

**AVTECH ELECTROSYSTEMS LTD.**

**NANOSECOND WAVEFORM ELECTRONICS  
ENGINEERING . MANUFACTURING**

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INSTRUCTIONS

Model AVX-D-5A-PS-EDF-W1-W2 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 or liability assumed by Avtech with respect to this product and no other warranty or guarantee is either expressed or implied.

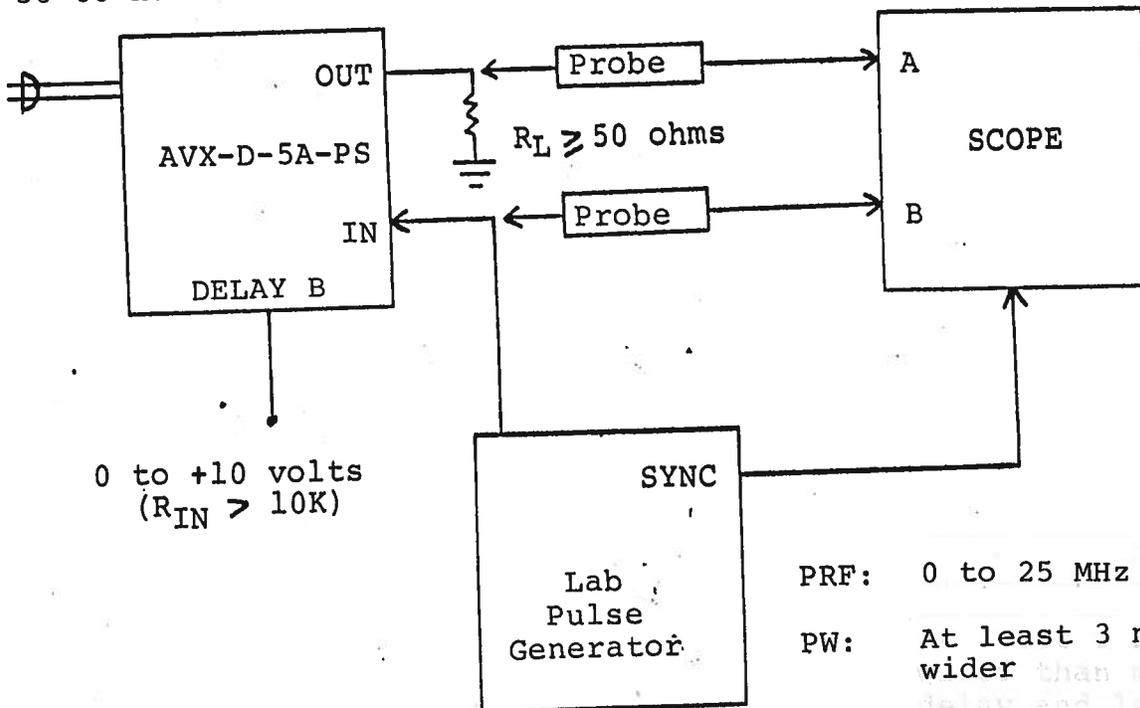
## Specifications

### Model AVX-D-5A-PS-EDF-W1-W2

Model designation:	AVX-D-5A-PS-EDF-W1-W2
Delay range:	20 nsec to 50 nsec. Controlled by 0 to +10V applied to delay terminal ( $R_{IN} > 10K$ ) or by one turn control
PRF range:	0 to 22 MHz
Jitter:	$\pm 10$ psec
Input PW:	$\geq 3$ nsec
Output PW:	2 to 10 nsec TTL (one turn control). Will drive 50 ohms
Signal amplitudes:	TTL levels. Outputs will drive 50 ohm loads
Power requirements:	120/240V, 50-60 Hz
Connectors:	BNC
Sweep rate:	Delay will respond to a 100 usec (or longer) ramp

## DELAY TEST ARRANGEMENT

120/240V  
50-60 Hz



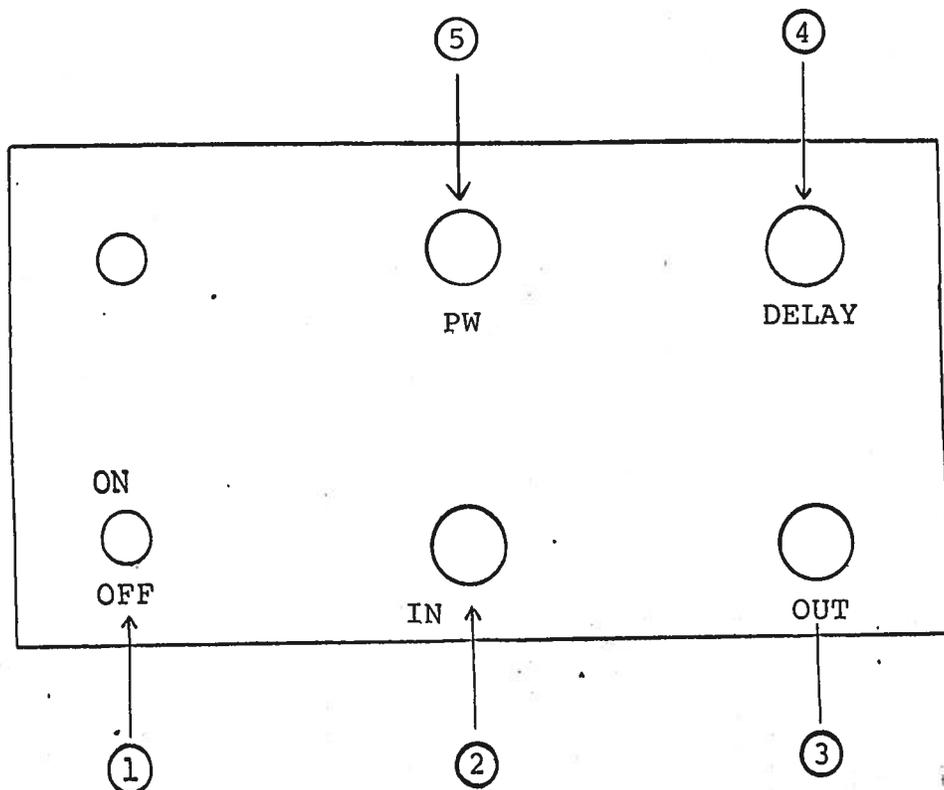
0 to +10 volts  
( $R_{IN} > 10K$ )

PRF: 0 to 25 MHz

PW: At least 3 nsec or wider than max desired delay and less than one half of PRF period

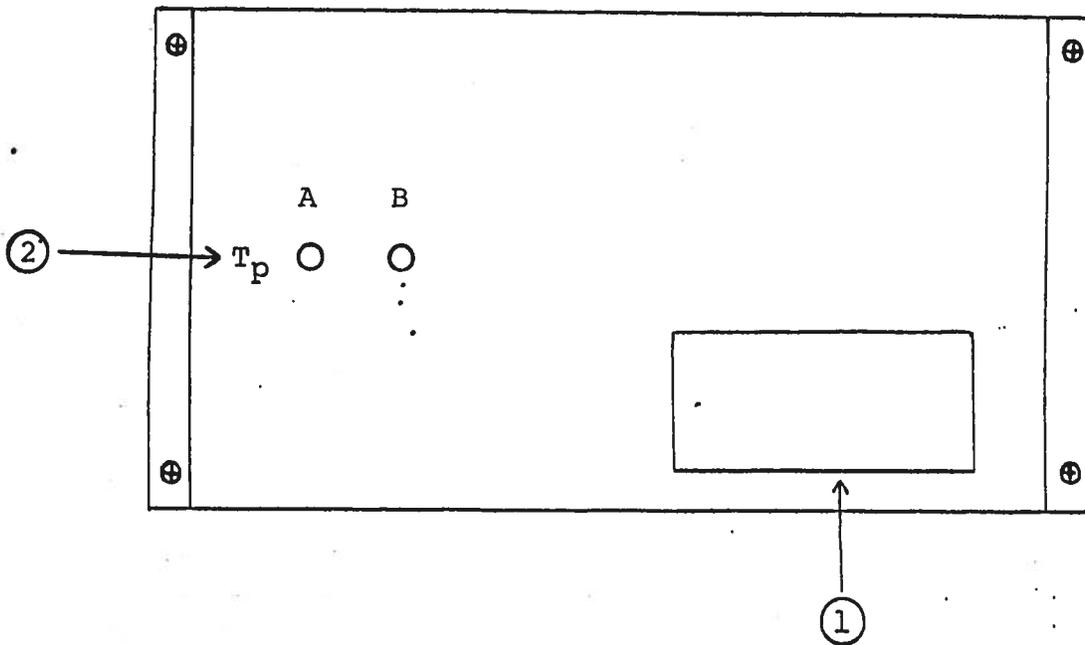
$V_{OUT}$ : +5 volts  
(TTL)

AVX-D-5A-PS FRONT PANEL



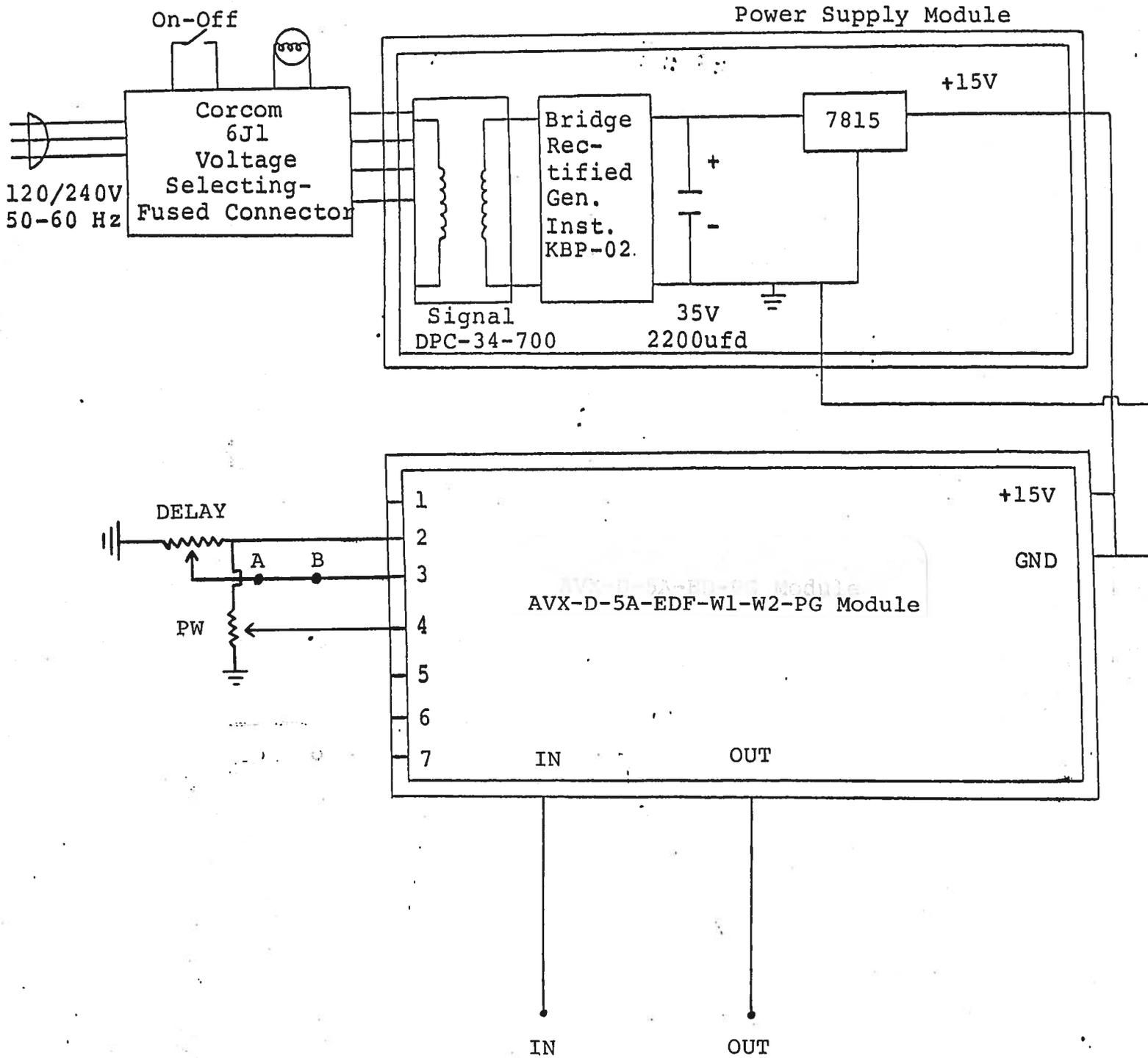
- ① ON-OFF Switch. Applies prime power to all stages.
- ② IN. BNC input trigger connector TTL level, PW 3 nsec or wider. Max allowed delay = less than one half PRF period.
- ③ OUT. BNC output connector TTL level, will drive 50 ohms. PW variable from 2 to 10 nsec.
- ④ DELAY. One turn control varies delay from 20 to 50 nsec. Note that output waveform may be lost for delay settings at near max CCW and max CW depending on the PRF rate. For initial trials, set mid range.

## BACK PANEL CONTROLS



- ① FUSED CONNECTOR, VOLTAGE SELECTOR. The detachable power cord is connected at this point. In addition, the removable cord is adjusted to select the desired input operating voltage. The unit also contains the main power fuse.
- ② DELAY Control. To voltage control the propagation delay, remove the jumper wire between banana plugs A and B and apply 0 to +10 volts to connector B ( $R_{IN} > 10K$ ). (option)

SYSTEM BLOCK DIAGRAM



Schroff 03.26.86

AVR-D-22-ED-PC Model 1