

Why does a Microsoft mouse accept two batteries even though it works just fine on only one battery?

 devblogs.microsoft.com/oldnewthing/20170206-00

February 6, 2017



Raymond Chen

Many mouse devices from Microsoft have a battery compartment that accepts two batteries. But the mouse still works even if you insert only one battery. What's going on here?

Yes, the mouse works just fine on only one battery. The reason why the mouse accepts two batteries is to double the amount of time between battery changes! This allows the text on the box to say “Runs for N months without needing to change batteries” for a value of N that is twice as high as it would have been if the battery compartment accepted only one battery.

This is the electronics equivalent of installing a larger gas tank in a car so you can advertise it as “Travels \langle distance \rangle on a single tank of gas.”

[Raymond Chen](#)

Follow

