
WiTricity, wireless power coming soon

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Anyone who ever had to hook up a serious amount of electronic equipment knows that wiring everything together in a neat fashion is a major hassle and quite a time consuming task. Once hooked up, we are more likely to move everything else in a room to make the arrangement work, rather than dealing with the wiring again. Granted, over the last decade the number of wires needed for particular applications has been decreasing due to the utilization of wireless standards such as Bluetooth and Wi-Fi and due to new interface such as HDMI. However, the pesky power cable that most appliances require, be it only for charging at times, has proven hard to get rid off. But there seems to be some hope on the horizon coming from a startup aptly named WiTricity. Founded in 2007 and based out of Watertown, MA, WiTricity was formed to commercialize technology for wireless electricity transfer that was developed at the Massachusetts Institute of Technology (MIT) about two years prior. The actual technology behind this wireless feat is called resonant magnetic coupling, which enables devices to transfer energy through a magnetic field over mid-range distances. The company demonstrated wirelessly powering a 60W light bulb in 2007 at a distance of 2 meters with a 40 percent efficiency. The picture below depicts WiTricity's vision about how that company envisions the technology being implemented. Although WiTricity claims that the magnetic fields generated will be harmless to humans, since magnetic fields interact weakly with biological organisms, I expect that many people will be rather uneasy about this technology initially. People still have many questions regarding the safety of cell phones and one would expect the same with this technology. A detailed discussion of several methods for wirelessly transferring energy can be found [here](#). It should be noted that the fundamentals behind WiTricity's technology are not really new. Back in the 19th century Nikola Tesla demonstrated the wireless illumination of phosphorescent lamps using a similar technique. This just shows you that what may seem new, might simply be a new implementation of an old idea. Nevertheless, if WiTricity can deliver a reliable solution at a descent price, and can convince OEMs to integrate it technology into upcoming products, there will clearly be a market for it. Now, what about preventing your next door neighbor from stealing your wireless electricity – is another set of authentication nightmares on the way?