

AIIMS Delhi to deploy robots for containing COVID-19 spread

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Milagrow iMap 9 is a floor disinfecting robot that can navigate and sanitize the floors without any human intervention



Being tried for precautionary measures, these robots will help AIIMS to promote physical distancing between health workers and coronavirus infected patients.

As India's healthcare system grapples with increasing cases of COVID-19, robotics brand Milagrow has announced its efforts with AIIMS, Delhi to help contain the spread of the pandemic amongst doctors and healthcare workers. Under this effort its advanced AI-powered robots – Milagrow iMap 9 and Humanoid ELF will be tested in the advanced COVID-19 ward at AIIMS, Delhi.

Manufactured in India, the Milagrow iMap 9 is a floor disinfecting robot that can navigate and sanitize the floors without any human intervention. It can destroy COVID spores on floor surfaces using sodium hypochlorite solution, as recommended by ICMR. The robot moves around autonomously without falling, avoiding obstruction while planning its own path, guided by LIDAR and advanced SLAM technology.

Milagrow's patented Real Time Terrain Recognition Technology (RT2RT) scans at 3600, 6 times per second to make a floor map in real time with an accuracy of upto 8mm over a 16m distance. This enables the iMap 9 to perform successfully in the first attempt, whereas other robots can take twice or thrice the time. Additionally, the robot can do zoning, virtual blocking of avoidable areas and sequential cleaning of zones based on specific needs.

The Milagrow Humanoid ELF enables doctors to monitor and interact with contagious COVID-19 patients remotely with no person-to-person contact, thereby significantly reducing the transmission risk. Bored patients in isolation wards can also interact with their relatives from time to time through this robot. The Humanoid ELF can navigate around the ward independently and record the activities in high definition video and audio. Offering 8 hours of battery life, it can travel about 2.9 km per hour, is 92 cms tall, has more than sixty sensors, one 3D and one HD camera, and a 10.1" display screen. The advanced humanoid features eyes with Emotion, Open API for further development and customization. Both the Milagrow iMap 9 and Humanoid ELF come with the auto charging feature.

Confirming the development, Randeep Guleria, Director of AIIMS, said, "Milagrow Floor Robot iMap9.0 & Milagrow Humanoid will be tried at AIIMS Hospital New Delhi".

Sharing his insights, Rajeev Karwal, Founder Chairman of Milagrow, added, "Milagrow Robots is very happy to support AIIMS in its effort to fight the Corona pandemic and will work closely to develop more products based on the feedback of actual conditions. Countries like The United States, China, and Italy have already successfully implemented AI-based robots at health facilities to minimize human intervention in treating COVID-19 patients, and India can replicate the same to provide some relief to its frontline healthcare workers in their battle against coronavirus. As the outbreak continues to rise alarmingly, our state-of-the-art robots will help check the virus spread and protect the doctors, nurses and caregivers from getting infected."