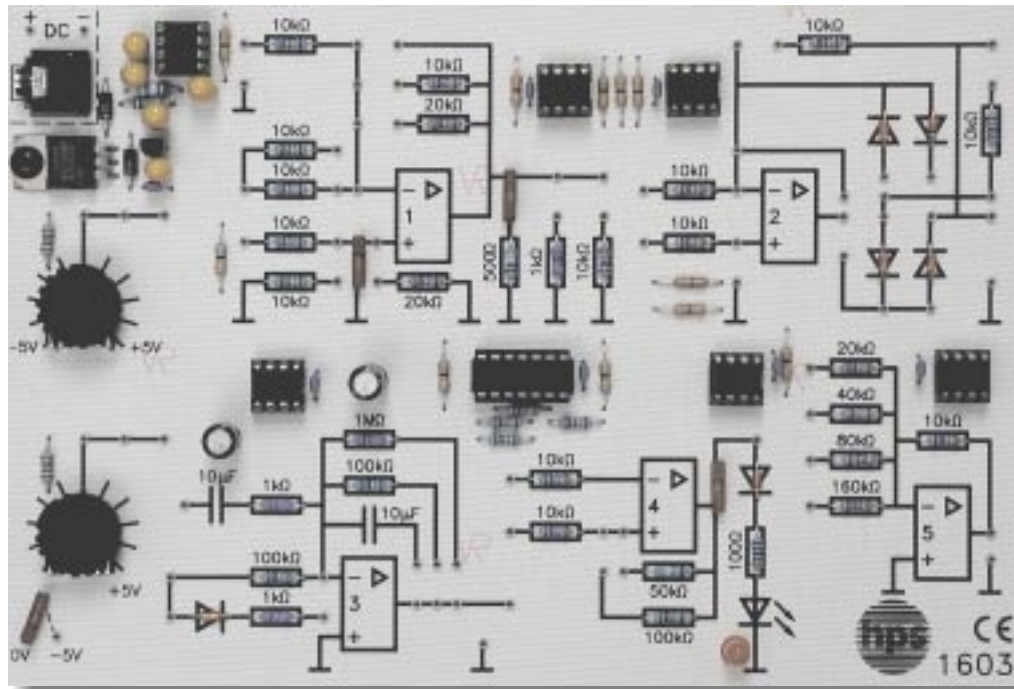


OPLAB – the multi-talented operational amplifier

For experiments in analog circuitry

**OpLAB** (Type 1603)

- All components and voltage sources are arranged in a way to become functional circuits by merely plugging a few connecting bridges or lines.
- 5 operational amplifiers are available for setting up the most common OP circuits:
 - OP1: inverting and non-inverting amplifier with variable wiring of resistors
 - OP2: rectifier circuits
 - OP3: integrator / differentiator
 - OP4: comparator circuits with and without hysteresis
 - OP5: D/A convertersMoreover several Ops can be interconnected for setting up a sawtooth generator for instance.
- The required input signals for the OP circuits are supplied by two variable voltage supplies integrated in the board or by the Measuring Interface, type 1620.

Workbook for *OPLAB*

The workbook available for the *OPLAB* contains numerous experiments for the following topics:

- | | |
|--|--------------------------------|
| ■ Introduction into the theory of the operational amplifier technology | ■ Comparator |
| ■ Inverting basic circuit | ■ Schmitt trigger |
| ■ Non-inverting amplifier | ■ Precision rectifier |
| ■ Impedance transformer | ■ Integrator |
| ■ Adder | ■ Delta and sawtooth generator |
| ■ Subtractor | ■ Differentiator |
| ■ Differential-mode voltage amplifier | ■ Digital/analog converter |

Technical data

- Power supply: 12 V DC (from plug-in power pack provided)
- Internal supply voltage: ± 7 V
- Dimensions of board: 190 mm x 130 mm

Recommended measuring equipment

- Simple multimeter
- hps Measuring Interface (type 1620.1)
(function generator and measured value acquisition in connection with a PC)