

May 9,2018 (1/8)

Daihatsu Announces a Complete Redesign of the Mira e:S Mini Passenger Vehicle - The first model to establish the origin of DNGA, the Mira e:S provides safety in addition to fuel efficiency and affordable pricing -



Mira e:S G "SA III" (2WD)

Daihatsu Motor Co., Ltd. (hereinafter, "Daihatsu") will launch the new Mira $e:S^{*1}$ mini passenger

vehicle, which has been fully redesigned for the first time in six years, nationwide on May 9.

The development of the original Mira e:S was influenced by growing societal awareness of environmental issues. The vehicle re-evaluated the significance of mini vehicles, and achieved what was at that time the world's leading fuel efficiency^{*2} for a gasoline-engine vehicle of 30.0 km/L, at a base price of less than 800,000 yen. The Mira e:S was launched in September 2011 as the "third eco-friendly car," and with its exceptional fuel efficiency, affordable pricing and conservation of natural resources, it was a car that established a new mini vehicle genre.

In recent years, however, consumer needs have been trending towards unique personal values such as choice, safety and quality in addition to the usual demand for cost performance. The fully redesigned Mira e:S is primarily targeted at women, senior citizens and customers living in non-urban areas and aims to be a mobility partner that supports their daily lives. It fulfils the two essential elements of mini vehicles, with outstanding fuel efficiency at an affordable price, and also provides the added appeal of safety, which has been requested by a majority of consumers. The vehicle features an improved basic performance, which is directly connected to safe driving, and has also been equipped with the collision avoidance system Smart Assist III for the first time in the model.

The new Mira e:S is the first vehicle to establish the origin of the Daihatsu New Global Architecture (DNGA), a unique business structure that offers a user-oriented approach to car production. DNGA is an approach to creating small cars that pursues fuel efficiency, affordable pricing and safety and that places great importance on how a car looks, feels and drives. It aims to create mini vehicles that become an essential part of customers' daily lives and that can be driven with ease by anybody, at any time.

Based on the DNGA origin that have been established with the development of the new Mira e:S, Daihatsu will develop a new platform as the first step of DNGA in future mini vehicles with the aim of developing of compact cars for a global market.

Main characteristics of the new Mira e:S:

- 1. Fuel efficiency of 35.2 km/L*³ (making the Mira e:S eligible to receive tax breaks and subsidies for eco-friendly vehicles) achieved by reducing vehicle weight
- 2. An affordable base price of 842,000 yen*4
- 3. Basic safety performance and equipment (Smart Assist III, etc.)
- 4. A powerful and innovative design
- 5. Comfortable equipment that make the vehicle a perfect fit for everyday lives

*1: "e:S" is an abbreviation of "E"co (ecology and economy) and "S"mart *2: Correct as of September 20, 2011

*3: Fuel efficiency figures for the L SA III, L, B SA III and B 2WD models driving in JC08 mode (as specified by the Ministry of Land, Infrastructure, Transport and Tourism)

*4: The manufacturer's recommended retail price (including consumption tax) for the B 2WD model.

Sales Outline

Target Monthly Sales: 9,000 units

Unveiling Exhibition: Saturday, May 20 - Sunday, May 21

Manufacturer's Recommended Retail Prices

[Mira e:S (including consumption tax))]

				Mileage		Tax
Grade	Engine	Transmission	Drive	(km/L)	Price (yen)	Reduction
				JC08 Mode		Level
В	KF-VE (NA ^{*5})	CVT	2WD	35.2	842,400	
			4WD	32.2	972,000	
B"SA III"			2WD	35.2	907,200	
			4WD	32.2	1,036,800	
L			2WD	35.2	874,800	
			4WD	32.2	1,004,400	Tax exemption
L "SA III"			2WD	35.2	939,600	*6
			4WD	32.2	1,069,200	
X "SA III"			2WD	34.2	1,080,000	
			4WD	32.2	1,209,600	
G "SA III"			2WD	34.2	1,209,600	
			4WD	32.2	1,339,200	

*5: Naturally aspirated engine

☆: Pictured vehicle

*6: Exempt from vehicle acquisition tax and vehicle weight tax, and eligible for a 50% reduction on mini vehicle tax due to eco-friendly performance (as of May 9, 2017)

*2WD models are priced 16,200 yen higher in Hokkaido Prefecture. Prices do not include recycling costs.

Vehicle Outline

1. Fuel efficiency of 35.2 km/L^{*3} (making the Mira e:S eligible to receive tax breaks and subsidies for eco-friendly vehicles) achieved by reducing vehicle weight.

- ♦ Up to 80 kg lighter than existing models
- The new Mira e:S is up to 80 kg lighter than existing models due to the use of a lightweight, high-rigidity "D monocoque" body, optimized suspension parts, resin parts, and streamlined, thinner interior and exterior parts.
- All side outer panels are now made from thick, high-tensile plating, while the vehicle body features a lightweight, high-rigidity "D monocoque" structure that absorbs impacts and other forces. A high-strength, high-rigidity and lightweight body has been creating by optimally distributing and minimizing the reinforcement materials, enhancing parts bonding, and increasing overall unity.
- Resin parts are used throughout the front fenders, hatch door and fuel tank*⁷ for lighter weight.
- Suspension parts have been optimized for lighter weight. In addition, the L and B-grade models feature newly developed 13-inch tires and 13-inch steel wheels that are the lightest in Japan^{*8}.
- ♦ Outstanding aerodynamics with 3% less air resistance than existing models
- The new Mira e:S boasts improved aerodynamics, with Cd air resistance figures reduced by 3%. This is due to a design that emphasizes airflow and equips body parts with airflow optimizers.
- ♦ Improved energy efficiency through an evolutionary new engine unit
- The new Mira e:S engine is based on the existing KF engine. However, it minimizes mechanical loss through the use of a low-friction belt to impart revolutions to the alternator, which improves energy efficiency.
- Fuel injection is performed using the same dual injectors as on the existing engine but at a lower cost.
- The CVT is based on the existing transmission, but with thinner casing for lighter weight.

*7: 2WD models only*8: As of May 2017, according to research conducted by Daihatsu

- 2. An affordable base price of 842,000 yen
 - A low prices has been achieved through a production process that offers high-quality cars at affordable prices
 - The new Mira e:S features a base price of 842,000 yen. All model grades are priced appropriately for high-quality mini vehicles.
 - Daihatsu engaged in cross-divisional cost reduction activities. Budgets for bodies and parts were decided in advance, and the vehicle performance and equipment demanded by customers was realized within these budgets. There was a thorough re-evaluation of all parts of the design process: design development that incorporated various design elements; parts design based on production conditions; and the distribution, shape and materials used for each component.
 - A new production plant for resin hatch doors was established at Daihatsu Motor Kyushu
 Co., Ltd.'s Oita (Nakatsu) Plant. In-house production of these parts has resulted in high-quality, low-cost parts.
- **3.** Basic safety performance and equipment (Smart Assist III, etc.)
 - ♦ Improving basic performance in order to increase driving quality

<The "KF-VE engine + CVT" unit has evolved and now features optimal control>

- Throttle opening and shift mapping during accelerator operation has been overhauled, while kickdown shift control has also been optimized.
- Acceleration from a standing start and when overtaking has improved significantly compared to existing models by achieving linear acceleration when opening the throttle.

<Optimized suspension for a stable, first-class ride>

- The characteristics and controls of suspension system parts such as the suspension itself, absorbers, steering and the newly developed 13-inch tires*⁹ have been optimized for the lightweight body of the Mira e:S. It offers stable handling for easy urban driving as well as peace of mind when travelling at high speeds.
- The combination of ultra-saturated valves and specialized base valves^{*10} in the absorbers is found in a mini vehicle for the first time^{*11}, while cylinder diameters have been increased^{*10}. Adjusting suspension compression according to speed has resulted in improved steering response and an even higher quality and more stable ride.

^{*9:} L SA III, L, B SA III and B models

^{*10:} G SA III and X SA III

^{*11:} As of May 2017, according to research conducted by Daihatsu

<NV performance contributes to a comfortable ride>

- The amount of noise that can reach the cabin has been limited by reducing the number of openings in the body.
- Sound insulation materials have been optimally distributed throughout the car to enhance cabin quietness.
- An overhaul of the front pillar and door mirror shapes has led to reductions in wind noise.
- Lock-up control has been optimized to minimize noise and vibrations.

 \diamond A safe car that comfortably seats four adults and is easy for anybody to drive

<A driver's seat that allows stress-free driving as part of a spacious package>

- Outstanding packaging technologies have resulted in a roomy interior that features liberal amounts of overhead space, safeguards upward visibility, and comfortably seats four adults.
- The locations of the accelerator pedal and steering wheel have been adjusted for an optimal driving position.
- The newly designed driver's seat features a lightweight frame that offers outstanding comfort and support. It provides superb support when operating the steering wheel, and outstanding cushioning through the frame and seat back. The location of the seat rails has also been optimized to improve seating comfort.
- A new steering wheel has been developed with an increased grip diameter. The steering wheel itself also features a soft synthetic-leather grain where the driver's hands hold the wheel.
- Safety equipment that provides peace of mind while driving
- The Mira e:S is equipped with Smart Assist III, which uses the world's smallest^{*12} high-performance stereo cameras.
- Smart Assist III provides braking support for pedestrian collision avoidance and an automatic high-beam system for exceptional safety performance.
- Two front and two rear corner sensors are equipped as standard^{*13} on some grades of model for the first time in a mini vehicle^{*12}. An in-display meter and alarm sound provide the driver with a variable distance-based alert when the car approaches an obstacle.

^{*12:} As of May 2017, according to research conducted by Daihatsu

^{*13:} G SA III, X SA III, L SA III and B SA III models

4. A powerful and innovative design

The essence of a 2BOX mini vehicle—an evolution of a simple, effective design

 \diamond An exterior that exudes quality and safety

<A front view that gives an impression of safety>

- The front view of the Mira e:S provides a feeling of safety with its extended nose and a bumper shape that demonstrates solidity and presence as it reaches down from the doors.
- The wide bumpers that extend from the front of the car to the sides resemble aerodynamic skirts, highlighting the vehicle's width and low center of gravity.

<An intelligent and dignified side styling>

- The distinctive side windows and pillars are tilted for improved aerodynamics and contribute to an excellent field of vision.
- The horizontal beltline and solid door cross-sections stretch across the vehicle for an expansive, intelligent, and dignified side appearance.

<A wide rear styling with a low center of gravity>

- The black garnish on both sides of the hatch door glass improves aerodynamics and emphasizes the width of the vehicle.
- The lines of the bumper corners and the lower-end molds underscore the vehicle's stability.
- Elaborate adjustments have been made to the design, such as reducing the difference in height between the hood and fenders, and using straight character lines on the sides of the vehicle. This gives the overall vehicle a sense of superb quality.
- ♦ A high quality interior that combines low cost, light weight, and ease of driving
- A distinctive instrument panel features horizontal tones that extend to left and right. With its refreshing shape, the simple, effective interior provides a liberating sense of space, while the black tones of the design create a chic, modern atmosphere.
- With their high-contrast blacks and light greys, the seats boast a modern styling. The primary fabric is soft to the touch and decorated with three-dimensional patterns in a high-quality, luxurious design.
- ♦ Newly developed LED lamps
- The Mira e:S is equipped with newly developed LED headlamps^{*14} that create a smart, powerful, and sharp impression. The optimal positioning of the reflectors increases the brightness of the lamps and enhances the outstanding vehicle design.
- The rear combination lamps (LED stop lamps) have four LEDs arranged in a single line for a sharp and cutting-edge design.

- ♦ Diverse color variations and newly developed 13-inch wheels
- A new Sky Blue Metallic color has been developed in order to emphasize the distinctive solidity of the new Mira e:S. The Mira e:S is available in a total of nine individual, powerful and fresh color schemes, including a number of metallic tones.
- Each grade of model comes with powerful, sharp and elaborate lightweight wheels.

*14: Equipped as standard on the G SA III and X SA III models. The lamps are optional on the B SA III model.

5. Comfortable equipment that makes the vehicle a perfect fit for everyday lives

<Self-illuminating digital meters>

- High-visibility white LED self-illuminating digital meters are installed on all models.
- The area illuminated by the Eco Driving Assist lights has been expanded, enabling drivers to instinctively recognize when Eco Driving is being used.

<TFT multi-information displays>

 The G and X grades feature TFT multi-information displays which show maintenance data, fuel efficiency scores, and other information to improve convenience and contribute to Eco Driving.

<Convenient equipment for a comfortable driving experience>

- Plentiful storage areas, such as embedded in-panel drink holders (on both driver and passenger sides), are positioned in easily accessible locations.
- The hatch door utilizes an electric hatch door opener for the first time on a mini vehicle*¹⁵.
 The door also features a door handle for easy opening and closing.

<Convenient equipment ideal for business use>

- B grade models have been newly established for business use. The models come equipped with specialized business deck boards^{*16} as standard which eliminate the height difference that typically occurs when collapsing the rear seats to provide a flat luggage space with a high-rigidity floor. The deck boards are covered with plastic fabric for easy cleaning.
- Keyless entry and electric front windows are included as standard for increased convenience.

^{*15:} As of May 2017, according to research conducted by Daihatsu

^{*16:} Optional on the G SA III, X SA III and L SA III models.