

INSTRUCTIONS

MODEL AVX-S1-UTB BIAS INSERTION UNIT

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 disassembled, modified or subjected to conditions exceeding the applicable specifications or ratings. This warranty is the extent of the obligation assumed by Avtech with respect to this product and no other warranty or guarantee is either expressed or implied.

## TECHNICAL SUPPORT

Phone: 613-226-5772 or 1-800-265-6681

Fax: 613-226-2802 or 1-800-561-1970

E-mail: [info@avtechpulse.com](mailto:info@avtechpulse.com)

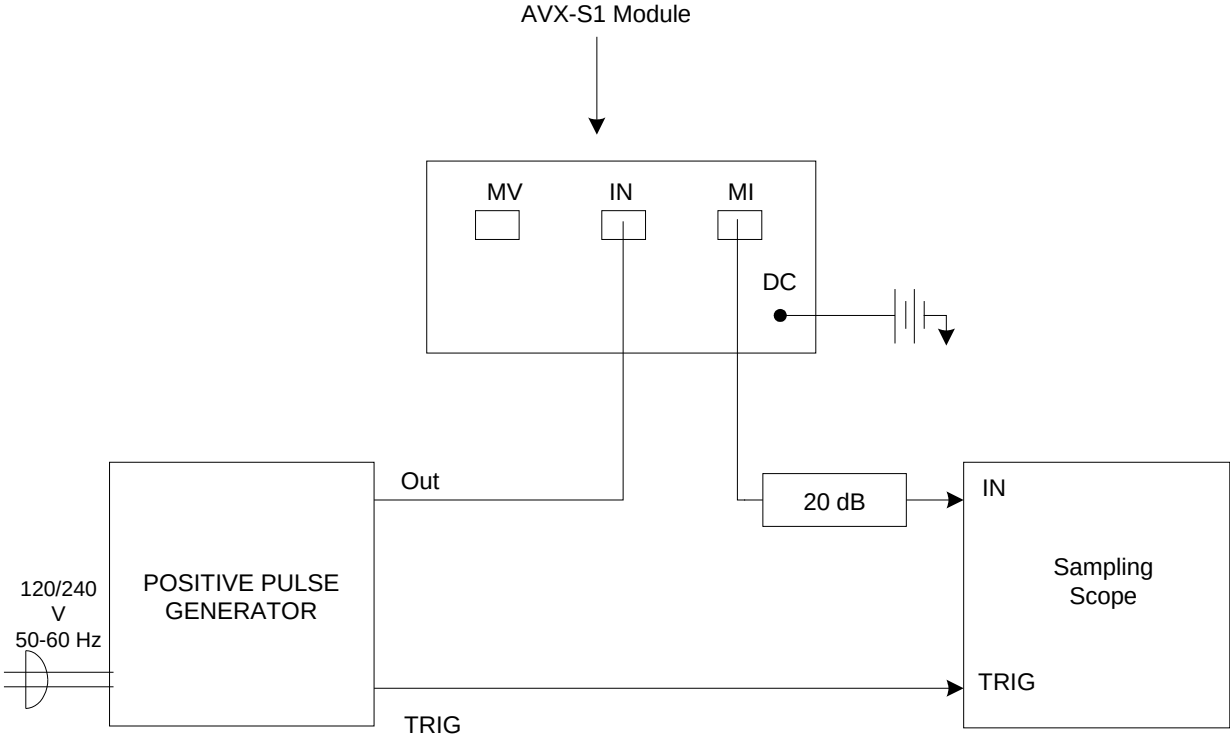
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FIG. 1: PULSE GENERATOR TEST ARRANGEMENT (AVX-S1 Module Connected)



## GENERAL OPERATING INSTRUCTIONS

- 1) The AVX-S1 module should be connected to the pulse source mainframe via the supplied 24" RG174 cable.
- 2) Gently insert the diode package leads into the 7-pin socket assembly. Pins 8 to 14 contact the AVX-S1 pin sockets. Pin 11 contacts the diode anode. Pin 12 contacts the cathode and is grounded.
- 3) The diode package may be secured in position by installing four 2-56 Philips screws in the four tapped holes in the mounting ledge. It may be necessary to loosen the two 4-40 Philips screws to reposition the height of the L-shaped monitor ledge.
- 4) A forward DC bias may be applied to the laser diode by connecting 0 to +5VDC to the DC solder terminals. The application of a small forward bias often yields a more ideal diode current waveform (as observed on the MI port). Note that the DC port must be shorted to ground if a bias is not applied.
- 5) Connect the MI port to a scope via 20-dB attenuator.
  - 6) The diode pulse current (Amps) and the Voltage at M<sub>I</sub> (Volts) are related as follows:

$$I_D = 0.2 (V_{MI} -) V_D = 10V_{MV}$$

- 7) For additional assistance:  
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AVX-S1, S.N. 9775

FUNCTIONAL EQUIVALENT CIRCUIT

PACKAGE

AVX-S SERIES DATA SHEET



## AVX-S SERIES SPECIFICATIONS

ORIGINAL QUOTATION