# **User Manual**

DSRC On-Board Unit

FCC ID: ACJ932PVX-U01

**Model: PVX-U01** 

# Installation in a vehicle

Since this device is installed on a vehicle by automaker as depicted in the Figure 1, and the **device is not sold to general end-users directly**, there is no user manual presented to end-users.

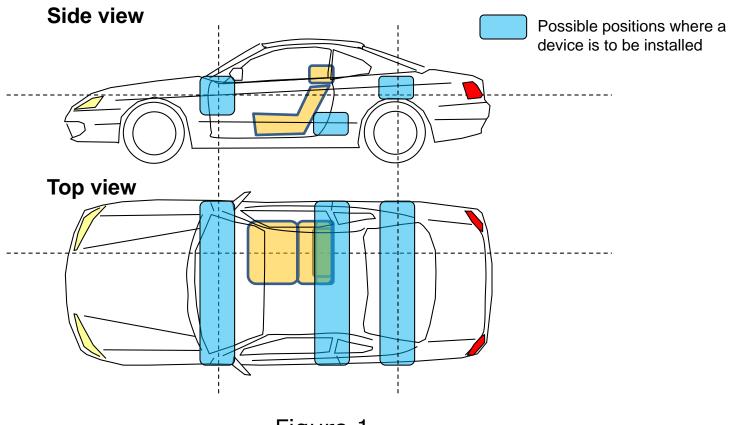


Figure 1

## Radio features of the Device

This device mainly consists of U-NII-4 band DSRC (**D**edicated **S**hort **R**ange **C**ommunications) transceiver and GNSS positioning functions to exchange vehicle's information. This device is installed on a vehicle to transmit the vehicle's information, such as vehicle position, vehicle speed and travelling direction to other vehicles. This device also receives information transmitted from other vehicles and calculate the possibility of collision accident with other vehicles based on the vehicles' status.

#### **DSRC:**

Radio Standard	IEEE 802.11p
Frequency	5860 MHz
Operation channel	Ch 172
Channel width	10 MHz
Modulation Type	QPSK 1/2
Transmit Speed	6 Mbps
DSRC Device Class	Class C
DSRC Antenna	Type: Sleeve, Maximum Gain: 6.0 dBi
Cable	Cable length: 3m, Cable loss: 2.7dB (5860 MHz)

#### **GNSS:**

Satellites	GPS
Frequency Range	1559 – 1610 MHz (L1)
Center Frequency	1575.42 MHz

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This device is authorized for use only with the particular DSRC antennas specified by the manufacturer. Refer to the table in the previous page.

#### **FCC Caution:**

- Any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
- Replacement of any transmitter component (crystal, semiconductor, etc.) could result in a violation of FCC rules.
- This transmitter must not be co-located or operated in conjunction with any other antenna or transmitter.

### **Radiation Exposure Statement:**

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20cm from all persons in a vehicle.