



AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS
SINCE 1975

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INSTRUCTIONS

MODEL AVX-D-4-C 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.

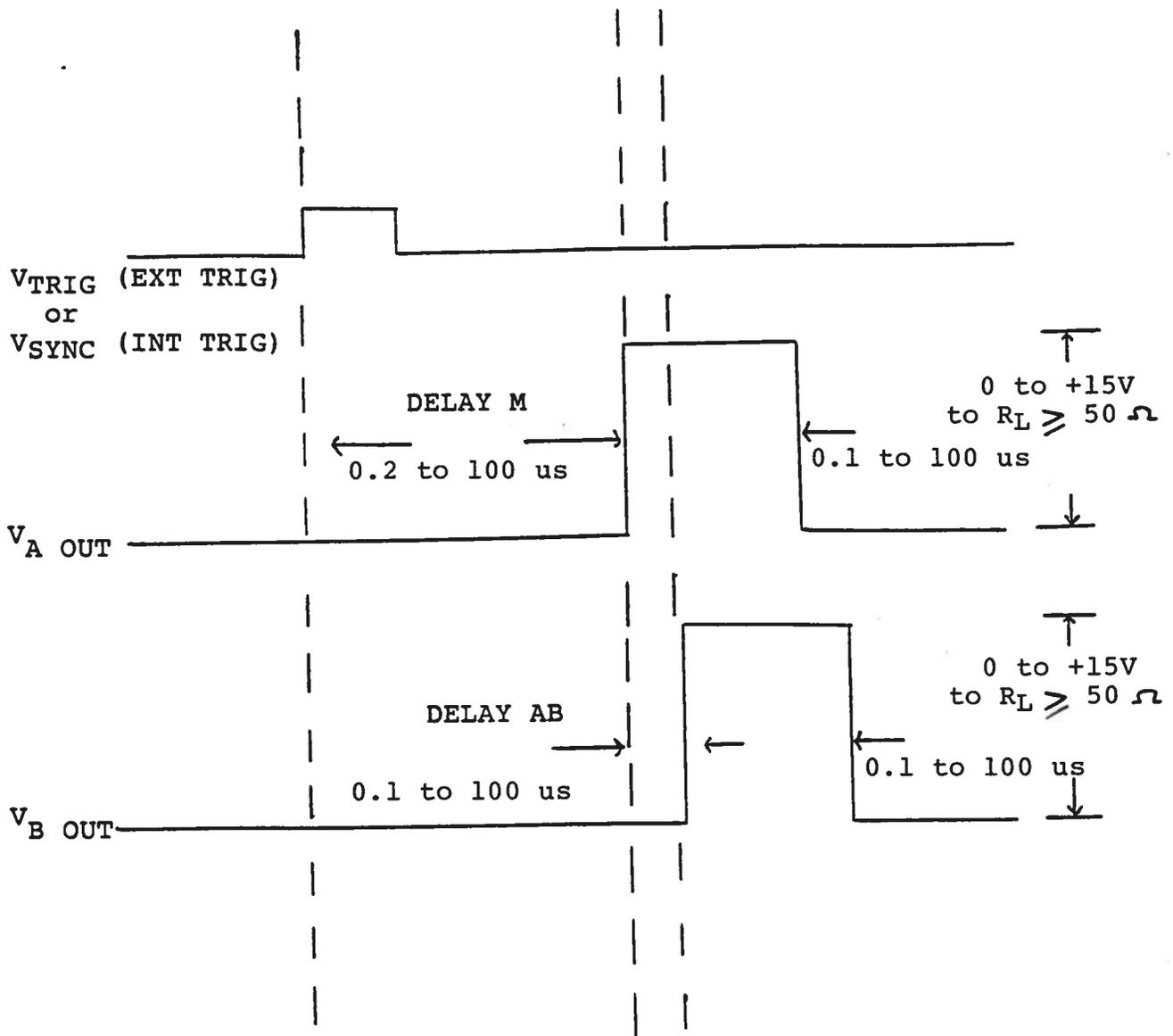


Fig. 1: INPUT AND OUTPUT WAVEFORMS FOR AVTECH MODEL AVX-D-4-C DELAY GENERATOR

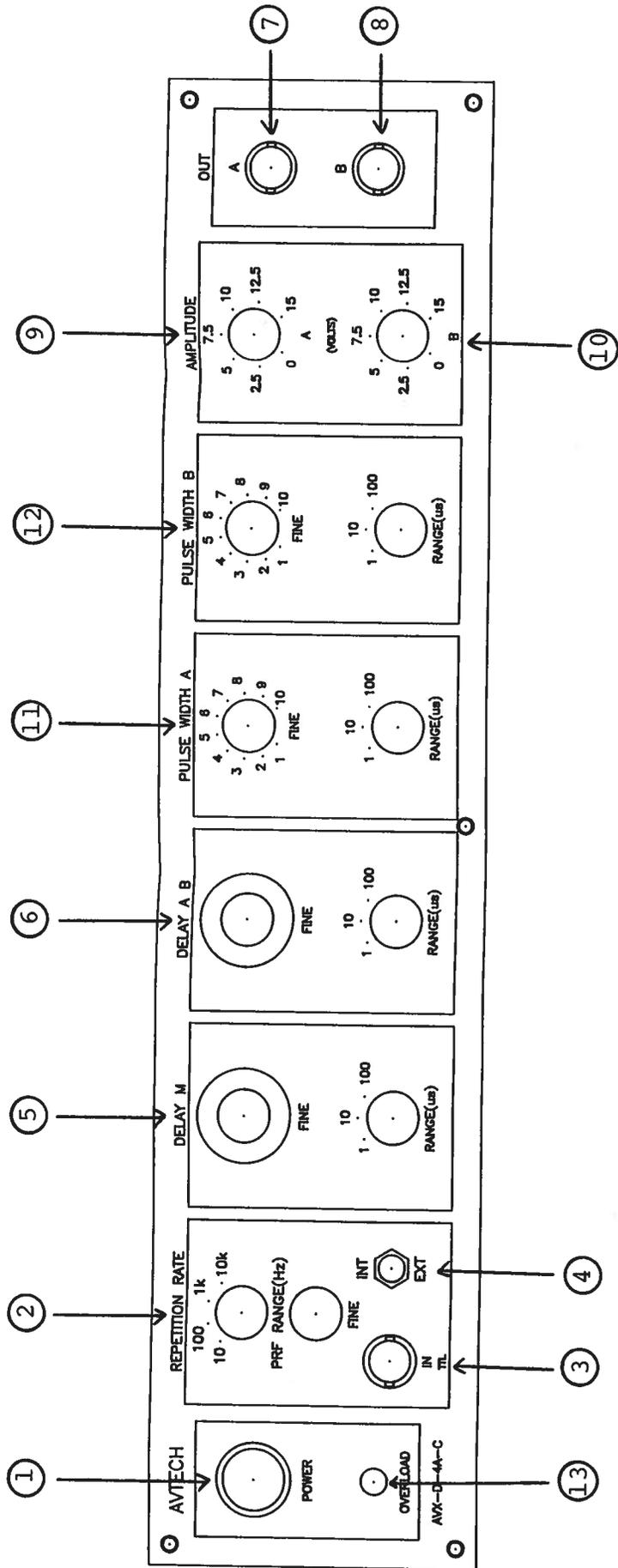


Fig. 2: FRONT PANEL CONTROLS

- (1) ON-OFF Switch. Applies prime power to all stages.
- (2) PRF. One turn control and 3 position range switch varies PRF from 1 Hz to 10 kHz as follows:

Range 1	1 Hz	10 Hz
Range 2	10 Hz	100 Hz
Range 3	100 Hz	1 kHz
Range 4	1 kHz	10 kHz
- (3) TRIG. +5 Volt 200 ns wide pulse output for scope triggering when operating on INT TRIG mode.
- (4) INT-EXT. To control PRF using internal clock (i.e. INT TRIG) set switch in INT position. Clock will trigger channels A and B and provide SYNC pulse at TRIG out. To control PRF using external pulser, set switch in EXT position and apply +5 Volt 50 ns or wider pulse at TRIG input (3).
- (5) DELAY M. 10 turn locking pot varies relative delay between OUT A and input trigger (or TRIG) from 0.2 to 100 us.
- (6) DELAY AB. 10 turn locking pot varies relative delay between OUT B and OUT A from 0.1 to 10 us independently of setting of DELAY M.
- (7) OUT A. BNC connector provides output pulse to 50 Ohm load (or larger).
- (8) OUT B. BNC connector provides output pulse to 50 Ohm load (or larger).
- (9) AMP A. One turn control varies output amplitude for A from 0 to +15 Volts.
- (10) AMP B. One turn control varies output amplitude for B from 0 to +15 V.
- (11) PW A. One turn control and 3-position range switch varies output pulse width for A as follows:

0.1 to 1.0 us
1.0 to 10 us
10 to 100 us

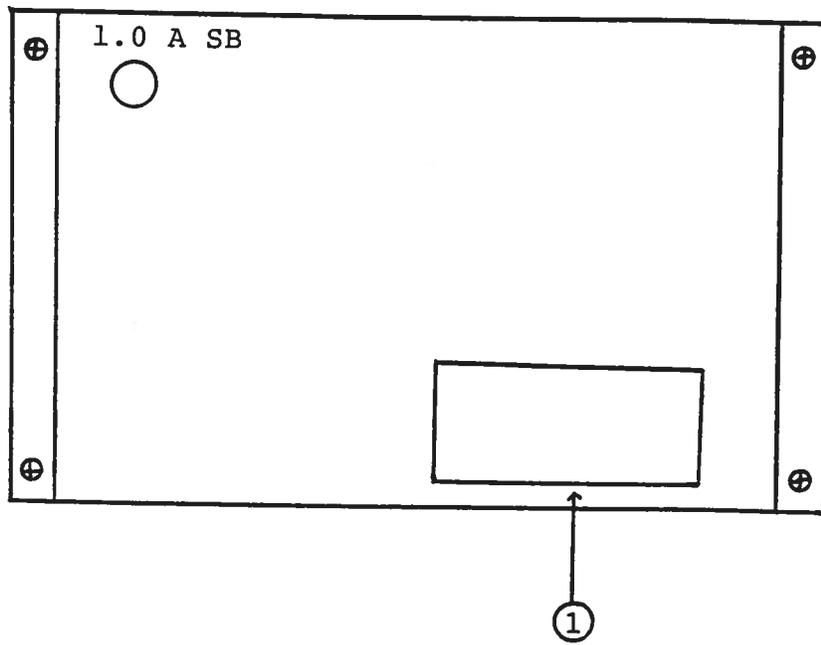
(12) PW B. One turn control and 3-position range switch varies output pulse width for B as follows:

0.1 to 1.0 us
1.0 to 10 us
10 to 100 us

(13) AVX-D-4-C 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 or by operating into a short circuit), 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) Removing output load short circuit (if any)

Fig. 3: 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 (0.5 A SB).
- (2) 1.0 A SB. Protects output stage against overload conditions.

ADDITIONAL ASSISTANCE

For additional assistance with this instrument, call (613) 226-5772 or Fax (613) 226-2802.

July 13/95

Disk: AVX-D, AVX-F

Name: AVXD4C.INS