



Double[®] 3

Work from home or anywhere!

Double 3 is a self-driving, two-wheeled videoconferencing robot that revolutionizes the way you work or learn remotely.

We help telecommuters, remote workers, and students feel more connected to their colleagues by giving them a physical presence where they can't be in person. Driving your own Double means you are free to roam around the office, attend meetings, visit work sites, or go to class from anywhere in the world.



Double[®] 3

Work even better from anywhere.

Self-Driving

An array of 3D sensors enables Double 3 to understand its environment, where it's safe to drive, and how to divert around obstacles to reach the destination. Obstacle avoidance means that completely untrained drivers can drive Double 3 without fear of bumping into walls or people.

Click-to-Drive Interface

Dots are drawn on the floor where Double 3 can safely drive. The driver can click anywhere on the floor and the robot will go there, avoiding obstacles along the way.

Mixed Reality Video

Mixed Reality is like Augmented Reality, except virtual 3D objects are added into the video stream, and they look like they are placed in the real world. They help you understand what your Double can see, and they highlight important waypoints and objects of interest, such as the Charging Dock.

Unified Pan-Tilt-Zoom Cameras

Two 13 Megapixel cameras provide an ultra wide field of view and multiple levels of zoom. The cameras can physically tilt up and down, which is helpful for reading papers on a desk or zooming into a specific point.

New Features (Continued)

Six Beamforming Microphones

An advanced array of six microphones help the driver hear people from farther away and with less background noise. The integrated audio system enables full-duplex audio (two-way simultaneous audio) to be more robust in challenging environments.

User-replaceable silicone rubber trim with 5 colors available

You can choose a color that fits your style or company brand: [Blue](#), [Pink](#), [Green](#), [Red](#) or [Gray](#)



Improving Upon Double 2

Double 3 is fully integrated hardware. No iPad installation, Bluetooth pairing, or accessories are required, making setup much easier. Simply install the Double 3 Head onto the robot base with the one bolt, and it just works. Thanks to obstacle avoidance, driving is now safer, easier, and more reliable.

Developer Friendly

A Developer API allows customized applications to be built for Double. Modular subsystems allow developers to choose which features they need for their application. The tiered architecture provides hooks to sensor data and autonomous features at various levels. Various expansion ports and mounting points allow additional hardware to be added.

Forward Thinking and Backwards Compatible

Double 3 is designed with future features in mind. The Double 3 Head is also backwards compatible with the older Double 2 robot base.



Self-Driving



Mixed Reality



Pan-Tilt-Zoom

Double[®] 3

Technical Specifications



Hardware

Cameras

- 2 x 13 Megapixel Unified Pan/Tilt/Zoom Module
- One super wide angle lens, one super zoom lens
- 30 FPS and Night Vision Mode

Sensors

- 2 x Stereovision depth sensors (Intel[®] RealSense™ D430)
- 5x Ultrasonic range finders
- 2x Wheel encoders (2048 PPR each)
- 1 x Inertial Measurement Unit (9 DoF)

Processors, Memory, and Storage

- NVIDIA[®] Jetson™ TX2-4GB System-on-Module
- 256-core NVIDIA[®] Pascal™ GPU Architecture
- Dual-core NVIDIA[®] Denver 2 64-Bit CPU
- Quad-core ARM[®] A57 Complex
- 4GB 128-bit LPDDR4 Memory
- 16GB eMMC 5.1 Flash Storage

Battery

4 hours of runtime, 2 hour recharge time Li-ion

Audio

6 x Digital microphones with beamforming
8-watt full range speaker

Display

9.7-inch LED-backlit multi-touch LCD
Remotely-adjustable height (47" to 60" tall)

Wireless Connectivity

Wi-Fi - Intel Dual-Band Wireless-AC (2.4GHz, 5GHz)
Bluetooth 4.2

Developer Expansion

2 x USB 3.2 SuperSpeed ports
HDMI video output port
Top and rear hardware mounting points

Colors

User-replaceable silicone trim (5 colors available)

Software

Video Protocol

WebRTC 128-bit AES encrypted

Supported Driver Interfaces

Mac or Windows PC with Chrome, Firefox, or Safari
iPad and iPhone, or Android with Chrome

Fleet Management

Enterprise-level administrative tools

Developer API Available

