

## Active Filters Using Operational Amplifier



**Product Categories:** [Electronics](#), [Engineering Equipment](#), [Filter Circuits Lab](#), [Filter Circuits Lab](#)

**Product Page:**

<https://www.labappara.com/product/active-filters-using-operational-amplifier/>

### Product Description

#### Active Filters Using Operational Amplifier

Experimental training board has been designed specifically to study characteristics of various types of active filters. This Training Board includes low pass, high pass, band pass and notch filters. The filter circuits are designed using second order Butter worth polynomials and provide unity gain in the pass band. Practical experience on this board carries great educative value for science and engineering Students.

Specifications:

#### 1. Low Pass Filter

- (1) Upper Cut-off frequency : 1 KHz
- (2) Cut-off slope : 29.5 dB/decade
- (3) Input impedance : 3.5 K at 1KHz
- (d) Output impedance : 18 Ohms at 1KHz

#### 2. High Pass Filter

- (1) Lower cut-off frequency : 100 Hz
- (2) Cut-off slope : 26 dB/decade
- (3) Input impedance : 12 K at 100 Hz
- (4) Output impedance : 30 Ohms at 100 Hz

### 3. Band Pass Filter

- (1) Upper cut-off frequency : 1 Khz
  - (2) Lower cut-off frequency : 100 Hz
  - (3) Upper cut-off slope : 29.5 dB/decade
  - (4) Lower cut-off frequency : 26 dB/decade
  - (5) Input impedances : 24 K at 100 Hz , 3.5 K at 1 KHz
  - (6) Output impedances : 30 Ohms at 100 Hz, 27 Ohms at 1 Khz for Engineering
- Electronics Workshop Laboratory Instruments