AVTECH ELECTROSYSTEMS LTD.

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INSTRUCTIONS

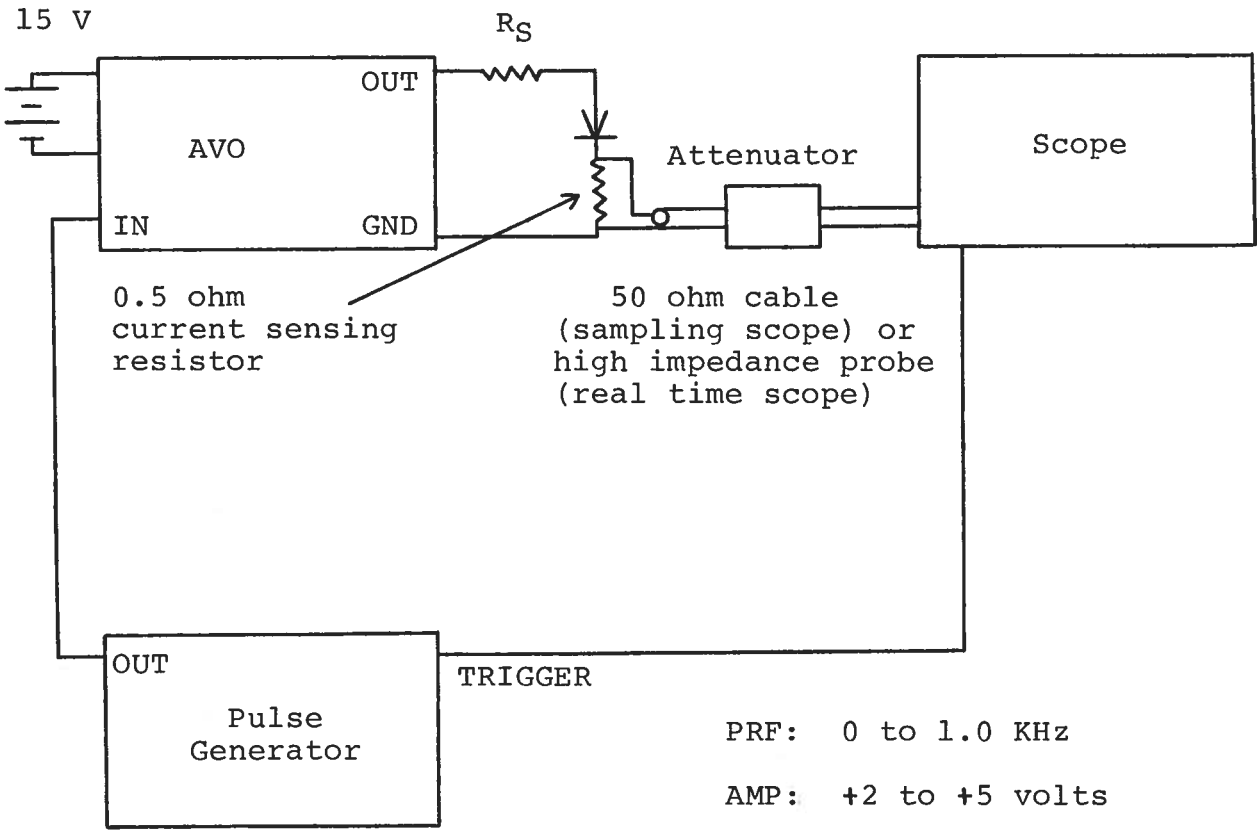
MODEL AVO PULSE GENERATOR

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.

AVO TEST ARRANGEMENT



Notes:

1) The laser diode is connected in series with a current limiting resistor ($2.5 \leqslant R_s \leqslant 5$ ohm) between the GND and OUT terminals on the front panel. In order to monitor the diode current a 0.5 ohm current sensing resistor may be connected in series with the diode and resistor R_s. 1/4 watt carbon film or carbon composition resistors may be used but all leads must be as short as possible ($\ll$ 0.1 inch). Solder leads directly to the GND and OUT terminals.

2) In general the pulse generator trigger delay control should be set in 0.1 to 1.0 usec range. Other settings should be as shown in the above diagram.

3) Either a sampling oscilloscope or a high speed real time oscilloscope (BW $\geqslant$ 200 MHz) may be used to monitor the voltage across the current sensing resistor and therefore the laser diode current. If a sampling scope is used at least 40 db attenuation should be used to insure a scope input of less than 1.0 volts.

4) The amplitude of the diode current is determined by the setting of the rear panel AMP pot control, the series resistor R_s +0.5 ohm, and by the series resistance of the laser diode. The performance check results given in the following page were obtained using a 1N4736 diode to simulate a laser diode load. With this diode a peak current of 50 amperes was obtained with R_s = 5.0 ohm and the pot set maximum clockwise.

5) For different diode mountings the GND terminal may be unscrewed (4-40 thread) and replaced with other fixtures. Alternatively, ground fixtures may be machined on the flange protruding from the base of the chassis. Note: Do not attempt to remove or modify the OUT terminal.

6) WARNING: The unit may fail if triggered at a PRF exceeding 1 KHz.