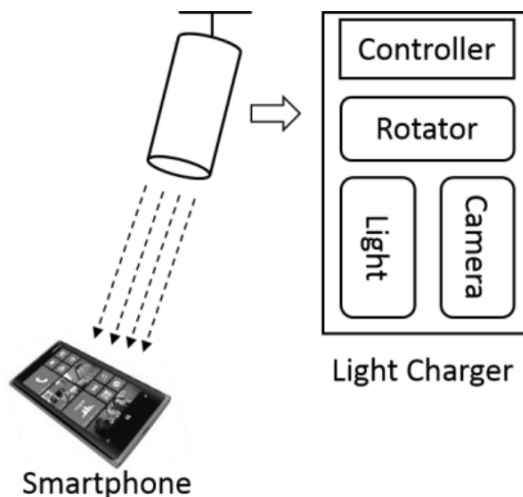


Charging Phones With Lasers

Written by Marco Attard
22 January 2015

Microsoft Research presents a unique take on wireless charging-- AutoCharge, a system using what amounts to a ceiling-mounted laser and a Kinect unit to locate smartphones before firing required juice in their direction.



The system works as follows. First, the Kinect camera scans the area for smartphone-like objects. Once a phone is detected, the charger (in this case an UltraFire CREE XM-LT6 Focusing LED Flashlight) rotates and fires a straight beam of focused light at a photovoltaic panel on the handset. Furthermore, the system first communicates with the smartphone via Bluetooth or on-board LED in order to check battery levels and ensure it will actually start firing at a phone, not a random rectangular object.

The light in use can be either visible (dramatic but potentially annoying) or invisible infrared (less dramatic, not annoying). Meanwhile a built-in safety mechanism can switch off the beam in case of interruption in just 50 milliseconds.

The result? Safe-- according to the researchers current means of wireless charging might pose a safety risk through the use of high levels of electromagnetic radiation-- and hassle-free wireless charging.

Of course, such laser-based charging is just an experiment, and in any case smartphones don't ship with photovoltaic panels. But it might be interesting to implement in the form of an alternative to traditional chargers, especially as smartphones become increasingly power-hungry.

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