Carpe

Autocorrelator for Microscopy

User Manual

Preliminary
Additional Information

A·P·E Angewandte Physik & Elektronik GmbH
www.ape-berlin.com ape@ape-berlin.de
Plauener Str. 163-165 Haus N 13053 Berlin Germany
Phone +49 30 986 011 30 Fax +49 30 986 011 333

1. The New Carpe

Fig 1 Carpe - Front panel

Control elements:

- Power button
- Hard keys
  - SCAN + — Scan range variation
  - < CURSOR> — Cursor Control
  - MAIN — alternatively to status display (press once: direct access to Main menu, disappears automatically after a few seconds; press twice in any menu: back to status display)
  - RETURN — back to previous menu
  - ACTIVATE — enable or disable masurement by removing deflection prism from beam path for normal microscope application
  - EXT / INT — Selection of external or internal sensor
- 6 soft keys — function depends on displayed menu
- GAIN — press-/turning-button; turning = manual gain control, pressing = Autogain: gain and sensitivity are automatically adjusted to set the measured AC-peak to about 80% of the screen.

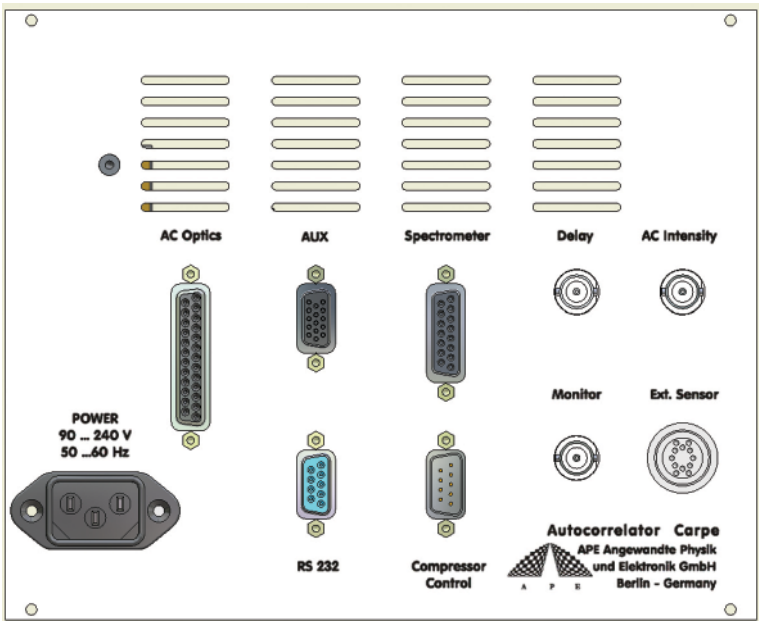

Fig 2 Back panel

Connectors:

- Power mains
- Optics (25 pinSubD female)
- Analogue BNC outputs: „AC Intensity“ and „Delay“ for oscilloscope (if required)
  Monitor output (analog power signal)
- Serial interface RS 232 (9 pinSubD female)
- optional: spectrometer input
  pulse compressor control
  AUX for special applications

2. The New Menu Structure

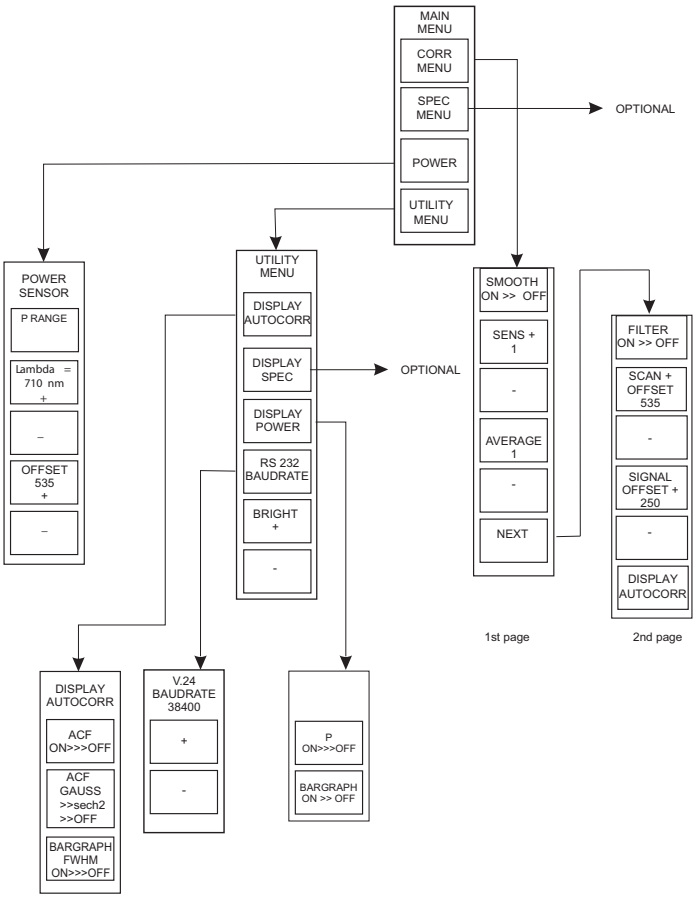

Fig. 3 Menu Structure

3. Internal Attenuator

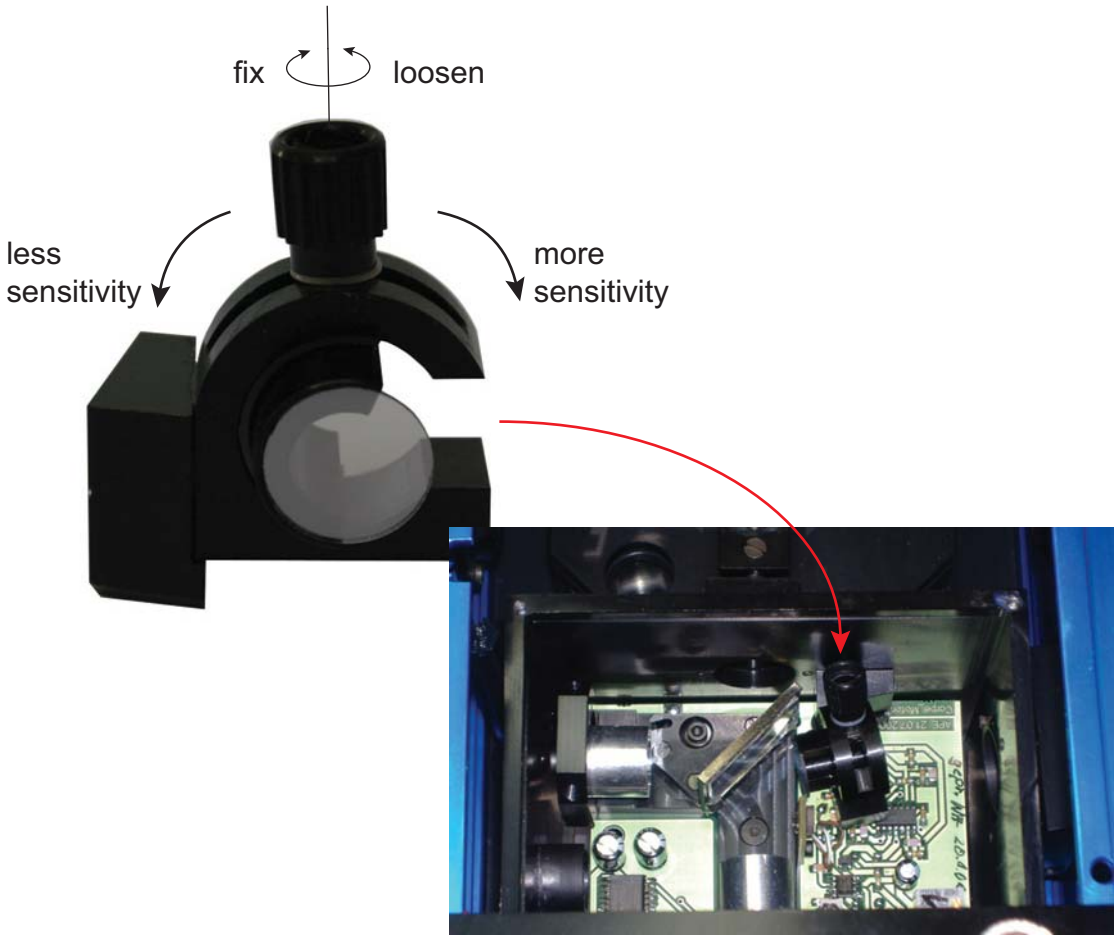

Fig. 4 Attenuator

This manually variable attenuator has been integrated into the Carpe optics unit to adjust the sensitivity of the measurement of the internal ACF to the power of the laser system

- open top cover
- unscrew inner cover (black) and take off
- adjust attenuator