

Audi lends engineering know-how to moon rover initiative

January 17 2016, by Nancy Owano



Audi has built a moon rover and it already gets around, namely landing in Detroit for the North American International Auto Show.

Tucked into a corner of Audi's booth at the event in Detroit "sat a little piece of hardcore astronomical research—a pint-sized lunar [rover](#)," wrote Eric Adams in *Popular Science*. *Business Insider* called it small and

adorable. "I mean if that isn't a close second to Wall-E cuteness I'm unsure what is?" read the [caption](#).

But the unmanned [moon rover](#) has been in recent news for reasons other than cuteness. Audi's engineers are sharing their expertise as a team of scientists gear up for Google's Lunar XPrize challenge. Audi is helping the group called Part-Time Scientists to build the Audi Quattro Lunar Rover.

The scientists are competing in Google's Lunar XPrize challenge, a \$30 million competition in methods for robotic space exploration.

Requirements for winning the money are twofold. The rover must roam around for at least 500 meters (1,640 feet). The rover must also snap high-definition images and video which can be sent back to Earth ("an Instagram for the ages," commented [Eric Adams](#) in *Popular Science*.)

The Google Lunar XPRIZE started off with more than 25 teams, said an earlier June 2015 Audi news release. Participants in the competition, in addition to Part-Time Scientists, include teams from around the world.

Prof. Dr. Ulrich Hackenberg, Audi board member for technical development, said: "We are pleased to [support](#) the project with our know-how in lightweight technology, electronics and robotics." Audi, said *Business Insider*, got involved to show how its all-wheel drive technology can be used in all kinds of terrain, even the bumpy lunar surface.

Chris Burns of *SlashGear* said, "Audi's biggest contribution to this project may be the [lightweight](#) nature of the beast. The wheels on this rover are made of 3D-printed aluminum, which allows them to be large, yet light. Compared to past models made by Audi, these wheels alone save the machine 200g (that's per wheel, mind you)."

A solar panel feeds captured sunlight to a lithium-ion battery, which

powers the rover's four wheels. The Rover's four wheels are each driven by an own motor and can be turned 360 degrees.

The trip will take about five days. The target landing area is north of the moon's equator, near the 1972 landing site of the Apollo 17, NASA's last manned mission to the moon, said Audi in the earlier June news release.

As for the image-taking requirements, a head at the front of the vehicle carries two stereoscopic cameras and a scientific camera for examining materials.

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Citation: Audi lends engineering know-how to moon rover initiative (2016, January 17) retrieved 8 June 2023 from <https://techxplore.com/news/2016-01-audi-know-how-moon-rover.html>

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