Samsung debuts TV remote that recharges by capturing radio frequency energy from Wi-Fi router

January 3 2022, by Bob Yirka

Credit: Samsung

Samsung is debuting its newest energy innovation at this year's Consumer Electronics Show (CES)—capturing the energy in radio

frequency signals emitted by home Wi-Fi routers to power a TV remote control. The technology is part of Samsung's stated mission to make consumer products more environmentally friendly.

Last year, Samsung debuted a TV remote at CES (the Eco Remote) that could be charged using either room-light or sunlight, or using a USB cable. At the time, Samsung officials noted that 99 million AAA batteries are discarded every seven years (the average life expectancy of small devices like TV remote controls). Most of those batteries wind up in landfills where they discharge massive amounts of toxic materials. To address the problem, Samsung began putting rechargeable batteries in their small devices and providing ways for them to be easily recharged, such as using the same charger that is used to charge phones.

This year, Samsung's new remote can be recharged in multiple ways. It can harvest energy from artificial room light, from sunlight, from a USB cable, and now also by capturing the energy in radio frequency signals generated by Wi-Fi routers. The idea is that most every home now has such a router that distributes Wi-Fi access to multiple devices used in the home. Samsung has also added a new color option for its Eco Remote—white. The company suggests the lighter color (the prior version of the Eco Remote came only in black) complements its "lifestyle" TV sets.

Over the past few years, Samsung has also kept its customer base informed on its progress in developing new technology to remove non-rechargeable batteries from its small devices. One option they have been looking into involves capturing kinetic energy that results from the movement of a TV remote in a user's hands. They have also looked into capturing some of the energy released as sound waves by humans speaking into their remotes as part of voice commands. Thus far, such ideas remain merely conceptual ideas, though based on the recent history of the Eco Remote, it seems possible one or more of them could wind up

being introduced at next year's CES.

© 2022 Science X Network

Citation: Samsung debuts TV remote that recharges by capturing radio frequency energy from Wi-Fi router (2022, January 3) retrieved 23 April 2024 from https://techxplore.com/news/2022-01-samsung-debuts-tv-remote-recharges.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.