

Drive-by-Wire kit compatible with the Chrysler Pacifica



Get your vehicle on the road quicker and safer with plug-and-play control of throttle, brake, steering & shifting on automotive-grade hardware

The Drive-By-Wire (DBW) kit gives you plug-and-play control of throttle, brake, steering and shifting on a production Chrysler Pacifica vehicle using production hardware from New Eagle. You can interface your AV system with the DBW kit using a ROS interface over CAN.

This kit is an ideal choice for robo-taxi applications due to its spacious, comfortable interior (seats 7) and power doors and hatch (also controllable through kit).

Control features

- Speed control
- Accelerator
- Steering
- PRNDL selector
- Turn signals
- Hazards
- Door/Liftgate
- High-beam headlights
- Front and rear window wipers

Optional

- Ignition
- Horn
- Parking brake

Safety at the forefront

- **Firmware speed limits** ensure safe operation during development (calibratable)
- **System** continuously **monitors driver** inputs and can **safely transition control** to safety driver
- **Automotive-Grade ruggedized hardware** (IP68, up to 100°C) can withstand harsh environmental conditions

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Feedback

- Vehicle speed
- IMU/Accelerometer
- Accelerator position
- Brake position
- Brake pressure
- ABS-Active flag
- Steering wheel angle
- Steering drive input torque
- Transmission numerical gear
- Turn signal state
- Hazards state
- Door and hood ajar states
- Headlight states
- Wiper states
- 12v System voltage
- Doorlock states
- Airbag deployed states
- Seatbelt states
- Steering wheel button states
- Wheel encoder pulse counters
- Wheel RPMs
- Ambient temperature
- Fuel level
- Ultrasonic park assist sensor distances
- Adaptive cruise radar object distance (optional)
- GPS (optional)
- Tire pressure
- VIN
- Wheel RPMs



Frequently asked questions

- **What models/years are supported?**

Hybrid, ICE (Optional); 2018, 2019, 2020, 2021

- **Does the system interfere with existing safety systems of the vehicle?**

No, ABS, ESC, and AEB functions that exist on the base vehicle are not affected and work as provided by OEM.

- **Are there any limitations to the control authority for each actuator?**

No, New Eagle designs the DBW systems to meet or exceed the human capability to control the vehicle.

- **What type of hardware is used in the system?**

New Eagle uses automotive grade components on everything from the harness connectors to the actuators (if required) to the supervisory embedded controller.

- **Are there other controls features or data that could be customised or provided?**

Yes, please inquire with sales team.

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