## AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS ENGINEERING - MANUFACTURING

P.O. BOX 265 OGDENSBURG NEW YORK 13669 (315) 472-5270

BOX 5120, STN. "F" OTTAWA, ONTARIO CANADA K2C 3H4 TEL: (613) 226-5772 FAX: (613) 226-2802

### INSTRUCTIONS

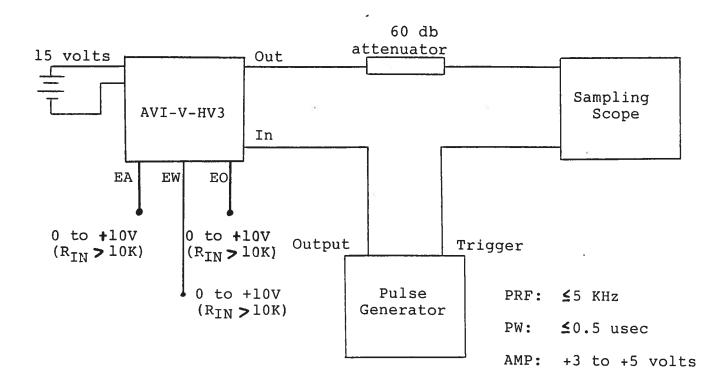
### MODEL AVI-V-HV3-EW-EA-EO-LIA PULSE GENERATOR

S.N.:

#### WARRANTY

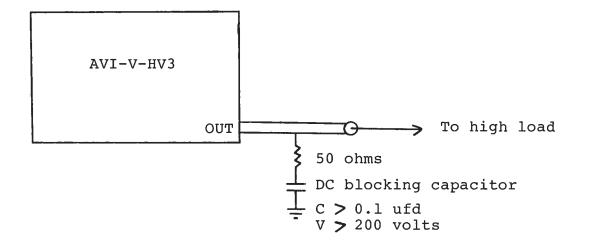
Avtech Electrosystems Ltd. warrants products of its manufacture to be free from defects in material and workmanship under conditions of normal use. If, within one year after delivery to the original owner, and after prepaid return by the original owner, this Avtech product is found to be defective, Avtech 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.

# MODEL AVI-V-HV3 PULSE GENERATOR TEST ARRANGEMENT



#### Notes:

- The bandwidth capability of components and instruments used to display the pulse generator output signal (attenuators, cables, connectors, etc.) should exceed 10 gigahertz.
- 2) The use of a 60 db attenuator will insure a peak input signal to the sampling scope of less than one volt.
- 3) In general, the source pulse generator trigger delay control should be set in the 0.1 to 1.0 usec range. Other settings should be as shown in the above diagram.
- 4) The Model AVI-V-HV3 pulse generator is designed to operate into a load impedance of 50 ohms (<u>CAUTION</u>: see 7 and 8 below).
- 5) WARNING: Model AVI-V-HV3 may fail if triggered at a PRF greater than 5 KHz.
- 6) The output pulse amplitude and pulse width are controlled by DC voltages (0 to +10V,  $R_{IN} \ge 10K$ ) applied to the AMP and PW solder terminals (see Fig. 1).
- 7) The DC offset is controlled by a DC voltage (0 to +10 volts,  $R_{IN} > 10K$ ) applied to the EO terminal. As the input is varied from 0 to +10 volts, the DC offset varies from -200 volts to +50 volts to a high impedance ( $R_L \gg 100K$ ). The DC offset is turned ON or OFF by the front panel two position switch.
- B) <u>CAUTION</u>: The DC offset circuit may be damaged if operated into a low impedance (i.e. 50 ohms or less). The following arrangement should be used to provide a 50 ohm termination for the pulse and a high impedance for the DC offset:



9) The monitor output provides a coincident attenuated (x10) replica of the pulse output (to 50 ohms). - M

a i e a grande a e entre a bidad a come entre e se entre a bidad a come entre e entre entre entre entre entre e