LEXUS
Technical Service Information Bulletin

Head Unit Software Update (Panasonic)

Service Category Audio/Visual/Telematics

Section Navigation/Multi Info Display **Market** USA

Toyota Supports
ASE Certification

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2023 - 2024	ES250, ES300H, ES350, RX350, RX350H, RX450H+, RX500H, UX250H	
2024	LC500, LC500C, LC500H	
2023	LS500, LS500H	
2022 - 2023	LX600	
2022 - 2024	NX250, NX350, NX350H, NX450H+	

REVISION NOTICE

January 26, 2024 Rev1:

- **Applicability has been updated to include 2022 model year LX 600, and 2023 model year LS 500, LS 500h, and 2022 and 2024 model year NX 250, NX 350, NX 350h, NX 450+, and 2023 – 2024 model year ES 250, ES 300h, ES 350, RX 350, RX 350h, RX 450h, RX 500h, UX 250h, and 2024 model year LC 500, LC 500c, LC 500h, vehicles.**
- **The Introduction, Software Update Information, and Software Update Procedures sections have been updated.**

Any previous printed versions of this bulletin should be discarded.

SUPERSESSION NOTICE

The information contained in this bulletin supersedes Service Bulletin No. L-SB-0007-22.

- **Applicability has been updated to include 2023 model year LS 500, LS 500h, LX 600, and 2023 – 2024 model year NX 250, NX 350, NX 350h, NX 450h+, RX 350, RX 350h, RX 450h, RX 500h, and 2024 model year LC 500, LC 500c, LC 500h, ES 250, ES 300h, ES 350, and UX 250h vehicles.**

Service Bulletin No. L-SB-0007-22 is obsolete, and any printed versions should be discarded.

Head Unit Software Update (Panasonic)

Introduction

A head unit software update is now available for 2022 model year LX 600, NX 250, NX 350, NX 350h, and NX 450h+ vehicles equipped with Lexus Multimedia (version 1020 or earlier). This update provides improved performance and capability for the following:

- User profile configuration and display.
- Cloud Navigation and Intelligent Voice Assistant.
- Mobile device connectivity.
- On-screen display and system settings/configuration.
- Security enhancements.

A head unit software update is now available for 2022 LX 600, NX 250, NX 350, NX 350h, and NX 450h+ vehicles; and 2023 ES 250, ES 300h, ES 350, and UX 250h vehicles equipped with Lexus Multimedia (earlier than version 1040). This software update includes the following improvements:

- Cloud navigation.
- Intelligent assistant voice recognition.
- Showing and controlling explicit audio content.
- User interface.
- Bluetooth®.
- Bug fixes.

This software update removes the following feature:

- Hybrid radio.

A head unit software update is now available for 2023 model year LX 600, NX 250, NX 350, NX 350h, and NX 450h+ vehicles equipped with Lexus Multimedia (version 1040 or earlier). This software update provides improved performance and capability for the following:

- User profile.
- Over-the-air (OTA) notifications.
- Ability to search during a call.
- Bug fixes settings/configuration.
- Security enhancements.

Head Unit Software Update (Panasonic)

Introduction (continued)

A head unit software update is now available for 2022 – 2023 model year LX 600 vehicles; 2023 – 2024 model year ES 250, ES 300h, ES 350, RX 350, RX 350h, RX 450h+, RX 500h, and UX 250h vehicles; 2022 – 2024 model year NX 250, NX 350, NX 350h, and NX 450h+ vehicles; 2023 model year LS 500 and LS 500h vehicles; 2024 model year LC 500, LC 500C, and LC 500h vehicles equipped with Lexus Multimedia (earlier than version 2050). This software update includes the following improvements:

- User interface design.
- Intelligent assistant.
- Navigation lane guidance.
- Phone book search.
- Bug fixes.

Vehicle operators can perform this update directly by accepting the on-screen notification (see Figure 1), advising the software update is available, or by locating the software update from the Settings menu and initiating the available update (see Figure 2). The release notes text below will be displayed to the customer:

"This software update includes improvements for user interface design, intelligent assistant, navigation lane guidance, phone book search, and bug fixes."
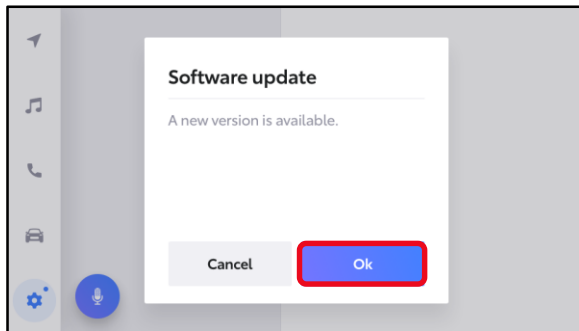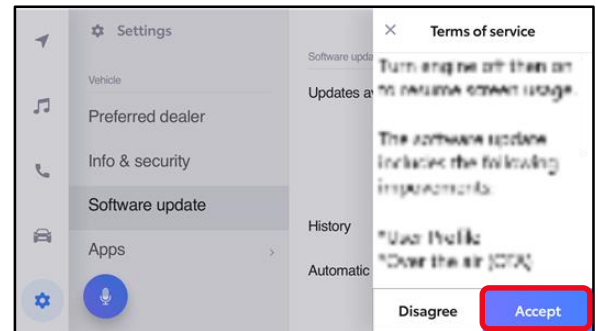
Figure 1.

Figure 2.

If it is necessary to perform the software update for a customer, follow the software update procedures in this bulletin.

This is a phased rollout, which means that as time progresses, more vehicles will receive the update notification and ability to update the head unit. This timing will vary by location and may not display for every vehicle in one location at the same day/time.

Warranty Information

OP CODE	DESCRIPTION	TIME	OFP	T1	T2
N/A	Not Applicable to Warranty	–	–	–	–

Head Unit Software Update (Panasonic)

Software Update Information

The following conditions and performance improvements for Lexus Multimedia are addressed with this head unit software update for versions 1020 or earlier:

- Abnormal Apple CarPlay® operation when multiple phones are connected via Bluetooth®.
- Unable to switch users when not in Park; the button is not grayed out.
- Abnormal color palette operation when using illumination customization.
- Contact phone number is not displayed when using voice recognition.
- Error banner missing or abnormal operation.
- Audio mode will change when searching for genres in Sirius XM® with voice recognition.
- Unable to change volume using voice recognition.
- Inconsistent climate control adjustments when using voice recognition.
- Intermittent black or white screen after shifting out of reverse or while driving.
- When using voice recognition to send a text message, the message is sent to a different number.
- Date labels do not align with the bar graphs in the trip information screen.
- Multiple degree "°" symbols displayed in the voice recognition screen.
- Unable to perform a system reset while listening to USB audio.
- "Profile not loaded" popup is shown through the startup animation.
- Intermittent rebooting.
- Abnormal operation when switching audio modes.
- Vehicle screen appears when requesting seat heater screen via voice recognition.
- Intermittent startup animation flickering.
- Poor appearance of the keyboard settings screen.
- Wi-Fi connection history is intermittently not retained.
- Wake word setting intermittently changes from OFF to ON.
- Multi-information Display (MID) incorrectly displays volume or mute changes.
- Intermittent Spanish text is displayed when the selected language is French, or vice versa.
- Abnormal USB audio playback when using voice recognition.
- Intermittent daytime display after IG-OFF.
- Two favorites added when one channel is selected.
- Some items are displayed in English instead of the system-selected language (other than English).
- Projection icon is displayed next to the phone not actively connected to projection mode.
- Voice recognition in Amazon Music™ is not consistent with other audio modes.

Head Unit Software Update (Panasonic)

Software Update Information (continued)

- When switching modes to Bluetooth® with no media files present an abnormal screen is displayed.
- Daylight savings time intermittently turns OFF.
- When switching audio mode to USB audio, the MID does NOT show USB text.
- Unable to start Remote Park while phone is connected to wireless Apple CarPlay®.
- Common voice recognition commands screen is not displayed when using voice recognition to ask for help in the Climate, Weather, and Settings screen.
- Poor music streaming quality when streaming from Samsung® devices.
- While listening to Apple Music®, when the next song starts the previous song information will still be displayed.
- Incorrect scaling of traffic colors in the navigation map.
- Intermittent DTC U131457 present.
- Abnormal navigation arrow operation.
- Repeated popups to use the HOV lane while using navigation.
- Abnormal traffic displayed when panning the map.
- Closed road notification missing.
- Zoom buttons intermittently inoperative.
- Arrival time does not match actual arrival time.
- Abnormal French voice recognition operation.

The following conditions and performance improvements for Lexus Multimedia are addressed with this head unit software update for versions earlier than 1040:

- Display screen black (this does not affect backup camera).
- Display screen flickers (this does not affect backup camera).
- Display screen freezes (this does not affect backup camera).
- Display screen is white after selecting USB music from the phone screen.
- Head unit reboots.
- PIN prompt will not appear.
- User profile inoperative.
- "Use for CarPlay®" toggle freezes.
- Apple CarPlay® connectivity performance.
- Apple CarPlay® projection screen does not appear after selecting "continue" on the phone.

Head Unit Software Update (Panasonic)

Software Update Information (continued)

- Apple Music® Home/For You screen 4th tile is non-responsive.
- Unable to switch to audio screen after ending an Apple CarPlay® phone call.
- Volume does not adjust during Siri® functions.
- Android Auto® connectivity performance.
- Contact photo does not show.
- Contact sync error with 5000+ contact address book.
- Last message not read.
- No confirmation after selecting "yes" to send a text message.
- Phone number not displayed after text message is sent.
- Profile image not displayed.
- Automatic device connection fails.
- Bluetooth® connectivity performance.
- Display screen shows phone call ongoing after it has ended on the phone.
- Two Bluetooth® phone calls active at once.
- Combination meter does not show compass when Android Auto® navigation is ON.
- Combination meter does not show compass when Apple CarPlay® navigation is ON.
- Date is incorrect when there is no GPS signal available.
- Incorrect navigation guidance is displayed.
- Map orientation resets.
- Map 2D/3D view resets.
- Map zoom level resets.
- Navigation announces crossing state borders incorrectly while driving.
- Navigation recalculation is stuck.
- Navigation route guidance is inoperative AFTER remote engine start.
- Traffic flow not updating while zoomed out.
- Unable to launch navigation by tapping on icon.
- Voice recognition command improvements.
- Voice recognition inoperative during Sirius XM® playback.
- Voice recognition reply improvements.
- Remove hybrid radio messages.
- Saved radio stations will not display station names.
- Sirius XM® channel presets in non-Sirius XM® regions.

Head Unit Software Update (Panasonic)

Software Update Information (continued)

- Sirius XM® radio is inoperative.
- Wi-Fi/DCM message appears in English instead of French.

The following conditions and performance improvements for Lexus Multimedia are addressed with this head unit software update for versions 1040 or earlier:

- User profile.
- OTA notifications.
- Ability to search during a call.
- Bug fixes settings/configuration.
- Security enhancements.

The following conditions and performance improvements for Lexus Multimedia are addressed with this head unit software update for versions earlier than 2050:

- Apple CarPlay® freezes or reboots (this does not affect the backup camera).
- Navigation guidance in combination meter is missing during Apple CarPlay®.
- Combination meter keeps Apple CarPlay® navigation arrow after disconnection.
- Combination meter shows Apple CarPlay® call in progress AFTER it has ended.
- Apple CarPlay® audio source does not resume after ACC cycle.
- Audio plays from device instead of vehicle during Apple CarPlay®.
- Apple CarPlay® audio plays instead of another last source.
- Unstable Apple CarPlay® call.
- Apple Music® Live Streaming Radio station descriptions are incorrect.
- Explicit song playback is possible even if it is set to OFF in Apple Music®.
- Apple CarPlay® system enhancements and updates.
- Muted Android Auto® call does not unmute.
- User Profile does not load using Android Bluetooth®.
- Android Auto™ disconnects after ending SOS call.
- Android Auto™ system enhancements and updates.
- Head unit reboots (this does not affect the backup camera).
- Load last saved user profile.
- Passenger microphone inoperative.
- Assistant/microphone activates unintentionally.
- Assistant hint is displayed in Spanish or French instead of English (when English is the system-selected language).

Head Unit Software Update (Panasonic)

Software Update Information (continued)

- French voice command "What's my cruising range" displays in English.
- Virtual Assistant system enhancements and updates.
- Mode button does not mute Amazon Music®.
- Amazon Music® does not resume after a Microsoft Teams call.
- Navigation distance units do not reflect the selected units.
- Navigation system enhancements and updates.
- Steering wheel Push-to-Talk (PTT) button short press inoperative.
- Slow head unit response from steering pad switches.
- Bluetooth® connectivity performance.
- The Parking Support Brake (PKSB) icon remains on screen (this does not affect the backup camera).
- "Default Source" description is not translated to French and Spanish.
- "Audio Off" banner appears when adjusting the ringtone setting while the audio is OFF.
- HVAC menu does not go to the CLIMATE screen from the COMFORT screen.
- Sirius XM® Banner information is in English instead of Spanish (when Spanish is the system-selected language).
- Sirius XM® satellite radio system enhancements and updates.
- Destination assist system enhancements and updates.
- HMI updates and enhancements.

The Head Unit (HU), Virtual Database (VD), and CAN (CA) update files may be accessed in the table below.

MODEL SERIES	MODEL YEAR	HEAD UNIT	TYPE	CALIBRATION ID
ES	2023	Entry	CA	rb_update_2023_ES_NE_CA_D_01040.zip
	2023 – 2024		HU	rb_update_2024_ES_NE_HU_D_02050.zip
			VD	rb_update_2024_ES_NE_VD_D_02050.zip
	2023	Premium	CA	rb_update_2023_ES_NP_CA_D_01040.zip
	2023 – 2024		HU	rb_update_2024_ES_NP_HU_D_02050.zip
			VD	rb_update_2024_ES_NP_VD_D_02050.zip
LC	2024		HU	rb_update_2024_LC_NP_HU_D_02050.zip
			VD	rb_update_2024_LC_NP_VD_D_02050.zip
LS	2023		HU	rb_update_2023_LS_NP_HU_D_02050.zip
			VD	rb_update_2023_LS_NP_VD_D_02050.zip
LX	2022		CA	rb_update_2022_LX_NP_CA_D_01040.zip
	2022 – 2023		HU	rb_update_2023_LX_NP_HU_D_02050.zip
			VD	rb_update_2023_LX_NP_VD_D_02050.zip

Head Unit Software Update (Panasonic)

Software Update Information (continued)

MODEL SERIES	MODEL YEAR	HEAD UNIT	TYPE	CALIBRATION ID
NX	2022	Entry	CA	rb_update_2022_NX_NE_CA_D_01040.zip
	2022 – 2024		HU	rb_update_2024_NX_NE_HU_D_02050.zip
			VD	rb_update_2024_NX_NE_VD_D_02050.zip
	2022	Premium	CA	rb_update_2022_NX_NP_CA_D_01040.zip
	2022 – 2024		HU	rb_update_2024_NX_NP_HU_D_02050.zip
			VD	rb_update_2024_NX_NP_VD_D_02050.zip
RX	2023 – 2024	Entry	HU	rb_update_2024_RX_NE_HU_D_02050.zip
			VD	rb_update_2024_RX_NE_VD_D_02050.zip
		Premium	HU	rb_update_2024_RX_NP_HU_D_02050.zip
			VD	rb_update_2024_RX_NP_VD_D_02050.zip
UX	2023	Entry	CA	rb_update_2023_UX_NE_CA_D_01040.zip
	2023 – 2024		HU	rb_update_2024_UX_NE_HU_D_02050.zip
			VD	rb_update_2024_UX_NE_VD_D_02050.zip
	2023	Premium	CA	rb_update_2023_UX_NP_CA_D_01040.zip
	2023 – 2024		HU	rb_update_2024_UX_NP_HU_D_02050.zip
			VD	rb_update_2024_UX_NP_VD_D_02050.zip

Head Unit Software Update (Panasonic)

Software Update Information (continued)

> **MULTIMEDIA SOFTWARE FILE DOWNLOAD**
> - **The multimedia software update file may be downloaded directly from this Service Bulletin by clicking on the file name in the table above. Once downloaded, do NOT extract the files (unzip), the files need to be saved directly to a blank USB flash drive.**
> - **Confirm there is no "(1)" or similar suffix on the file due to multiple downloads.**
> - **Do NOT rename the file unless it is to remove "(1)" or similar.**
> - **Multiple files can NOT be on the same USB flash drive; if there are two files on the USB flash drive beginning with "rb_update" the software installation will NOT begin.**
> - **Use a blank USB flash drive from a trusted name-brand manufacturer with the following specifications:**
>   - **Storage capacity: 4.0 – 32 GB.**
>   - **USB flash drives larger than 32 GB that can be partitioned to smaller sizes will NOT work.**
>   - **If a 32 GB USB flash drive is not working, try a smaller capacity USB flash drive.**
>   - **Communication format: USB 2.0 or newer.**
>   - **File format: FAT 32 (Windows®).**
> - **USB-C vehicles will require a USB-C flash drive or adapter that is capable of transferring data (not just charging).**

> **NOTE**
> The USB method should ONLY be used when the Wi-Fi/Cellular method of updating is unsuccessful.

> **NOTICE**
> - **To prevent damaging the head unit, DO NOT put multiple files on the same USB flash drive at the same time.**
> - **It is recommended to use one separate USB flash drive per file: For example, one for HU file, one for VD file (one for CA if applicable).**

Software Update Procedures

> **HINT**
> Future OTA updates may use the Wi-Fi delivery method to update the data.

Head Unit Software Update (Panasonic)

Software Update Procedures (continued)

Wi-Fi Connection Procedure

1. Turn ON the ignition.

2. Select the gear icon in the lower left corner of the radio screen.

   Figure 3.
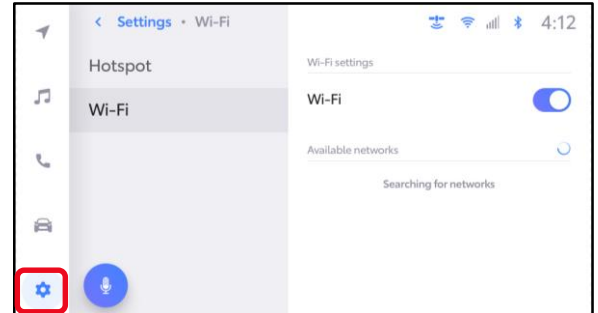
3. Select Data & Wi-Fi.

   Figure 4.
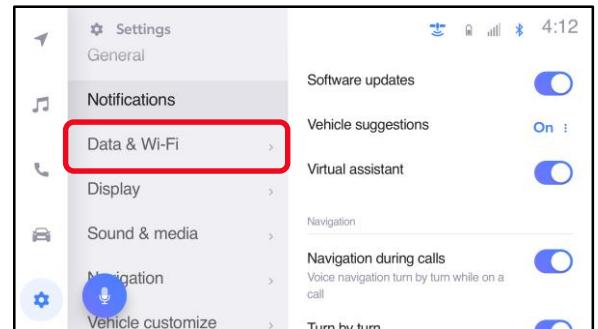
4. Select Wi-Fi and turn the Wi-Fi toggle to ON.

   HINT
   - This step is used to connect the vehicle to an EXTERNAL Wi-Fi source.
   - Wi-Fi connection is NOT required for updates that are delivered through DCM data.

   Figure 5.
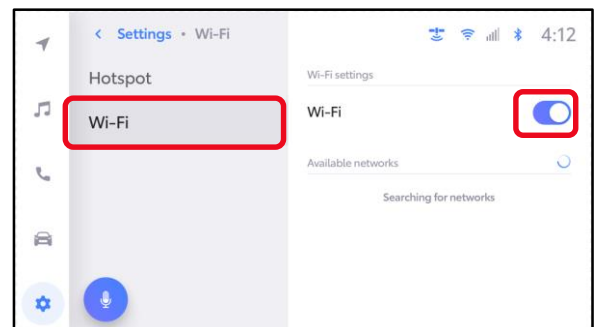
Head Unit Software Update (Panasonic)

Software Update Procedures (continued)

Wi-Fi Connection Procedure (continued)

5. Select the Wi-Fi network desired to connect.

    Figure 6.

NOTE
It is NOT possible to connect to a Wi-Fi source that requires a username and password to be entered in a browser.
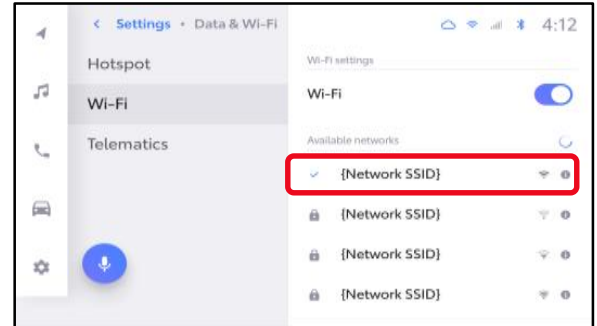
6. Follow the on-screen instructions. A message will appear confirming that the vehicle is successfully connected to the network.

    Figure 7.
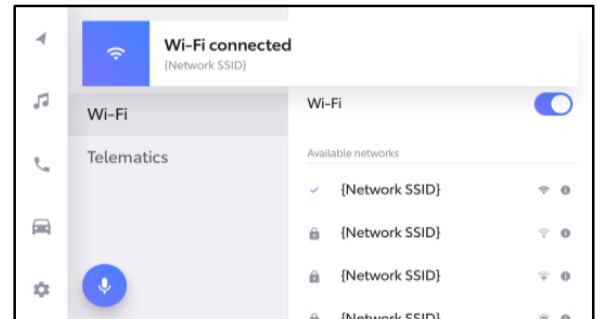
OTA Update Procedure (Wi-Fi and Cellular)

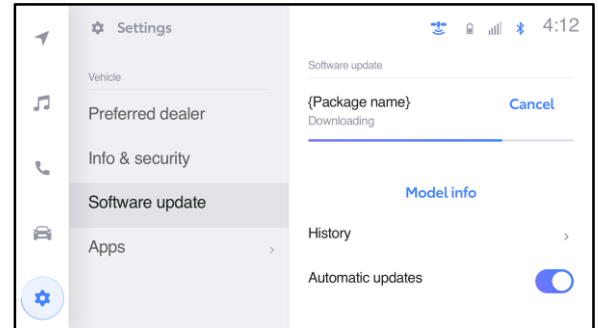1. Select the gear icon, scroll down, and select Software update.

    Figure 8.
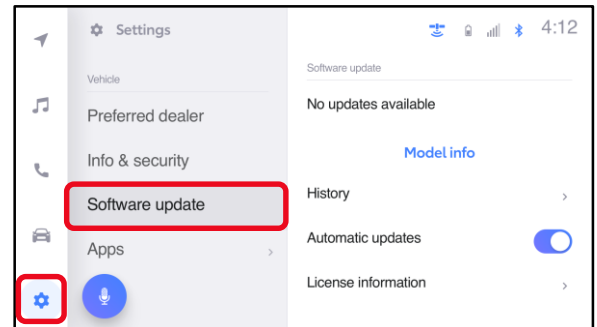
Head Unit Software Update (Panasonic)

Software Update Procedures (continued)

OTA Update Procedure (Wi-Fi and Cellular) (continued)

2. Are software updates available?
   - **YES —** Continue to step 3 to update the vehicle.
   - **NO —** This bulletin does NOT apply, continue diagnosis using the applicable Repair Manual.

Figure 9.
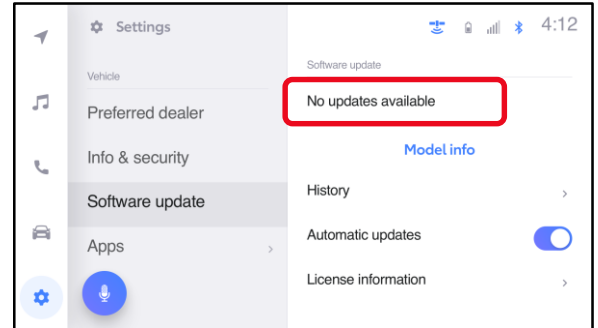
Figure 10.
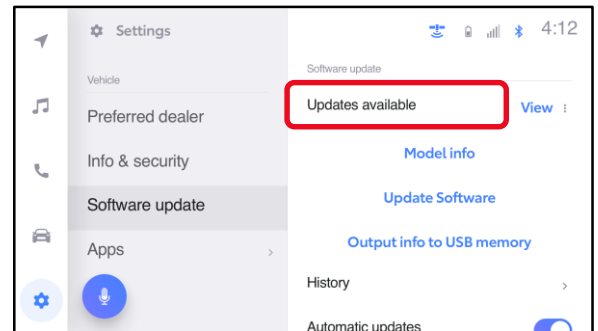
3. Select Model info.

Figure 11.
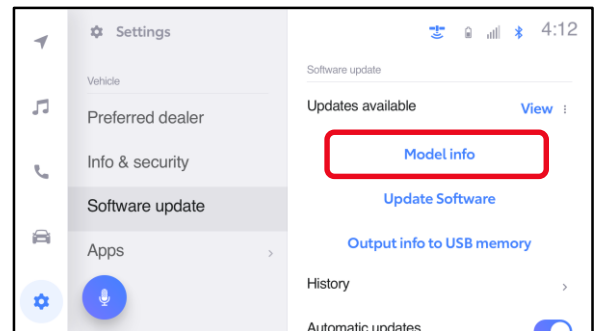
Head Unit Software Update (Panasonic)

Software Update Procedures (continued)

OTA Update Procedure (Wi-Fi and Cellular) (continued)

4. Is the software up to date?
   (Refer to Table 1 below.)

   - **YES —** This bulletin does NOT apply.
     Continue diagnosis using the
     applicable Repair Manual.

   - **NO —** Continue to step 5.

Figure 12.
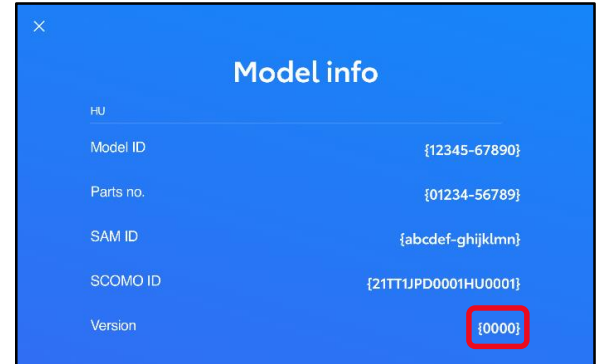
Table 1. Software Version Information

TYPE	PREVIOUS VERSION	CURRENT VERSION
HU Version	Earlier than 2050	2050
VD Version		

5. Select Update Software.

Figure 13.
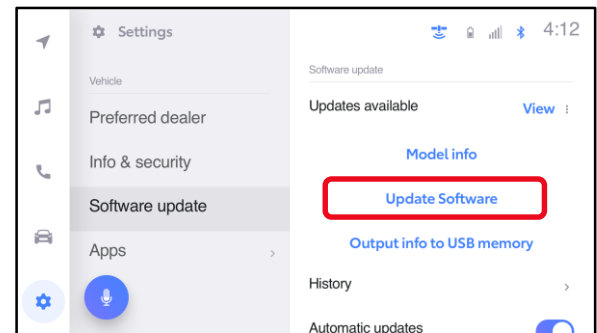
6. Select Accept on the Terms of
   service screen.

Figure 14.
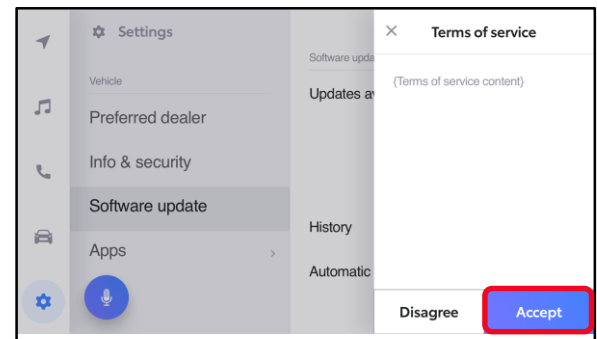
Head Unit Software Update (Panasonic)

Software Update Procedures (continued)

OTA Update Procedure (Wi-Fi and Cellular) (continued)

7. Wait for the update to download.

Figure 15.

8. Select Accept on the Notice pop-up message if it appears.

Figure 16.
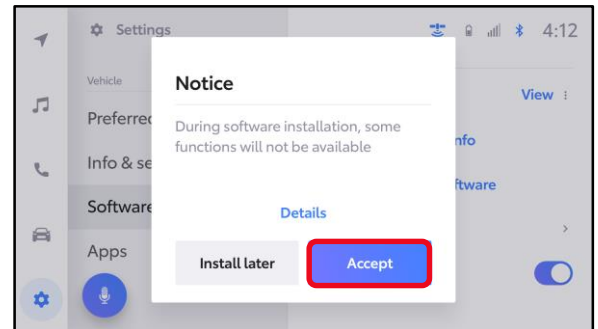
9. Wait for the update to download. Once the head unit begins installation, the update will take 10 minutes or less.
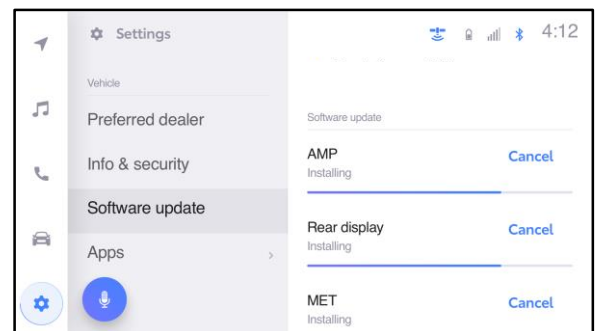
> **NOTE**
> - Do NOT turn OFF the engine or ACC BEFORE the software is ready for updating.
> - Selecting Cancel will cancel the installation of the specific component, but it can be installed manually later.
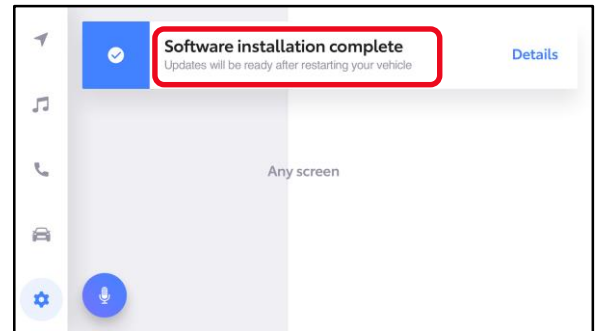
Figure 17.

Head Unit Software Update (Panasonic)

Software Update Procedures (continued)

OTA Update Procedure (Wi-Fi and Cellular) (continued)

10. If a major update is being installed the message "Software update in progress" will be displayed.

> **NOTE**
> - Do NOT turn OFF the engine or ACC BEFORE the software has updated successfully.
> - Selecting Cancel will cancel the installation of the specific component, but it can be installed manually later.

Figure 18.
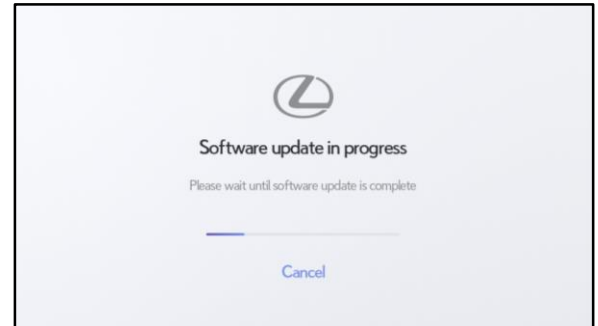
11. The software installation is complete when either a "Software installation complete" banner (Figure 19) or the "Software update complete" screen (Figure 20) is displayed.

> **NOTE**
> If the vehicle has installed a major update, and the "Software update complete" screen is displayed, then an IG-OFF/ON will need to be performed prior to attempting to operate any of the infotainment functions.
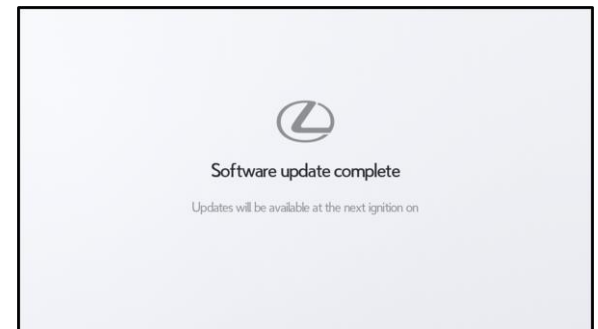
Figure 19.

Figure 20.

Head Unit Software Update (Panasonic)
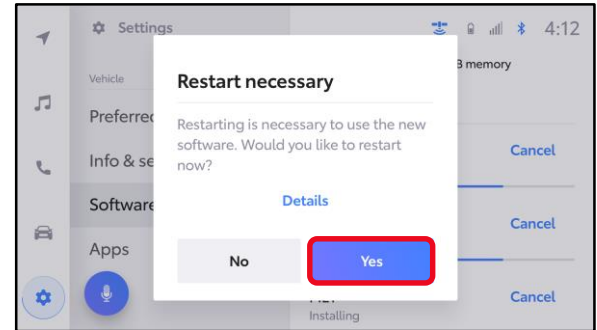
Software Update Procedures (continued)

OTA Update Procedure (Wi-Fi and Cellular) (continued)

12. If a restart is necessary, select Yes to restart the head unit.
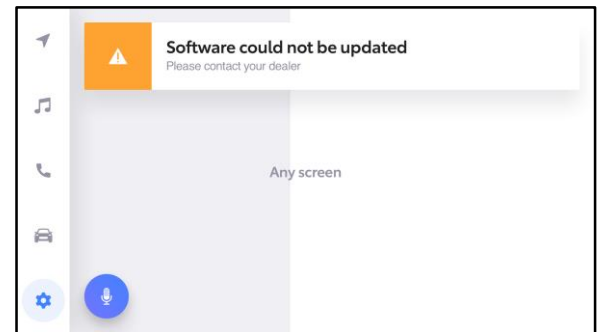
    Figure 21.

    > **NOTE**
    >
    > If No is selected or the vehicle is switched to IG-OFF, the installation will occur at the next IG-ON.

13. If after IG-OFF/ON a "Software could not be updated" banner appears, continue to the USB Update Procedure subsection.

    Figure 22.

USB Update Procedure

1. Download the software from the Software Update Information section onto an empty USB flash drive.

    > **NOTE**
    > - The USB method should ONLY be used when the Wi-Fi/DCM method of updating is unsuccessful.
    > - Even for USB update, confirm one of the following signals is present for the head unit:
    >   - Data Communications Module (DCM) (this function is NOT available in some countries or areas.)
    >   - Wi-Fi.

    > **NOTICE**
    >
    > **Possibility of damage to the components being repaired. This is a new procedure different from previous multimedia software update bulletins. Please pay close attention to the notices on page 10 and page 19.**
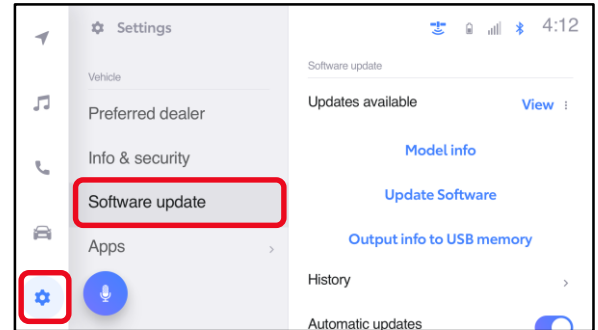
Head Unit Software Update (Panasonic)

Software Update Procedures (continued)

    USB Update Procedure (continued)

2. Select the gear icon and scroll down to select Software update.

Figure 23.

3. Insert the prepared USB flash drive into the vehicle's data USB port.

Figure 24.

> **NOTE**
>
> After inserting the USB flash drive, two banners may appear:
>
> 1. A blue "USB device connected" banner.
> 2. An orange "Device no response" banner appears if there are no media files on the USB flash drive. This is normal.
>
> If the blue "USB device connected" banner does not appear, the USB flash drive may be formatted incorrectly or is inoperative.
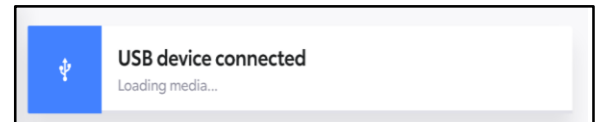
For 2022 model year LX and NX vehicles; and 2023 model year ES and UX vehicles that have a CA version earlier than 1040, insert the USB flash drive with the CA file first. After CA is updated to 1040, repeat the USB update procedure to update the HU to 2050, then the VD to 2050.

For all other 2023 – 2024 model year vehicles listed in this bulletin that have CA version 1040 or later, insert the flash drive with the HU file first. After the HU is updated to 2050, repeat the USB update procedure to update the VD to 2050.

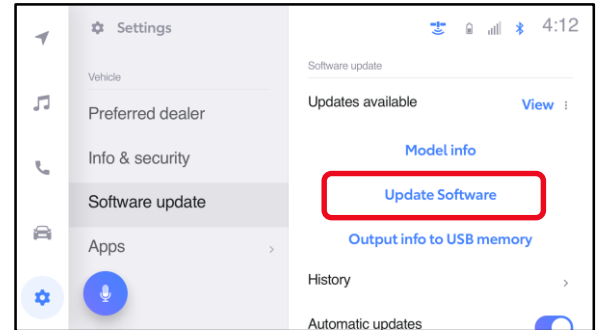# Head Unit Software Update (Panasonic)

Software Update Procedures (continued)

USB Update Procedure (continued)

4. Select Update Software.
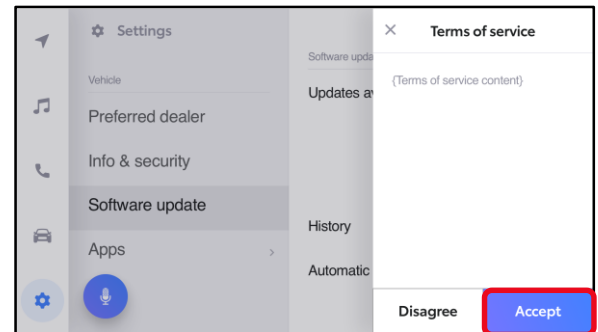
Figure 25.

> **NOTE**
>
> The "Update Software" button may not be available immediately after inserting the USB flash drive. The head unit is unzipping the software update file, and it may take up to 15 minutes for this button to become available to press.

5. Select Accept on the Terms of service screen.

Figure 26.

6. Wait for the update to download. Once the head unit software begins installation, the update will take about 15 minutes per update file.

Figure 27.

> **NOTICE**
>
> **To prevent damaging the head unit, follow the five requirements below during this software update install step.**
>
> - **Do NOT turn IG OFF.**
> - **Do NOT turn ACC OFF.**
> - **Do NOT press CANCEL.**
> - **Do NOT turn the head unit OFF.**
> - **Do NOT remove the USB flash drive until instructed in step 9.**
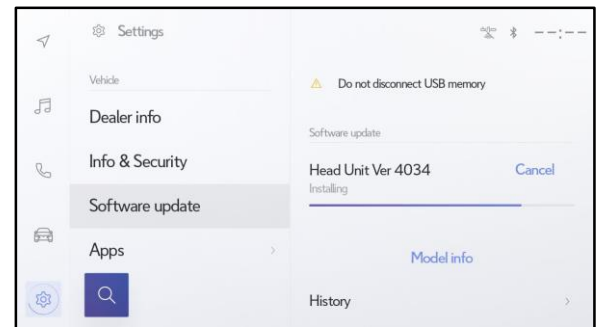
Head Unit Software Update (Panasonic)

Software Update Procedures (continued)

USB Update Procedure (continued)

A. When the update is complete, "Install Complete" will show on the head unit, as shown in Figure 28.

B. The "Software installation complete" pop-up message may also appear, as shown in Figure 29.

> **NOTE**
>
> If you are prompted to upload a report as shown in Figure 30, insert a blank USB to remove the .JSON files. These files are NOT needed.
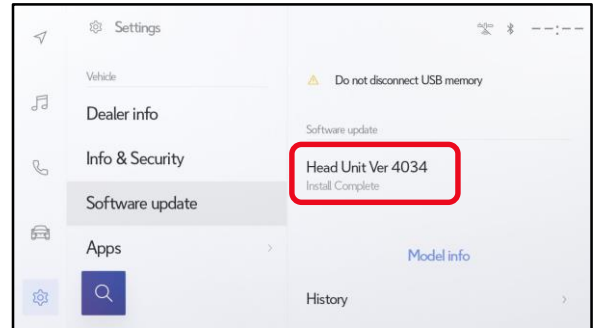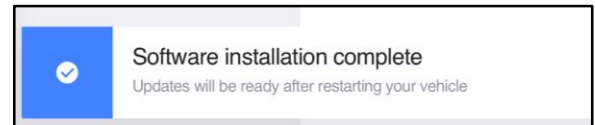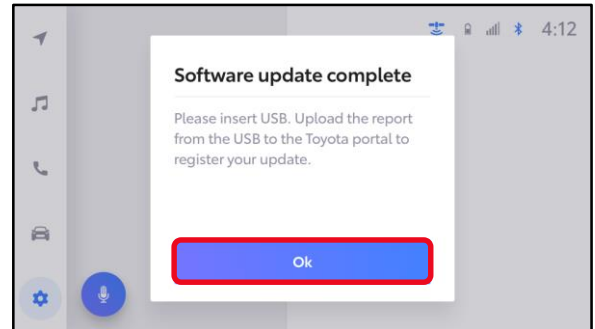
Figure 28.

Figure 29.

Figure 30.

7. Perform an ignition cycle.

8. Wait two minutes.

9. After the system has successfully booted up, remove the USB flash drive.

Head Unit Software Update (Panasonic)

Software Update Procedures (continued)

USB Update Procedure (continued)

10. Perform steps 1 – 4 of OTA Update Procedure (Wi-Fi and Cellular) to verify the software version matches the table below.

Table 2. Software Version Information

TYPE	CURRENT VERSION
HU Version	2050
VD Version	
CA Version	1040 or later

11. Perform steps 1 – 10 again for the remaining files as noted in step 3 of the USB Update Procedure.