

FACTUAL REPORT OF INVESTIGATION ATTACHMENT

Tesla Model S Software Release Notes v6.1

Culver City, CA

HWY18FH004

(9 pages)



MODEL S SOFTWARE RELEASE NOTES v6.1

Please note that this release brings fundamental improvements and changes to how your vehicle operates. It is important to read these Release Notes so that you understand how these changes affect the operation of your vehicle. You may also access these Release Notes at any time by tapping the Tesla T on the touchscreen and tapping the Release Notes link on the "About Your Tesla" window.

With this release, we are expanding the Driver Assistance features in your Model S with Traffic-Aware Cruise Control, Forward Collision Warning, and Auto High Beam. In addition, we are introducing Trip Energy Prediction, a new feature to help you better manage your energy usage as you drive. This release also includes Smart Preconditioning to automatically prepare your cabin temperature for you before you drive. There are numerous other improvements across various areas in your Model S, such as: shuffle/repeat in the Media Player, one-touch phone number dialing in Calendar events, and better support for TuneIn podcasts.

The Calendar app improvement requires the use of the latest Tesla Mobile App, available for iOS and Android.

Please refer to the in-vehicle Owner's Manual for more detailed information relating to these features. You can always view the Owner's Manual by tapping the "MANUAL" button in the lower left corner of the Settings Panel.

Traffic-Aware Cruise Control

With this release, Model S cruise control has been upgraded to Traffic-Aware Cruise Control (TACC). When TACC is engaged, Model S will adjust its speed based on the car directly in front of you, decelerating and accelerating as needed. This feature is available only to customers who have Autopilot hardware and have purchased the new Tech Package.

You can now immediately adjust your set speed to the speed determined by Speed Assist. To do so, first check the Speed Assist speed, indicated by the tick mark at the edge of the speedometer. If this speed is appropriate, pull the cruise stalk toward you and hold it for approximately half a second. When you release the stalk, your set speed is the speed determined by Speed Assist, taking into account any OFFSET FROM SPEED LIMIT you've set.



Note:

- Do not rely on Speed Assist to determine an accurate or appropriate cruising speed. Always cruise at a safe speed based on traffic and road conditions.
- Please pay attention to the speed determined by Speed Assist before engaging this feature.
- When you're cruising at the speed determined by Speed Assist, the set speed does not change when the speed limit changes.

• If Speed Assist cannot determine the speed limit of the road, your set speed will not change when you pull the cruise stalk toward you and hold it for approximately half a second.

To adjust the TACC set speed manually, simply tap on the cruise stalk up or down as needed. Tapping

to the first detent will adjust the speed by 1 mph (1 km/h) and tapping to the second detent will adjust to the <u>closest</u> 5 mph (5 km/h) increment. A triangular indicator at the edge of the speedometer will indicate the set speed.



Other TACC functions—engaging, disengaging, initially establishing a set speed, etc.—remain the same as the previous Model S cruise control.

You can adjust the following distance to the car in front of you by rotating the end of the cruise stalk from 1, the shortest following distance, to 7, the longest following distance. This distance will vary depending on your speed.

When TACC is engaged, a CRUISE badge will appear in the speedometer. If the badge is blue, Model S is actively tracking a car and will accelerate/decelerate based on your set speed, the following distance you've set, and the speed of the tracked vehicle. If the badge is gray, Model S is not actively tracking a vehicle and will continue at your set speed as if there were no car in front of you.



Note:

- When your Model S comes to a standstill while following a car and remains stationary for 3 to 10 seconds, the CRUISE badge will change to a HOLD badge. If the badge is blue, Model S is actively tracking a car. If the badge is gray, Model S is not actively tracking a vehicle. You will need to resume TACC by pressing the accelerator pedal or pulling on the cruise stalk. A visual notification will appear if you need to do this.
- TACC only has a limited amount of deceleration. Therefore, you should always oversee the system and intervene if corrective action is needed. In particular, Forward Collision Warning notifications may be displayed when TACC cannot handle particular scenarios.
- TACC is not designed for adverse weather conditions such as heavy rain, snow, slippery roads, etc. You should not use the system in such conditions.
- TACC has limited capabilities to detect vehicles merging into your lane at close distances, in which case driver intervention may be required.
- TACC is best for highway driving and not for driving on winding roads or city streets with different types of traffic—e.g., with pedestrians and bicycles.
- TACC may not detect some stationary vehicles or other objects—e.g., pedestrians, motorcycles, cyclists, animals or other small stationary/moving objects.
- TACC may react to vehicles that are not in the immediate path of your Model S, in which case driver intervention is required.

Overtaking Cars

While TACC is engaged, activating the left-turn signal will accelerate your Model S a bit faster than your current speed—if TACC is tracking a car and you are traveling slower than your set speed. TACC will still maintain a following distance to the car in front, albeit shorter than normal. This feature is particularly useful when you need to pass a car on the left. This feature is enabled by default. You can disable this setting via the OVERTAKE ACCELERATION setting located in Controls > Settings > Driver Assistance > CRUISE CONTROL.

Note:

- For Right-Hand Drive cars, this feature will activate when you activate the right-turn signal.
- This feature does not activate below 45 mph (72 km/h).

Forward Collision Warning

Forward Collision Warning will warn you when there is an object in your path and a collision is likely unless the driver takes corrective action. This warning consists of a visual indicator in the center of the dial in the instrument panel, along with a chime. You can set how early you'd like to be warned, or

disable this feature, via the FORWARD COLLISION WARNING setting in Controls > Settings > Driver Assistance > COLLISION AVOIDANCE ASSIST.

Note: Forward Collision Warning will not warn you about all possible collisions and may also warn you of collisions that will not occur.



Auto High Beam

Auto High Beam is a new convenience feature where Model S will temporarily switch to low-beam headlights if there is traffic or urban lighting detected in front of the car, such as from an oncoming vehicle or street lights. The blue headlights telltale in the instrument panel will display a small "A" when high beams are on. This telltale will turn gray when high beams are not on. Auto High Beam is activated when you turn your high beams on and have enabled this feature via the AUTO HIGH BEAM setting in Controls > LIGHTS.

Note: When Auto High Beam is enabled, you can manually turn on the high-beam headlights by pulling the turn indicator stalk all the way towards you.

Trip Energy Prediction

You can also monitor energy usage while on your trip via the new Trip Chart in the Energy app. This chart allows you to track Model S's actual energy usage against the initial prediction. To examine the chart in more detail, you can tap on the zoom button in the upper right portion of the chart.

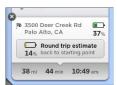
Note: The Trip Energy Prediction feature is only available if your Model S is equipped with the Navigation option.

Navigation

The projected energy remaining will briefly be displayed as a percent when a trip is first generated by the Navigation system. Thereafter, you can view it by tapping the area at the bottom of the turn list. While Navigation is active, Model S will also monitor your energy usage and advise you:

- If you need to drive slowly to reach your destination, or if you won't be able to reach your destination without charging.
- Whether Model S has sufficient energy for a round trip—enough energy to get to your destination and back to the starting point of your trip. Tap on the bar at the bottom of the Navigation turn list to see this value.





Trip Chart

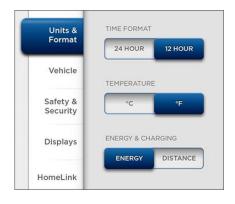
You can also monitor energy usage while on your trip via the new Trip Chart in the Energy app. This chart allows you to track Model S's actual energy usage against the initial prediction. To examine the chart in more detail, you can tap on the zoom button in the upper right portion of the chart.



Energy Option for Battery Display

To better support the new Trip Energy Prediction feature, you now have the option to view the energy remaining in your battery as a percentage. You can switch to this view by choosing the ENERGY option in Controls > Settings > Units & Formats > ENERGY & CHARGING.

Note: For EU vehicles, you can switch to this view by choosing the ENERGY option in Controls > Settings > Language & Units > ENERGY & CHARGING.



Smart Preconditioning (BETA)

With this release, Smart Preconditioning will automatically get the cabin climate ready for you, based on the last set temperature and your driving schedule. Model S will observe your driving schedule and when it's confident in identifying a pattern, it will start Smart Preconditioning when you are charging, at home, or at work.

Smart Preconditioning will be disabled by default. You can enable it via the SMART PRECONDITIONING setting in Controls > Settings > Vehicle > CLIMATE.

Note:

- If you do not have a regular driving schedule, Model S will not be able to confidently identify a pattern and may not ever start Smart Preconditioning for your car.
- Smart Preconditioning is only available if you save home and work locations.

New Navigation View: Route Overview

There is now a new way to view your route when you are using Navigation. The Route Overview mode allows you to see the full route on the map. This view will adjust and zoom in on your destination as you make progress on your trip. You can switch to this mode by tapping on the control in the center of the

Maps control bar.



Enhanced Park Assist View

With this release, the Park Assist view has been enhanced to provide better guidance when you park your Model S. When you shift to reverse, the Park Assist view will appear, showing any objects that are

in close proximity to the front and rear of your Model S. A chime will also sound as your Model S approaches any objects to the front/rear. The Park Assist view will close when you shift to drive unless there are objects close to the front of the car, in which case the Park Assist view will close automatically when the speed exceeds 5 mph (8 km/h). You can also close the Park Assist view manually by tapping on the "x" in the upper left-hand corner. If you need to silence the chime, you can tap on the mute button, located in the bottom left corner of the window.



Note:

- The Enhanced Park Assist View is available only if your Model S is equipped with parking sensors.
- If you drive with the Camera app active, you will now have the option to switch to the Park Assist view
 at speeds below 5 mph (8 km/h). This is particularly useful if you need assistance with parallel
 parking. You can switch to the Park Assist view by tapping the button in the upper left corner of the
 Camera app window.

Reverse Camera Guidelines

To help you back up with more confidence, new guidelines are now available in the Camera view when you shift to reverse. The guidelines will curve appropriately in response to any steering wheel adjustments.



Calendar Enhancements: Meeting Notes & Phone Numbers

With this release, you can now do more with Calendar events: view event notes and easily dial phone numbers associated with an event—e.g., conference call phone numbers, etc. Additionally, you can now use the filter function to control which calendar events appear in the app.

The first phone number associated with an event—e.g., in the event location field or event notes—will be displayed with the event on the main Calendar view. Just tap on it to dial the phone number via the Bluetooth-connected phone.

You can also see all the phone numbers, conference codes, and web links associated with an event by looking at the event notes. Additionally, you can click on a web link inside of an event note and it will open in the Browser app. To view event notes, simply tap on the "i" next to the event.





Note:

• You will need the latest Tesla Mobile App to enable this new feature.

Media App Improvements

Shuffle/Repeat

You can now shuffle tracks in a playlist or repeat any track on a USB drive or Slacker Premium account. Just tap on the Shuffle or Repeat icons beneath the album cover art to enable/disable these options.



TuneIn Podcasts

You can now pause or rewind/fast forward to any point in a TuneIn podcast. To rewind/fast forward, simply manipulate the scrubber bar in the Media app. You can also pick up where you left off in a TuneIn podcast when you return to your Model S.



Improved Rdio/Slacker Buffering

With this release, there is better buffering for Rdio/Slacker. You can see the music buffering ahead as the buffer bar "fills up."



Simplified Right Steering Wheel Controls

With this release, the right steering wheel controls have been simplified:

- Scrolling adjusts the most recently used function.
- Pressing on the lower right steering wheel button (Menu button) displays the function list. Pressing the button again closes it.
- Pressing on the upper right steering wheel button (Voice button) allows you
 to browse the phonebook of the Bluetooth-connected phone. Pressing the
 button again closes it.
- While on a phone call, you can access Call Options by tapping on the right scroll wheel to act on the active call or access the phonebook.





Factory Reset

You can now use the Factory Reset function to erase all personal data—e.g., saved addresses, music favorites, etc.—and reset all settings to their factory defaults. This is particularly useful when you are transferring ownership of the car—e.g., selling it or giving it to someone else. You will need to enter your My Tesla account information to complete the Factory Reset process. This feature is available via the FACTORY RESET setting in Controls > Settings > Service & Reset > CAR SOFTWARE.



Additional Improvements

- The Consumption graph in the Energy app now defaults to Average Range. The graph also preserves your Projected Range setting selection.
- You can now open your charge port by pressing and holding the trunk button on your keyfob.
- You can now adjust the volume for the Navigation instructions using the left scroll wheel on the steering wheel when the Navigation instructions are being spoken.
- There is a new Suspension tab that contains the suspension controls previously found in Controls > Driving. The Suspension tab can be found under Controls.
- RANGE MODE has moved from Settings > Vehicle to Controls > Driving.
- There is a new Service & Reset tab found in Controls > Settings that contains the following settings:
 - SERVICE MODE, previously found in Controls > Settings > Vehicle
 - TIRE PRESSURE MONITOR, previously found in Controls > Settings > Vehicle





o TOW MODE, previously found in Controls > E-Brake & Power Off