

ANALOG FUNCTION GENERATOR

The Analog Function Generator is designed to generate five standard waveforms with a wide frequency range, making it ideal for a variety of applications in electronics.



The analog function generator is expertly engineered to produce five standard waveforms, offering an adjustable frequency range from 50Hz to 20kHz. Its intuitive design simplifies the process of crafting the precise waveform and frequency required for your specific needs.

Key Features

- Multiple Waveforms:
 - Generates Sine
 - Triangle
 - Saw-tooth
 - Square
 - PWM
- Broad Frequency Range: Covers 20Hz to 20kHz
(Suitable for a variety of applications.)
- Fine-tuned Control: Adjustable amplitude (0-10 V Vpp) and duty cycle (2%-98%).
- Energy Efficient: Optimized for low power consumption while maintaining output quality.
- Durable Design: Built to withstand rigorous use in lab environments.



Enhanced Technical Specifications

- Frequency Accuracy: $\pm 0.1\%$.
- Amplitude Resolution: 0.1V.
- Minimum output Impedance: 50 ohms.
- Harmonic Distortion: Less than 0.5% for sine wave.

Specifications

- Frequency Characteristics

• Square, Triangular, PWM & Saw-tooth

Capacitor	250Kohm Potentiometer	10Kohm Potentiometer
0.01uF	12KHz - 542Hz	41KHz - 12.5KHz
0.1uF	1.8KHz - 73Hz	-
1uF	140Hz - 11Hz	-

• Sine Wave

Capacitor Value	Frequency Range
10uF	20 Hz - 130 Hz
1uF	100 Hz - 550 Hz
100nF	500 Hz - 4.5 kHz
10nF	4 kHz - 15 kHz
1nF	14 kHz - 20 kHz

- Output Characteristics

Peak to Peak voltage(Amplitude) 10V

Minimum load impedance 50 Ohm

Resolution 1V

Power Source +30V/ 0V

Dimensions 18cm * 12cm * 9cm

Front Panel



1. Wave selector
2. Sine wave frequency range selector
3. Sine wave frequency adjust knobs
4. Saw-tooth/ Triangle/ square/ PWM frequency range selector
5. Saw-tooth/ Triangle/ square/ PWM frequency adjust knob (High Frequency)
6. Saw-tooth/ Triangle/ square/ PWM frequency adjust knob (Low Frequency)
7. Amplitude adjust knob
8. DC shift adjust knob
9. Duty cycle adjust knob (PWM)
10. Saw Tooth on/off switch
11. Duty cycle adjust knob (Saw Tooth)
12. Output