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 (613) 226-5772 TELEX 053-4591

INSTRUCTIONS

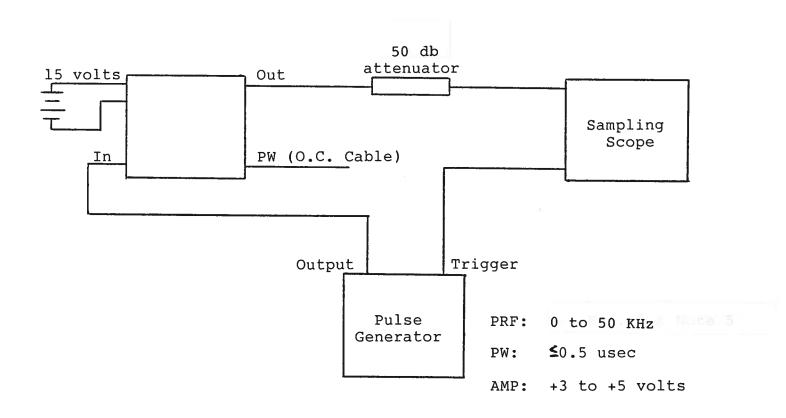
MODEL AVI-P-LIA PULSE GENERATOR

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 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 several gigahertz.
- 2) The use of a 50 db attenuation will insure a peak input signal to the sampling scope of less than one volt.
- 3) In general, the pulse generator trigger delay control should be set in the 100 nsec range. Other settings should be as shown in the above diagram. The Avtech pulse generator output is delayed with respect to the trigger input signal by about 50 nsec. (typically).
- 4) The Model AVI output pulse width is a linear function of the length of open circuited coaxial cable connected to the "PW" port. The open circuited delay line should be formed from high-quality semi-rigid 50 ohm coaxial cable (eg. 0.085 inch copper 50 ohm semi-rigid). Miniature flexible coaxial cable such as RG 173 may be used but will result in a degraded fall time. In the absence of an external cable connected to the tune port, Model AVI-MP outputs pulse widths less than 5.0 nsec. The output pulse width increases 3 nsec for each additional foot of cable added.
- 5) The Model AVI pulse generator can withstand an infinite VSWR on the output port.
- 6) The output amplitude is controlled by the one turn AMP control.