

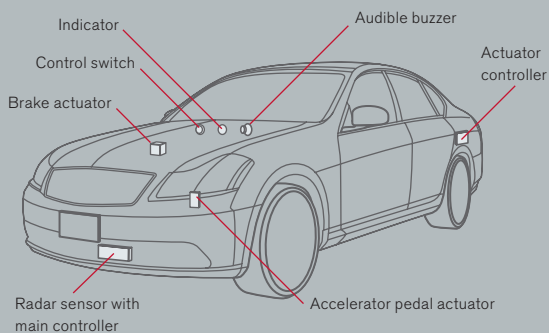
Helps the driver to maintain comfortable driving

Even when risk has not appeared, Nissan technologies make it easier for the driver to maintain safe driving conditions. Some of these innovations reduce the driver's burden, while others enhance visibility and awareness of the immediate surroundings at night and when parking, for example.

Distance Control Assist System

(under development)

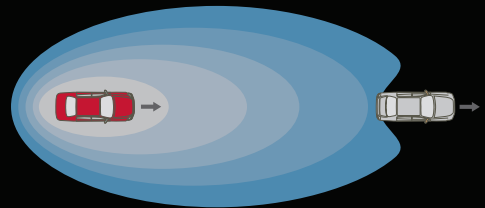
Using a radar sensor installed in the front bumper, this system helps drivers control the distance between themselves and the vehicle in front. For example, if the driver releases or is not pressing the accelerator pedal, the system automatically applies the brakes to help control the distance from the vehicle in front. Or, if the preceding vehicle slows down and the system determines that braking is required, visual and aural indicators prompt the driver to take action. The accelerator pedal also lifts up to assist the driver in switching to the brakes. These functions alleviate the burden on the driver, particularly under traffic conditions that require frequent braking.



Too close to preceding vehicle

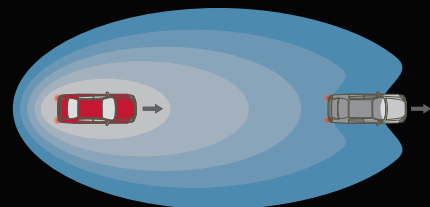
If the driver releases the accelerator, the system automatically applies the brakes.*

* Brakes are applied automatically only when the driver is not pressing the accelerator.



Braking is required by driver (when preceding driver slows down, etc.)

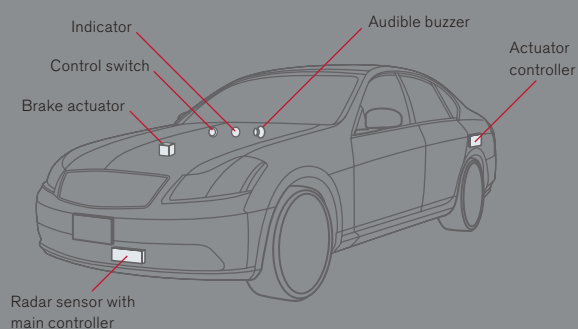
Along with an audible warning and an indicator display, the accelerator pedal rises to assist the driver in switching to the brake pedal.



The Distance Control Assist System in operation

Intelligent Cruise Control with low-speed following capability

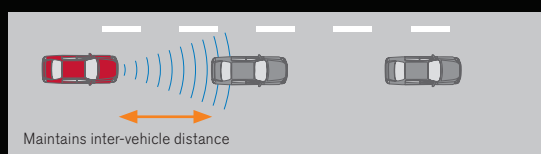
If there is a vehicle in the lane ahead, the system uses data from a radar sensor installed in the front bumper to control following distance appropriately in accordance with the preset cruising speed (about 40 to 100km/h). If there is no vehicle ahead, the preset cruising speed is maintained. The low-speed following mode operates at speeds under about 40km/h to maintain an appropriate following distance in congested traffic, thereby helping reduce the driver's workload. The system provides further convenience by switching automatically between Intelligent Cruise Control mode and low-speed following mode.



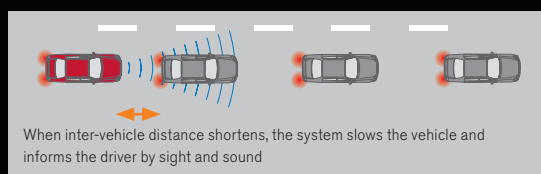
Low-speed following capability

If the sensor detects a vehicle in the lane ahead and the driver turns on the system while driving between about 10 and 40km/h, this will maintain a following distance in accordance with vehicle speed, up to about 40km/h.

※System operation is suspended when the lane ahead is clear.

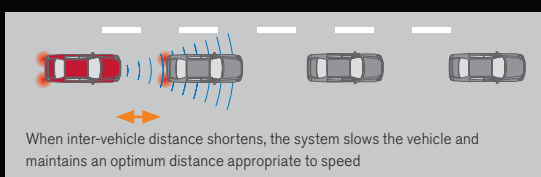


If the preceding vehicle slows down, the system slows the car and, when necessary, an audible warning and visual indication prompt the driver to perform braking. Below about 5km/h, system operation is suspended and the audible warning and visual indication prompt the driver to perform braking on his or her own.

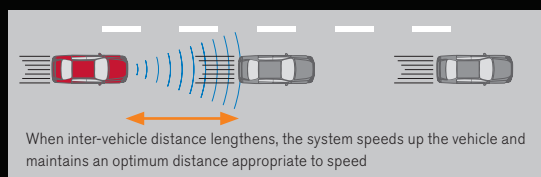


Automatically switches between Intelligent Cruise Control mode and low-speed following mode.

When using Intelligent Cruise Control to follow a vehicle, the low-speed following mode activates automatically if vehicle speed drops below about 35km/h.



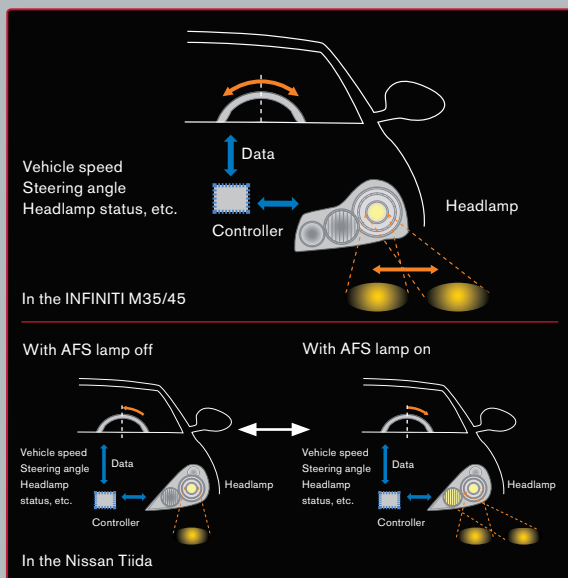
During low-speed following, if speed rises above about 40km to keep pace with a preceding vehicle, Intelligent Cruise Control will take over if the driver has preset a cruise control speed.



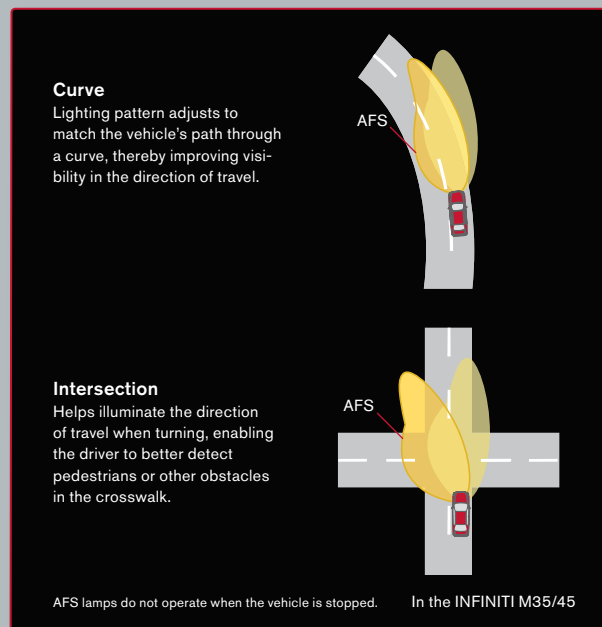
The Intelligent Cruise Control System with low-speed following capability in operation

Adaptive Front Lighting System (AFS)

Most pedestrian fatalities occur at night, so improved visibility is vital to help avoid such accidents. Nissan's AFS automatically swivels the angle of AFS lamps (located in the headlamps) in the direction the vehicle is turning, based on steering angle and vehicle speed, thereby helping to reveal obstacles in the vehicle path.



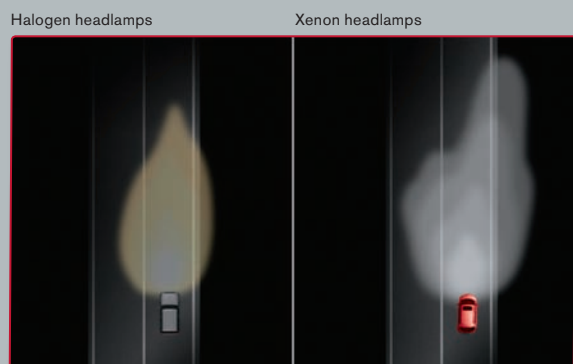
System configuration



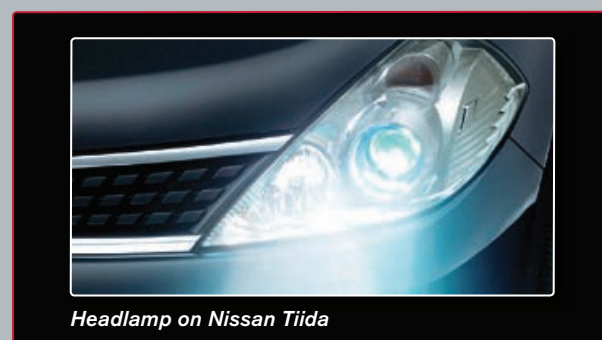
Effect of Adaptive Front Lighting System

Xenon headlamps

For improved visibility, Xenon headlamps produce bright white light that is close to sunlight in color. This powerful yet natural looking illumination enhances confidence for night driving safety.



Headlamp illumination comparison



Rear View Monitor

A dashboard monitor shows the area behind the vehicle using a rear-mounted camera. This helps makes parking easier and helps avoid collisions with fixed objects while backing.



Blind spots cited by customers in order of frequency (Nissan data)

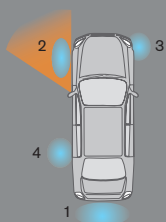


Camera

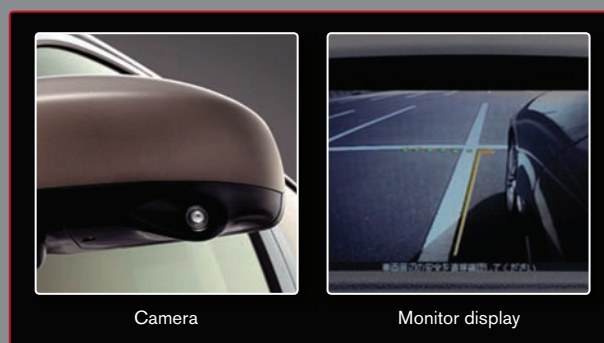
Monitor display

Side View Monitor

For greater confidence when pulling over and parking, this shows the area ahead of the passenger side mirror, using a camera mounted on the mirror and a dashboard monitor. Infrared LED illumination increases visibility at night.



Blind spots cited by customers in order of frequency (Nissan data)



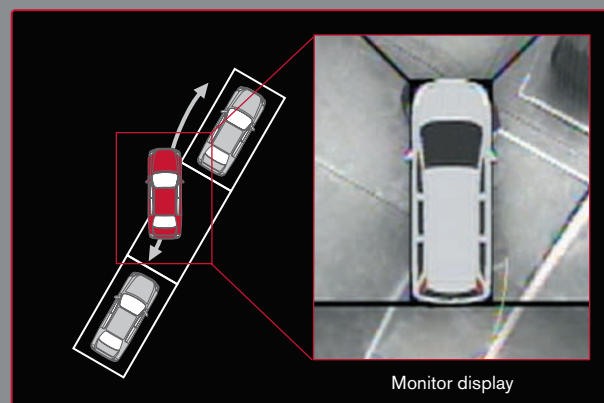
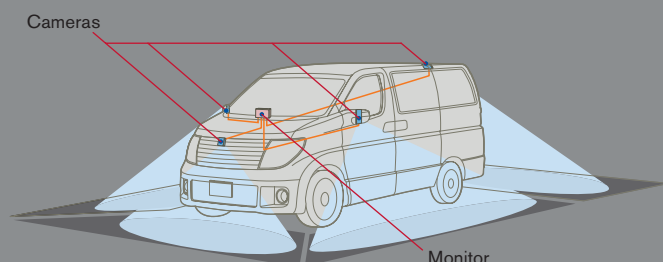
Camera

Monitor display

Around View Monitor

(under development)

Images from front, side and rear cameras combine to form an overhead view of the vehicle relative to a parking space. A further evolution of Nissan's industry-leading adoption of rear-view and side blind spot monitor technologies, this delivers real-time information on the vehicle's periphery in an easy-to-understand format.



Monitor display