

## Millisecond Timer

### Introduction

This instrument is a fully autoranging timer able to measure to 1ms, with a range of 9999s.

### Operation

The instrument can be triggered mechanically or electronically by connecting to the sockets marked 'A' and 'B'.

Sockets 'A' will alternately start and stop the timer each time the sockets are connected together. This is equivalent to the light beam being restored after being broken on a photo timing gate.

Sockets 'B' will alternately start and stop the timer each time a connection between them is broken. This is equivalent to the light beam being interrupted on a photo timing gate.

Any combination of sockets 'A' and 'B' can be used to operate the timer.

N.B. When a mechanical switch is used to trigger the timer care must be taken to ensure that switch 'bounce' does not cause spurious starts/stops. A 0.1 $\mu$ F capacitor connected across the switch contacts will usually cure this problem.

When timing is taking place, operation of the switch marked RESET/HOLD to the HOLD position will cause the displayed time to be held while the timer continues counting. Releasing the switch to the centre position causes timing to continue. This allows the recording of split times.

Operation of the switch to the RESET position causes the timer display to be reset to 0.000.

### Technical Specification

Ranges	0 to 9.999s
	10 to 99.99s
	100 to 999.9s
	1000 to 9999s

Accuracy	$\pm 0.1\%$
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