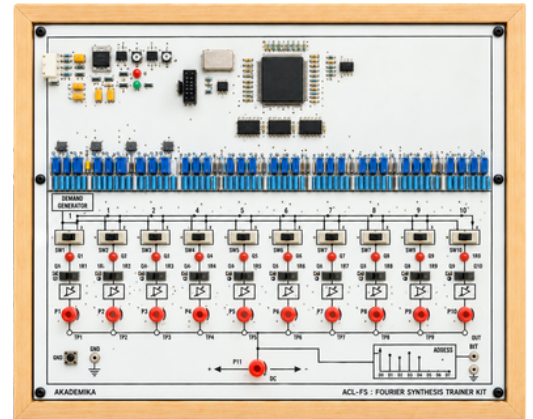


ACL-FS

Fourier Synthesis Kit



FEATURES

- Signal synthesis by summing 10 harmonics
- Each harmonic selectable with +sin, -sin, +cos, -cos value
- Allows visualization of signal formation by combining multiple sinusoidal harmonics.
- Provides easy access to waveform generation and signal analysis through dedicated control sections.
- Square, triangle, ramp, pulse, rectified sine, AM and other wave-form generation
- Spectrum analysis of the signal using ACT - 01 and ACT - 02
- Designed for laboratory demonstrations of Fourier series, waveform synthesis and harmonic analysis.
- Mobile based interactive e-manual

SPECIFICATIONS

Frequency of the fundamentals

- 10 KHz with quartz control

Frequency of the harmonics

- 20 KHz, 30 KHz, 40 KHz, 50 KHz, 60 KHz, 70 KHz, 80 KHz, 90 KHz, 100 KHz

Phase of each sine wave

- Selectable 0° (sin), 90° (cos), 180° (-sin), 270° (-cos)

Amplitude of each sine-wave

- Adjustable on 2 ranges from 0 ~ 1 Vpp or from 0 ~ 10 Vpp
- Indication of the presence of each harmonic : via LED

Amplitude of the DC component

- Adjustable from -10V ~ +10V

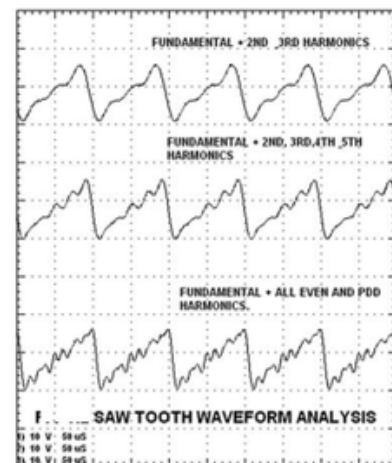
Adder stage with 11 inputs

Power supply

- GND, +5V, +12V, -12V

EXPERIMENTS

- To study square wave synthesis
- To study triangular wave synthesis
- To study saw-tooth wave synthesis
- To study AM wave synthesis



Synthesis of Saw Tooth signal

