

PLUG-IN AMPLIFIER AND TIME BASES FOR 5400 SERIES

**5A48
5B42/5B40**



5A48 50 MHz DUAL-TRACE AMPLIFIER

The 5A48 is a dual-trace, 50 MHz plug-in amplifier with five operating modes used in 5400 Series mainframes. The 5A48 features selectable trigger source and crt readout.

CHARACTERISTICS

Bandwidth and Rise Time (-3 dB) - 50 MHz and 7 ns at 5 mV to 10 V/div; 25 MHz and 14 ns at 1 mV and 2 mV/div.

Deflection Factor and Accuracy - $\leq 3\%$ at 5 mV to 10 V/div, 15°C to 35°C; $\leq 4\%$ at 5 mV to 10 V/div, 0°C to 50°C; $\leq 5\%$ at 1 mV and 2 mV/div.

Input R and C - 1 M Ω , ≈ 24 pF.

Maximum Input Voltage - Dc Coupled: 250 V (dc + peak ac). Ac Coupled: 500 V (dc + peak ac). 500 V p-p.

Display Modes - CH 1, CH 2, CH 2 Invert, Add, Alt, Chop.

**High Performance
Amplifier and Time
Bases.**

5A48

- DC to 50 MHz Bandwidth
- 1 mV to 10 V/div Sensitivity
- Add and Invert Modes

ORDERING INFORMATION

5A48
Dual-Trace Amplifier **\$1,595**
Includes: Instruction/Service manual (070-1450-00), 1 year warranty

5B42/5B40 HORIZONTAL TIME BASES

The 5B42/5B40 Time Bases are designed for use in 5400 Series mainframes. They feature sweep rates from 10 ns to 5 s/div and crt readout of the sweep rate selected. Trigger coupling modes included are: ac, dc, HF reject, and LF reject. There is even an external amplifier input for X-Y measurements. The 5B42 also features delayed-sweep rates up to 10 ns/div. The delayed sweep feature allows very accurate ($\approx 1\%$) timing measurements to be made.

CHARACTERISTICS

Horizontal Sweep Rate - 0.1 μ s to 0.5 s/div, 10 ns/div (X10).

Sweep Accuracy -

Time/Div	Unmagnified		Magnified	
	15°C to 35°C	0°C to 50°C	15°C to 35°C	0°C to 50°C
0.5 μ s to 1 s/div	3%	4%	4%	5.5%
0.1 μ s, 0.2 μ s, 2 s, and 5 s/div	4%	5%	5%	6.5%

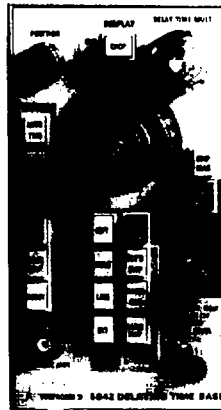
Ext Horizontal Input - Deflection Factor: 50 mV/div $\pm 3\%$. Input R and C: 1 M Ω , ≈ 24 pF. Bandwidth: 2 MHz.

DELAYED SWEEP (5B42)

Differential Time Measurement Accuracy - $\leq 1\% + 0.2\%$ of full scale from 1 μ s to 0.5 s delay time.

Jitter - $\leq 0.05\%$ of one division of delayed sweep selected.

Multiplier Range - 0.2 to 10 times the time/div setting



5B42



5B40

Trigger Sensitivity -

Mainframe	Frequency	Internal	External
5400	dc to 10 MHz	0.4 div ^{*1}	60 mV ^{*1}
		0.4 div ^{*2}	100 mV ^{*2}
5400	10 MHz to 60 MHz	1.0 div ^{*1}	150 mV ^{*1}
		1.0 div ^{*2}	400 mV ^{*2}
5100	dc to 2 MHz	0.4 div ^{*2}	100 mV ^{*2}

^{*1} 5B40 only.

^{*2} 5B42 only.

Trigger Operating Modes - Auto, Norm, Single Sweep.

Trigger Coupling - Ac, dc, LF REJ (Atten below 2.5 kHz), HF REJ (Atten above 50 kHz).

Ext. Trigger Level Range - ± 1.5 V (5B40) and ± 2.5 V (5B42).

5B42/5B40

- Single Sweep
- 10 ns to 5 s/div Sweep Rates
- Triggering to 50 MHz
- HF/LF Reject Coupling
- External Horizontal Amplifier
- Delayed Sweep (5B42)

ORDERING INFORMATION

5B42
Dual Time Base **\$1,995**
Includes: Instruction/Service manual (070-1447-00), 1 year warranty

5B40
Single Time Base **\$1,195**
Includes: Instruction/Service manual (070-1742-00), 1 year warranty