AVTECH ELECTROSYSTEMS LTD.

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INSTRUCTIONS

MODEL AVX-D-3-PS-UM1 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 dissembled, modified or subjected to conditions exceeding the applicable specifications or ratings. This warranty is the extent of the obligation or liability assumed by Avtech with respect to this product and no other warranty or guarantee is either expressed or implied.

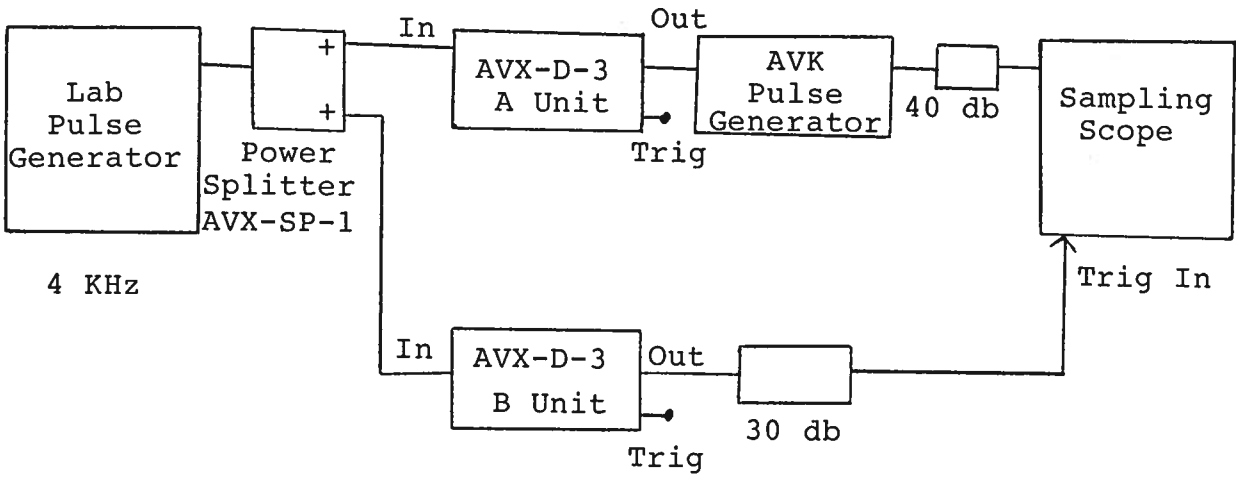
SPECIFICATIONS

MODEL AVX-D-3-PS-UM1

Model designation:	AVX-D-3-PS
Delay range:	Range — Delay (usec) 1 — 1 - 17.8 usec 2 — 17.8 - 34.5 usec 3 — 34.5 - 51 usec 4 — 51 - 68 usec 5 — 68 - 84 usec 6 — 84 - 102 usec
PRF range:	0 to 10 KHz
Jitter:	10 usec: $\leq \pm$100 psec 100 usec: $\leq \pm$300 psec
Input PW:	50 to 500 nsec
Output PW:	200 to 300 nsec
Trig. PW:	Equals input PW
Prop delay, IN to TRIG port:	$\leq$30 nsec
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



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 (eg. 100 usec) 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 (eg. 20-100 nsec) 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, ie. AVX-D-3 A and B units removed.
   b) Delay of about 10 usec.
   c) Delay of about 100 usec.

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.

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