

Spot the Robot 'Dog'

By: Rapid Access International, Inc.

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It has now been almost a year since Boston Dynamics released an early video featuring its robot 'dog' dancing to a well known Bruno Mars song, 'Uptown Funk'.¹ Just last week, the company announced the commercial launch of Spot, the 'dog' with a more informational video.² As it turns out, the robot is capable of much more than some entertaining dance moves.

The Details

A 'mobile robot designed for sensing, inspection, and remote operation'³, Spot is built to be incredibly durable. Built to operate in harsh environments, the robot can endure dusty and wet conditions. Designed for harsh environments like building sites or the last strongholds of humanity, the robot can withstand dusty and wet conditions with its IP54 protection. And, it's capable of operating in temperatures ranging from -20°C to 45°C.⁴

Spot can carry up to 14kg, "open doors and handle other objects, or equipping a camera to let Spot remotely inspect facilities like Oil Refineries."⁵ And, the agility allowed by four legs means that Spot is capable of going where wheeled robots cannot.

Spot moves at speeds of up to 3.6mph and operates for up to 90 minutes on one battery charge, with batteries quickly and easily swapped on the fly. It's also highly aware of its surroundings with the use of stereo cameras "as part of a 360-degree LIDAR vision system to perceive obstacles and people as it moves through dynamic environments".⁶ If it does experience an accident, the spot is apparently well protected against bumps and scratches, and it can right itself from a fall in an instant.

Availability

Spot is available, but not freely. Boston Dynamics invites prospective buyers to 'Contact Sales' or 'Join Mailing List' on their website. Purchasing the robot is treated more as an application than a shopping cart. The company is asking would-be owners to put together a written application explaining their intentions.

This evaluative approach suggests that the company is trying to exert a level of control over how their robots are used. Dynamics is asking would-be owners to put together a written application explaining their intentions.

¹ 'Uptown Spot'. Boston Dynamics YouTube Channel. YouTube. Posted October 16, 2018. Available at: <https://www.youtube.com/watch?v=kHBcVlqpvZ8>. Accessed on September 30, 2019.

² 'Spot Launch'. Boston Dynamics YouTube Channel. YouTube. Posted September 24, 2019. Available at: <https://youtu.be/wlkCQXHEgJA>. Accessed on September 30, 2019.

³ See Boston Dynamics Website. Available at: <https://www.bostondynamics.com/>. Accessed on September 30, 2019.

⁴ Kerr, Chris. "Everything you need to know about Boston Dynamics' terrifying super-bot 'Spot'". Stuff. September, 27, 2019. Available at: <https://www.stuff.tv/features/everything-you-need-know-about-boston-dynamics-terrifying-super-bot-spot>. Accessed on September 30, 2019.

⁵ *Ibid.*

⁶ *Ibid.*

The company has indicated that it is not at all interested in using the Spot robot as a weapon. Michael Perry, VP of business development at Boston Dynamics has stated that they “don’t want to see Spot doing anything that harms people, even in a simulated way. That’s something we’re pretty firm on when we talk to customers.” So, while Boston Dynamics is still marketing to police departments, it says the Spot would be limited to disposing of bombs and other hazardous materials, along the lines of existing police robots.⁷

As far as the cost, Boston Dynamics has indicated the cost as being similar to that of an automobile. No specifics on the actual cost range, but this is not yet considered as a consumer product. Alongside the launch video, the company notes that early customers are testing Spot to monitor construction sites, provide remote inspection at gas, oil and power installations, and in public safety. Spot is in mass production but currently shipping just to “select early adopters”.

Boston Dynamics is based in Waltham, MA and Mountain View, CA.

⁷ Brandom, Russell. “Boston Dynamics’ Spot is leaving the laboratory: A new leasing program is putting dozens of robots to work in the real world”. The Verge. September 24, 2019. Available at: <https://www.theverge.com/2019/9/24/20880511/boston-dynamics-spot-robot-mini-hands-on-lease-buy>. Accessed on September 30, 2019.