

Function Generators



4011A



4010A

Model 4011A 5 MHz Function Generator with Digital Display

- 0.5 Hz to 5 MHz
- Sine, Square, Triangle, Pulse, & Ramp output
- Coarse and Fine tuning
- 4 digit LED display
- Variable duty cycle
- Variable DC offset

Model 4010A 2 MHz Function Generator

- 0.2 Hz to 2 MHz
- Sine, Square, Triangle, Pulse, & Ramp output
- Variable duty cycle
- Variable DC offset

Specifications

	models	
	4011A	4010A
Frequency Characteristics		
Waveforms	Sine, Square, Triangle, \pm Pulse, \pm Ramp	
Range	0.5 Hz to 5 MHz in 7 ranges	0.2 Hz to 2 MHz in 7 ranges
Resolution	4 digits	NA
Dial Accuracy	NA	$\pm 5\%$ typical
Tuning Range	Coarse, 10:1 Fine $\pm 5\%$ of coarse setting	10:1 Does not apply
Variable Duty Cycle	15:85:15 Cont variable	15:85:15 cont variable
Operating Modes	Normal, VCG	Normal, VCG
Output Characteristics		
Impedance	50 Ω $\pm 10\%$	
Level	20 V p-p Open circuit, 10V p-p into 50 Ω	
Amplitude	Variable, 20 dB range typical	
Attenuation	-20 dB ± 1 dB	
DC Offset	Preset ± 0.1 V typ Variable: ± 10 V open-circuit ± 5 into 50 Ω	
SINE Wave	Distortion: $\leq 3\%$ @ 1 kHz Flatness: $\pm 5\%$ (.45 dB)	Distortion: $\leq 4\%$ @ 1 kHz Flatness: $\pm 5\%$ (.45 dB)
Square Wave	Symmetry: 0.5 Hz to 100 KHz $\leq 2\%$ Risettime: ≤ 120 nS	
Triangle Wave	Linearity: $\geq 98\%$ to 100 KHz, $\geq 95\%$ to 2 MHz	
TTL Output		
Level	0.8V to 2.4V	
Rise time	≤ 20 nS (4011A), ≤ 50 nS (4010A)	
Duty Cycle	50% typical	
CMOS Output		
Max. Frequency	2 MHz	2 MHz
Level	4V to 14V ± 0.5 p-p cont. variable	
Rise Time	≤ 120 nS	
Input		
Input Voltage	0-10V ± 1 V causes a 100:1 frequency change	
Impedance	10K Ω $\pm 5\%$	
Frequency Counter		
Accuracy	Time Base Accy ± 1 count	NA
Time Base Accuracy	± 10 PPM (23°C $\pm 5^\circ$ C)	NA
Display	4 digit LED	NA
Power Source	120/230 VAC $\pm 10\%$, 50/60 Hz, internal jumper selectable	
Dimensions (H x W x D)	4.5 x 11.75 x 10.375" (114 x 298 x 264 mm)	
Weight	4 lbs (1.8 kg)	

Accessories

Two Year Warranty

SUPPLIED: Output cable with BNC to alligator clips, Instruction Manual
Carrying Case (not included): LC-40