

WIRELESS CHARGING



The last quarter of 2013 is here and with it the launch of lots of new mobile products, mainly Smartphones and tablets just in time for holiday gift-giving (What? Christmas season already??) One of the nicest new features to be found on these devices is wireless charging. Companies that support this feature right now are: **Google's** 'Nexus 4,' **Samsung's** 'Galaxy S4,' **Apple's** 'iPhone 5 (as an add-on), **HTC's** 'Droid DNA,' and **Nokia's** 'Lumia 820 and 920.' As time moves on, expect more devices to incorporate this feature as all the tech giants work toward a standardized platform. Reports are already out that the forthcoming **iPad 5** will have built-in wireless technology, and **Intel Corp.** has already announced that their future Ultrabooks will be wirelessly chargeable. However, presently there are 3 standards out there: **Qi**, **PMA Powermat**, and **A4WP** which are incompatible with each other and only work with specific devices; but given time and research, there is hope that an industry-wide generic charger will emerge.

How does it work? Basically this type of charging uses magnetic induction, i.e. magnetism is used to transmit energy – in this case from the wall power outlet to the charging base, creating a magnetic field. The magnetic field creates a current in the coil within the device, the coil is connected to the battery and the current charges the battery. You can see where compatibilities can be an issue: if the hardware does not support the wireless charger, it just won't work. But this hasn't stopped café giant **Starbucks** from joining up with **PMA Powermat** to install their wireless chargers in 10 of their stores, so that frappé now includes a charge!

So along with all the new gadgets come - in time – ever newer improvements with the intent on having the consumer have effortless and simpler ways of using their mobile devices, ways that motivate us to spend more time on them, i.e. longer battery life, more Apps to install, cross-platform compatibilities, better pixelization, better cameras and sound, and...easier ways to charge the device. We can only sympathize with those people who abhor all these technological innovations; there is no turning back and like it or not many of those science fiction stories of the past are quickly becoming realities.