

ChronoMaster®



Plug-In! Chronomaster

Plug-in! Connect the smart ChronoMaster easily with your PC or tablet. Your measurement results are displayed on the screen. The ChronoMaster offers you user-specific, individual functionalities:

- Modular software in two versions
- Simultaneous testing in combination with the Micromat C automatic microphone
- Convenient operation using 4 buttons
- Plug & Play

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- Compact microphone with integrated measurement electronics
- Automatic detection of 6 main positions, 4 vertical positions and 2 special positions
- Guided sequence mode, adjustable 1 to 10 testing positions
- Secure mount, even for large watches
- Accurate positioning every 45°
- Convenient operation of «Chronoscope Service» display software, thanks to built-in control buttons
- Interface: USB port, Type A connector
- Housing: Die-cast zinc, painted black
- Dimensions: 130 x 110 x 110 mm (W x H x D)
- Weight: 0,8 kg

Adjustment Possibilities	ChronoMaster	ChronoMaster Pro
Continuous Diagram Recording, Selectable integration time: 4A, 2, 4, 6, 8, 10, 20, 30, 40, 50, 60, 120, 180 und 240 s, adjustable zoom: 1, 2, 4, 8, 16-fach	•	•
Vario Display Mode, measuring time: adjustable from 4 s to 99:59:58h	•	•
Trace Display Mode, selectable measuring time: from 4 s to 99:59:58h, Adjustable zoom: 1, 2, 4, 8 x		•
Sequence Display Mode, Stabilisation time: adjustable from 2 s to 2 min, Measuring time: adjustable from 4 s to 10 min, Measuring cycle: adjustable from 1 to 10 test positions		•
Polar Display Mode, Rotation time: 24, 30, 60, 120, 180 and 240 s, Rotation sense: clockwise / counterclockwise, Measuring time: adjustable from 4 s to 01:00:00 h		•
Scope Display Mode, Selectable time deviations: 20, 200, 400 ms Average beat noises		•

Measurement capabilities

Measuring rate variation, amplitude and beat errors in mechanical watches with a variety of display modes.

Beat number

Automatic selection of all common beat numbers. Manual selection of less common beat numbers. Manual selection of any beat number between 3'600 to 72'000 b/h.

Measuring mode

Std: Standard mode / Swiss anchor escapement
Spe1: Mode for watches with Co-Axial escapement
Spe2: Mode for watches with AP escapement
Rate: For rate measurement only

Gain control

- Fully automatic
- Manually possible for watches with background noise or unusual beat noises

Time base

- TCXO quartz, high-frequency quartz time base
- Stability: $\pm 0.08\text{s/d}$
- Ageing in 1st year: $\pm 0.03\text{s/d}$

Measuring Ability Rate accuracy: (numerical display in s/d)

Resolution: selectable 1.0, s/d, 0.1 s/d or 0.01 s/d
Measuring range: ± 999 s/d
Accuracy: ± 0.1 s/d

Amplitude: (numerical display in degrees)

Resolution: 1° or 0.1°
Measuring range: 70° to 360°
Accuracy: $\pm 1.0^\circ$
Lift angle: adjustable from 10° to 90°
Resolution: 0.1°

Beat error: (numerical display in milliseconds)

Resolution: 0.1 ms
Measuring range: 9.9 ms
Accuracy: ± 0.1 ms

Requirements of PC

Suitable processor (CPU) for operating system Windows 7, Windows 8.1 or Windows 10
Minimum 4 GB RAM
USB interface: 2.0
Screen with a minimum resolution of 1024 x 768 pixels