

## What are the reasons for synchronising beacons?

- To prevent random flashing which can induce photo sensitive epilepsy.
- To create specialised visual impression for events like exhibitions and museum displays. (All beacons flashing together to create large concentrated flashes)

## How many beacons can be synchronised together?

- Hundreds of these beacons can theoretically be synchronised together, subject to power supply limits. This issue can be addressed by using multiple power supplies, each powering a certain number of beacons. Generally power supply requirements need to be number of beacons multiplied by peak current supply of the beacons in question. For example, if 10 beacons with a peak current supply of 1.6A, the power supply needs to be 16A.

## What is the delay between each beacon flashing?

- Delay between adjacent beacons is less than 50 micro seconds. In a chain of 200 beacons, the delay would be 100th of a second between the first and the last beacon. Each beacon triggers the next beacon which in turn triggers the next.



## What are the cable requirements?

- The synchronisation cable needs to be 2 core (2 single or twin core), up to the maximum size the terminals in the beacon will take. This is likely to be 2.5mm<sup>2</sup> – 4mm<sup>2</sup>, however a minimum of 0.5mm<sup>2</sup> is recommended. Generally standard twin core cables are ok. For noisy environments, screened or twisted pair may be applicable.

## What are the power supply cable requirements?

- As with most installations, a star configuration is recommended but not essential if the power supply cable size and number of beacons connected makes this impractical. Please refer to previous tech note 'Beacon Installation' for further information on wiring.

