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
VERTICAL AMPLIFIERS (CH 1 and	CH 2)
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	I 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
СНОР	dual trace, chopped
ADD	agebraic sum of CH 1 + CH 2
Polarity Reversal	CH 2 only
Maximum Input Voltage	400 V (DC + AC peak)
SWEEP SYSTEM	·
Sweep Speed	0.1 μ s/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
TRIGGERING	
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
TRIGGER SENSITIVITY	
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: I kHz-100 kHz, Internal: .5 div, External: 100 mV
HORIZONTAL AMPLIFIER (Input t	hrough channel 2 input)
X-Y Mode	Switch selectable using X-Y switch. CH 1: X axis, CH 2: Y axis
Sensitivity	Same as vertical channel I
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
CRT	
Туре	Rectangular with internal graticule
Display Area	$8 \times 10 \text{ div} (1 \text{ div} = 1 \text{ cm})$
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%)
GENERAL	
	Within Specified Accuracy: 50° to 95°F (10° to 35°C), ≤85% RH
Temperature	Full Operation: 32° to 104°F (0° to 40°C), \leq 85% RH
	Storage: -4° to 158°F (-20° to +70°C
Power Requirements	$100/120/220/240 \text{ VAC } \pm 10\%$, 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)
	Two Year Warranty
Supplies Accessories	Instruction Manual, Two PR-33A x1/x10 Probes or equivalent,
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Optional Accessories	PR-32A Demodulator Probe, PR-37A x1/x10/REF. Probe, PR-100A x100 Probe,

