Optics, radar

OPTICAL TIME-TAGGING

Portable device providing a time reference through a configurable light signal

Technological benefits

An absolute reference
Time reference based on GPS signals
Accurate to a few microseconds

A simple, independent system
Robust, transportable and compact
Internal electric power supply
Suitable for experiments in difficult field conditions requiring an accurate time reference

Fully configurable
Fully programmable
Storage of numerous event files that can be prepared beforehand (simple text files)
USB connection

Invention overview

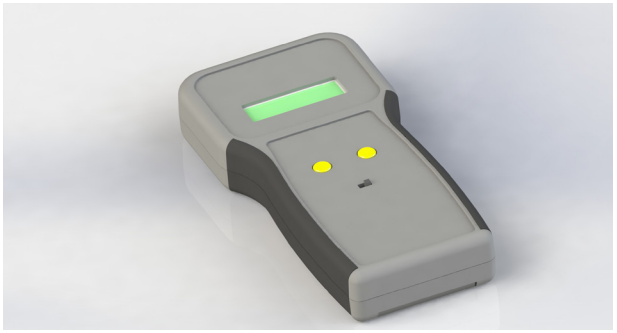
At predetermined times, the device emits light signals whose colour, intensity and duration can be configured using an external software program.

These signals can be directed towards cameras filming the same event so that when reprocessing the data, the different views can be calibrated and synchronized.

Potential applications

Absolute time-tagging of an observable phenomenon
Accurate time-tagging of astronomical phenomena such as an eclipse, occultation of stars by asteroids, meteor showers or falling space debris
Comparison of satellite data and ground-based data to locate meteorological phenomena such as lightning, sprites, elves or blue jets

Instrument synchronization
Instrument calibration
Video surveillance e.g. average-speed radars or security cameras



An accurate time reference the size of a remote control unit

Commercial benefits

Simple and efficient
Small, lightweight and low power consumption
Easily and fully programmable prior to use in the field
Low cost

Wide range of applications

Patented invention, available under license

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For further information

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