

# Retouche A2



## Test system for the automatic adjustment of mechanical movements

The Retouche A2 is used to adjust automatically the rate and the symmetry of the vibration of mechanical movements in horizontal position. The location is the watchmaker's work bench or as adjustment station integrated into an automatic production line.

It can drive up to two independent channels. In addition, the automatic microphone AM1 can be connected to one of the two channels. The measured values are transferred automatically to the associated channel to proceed with an ideal rate adjustment.

### Witschi Electronic Ltd

Bahnhofstrasse 26 – CH-3294 Büren a.A. – Phone +41 (0)32 352 05 00  
 Fax +41 (0)32 351 32 92 – welcome@witschi.com – www.witschi.com

## Technical data

### Application

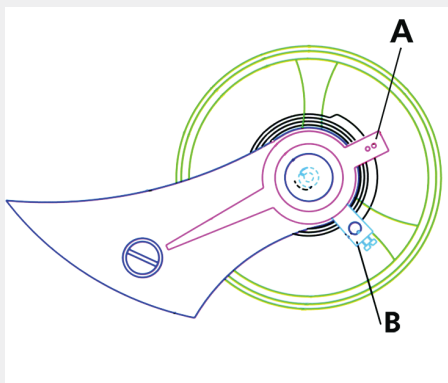
The Retouche A2 is a stand-alone calibration station for use on a manual workstation or integrated into an automated production line.

### Interfaces

The device has two RS232 interfaces with the following functions:

- Printout of measuring reports on a printer
- Data exchange with a PC
  - Transferring measurement results to the PC for backup and producing statistics
  - Loading a test sequence with all the corresponding parameters.

## Operating principle of the Retouche A2



The Retouche A2 is used to calibrate the rate and symmetry of oscillation of mechanical watch movements in large numbers. Our sophisticated, fully automated calibration procedure adjusts regulator (A) and stud support (B) until the mechanical watch movement has reached the desired degree of accuracy or the movement is declared unadjustable. The amplitude of the oscillation is monitored during calibration.



The calibration system consists of a Retouche A2 testing device (1), one or two RMA measuring and calibration stations (2) and one small control panel "CP" (3) per RMA. The system can be supplemented with a printer.

One or two RMA calibration units can be connected to the testing device.

The **RMA (Retouche Mécanique Automatique)** calibration unit is the actual measuring and calibration station. Fine pins reach into the watch movement and adjust regulator (A) and stud support (B). A microphone for detecting mechanical vibrations records the rate frequency.

The small control panel "CP" (3) for activating the measurement and displaying the measurement results (good/bad) is connected to the RMA calibration unit.