

# ST1

# Stroboscope

**Portable stroboscope that works with several TecQuipment products. Also good for general-purpose laboratory use.**

- Portable, lightweight, robust unit that works with selected TecQuipment products, but is also good for general-purpose laboratory use
- Internal or external trigger
- Variable flash frequency
- Includes digital display of flash frequency
- Can synchronize to the mains (supply) frequency
- External trigger input works with other TecQuipment equipment

## Description

A portable digital stroboscope for general laboratory use, such as speed measurement and motion studies. It emits a white light flash from a bulb and reflector on the front of the unit. The rear panel holds the stroboscope controls, lead sockets, and a liquid crystal display.

The stroboscope has three modes of operation: internal oscillator; external trigger; mains synchronised.

The internal oscillator produces a continuous flash frequency range, adjusted using a rotary control. To hold the frequency at a set value, the rotary control can be disabled. Once disabled, moving the control will not change the flash rate.

The external trigger allows another frequency generating device to control the flash rate. TecQuipment supply External Trigger connecting leads for the Whirling of Shafts Apparatus (TM1001).

The mains synchronised mode sets the flash rate to that of the mains frequency (either 50 Hz or 60 Hz).

The stroboscope also has an inhibit flash facility. This is an electrically isolated method of stopping the flash in all modes of operation. It safely, quickly and remotely prevents the stroboscope from flashing without having to switch off the unit.

The stroboscope can also be connected to remote input sensors, and has an internal power supply to operate them. It also allows settings to be stored after use, which is useful when repeating experiments or demonstrations.



## Standard Features

- Supplied with comprehensive user guide
- Two-year warranty
- Manufactured in accordance with the latest European Union directives

## Operating Conditions

*Operating environment:*  
Laboratory environment

*Storage temperature range:*  
-25°C to +55°C (when packed for transport)

*Operating temperature range:*  
+5°C to +40°C

*Operating relative humidity range:*  
30% to 95% non-condensing

## Essential Services

*Electrical supply:*  
Single-phase 110 VAC, 60 Hz or 230 VAC, 50 Hz (specify on order)

## Specification

*Dimensions:* 320 mm x 260 mm x 280 mm, packed:  
0.023 m<sup>3</sup>

*Weight (packed):* 5 kg

*Flash rate:* 60 to 7500 flashes per minute continuous range.

*Flash rate display:* Back-lit LCD in either flashes per minute, hertz or milliseconds.

*Accuracy:* Better than 0.1%.

*Flash energy:* At least 0.11 J

*Trigger sources:* Internal, external (3 V to 50 V d.c.) or mains synchronised

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