## Why does my Surface power brick keep blinking on and off?

devblogs.microsoft.com/oldnewthing/20170131-00

January 31, 2017



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If you try to charge your phone and your Surface from the same power brick, keep a close eye on the charger: See if the charging light is blinking.

Here's the deal. There's an issue with some phones in the way they negotiate current with Surface power brick. The two get into a current negotiation fight.

- 1. The power brick detects that there is a phone plugged in.
- 2. The power brick says, "Hey, I can give you 1.2mA, is that okay?" (Note: All numbers in this story are made up.)
- 3. The phone says, "I'm cool with that."
- 4. The power brick says, "Okay, heres 1.2mA. Enjoy."
- 5. The phone gets confused and draws 1.3mA instead of 1.2mA.
- 6. The power brick shuts down due to overcurrent. The charging light goes off.
- 7. Your Surface is now running on battery.
- 8. The phone says, "Okay, well, easy come easy go." It stops drawing power.
- 9. The power brick says, "Whew, that overcurrent situation is over. I sense no load. The user must have unplugged the curling iron or whatever it was. Let me turn myself back on." The charging light goes on.
- 10. The Surface is now running on AC power.
- 11. Go to step 1.

The result of this issue is that the PC is constantly switching between battery and AC, and the phone doesn't charge. Basically, everybody loses.

The Lumia folks issued a firmware update to address this issue, but if you're using some other phone model, then who knows when/if it'll get fixed. But at least you know what's going on.

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