

## AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS

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### INSTRUCTIONS

MODEL AVX-S3D BIAS INSERTION UNIT

S.N.: 6500

#### 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 quarantee is either expressed or implied.

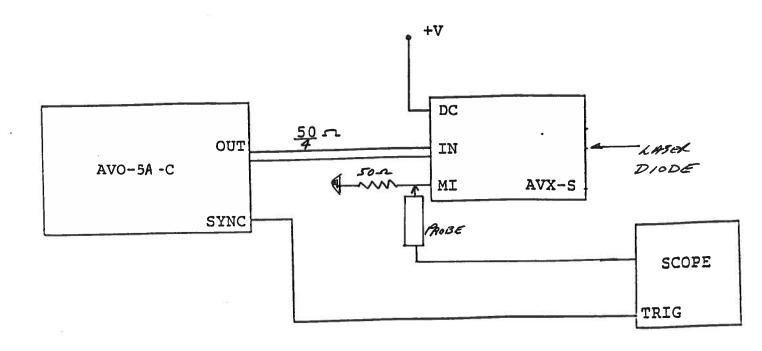
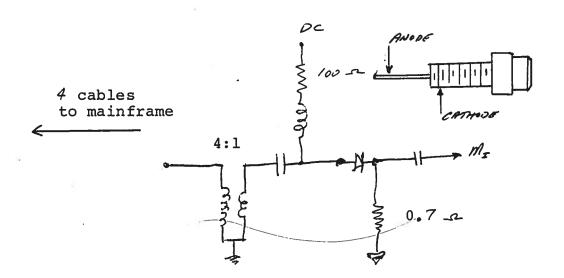


Fig. 2

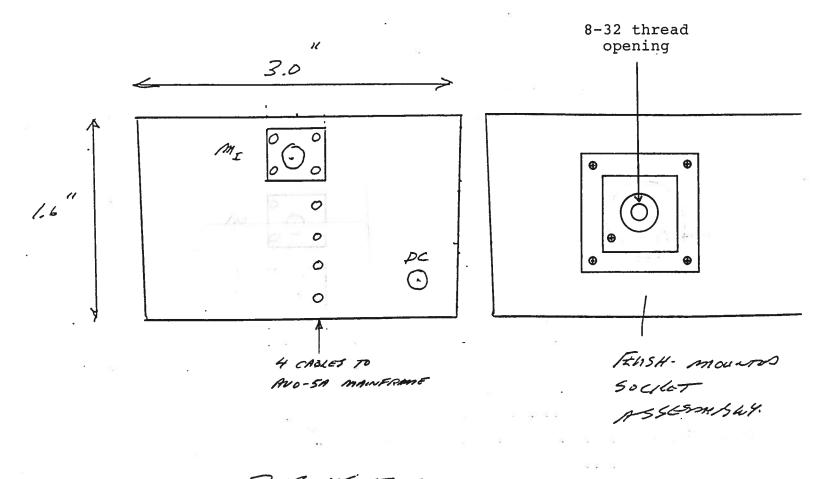
# FUNCTIONAL EQUIVALENT CIRCUIT



#### Notes:

- 1) Gently insert the anode lead of the OP-3 package into the 8-32 threaded opening of the AVX-S3D unit and contact the pin socket which is located about 1 centimeter into the 8-32 opening. Push the anode lead into the socket until the 8-32 threads on the package contact the body of the AVX-S3D unit. Then screw the package into the threads using finger force only. Note that the above operation is much easier if the anode lead is very straight.
- The DC terminal of the bias insertion must either be shorted to ground (if a DC offset is not required) or a DC power supply must be applied. The laser diode will not function if the DC terminal is open circuited. Note that the DC current must not exceed ±100 mA.
- The MI port must be terminated into 50 Ohms. MI provides outputs as high as 30 Volts.
- 4) The diode current  $I_{\text{\tiny D}}$  (Amps) and the MI output voltage are related as follows:

 $I_D \approx 1.52 \; M_z$ 



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