

PIONEER CORPORATION

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News Release

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PIONEER CORPORATION PIONEER SMART SENSING INNOVATIONS CORPORATION

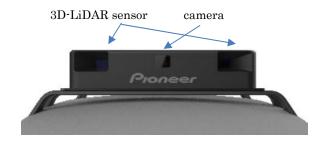
Pioneer Exhibits "3D Data Collection LiDAR kit" Retrofittable on Vehicles at CES 2020 - Detect the environment around the vehicles with high resolution, providing data for map maintenance and other applications -

Pioneer Smart Sensing Innovations Corporation ("PSSI," hereafter), a consolidated subsidiary of Pioneer Corporation, developed the 3D Data Collection LiDAR kit ("the LiDAR kit," hereinafter) and exhibited a prototype at CES 2020. Designed to be retrofitted onto vehicles, the LiDAR kit detects the environment around the vehicles with high precision and high resolution.

The LiDAR kit is an all-inclusive solution that consists of hardware that integrates a 3D-LiDAR sensor, a camera, a global navigation satellite system (GNSS) and software algorithm for object recognition, localization and change point detection. It may be easily retrofitted onto a various type of vehicles use to accurately detect the position, distance, shape and other aspects of an object around the vehicles, and to be able to collect 3D space data without requiring complicated adjustments. Including data on the surrounding environment, road marking and road surface conditions, the 3D space data may be used to maintain maps besides for creating and providing data for marketing purposes.

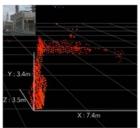
PSSI will be releasing the LiDAR kit in autumn 2020 for companies wishing to collect and utilize 3D space data efficiently at low cost.

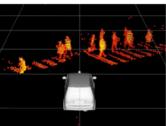
On display at CES 2020, the prototype incorporates a 360-degree camera "d'Action 360 S(DC5000)" manufactured by Car Mate Mfg. Co., Ltd.

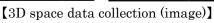




[the LiDAR kit (image)]









[Detect the Road Surface Environment (image)]

■About Pioneer Smart Sensing Innovations Corporation

As a new company to take over the business activities which handles autonomous driving-related business in Pioneer, Pioneer Smart Sensing Innovations Corporation" is established on October 1, 2019. PSSI has been pursuing the development of compact, high-performance, and low-cost MEMS mirror-based 3D-LiDAR sensors, and will churn out from 2020 onwards. At the same time, PSSI is currently developing "high-precision object recognition algorithms", "vehicle ego-localization algorithms" and "difference extraction of surroundings algorithms", and utilizing 3D-LiDAR sensors.



URL: http://autonomousdriving.pioneer/en/

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