

Time of Your Light: Illuminating Electronics for Scouts and Guides

Information for Supporters

Help spark the
imagination of
future engineers

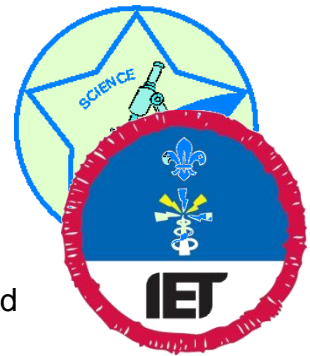
Find out how you
can help on page 4



What is Time of Your Light?

"Time of Your Light" is a joint initiative between the Institution of Engineering and Technology and the Peak 2015 Scout & Guide jamboree. Our goal is to inspire thousands of young people to discover the excitement of engineering and technology. We will deliver an engaging, hands-on soldering activity over five days of camping at Chatsworth House, Derbyshire.

Scouts and Guides attending Peak 2015 will be able to enjoy soldering their own electronic badge. The badges will light up and can be reprogrammed by the young people to flash with different patterns. Our vision is for the badges to be brought together for the closing ceremony to form a networked, animated light installation. Credit will be earned towards the Scouts' IET Electronics badge and the Guides' Scientist badge.



Why electronics at a Scout and Guide camp?

We all rely on electronics every day of our lives, but there is now a huge mismatch in the UK between the demand for engineers and technicians and the number of people qualifying in relevant fields. The IET and the Scouts and Guides associations recognise that initiatives such as Time of Your Light are essential to inspire the next generation. Plus of course, soldering your own programmable badge is great fun!

Scouting exists to actively engage and support young people in their personal development, empowering them to make a positive contribution to society. Girl Guiding has a mission to enable girls and young women to develop their fullest potential as responsible citizens of the world.

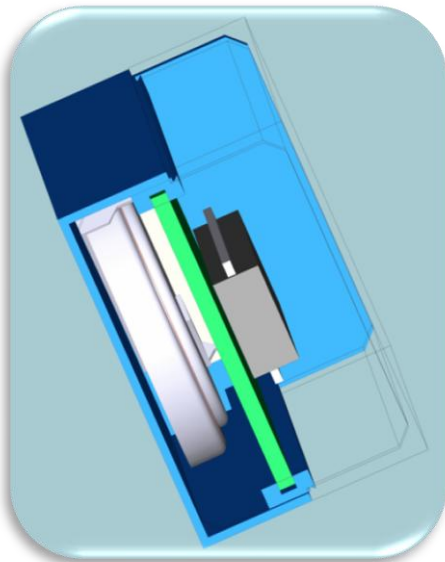
The Institution of Engineering and Technology aims to introduce a new generation to the sheer excitement of science, technology and engineering as a key part of our vision of "working to engineer a better world".



Building on our shared goals and values, the IET has been working closely with the Scout Association over a number of years and in 2011 we jointly launched a revamped Electronics badge, which we continue to sponsor. Last year, we received an invitation to run an activity at Peak 2015 (www.peakcamp.org.uk) as part of a drive to help Scouts and Guides engage with real engineers.

What are we planning?

The theme of the week at Peak 2015 is Time. **Flashing lights** is a great fit, as a timer circuit is needed to control the on/off sequence. And of course there is plenty of opportunity to show off your illuminated handiwork round the campfire!

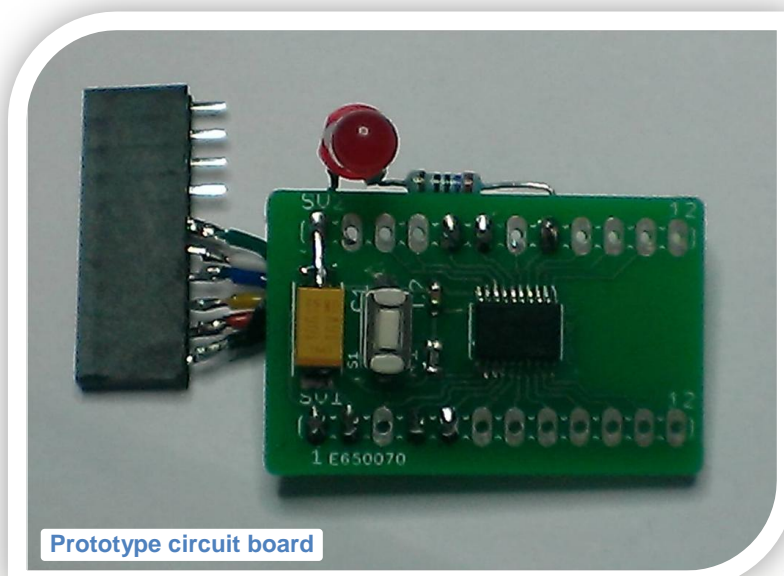


Badge housing showing L-R: battery, circuit board (green) and MSP430 programmable microcontroller

The circuit we are proposing uses a programmable chip, which keen youngsters can optionally reprogram to flash **different patterns** (e.g. in Morse code). The chip also has a signal input. If we can raise sufficient funding and support, we would like to extend the concept to bring all the badges together on the final evening and create one or more **animated installations**. We envision a **giant clock** that will count down to the grand finale.

Our activity will be aligned with the requirements of both the Scouts' IET Electronics badge and Guides' Scientist badge. The most difficult part of the Scouts' badge for a lot of young people to achieve is the requirement to **solder a circuit**, so we have designed the activity around supporting that.

Approximately 7000 young people will be attending the camp, of which 4000 will be involved in the various activities. Based on the organisers' experience and our research, including a successful trial activity in January, we expect to welcome 1000 **participants** in the IET electronics activity over five days.



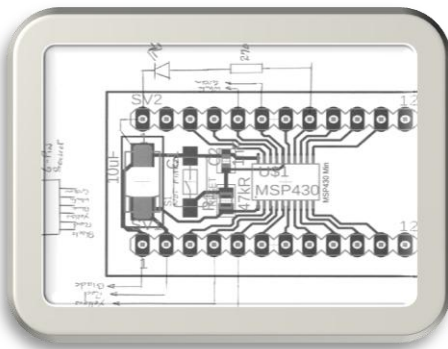
Prototype circuit board

How can you help?

Peak 2015 is generously supplying a marquee at the camp to host Time of Your Light. IET volunteers are donating substantial time and expertise to designing, planning and running the activity. Both organisations have also made a small financial contribution.

To help us realise the full vision of creating a large, animated installation we are seeking support from individuals, charities and commercial organisations in a number of forms:

- **Funding and/or donations of materials** (electronic components, circuit boards)
- **Loans of equipment** (soldering equipment, computers)
- **Volunteers** (activity developers, helpers for one or more days at Peak 2015)
- **Promotion** (help us spread the word)



Prototype circuit diagram

We are particularly in need of support to help us provide the materials, including circuit boards and components, and would welcome financial contributions and donations of components.

We have determined a series of staged funding goals. The higher the level we reach, the better the experience we will be able to offer. There is no minimum contribution.

Level	Total	Description
Bronze	£500 (already reached)	Basic activity, no soldering
Silver	£1500	Simple soldering activity, no flashing, no installation
Gold	£3500	Reprogrammable flashing light badges for 1000 participants, no installation
Platinum	£5000	Reprogrammable flashing lights for 1250 participants, high-impact animated installation on final night

How will your support be recognised?

There is usually local radio, newspaper and television coverage of Peak Camps, so this camp is expected to attract the same sort of interest. All supporters will be invited to come along to the camp and will get the opportunity to speak to some of the young people and have a look around the site. There will also be photo opportunities at the camp.



Peak 2015 can also offer social media recognition for companies through both Facebook and Twitter, with over 2000 combined followers, a number which we expect to keep on rising right up until the camp. All sponsors will be able to communicate to followers through the Peak 2015 Social Media.

In addition to this, organisation names will be shown in the activities booklet (if known before print deadlines) and your banner with name/logo etc can be on show at the activity that has been sponsored.

How can you find out more?

Please feel free to get in touch with us to express your interest in supporting us or simply to find out more about how you can help:

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"Tents", "Scouts" logo, "Peak 2015" logo – The Scout Association
"Girlguiding" logo - The Guide Association
"Badge box", "Prototype circuit diagram", "Prototype circuit board" – Paul Bennett, HIDECS Consultancy
"Boy soldering" – Ian Cole <http://www.raisinggeeks.com/>