

INSTRUCTIONS

MODEL AVX-D-3-PS DELAY GENERATOR

S.N.:

WARRANTY

Avtech Electrosystems Ltd. warrants products of its manufacture to be free from defects in material and workmanship under conditions of normal use. If, within one year after delivery to the original owner, and after prepaid return by the original owner, this Avtech product is found to be defective, Avtech shall at its option repair or replace said defective item. This warranty does not apply to units which have been disassembled, modified or subjected to conditions exceeding the applicable specifications or ratings. This warranty is the extent of the obligation assumed by Avtech with respect to this product and no other warranty or guarantee is either expressed or implied.

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SPECIFICATIONS
MODEL AVX-D-3-PS

Model designation:	AVX-D-3-PS
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:
 - 2) Aggravate the jitter since the resultant jitter is the consequence of two units.
 - 3) Allow triggering of the sampling scope with long delays (e.g. 100 us) on the AVX-D-3 units.
- 4) 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.
- 5) The photos on the following sheet illustrates the AVK output waveform for the following 3 cases:
 - 6) No delay, i.e. AVX-D-3 A and B units removed.
 - 7) Delay of about 10 us.
 - 8) Delay of about 100 us.
- 9) 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