

# Chronoscope C1



## **Chronoscope C1, versatile, compact measurement amplifier**

The Chronoscope C1 facilitates the use of customer-specific sensors for the measurement of mechanical watches. The single-channel measurement amplifier analyses the analogue beat noise from the connected sensor and sends the digitised measurement values to a PC via USB interface.

## **Varied range of specialised measurement sensors**

Witschi's many years of experience enable it to find a solution for every measurement activity, such as sensors for use in extreme environmental conditions (temperature or magnetism), sampling microphones for special supports, and receivers for integration into automated systems.

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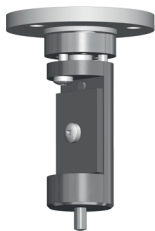
## Chronoscope C1

- Single-channel compact measurement amplifier
- Connects to customer-specific sensors for the acoustic measurement of mechanical watches
- USB interface for data transfer to a Windows PC or the terminal
- Variety of measurement sensors available
- Customer-specific receivers available on request
- High-quality measurement electronics with Witschi W4 technology
- Simple calibration via the USB-C interface

## Microphone varieties (examples)



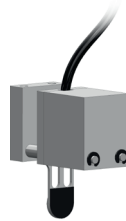
Measurement of mechanical watches in pallet systems with measurement on the watch glass or calotte.



For integration into industrial applications with tight space constraints.



Measurement on the watch glass or calotte through a small opening in closed watch boxes.



Extra-thin microphone for measuring the beat noise on the watch crown.



For the use in strong magnetic fields of up to 15'000 Gauss (1.5 Tesla).



Microphone for measuring the beat noise on the watch's winding stem.

## General

Display units	Windows PC Windows tablet
Software	Chronoscope Service
Languages	German, French, English Spanish, Italian
Interfaces	1x Lemo 1x USB C
Dimensions	122 x 31 x 50 mm (W x H x D)
Weight	140 g
WiCoTRACE	yes

## Measurement

Measurement channels	1
Rate	-99.99 ... +99.99 s/d $\pm$ 0.01 s/d
Amplitude	80 ... 360° $\pm$ 0.1°
Beat error	0 ... 9.9 ms $\pm$ 0.1 ms

## Measurement conditions

Stabilisation time	Manual
Amplification control	Adjustable, 1 ... 4
Measurement time	Manual, 2 s ... 300 h
Beat number	Automatic and manual, 18'000 ... 72'000 A/h
Lift angle	Adjustable, 10 ... 90°
Time base	TCXO ( $\pm$ 0.004 s/d)