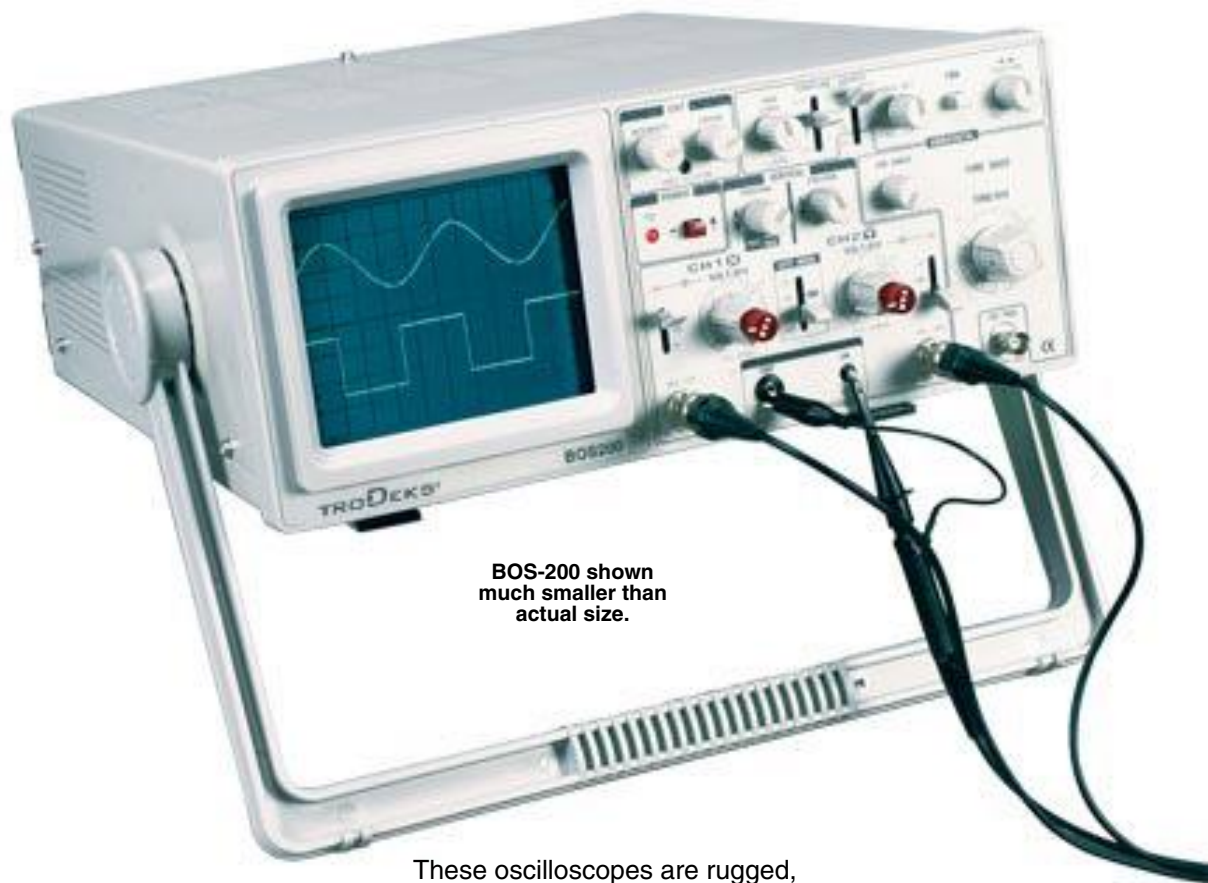


# Benchtop Oscilloscope



## BOS Series



- ✓ 20 to 60 MHz Dual Trace, ALT Trigger
- ✓ Vertical Sensitivity: 1 mV/DIV
- ✓ Horizontal Resolution: 10 nS
- ✓ Hold-Off, X-Y Operation, Z-Mod, Y-Output
- ✓ 23 Calibrated Ranges, Main Time Base

The BOS Series comprises dual-channel oscilloscopes with frequency bandwidths of 40 to 100 MHz at -3 dB, a maximum sweep of 10 ns, a maximum sensitivity of 1 mV/DIV, and 150 mm rectangular CRT with internal graticule.

These oscilloscopes are rugged, easy to operate, and highly reliable. They are ideal for research, production, and electronics applications. The BOS converts a high-input differential voltage ( $\leq 1300$  Vp) into a low voltage ( $\leq 6.5$  V).

Optional accessories include differential voltage probes, which provide a safe means of measuring a floating potential.

To Order	
Model No.	Description
BOS-200	20 MHz analog oscilloscope
BOS-205	20 MHz with delay sweep
BOS-350	40 MHz analog oscilloscope
BOS-355	40 MHz with delay sweep
BOS-605	60 MHz with delay sweep

Accessories	
Model No.	Description
BOSP-260	Replacement oscilloscope probe for 60 MHz bandwidth x1, x10
BOSP-9100	Replacement oscilloscope probe for 100 MHz bandwidth x1, x10

Comes complete with power cord, 110V fuse, 220V fuse, plastic screwdriver, 2 probes.  
**Ordering Examples:** BOS-200, 20 MHz analog oscilloscope.

## Specifications

Models	BOS-200	BOS-205	BOS-350	BOS-355	BOS-605
Cathode Ray Tube	6" diagonal, rectangular screen with internal graticule 8 x 10 DIV (1 DIV = 1 cm), B31 phosphor, 2 kV acceleration voltage				6" diagonal, rectangular screen with internal graticule 8 x 10 DIV (1 DIV = 1 cm), B31 phosphor, 12 kV accel voltage
Vertical Deflection					
Bandwidth	DC to 20 MHz (-3 dB)		DC to 40 MHz (-3 dB)		DC to 60 MHz (-3 dB)
Sensitivity	1 mV/DIV to 1 V/DIV (5 MHz, -3 dB), x5 gain selected 5 mV/DIV to 5 V/DIV		1 mV/DIV to 1 V/DIV (10 MHz, -3 dB), x5 gain selected 5 mV/DIV to 5 V/DIV		1 mV/DIV to 1 V/DIV (15 MHz, -3 dB), x5 gain selected 5 mV/DIV to 5 V/DIV
Attenuator	1-2-5 sequence, 10 step with variable control				
Input Impedance	1 MΩ ±2%, 25 pF ± 10%				
Max Input Voltage	400 V (DC + AC peak)				
Rise Time	About 17.5 ns		About 8.8 ns		About 5.8 ns
Overshoot	Less than 5%				
Operation Mode	CH 1, CH2, DUAL (ALT, CHOP)				
Algebraic Addition	CH 1 + CH 2, CH 1 - CH 2				
Inverter	CH 2 Only				
Horizontal Deflection					
X-Y Mode	Switch slectable using X-Y switch; CH 1: X axis, CH 2: Y axis				
Accuracy	X Axis: ±6%, Y Axis: ±3%				
Bandwidth	DC to 1 MHz (-3 dB)				
X-Y Phase Difference	Approx. 3 degrees at 50 kHz				
Sweep System					
Sweep Display Mode	Main, Mix	Main, Mix, Delay	Main, Mix	Main, Mix, Delay	Main, Mix, Delay
Hold-Off Time	5:1 continuously variable				
Main Sweep					
Sweep Speed	0.1 μs/DIV to 2.0 s/DIV in 1-2-5 sequence, 23 steps				
Accuracy	±3%				
Variable Time Control	5:1, uncalibrated, continuously variable between steps				
Sweep Magnification	10x, ±10%, extended sweep speed up to 10 ns/DIV				
Delay Sweep					
Sweep Speed	0.1 μs/DIV to 2.0 s/DIV in 1-2-5 sequence, 23 steps			0.1 μs/DIV to 2.0 s/DIV in 1-2-5 sequence, 23 steps	
Accuracy	±3%			±3%	
Sweep Magnification	10x, ±10%, extended sweep speed up to 10 ns/DIV			10x, ± 10%, extended sweep speed up to 10 ns/DIV	
Delay Timeposition	Variable control to locate desirable waveform for extending			Variable control to locate desirable waveform for extending	
Triggering					
Trigger Coupling	AUTO, NORM TV-V, TV-H			AUTO, NORM TV-V, TV-H	
Trigger Source	CH 1, CH 2, ALT, LINE, EXT			CH 1, CH 2, ALT, LINE, EXT	
Slope	±			±	
Trigger Sensitivity					
Coupling	TV-V, TV-H, Auto, Nom				
Bandwidth	DC to 1 kHz, 1 kHz to 100 kHz , 100 Hz to 20 MHz, 100 Hz to 20 MHz				
Interior	1.0 DIV, 1.5 DIV, 1.0 DIV, 0.5 Vp-p				
Exterior	0.5 Vp-p				
Dimensions	324 W x 398 D x 132 mm H (12.75 x 15.67 x 5.20")				
Net Weight	Approx. 7.6 kg (16.75 lb)				
Rated Range of Use	10 to 35°C (50 to 95°F), 10 to 80% RH				
Component Test					
Test Voltag	Max 6 Vrms (open circuit)			Max 6 Vrms (open circuit)	
Test Current	Max 11 mA (shorted)			Max 11 mA (shorted)	
Test Frequency	Line frequency			Line frequency	
Components	Capacitor, inductor, diode, transistor, zener, etc.			Capacitor, inductor, diode, transistor, zener, etc.	
CH 2 Output					
Output level	100 mV (no load), 50 mV/DIV (with 50 Ω load)			100 mV (no load), 50 mV/DIV (with 50 Ω load)	
Bandwidth	20 Hz to 20 MHz		20 Hz to 40 MHz		20 Hz to 60 MHz
Graticule Illumination	Adjustable			Adjustable	
Calibrator	Square wave about 1 kHz, 2V p-p ±3%			Square wave about 1 kHz, 2V p-p ±3%	
Z-Modulation	Positive TTL signal, low-level blank intensity at any intensity, high-level unblank any intensity			Positive TTL signal, low-level blank intensity at any intensity, high-level unblank any intensity	
Trace Rotation	Adjustable on front panel			Adjustable on front panel	
Power Source	110 to 130V (800 mA fuse), 200 to 260V (600 mA fuse) 50/60 Hz selectable				
Power Consumption	Approx. 38 W				
Limits of Operation	0 to 50°C (32 to 122°F), 10 to 80% RH				
Storage Environment	-30 to 70°C (-22 to 158°F), 10 to 90% RH				