

Details of this manual

This manual only includes a summary and the basic operating procedures of Advanced Drive.

For details about the controls, use, warnings/precautions, etc. of each function, refer to the Online Owner's Manual at Lexus.com.

Before using this system, be sure to read the Owner's Manual which corresponds to the software version of the system. (→P. 4)

<https://drivers.lexus.com/lexusdrivers/resources/owners-manuals/manual?om=om50u0301.ls.22.2111.hev.20TM>



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Reading this manual

Illustrations in this manual

Depending on the vehicle specifications or system software version, the content of the displays in this manual may differ from the actual vehicle.

Symbols in this manual

Symbols	Meanings
	Indicates the action (pushing, turning, etc.) used to operate switches and other devices.
	Indicates operating or working procedures. Follow the steps in numerical order.
	WARNING: Explains something that, if not obeyed, could cause death or serious injury to people.
	NOTICE: Explains something that, if not obeyed, could cause damage to or a malfunction in the vehicle or its equipment.
	Means Do not , Do not do this , or Do not let this happen .

Accessing an Owner's Manual which matches the system specifications

To access the appropriate Owner's Manual, it is necessary to check the software version of the system and then visit Lexus.com.

- 1 Check the current software version by smartphone app.

The software version as of October 2023 is Ver. 05.01.

- 2 Access the following URL using a computer, smartphone, etc.:

<https://drivers.lexus.com/lexusdrivers/resources/owners-manuals/manual?om=om50u0301.ls.22.2111.hev.20TM>



- 3 Select the file which includes the software version, as checked in step 1.

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Lexus Teammate Advanced Drive

Before using Advanced Drive

In order to continuously use all functions of Advanced Drive, it is necessary to perform certain preparations and keep the software updated to the latest version.

Preparation before use

It is necessary to enter a subscription service contract, provided by Lexus, to use these functions. For details, contact your Lexus dealer.

■ Precautions for use

- Be aware that the system may temporarily be disabled if a regulatory or safety related issue occurs.
- If a subscription service contract has not been entered or the contract has not been renewed, Advanced Drive may not be used or some functions may not be available.

Software updates

Advanced Drive uses the Data Communication Module (DCM) to perform software updates when functions are changed/added or improvements are made to the system.

■ Software update procedure

Software updates are performed by smartphone app.

When there is a software update notification, follow the instructions displayed.

When the software is updated, the operating method of functions may change and functions may be added.

For details about changes or additions, check the Online Owner's Manual at Lexus.com. (→P.4)

■ Software updates

- Once the software is updated, it cannot be reverted to a previous version.
- Depending on the communication environment and the content of an update, a software update may take several hours. Although an updates will be suspended when the power switch is turned off, it will resume when the power switch is changed back to ON mode.
- Advanced Drive can still be used while the software is being updated.
- When a message requesting that update be performed at a Lexus dealer is displayed, contact your Lexus dealer.
- In the following situations, the software may be updated automatically:
 - When a possible system issue or other safety related issue is corrected^{*1}
 - When a regulatory issue has is corrected^{*1}
 - When small corrections which do not affect system operation or performance are made^{*2}

*1: All available updates may be installed and the software updated to the most current version.

*2: A notification screen will not be displayed.



WARNING

■ For safe use

When the software is updated, the operating methods of functions may change. Using this system without knowing the correct operating methods may lead to an accident resulting in death or serious injury.

Make sure to read the Online Owner's Manual which corresponds to the software version of the system, available at Lexus.com, before using this system. (→P.4)

Data handling

The Advanced Drive mainly records certain data, such as the following.

▶ Recorded for several seconds at certain times after the hybrid system is started*

- Operation status of the system
- Sensor detection information
- Images from the cameras
- Location information

* : While driving, data is recorded for several seconds to approximately 1 minute before and after certain collision or collision-like situations.

▶ Constantly recorded while driving

- Distance driven
- Vehicle speed
- Accelerator status

Lexus uses the Data Communication Module (DCM) to obtain recorded data. Also, data can be obtained when your vehicle is brought to a Lexus dealer.

Collected data is used for research and development of autonomous driving, advanced safety systems, and map creation technology. Also, this data may be used for collision analysis or resolution, malfunction diagnosis, or to provide customer support.

■ Recorded data

- This system does not record conversations or other sounds.
- The system does not record personal information (example: name, gender, age,

etc.).

■ **Data usage**

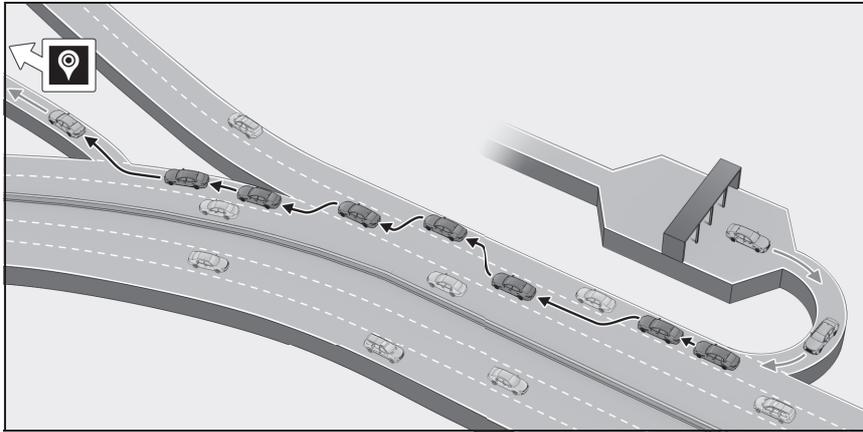
- Lexus will not disclose the recorded data to a third party except:
 - With the consent of the vehicle owner or with the consent of the lessee if the vehicle is leased
 - In response to an official request by the police, a court of law or a government agency
 - When the data can be used for research and development of autonomous driving, advanced safety systems, and map creation technology and has been processed so that it is not tied to a specific vehicle or vehicle owner
- Data recorded by this system may be used in combination with data collected through other means, which may identify a user, when performing collision analysis.

Advanced Drive

Description of functions

Advanced Drive is a system which uses high definition map data and detection information from various sensors to, through confirmation of the conditions by the driver, provide steering, acceleration, and deceleration support on highways and expressways.

Also, in an emergency, the system supports deceleration, moving to the shoulder of the road, and stopping, to help avoid a collision or help reduce the impact of a collision.



■ Functions

Refer to the Online Owner's Manual at Lexus.com. (→P.4)

■ Hands-free driving

Depending on local laws and regulations, driving without hands on the steering wheel may be prohibited. Use this system in accordance with applicable federal and state laws.

■ Possible impact of the LiDAR sensors

The LiDAR sensors may affect the operation of other equipment that uses infrared sensors. (For example, some automated parking systems may prevent the vehicle from being parked properly.)

For details, contact your Lexus dealer.



WARNING

■ For safe use

Driving safely is the sole responsibility of the driver. Do not overly rely on this system, and pay careful attention to the surrounding conditions in order to ensure safe driving.

- Advanced Drive is not an automated driving system.

This system provides the driver with information and driving assistance according to the road shape and conditions, traffic conditions, and the condition of the driver themselves. Always pay careful attention to the surrounding conditions as use of the system is the responsibility of the driver.

- Depending on the condition of the surrounding area, the road, or the driver, Advanced Drive may not operate or operation may be suspended. Also, it may not always be able to achieve the same level of performance. Read the operating conditions of each function carefully. Do not overly rely on this system and always drive carefully.

- As the recognition performance and control performance of Advanced Drive are limited, driver operation is necessary to ensure safety while the system is operating.

It is the driver's responsibility to pay careful attention to their surroundings and be ready to take over driving at any moment.

- Even if Advanced Drive is operating properly, the surrounding conditions as recognized by the driver and detected by the system may differ. Therefore, it is necessary for the driver to pay attention, assess risks, and ensure safety. Over-reliance on this system to drive the vehicle safely may lead to an accident resulting in death or serious injury.

- As Advanced Drive system control uses map information, the system may not operate correctly if the actual road conditions differ from the map information, such as when there is road construction, etc. Do not overly rely on this system, and pay careful attention to the surrounding conditions as use of the system is the responsibility of the driver.

- While Advanced Drive is operating, as driver operation may become necessary, the driver must ensure they have clear visibility of their surroundings.

Use the following to ensure visibility:

- Headlights
- Windshield wipers
- Windshield defogger, rear window defogger and outside rear view mirror defoggers

- In certain situations, a message urging the driver to hold the steering wheel may be displayed by Advanced Drive. In this case, hold the steering wheel and drive the vehicle manually to ensure safety.

⚠ WARNING

- Always observe the legal speed limit when driving on public roads.

■ **Situations in which Advanced Drive should not be used**

Do not use Advanced Drive in situations such as the following.

As the system will not be able to provide appropriate control, using it may lead to an accident resulting in death or serious injury.

- **Vehicle conditions**
 - When the vehicle may be affected by the turbulence of other nearby vehicles
 - When water, snow, dirt or other foreign matter is attached to the windshield
 - When the windshield is fogged up, or covered with condensation or ice
 - When the windshield is cracked or damaged
 - When the lens of a camera is dirty or fogged
 - When water, snow, dirt or other foreign matter is attached to a sensor or its surrounding area
 - When the carried load has caused the vehicle height to change significantly or the vehicle to be tilted
 - When driving in an emergency lane
 - When driving in a flex lane
 - When tire chains are installed
 - When the tire inflation pressure is not correct
 - When the installed tires are significantly worn
 - When tires other than the manufacturer specified size are installed

- When a compact spare tire is installed to the vehicle or an emergency tire puncture repair kit has been used
- When the wheels are misaligned
- When the vehicle has been subjected to a strong impact, such as in a collision
- When the vehicle cannot be driven stably, due to a collision, malfunction, etc.
- When towing with the vehicle
- When the vehicle is being towed
- **Road/traffic conditions**
 - When driving on a road with sharp curves
 - When the road surface is slick, such as when it is covered with ice or snow
 - When driving on a steep slope
 - When driving on a road with a steep grade that changes sharply
 - When driving in heavy traffic
 - When in traffic that is constantly accelerating/decelerating
- **Weather**
 - When driving in strong wind
 - When driving in inclement weather (rain, fog, snow, sandstorm, etc.)

Advanced driving support

The advanced driving support is a system which, through confirmation of the situation by the driver, provides support with lane maintenance, acceleration, deceleration, stopping, starting off, and lane changing while driving on a highway or expressway.

Also, when a destination has been set on the navigation system, support for some of the driving operations necessary to reach the destination will be provided.

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WARNING

■ For safe use

Driving safely is the sole responsibility of the driver. Do not overly rely on this system, and pay careful attention to the surrounding conditions in order to ensure safe driving.

- The advanced driving support is designed for use on roads such as highways and expressways. Do not use it in any other areas, as it may not operate correctly.

Also, do not use this system on roads which are shared with pedestrians and bicyclists.

- Advanced driving support is not a system which allows for inattentive driving or the driver to not watch the road.

Always pay careful attention to the surrounding conditions, as ensuring safety is the responsibility of the driver.

- As the advanced driving support cannot detect intersections, traffic lights, or stop lines, if any of these are encountered, the system will not be able to provide appropriate control, possibly leading to an accident resulting in death or serious injury.

Always pay careful attention to the surrounding conditions, as ensuring safety is the responsibility of the driver.

- While the advanced driving support is operating, various information, such as the system operating state, will be displayed. Maintain a driving posture which allows the entire display to be viewed.

Basic operations

■ Setting a destination on the navigation system

When using Cloud Navigation^{*}, it will be linked with route guidance and provide support for some of the driving operations necessary to reach the destination.

The advanced driving support can be used even if Cloud Navigation is not being used. (The vehicle will continue along the current road.)

^{*}: Refer to the "MULTIMEDIA OWNER'S MANUAL".

■ Meeting the use conditions

→P.14

■ Operating the advanced driving support (controlled driving)

→P.14

■ Adjusting the set vehicle speed

→P.15

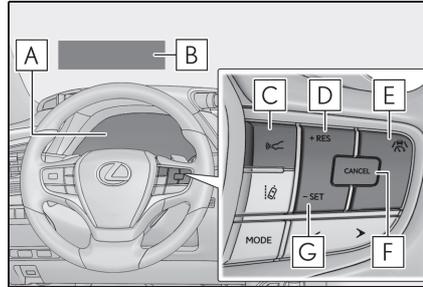
■ Changing the vehicle-to-vehicle distance

→P.16

■ Cancelling controlled driving

→P.17

System components



A Instrument cluster

B Head-up display

C Vehicle-to-vehicle distance switch

D "+RES" switch

E Advanced Drive main switch

F Cancel switch

G "-SET" switch

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Lexus Teammate Advanced Drive

Advanced driving support use conditions

This system can be operated when in an area where use is possible and all of the operating conditions are met.

The Advanced Drive indicator  is illuminated and “Advanced Drive READY” is displayed when the system can be operated.

■ Areas where use is possible

Highways or expressways where high definition map data is available

For details, refer to the following URL.

<https://www.lexus.com/teammate>



■ Operating conditions

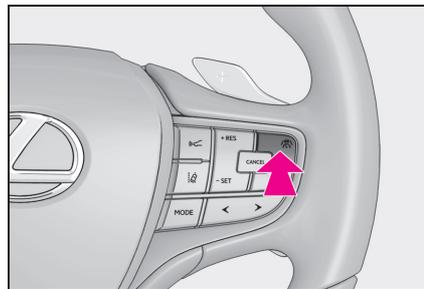
- High definition map data is being received correctly.
- The vehicle position can be identified.
- White lane lines are detected on both the left and right side
- The D shift position is selected.
- The steering wheel is being held.
- The driver’s seat belt is fastened.
- The driver’s door is closed.

Operating the advanced driving support (controlled driving)

Press the Advanced Drive main switch.

If the use conditions are met, the system will be enabled and controlled driving will start. When the switch is pressed, the current vehicle speed will become the set vehicle speed and be displayed.

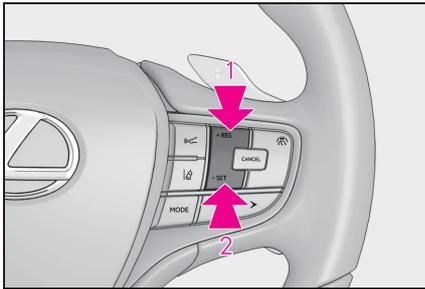
If the use conditions are not met, the LTA (Lane Tracing Assist) and dynamic radar cruise control with full-speed range will operate.



Adjusting the set vehicle speed

- ▶ Adjusting the set vehicle speed using the switches

Press the "+RES" or "-SET" switch until the desired speed is displayed.



- 1 Increase set vehicle speed
- 2 Decrease set vehicle speed

Fine adjustment: Press the switch. (The set vehicle speed changes by 1 mph [1.6 km/h]^{*1} or 1 km/h [0.6 mph]^{*2} each time the switch is pressed.)

Large adjustment: Press and hold the switch until the desired set vehicle speed is reached. (The set vehicle speed changes in 1 mph [1.6 km/h]^{*1} or 1 km/h [0.6 mph]^{*2} increments.)

*1: When the set vehicle speed is shown in "MPH"

*2: When the set vehicle speed is shown in "km/h"

- ▶ Increasing the set vehicle speed using the accelerator pedal

- 1 Depress the accelerator pedal to accelerate the vehicle to the desired vehicle speed.
- 2 Press the "-SET" switch.

⚠ WARNING

■ For safe use

Set the speed appropriately according to the speed limit, traffic flow, road conditions, weather conditions, etc. The driver is responsible for confirming the set vehicle speed.

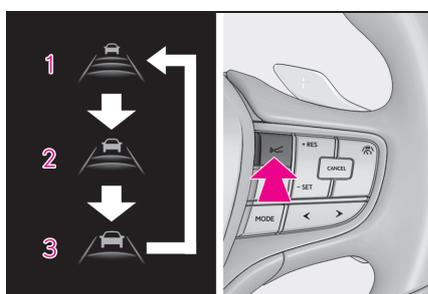
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Changing the vehicle-to-vehicle distance

Press the vehicle-to-vehicle distance switch.

Pressing the switch changes the setting as follows.

Select a distance which is appropriate for the surrounding conditions.



- 1 Long
- 2 Medium
- 3 Short

Driving operations during controlled driving

The driver can perform certain operations even when the vehicle is being driven by advanced driving support controlled driving.

■ Accelerator pedal

As with normal driving, acceleration can be performed by depressing the accelerator pedal. The vehicle will return to the set vehicle speed when the accelerator pedal is released.

Hold the steering wheel when operating the accelerator pedal and until the vehicle returns to the set vehicle speed.

■ Brake pedal

As with normal driving, deceleration can be performed by depressing the brake pedal. However, controlled driving will be cancelled.

■ Steering wheel

- As with normal driving, the steering wheel can be operated.

If the steering wheel is operated more than a certain amount, controlled driving will be cancelled.

- The steering wheel can be operated to enter a rest area/service area.

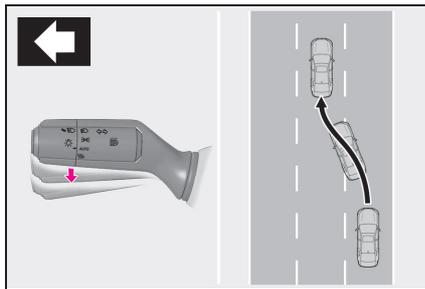
When approaching the rest area/service area, controlled driving may be cancelled.

■ Turn signal lever

- If the turn signal lever is held in the lane change position for approximately 1 second or more and according to the traffic conditions, the lane can be changed into, the

system will change lanes. (Lane change assist)

It is necessary for the driver to hold the steering wheel and check the safety of their surroundings when the lane change assist operates.



- If a lane change suggestion or passing suggestion is displayed and the turn signal lever is held in the lane change position toward an adjacent lane, the lane change assist will operate.



WARNING

■ For safe use

Driving safely is the sole responsibility of the driver. Even if the lane is being changed by system control, it is necessary for the driver to pay attention to their surroundings.

Cancelling controlled driving

While the advanced driving support is operating, if any of the following are performed, controlled driving will be cancelled:

- The Advanced Drive main switch is pressed.
- The cancel switch is pressed.
- The shift position is changed to a position other than D.
- The brake pedal is depressed while the vehicle is moving.

Changing Settings of Advanced Drive

Settings of Advanced Drive functions can be changed on the multi-information display.

To change settings

- 1 Stop the vehicle in a safe place, engage the parking brake, and change the shift position to P.
 - 2 Press the  or  meter control switch to select .
- Perform this procedure with the hybrid system operating.
- 3 Press the  or  meter control switch to select "Advanced Drive".
 - 4 Press the  or  meter control switch to select the setting to be changed.
 - 5 According to the display, select the desired setting and then press .

WARNING

■ When changing settings

As the hybrid system needs to be operating while changing the settings, ensure that the vehicle is parked in a location with adequate ventilation.

In a closed area such as a garage, exhaust gases including harmful carbon monoxide (CO) may collect and enter the vehicle. This may lead to death or a serious health hazard.



NOTICE

■ When changing settings

Ensure that the hybrid system is operating, otherwise the 12-volt battery may become discharged.