

INSTRUCTIONS

MODEL AVX-S1-LHA 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

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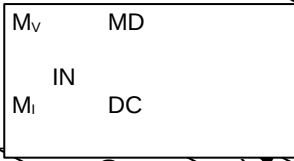
World Wide Web: <http://www.avtechpulse.com>

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50 Ohm Cable

FIG. 1: BIAS INSERTION



To display scope

0 to +5 Volts (from lab power supply)

I_{se}

Generator



To display scope

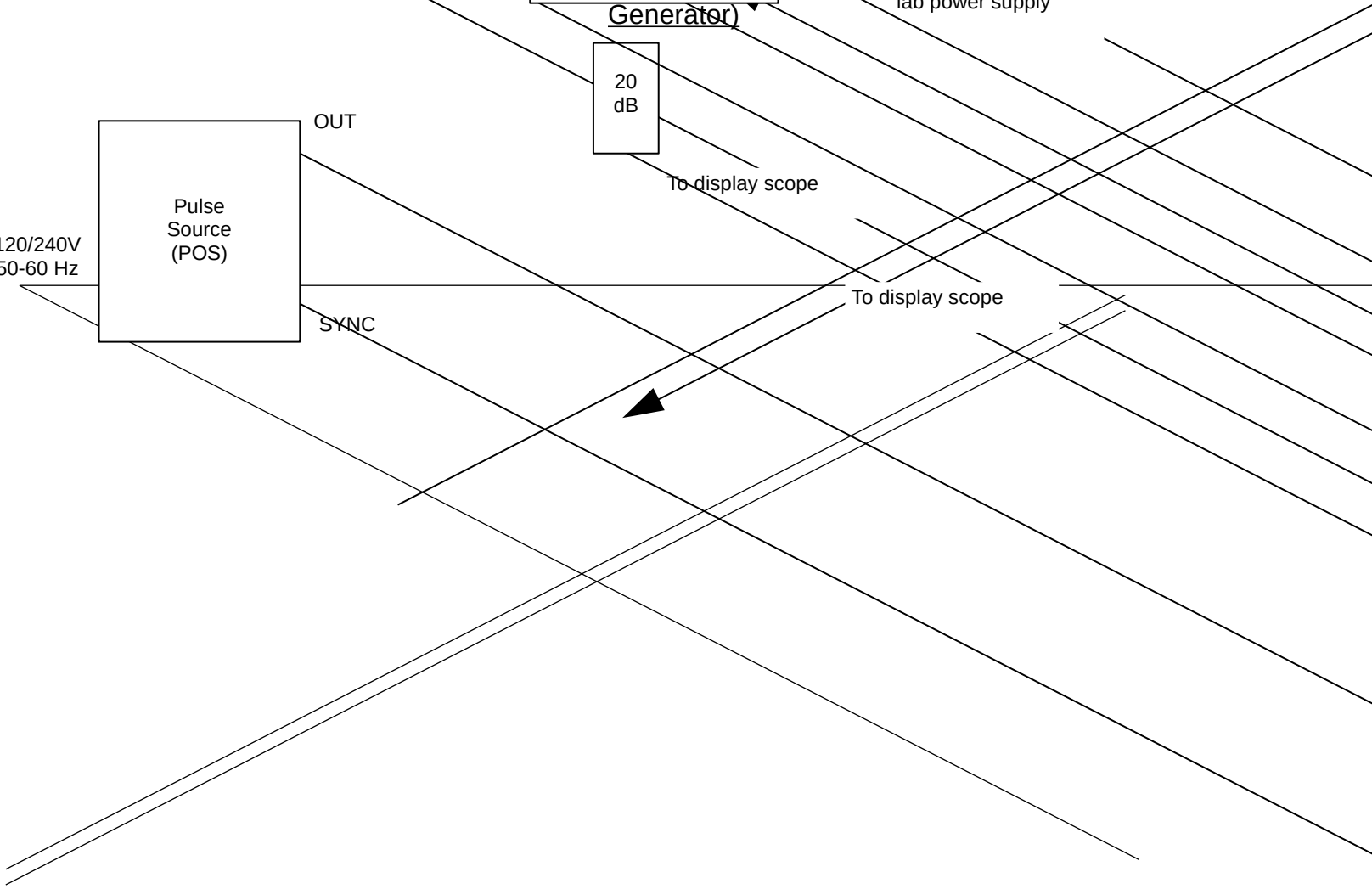
To display scope

OUT

Pulse Source (POS)

SYNC

120/240V
50-60 Hz



GENERAL OPERATING INSTRUCTIONS

- 1) Gently insert the leads of the TO-3 package into the openings of the pin socket. Push the leads fully into the socket.
- 2) The DC terminal of the bias insertion unit must either be shorted to ground (if a DC offset is not required) or not function if the DC terminal is open circuited. Note that the DC current must not exceed -100 mA (applying a DC potential of 0 to -5Volts is normally adequate).
- 3) The MI port must be terminated into 50 Ohms. Note that a 30 dB attenuator may be placed between the AVX-S1 MI output and the scope input.
- 4) The pulsed diode current I_D (Amps) and the MI output voltage (Volts) are related as follows:

$$I_D = \frac{11 (V_{MI} - V_{DIODE})}{10}$$

The V_{DIODE} is the "ON" voltage and may be obtained from the diode data sheet. V_{MI} is the voltage at the M_I SMA output.

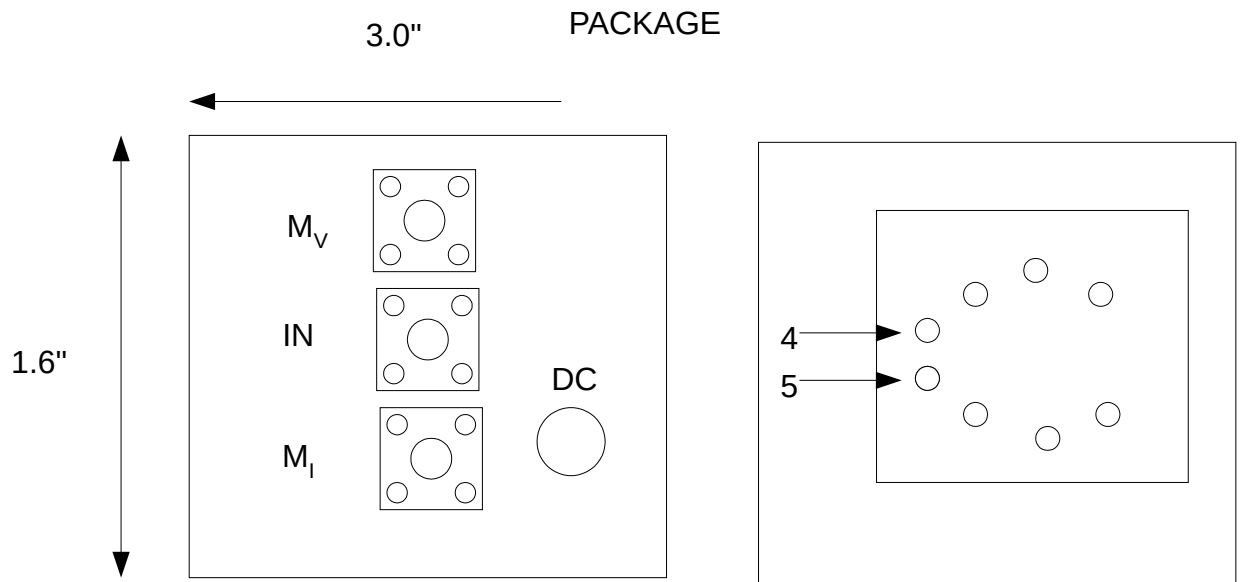
- 5) The M_V port may be used to monitor the pulsed diode "ON" voltage (V_{DIODE} - pulse):

$$V_{DIODE} - \text{pulse} = 11 V_{MV}$$

V_{MV} is the voltage at the M_V SMA output (to 50 Ohms).

- 6) For additional assistance:
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PIN DIODE PACKAGE



ORIGINAL QUOTATION

PERFORMANCE CHECK SHEET