## Chronoscope M10



## Chronoscope M10, efficiency in watch production!

The Chronoscope M10 is the versatile measuring system for checking large quantities of mechanical watches in the production process. It can acoustically measure the beat noises of up to 10 watches in 6 automatically controlled test positions. The precise measurement provides results on rate variation, beat error and amplitude.

## Measurement on movements and watches

The highly sensitive recording of the impact noise at the crown is suitable for movements in calottes and complete watches with or without bracelet.

## More productive thanks to WiCoTRACE

The Chronoscope M10 is connected to the PC via a USB interface. Thus, the M10 is fully integrated into the central test parameter and results management WiCoTRACE and benefits from a traceable, productive and efficient measurement process.

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## Chronoscope M10

- Simultaneous acoustic measurement of the beat noises of 10 mechanical watches
- Suitable for movements in calottes or watches with or without bracelet
- Automatic measurement in 6 test positions
- Long-term measurement up to 300 h
- Proven and robust mechanics for use and the toughest operating conditions
- Powerful test parameter and result management with WiCoTRACE


## General

| Operation | Parameterisation and display via PC <br> software WiCoTRACE |
| :--- | :--- |
| Display | Windows PC (optional) |
| Languages | German, French, English, Spanish, <br> Italian |
| Interfaces | $1 \times$ USB Type B |
| Dimensions | $560 \times 400 \times 460 \mathrm{~mm}(\mathrm{~W} \times \mathrm{H} \times \mathrm{D})$ |
| Weight | 60 kg |
| WiCoTRACE | yes (WiCoTRACE 3 Lite included in the <br> delivery) |

## Result management

| Print-out | PC printer |
| :--- | :--- |
| Results memory | Yes |
| Export | Excel, PDF |

## Measurement

| Measurement principle | Acoustic measurement of beat <br> noises |
| :--- | :--- |
| Measurement channels | 10 |
| Rate | $-999 \ldots+999 \mathrm{~s} / \mathrm{d} \pm 0.1 \mathrm{~s} / \mathrm{d}$ <br> High resolution: <br> $-99.99 \ldots+99.99 \mathrm{~s} / \mathrm{d} \pm 0.01 \mathrm{~s} / \mathrm{d}$ |
| Amplitude | $80 \ldots 360^{\circ} \pm 1.0^{\circ}$ <br> High resolution: <br> $80 \ldots 360^{\circ} \pm 0.1^{\circ}$ |
| Beat error | $0 \ldots 9.9 \mathrm{~ms} \pm 0.1 \mathrm{~ms}$ |

## Measuring conditions

| Stabilisation time | Manual, $0 \ldots 60$ Minutes |
| :--- | :--- |
| Amplification control | Adjustable, $1 \ldots .4$ |
| Measurement time | $2 \mathrm{~s} \ldots .300 \mathrm{~h}$ |
| Test positions | 6 |
| Beat rate | Manual, $18^{\prime} 000 \ldots 43^{\prime} 200 \mathrm{~A} / \mathrm{h}(6 \mathrm{~Hz})$ |
| Lift angle | Adjustable $10 \ldots 90^{\circ}$ |
| Time base | $\mathrm{OCXO}( \pm 0.004 \mathrm{~s} / \mathrm{d})$ |

Technical specifications subject to change without notice.

