



# ChronoMaster® Auto

## ChronoMaster Auto

- Acoustic microphone with integrated measuring electronics for the measurement of mechanical watches
- Smooth and silent movement
- 360° rotation axis and the 180° tilting axis
- Precise position control based on gravity thanks to the integrated acceleration sensor
- One single USB cable for power supply and data transmission
- Wireless data transmission via Bluetooth
- Integrated fixation for large and heavy watches
- Convenient operation with the to built-in control buttons
- Ergonomic regulation of movements thanks to stable hand rest for left- and right-handers
- The smart drive unit also allows manual position changes

	ChronoMaster Auto	ChronoMaster Auto PRO
Automatic change to the 6 main, 4 intermediate and 2 special positions	•	•
Arbitrary test positions in 1° steps**		•
Tourbillon measurement**		•

(Further functions follow)

## Registered design WIPO D230112 (CH, CN)

### General

Operation	4 Control keys
Display devices	Windows PC* Windows tablet* Witschi Terminal
Software	WiCoTRACE Chronoscope Service
Interfaces	USB type C Bluetooth
Dimensions	150 x 220 x 150 mm (W x H x D)
Weight	980 g
WiCoTRACE	yes

### Measurement

Measurement principle	Acoustic measurement of beat noises
Rate	-1'000 ... +1'000 ± 0.1 s/d
Amplitude	70 ... 360° ± 1.0°
Beat error	0 ... 9.9 ms ± 0.1 ms

### Measuring conditions

Test positions**	Up to 12 standard test positions and arbitrary intermediate positions <sup>PRO</sup>
Drive unit	Low-noise drive unit with 2 axes. Rotation angle main axis 360°, rotation angle tilt axis 180°.
Rotational speed	0 ... 20 min <sup>-1</sup>
Positioning precision	± 1°
Stabilisation time	Manual
Amplification modes	1 ... 4
Measurement time	Manual, 2 s ... 300 h
Frequency	Automatic or manual, 3,600 ... 72,000 A/h
Lift angle	Manual, 10 ... 90°
Time base	TCXO (± 0.004 s/d)
Ambient conditions	Temperature: 5 ... 40 °C Relative humidity: max. 80 % (non-condensing)

\* Not compatible with ARM processors (e.g. Microsoft Surface X)

\*\* Depending on the software or display device used