You can then push the left stalk forward (same function to change the auto high-beam) and press the mist button once to switch between all mode. See [Figure 8](#).

# WIPER MANUAL MODE

Each click goes through the following sequences:

## NORMAL

- 1 Slow intermittent
- 2 Fast intermittent
- 3 Slow continuous
- 4 Fast continuous
- 5 Off
- 6 Auto

**Then it cycle back to step 1**

## SHORT

- 1 Slow continuous
- 2 Fast continuous
- 3 Off
- 4 Auto

**Then it cycle back to step 1**

➤ To turn off this function, you simply need to change the wiper mode in the center display to any other mode then auto.

➤ The wiper manual mode also turn off automatically when you leave the car and your phone disappear from the vicinity of the car.

# WIPER MANUAL MODE

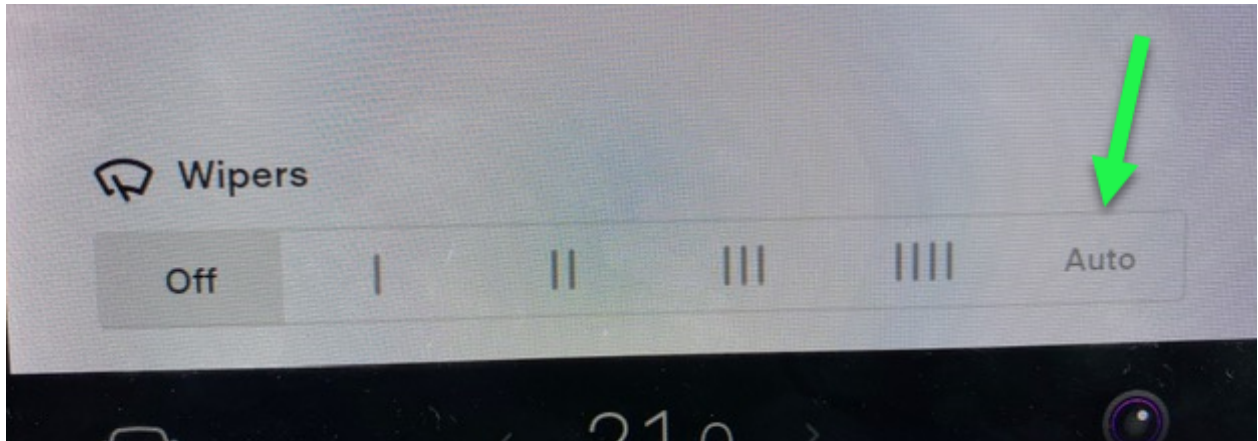


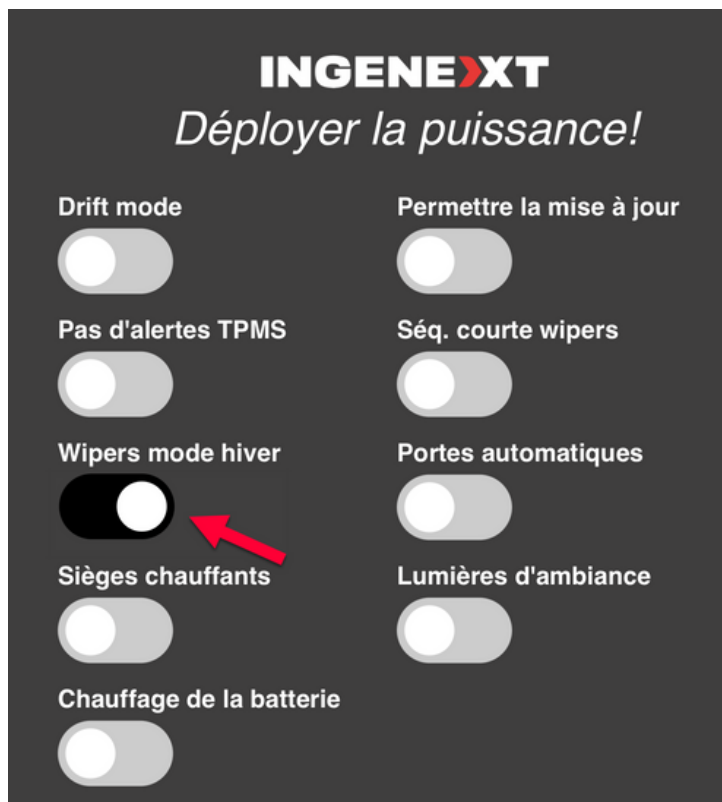
Figure 7



Figure 8

# WIPER WINTER MODE

This option is meant to help you out deicing the wipers blades which can be cumbersome when they're in their default Park position. If activated, the wipers will go in service mode by themselves when you're going from Drive to Park if the ambient temperature is below the freezing point. You can get out of the service mode when you are in Park by just by tapping the wipers mist button.



**Figure 9**

# AUTOMATIC DRIVER DOOR (BETA)

You need to activate the Automatic Door Open setting in the Ingenext's app. This function allows

- the driver's door to open automatically when the driver approaches the car with his key fob or the phone key. See Figure 11

For this to work, the vehicle must be kept awake. For

- this, you need activate the sentry mode to keep the car awake and to allow it to monitor the presence of the phone key or the key fob. See Figure 12

The automatic door logic will only enable itself if

- the phone key or the key fob are far enough from the vehicle to not be detected for at least 15 seconds.

## AUTOMATIC DRIVER DOOR (BETA)

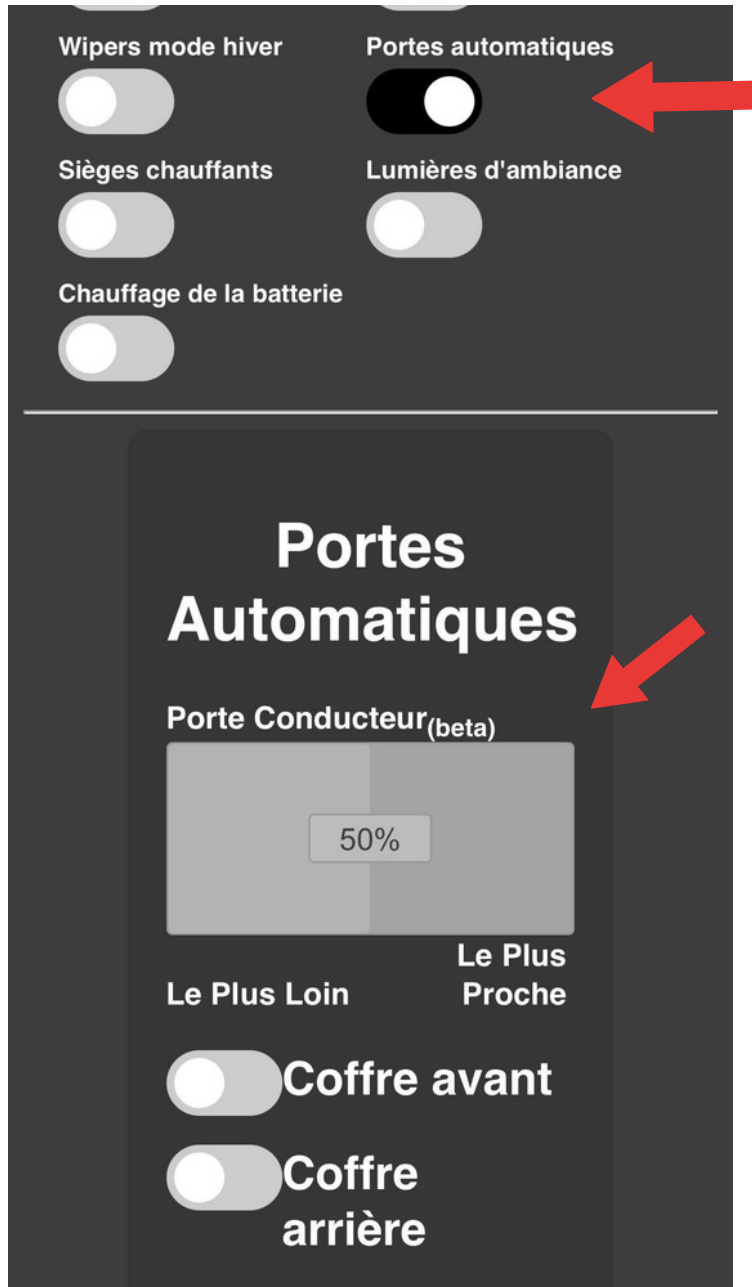
➤ The open door proximity detection setting in the app can be set from closest to farthest depending on the strength of your Bluetooth signal. See Figure 10

➤ We recommend that you test the settings for your car and your key fob/phone key. You should start by setting it to from the closest then to the farthest until you're satisfied with how soon it open the door before you're close to it.

➤ Keep in mind that if you set it too far, it might trigger a false automatic door opening if you have , for example, your car in the garage and you're close to it.

We also recommend that you activate the Lock Confirmation Sound in the Locks menu in the center display. This way, when the car unlocks the doors, the car will trigger a beeping sound to let you know that the door is open and unlock. See Figure 11





**Figure 10**

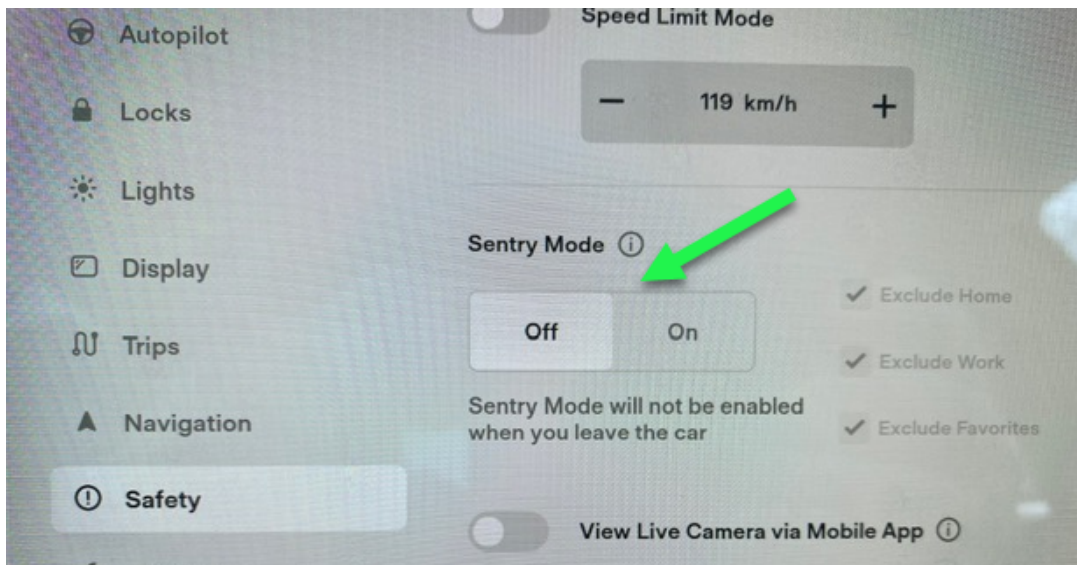


Figure 11

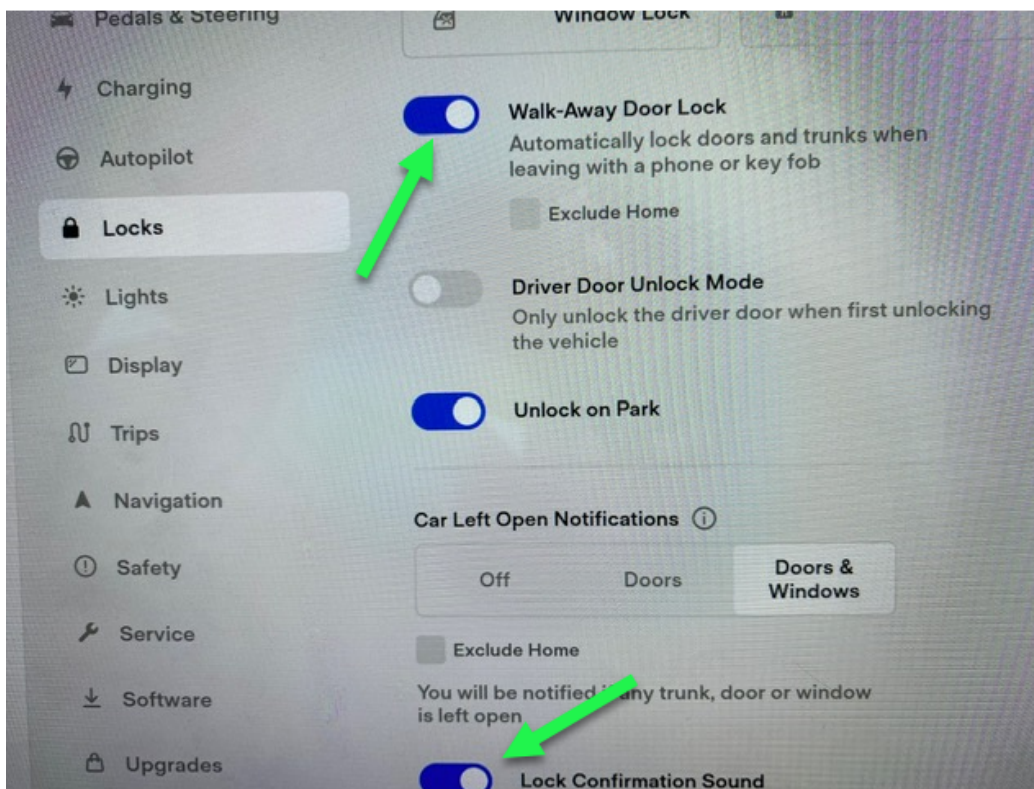


Figure 12

## How the phone detection work for the auto door opening

In order to have auto door and auto trunk/frunk function to work, you need to set the detection and loss of sight threshold correctly for your use case. **Figure 13** show how both the detection and loss of sight range works. The range between C and D is used to detect that the Phone-key is in range to trigger the auto-door opening and then allowing the auto trunk/frunk to work. The range between A and B is used to consider the Phone-key out of the range of detection and to trigger the 15 sec lockout timer to allow another detection of the Phone-key. Finally, the red portion of the spectrum is a dead-band range where no change of state can happen.

- A** Phone loss of sight (100%)
- B** Phone loss of sight (20%)
- C** Driver's door (farthest 100%)
- D** Driver's door (closest 100%)

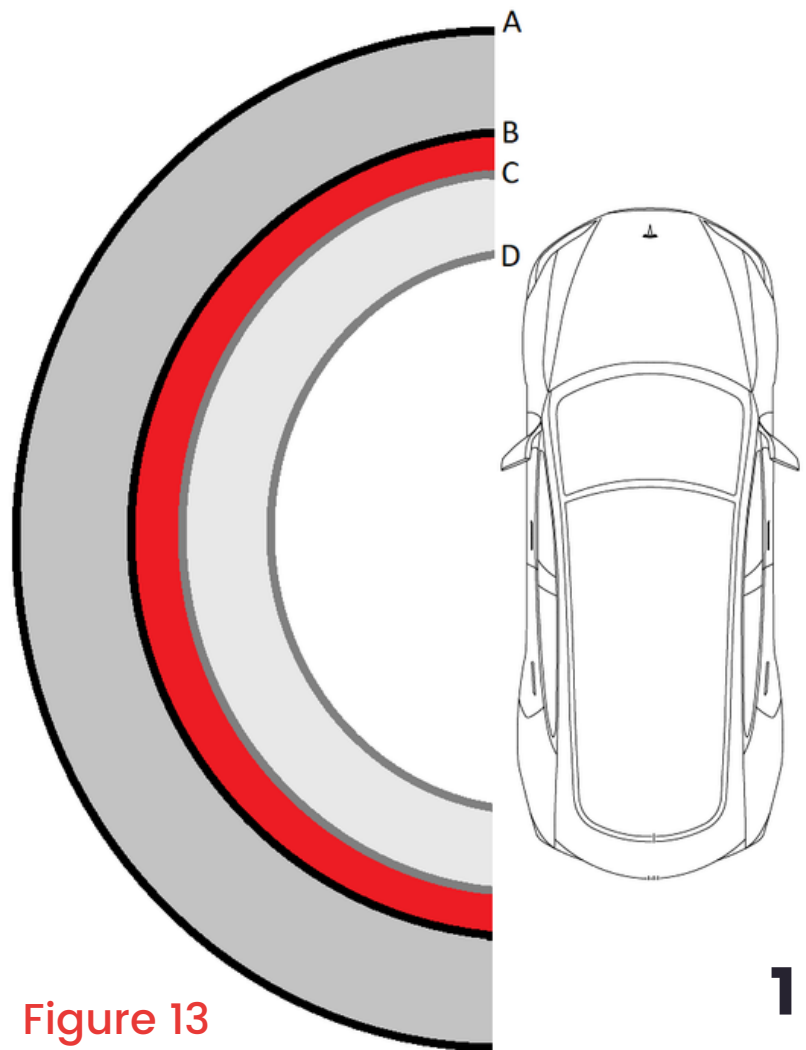


Figure 13

# AUTOMATIC FRUNK & TRUNK

- You can choose the number of times and the duration that the frunk and trunk can be opened.
- These functions are accessible through the advance Automatic Doors menu. See Picture 10

For proper operation, you must have the Automatic

- Doors option enabled in order to wake up the proximity sensors when you're approaching your vehicle.

The Automatic frunk opening works with the side

- sensor closest to the driver's side front wheel. See Picture 14

- The Automatic trunk opening works with the side sensor closest to the driver's side rear wheel. See Picture 15

# AUTOMATIC FRUNK & TRUNK

Here are the steps to open the trunk/frunk:

- 1** Position yourself approximately 24” from the sensor.
- 2** Then approach your leg to approximately 12” from the sensor.  
For the frunk: the left turn signal will flash for about 2-4 blinks. When it stop, you can move back to the 24” position you were at the beginning.
- 3**
- 4** For the trunk: the left turn signal will flash rapidly. When it lit steady, you can move back to the 24” position you were at the beginning.
- 5** When you are back at the 24” position, the frunk or the trunk will open automatically. You can check this video : [https://www.youtube.com/watch?v=pJlrFwu2Ceg\\_](https://www.youtube.com/watch?v=pJlrFwu2Ceg_)

To get the full automatic opening experience, we recommend that you buy a set of shock absorbers for the Model 3 trunk and frunk like these: <https://amzn.to/2QLhr8k>



**Figure 14**



**Figure 15**



# THE REAR HEATED SEATS

➤ There's two ways to control the Rear heated seats:

1 With the Ingenext's app. [See Picture 16](#)

With rear window switches. [See Picture 17](#). You first need to activate the Heated Seats setting in the Ingenext app.

2 Then, to turn on the rear heated seats, with the corresponding windows being in the roll up position, simply pull up briefly on the rear window switch. Each pull of the switch goes through the following sequence :

- Level 3
- Level 2
- Level 1

**Then it cycle back to Level 3**

➤ To turn off the heated seat, simply pull the windows switch up for at least 3 seconds.

➤ When using the windows switches to control the rear heated seats level, the right seat also control the center seat setting since this one doesn't have any switch

➤ **If you already have the factory installed option you will still be able to control the rear heated seats on your car center display as well as with the Ingenext app and with the rear windows switches.**



**Figure 16**



**Figure 17**



# AMBIENT LIGHTS

- The Ambient lights function will activate all the lights in the door's pocket and at the feet of both the driver and passenger seat. See Picture 18.

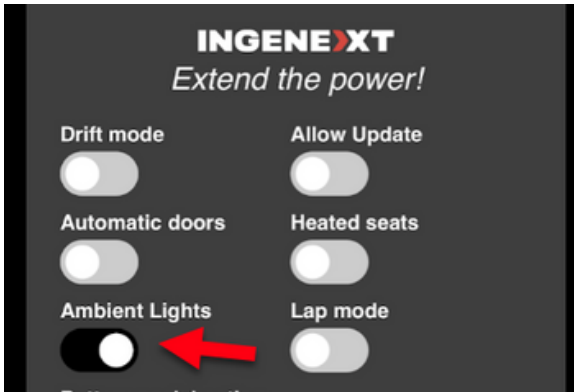


Figure 18

# NO TPMS ALERTS (BLE)

- This feature blocks the TPMS alerts on cars that have factory BLE TPMS sensors. See Picture 19

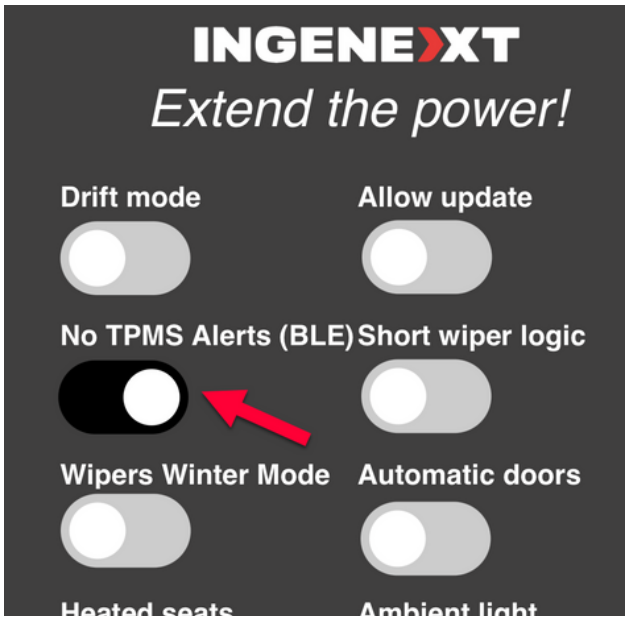


Figure 19

# WIFI AP CONTROL

➤ This function is used to turn on or off the Ingenext WIFI AP function.

- 1** While in Park, in the center display of the car, you need to first turn off the Windows Locked button. Then switch the center display WIFI interface from ON to the OFF position. **See Picture 20 and 21**
- 2** Then click on the Windows Locked button in the center display to turn it ON. Then wait approx. one second and then turn it OFF. Then wait one more second and click again on the Windows Locked button to turn it ON. Finally, wait one second and then turn it OFF again. **See Picture 20.**
- 3** Finally, turn the UI WIFI interface back to ON in the center display of the car, and put back the Windows Locked button to the state it was prior to this sequence.

# WIFI AP CONTROL

- 4 You can repeat the same sequence to switch the WIFI AP interface between ON or OFF.

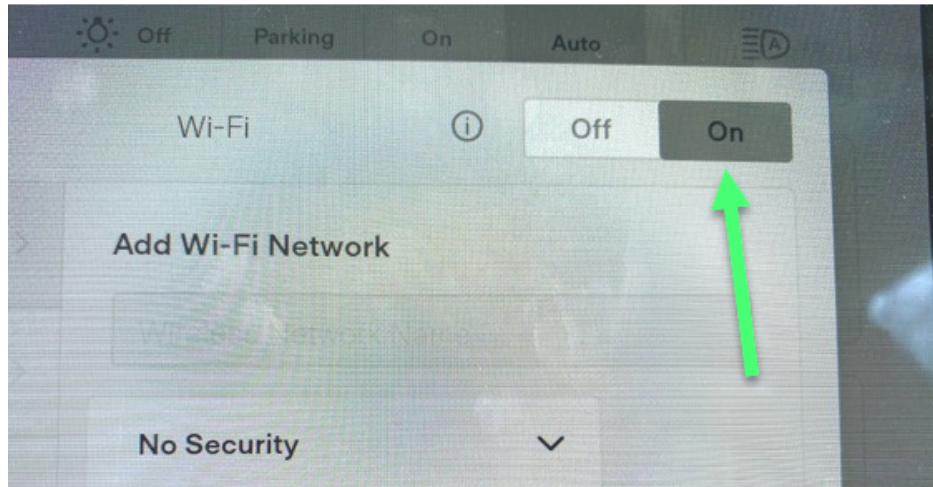


Figure 20

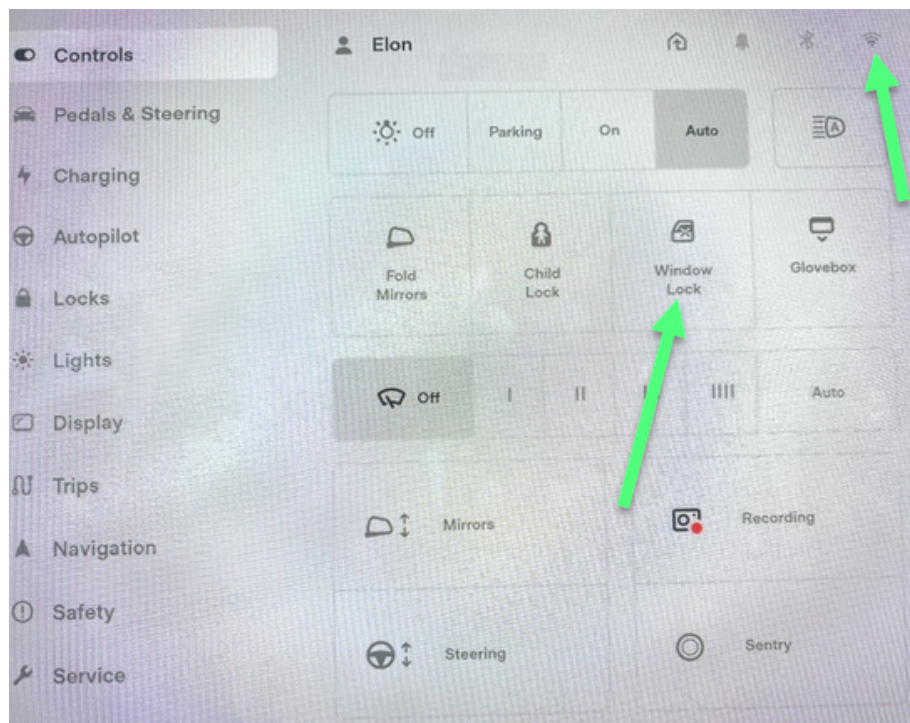
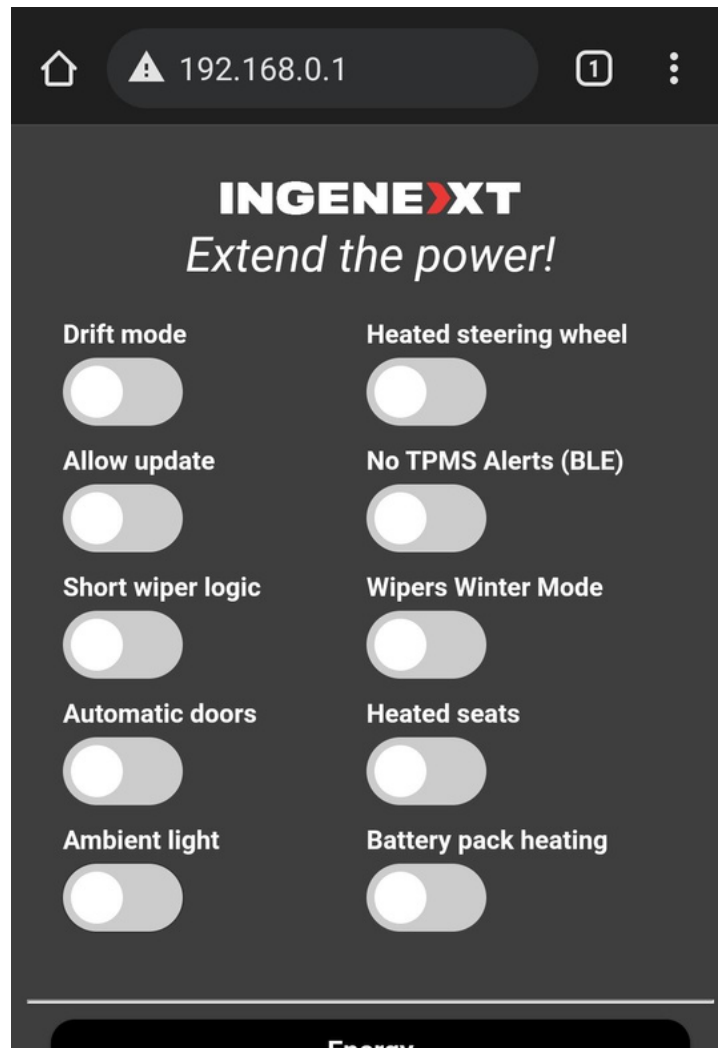


Figure 21

# HEATED STEERING WHEEL

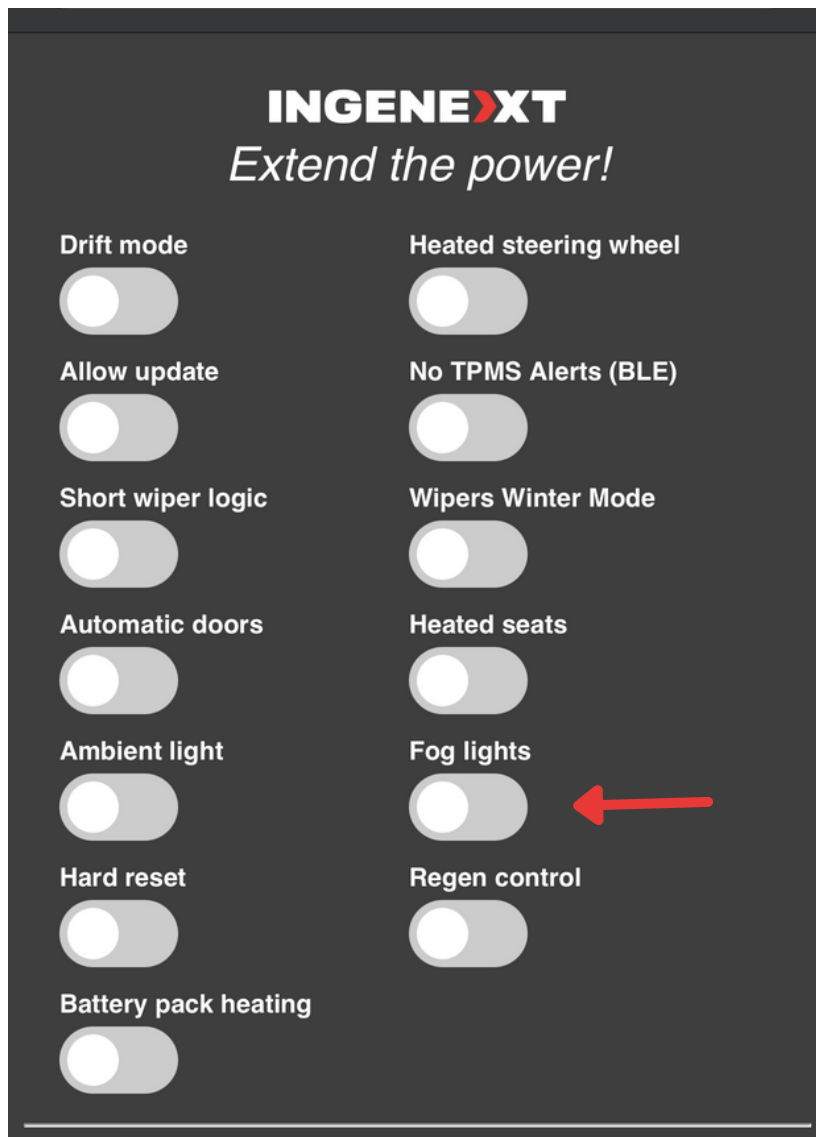
- This feature will activate the heated steering wheel if your steering wheel allows it. If your steering wheel is not designed to be heated, this feature will not work.
- To activate it you must set the feature to on in the application and activate the heated driver's seat.



**Figure 22**

## FOG LIGHT BONUS & BOOST SR ONLY

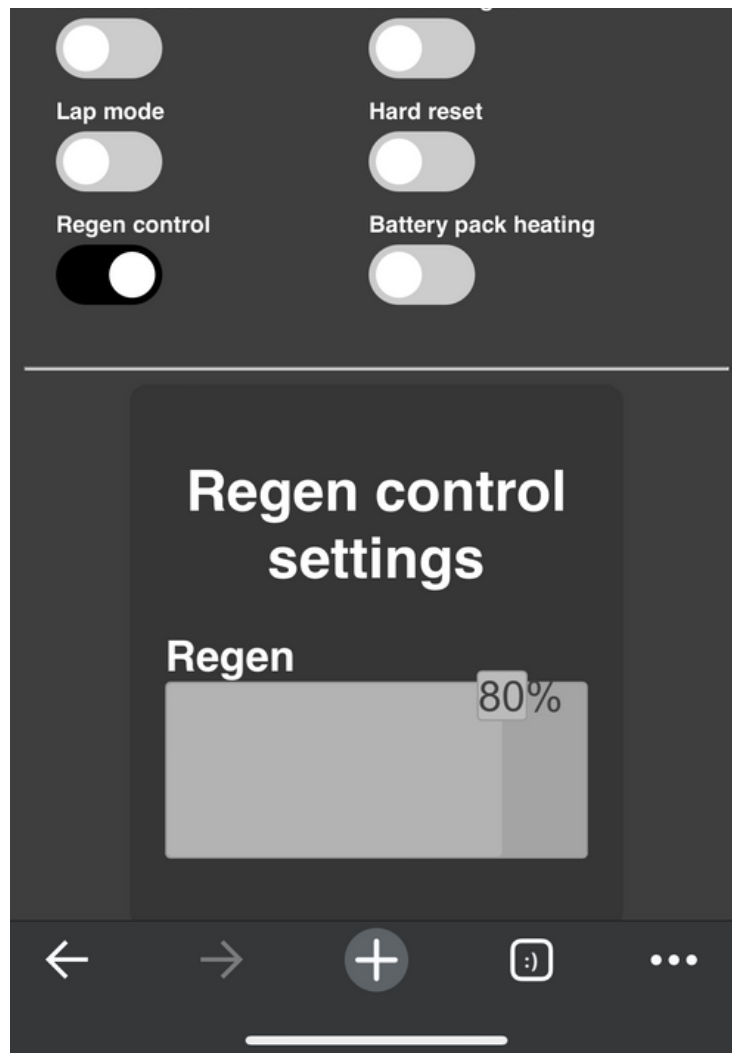
- This feature will activate the fog light
- The feature also works on retrofitted fog light



**Figure 23**

# REGEN CONTROL

- This feature is used to control the total percentage of regen allowed by the battery.
- The feature can be activated while parked or driving



**Figure 24**

# HARD RESET

- This feature resets the vehicle's systems. The feature will automatically turn off after the hard reset. You must be in park to activate it
- All those who own a 2021 and above must do a hard reset after installing the product.

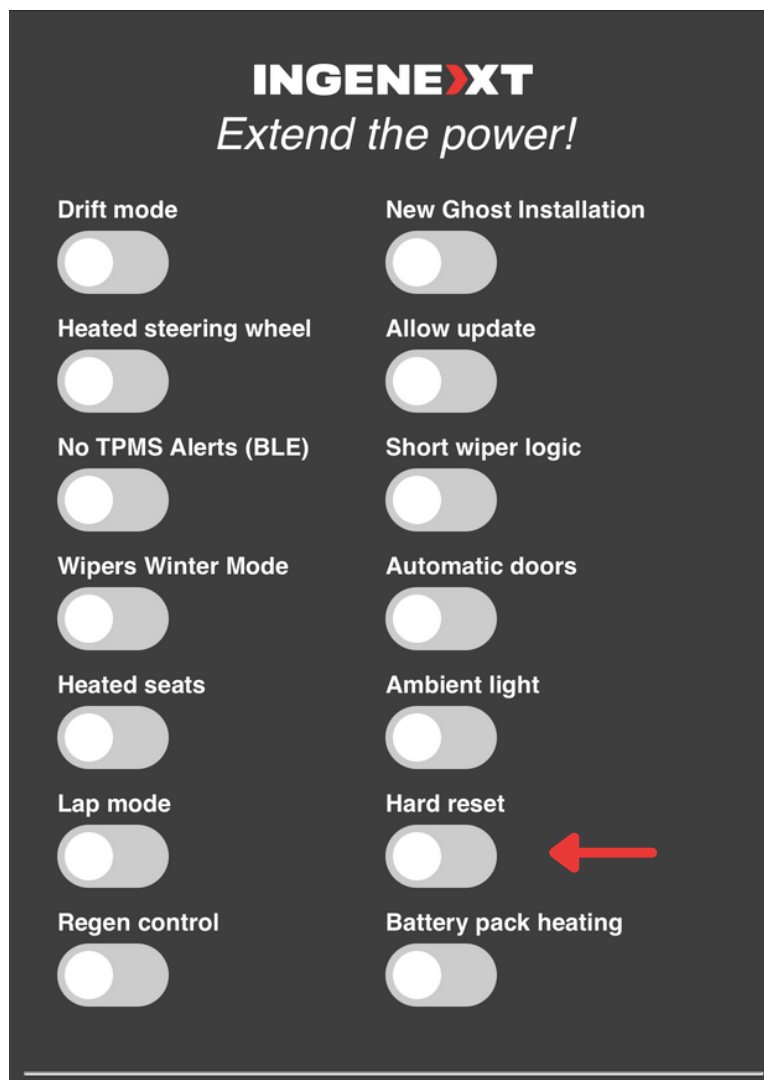


Figure 25

# OFF ROAD MODE

- This feature allows the motors to split the torque (50/50) giving better traction for winter driving. This function is only available for Tesla with two motors (AWD) when driving in manual mode.
- To activate it you must be in PARK and turn on the option in the Ingenext web application
- To deactivate the off-road mode you must :
- Disable the option in the Ingenext web application
  - Restart the car by going to the Safety and Security menu and clicking on the POWER OFF button.
  - Wait 5 seconds and press the brake pedal to restart the car.

The off road mode cannot be activated at the same time as the drift mode.



## RWD MODE

- This function makes the car two-wheel drive (100% power to the rear motor). This function is only available for Tesla with two motors (AWD).
- To activate it you must be in PARK and turn on the option in the Ingenext web application.
- To deactivate it you must be in PARK and turn off the option in the Ingenext web application.

\*The RWD mode can be activated at the same time as the drift mode.

# LAP MODE (FOR GHOST ONLY)

- Fully customizable parameters to optimize performance on a race track or other off road type driving :
- adjustable front and rear bias of power output, adjustable stability control and adjustable regenerative braking. Also Post-Drive cooling and Compressor overclock can be enable.
  - You must be in park to change parameters

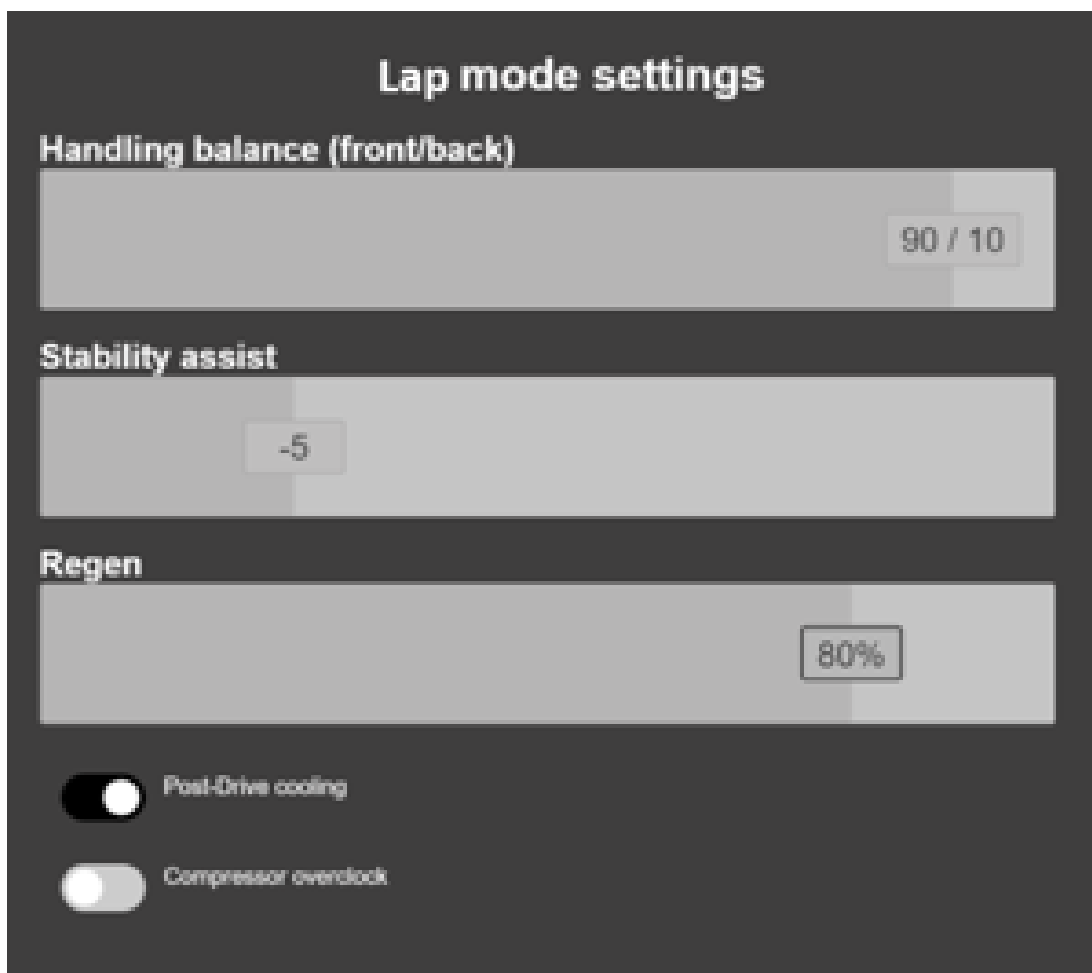


Figure 26

# RESET WIFI AP PASSWORD

- 1** You should start this sequence with the center display in the Service Menu
- 2** While in Park, cycle every second between the WIPER SERVICE MODE ON and OFF Position
- 3** You should do this sequence (from ON to OFF) at least 4 times in order to reset the AP password to the default one : ingenext.

# ALLOW UPDATES

- In the future, all updates from Tesla on the center display will be failed. In order to be able to allow these updates to be installed, you must enable the Allow Updates setting in the Ingenext's app.

Before installing any future update, we highly recommend that you visit our website

<https://ingenext.ca/pages/safe-tesla-updates-for-boost50-and-bonus-module>



to confirm that the staged update on your center display is safe to be installed with your current Ingenext's app version. If it isn't, you should wait until a new version of the Ingenext's app is released in order to fix potential changes and new features that would be deployed.

- To prevent an accidental update of the center display, you should always disable the Allow Updates setting in the Ingenext's app once the staged update is installed and the Ingenext's app is updated accordingly.

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