

# MULTISTREAM

## Multichannel Streaming

DATASHEET

The Multistream synchronises a solid state lightsource with a digital camera to achieve KHz acquisition for up to four wavelengths

The MultiStream is a user-friendly device, which allows the Cairn OptoLED, LaserBank or any other digitally-controlled solid-state light source to be synchronised with a scientific CMOS, CCD or EMCCD camera for multi-wavelength streaming at up to 1KHz. The MultiStream cycles through a protocol of up to four wavelengths using precise hardware timing, whilst still allowing independent software or front panel switching as required. Even if fast streaming is not required the MultiStream is a valuable addition to an imaging system to reduce photo damage and sensor readout artefacts by precisely synchronising illumination to the camera exposure.

### APPLICATIONS

- Ratiometric calcium and voltage imaging
- Fast, multi-indicator, timelapse imaging
- Fast, combined fluorescence and phase contrast or DIC imaging
- TIRF and Spinning Disk Confocal

### INPUTS

- 4 BNC sockets for individual software control of channel settings
- 4 front panel override switches for manual setting of active channels
- Trigger input from camera to synchronise multi-wavelength acquisition



### KEY BENEFITS

- Combines software and hardware timing to flexibly match illumination to camera exposure and reduce photo damage
- Standalone front panel control works with any software
- LED indicators allow the researcher to track and troubleshoot the experiment
- Streaming protocols can be changed on-the-fly in response to experimental needs
- Automatically supports virtual global shutter modes on sCMOS cameras



### OUTPUTS

- 4 BNC sockets to connect to up to 4 illumination channels