

THE NEW LEXUS UX

The new UX presents Lexus's innovative luxury and safety in a package that combines bold new designs and an ultra-efficient new powertrain. For many customers, this will not only be their first Lexus, but also their first luxury vehicle.

It is designed for modern urban motorists who seek a fresh, contemporary and dynamic take on luxury driving, something that is not just new and exciting, but also relevant to their lifestyles.

Infused with dynamic attitude, the UX is engineered to deliver quick and engaging driving with a Lexus-smooth demeanour, making it a unique entry in the luxury compact SUV market.

The UX is the first Lexus to be constructed using the new Global Architecture – Compact (GA-C) platform. A lightweight yet super-rigid structure, extremely low centre of gravity and refined suspension tuning endow it with exemplary handling agility and ride comfort, and a distinctive driving character.

In the UK, the UX is offered exclusively with a fourth generation self-charging hybrid powertrain. In selected markets, a 2.0-litre petrol version is available.

EUROPE – A KEY MARKET FOR THE NEW LEXUS UX

The European market offers great potential for the new Lexus UX, a region where customers are increasingly looking for premium quality alternatives to saloons, wagons and hatchbacks that better suit modern lifestyles. Although this has led to a wealth of choice in the growing compact SUV segment, the UX stands apart from the competition as a more distinctive and stylish player with strong dynamic appeal and the unique benefit of Lexus's clean and efficient self-charging hybrid technology.

In essence, it is a new genre of SUV, an 'urban explorer' that offers a new take on what luxury means for today's motorists. Alongside the well-established Lexus CT hatchback, it will take its place as a gateway model for Lexus and will play a key role in helping the company achieve its target of 100,000 annual sales in Europe* by 2020. Its self-charging hybrid technology has growing appeal, as the market moves away from diesel power to embrace alternative, electrified powertrains.

The UX will have broad appeal in Europe, particularly for customers with young families who want the flexibility of an SUV, but also a car that is as agile, nimble and manoeuvrable to

drive around town as a hatchback. In this regard, the UX will be an ideal partner for day-to-day travelling as well as longer journeys to discover new places and experiences. At the same time, the UX will be a prime choice for downsizing households where the children have grown up, and for couples whose travel often mixes business with leisure.

As Lexus's first compact SUV, the UX joins its larger NX and RX stablemates to complete a powerful European SUV range that fully expresses the pillars on which the brand has been transformed: brave design, exhilarating performance, imaginative technology and *takumi* craftsmanship.

* Lexus Europe's sales territory includes the European Union, Norway, Iceland and Switzerland, and the eastern markets of Russia, Ukraine, Kazakhstan, the Caucasus region, Turkey and Israel.

EXTERIOR DESIGN AND AERODYNAMICS

Lexus designers created an overall design theme for the UX that combines strength with refinement and is stylish yet functional.

The treatment of the spindle grille – a signature feature of all Lexus models – is unique to the UX, featuring a new mesh pattern with individual elements that gradually change in shape as they radiate out from the central Lexus emblem. The result is an intriguing three-dimensional look that appears to change with the viewing angle.

The headlamp design gives the UX a determined and confident look. The daytime running lights are arranged in an arrowhead shape above the headlamp units, emphasising the Lexus 'L' lighting signature. The headlights themselves are single-projector dual-beam LEDs (UX and F Sport grades) or ultra-small triple-projector LED units (Takumi grade, Tech & Safety Pack).

The vehicle's basic form flows out from the lines of the spindle grille to envelop the cabin. Crisp, prominent, sculpted surfaces and dramatically flared front and rear wings express strength, while the car's aerodynamic profile, large wheels pushed out to the corners and a strong front fascia generate an agile stance.

The wheel arch mouldings, which protect the bodywork from gravel thrown up by the tyres, manage the airflow over their edges to reduce turbulence and lift, contributing to the vehicle's stability.

The rear combination lamps play a role in this as well. The aero stabilising blade lights run from the top of the rear wings and span the entire width of the vehicle. By guiding airflow around the rear, they help reduce turbulence and lift, aiding vehicle stability when cornering and driving in crosswinds.

Their design creates a distinctive night-time signature, formed by an array of 120 LEDs which tapers towards the centre of the tailgate, measuring just 3mm deep at its narrowest point. A wing-type spoiler at the rear edge of the roof and a flat underbody contribute to vehicle quietness and fuel efficiency.

Takumi skilled modellers worked with the design and engineering teams to refine all the exterior surfaces, to hundredth-of-a-millimetre tolerance, pushing the boundaries of what could be produced in the body panel-stamping presses.

The five-spoke 17-inch alloy wheels on the entry-level UX model have an aero-ventilating design with Gurney flaps along the edges of the spokes to reduce wind resistance and channel airflow to cool the brakes. The design pulls air from the inside of the wheel, while the airflow over the outer side is regulated to follow the wheel surface. The UX is also available with (non-aero) 18-inch wheels, with different designs for the F Sport and Takumi models.

COLOUR CHOICES TAILORED TO THE UX

In the UK the Lexus UX is available in 12 exterior colours, including three developed specifically for the model: Terrane Khaki, Celestial Blue and, exclusive to the F Sport, Blazing Carnelian.

The Blazing Carnelian shade is particularly vivid with a depth created using a multi-layer paint process that combines a red base with a yellow mica interference layer. Terrane Khaki creates a strong contrast between bright highlights and dark, calm shades. The mica particles have been enlarged as far as possible without creating colour unevenness, achieving a high level of brilliance, while also evoking toughness.

INTERIOR DESIGN: A NEW KIND OF LEXUS LUXURY

Lexus designed the UX's cabin to evoke the feel of a dynamic, luxury saloon, but with the higher seating position and versatility that are required of an SUV. The materials and finish are pure Lexus, combining Japanese traditions in craftsmanship and hospitality with innovative production techniques.

The interior also conveys a sense of security. For example, the form of the door shoulders evokes a robust frame beneath.

The designers have created a feeling of seamless continuity inside the UX, inspired by *engawa*, a traditional Japanese architecture concept that blurs the boundary between the inside and outside of a home. From the driver's seat, the upper section of the instrument panel appears to extend out beyond the windscreen into the wings. This gives the driver and

excellent field of vision and clear sense of the vehicle's dimensions and position on the road. Viewed from outside, the bonnet appears to be connected directly to the instrument panel through the windscreen.

Getting in and out of the vehicle has been made easier by precise location of the hip points and shaping of the seat-cushions. The human-centred design approach is evident in the low, unobtrusive design of the instrument panel and slim front pillar mouldings, shaped to improve visibility. Even though there is a higher seating position than in a standard passenger car, a reduction in the distance between the hip and heel points gives the UX driver a feeling of being closer to the road than in a conventional SUV.

The doors are a driver's first point of contact with any vehicle. Going into the finest detail in their pursuit of luxury, Lexus acoustic engineers worked with neural scientists to create the best possible door-closing sound. Using research into the brain waves created when a luxury car door closes, the team selected specific materials and adjusted the shape of the door by tenths of a millimetre to produce just the right satisfying and reassuring tone.

Every UX that comes off the production line at Lexus's Kyushu plant is inspected by *takumi* craftspeople in a dedicated quiet room before leaving the factory, to identify and if necessary, correct any inconsistency in the door-closing sound.

The UX delivers a quiet drive, thanks to its high-strength structure and optimal location of sound-absorbing and insulating materials throughout the body. Engineers traced noises to their sources to keep them out of the cabin and even the sound of water thrown up by the tyres was reduced.

'SEAT-IN-CONTROL' CONCEPT

The 'Seat in Control' concept makes the driver feel more in touch with the road and engaged in the drive. Principal vehicle functions are grouped around the driver's side of the cabin and the shape of the driver's seatback is designed so that the controls can be operated with the driver maintaining a comfortable and natural posture.

The front seats are six-way manually adjustable in the UX model, and eight-way power-adjustable in the F Sport and Takumi, the latter with additional adjustable lumbar support for the driver. The springs and foam in the cushions are specially designed to gently envelop the occupant and disperse pressure under the sciatic area.

Luxury extends throughout the cabin. For example, the three-spoke steering wheel and analogue clock are from the Lexus LS flagship saloon. The Lexus Climate Concierge automatically links heating and cooling airflow with the heated and (on Takumi grade)

ventilated front seats to ensure a comfortable cabin temperature. Attention to detail can be witnessed in a headlining design which eliminates distracting shadows from the top of the windscreen, and switches and controls that have a reassuringly 'Lexus feel'.

LUXURIOUS NEW FINISHES

Ever since the brand was founded, Lexus has drawn on Japanese traditions in craftsmanship and hospitality to infuse its vehicles with a special sense of contemporary luxury. It has adapted this approach in the new UX to generate a special appeal to younger customers experiencing their first luxury vehicle.

Lexus interviewed premium car owners in different parts of the world, including Europe, to better understand their expectations in terms of design and to find out more about their lifestyles. The findings were consistent and inspiring, providing a fresh perspective on what luxury means and helping define the appearance and quality of the UX's interior. The result is an uncluttered, 'less is more' approach that makes the UX feel more inviting and accessible.

A vehicle interior is composed of many different parts, such as the instrument panel, seats and trims, but it is the effect of the sum of these parts that matters most. One example is a leather upholstery finish (Takumi grade) with stitching inspired by the Japanese *sashiko* technique used for making judo and kendo uniforms. It is combined with a pattern of perforations on the lower part of the seat derived from perfectly aligned mathematical curves and gradations.

The interior colour combinations evoke different moods and accentuate the premium design. UX grade features Black premium fabric upholstery, with Black combination cloth and leather-effect Tahara with red contrast stitching for the F Sport. Takumi grade introduces smooth leather in Black, Ochre, White Ash and Rich Cream. Smooth leather can also be specified for the F Sport in Black or Flare Red. The headlining is black, or white when Rich Cream or Ochre leather upholstery are selected.

The instrument panel in the UX grade model is black, while the Takumi version matches black with inlays with a grain finish inspired by the appearance of the *washi* paper familiar from the traditional screens found in Japanese homes, in Black or Noble Brown. In the F Sport the black instrument panel has red contrast stitching.

INTUITIVE CONTROLS AND CLEAR DISPLAYS

The instrument panel is designed to make technology intuitive to use. The meters are presented in a seven-inch TFT display that digitally renders realistic, analogue gauges with a three-dimensional effect.

A head-up display, standard on the UX Takumi, adds to the high-tech feel, projecting key information in colour onto a virtual screen 2.5 metres in front of the driver. This makes it easier to focus on both the display, and the road ahead. High contrast levels make it easy to read in daylight or when driving in snow.

The Lexus Remote Touch Interface (standard with the 10.3-inch Lexus Navigation) is designed to feel as familiar to use as a smartphone and provides haptic feedback to the user. Its operation is designed to mimic common phone gesture controls, such as double tapping and flicking. Its frameless design eliminates edges and a special coating allows the user's fingers to slide smoothly over the surface, without leaving fingerprints. The touchpad can also recognise block capital (Roman alphabet) letters when a search name is entered. Vibration on the touchpad surface (the haptic response) indicates when the cursor is moved, making it easier to align the cursor with the desired function icon.

A switch at the base of the touchpad can call up an operation screen with related functions, such as air conditioning and navigation, enabling easier access without having to click through menus. In a touch of high-tech elegance, the Lexus logo on the pad surface is backlit at night.

IMAGINATIVE TECHNOLOGY

Lexus designers have created a refined cabin atmosphere, with subtle, integrated LED lighting. White LEDs illuminate the front footwells, glovebox, and console switches and are featured in the dome light, map lights and cargo area light.

The air vents have a new single-knob control for both airflow direction and volume. By combining the two functions in a single control, the vents could be made larger, improving airflow while reducing noise.

On the UX Takumi, the vents are illuminated by a distinctive LED light source. This is wirelessly powered by the electromagnetic resonance of two adjacent coils vibrating at the same frequency. Using the same design principle as the Lexus LC's rear combination lamps, the vent control LEDs use mirror optics to create the effect of floating lighting depth, even though the light element is just 3mm thick.

VERSATILITY THROUGH THOUGHTFUL PACKAGING

The UX package makes urban exploring easier. A 2,640mm wheelbase contributes to a smooth, stable ride and cabin roominess. The 4,495mm length and best-in-segment 5.2m kerb-to-kerb turning radius help make it easy to manoeuvre and park.

Several design measures make getting in and out of the car easier, including optimal placing of the hip-point, a cut-off profile for the rocker panel below the doors and the shape of the seat cushions. For interior storage, the UX has the largest console box in its class.

A power-operated tailgate with hands-free function is standard on the UX Takumi. Solid aluminium roof rails are provided on all versions, allowing for the installation of a variety of accessory carriers.

Depending on model configuration, tyres and markets, the UX is equipped with a tyre repair kit or run-flat tyres (F Sport). The new, second generation run-flat tyres are quieter and more comfortable and they allow the vehicle to be driven with a flat tyre at speeds up to 50mph, for up to 99 miles.

IMMERSIVE TECHNOLOGY AT YOUR FINGERTIPS

The UX offers the latest in Lexus's multimedia and navigation technology. A seven-inch EMV (Electro Multi Vision) media and navigation display is standard on the UX grade and F Sport model, while a 10.3-inch version is provided when the larger and more sophisticated Lexus Navigation system is specified (standard on the UX Takumi).

The Lexus Premium Sound System can play back the highest-resolution digital audio formats (WAV, FLAC, ALAC, and OGG Orbis) from a USB device, conveying more musical data than a CD. Dual rear-seat USB ports allow passengers to use and recharge their smartphones or tablets.

The standard six-speaker system (UX and F Sport) and optional eight-speaker upgrade system use bamboo charcoal speaker diaphragms to reduce mass and deliver natural-sounding voices and improved mid-range sound. Both systems create a more lifelike soundstage by using tweeters mounted at the sides of the instrument panel and reflecting sound off the windscreen. The eight-speaker system adds a centre-dash tweeter, a subwoofer mounted in the luggage area and a more powerful amplifier.

A Mark Levinson Premium Surround Sound System – standard on the UX Takumi – uses a 13-speaker array, low-distortion 668W Class D eight-channel amplifier, Quantum Logic

Surround Sound and ClariFi™ 2.0 technology to deliver an immersive, concert-like sound experience.

A SOLID STRUCTURE TO BUILD ON

Lexus has instilled the UX with handling agility and smooth, quiet ride comfort that urban customers will find pleasing. Key to achieving this balance is the car's high-strength GA-C global architecture platform. Extensive use of high-tensile steel, high-strength adhesives and laser screw welding results in a highly rigid structure, an essential foundation for achieving dynamic handling and luxurious ride comfort.

Using aluminium for the side doors, wings and bonnet, and composite materials for the tailgate helps give the UX the lowest centre of gravity of any vehicle in its class (594mm). As a result, it delivers a secure, agile feeling normally associated with lower-set hatches. A ring structure around the hatch opening and behind the rear seats increases torsional rigidity to enhance crash performance, improve handling and reduce noise and vibration.

The MacPherson strut front suspension and multilink rear suspension with trailing arms, both mounted on subframes, are tuned to deliver a combination of agility and comfort when driving over well-worn urban streets. Refined details such as the quality of the damper oil, oil seals and friction control in the shock absorbers make a significant and positive impact on ride quality.

An upper strut brace increases the torsional rigidity of the engine bay, while the steering rack bolts directly to the subframe without rubber bushings, giving improved steering feel.

Active Cornering Assist (ACA), a function integrated with Vehicle Stability Control (VSC), helps the vehicle trace the driver's desired line through a turn by applying a degree of brake control on the inside wheels, suppressing any tendency to understeer. As a result, the UX drives through corners with precision while maintaining stability.

SUSPENSION THAT ADAPTS TO YOUR NEEDS

The latest version of Lexus's Adaptive Variable Suspension (AVS), which debuted on the flagship LC coupe, is optionally available for the UX F Sport in the Tech & Safety Pack. This system decreases body roll when cornering and enhances ride comfort over bumpy urban streets. AVS uses linear control solenoids to vary the amounts of shock fluid to bypass the shock absorber's piston assembly. Thus, the system can vary suspension damping through 650 levels, making its operation indiscernible to the vehicle occupants.

Based on signal inputs from the steering, yaw rate and linear G sensors, AVS continually adjusts damping force to minimise body roll when cornering, while maintaining optimum tyre

contact with the road and ride comfort on all surfaces. Damping force is reduced at low speeds and increased at high speeds. Integrated functions including Roll Posture Control, Anti-pitch Control, Repercussion Control and Roughness Sensing Control adapt AVS performance to all road surfaces and driving dynamics.

The driver can set damping performance using the Drive Select controller. When Eco, Normal or Sport S mode is selected, or when Custom mode is selected with the chassis setting in Normal, the damping force remains unchanged to maintain an optimal balance of ride comfort, steering response and a flat ride.

By selecting Sport S+, or Custom mode with the chassis setting in Sport, the damping force control mode switches to firmer damper settings to provide the most dynamic driving feel.

In addition, using Pre-Collision System Co-operative Control, AVS can instantly increase damping force to limit vehicle pitch and roll when the driving support computer judges that there is a possibility of rapid driver input to avoid a collision. VSC Cooperative Control applies appropriate damping in response to vehicle side-skid and changes in the road surface friction, helping to maintain the effectiveness of VSC.

SHARP STEERING AND ALLOY WHEEL OPTIONS

An electric power steering system with a new, compact and highly rigid column assist motor delivers handling with crisp, immediate response to driver inputs and provides excellent steering feel.

A new electric tilt and telescopic steering column is available for UX models equipped with power-adjustable front seats (standard on F Sport and Takumi grades). In addition, on Takumi models ingress and egress are made easier with auto away/auto return controls linked to the driver's seat belt and the hybrid power switch. Using the switch, the tilt and telescopic motors can move the steering wheel up or down and forward or back through a 40mm range.

Standard 17 x 6.5-inch alloy aero ventilating wheels feature 215/60R17 tyres, while the 18-inch F Sport and Takumi alloy wheels are fitted with 225/50RF18 95V run-flat tyres.

UX 250h: NEW-GENERATION LEXUS HYBRID DRIVE

The UX 250h is equipped with the fourth generation Lexus self-charging hybrid powertrain, featuring multiple new components, including the 2.0-litre petrol engine, hybrid transaxle, compact battery and power control unit.

With 181bhp/135kW (184 DIN hp) total system output, it combines high fuel efficiency with a very smooth, natural and responsive driving experience.

The UX's new 2.0-litre in-line four-cylinder engine achieves class-leading 41 per cent thermal efficiency, thanks to its use of revolutionary laser-clad intake valve seats with an all-new intake port profile; a high compression ratio (14:1); D4-S fuel injection combining direct and secondary port injectors to achieve high-speed combustion. VVT-iE intelligent variable valve-timing with an electric actuator on the intake side also improves driveability while reducing emissions.

A continuously variable capacity oil pump and a variable cooling system with an electric water pump contribute to ultra-low internal friction, further optimising engine performance and fuel efficiency. The system also ensures quicker cabin heating on cold days and quicker cool-down when the air conditioner is used.

Exhaust heat recirculation enables quick engine warm-up to reduce emissions, while a gasoline particulate filter provides high-efficiency particulate material removal to conform to EURO 6D PN (particulate number) regulations.

The UX's hybrid system couples this new engine with two electric motor/generators in a new generation hybrid transaxle that is more compact, lighter and has less internal friction than previous Lexus hybrid systems. The Power Control Unit (PCU) is more powerful yet is 20 per cent smaller and 10 per cent lighter.

Optimising the level of electric motor assistance and engine rpm produces a linear acceleration feel without the engine running at high revs. Engine speed is synchronised with vehicle speed to create an immediate and continuous acceleration feel.

The new transaxle mounts the electric motor/generators (MG1 and MG2) coaxially rather than in-line. The resulting smaller and lighter package reduces frictional losses by 25 per cent. In addition, MG2 is now a higher speed motor, yielding better performance and efficiency. A further benefit to the driver is a lower – and best in segment – kerb to kerb turning radius of 5.2 metres, making the UX easy to manoeuvre.

The Sequential Shiftmatic feature delivers responsive engine braking force in six steps with a shift feel similar to a manual transmission, using steering wheel shift paddles or the S position on the shift lever.

The speed at which the hybrid system can shut off the petrol engine, such as when driving on long downward slopes, has been raised to 71mph.

The new, compact and lightweight nickel-metal hydride (NiMH) battery and compact cooling system are located below the rear seat, which helps give the vehicle its low centre of gravity.

E-FOUR ALL WHEEL DRIVE

The UX 250h is available with either front-wheel drive or E-Four electric all-wheel drive.

The E-Four all-wheel drive system uses a separate, dedicated high-torque electric motor integrated into the rear differential. Power distribution between the front and rear axles is automatically optimised by the Vehicle Stability Control (VSC) system when accelerating, cornering, or driving on slippery surfaces. E-Four provides stable driving on uphill slopes or snow-covered roads with lower fuel consumption than a conventional all-wheel drive system with a power split device and driveshaft. E-Four does more than assist traction in slippery conditions: it can also actively improve stability by adjusting rear-wheel power to help correct over or understeer.

THE BENEFITS OF THE LEXUS SELF-CHARGING HYBRID SYSTEM

The UX 250h is very responsive to drive and, like all Lexus hybrids, it offers better fuel efficiency and lower emissions than other petrol or diesel vehicles in its class. It also requires no plugging in for recharging and has no issues where driving range is concerned. In real-world city driving it can use electric power for a significant proportion of every journey – up to 55 per cent, depending on the driving conditions.

Electric vehicle mode

When cruising or accelerating gently, the front electric motor (and rear motor on all-wheel drive models) can propel the car with electricity supplied by the hybrid battery. In this situation, the vehicle runs almost silently, uses no petrol and produces zero emissions.

Dynamic yet smooth

At higher speeds the ultra-smooth Atkinson cycle petrol engine cuts in quietly, while still receiving assistance from the electric motor(s) when required. Through the near-perfect distribution of power from these two sources, the UX 250h delivers driving pleasure with low fuel consumption and emissions.

Rapid acceleration

Under full acceleration, power from the electric motor(s) instantaneously supplements the performance of the 2.0-litre petrol engine. Together they deliver a potent surge of torque, providing linear acceleration precisely when it's needed.

No need to plug in

Under braking, or when the driver takes their foot off the accelerator, regenerative braking harnesses kinetic energy to produce electricity. This, together with electric power produced

during normal driving conditions, is stored in the hybrid battery. This means the UX 250h never has to be plugged in to a power source for recharging.

Low cost of ownership

As well as being fun to drive, the UX 250h offers low cost of ownership and high residual value. This is due primarily to Lexus's industry-leading experience in engineering self-charging hybrids and batteries which last as long as the car itself, and the inherently low wear and tear of the hybrid system.

Reduced servicing costs

The UX 250h has no clutch and the starter motor and alternator are integral to the hybrid system, so need no servicing or replacement over the lifetime of the vehicle. The conventional timing belt has been replaced by a maintenance-free timing chain. With no need to service or replace these parts, owners can save more than £1,000 over five years.

Hybrid battery life equal to that of the car

Lexus hybrid batteries have a proven reliability record, established through more than 35 billion miles of driving worldwide, and are designed to last the lifetime of the car. Rigorously engineered for performance and durability, they are covered by a five-year/60,000-mile warranty. UK customers taking advantage of a Hybrid Health Check at their Lexus centre can benefit from an additional year's warranty, up to 15 years.

Reduced tyre and brake wear

Because the regenerative braking delivers the first half of all braking force, brake pad and disc wear are significantly reduced. Over the course of 60,000 miles, a Lexus hybrid will usually require just one set of replacement pads and no new discs. The higher tyre pressures used by hybrid vehicles helps lessen tyre shoulder wear, while linear power delivery and balanced weight distribution further help reduce wear.

LEXUS DRIVE MODE SELECT

The UX 250h is equipped with Lexus Drive Mode Select, which allows the driver to tailor the driving experience by selecting from three different drive modes.

Normal mode provides an optimal balance between driving performance and fuel efficiency; Eco mode maximises fuel savings across all driving conditions by smoothing the throttle response, and by moderating air conditioning operation; Sport mode delivers quicker throttle response and increased power steering feel.

In F Sport models equipped with AVS, five different driving modes are available: normal, Eco, Sport S, Sport S+, and custom.

Sport S+ further enhances the car's handling and stability when cornering. When Sport S+ or Custom mode are selected with the chassis in Sport setting, the damping force control mode switches to firmer shock absorber settings to provide a more dynamic driving feel.

Custom mode lets the driver choose their preferred combination of modes for the powertrain, chassis and air conditioning functions.

SAFETY TECHNOLOGY AND DRIVER ASSISTANCE

UX models are all equipped with eight airbags: driver and front passenger airbags; driver and front passenger knee airbags; driver and front passenger seat-mounted side impact airbags and front to rear side curtain airbags.

The second generation Lexus Safety System+ is fitted as standard, a suite of active safety technologies that support the driver and reduce the risk and severity of a range of potential accidents. It includes all-speed Adaptive Cruise Control, Pre-Collision System (PCS) with pedestrian detection, Lane Keep Assist with Lane Departure Alert and Steering Assist, Lane Trace Assist, Road Sign Assist (RSA), and Intelligent High-Beam headlamps/Automatic High Beam (AHB) or Adaptive High-beam System (AHS).

The Pre-Collision System works with the Adaptive Cruise Control, operating at speeds relative to a vehicle ahead of between seven and 110mph. The Adaptive Cruise Control also works with the Road Sign Assist so that vehicle speed can be promptly adjusted in line with the speed limit for the road being driven.

The PCS uses camera-based detection to recognise pedestrians in night-time driving, and its radar capability has been extended to enable detection of cyclists during daylight.

The UX is capable of low-speed following, including in stop-go traffic, up to speeds of about 18mph. Thus, the UX driver enjoys more relaxed driving in situations that can be stressful and tiring, while also gaining a measure of safety.

Lane Trace Assist uses the electric power steering motor to help the driver keep the vehicle centred in its lane. Lane Departure Alert detects not only white traffic lines, but also the sides of the road.

Automatic High Beam dips the headlights if it detects the headlights of an oncoming vehicle, or tail-lights of traffic ahead, and returns to main beam as soon as the road ahead is clear. On UX models equipped with triple LED headlights (standard on Takumi grade), the Adaptive

High-beam system is used. This automatically operates 11 independent LED chips in the headlamp to give precise control of the field of illumination, to maximise night-time visibility without dazzling other traffic.

Other safety systems include Rear Cross Traffic Alert (standard on Takumi grade) which can detect vehicles crossing from either side, and static vehicles ahead or behind when parking, covering a wider range of scenarios than clearance sonars and other rear cross traffic systems. Real-time images from a digital camera are presented on the car's centre display and the warning beeps are used to alert the driver to potential risks.

Connected to this, a Parking Support Brake system adds active drive force (throttle) and braking control to the audible and visual warnings to reduce the possibility of contact with moving objects ahead or behind the UX when parking.

UX F SPORT

The F Sport specification includes an exclusive grille design featuring a mesh pattern created by individual L-shaped pieces. The front bumper features large fog lamp bezels with L-shaped chrome mouldings and the same mesh pattern as the grille. A revised rear bumper and jet-black trim on the front and rear mouldings complete the look.

Of the range of 12 exterior colours for the UX, F Sport White, Blazing Carnelian and Azure Blue, are exclusive to the F Sport grade.

Exclusive interior features include front sports seats upholstered in a combination of cloth and leather-effect Tahara and made with an integrated-foaming technique that was first developed for Lexus F performance models. This construction method helps the seats hold the occupant's body more snugly. The upholstery is set into a mould which is then filled with foam to complete the seat in a single process. The special eight-way power-adjustable F Sport front seats feature lumbar adjustment, as well as manual forward/backward adjustment for the headrests.

The F Sport features a movable meter ring, which originated in the Lexus LFA supercar and is also featured in the LC coupe. This allows the driver to change the content displayed with ease. Pushing a switch on the steering wheel moves the ring to the right and enlarges the multi-information display.

A leather-covered F Sport steering wheel, leather-trimmed shift knob, aluminium footrest and aluminium pedals are also part of the package.

The UX F Sport can be equipped with a specially tailored version of the high-response Adaptive Variable Suspension (AVS) system that debuted on the Lexus LC and LS flagship

coupe and saloon models. The system, featured in the optional Tech & Safety Pack, increases damping force to minimise roll when cornering or changing lanes and reduces damping force in straight line driving to preserve ride quality.

Exclusive F Sport suspension tuning includes specific springs and anti-roll bars, plus rear performance dampers for a more refined ride. The 18-inch, five twin-spoke aluminium alloy wheels, unique to the F Sport, are even more rigid than the standard UX wheels, contributing to responsiveness and handling agility.

The driving experience can be further enhanced with Active Sound Control (ASC), which generates the aural effect of up and down-shifts like those of a geared automatic transmission. An additional Sonic Interaction Design (SID) function adjusts the sound the vehicle makes when driving in Sport S+ mode (S+ Sound).

UK MODEL RANGE

The UX is available in the UK in three equipment grades: UX, F Sport and Takumi.

The **UX** grade features the second generation Lexus Safety System+, seven-inch Lexus Navigation and multimedia system with DAB, dual-zone air conditioning, heated front seats, roof rails and 17-inch alloys.

Key features for the **F Sport** include F Sport interior and exterior styling features, including F Sport 18-inch alloy wheels, black front spindle grille and black door mirror housings. In the cabin there are F Sport front seats with fabric and Tahara upholstery and F Sport pedals and steering wheel. The specification also includes rear privacy glass, LED front fog lights, heated, power-adjustable front seats, heated steering wheel and a memory setting for the door mirrors.

The **Takumi**, named in celebration of Lexus's skilled *takumi* craftsmen, offers smooth leather upholstery, *washi* paper-grain trim inlays, integrated front seat heating and ventilation, a bespoke Mark Levinson 13-speaker Premium Surround Sound system, 10.3-inch Lexus Navigation and multimedia display, 360-degree camera, colour head-up display, sunroof, power tailgate, auto-folding function for the door mirrors, smart entry system, 18-inch alloy wheels, Blind Spot Monitor and Rear Cross Traffic Alert with braking function.

OPTION PACKS

A range of option packs is available giving customers the chance to develop their UX's specifications to suit their personal preferences. The **Premium Pack** (UX grade) provides 18-inch alloy wheels, front and rear parking sensors, rear privacy glass, integrated heating in the front seats and steering wheel and an auto-dimming rear-view mirror.

Taking luxury specification to an even higher level, the **Premium Plus Pack** (UX and F Sport) adds smooth leather upholstery, *washi* trim inlays, smart entry, power tailgate and illuminated entry system. When selected for the F Sport, the pack further provides a 10.3-inch Lexus Navigation and multimedia display, eight-speaker audio system and power-adjustable steering wheel.

The **Tech & Safety Pack** (UX and F Sport, only available in addition to the Premium or Premium Plus packs) equips the car with a Blind Spot Monitor, Rear Cross Traffic with Auto Brake, intelligent clearance sonar, triple-eye LED headlights with Adaptive High-beam System, a head-up display, Lexus Navigation and a wireless charging tray for smartphones. When applied to the F Sport model, it further provides Adaptive Variable Suspension.

The UX model is available with a **Tech & Sound Pack** (only in addition to the Premium Plus Pack) that introduces the Mark Levinson audio system, head-up display, wireless charger, intelligent parking sensors and power-adjustable front seats and steering wheel.

For the F Sport, the **Takumi Pack** upgrade includes all the content of the Premium Plus and Tech & Safety Packs, together with front seat ventilation, the Mark Levinson audio system, Lexus Navigation, a sunroof, door mirror memory settings and 360-degree camera.

New for the 2020 model year, the **Premium Pro Pack** is available for UX grade. This includes all the contents of the Premium Plus Pack together with the Blind Spot Monitor, Rear Cross Traffic Alert with auto brake, head-up display, triple-eye LED headlights with Adaptive High-beam System, Mark Levinson Premium Surround Audio System, power-adjustable steering wheel, eight-way driver's seat power adjustment, two-way driver's seat power lumbar adjustment, wireless smartphone charger, door mirrors with auto-fold and reverse tilt functions and a sunroof.

Also introduced for 2020, the **Lexus Driver Assist** pack (UX and F Sport models) bundles intelligent parking sensors, Blind Spot Monitor and Rear Cross Traffic Alert with auto-braking to provide added safeguards to prevent an accident when turning or manoeuvring in or out of parking spaces.

All new Lexus models come with Lexus Care as standard, with a three-year/60,000-mile warranty and three years' roadside assistance package.

UX 250h TECHNICAL SPECIFICATIONS

ENGINE		
Engine type	4 cylinders in-line	
Valve mechanism	16-valve DOHC, VVT-iE (intake)/VVT-i (exhaust)	
Displacement (cc)	1,987	
Bore x stroke (mm)	80.5 x 97.6	
Compression ratio	14.0:1	
Total system output (bhp/DIN hp/kW)	181/184/135	
Max. engine power (bhp/DIN hp/kW @ rpm)	150/152/114 @ 6,000	
Max. engine torque (Nm @ rpm)	190 @ 4,400 – 5,200	
HYBRID SYSTEM		
Electric motor – front		
Type	Permanent magnet, synchronous motor	
Max. voltage	650	
Max. power (bhp/kW)	107/80	
Max. torque (Nm)	202	
Electric motor – rear (E-Four models)		
Type	Induction motor	
Max. voltage	216	
Max. power (bhp/kW)	7.1/5.3	
Max. torque (Nm)	55	
Hybrid battery		
Type	Nickel-metal hydride	
Nominal voltage	216	
Number of cells	180	
TRANSMISSION		
	FWD	E-FOUR
Type	E-CVT	
Motor reduction gear	3.062	
Differential Gear Ratio (front/rear)	3.605/ -	3.605/10.487
PERFORMANCE		
	FWD	E-FOUR
0-62mph (sec)	8.5	8.7
Max. speed (mph)	110	
DIMENSIONS		
Overall length (mm)	4,495	
Overall width – excluding mirrors (mm)	1,840	
Overall width – including mirrors (mm)	2,080	
Overall height (mm)	1,520 (17in wheels) 1,540 (18in wheels)	
Wheelbase (mm)	2,640	
Track front (mm)	1,560 (17in wheels) 1,550 (18in wheels)	
Track rear (mm)	1,560 (17in wheels)	

		1,550 (18in wheels)	
Overhang front (mm)		970	
Overhang rear (mm)		885	
Coefficient of Drag (Cd)		0.33	
Fuel tank capacity (litres)		43	
INTERIOR DIMENSIONS		FWD	E-FOUR
Interior length (mm)		1,830	
Interior width (mm)		1,518	
Interior height (mm)		1,171 1,146 (with sunroof)	
Luggage capacity (litres) All figures include tray compartment in loadspace	Rear seats up, loaded to tonneau cover	320	283
	Rear seats up, loaded to roof	438	401
	Rear sets folded, loaded to roof	1,231	1,194
WEIGHTS (kg)		FWD	E-FOUR
Kerb weight		1,540 – 1,620	1,600 – 1,680
Gross vehicle weight		2,110	
Towing capacity – braked		750	
Towing capacity – unbraked		750	
FUEL CONSUMPTION (WLTP)		FWD	E-FOUR
Combined (mpg)		50.4 – 53.2	47.0 – 47.0
EMISSIONS (WLTP), INSURANCE, SERVICING & WARRANTY			
CO ₂ emissions - combined (g/km)	UX	121 120 without navigation	-
	UX Premium Pack	124	-
	UX Premium, Tech & Safety Packs	125	-
	UX Premium Plus Pack	125	135
	UX Premium Plus, Tech & Safety Packs	125	135
	UX Premium Plus, Tech Mark Levinson	126	136
	UX Premium Plus Pack Pro	126	136
	F Sport	126	-
	F Sport Tech & Safety Packs	126 127 with sunroof	-
	F Sport Premium Plus Pack	127	136

	F Sport Premium Plus Tech & Safety Packs	127	137
	F Sport Takumi Pack	128	137
	Takumi	126	136
Insurance groups	22E – 26E		
Service intervals	10,000 miles/annually		
Comprehensive new vehicle warranty	3 years/60,000 miles		
Hybrid warranty	5 years/60,000 miles (whichever comes first)		
Corrosion/perforation warranty	12 years/unlimited mileage		
Surface rust/paintwork	3 years/unlimited mileage		
SUSPENSION			
Front	MacPherson strut		
Rear	Trailing arm, double wishbones		
BRAKES			
Front (diameter x thickness, mm)	Ventilated discs 305 x 28		
Rear (diameter x thickness, mm)	Solid discs 281 x 12		
STEERING			
Type	Rack and pinion, electric power steering		
Turns (lock to lock)	2.76		
Min. turning radius (m)	Tyre	5.2	
	Body	5.6	
WHEELS & TYRES			
Wheel and tyre size	17in, 215/60R17 18in, 225/50R18		

LEXUS UX 250h EQUIPMENT SPECIFICATIONS

SAFETY & DRIVER ASSISTANCE	UX	F SPORT	TAKUMI
Lexus Safety System+ with Pre-Collision System with pedestrian detection, Adaptive Cruise Control, Lane Keep Assist, Lane Trace Assist, Road Sign Assist & Automatic High Beam/Adaptive High-beam System	✓	✓	✓ (with Adaptive High-beam System)
Adaptive High-beam System (replacing AHB)	Opt ^{4,8}	Opt ^{5,7}	✓
Driver & front passenger airbags	✓	✓	✓
Driver & front passenger side airbags	✓	✓	✓
Driver & front passenger knee airbags	✓	✓	✓
Curtain Shield airbags	✓	✓	✓
Front passenger airbag cut-off switch	✓	✓	✓
ABS	✓	✓	✓
Electronic Brakeforce Distribution (EBD) with Brake Assist System (BAS)	✓	✓	✓
Secondary collision brake (SCB)	✓	✓	✓
Vehicle Stability Control (VSC)	✓	✓	✓
Traction Control (TRC)	✓	✓	✓
Vehicle Dynamics Integrated Management	✓	✓	✓
Hill Assist Control (HAC)	✓	✓	✓
Blind Spot Monitor and Rear Cross Traffic Alert	Opt Pack ^{4,8,9}	Opt Pack ^{5,7,9}	✓
Tyre Pressure Warning System	✓	✓	✓
Electronic front seatbelt pretensioners with force limiters	✓	✓	✓
High mounted rear stop light	✓	✓	✓
Emergency brake signal	✓	✓	✓
Seatbelt warning system	✓	✓	✓
ISOFIX child seat anchor points on outer rear seats	✓	✓	✓
Adaptive Variable Suspension	✗	Opt Pack ^{5,7}	✗
Sports suspension with lateral performance dampers	✗	✓	✗
Speed-sensitive electric power steering	✓	✓	✓
E-Four all-wheel drive	Opt ^{2,8}	Opt ^{3,7}	Opt
Electronic parking brake	✓	✓	✓
eCall	✓	✓	✓
INSTRUMENTS & CONTROLS	UX	F SPORT	TAKUMI
Drive Mode Select – 4 modes	✓	✓	✓
Drive Mode Select – 5 modes	✗	Opt Pack ^{5,7}	✗
Active Sound Control	✗	✓	✗
Head-up display	Opt Pack ^{4,8}	Opt Pack ^{5,7}	✓
Steering wheel-mounted paddle shifts	✗	✓	✗
AUDIO, NAVIGATION & INFORMATION	UX	F SPORT	TAKUMI
7in Lexus Media Display with 8-speaker audio	✗	Opt Pack ⁵	✗

7in Lexus Navigation with full European mapping	✓	✓	✘
10.3in Lexus Navigation with full European mapping, DVD, connected services, remote touch controller	Opt ^{2,4,8}	Opt Pack ^{3,5,7}	✓
13-speaker Mark Levinson Sound system	Opt Pack ^{6,8}	Opt Pack ⁷	✓
Apple CarPlay and Android Auto wireless smartphone integration	✓	✓	✓
Lexus Link connected services	✓	✓	✓
USB x2 front and rear and Aux socket (VTR compatible)	✓	✓	✓
Bluetooth	✓	✓	✓
COMFORT & CONVENIENCE	UX	F SPORT	TAKUMI
Dual-zone climate control with humidity sensor	✓	✓	✓
Rear cabin air vents	✓	✓	✓
Power windows with anti-jam protection	✓	✓	✓
Rain-sensing wipers	✓	✓	✓
Smart keyless entry	Opt Pack ^{2,8}	Opt Pack ^{3,7}	✓
Push-button start	✓	✓	✓
Parking assist sensors (4 front, 4 rear)	Opt Pack ^{1,2,8}	✓	✘
Intelligent parking assist sensors (4 front, 4 rear)	Opt Pack ^{4,6,9}	Opt Pack ^{5,7,9}	✓
Reversing camera	✓	✓	✓
Wireless smartphone charging tray	Opt Pack ^{4,6}	Opt Pack ^{5,7}	✓
360-degree Panoramic View Monitor	✘	Opt Pack ⁷	✓
Adjustable turn indicator flash sequence	✓	✓	✓
LED interior lighting	✓	✓	✓
Auto-dimming rear-view mirror	Opt Pack ^{1,2,8}	✓	✓
Power-adjustable steering wheel with leather trim	Opt Pack ^{5,8}	✘	✓
Power-adjustable F Sport steering wheel with leather trim and paddle shifts	✘	Opt Pack ^{3,7}	✘
Heated steering wheel	Opt Pack ^{1,2,8}	✓	✓
Analogue automatic GPS clock	✓	✓	✓
12v accessory socket x2 (centre console and luggage compartment)	✓	✓	✓
4x tie-down hooks in boot	✓	✓	✓
2x folding shopping bag hooks in boot	✓	✓	✓
Front centre arm rest with storage	✓	✓	✓
Glove box	✓	✓	✓
2 cup holders in centre console	✓	✓	✓
2 cup holders in rear centre arm rest	✓	✓	✓
Under deck storage	✓	✓	✓
Side deck storage	✓	✓	✓
SECURITY	UX	F SPORT	TAKUMI
Anti-theft system with alarm, intrusion, tilt and glass breakage sensors, engine immobiliser	✓	✓	✓
Two-motion double door locking	✓	✓	✓
Speed-sensitive auto door locking	✓	✓	✓

VIN etching	✓	✓	✓
Locking wheel nuts (Thatcham approved)	✓	✓	✓
SEATING, UPHOLSTERY & TRIM	UX	F SPORT	TAKUMI
Cloth upholstery	✓	✗	✗
Smooth leather upholstery	Opt Pack ^{2,8}	Opt Pack ^{3,7}	✓
F Sport seats with fabric/Tahara upholstery	✗	✓	✗
Heated front seats	Opt Pack ^{1,2,8}	✓	✓
Heated and ventilated front seats	✗	Opt Pack ⁷	✓
6-way manually adjustable front seats	✓	✗	✗
8-way power front seat adjustment	Opt Pack ^{6,8}	✓	✓
2-way power lumbar adjustment on driver's seat	Opt Pack ^{6,8}	✓	✓
Memory function for driver's seat	✗	Opt Pack ⁷	✓
60:40 split-folding rear seats	✓	✓	✓
Map pockets on front seat seatbacks	✓	✓	✓
Washi paper-grain inlays	Opt Pack ^{2,8}	✗	✓
Leather shift lever trim	✓	✗	✓
F Sport shift lever with leather trim	✗	✓	✗
F Sport aluminium sports pedals	✗	✓	✗
Carpet mats	✓	✓	✓
EXTERIOR	UX	F SPORT	TAKUMI
Auto-folding, heated door mirrors with integrated turn indicators	✓	✓	✓
Door mirrors with memory setting	✗	Opt ⁷	✓
Auto-folding door mirrors	✗	✗	✓
Acoustic windscreen	✓	✓	✓
Rear privacy glass	Opt Pack ^{1,2,8}	✓	✓
Power tailgate	Opt Pack ^{2,8}	Opt Pack ^{3,7}	✓
LED headlights with Automatic High Beam	✓	✓	✗
Triple-eye LED headlights with Adaptive High-beam System	Opt Pack ^{4,8}	Opt Pack ^{5,7}	✓
LED daytime running lights	✓	✓	✓
LED front/rear fog lights	✓	✓	✓
LED cornering lights	Opt Pack ^{2,8}	✓	✓
LED rear lights	✓	✓	✓
Headlight cleaners	✓	✓	✓
LED sequential turn indicators	✓	✓	✓
Illuminated doorhandles with puddle lights	Opt Pack ^{2,8}	Opt Pack ^{3,7}	✓
F Sport black spindle grille	✗	✓	✗
F Sport side sills	✗	✓	✗
F Sport bumpers with metallic coating	✗	✓	✗
Black door mirror covers	✗	✓	✗
Integrated roof rails (chrome)	✓	✓	✓
Sunroof	Opt	Opt Pack ⁷	✓
17in alloy wheels	✓	✗	✗
18in alloy wheels with run-flat tyres	Opt Pack ^{1,2,8}	✗	✓
18in F Sport alloy wheels with run-flat tyres	✗	✓	✗

OPTION PACKS	UX	F SPORT	TAKUMI
¹ Premium Pack: 18in alloy wheels, rear privacy glass, front and rear parking sensors, auto-dimming rear-view mirror, heated front seats, heated steering wheel	Opt	x	x
² Premium Plus Pack (includes Premium Pack contents): smooth leather upholstery, smart keyless entry, power tailgate, illuminated exterior door handles, Washi trim inserts,	Opt	x	x
³ F Sport Premium Plus Pack: smooth leather upholstery, smart entry, power tailgate, illuminated exterior door handles, 10.3in Lexus Navigation, 8-speaker premium audio with DVD, power steering column adjustment.	x	Opt	x
⁴ Tech & Safety Pack (only in addition to Premium/Premium Plus Packs): blind spot monitor and rear cross traffic alert with auto brake, head-up display, wireless charging tray, LED headlamps with Adaptive High-beam System, intelligent parking sensors, Blind Sport Monitor, Rear Cross Traffic Alert with auto-braking, Lexus Navigation.	Opt	x	x
⁵ F Sport Tech & Safety Pack: blind spot monitor and rear cross traffic alert with auto brake, head-up display, wireless charging tray, LED headlamps with Adaptive High-beam System, intelligent parking sensors, Blind Sport Monitor, Rear Cross Traffic Alert with auto-braking, Adaptive Variable Suspension, Sport S+ drive mode	x	Opt	x
⁶ Tech & Sound Pack (only in addition to Premium Plus Packs): Mark Levinson sound system, 8-way power adjustable front seats, 2-way driver power lumbar support, power steering column adjustment, head-up display, wireless charging tray	Opt	x	x
⁷ Takumi Pack (includes Premium Plus and Tech & Safety Pack contents): Mark Levinson sound system, Lexus Navigation, Panoramic View Monitor, ventilated front seats, front seat memory steering, door mirror memory setting, sunroof.	x	Opt	x
⁸ Premium Pro Pack (includes Premium Plus Pack contents): Blind Spot Monitor, Rear Cross Traffic Alert with auto brake, head-up display, triple-eye LED headlights with Adaptive High-beam System, power-adjustable steering wheel, 8-way power adjustable front seats, 2-way power lumbar support on driver's seat, wireless smartphone	Opt	x	x

charger, heated door mirrors with auto-folding and reverse tilt functions, sunroof.			
⁹ Lexus Driver Assist (only in addition to Premium Pack or Premium Plus Pack): intelligent parking sensors, Blind Sport Monitor, Rear Cross Traffic Alert with auto-braking.	Opt	Opt	*

ENDS

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