

THE ALL-NEW 7TH GENERATION LEXUS ES



Like the LS flagship, the ES model line has a history dating back to the birth of the Lexus brand in 1989. It was one of the first two models offered by Lexus, introducing new standards of quality, refinement and an ownership experience that would become industry benchmarks. Before the introduction of the CT 200h, the ES was the entry-level model line to the brand. Today, it is Lexus' most popular sedan with more than 2.3 million cumulative global sales in 30 years.

The 2019 model is the seventh generation of the ES and follows the LS and LC in carrying forward a new chapter in Lexus design that has a much stronger emotional quality. Long renowned for its comfort and refinement, the all-new ES builds on its established strengths with an all-new chassis that allows for a more dynamic exterior design and even better driving performance. It is more spacious, quieter and safer than ever before, with a level of craftsmanship rarely found in this mid-sized market segment.

For the Malaysian market, Lexus Malaysia is offering the new ES in two variants - the ES 250 Luxury and ES 250 Premium. Customers have a choice of up to 7 exterior colours which features the new developed Ice Ecu Mica Metallic (4X8) and other Lexus shades such Sonic Quartz (085), Red Mica Crystal Shine (3R1), Graphite Black Glass Flake (223), Sonic Titanium (1J7), Platinum Silver Metallic (1J4) and Deep Blue Mica (8X5). 2 Interior colour themes are available which are Black and Topaz Brown.



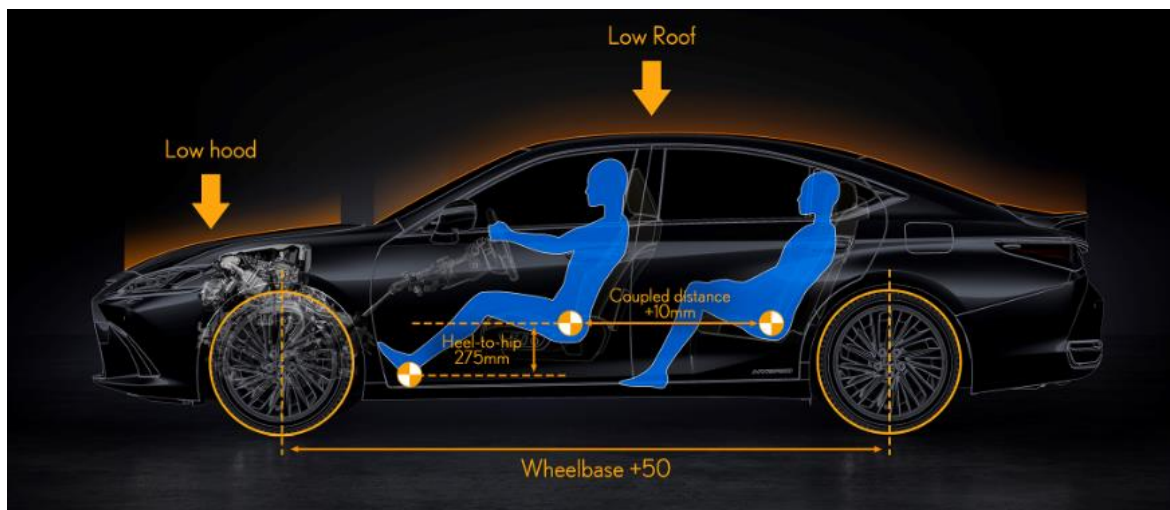
Topaz Brown

Black

EXTERIOR DESIGN



For this new generation of the ES, the theme of Provocative Elegance was adopted. While the ES has always been regarded as an elegant luxury sedan, for this new generation, daring design elements have been added. Departing from past generations, the new design with 'smart sportiness' features a rearward sloping roofline that gives a coupe-like profile with more efficient aerodynamics; challenging the traditional expectations of buyers in this segment.



Dimensional changes have been made in all aspects with a lower bonnet, lower roof, longer wheelbase and longer body. In overall length, there is an increase of 65 mm while overall width has been increased by 45 mm but the overall height is lower by 5 mm. The longer wheelbase (+50 mm) allows the wheels to be pushed closer to the car's corners, with wider rear treads (+10 mm).



At the front, there is a new interpretation of the Lexus spindle grille which immediately identifies the brand. It has a satin-plated frame with a vertical grille which gives an elegant yet sharp and graceful appearance. Slim headlamps feature distinctive L-shaped indicator lights with the ES 250 Luxury having the ultra-compact 3 Bi-Beam LED headlamp units and an Adaptive High Beam System. The ES 250 Premium has single lens Bi-Beam LED headlamp units which also provide strong and clear illumination. Cornering lamps are also provided, enhancing visibility of the sides when turning.



The same sharp and elegant appearance can be found at the rear with full LED taillamps that wrap around the quarter panels to provide a continuous styling line. The lights feature a distinctive three-dimensional, L-shaped design with a condensed image that gives eye-catching depth.

The new ES comes with a moonroof that has a larger open area compared to the one in the previous generation. While enhancing the airiness of the cabin, the tinted glass of the moonroof reduces glare and heat.



18-inch alloy rims are fitted on all variants, with the ES 250 Luxury wheels having Hyper Chrome Metallic Coating and a Medium Gray Metallic Coating for the ES 250 Premium. Similar to the LS wheels, the ES 250 Luxury comes with a noise-reducing hollow rim structure which helps reduce the resonance sound generated by the tyres. Tyres sizes are 235/45R18 for the ES 250 Luxury and ES 250 Premium having 215/55R18.

AERODYNAMIC PERFORMANCE

From any angle, it will be clear that the new ES has a very aerodynamic form which benefits road performance, fuel efficiency as well as passenger comfort. Apart from the overall shape which has been refined in the wind tunnel and through computer simulations, there are many small features around the bodywork which contribute to the excellent aerodynamics.

Aero Stabilizing Fins on the door frame covers and sides of the rear lamps act as 'vortex generators' to manage airflow along the sides of the body. These tiny fins, which are also found on the underbody covers, pull the airstream closer to the body to enhance stability.

Air rushing under the car can be turbulent and cause lift which affects stability. To minimise this, there is a cover under the car which runs its entire length and width. Whatever openings that are necessary are as small as possible and in effect, the entire underside is closed off so that the air flows smoothly from front to back.

Another small but important feature is the installations of spats ahead of the front wheels. The purpose of these spats is to manage airflow around the wheels in a way that helps to improve stability.

INTERIOR DESIGN



The theme of Provocative Elegance has also been used in the cabin of the new ES. The driver-centric cockpit complemented by more open, spacious and relaxing areas for passengers. This concept - introduced with the LC coupe and refined in the LS sedan - has been taken a step further in the ES.

Roominess and quietness are long-established as core qualities of the ES and the new generation continues this reputation with generous space for each occupant at the front and rear, thanks in no small part to a 1,025 mm couple distance which is best in class.

The quality and finish of the cabin were given a lot of attention to deliver the calm and peaceful environment that is a key element in the omotenashi hospitality that defines Lexus models. The new ES takes quietness to a higher

level using new technologies and design in three areas: countermeasures to tackle noise and vibration at their source; sound insulation, to prevent noise intruding in the cabin; and sound absorption, making extensive use of special materials to absorb undesirable noise. The advances made surpass anything achieved before with the ES.

The newly-designed seats are the result of a 3-year project by Lexus to come up with the ideal seat which would provide the best combination of support and comfort, no matter what the size or shape of the occupant. The seats have a simple structure, with polyurethane foam wrapped around an iron frame. Flat cushion and raised side sections support the hips and keep the body stable, while subtle depressions in the cushion's surface allow for smaller occupants to enjoy the same level of body-holding as larger people. In typical Lexus attention to detail, a thin, soft layer added to the top of each seat lets your head sink into the cushion, adding to the feeling of stability.

The ES 250 Luxury seats have upholstery of semi-aniline leather and 10-way power adjustment at the the front. The seat adjustments include variable cushion length to optimise support under the thighs. While a rocker switch on the inner side of the front passenger's seat allows the rear passenger to make adjustments forward or backwards. Internal ventilation in the seats enhances passenger comfort in hot weather although the highly efficient climate control system would already be providing a cool environment.

For the ES 250 Premium, the front seats have 8-way power adjustment and there is also internal ventilation to enhance comfort. The upholstery for this variant is NuLuxe leather.



The rear passengers are also treated to an expansive atmosphere, in part due to the increased legroom and, despite the sleek roofline, better headroom as well due to a lower hip point and a carefully configured headliner. The seats themselves have been designed for maximum comfort and support, with the ES 250 Luxury having

power adjustment through 8 degrees of recline. A control panel in the centre armrest contains the switches for making adjustments to the seat recline, rear climate control, sunshade position and seat ventilation.

Just as important to a comfortable environment as quietness is interior lighting. The ES has LED lighting around the cabin which offers ambient illumination that is appropriate for an elegant sedan. A reading lamp is now provided for the convenience of rear occupants.



*Specifications detailed in this image may vary from models and equipment available in your area. Please inquire at your local dealer for details on the availability of features

The ES 250 Luxury have a 3-zone climate control system (front and rear) with Climate Concierge to ensure passengers experience optimal comfort at all times. The Climate Concierge feature combines the benefits of the multi-zone automatic climate control with automatic seat cooling functions and was a world-first system when it was introduced in the LS. It also shuts down seat ventilation if there is no one on the seat, saving energy. For cleaner and fresher air, there is a Nanoe® plasma generator and pollen/dust removal filter.

The dashboard is slim and compact in profile with fine detail like the beautiful stitching that is a hallmark of Lexus craftsmanship. A black Shimamoku wood trim are available and the subtle use of metallic ornamentation provides a sense of depth and emphasises the precise and high quality finishing. Soft padding in upholstery-wrapped areas create a stylish appearance as well.

Although the ES is intended to be an elegant luxury sedan, it still offers dynamic performance for the driver and in this respect, there is a driver-centric cockpit with all the controls within reach. The newly designed 3-spoke steering wheel, made of real wood and wrapped in genuine leather, has a grip profile that fits palms comfortably for steering feedback to be felt instantaneously. Paddle shifters make it easier to manually select gears, if desired, without taking the hands off the steering wheel.

Besides the convenience of a pushbutton engine start/stop system, there is also a new Electronic Parking Brake which is almost effortless to operate. The brake system includes an Auto Hold function for easier starts on slopes.

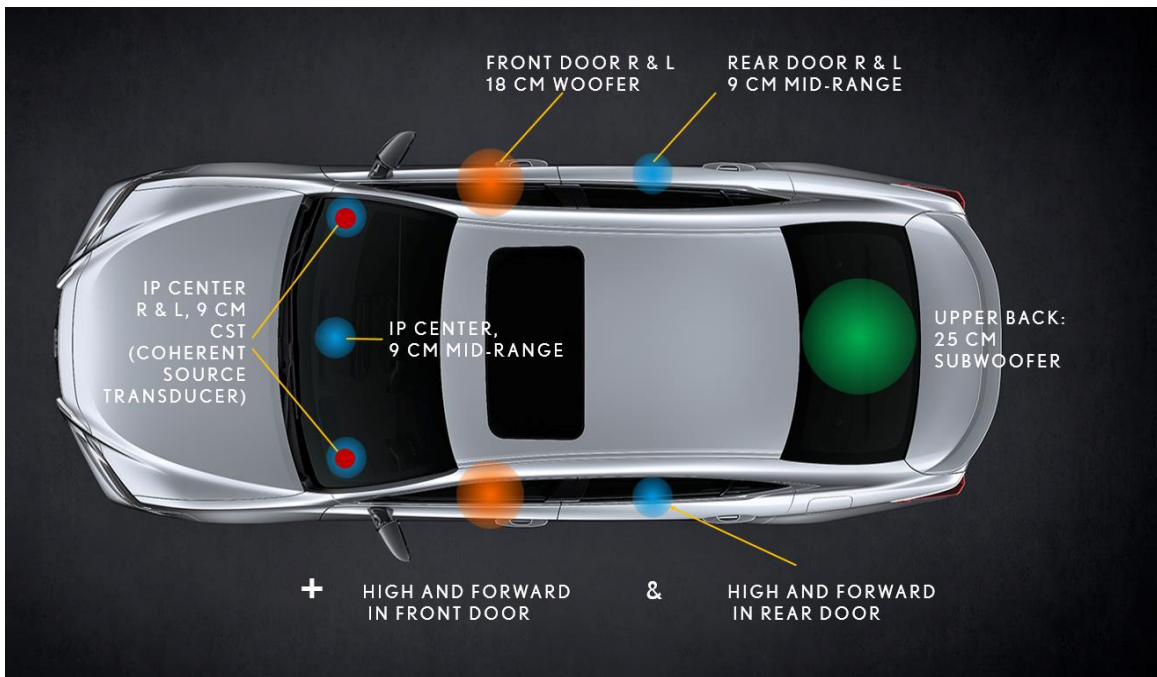
The driver's focus is kept on the road ahead by locating the centre display screen and instrument panel in a tight cluster within their field of view. The instrument panel has a Full Digital Optitron Meter with an ultra sharp 7-inch TFT (Thin Film Transistor) LCD. A metallic ring graphic located in a 3-dimensional space gives a sense of depth and the meter face and pointer are differentiated in accordance with the Drive Model in use (ECO, NORMAL or SPORT). This enables the driver to identify the necessary information instantly.



Drivers in the ES 250 Luxury can also refer to a Head-Up Display (HUD) that is the largest in its class with a display area of 260 mm x 97.5 mm. The high-resolution display is projected on the windscreen at an optimum visual distance so the driver's eyes can readily focus on objects in front of the car as well as the display. Information shown on the display are the road and engine speed, gear position, Dynamic Radar Cruise Control status and Land Tracing Assist warning.

Additional information is available on the Lexus multimedia system with GPS route navigation positioned on the upper centre section of the dashboard. The 12.3-inch wide Electro Multi Vision display (8 inches wide for the ES 250 Premium) features crisp, easy-to-read graphics and a revised menu. The multimedia system accepts audio files on USB drives and also supports Miracast® and Screen Mirroring with Android devices.

The display is managed with the Remote Touch Interface with a smartphone-like feel and touchpad that is easy and intuitive to use. Vibration feedback on the touchpad helps driver awareness of cursor movements and button selection on the display.



The ES 250 variants comes with a premium Pioneer system with 10 speakers that include 9-cm CST speakers combining a tweeter and midrange unit in the side panels. The audio system's performance has been customised for the ES cabin and uses a number of advanced technologies to provide accurate reproduction of any sound source, creating a real-life, immersive soundscape that adds enjoyment to any journey.

Of course, the exceptional quietness of the cabin also contributes to an enhanced audio experience and to achieve this perfectly quiet and calm cabin environment, Lexus engineers took 3 years to achieve their goal, using the LS flagship sedan as their benchmark. They knew it was important not produce the kind of deadening, disconcerting silence of a recording booth, but to produce a comfortable, undisturbed ambience that lets you enjoy the audio system to the full, or speak to others people with ease.

To eliminate potential noise sources, the ES underwent extensive wind tunnel testing and then received insulation measures to prevent external sounds getting into the car. Besides filling tiny openings to stop noise transmission, noise-absorption materials were added in key areas, such as the door trims and underfloor to soak up sounds and vibrations.



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For those with compatible smartphones, there is a wireless charging pad in the centre console box of the ES 250 Luxury. This uses the Qi wireless charging standard that has been adopted by the industry for charging smartphones and personal devices.

DRIVING PERFORMANCE

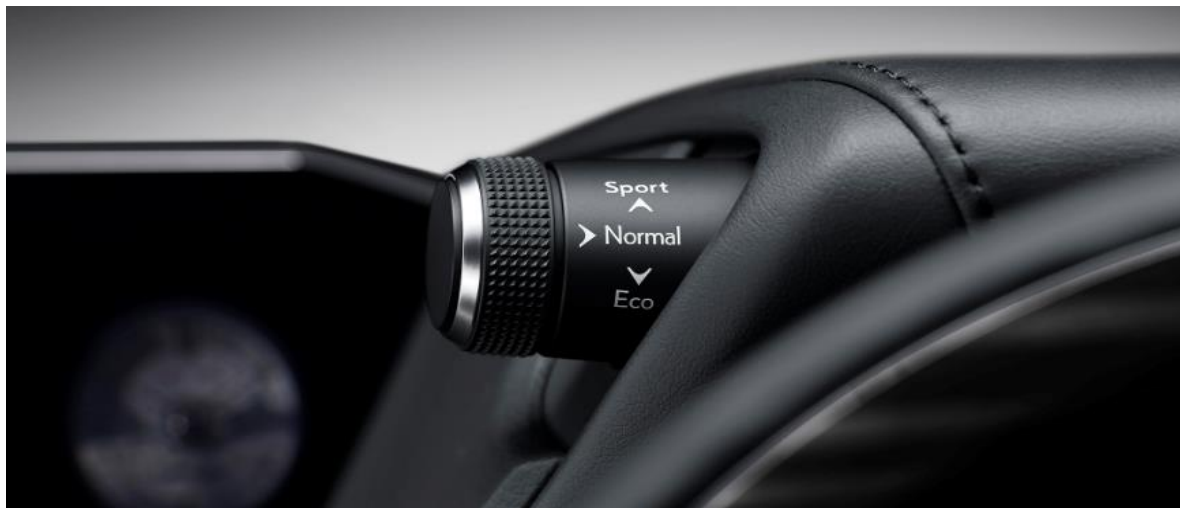
The ES 250 Premium and ES 250 Luxury are powered by a 2.5-litre in-line 4-cylinder petrol engine (A25A-FKS) producing 204 hp at 6,600 rpm and maximum torque of 247 Nm at 5,000 rpm. Engineered to deliver effortless acceleration along with impressive efficiency, this engine has one of the world's highest levels of thermal efficiency and specific output for its displacement.

The impressive heat and combustion management is achieved, in part, through the use of a variable-capacity oil pump (a Lexus first) which controls the oil discharge volume according to running conditions. The engine also has VVT-iE (Variable Valve Timing - Intelligent by Electric Motor) which is a more advanced version of the Dual VVT-i system. VVT-iE, first used in the LS460's 1UR engine, employs an electrically-driven actuator to infinitely adjust intake valve timing. Infinite adjustment of the exhaust valve timing is by a hydraulic actuator. Using an electric actuator provides enhanced response and accuracy at lower engine speeds as well as a greater total range of adjustment.

As with previous generations of the ES, the latest generation has front-wheel drive with power delivery coming through a new 8-speed Direct Shift Automatic Transmission featuring AI (Artificial Intelligence) Shift Control. Where conventional automatic transmissions use electronic controls for smoother shifting, AI Shift Control also has a transmission algorithm which intelligently manages shifts according to the road speed and predicted driver intentions. This complements the Drive Mode selection which also offers personalisation of driving performance.

By constantly monitoring the vehicle speed and the throttle position, the AI Shift Control system can shift early during relaxing driving or hold gears longer to give the driver a more engaged and predictable feel. A related system called Direct Connected Downshift allows the transmission to skip gears when large throttle openings are detected such as when overtaking on the highway.

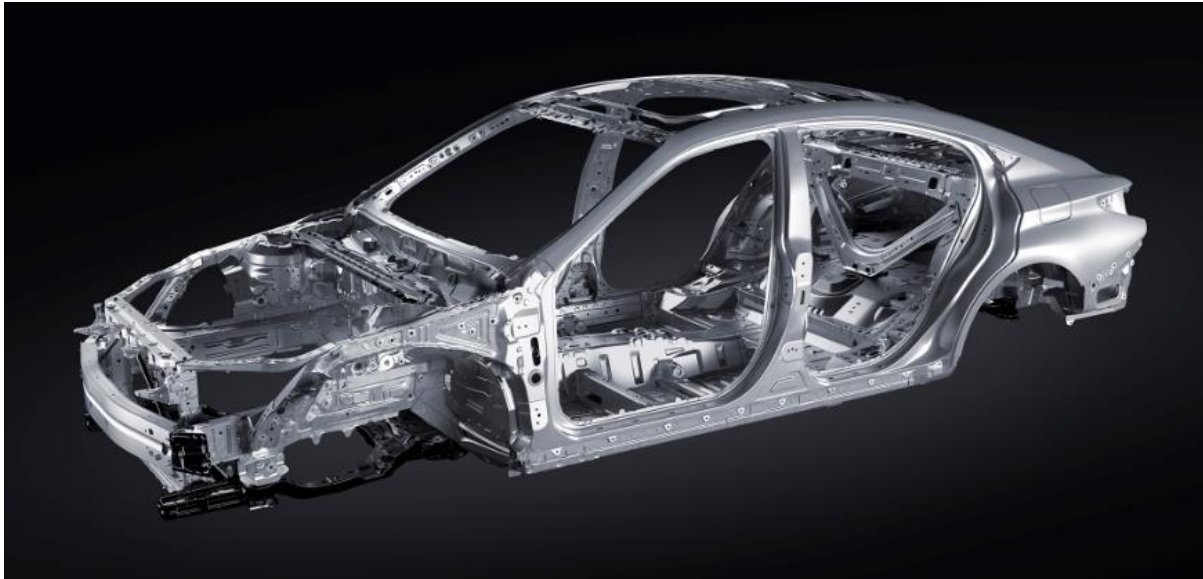
More compact and lighter than comparative conventional transmissions, the 8-speed transmission has an ultra-thin torque converter and a multi-plate lock-up clutch for more efficient transfer of power to the front wheels. The 8 ratios provide a broad spread for a smoother driving experience as well as optimal gear selection for all driving conditions. With a wider spread of ratios, the transmission can provide stronger acceleration in lower speed ranges while achieving better fuel efficiency at higher speeds.



Drive Mode Select, a common feature in Lexus models, allows the driver to choose between economical driving and sporty driving, or a balance of both. Selection is done by rotating a knob and when ECO mode is selected, engine torque and air-conditioning performance are moderated to maximise fuel economy. The SPORT mode prioritises acceleration and responsiveness, allowing the driver to enjoy the full potential of the ES. In this mode, the steering feel is also altered to match the enhanced responsiveness.

The ES 250 also comes with an engine Stop & Start system that makes a significant contribution to saving fuel. It shuts down the engine during anticipated long periods of idling (eg at traffic lights) which are times when fuel consumption is at its highest since the car is not moving at all. The engine restarts smoothly when the driver release pressure on the brake pedal.

BODY & CHASSIS



Perhaps the biggest story about the new ES is the innovation in combining the core criteria of elegant design, dynamic performance, ride quality, quietness, and safety. To achieve this, Lexus developed a new platform for the ES from scratch. For dynamic performance, the location and angle of the steering wheel and pedals were reviewed to create a posture that supports easy driving. To augment the vehicle's excellent DNA with its a low center of gravity and uniform lateral weight distribution, the geometry of the high-rigidity body and chassis were optimized to deliver excellent straight-line driving stability, stable cornering, and braking stability.

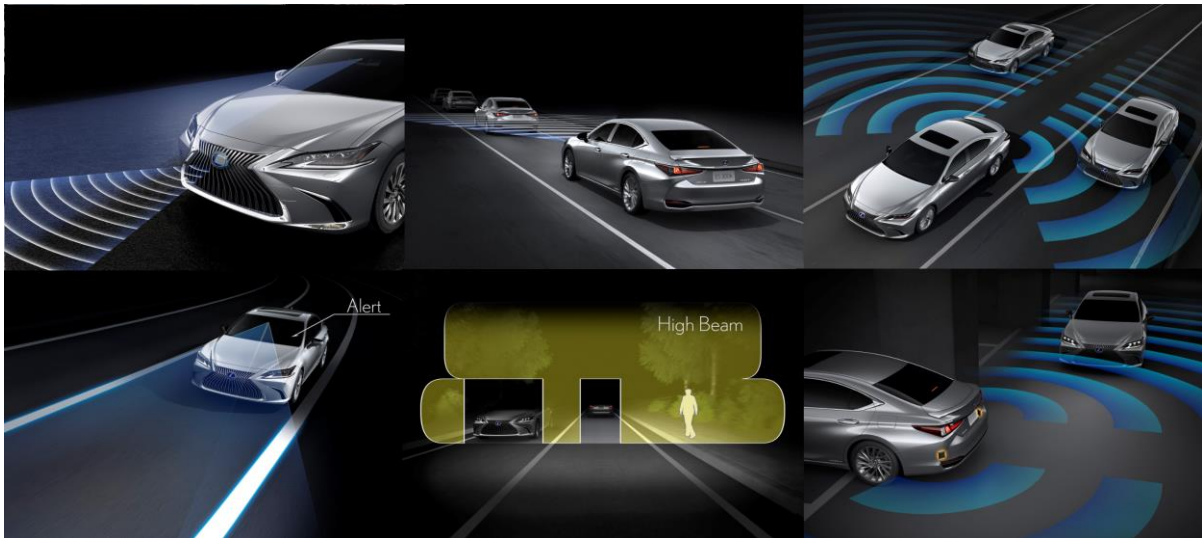
Various grades of high-tensile steel reduce weight compared to previous platforms, while enhancements such as an all-new multi-link rear suspension design, rack-mounted electric power steering and a V-brace behind the rear seat gave the engineers the flexibility to tune the ES with a new-found precision. As a result, the engineers have been able to transform a sedan known primarily for comfort and quietness into one that is equally capable of delivering class-leading handling without compromising the well-known attributes.

Yamaha Performance Dampers are equipped in the ES 250 Luxury which is an extremely short stroke damper placed at front and rear of the ES which helps minimize the effect of body deformation due to road input or cornering. It essentially minimizes tiny vibrations within the body enhancing chassis settling and eliminates continuing motion after hitting a bump contributing to a sports-car like chassis with top-class luxurious ride quality.

MacPherson strut front suspension and a double wishbone set-up at the rear. Although the design of the front suspension is similar to the previous ES, several changes have been made to improve overall responsiveness. New Saturation Type Shock Absorber creates optimal damping for situations such as cruising on the highway or starting off. Wider spacing of the anti-roll bar bushing mounts also contributes to overall roll reduction.

More precise steering inputs are delivered by a new rack-assist type Electric Power Steering (EPS) system. Unlike the previous ES which used an assist motor mounted on the steering column, the new EPS set-up puts the assist motor directly on the steering rack, which returns more precise feedback to the steering wheel.

SAFETY



The class-leading quality of the safety provisions in the new ES have been independently confirmed by Euro NCAP which gave the model secured the maximum 5-star rating with one of the highest average points scores the independent organisation has recorded under its tougher 2018 assessment criteria.

Key to the car's excellent safety performance is the latest version of Lexus Safety System + (LSS+), an advanced package of active safety technologies. LSS+ adds new capabilities and increases the range of driving scenarios in which it can provide extra alerts and safeguards to help prevent an accident from happening. The new features include a comprehensive Pre-Collision System (PCS) using radar and cameras to detect vehicles or obstacles, Lane Departure Alert (LDA) with Lane Tracing Assist (LTA) which helps keep the car from unintentionally moving outside a lane and Dynamic Radar Cruise Control (DRCC) with Stop & Go Function which is capable of low speed following from 30km/h and below. DRCC allows more relaxed driving as the system will automatically maintain a safe distance with a vehicle ahead, adjusting the set cruising speed as necessary. In the event the car has to come to a stop (due to the vehicle ahead stopping), the system remains active and will start moving the car again as the front vehicle moves off.

There's also Active Cornering Assist, which helps the driver to maintain the desired line along winding roads. This differs from Vehicle Stability Control (VSC) which is also present in that it is a driver assistance system that is active whereas VSC operates when the car is predicted to oversteer or understeer during cornering.

For the ES 250 Luxury, an advanced safety feature is the two-stage Adaptive High Beam system (AHS) (Automatic High Beams for ES 250 Premium). AHS not only turns the headlight high beams on and off automatically for the driver but its 24 individual LED light array can adapt the light pattern to provide an enhanced illumination without dazzling preceding or oncoming vehicles. The system uses a camera to detect light from other oncoming vehicles and optimizes the level of lighting.

For added safety, the ES comes with a Drive-start Control system which helps prevent sudden starts by suppressing excessive acceleration. This may occur due to driver distraction and by suppressing acceleration, damage can be reduced in the event of a collision.



Also added to the new generation ES 250 Luxury is a Panoramic View Monitor that gives an all-round view, including a birds-eye view for easier manoeuvring during parking. An interesting feature of the display is a See-Through View & Moving View which shows a transparent image part of the car's body and seat so the driver can 'see' around the car. The Moving View displays an image as if seen from diagonally above, enhancing the driver's awareness of the surrounding areas.

Complementing the display are 8 sensors around the car which detect obstacles and provide alerts to the driver. The reverse camera now has a pedestrian detection feature which will alert the driver so that caution will be taken while reversing. Lexus Park Assist is also available and shows guide lines to help the driver position the car properly while reversing.

Other safety systems include a Blind Spot Monitor that detects vehicles in the blind spots along the sides and Rear Cross Traffic Alert (RCTA) that also detects vehicles approaching from either side as the ES is reversing out of a parking bay. Both systems use radar and alert the driver via a buzzer and visual indicators.



In terms of passive safety, the ES has a comprehensive provision with up to 10 SRS airbags, including side airbags for the rear occupants (besides the curtain shield airbags over the windows). The interior trim has impact-absorbing materials and structures so that head injuries are minimised during violent accidents when the body is subjected to extreme forces. For those who carry small children, ISOFIX points are provided in the rear seats for easy and secure installation of compatible childseats.

-ENDS-