

AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS SINCE 1975

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INSTRUCTIONS

MODEL AVX-D-3-PS DELAY GENERATOR

S.N.:

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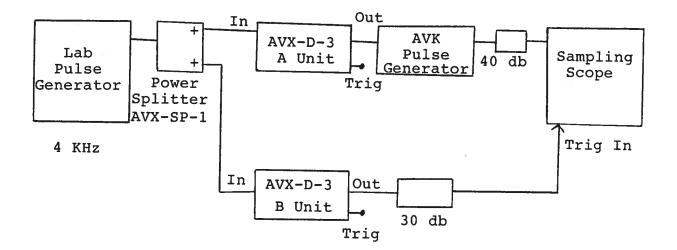
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SPECIFICATIONS MODEL AVX-D-3-PS

Model designation:	4VX-D-	3-PS
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Delay range:	Range Delay (us)
	1 10-24 2 24-39 3 38-53 4 53-69 5 69-84 6 84-99
PRF range:	0 to 10 KHz
Jitter:	10 us: < +100 ps 100 us: < +300 ps
Input PW	50 to 500 ns
Output PW:	200 to 300 ns
Trig. PW:	Equals input PW
Prop delay, IN to TRIG port:	< 30 ns
Signal amplitudes:	TTL levels Outputs will drive 50 ohm loads
Power requirements:	120/240V, 50-60 Hz
Connectors:	BNC

MODEL AVX-D-3 JITTER AND DELAY TEST ARRANGEMENT



GENERAL OPERATING INSTRUCTIONS

- 1) A worse-case jitter test of the AVX-D-3 unit was conducted using the above arrangement. The use of two delay generators serves to:
 - a) Aggravate the jitter since the resultant jitter is the consequence of two units.
 - b) Allow triggering of the sampling scope with long delays (e.g. 100 us) on the AVX-D-3 units.
- 2) The delays of the A and B units should be such that the time base of the sampling scope is triggered slightly ahead (e.g. 20-100 ns) of the application of the impulse to the vertical amplifier.
- 3) The photos on the following sheet illustrates the AVK output waveform for the following 3 cases:
 - a) No delay, i.e. AVX-D-3 A and B units removed.
 - b) Delay of about 10 us.
 - c) Delay of about 100 us.
- 4) The AVX-D-3 delay can be calibrated by means of a real time scope monitoring the time delay between the IN (or TRIG) and OUT ports.

PERFORMANCE CHECK SHEET