

A PLUG-IN WITH A DIFFERENCE



Henrietta Lynch investigates a new energy saving device for electrical appliances at home or work

The control of electronic and electrical equipment inclusive of lighting is something that is becoming increasingly important when considering energy and CO2 reductions. Unfortunately whilst designers of commercial and other non-domestic building types may now routinely consider the lighting control as part of their lighting design schemes and specify relevant systems to manage this, lighting control in terms of energy use in the domestic environment is rarely considered. Should more complex lighting control become more important in the home or should we be concentrating on designing simpler installations that require minimum technical intervention?

The Energy Saving Trust (EST) estimates that on average a household wastes £37 per year on electronic gadgets and appliances being left on stand-by or chargers left plugged in unnecessarily. This is equivalent to more than £740m worth of wasted electricity or the equivalent of 1.4 million long-haul flights per year.

Many of us will have stayed in hotel rooms that use a key card to switch all the appliances on and off at entry. I have spoken to many lighting designers who have suggested that perhaps we should control the electrical appliances in our homes in a similar way. Maybe in the future all our domestic electronic gadgets could be addressable and therefore controllable via a wireless network, either individually or as part of a hard-wired system?

As an innovative response to the issues of wasted energy in the home from appliances being left on and a desire to physically manage and control the increasing number of gadgets that we own, Ashley Kelly, currently an MSc Enterprise student at London Southbank University (LSBU), designed the AllSocket system.

The AllSocket system functions as a kind of universal socket which allows gadgets to be plugged into it at any point, negating the need for individual wall plugs, at the same time as providing a cable management and electronic control system. The AllSocket system works using Power Track and AllPlugs...

'The Power Track integrates the electrical

wiring into a skirting board or a similar wall panel. 'AllPlugs' replace conventional electrical plugs, then simply slot into the distribution system anywhere around the perimeter of the room, giving you access to power wherever it is required.'

This system allows for the user to turn the power on or off for one or several of the gadgets at the same time using either using a wireless wall switch or via smart plugs that can automatically detect stand-by states in equipment.

Ashley, who describes herself as 'a mature student', studied for a degree at LSBU after leaving school at 16 with ten GCSEs in 1988 then going straight to work. During her working life she gained a BTEC in Electronic Engineering and professional qualifications as a video editor finally graduating with a first class honours degree in Engineering Product Design in 2008.

It was during her degree that Ashley developed the AllSocket system which was awarded a place on LSBU's Enterprise Associate scheme. This is a scheme designed to explore and develop the commercial potential of student's final year projects. AllSocket then went on to win the Ideal Home Concept Product Award in 2009. The system is currently being tested to prove its overall viability as a product and for its energy saving potential.

It is no accident that Ashley's degree and masters courses run at a university that values sustainable design skills. LSBU houses The Centre for Efficient and Renewable Energy in Buildings (CEREB), a pioneering multi-million pound new facility developed in partnership with Kingston and City Universities in London. It is a unique teaching, research and demonstration centre for low carbon technologies in the built environment - the University promotes the ideology that sustainability is a major part of design and that environmental impact, life cycle and 'alternative' technologies are at the forefront of every project. This is surely an inspirational facility for all design students.

Contact Ashley Kelly and CEREB at:

www.mydesignright.com

www1.lsbu.ac.uk/rbdo/external/entassoc.shtml

www.cereb.org.uk



Ashley Kelly, inventor of the AllSocket system, a universal socket that negates the need for individual wall plugs