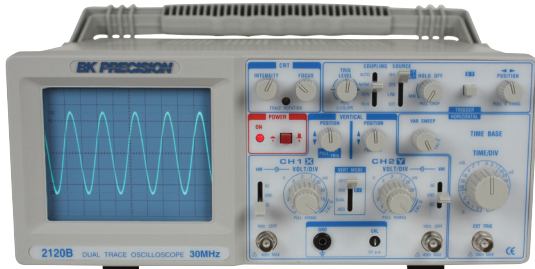


# Data Sheet

## 30 MHz Dual Trace Analog Oscilloscope With Probes

### Model 2120B



B&K Precision's model 2120B is a dual trace oscilloscope that offers high performance at a low price. Most competitor's entry level oscilloscopes have a 20 MHz bandwidth, while B&K Precision's models 2120B has a bandwidth of 30 MHz. This oscilloscope is built by and backed by B&K Precision, a company that has been selling reliable, durable, value priced test instruments for over 50 years.

- Dual or single trace operation
- 5 mV/div sensitivity
- AUTO/NORM triggered sweep operation with AC, TVH, TVV and line coupling
- Compact low profile design
- cUL certified



Specifications	2120B
<b>VERTICAL AMPLIFIERS (CH 1 and CH 2)</b>	
Sensitivity	5 mV/div to 5 V/div, 1 mV/div to 1 V/div at X5
Attenuator	10 steps in 1-2-5 sequence. Vernier control provides full adjustment between steps
Accuracy	± 3%, ± 5% at X5
Input Resistance	1 MΩ ± 2%
Input Capacitance	25 pF ± 10pF
Frequency Response	5 mV to 5 V/div: DC to 30 MHz (-3dB). X5: DC to 10 MHz (-3dB)
Rise Time	12 ns (Overshoot ≤ 5%)
Operating Modes	CH 1: CH 1, single trace
CH 2	CH 2, single trace
ALT	dual trace, alternating
CHOP	dual trace, chopped
ADD	algebraic sum of CH 1 + CH 2
Polarity Reversal	CH 2 only
Maximum Input Voltage	400 V (DC + AC peak)
<b>SWEEP SYSTEM</b>	
Sweep Speed	0.1 μs/div to 2 s/div in 1-2-5 sequence, 23 steps, Vernier control provides fully adjustable sweep time between steps.
Accuracy	± 3%
Sweep Magnification	10x
<b>TRIGGERING</b>	
Triggering Modes	AUTO (free run) or NORM, TV-V, TV-H
Trigger Source	CH 1, CH 2, ALT, EXT, LINE
Maximum External Trigger Voltage	300 V (DC + AC peak)
Trigger Coupling	AC 30 Hz to 30 MHz
TV H	Used for triggering from horizontal sync pulses
TV V	Used for triggering from vertical sync pulses
<b>TRIGGER SENSITIVITY</b>	
Auto	Bandwidth: 100 Hz-30 MHz, Internal: 1.5 div, External: 100 mV
Norm	Bandwidth: DC to 30 MHz, Internal: 1.5 div, External: 100 mV
TV V	Bandwidth: 20 Hz-1 kHz, Internal: .5 div, External: 100 mV
TV H	Bandwidth: 1 kHz-100 kHz, Internal: .5 div, External: 100 mV
<b>HORIZONTAL AMPLIFIER (Input through channel 2 input)</b>	
X-Y Mode	Switch selectable using X-Y switch. CH 1: X axis, CH 2: Y axis
Sensitivity	Same as vertical channel 1
Input Impedance	Same as vertical channel 1
Frequency Response	DC to 1 MHz typical (-3 dB)
X-Y Phase Difference	Approximately 3° at 50 kHz
Maximum Input Voltage	Same as vertical channel 1
<b>CRT</b>	
Type	Rectangular with internal graticule
Display Area	8 x 10 div (1 div = 1 cm)
Accelerating Voltage	2 kV
Phosphor	P31
Trace Rotation	Electrical, front panel adjustable
Calibrating Voltage	1 kHz (± 10%) Positive Square Wave, 2 V p-p (± 3%)
<b>GENERAL</b>	
Temperature	Within Specified Accuracy: 50° to 95°F (10° to 35°C), ≤ 85% RH Full Operation: 32° to 104°F (0° to 40°C), ≤ 85% RH Storage: -4° to 158°F (-20° to +70°C)
Power Requirements	100/120/220/240 VAC ± 10%, 50/60 Hz, approximately 40 W.
Dimensions (WxHxD)	7 x 14.5 x 17.25" (180 x 370 x 440 mm)
Weight	Approximately 17.2 lbs (7.8 kg)
<b>Two Year Warranty</b>	
Supplies Accessories	Instruction Manual, Two PR-33A x1/x10 Probes or equivalent, AC Power Cord, Spare Fuse
Optional Accessories	PR-32A Demodulator Probe, PR-37A x1/x10/REF Probe, PR-100A x100 Probe, PR-55 High Voltage x1000 Probe, LC-210A Carrying Case