

LEXUS SAFETY SYSTEM+ A

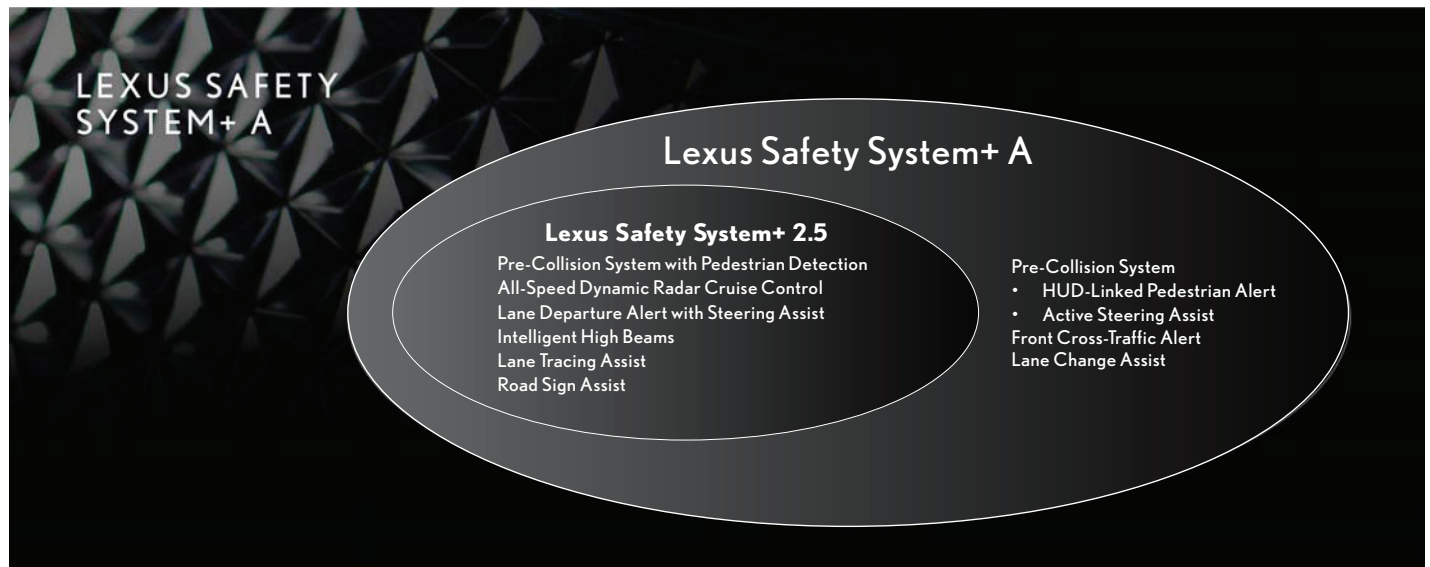
A COMPREHENSIVE SUITE OF
ADVANCED TECHNOLOGIES



Lexus Safety System+ A is an available package of active safety features designed to complement the standard Lexus Safety System+ 2.5 suite. Lexus Safety System+ A was first offered on the 2018 Lexus LS, and includes features such as Lane Change Assist. This feature allows the vehicle to perform a driver-initiated and monitored lane change using the front camera and radars when Dynamic Radar Cruise Control is in use.

Additional Lexus Safety System+ A features include:

- **Front Cross-Traffic Alert.** Under certain circumstances, Front Cross-Traffic Alert is designed to warn the driver of vehicles approaching from the left or right at intersections.
- **Road Sign Assist.** Fuses camera data with navigation data to display certain road sign information (Stop, Yield, Do Not Enter, Speed Limit) on the multi-information display (MID) and Head-Up Display (HUD).



PRE-COLLISION SYSTEM WITH AUTOMATIC BRAKING AND PEDESTRIAN ALERT WITH ACTIVE STEERING ASSIST

In addition to Pre-Collision System with Pedestrian Detection, the HUD-linked Pedestrian Alert is designed to detect a stationary or moving pedestrian/bicyclist in front of the vehicle and integrate with the available large color HUD. If Pedestrian Alert determines there is the possibility of a collision with a pedestrian/bicyclist ahead, the system animates arrows towards the direction of the pedestrian/bicyclist via the available HUD, intuitively notifying the driver.

Pre-Collision System with Active Steering Assist has the potential to help reduce the severity of, or prevent collisions with, a preceding pedestrian that may not be avoided through automatic emergency braking alone. The system is designed to detect certain situations where there is a high probability of a collision with a pedestrian in the vehicle's lane of travel or with a continuous structure, such as a guardrail. If the system is able to recognize the lane markers on both sides of the vehicle, and the system determines that avoiding or mitigating a collision through brake control alone may not be likely, but that it might be avoided or mitigated with steering assist, the system assists in collision mitigation or prevention by providing a limited amount of automatic steering assist within the lane in addition to activating an alert and applying the brakes.



FRONT LATERAL SIDE PRE-COLLISION SYSTEM

Enhancing the capability of the standard Pre-Collision system, lateral side radar is designed to detect vehicles approaching diagonally in front of the Lexus. If the system determines a collision may occur, it warns the driver to perform evasive maneuvers. Additionally, Brake Assist is applied if the system determines there is a high probability for a collision. This can help the driver avoid a collision or mitigate the impact force to occupants and the vehicle.

FRONT CROSS-TRAFFIC ALERT

Front Cross-Traffic Alert is designed to warn the driver of the presence of crossing vehicles or bicyclists at intersections, thereby potentially reducing the severity of, or preventing some intersection collisions. FCTA uses the front lateral side radar sensors to detect and alert the driver of approaching vehicles or bicyclists that may cross the vehicle's path. If the approaching vehicle or bicycle continues its trajectory, the system is designed to quickly alert the driver in two stages via the available HUD and Panoramic View Monitor before the vehicle/bicycle enters the path of the Lexus.



LANE CHANGE ASSIST

Lane Change Assist allows the vehicle to perform a driver-triggered and monitored lane change using the front camera and radars when Dynamic Radar Cruise Control is in use. Lane Change Assist uses driver activation of the turning signal as a cue to engage, and supports lane changes by monitoring the surrounding road environment and, at the appropriate timing, controls steering as well as acceleration and deceleration.

LEXUS SAFETY SYSTEM+ A

An overview of the active safety features available on the 2018-2023 Lexus LS

	2018 Lexus Safety System+	2018 Lexus Safety System+ A	2019-2021 Lexus Safety System+ 2.0 2022-2023 Lexus Safety System+ 2.5	2019-2023 Lexus Safety System+ A
HUD-Linked Pedestrian Alert	–	✓	–	✓
Active Steering Assist	–	✓	–	✓
Pre-Collision System (PCS)	Front PCS with Daytime Vehicle & Pedestrian Detection	✓	–	–
	Front PCS with Daytime Cyclist and Low-Light Vehicle & Pedestrian Detection	–	–	✓
	Front Lateral Side PCS	–	✓	–
Lexus CoDrive	All-Speed Dynamic Radar Cruise Control (DRCC)	✓	–	–
	Lane Tracing Assist (LTA)	–	✓	–
	Lane Change Assist (LCA)	–	✓	–
Front Cross-Traffic Alert (FCTA)	–	✓	–	✓
Road Sign Assist (RSA)	–	✓	✓	–
Intelligent High Beams (IHB)	✓	–	✓	–
Lane Keep Assist (LKA)	✓	–	–	–
Lane Departure Alert (LDA) with Steering Assist	✓	–	✓	–

