

Data Sheet

The B+K Model 4070A represents the finest single source for signal generation to date. Combining the latest DSP and DDS technologies, the 4070A offers a number of operating modes, providing a versatile, cost-effective signal source. You will find the 4070A is the best value and most capable instrument for any bench. Arbitrary Waveform Generator, Sweep Function Generator, Pulse, VCO, AM, FM, \emptyset Modulation, FSK and Burst Modes are all accessed quickly and easily from the front panel keypad. Being a true 12 bit arbitrary generator, the 4070A is stable, accurate and drift free. Unlike competitive models, the 4070A generates every data point independently of the repetition rate instead of a simple look-up table. Custom design waveforms on a PC, or download from a number of sources, spread sheet, oscilloscope or application program - the 4070A will perform like no other signal source.

- **Arbitrary Waveform Generation**
Design custom waveforms on your PC and download for generation 40 MS/s max update rate 12 bit resolution, 32K buffer. Arbitrary waveforms may be designed with a graphical Windows®-based design tool, which is available for free download from www.bkprecision.com.
- **Function Generator**
Generate Triangle, Ramp, Sinewave and others.
- **Pulse Generator**
Digital waveforms with an adjustable duty cycle.
- **High Stability Timebase**
Guarantee ± 5 ppm frequency over 32° to 104°F (0 to 40°C) range.

Features

- **Modes**
- **Basic Sine/Square Wave**
- **Linear/Log Sweep (Free Run or Triggered)**
- **Internal/ External AM**
- **Internal/ External FM**
- **Internal/ External PM**
- **Internal/ External SSB**
- **Internal/ External BPSK**
- **Internal/ External FSK (Ext FSK to 3MHz)**
- **Burst (Int/Ext trigger)**



Features (cont.)

- **DTMF Generation**
- **DTMF Detection**
- **Power Measurement**
- **Dualtone Generation**
- **Arbitrary Waveform**
- **Function Generator**
- **Pulse Generator**

Specifications	Model
	4070A
MAIN OUTPUT	
Frequency	DC to 21.5000000 MHz, 0.01 Hz steps
Level	4 mVp-p to 10.000 Vp-p, 1 mV steps (into 50 Ω) or -44 dBm to +24 dBm, 0.1 dBm steps (into 50 Ω)
Level Accuracy	$\pm 1\%$
Flatness	± 0.2 dB (DC-21.5 MHz) Level 5V @50 Ω
DC offset	0V to ± 10 V, 1 mV steps (into 50 Ω)
Output impedance	50 Ω
Freq. accuracy	± 10 ppm (.001%), ± 5 ppm optional (@50 Ω)
Phase Nois:	< -55 dBc in a 30 kHz band
ARBITRARY WAVEFORM GENERATOR MODE	
Vertical Resolution	12 bits
Sample Rate	Variable from 0Hz to 40 Msamples/Sec. in .1 Hz steps
Sample Buffer Depth	32,768 data points
Data Formats Supported	Floating Point, Decimal, Hexadecimal, Integer, Binary, Digital, CSV and PRN formats
Nonvolatile waveform storage	1 location, 32,768 points