



AVTECH ELECTROSYSTEMS LTD.

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SINCE 1975

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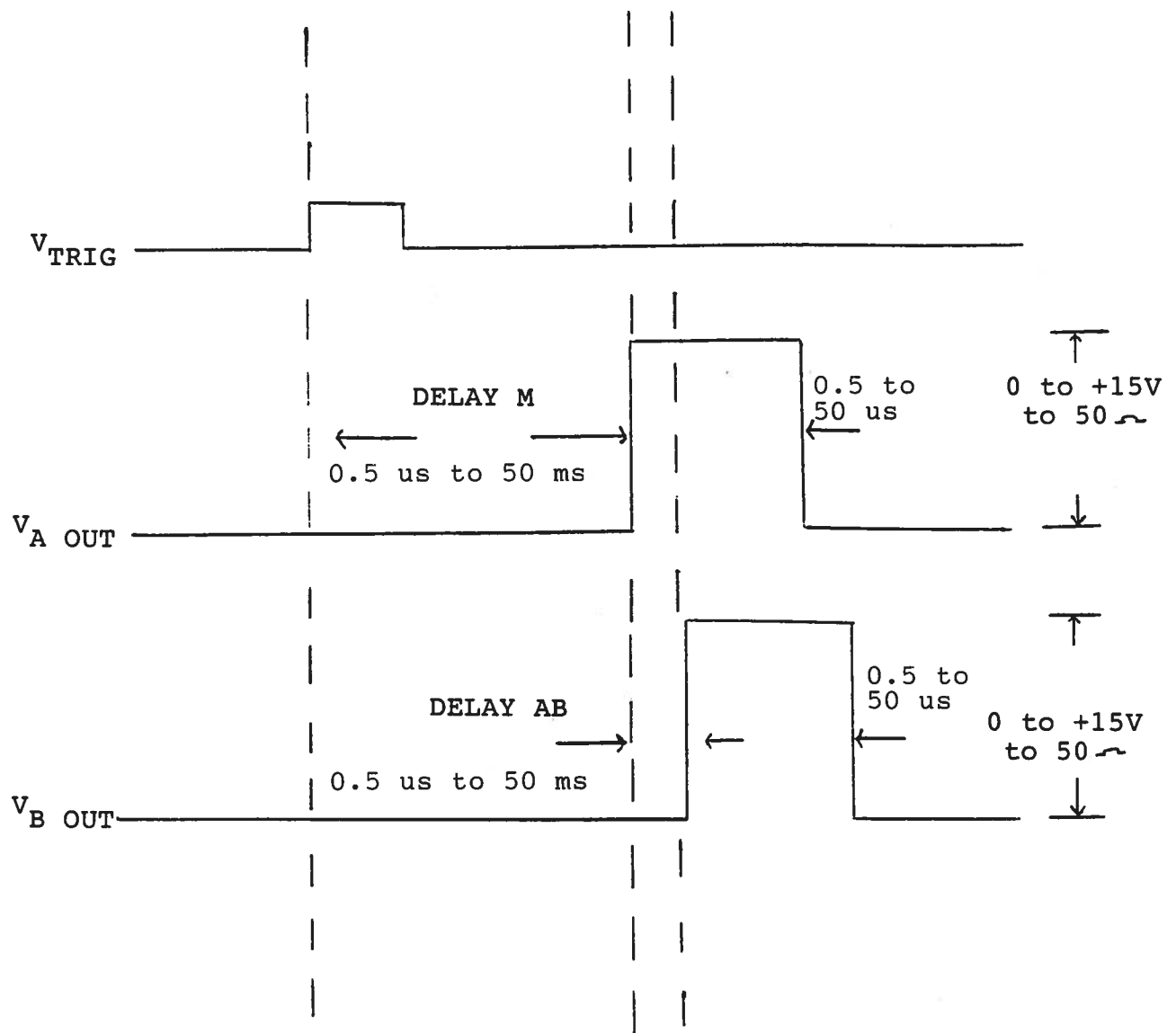
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INSTRUCTIONS

MODEL AVX-D-PS-SUA PULSE GENERATOR

S.N.:



INPUT AND OUTPUT WAVEFORMS FOR AVTECH MODEL AVX-D-4-PS DELAY GENERATOR

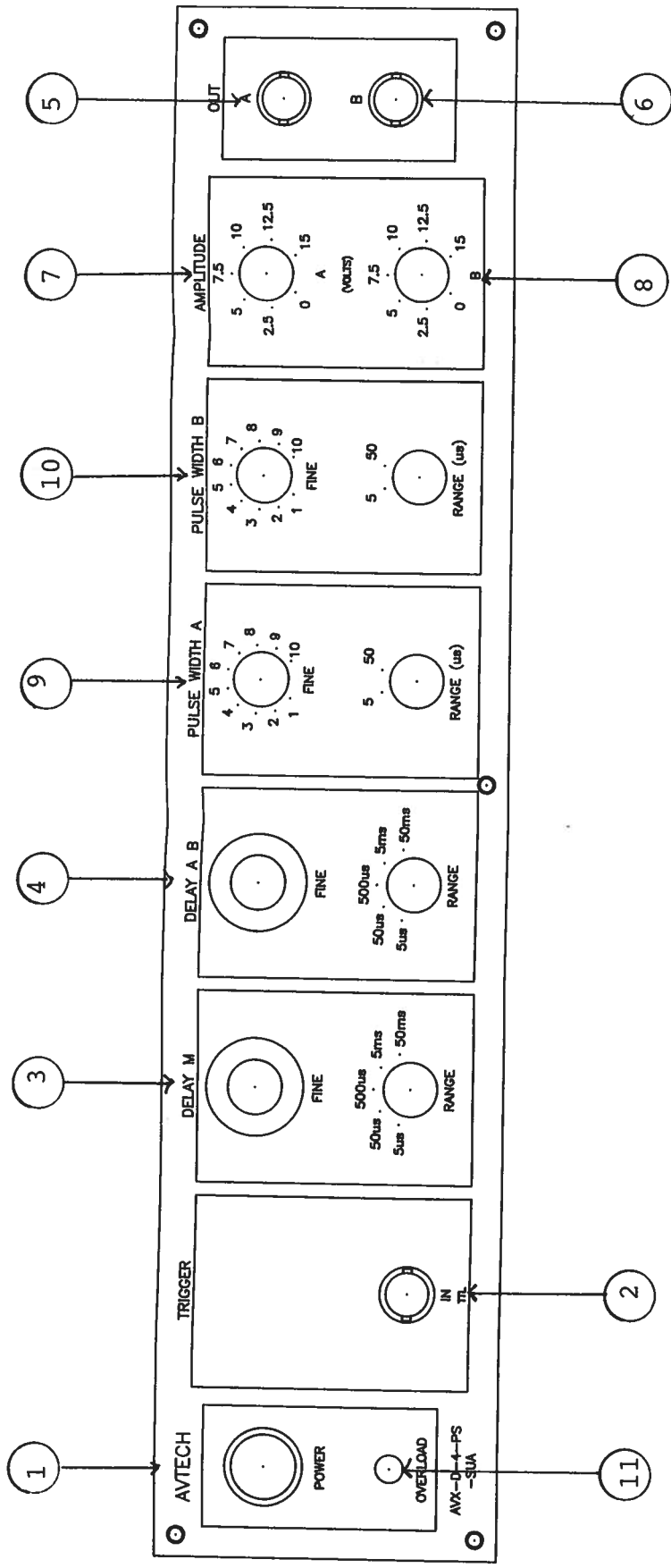
WARRANTY

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-4-PS

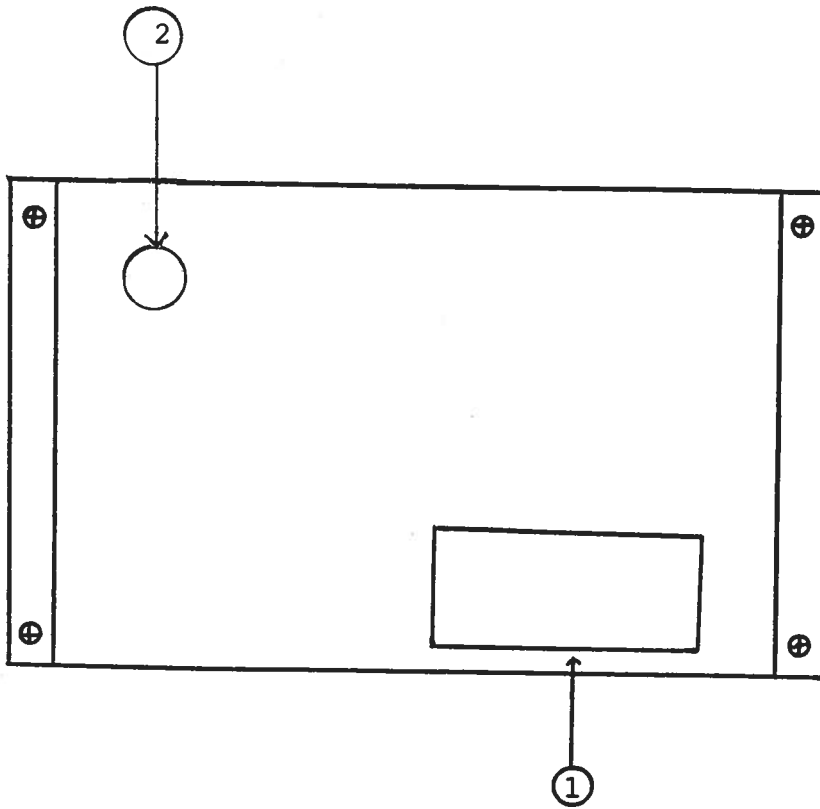
Input trigger:	TTL 20 ns or wider
Delay M:	Variable from 0.5 us to 50 ms via front panel 10 turn locking pot and a 5 position range switch
Delay AB:	Variable from 0.5 us to 50 ms via front panel 10 turn locking pot and a 5 position range switch
Output pulse width (A and B):	0.5 to 50 us (ten position range switch and a one turn control)
Output amplitude (A and B):	0 to +15 Volts to 50 Ohms
Output rise and fall time:	100 ns
PRF range:	0 to 4 kHz
Input and output connectors:	BNC
Prime power:	120/240 V. 50-60 Hz switchable. Detachable cord with fuse
Chassis size:	4 x 6 x 8 inches



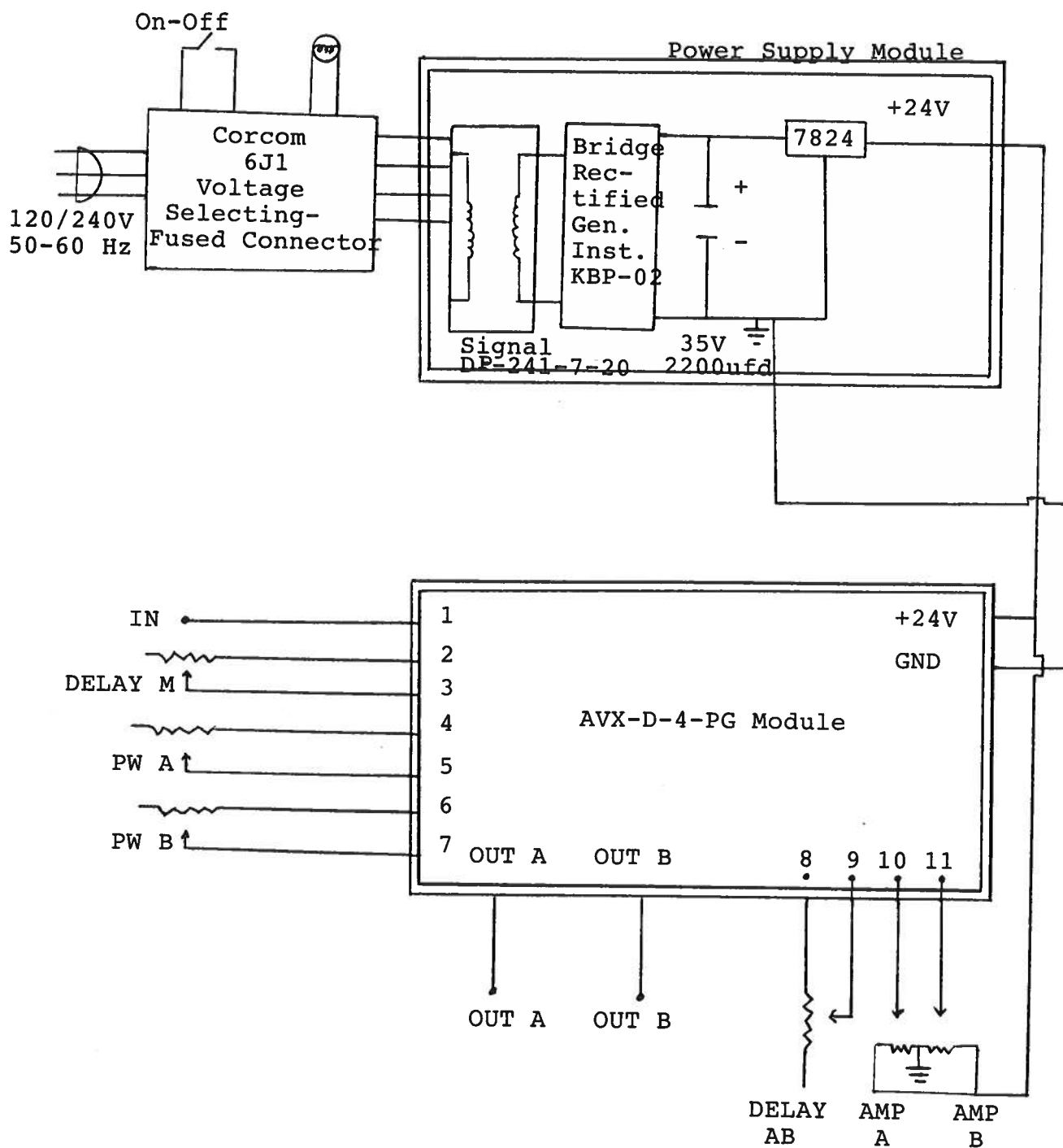
FRONT PANEL CONTROLS

- (1) ON-OFF Switch. Applies basic prime power to all stages.
- (2) IN. BNC input trigger connector TTL level 20 ns or wider pulse.
- (3) DELAY M. 10 turn locking pot varies relative delay between OUT A and input trigger from 0.5 us to 50 ms.
- (4) DELAY AB. 10 turn locking pot varies relative delay between OUT B and OUT A from +0.5 us to 50 ms independently of setting of DELAY M.
- (5) OUT A. BNC connector provides output pulse to 50 Ohm load.
- (6) OUT B. BNC connector provides output pulse to 50 Ohm load.
- (7) AMP A. One turn control varies output amplitude for A from 0 to +15 V.
- (8) AMP B. One turn control varies output amplitude for B from 0 to +15 V.
- (9) PW A. One turn control varies output pulse width for A from 0.1 to 1.0 us.
- (10) PW B. One turn control varies output pulse width for B from 0.1 to 1.0 us.
- (11) AVX-D units with a serial number higher than 5600 are protected by an automatic overload protective circuit which controls the front panel overload light. If the unit is overloaded (by operating at an exceedingly high duty cycle), the protective circuit will turn the output of the instrument OFF and turn the indicator light ON. The light will stay ON (i.e. output OFF) for about 5 seconds after which the instrument will attempt to turn ON (i.e. light OFF) for about 1 second. If the overload condition persists, the instrument will turn OFF again (i.e. light ON) for another 5 seconds. If the overload condition has been removed, the instrument will turn on and resume normal operation. Overload conditions may be removed by:
 - 1) Reducing PRF (i.e. switch to a lower range)
 - 2) Reducing pulse width (i.e. switch to a lower range)
 - 3) Remove short circuit (if any)

BACK PANEL CONTROLS



SYSTEM BLOCK DIAGRAM



- (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 (0.25A SB).
- (2) 1.0A SB. Fuse which protects the output stage if the output duty cycle rating is exceeded.

Jul 21/94