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INSTRUCTIONS

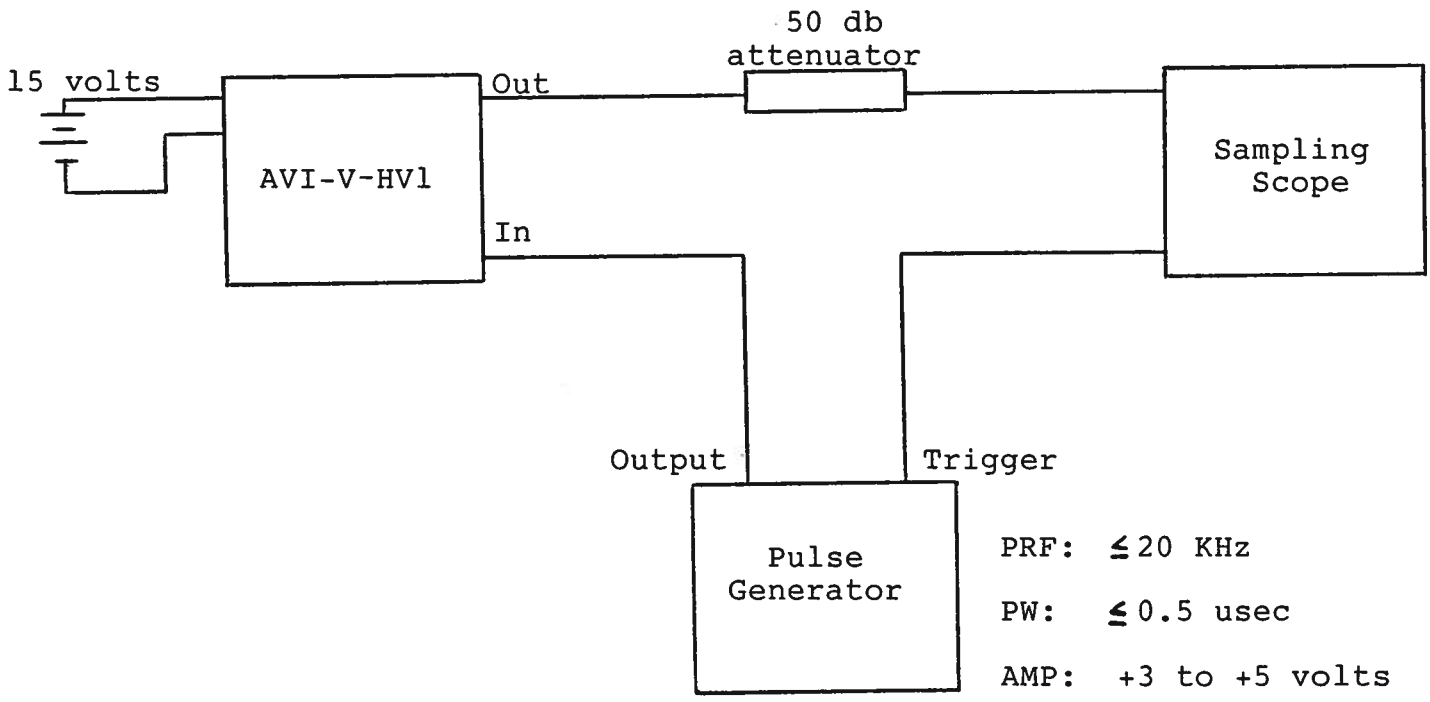
MODEL AVI-V-HV1-EA PULSE GENERATOR

S.N.:

WARRANTY

Avtech Electrosvstems 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-HV1 PULSE GENERATOR TEST ARRANGEMENT



Notes:

1) 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 50 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-HV1 pulse generator can withstand an infinite VSWR on the output port.

5) WARNING: Model AVI-V-HV1 may fail if triggered at a PRF greater than 20 KHz.

6) The output pulse width is controlled by means of the one-turn potentiometer (PW). The pot should initially be set mid-range and the pulse width adjusted using an oscilloscope. The output will degenerate to an impulse and eventually vanish as the pot is turned fully counter-clockwise.

7) The output amplitude is controlled by means of 0 to +10 volts applied to the AMP solder terminal (R_{IN} > 10K). The output pulse width may reduce by as much as 5 nsec. when the output amplitude is varied from maximum to near zero.

8) To DC offset the output pulse, connect a DC power supply set to the desired offset value to the OS terminals ($\pm$50 volts). (option).

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Notes:

1) 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 50 db attenuator will insure a weak 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-HV1 pulse generator can withstand an infinite VSWR on the output port.

5) WARNING: Model AVI-V-HV1 may fail if triggered at a PRF greater than 20 KHz.

6) The output pulse width is controlled by means of the one-turn potentiometer (PW). The pot should initially be set mid-range and the pulse width adjusted using an oscilloscope. The output will degenerate to an impulse and eventually vanish as the pot is turned fully counter-clockwise.

7) The output amplitude is controlled by means of 0 to +10 volts applied to the AMP solder terminal (R_{in} > 10K). The output pulse width may reduce by as much as 5 nsec. when the output amplitude is varied from maximum to near zero.

8) To DC offset the output pulse, connect a DC power supply set to the desired offset value to the OS terminals (+50 volts). (option).