

News Release

Hyundai Motor Group Powers Up Robotic Services at Smart Office Building in Seoul

- Hyundai Motor Group introduces DAL-e Delivery robot and Parking Robot at Factorial Seongsu, a robot-friendly office building in Seoul
- Hyundai Motor and Kia's DAL-e Delivery robot navigates autonomously across the building, providing quick and efficient delivery services to building occupants
- DAL-e Delivery is equipped with artificial intelligence (AI) Face Identification technology developed by Robotics LAB, with an accuracy of 99.9%
- Hyundai WIA's Parking Robot can autonomously park vehicles, maneuver in tight spaces, and increase parking space utilization
- Hyundai WIA has also developed a 'Smart Parking Control System' that can manage up to 50 parking robots simultaneously
- Starting in Q3, the Parking Robot will work alongside Hyundai Motor and Kia's Automatic Charging Robot (ACR) to provide EV charging services
- The Group aims to create a Robot Total Solution by expanding its robot services to various buildings, starting with Factorial Seongsu

SEOUL, June 20, 2024 – Hyundai Motor Group (the Group) announced today the deployment of Hyundai Motor and Kia's 'DAL-e Delivery' robot and Hyundai WIA's 'Parking Robot' at Factorial Seongsu, providing innovative services at the robot-friendly office building in Seoul. [The Group also released a video of its deployed robots, which can be seen here.](#)

At IGIS Asset Management's Factorial Seongsu, occupants can enjoy beverage delivery from the DAL-e Delivery robot and parking services from the Parking Robot, both utilizing the Group's latest technologies.

“With DAL-e’s full-fledged delivery service, we aim to make Factorial Seongsu the first building to apply our Robot Total Solution,” said Dong Jin Hyun, Vice President and Head of Robotics LAB at Hyundai Motor Company and Kia Corporation. “We plan to expand our robotics services to more buildings, making these technological enhancements a major criterion for space innovation.”

The Group has proposed a ‘Robot Total Solution’ development plan, which involves using various robots and facial recognition systems in smart buildings, starting with Factorial Seongsu. It also intends to develop a ‘multi-integrated control system’ for managing multiple delivery robots within the Robot Total Solution. [A video of the facial recognition system can be seen here.](#)

DAL-e Delivery Robot

[Watch the DAL-e Delivery robot in action](#)

The standout feature of DAL-e Delivery is its autonomous driving capability to navigate across the building. DAL-e Delivery seamlessly interfacing with the elevator and door control system. It ensures quick delivery service by determining optimal routes in real-time. The robot features an 11.6-inch high-resolution display, offering a clear representation of the service status.

When a customer orders a drink through the mobile app, DAL-e Delivery takes the drink from the café located on the basement floor and delivers it to the customer’s chosen office space or meeting room. When the robot arrives at the delivery destination, it identifies the recipient through a camera and artificial intelligence (AI) Face Identification technology developed by the Robotics LAB that has an accuracy of 99.9 percent. Then, the storage tray comes forward automatically to deliver the drink.

DAL-e Delivery is equipped with a large cargo capacity, allowing it to carry up to 16 cups of coffee and items weighing up to 10 kg at a time. The Group expects the DAL-e Delivery service to greatly enhance convenience for building occupants. It intends to scale up the number of units and potentially broaden its offerings to include courier and mail delivery services in the future.

Parking Robot

[Watch the fully autonomous Parking Robot in action](#)

Hyundai WIA’s ‘Parking Robot’ can autonomously park vehicles weighing up to 2.2 tons at speeds of up to 1.2 meters per second. It is designed to move in any direction, enabling it to maneuver vehicles in tight spaces where parking is difficult. This allows for more parking spaces in the same area, greatly increasing space utilization.

“Hyundai WIA’s autonomous Parking Robot was successfully commercialized at the Hyundai Motor Group Innovation Center Singapore (HMGICS) last year. Also, its performance and safety were fully verified while preparing for its large-scale introduction to the Hyundai Motor Group Metaplant

America (HMGMA) this year,” said Shindan Kang, Vice President and Head of Mobility Solution Planning Group of Hyundai WIA. “We believe that people will be able to experience the most advanced parking robot technology at Factorial Seongsu.”

When a customer needs to use a car, the Parking Robot retrieves the vehicle from its designated parking spot and autonomously parks the car when the customer returns it. This is the first time an autonomous parking robot has been commercialized in Korea.

The autonomous parking system consists of two flat and wide robots that slide under a car to lift and move its wheels. At just 110 millimeters thick, these robots are compatible with any vehicle. The parking robot, equipped with cameras, precisely recognizes the vehicle’s wheel size and position to lift it. Additionally, it uses lidar sensors to detect people nearby, preventing safety accidents and improving safety.

Smart Parking Control System and Automatic Charging Robot (ACR)

[Watch the Automatic Charging Robot in action](#)

Hyundai WIA has also developed a ‘Smart Parking Control System’ that can control up to 50 parking robots simultaneously. This system helps the parking robots to navigate via optimal routes to efficiently distribute multiple vehicles. In the future, the system will be able to detect and respond to both human-parked vehicles and situations in unattended parking lots.

Starting in the third quarter of this year, the Parking Robot will work with Hyundai Motor and Kia’s Automatic Charging Robot (ACR) to offer electric vehicle (EV) charging services, maximizing customer convenience.

As part of this service, the autonomous Parking Robot transfers a vehicle to the charging area where the ACR identifies the car’s license plate, inspects its battery status and charges it. ACR contains a deep learning-based charging port recognition function, which recognizes an EV’s charging port. ACR can automatically insert and remove the charger according to the vehicle’s battery status. After the charging process is complete, the Parking Robot returns the car to its parking spot.

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About Hyundai Motor Group

Hyundai Motor Group is a global enterprise that has created a value chain based on mobility, steel, and construction, as well as logistics, finance, IT, and service. With about 250,000 employees worldwide, the Group’s mobility brands include Hyundai, Kia, and Genesis. Armed with creative thinking, cooperative communication, and the will to take on any challenges, we strive to create a better future for all.

More information about Hyundai Motor Group can be found at: <http://www.hyundaimotorgroup.com> or [Newsroom: Media Hub by Hyundai](#), [Kia Global Media Center \(kianewscenter.com\)](#), [Genesis Newsroom](#)

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