



DAIHATSU



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(1/3)

Daihatsu Develops Smart Assist III, a Crash Avoidance System with a New Breaking Function to Avoid Accidents with Pedestrians

- Featuring the world's smallest stereo camera^{*1}, the new crash avoidance system is adopted for Tanto mini vehicles released today -



Tanto with Smart Assist III



Small stereo camera

Daihatsu Motor Co., Ltd. (hereafter "Daihatsu") has developed Smart Assist III, an upgraded version of Smart Assist, which is Daihatsu's proprietary crash avoidance system. This system has been installed in partially-upgraded Tanto mini vehicles, Tanto Sloper, and Tanto Welcome Seat mini welfare vehicles and will be released nationwide on Wednesday, November 30. (For details of the partial upgrades to Tanto, see the separate press release issued on the same day.)

Smart Assist is a crash avoidance system that Daihatsu adopted for mini vehicles for the first time^{*2} in 2012, in order to provide the safety and security demanded in daily use vehicles to reduce traffic accidents. This system is adopted in nine models of compact cars^{*3}, the majority of which are mini vehicles. It is supported by a large number of customers with optimal functions for compact cars and an affordable price of 60,000 yen^{*4}. The actual cumulative total sales of cars equipped with this system exceeded 1,000,000 vehicles in July 2016.

The newly developed Smart Assist III boasts the further improvement of safety performance over its predecessors. This was enabled by the world's smallest^{*1} compact stereo camera, a crash-avoidance breaking function for pedestrians as well as vehicles, and an expanded vehicle speed range in which the function is activated. The compact stereo camera can be mounted on not only more spacious vehicles like Tanto, but also smaller mini vehicles. In addition, the system comes with Daihatsu's first auto high beam, which improves the safety and security of night driving. Despite these enhanced functions, Smart Assist III is offered at the same price as its predecessor, making those functions familiar to customers who are in need of compact cars as before.

*1. The world's smallest stereo camera with an interval of 80 mm between the left and right cameras. (As of November 30, 2016. Inquiry by Daihatsu.)

*2. As of December 2012. Inquiry by Daihatsu.

*3. Move, Tanto, Cast, Wake, Move Canbus, Hijet Caddie, Boon, and Thor come with Smart Assist II, and Mira e:S comes with Smart Assist.

*4. Price of Smart Assist II excluding taxes.

Outlines of Smart Assist III

☆Functions of Smart Assist III

Function	Operation object	Vehicle speed range	Note ⁵
Crash-avoidance braking function (for vehicles and pedestrians)	For vehicles	About 4 to 80 km/h Crash avoidance: Speed difference of about 4 to 30 km/h Damage reduction: Speed difference of about 30 to 80 km/h	○
	For pedestrians	About 4 to 50 km/h Crash avoidance: Speed difference of about 4 to 30 km/h Damage reduction: Speed difference of about 30 to 50 km/h	☆
Brake assist for damage reduction	For vehicles	About 30 to 80 km/h (Speed difference of about 30 to 80 km/h)	☆
	For pedestrians	About 30 to 50 km/h (Speed difference of about 30 to 50 km/h)	☆
Collision warning function (for vehicles and pedestrians)	For vehicles	About 4 to 100 km/h (Speed difference of about 4 to 100 km/h)	○
	For pedestrians	About 4 to 50 km/h (Speed difference of about 4 to 50 km/h)	
Erroneous start prevention function	Front side	About 0 to 10 km/h	
	Rear side	About 0 to 10 km/h	
Preceding vehicle departure reporting function		-	
Lane departure warning function		Over 60 km/h	
Auto high beam		Over 25 km/h	☆

5: ☆ = New function for Smart Assist III, ○ = Enhanced performance (Smart Assist II → Smart Assist III),

No mark = Same as conventional

1. Major upgrades

◇ Crash-avoidance braking function

<Crash-avoidance braking function for pedestrians as a new function>

The world's smallest compact stereo camera is mounted on the upper part of the wind shield. This enables the stereo camera to detect the distance from vehicles or pedestrians in front. The brakes are activated to avoid accidents not only with vehicles, as with the previous crash-avoidance braking function, but also pedestrians where the vehicle's speed is within a range of about 4 to 50 km/h.

<Expanded range of vehicle speed in which the function is activated>

The vehicle speed range in which the function is activated has been expanded from approximately 4 to 50 km/h to 4 to 80 km/h (approximately 4 to 50 km/h for avoiding accidents with pedestrians). The speed difference for avoiding accidents has also been expanded from approximately 4 to 20 km/h to 4 to 30 km/h. This means improved security and safety.

<Brake assist for damage reduction as a new function>

If the driver presses the brake pedal when the vehicle detects an accident risk, the strong brake assist function is activated, thereby avoiding a crash or reducing damage.

2. New function

◇ Daihatsu's first auto high beam

This function switches between low and high beams for the headlights by detecting the headlights of an oncoming car or other lights. This improves safety by allowing the driver to concentrate on driving even at night without concern for oncoming cars.