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INSTRUCTIONS

MODEL AVO-5A-P-M1-TTL PULSE GENERATOR

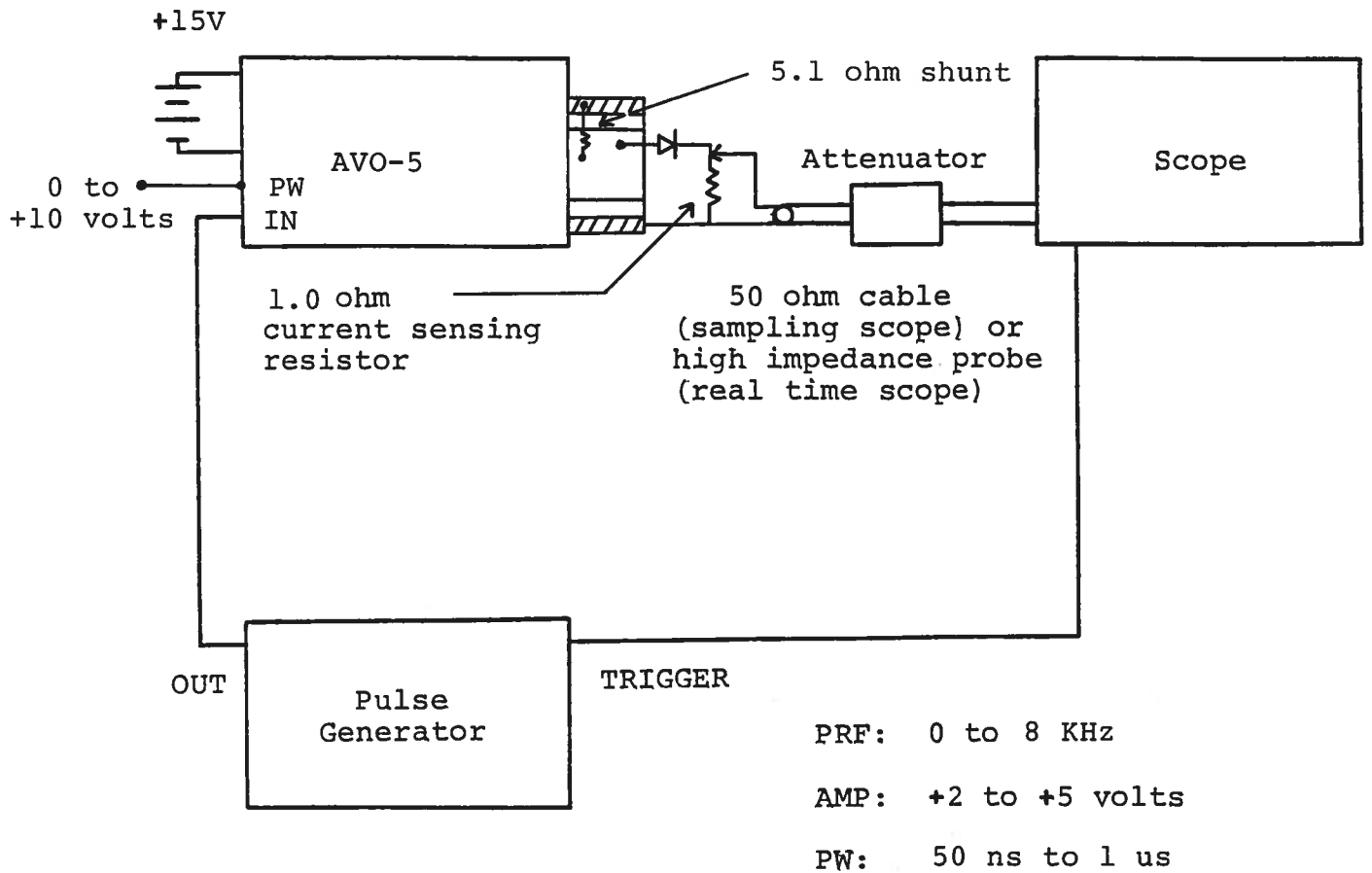
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WARRANTY

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

AVO-3 TEST ARRANGEMENT



Notes:

- 1) The laser diode is connected in series with a current limiting and current sensing resistor ($R_s = 1.0$ ohm) between the GND and OUT terminals on the front panel. Solder leads directly to the GND and OUT terminals. In addition, a 5.1 ohm shunt resistor should be used as shown.
- 2) Either a sampling oscilloscope or a high speed real time oscilloscope (BW > 500 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 60 db attenuation should be used to insure a scope input voltage of less than 1.0 volt.
- 3) The amplitude of the diode current is determined by the setting of the AMP pot control, the series 1 ohm resistor and by the series resistance of the laser diode. The performance check results given in the following page were obtained using an LJ30-24 diode with a 1.1 ohm series resistance. A current of 40 to 45 amperes was obtained with the amp pot set fully clockwise. If much lower currents are required the series resistance could be increased in value.
- 4) The output pulse width is controlled by a 0 to +10 volts DC applied to the PW terminal ($R_{IN} \geq 10K$).
- 5) WARNING: The unit may fail if triggered at a PRF exceeding 10 KHz. Use moderate heat when soldering to the OUT terminal.
- 6) 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.
- 7) The output switching elements SL3 may be replaced by removing the metal cover on the side of the instrument. CAUTION: The cases of the SL3 elements are at a DC potential as high as 400 volts.

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