

Lexus GX 460 Leads A Dual Life With Ultra-Smooth Driving Manners and Remarkable Off-Road Capability

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The Lexus GX 460 remains a rarity among luxury SUVs, a full-capability model with exceptional off-road prowess, yet with on-road handling and ride quality that epitomize the Lexus brand. The 2014 model gets the signature Lexus spindle grille for a more distinctive appearance, and the change is also functional thanks to the addition of LEDs (light emitting diodes) for the headlamps, daytime running lights (DRLs) and available foglamps.

The GX 460 Premium model becomes the GX Luxury for 2014 with the addition of Blind Spot Monitor with Rear Cross Traffic Alert, Intuitive Parking Assist and 18-inch split six-spoke design wheels with a Liquid Graphite finish.

The GX 460's wide-ranging outdoor capability gets a boost from some indoor changes for 2014, namely a new multimedia system that uses an innovative customizable home screen. Capable of displaying three sections at once, the screen can be configured as a single display (navigation/map), dual display (navigation/map + audio, compass or other function) or three displays on the same screen (navigation/map + audio + weather). Adding information and clarity, the available navigation system features three dimensional map views.

A new touch-screen display audio adds an eight-inch screen, backup monitor, HD Radio™, Bluetooth® audio, automatic phone book transfer, a vehicle information display and complimentary traffic and weather data provided via HD Radio. The new multimedia system also incorporates cache radio which has the ability to pause live radio. It automatically records the previous 15 minutes for convenient replay.

One vehicle, Two Personalities in Harmony

The Lexus GX 460 is a premium luxury family commuter during the week that easily transforms to a trail-driving 4x4 on the weekend, with room for up to seven. Such a contrast of functions is made possible by a combination of rugged body-on-frame construction and an advanced standard Kinetic Dynamic Suspension System (KDSS), which helps to significantly reduce body lean without needing stiffer springs and dampers. The GX 460's 301-horsepower 4.6-liter V8 provides 329 lb.-ft. of peak torque, making it an excellent tow vehicle.

Towing, one of the GX 460's particular strengths, gets easier for the 2014 model with the addition of standard Trailer sway control. If trailer sway is affecting handling of the GX 460, this feature uses the Vehicle Stability Control to help bring it under control. The generous 6,500-lb. towing capacity is sufficient to pull a boat, watercraft, motorcycles, horses or a racecar.

The Real Deal in 4-Wheel Drive Capability

To drive the Lexus GX 460 and experience its on-road smoothness and quiet, one might be amazed at the other side of its dual personality, the side that loves trail driving. It's a matter of the right hardware, dynamic chassis control and body configuration for obstacle clearance.

First on the GX 460's roster of full-capability chassis systems is the standard full-time four-wheel drive that uses an electronically controlled transfer case and a TORSEN® torque-sensing limited slip center differential. The TORSEN differential distributes power 40:60 under most driving conditions and changes the ratio as needed based on wheel slip. The system offers a low range for off-road driving, and the center differential can be electronically locked.

The 4WD has some on-road performance tricks, as well. Tracking through curves, the system can change the torque split to 30:70 to enhance vehicle tracking. If the rear wheels spin, the center differential can change the ratio to 50:50 to help control the slippage. It's also ready for sudden changes in road-surface conditions, such as driving through a puddle or over an ice patch.

The GX 460's sophisticated full-time 4WD system includes a low range for secure off-road travel, and it is supported by a platoon of chassis control technology. With the optional Crawl Control, Downhill Assist Control (DAC), Active Traction Control (A-TRAC) and Vehicle Stability Control (VSC) at the ready, the GX 460 can keep going when the pavement ends and when faced with steep inclines.

Active Traction Control (A-TRAC) provides the traction benefits of having locking front and rear differentials, but with lower weight. The system can apply the brake to a slipping wheel, while transferring torque to the wheels with better traction. A steering angle indicator in the gauge panel shows the driver, at a glance, which direction the front wheels are pointing – useful for situations where this can be difficult to discern, such as driving off-road.

Suspension Science

The GX 460 Luxury model deftly balances its on-road and off-road personas. On-road, the driver can tailor ride and handling balance by selecting from among Normal, Sport or Comfort modes for the Adaptive Variable Suspension (AVS). The electronically controlled dampers will do the rest, adjusting to road surface conditions.

Driving off-road requires greater axle and wheel articulation than on-road driving, but it takes special engineering to achieve that capability without compromising on-road cornering. The GX 460 helps solve that dilemma with Kinetic Dynamic Suspension System (KDSS). Lexus was able to make the stabilizer bars stiffer to reduce maximum body-lean angle by as much as 50 percent. KDSS, meanwhile, can continually vary the actual lean resistance using hydraulic cylinders acting on each stabilizer bar and linked by a pressure-sensing valve.

In off-road situations, KDSS reduces the sway resistance, which allows the wheels on each axle to move with a larger degree of side-to-side independence, helping to minimize any tendency for wheel lift. When the GX 460 encounters an uneven surface, one compressed cylinder causes fluid to flow to the other cylinder, helping the vehicle to keep all four wheels on the ground.

To get an example of how helpful KDSS can be, consider that drivers of some 4×4 vehicles will crawl under their vehicles to disconnect the stabilizer bars before traversing a difficult trail, all to achieve what KDSS does automatically.

During on-road cornering, when both front and rear hydraulic cylinders are in a neutral position, no fluid flows in the system and the stabilizer bars work conventionally to help reduce body lean.

Learning to Crawl

Driving off-road, especially on steep declines, requires some skill to manipulate the throttle, brake and steering and keep the vehicle moving forward securely. The GX 460 offers Crawl Control, which automatically modulates the throttle and brake, allowing the driver to concentrate on steering. Crawl Control, which is also useful to help navigate the vehicle through sand, mud or snow, engages when the driver shifts into low range.

The system allows the vehicle to move forward or in reverse at one of five driver-selectable low-speed settings. Crawl Control also engages the front and rear “virtual” locking differentials to help reduce tire slippage and optimize chassis behavior.

Advanced Safety Systems

The Driver Support Package, available in the Luxury model, includes the Pre-Collision System (PCS) with Driver Attention Monitor. It is designed to help reduce collision damage, and includes Dynamic Radar Cruise Control, which uses millimeter-wave radar to measure and help maintain a pre-set following distance from a vehicle traveling ahead.

Sometimes, a driver can be inattentive at the worst time, and the GX 460 can help do something about that. The available Driver Attention Monitor uses a camera to monitor the orientation of the driver’s face. If it determines that the driver is not facing forward when an obstacle is detected by PCS, alerts are conveyed with a warning chime and a warning display. If the driver doesn’t respond as the vehicle gets closer to the obstacle, the next level of warning is for PCS to gently apply the brakes.

At the same time, the system automatically retracts the front seatbelts and prepares the brake system to respond with increased force when the driver presses the pedal.

The Driver Support Package also includes Lane Departure Alert (LDA) and Intelligent High Beam headlamps. LDA uses certain lane markings to help alert the driver of a perceived unintentional lane departure by sounding a warning buzzer and displaying an alert. Intelligent High Beam headlamps automatically switch the high beams to low beams when encountering oncoming vehicles or approaching vehicles from the rear.

Connected and Informed with Lexus Enform[®]

Lexus has expanded connectivity in its vehicles while helping to reduce driver distraction. The foundation of this capability, Lexus Enform, can make a compatible Bluetooth smartphone even smarter. The available Enform service, with Destination Assist, eDestination, and App Suite, comes with the Navigation System/Mark Levinson Audio Package. Lexus Enform provides access to the subscription-free App Suite. These voice-enabled apps let you search the Internet through Bing[™], make restaurant reservations through OpenTable[®], get movie tickets via MovieTickets.com[™], listen to Internet radio, including Pandora[®], and iHeartRadio[™], search business reviews on Yelp[®], and check in on Facebook Places[™].

The GX 460’s telematics system, Lexus Enformwith Safety Connect[®] is available by subscription. Complimentary one-year trial subscriptions are available on all purchases of new Lexus vehicles equipped with these features. Safety Connect is standard on all vehicles while Lexus Enform with Safety Connect is on all vehicles equipped with the optional Navigation system. The Lexus Enform and the Safety Connect response centers operate 24 hours a day, 7 days a week—every day of the year.

Lexus Enform vehicles are factory ready for subscriptions to a variety of innovative SiriusXM[®] services including Sports, Stocks and Fuel Prices. SiriusXM services offer complimentary one-year trial data subscription.

What’s New for 2014

- New front-end design with spindle grille, LED headlamps, LED daytime running lights and, for Premium Package and Luxury model, LED foglamps as well.
- New rear fascia includes clear taillamps
- Standard display audio with 8” touchscreen and backup camera
- New multimedia
- Trailer sway control

- The GX 460 Premium model becomes the GX Luxury for 2014 with the addition of Blind Spot Monitor with Rear Cross Traffic Alert, Intuitive Parking Assist and 18-inch split six-spoke design wheels with a Liquid Graphite finish.
- Available Blind Spot Monitor with Rear Cross Traffic Alert
- New Premium Package (LED foglamps, windshield deicer, rain-sensing wipers, heated and ventilated front seats, heated outboard rear seats, 3 Zone Climate Control, Navigation with touchscreen, Intuitive Parking Assist, leather trimmed interior, full Mahogany wood trim and 18-inch six-spoke wheels.)
- NuLuxe trim with natural grain for GX460 (black only)
- Linear Espresso Wood/Abyss Black trim (GX460)
- Mahogany wood trim (same as LX) for Premium Package and GX 460 Luxury Models
- Headlamp washers (optional; standard on Luxury model)

Vehicle Details

Chassis/Body/Suspension/Tires

- Robust body-on-frame construction
- Available Adaptive Variable Suspension (AVS) features three modes: Normal, Sport and Comfort. (GX 460 Luxury)
- Available Adjustable Height Control (AHC) helps enhance the vehicle's flexibility in a wide range of driving situations. (GX 460 Luxury)
- Hill-start Assist Control (HAC) provides additional control for off-road driving by helping to keep the vehicle from rolling back while starting on a steep incline.
- Downhill Assist Control (DAC) is designed to augment the low-speed descending ability of the transmission's low range by helping to hold the vehicle to a target speed with no intervention from the driver.
- 18-inch alloy wheels with 265/60R18 mud and snow tires.

Safety/Security Features

- The Supplemental Restraint System (SRS) includes standard 10 airbags: driver and front passenger airbags; front seat-mounted side airbags; driver and front passenger knee airbags; second-row seat-mounted side airbags, and roll-sensing side curtain airbags covering all three rows.
- Active front headrests move up and forward almost instantly in the event of certain types of rear-end collisions.

Luxury/Comfort/Convenience

- Standard features include: 10-way power-adjustable, front seats; automatic dual-zone climate control; steering wheel audio controls; power moonroof; memory system for the driver's seat, steering wheel and outside mirror positions, and integrated HomeLink[®] transmitter.
- The versatile passenger-side second row seat slides 4.1 inches fore/aft to maximize passenger and cargo carrying ability.
- The foldable and reclining second row seats also feature a 60/40 walk-in function to access the standard power fold-flat third row seats.
- The tailgate window has a flip-up glass panel for added convenience.
- Standard Lexus Premium nine-speaker audio system with iPod[®]/USB connectivity, Bluetooth hands free phone capability and music streaming, and an integrated SiriusXM Satellite Radio receiver (complimentary

90-day trial subscription included).

- Standard rear back-up camera displays images on the standard 8 inch audio display screen, or the optional navigation system's LCD display.

Luxury Options

- 17-speaker Mark Levinson® Premium Audio system with 330-watts output at less than 0.1 percent THD, Automatic Sound Levelizer (ASL), 7.1 architecture
- Rear Seat Entertainment (RSE) system includes two LCD screens, one in each of the front seat backrests, two wireless headphones and remote control. HDMI input new for 2014.
- Comfort Package (GX460 only) includes heated/ventilated front seats, heated outboard rear seats, and three-zone automatic climate control for enhanced third-row passenger comfort.
- Driver Support Package (GX 460 Luxury) includes Pre-Collision System (PCS) with Driver Monitor and Dynamic Radar Cruise Control; Lane Departure Alert; and Wide-view Front and Side Camera which is designed to enhance visibility in tight settings, such as parking garages, and to help the driver's view around corners when pulling out of parking spaces into traffic, and stopped at intersections and T-junctions; Crawl Control; Mark Levinson Audio System; Intelligent High Beams
- Intuitive Parking Assist helps the driver detect obstacles at the front, rear or corners of the vehicle and helps guide the GX into the garage or parking spaces. (Available on GX460, and Premium Package and standard on GX 460 Luxury).

Warranty

- 48-month/50,000-mile basic limited warranty with roadside assistance for 48 months/unlimited miles.
- 72 months/70,000 miles powertrain and restraint system coverage.
- 72 months corrosion perforation protection coverage, regardless of mileage.

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