

Operation Amplifier Circuit Trainer

CPE-2240



■ Features

- Composed of 10 modules for 28 circuit experiments and main unit for various analogue experiments
- Possible to make an application experiment by use various ICs and TRs.
- Main body was designed a suitcase-form for easy keeping and the front-panel was made of Epoxy to prevent from short-circuit.

■ Technical Specification

1) Main body

- ① DC output : 3 / 5 / 6 / 9 / 12 / 15V Dual output
- ② Decade capacitor : 0.1 μF ~9.99 μF (3 dials)
- ③ Decade resistor: 1 k Ω ~15 k Ω , 10 k Ω ~150 k Ω , 100 k Ω ~1.5M Ω (select by BCD 3ea)
- ④ AF Generator(Digital) : 100Hz~10kHz(in 2 range)
: Output - 1V/10V (in 2 range)
: Waveform - sine and square
- ⑤ Multi-Tester(4½ digital) : DC Volt - 2V, 20V (in 2 range) 10m Ω /V
: DC Current - 20mA, 2200mA (in 2 Range)
- ⑥ AC output: 30V, CT (15V+15V), 0.1A Max.
- ⑦ Variable resistor: 1,000 Ω , 100 k Ω
- ⑧ Switch: Slide, push, SPDT-toggle
- ⑨ Input power: AC 220V, 60Hz
- ⑩ Dimensions: 390(W) x 130(H) x 270(D)mm
- ⑪ Breadboard: 1ea
- ⑫ Module dimension: 200(W) x 45(H) x 108(D)mm

2) Experiment modules

(OAT-4300-01) OP AMP characteristic

- ① Experiment of input off-set voltage measurement
- ② Experiment of input bias current measurement
- ③ Experiment of internal input impedance measurement
- ④ Experiment of slow rage measurement
- ⑤ Experiment of common signal rejection rate(CMPR) measurement
- ⑥ Experiment of Closed loop response measurement

(OAT-4300-02) Basic Linear Amp

- ① Characteristic of non-inverting amplifier experiment
- ② Characteristic of inverting amplifier experiment
- ③ Experiment of DC off-set characteristic
- ④ Experiment of voltage flour
- ⑤ Experiment of addition amplifier
- ⑥ Experiment of difference amplifier

(OAT-4300-03) Differentiator and Integrator

- ① Experiment of pulverizer for use OP-amp
- ② Experiment of integrator for use OP-amp

(OAT-4300-04) Voltage and Current circuit

- ① Constant current circle practice
- ② Electric current - voltage transducer practice
- ③ Voltage - current transducer practice
- ④ Turnover voltage - electric current amplifier practice
- ⑤ Reversal voltage - electric current amplifier practice

(OAT-4300-05) Non-Linear signal processing

- ① Comparator practice
- ② Peak detector practice
- ③ Half-wave rectifier practice
- ④ Full-wave rectifier practice
- ⑤ Logarithmic amplifier practice

(OAT-4300-06) Generator

- ① Sine & cosine oscillator practice
- ② Square wave generator practice
- ③ Square wave and triangle wave oscillator practice

(OAT-4300-07) Active Filter

- ① Band-pass filter practice
- ② State variable filter practice

(OAT-4300-08) Subtract / Adder Circuit

- ① Adder circuit practice
- ② Subtract circuit practice

(OAT-4300-09) Absolute value circuit

- ① Absolute-value circuit practice
- ② Absolute value amplification circuit practice

(OAT-4300-10) Interface circuit

- ① Interface practice with relay

(OAT-4300-11) Breadboard

3) Accessories

- ① User's manual: 1ea
- ② Module stored bag: 1ea
- ③ Jumper wire: 1set
- ④ AC power cord: 1ea