

# Remote control / On-board control unit

## Background

In accordance with Public-private ITS Initiative / Roadmaps 2020 and 2021, driverless autonomous mobile service is in the phase of demonstration experiment and social implementation to put the service into practical use in 40 places in 2025 and nationwide around 2030, as countermeasures for social problems including aging population and labor shortage. Autonomous vehicles in this service needs to be operated by hand or remote-controlled in case of emergency or when a vehicle is out of the specific zone.

## Social problems

- Training is required for unique operating control units that differ from conventional steering wheel
- Control units require strength and reliability as with conventional devices .  
It is difficult to connect mechanically and electrically because such control units consist of many components.

## Overview

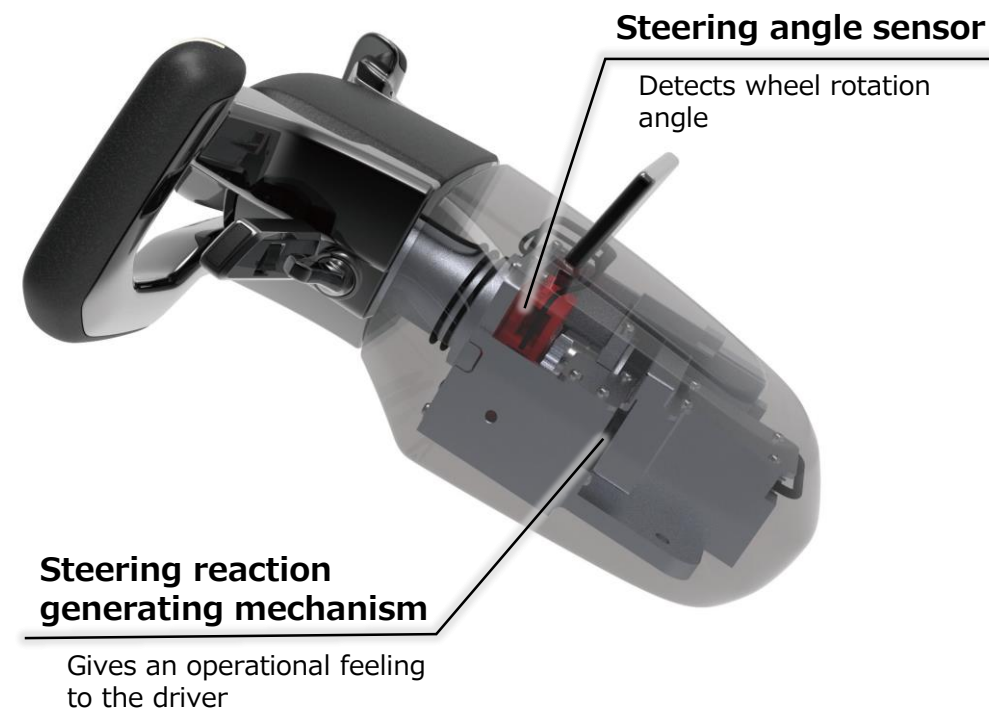
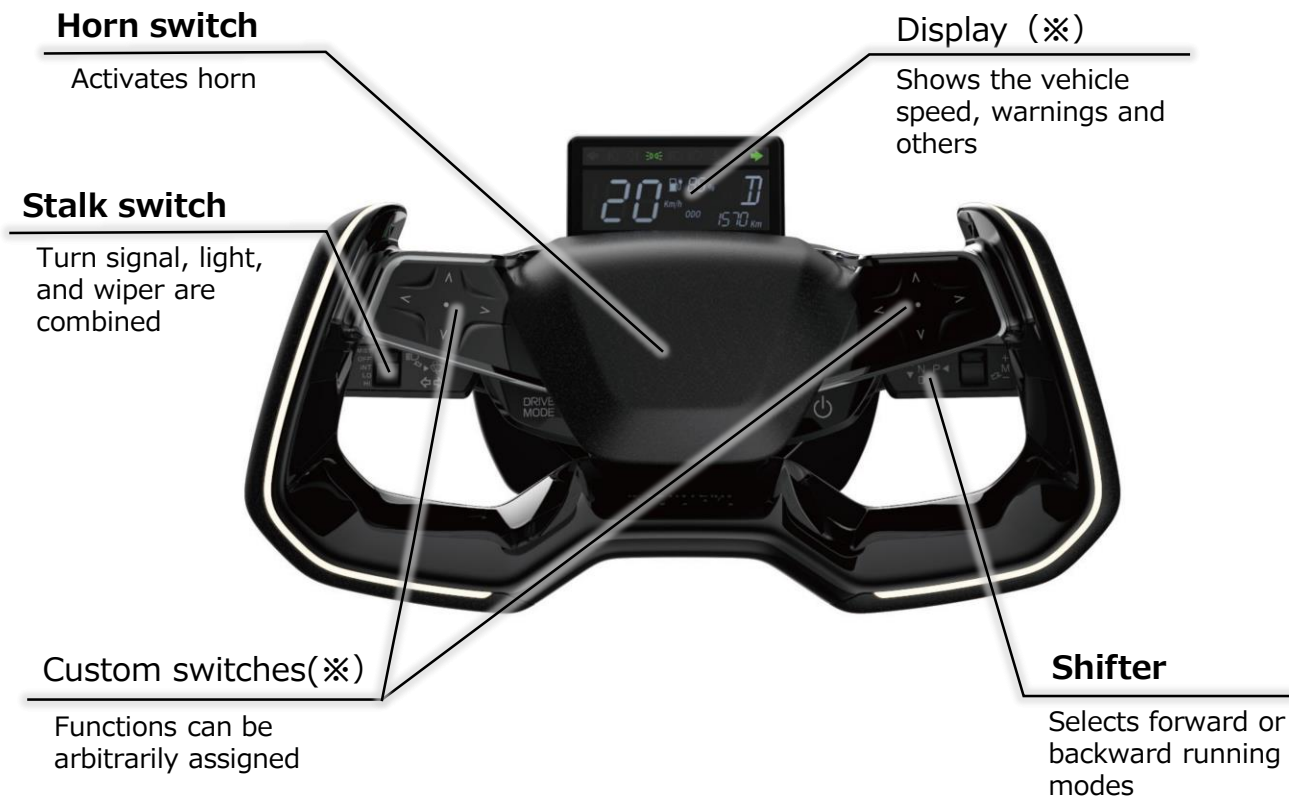
- Operation feeling equivalent to a conventional car
- A turn signal switch, wiper switch, shifter, display, and sensors are integrated.
- Connectable to a car or system with a connector



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## Technology Introduction

A turn signal switch, wiper switch, shifter, display, and sensors are integrated.



※Optional.

The figures depict mock-ups for exhibition.

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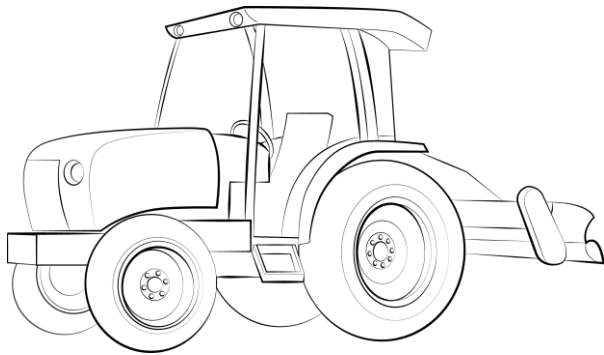
## Specification

<b>Size</b>	<b>W 365mm×D 370mm×H 265mm</b>
<b>Weight</b>	<b>5kg</b>
<b>Steering angle range</b>	<b>Max±150°</b>
<b>Rated voltage</b>	<b>12V</b>
<b>Communication specification</b>	<b>CAN</b>
<b>Loaded functions</b>	Turn signal switch Light switch Wiper switch Shifter Horn switch Steering reaction generating mechanism Steering angle sensor
<b>Options</b>	Custom switches Display Accelerator switch Brake switch Power switch

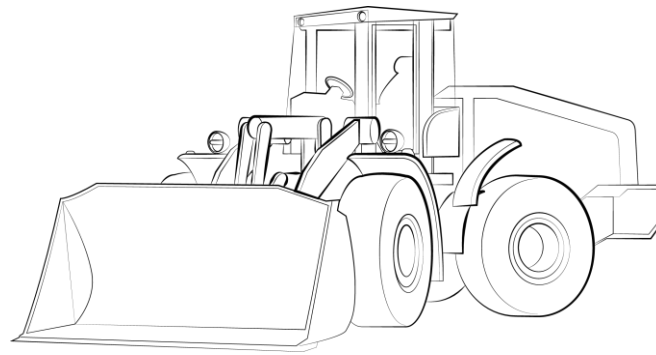
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## Application Examples

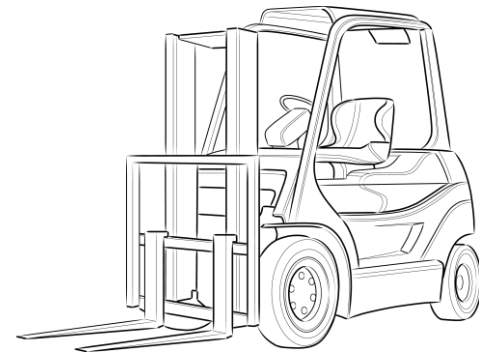
Application to mobilities other than mobile services



**Agriculture**



**Construction machines**



**Forklifts**