

Model FG2A

2MHz Function Generator

- ◆ Square, Triangle, Sine Waves, and TTL Pulse Output
- ◆ 0.2Hz to 2MHz
- ◆ Duty-Cycle Control
- ◆ VCF Input
- ◆ Variable/Output Attenuation to 60dB
- ◆ Variable DC Offset Control
- ◆ Signal Inversion

The FG2A offers high performance with numerous output functions by fast, easy push-button selection of power, frequency range, and waveform. Standard outputs include both a TTL level pulse output and an adjustable amplitude, low impedance output of low distortion sine, square, or triangle wave signals.

Duty-cycle control allows the 50% duty cycle of the signal to be changed to any desired value. You can use this to produce short duration pulses in square wave mode, or sawtooth signals (ramp) in triangle mode. The invert button allows you to change the polarity of the output signal. You can also add a variable DC offset voltage to the signal.

The VCF input permits the frequency to be controlled by an external DC control voltage. This capability is particularly useful for generating 1000:1 or 1:1000 sweep signals. Two 20dB attenuators allow easy adjustment of low output levels, and the 50Ω output allows the FG2A to directly drive low impedance devices at amplitudes up to 10V pk-pk.

The FG2A is housed in a stylish case that allows stacking, and has a cushion grip carrying handle/tilt stand and a rear cord wrap.

FG2A Specifications (at 23°C ±5°C; <70% R.H.)

Frequency Ranges		
With range setting at	1Hz	0.2Hz to 2.0Hz
	10Hz	2Hz to 20Hz
	100Hz	20Hz to 200Hz
	1kHz	0.2kHz to 2.0kHz
	10kHz	2kHz to 20kHz
	100kHz	20kHz to 200kHz
	1MHz	0.2MHz to 2.0MHz
Frequency Multiplier		0.2 to 2.0
Frequency Accuracy		±5% of full-scale
Voltage Controlled Frequency		1000:1 minimum for 0 to 10V (±1V) input; 0 to -10V (±1V) input
Input Impedance		10kΩ ±10%
Sine Wave Distortion		<1% 0.2Hz to 200kHz, 30dB down minimum 200kHz to 2MHz
Square Wave Rise and Fall Time		<100nsec
Pulse Output Rise and Fall Time		<25nsec (5TTL loads)
Main Output		
Amplitude		>20Vp-p (open circuit); >10Vp-p (into 50Ω load)
Impedance		50Ω ±6%
Amplitude Range		<20mVp-p to >20Vp-p (open circuit)
Attenuators		Two each, -20dB ±1dB each
DC Offset Control		<-10V to >+10V (open circuit); <-5V to >+5V (50Ω load)
Duty Cycle Control		(50% at max. CCW position); 5 to 1 min. duty cycle change; Note: Frequency divides down by ten when not at a 50% duty cycle.

GENERAL

Frequency Range: 0.2Hz to 2MHz (7 ranges); **Accessories:** AC power cord; two coaxial test cables, two spare fuses, Operator's Manual; **Power:** 117VAC or 234VAC, 50 or 60Hz ≤ 20VA; **Input:** Voltage controlled frequency (VCF); **Output:** Sine wave, square wave, triangle wave and TTL pulse; **Operating Temperature:** 0°C to 50°C (32°F to +122°F), 80% R.H.; **Storage Temperature:** -40°C to 70°C (-40°F to +158°F), 70% R.H.; **Dimensions (H x W x D):** 7.9cm x 23cm x 33cm (3.1" x 9" x 13"); **Weight:** 1.3kg (3.5 lb); **Warranty:** One Year

