



DAIHATSU



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(1/4)

Mira e:S, Daihatsu's mini passenger vehicle

**Achieves top fuel efficiency of all gasoline cars*¹ at 33.4 km/L*², at
greater affordability starting from 745,000 yen**

Equipped with Smart Assist and enhanced safety features



Mira e:S G "SA"

Daihatsu Motor Co., Ltd. (Daihatsu) freshened its Mira e:S mini passenger vehicle slated for release nationwide on August 19.

The Mira e:S garnered the support of customers in a wide range of age groups as the "Third eco-car" that further enhanced fuel efficiency and affordability, essential facets of a mini passenger vehicle. The model largely contributed to the Mira series achieving the top rank in annual mini passenger vehicle sales (units sold) per vehicle model name for 2012.

The latest improvement further innovated on e:S Technology to achieve better fuel efficiency while allowing greater affordability. It also enhanced assurance and safety features, such as in its being equipped with the Smart Assist*³ crash-avoidance assistance system. This is the second model, following the Move released in December 2012, to use Smart Assist. Other changes include improvements in basic performance and a new front face design.

Some major features of the new Mira e:S are:

1. Top fuel efficiency among all gasoline cars, at 33.4 km/L, and an affordable starting price of 745,000 yen
2. Enhanced assurance/safety features, including the Smart Assist crash-avoidance assist system and the first Emergency Stop Signal system to be equipped in a Daihatsu car
3. More assuring and enjoyable riding comfort owing to improvements in basic performance

*1: As of August 19, 2013; excludes HVs

*2: 2WD models, JC08 mode

*3: Standard feature on L "SA," X "SA," G "SA," Lf "SA," Xf "SA" and Gf "SA"

Outline

Fuel Efficiency

Advancements in e:S Technology achieve fuel efficiency of 33.4 km/L, highest of all gasoline cars

Daihatsu further innovated on the Second Edition e:S Technology used in the Move released in December 2012. Improvements were made to each of the three major aspects of e:S Technology: (1) power train evolution, (2) vehicle evolution and (3) energy management, and thoroughly pursued improvements in combustion efficiency, reduced running resistance and better energy efficiency.

1) Power train evolution

- Improved combustion efficiency with Cooled i-EGR, a further-improved version of i-EGR

The EGR Cooler lowers the temperature of emission due to be recirculated, which keeps intake temperature lower than conventional i-EGR and restricts abnormal combustion. By optimizing the timing of ignition to match the lower intake temperature and reducing the amount of gasoline injected, the system contributes to better fuel efficiency.

By controlling the combustion temperature the system also sustains clean emissions.

- Thoroughly reduced friction loss using low-friction chains
- Reworked CVT control and achieved higher gear ratio compared to the previous level. Achieves fuel efficiency and better driving performance at a greater scale.

2) Vehicle evolution

- Achieved ideal wind flow and improved aerodynamics through design and use of aerodynamic parts that improve fuel efficiency

Front bumper takes on a new design called Aero Corner that directs wind from the front quickly and smoothly to the vehicle's rear

Under-floor cover*⁴, tire deflectors and low-down suspension*⁴ reduce air resistance

- Improved rear differential gears to heighten fuel efficiency on 4WD models

*⁴: On all 2WD models

3) Energy management

- Advanced Eco IDLE

By revising the system's control of how it restarts the engine before the vehicle stops, the system now activates at a vehicle speed of approximately 11 km/h prior to stopping.

- Advanced Eco Power Generation Control

Use of a high-performance alternator with high power-generating efficiency further heightens power generation upon vehicle slowdown while restricting it at acceleration and cruise. The improvement reduces engine load and contributes to better fuel efficiency.

Reference: Advancements made in the Second Edition e:S Technology include the following.

- Use of CVT Thermo Controller mutually optimizes the engine and CVT temperatures to heighten combustion efficiency and motion transfer efficiency, and improve fuel efficiency
- Optimized fuel injection and speed control in accordance with temperatures optimized under the CVT Thermo Controller
- Optimized combustive state by controlling ignition timing per cylinder
- Lower viscosity of CVT fluid reduced friction resistance

Affordability

Sustained thorough cost-reduction efforts to achieve starting price of 745,000 yen and greater affordability

- Pursued lower cost through cost-reduction efforts pursuing the best drawing from quality and cost aspects seen from the standpoint of improving essential design, and by sustaining efforts to innovate purchase and procurement. Achieved affordability, lowering starting price by 50,000 yen and enhancing features on popular grades while improving fuel efficiency and basic performance.

Assurance, Safety

Equipped with Smart Assist and Emergency Stop Signal systems, heightening safety

- Equipped with Smart Assist, a crash-avoidance assist system with four functions: brakes that assist low-speed crash avoidance, gas pedal misoperation control, notification of motion of a vehicle in front, and vehicle stability control (VSC) and traction control (TRC)*5
- Equipped with Emergency Stop Signal system on all models. When the driver strongly depresses the brake while driving at 60 km/h or faster, the system automatically flashes the hazard lights as the brake lamps turn on and warns vehicles that follow.

*5: VSC and TRC are registered trademarks of the Toyota Motor Corporation (use approved).

Basic Performance

The “Fun & Relaxing Drive” concept achieves greater quietness and riding comfort

- Decreased vibration through greater stiffness in steering support parts, and improved functions of and optimally located sound absorbing/insulating materials of each part to reduce engine noise within the car and improve silence
- Optimally tuned suspension improves steering feel and riding comfort

Style

Front face with an innovative look, and improved quality of the interior

- Characteristic upper grill displays innovativeness, while the width of the lower grill creates stability
- Bumper corner improves aerodynamics and contributes to greater fuel efficiency
- Clear and crystalline rear combination lights express innovativeness
- Improved appearance primarily around the central panel

The contrasting colors of black and silver – seen on glossy line decoration of the black audio face, piano-black decoration*6 of the audio panel, and silver decoration*6 of the air conditioner panel – create a premium feel.

- Improved appearance of quality, changing the seat surface to a subtle gray
- Achieved a diverse lineup of 10 colors that now includes Shining Red

*6: G “SA” and Gf “SA”

Other

- All models come with Auto-Off system for headlights
- Keyless Battery Alert is used in the G “SA” and Gf “SA”

The Smart Assist system assumes the customer will drive safely. Do not rely on Smart Assist; drive safely.

Smart Assist’s brake system that assists low-speed crash avoidance activates when the risk of colliding with a preceding car heightens when moving at approximately 4-30 km/h, and attempts to avert a crash by stopping or slowing down automatically, or to reduce the damage from a crash.

The system may activate when facing other subjects such as a two-wheeled vehicle, pedestrian, light pole or wall, but it is not intended for avoiding crashes with these subjects.

The system may not activate when the driver operates the vehicle to avoid a crash, or under certain road or weather conditions.

Manufacturer's suggested retail prices (tax included)

Mira e:S

Grade	Engine	Transmission	Smart Assist	Drive	Fuel efficiency (km/L) JC08 mode	Price (yen)	Tax reduction level
D	NA*7	CVT	-	2WD	33.4	745,000	Exempt
L			-			890,000	
L "SA"			○			940,000	
X			-			1,000,000	
X "SA"			○			1,050,000	
☆ G "SA"			○			1,180,000	
Lf			-	990,000			
Lf "SA"			○	1,040,000			
Xf			-	1,100,000			
Xf "SA"			○	1,150,000			
Gf "SA"			○	1,280,000			

*7: Naturally aspirated engine

☆Photo attached