

# News Release

June 17, 2015

*Safe Driving Support for Fleet Vehicles*  
*by LTE communication module and image sensing technology*  
**Pioneer Launches In-Car Rearview Mirror Telematics Unit**  
**enable the cooperation with 3rd Party Cloud-Based Solutions**  
*~ Also Supports Pioneer fleet management service "Vehicle Assist"*



[A suggested method of mounting the unit]

Aiming to be a leading company of "comprehensive infotainment" for in-car environments, Pioneer Corporation has been developing and proposing "next-generation in-car units" and "cloud services" for connected cars, whose numbers are increasing.

Today, Pioneer announced to launch a new rearview mirror shaped telematics device in July, which has LTE communication module and will be provided for next-generation fleet vehicle use. It also works with our "Vehicle Assist" which is fleet management service.

The unit is always connected to the network via a LTE which features high-speed, large capacity, and low delay, allowing real-time communication of work instructions and fleet management that utilize cloud services. The unit also comes with a built-in front-view camera with wide-angle lens, which allows the unit to function as a driving recorder. The camera also enables the unit to provide a driving support service by sensing (by unique image-sensing technology) lane changes or when the vehicle ahead starts moving, acquiring the vehicle's position via GNSS (Global Navigation Satellite System), and by detecting unsafe driving with its built-in sensor. The unit can be mounted easily on a car's rearview mirror and does not require any major system building, so the installation cost is low, and can be used for a wide range of business purposes; enabling customers to use it with their own unique applications, and also allowing expansion of functions and version upgrades via the network.

If you use the device with "Vehicle Assist", fleet vehicle oriented telematics service which Pioneer launched this spring, it will offer a more sophisticated "fleet management", creating daily reports, driving route reports (drive recording) and driving performance evaluation reports, and also it enables the sending and "reading out" the of messages to drivers.

Vehicle Assist : [http://pioneer.jp/biz/biz\\_carnavi/cloud/](http://pioneer.jp/biz/biz_carnavi/cloud/) (Japanese)

## [Main Features]

### ■ Equipped with LTE communication module, which enables real-time fleet management

The unit is always connected using NTT Docomo's LTE network, enabling real-time cloud based fleet management. This enables the system to support customers' operational efficiency and communication of work instructions. It can be used for the next-generation telematics service, such as getting the images from the camera and check the situation of the vehicle from a distant place.

■ Safe driving support service enabled by unique image-sensing technology with a built-in front-view camera with a wide-angle lens

The unit features the “safe driving support service”. It uses a built-in front-view camera with a wide-angle lens and analyzes the images captured with this camera using unique image-sensing technology, to provide the driver with alerts on the screen and sound when the vehicle in front starts moving or if your vehicle departs the lane. It can also be used as a driving recorder for capturing and recording front-view images, recording front-view images in 20 seconds before and after a shock is detected.

[A front-view camera with a wide-angle lens on the back side of the unit]



[The entire screen can be used as a rearview mirror when no information is displayed]



[Driving recorder screen]



[This screen appears when the vehicle in front starts ]



[This screen appears when the vehicle departs the lane]

■ Half-mirror 5-inch LCD with a capacitive touch panel can be set on a wide range of vehicles.

The unit can be mounted easily on the rearview mirror regardless of dashboard shape or space. The unit comes with an LCD with a 5-inch capacitive touch panel, which displays a variety of information such as driving support and work instructions. The entire screen can be used as a rearview mirror when nothing is displayed. It can be used as a rearview monitor if a rear view camera is connected.

■ Global Navigation Satellite System (GNSS) and gyro/acceleration sensor

The GNSS allow the unit to obtain highly accurate vehicle position. And gyro/acceleration sensor in the unit can provide safe driving support service which detects driving behavior.

■ Applications can be installed to match customers’ needs and you can update them using the network

You can use the device for vehicle management or sending messages to the drivers using GNSS and data communication function.



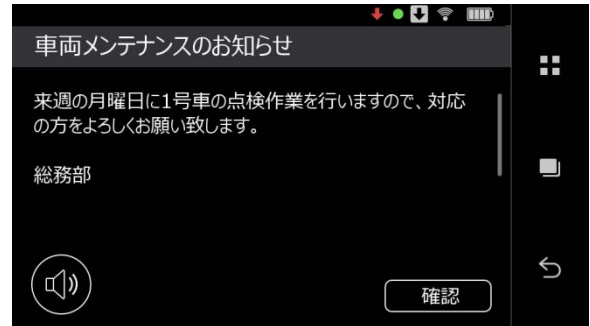
[The menu screen]

■ Supports telematics service “Vehicle Assist”, for fleet vehicles

If you use the device with “Vehicle Assist”, the system creates daily reports, driving route reports (drive recording) and driving performance evaluation reports and also it enables sending and “reading out” the messages to drivers, in addition to fleet management.



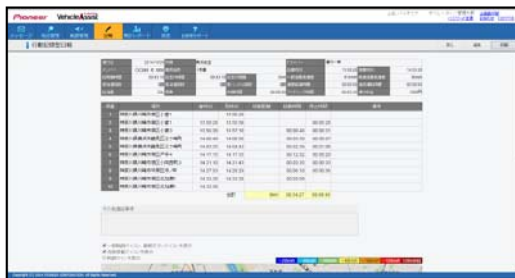
[The fleet management screen]



[Messages appear on the screen.]



[The fleet management screen on the terminal computer]



[The daily report screen]



[The driving performance evaluation report screen]