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INSTRUCTIONS

MODEL AVX-S1 BIAS INSERTION UNIT

S.N.: 6208

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

BIAS INSERTION UNIT TEST ARRANGEMENT

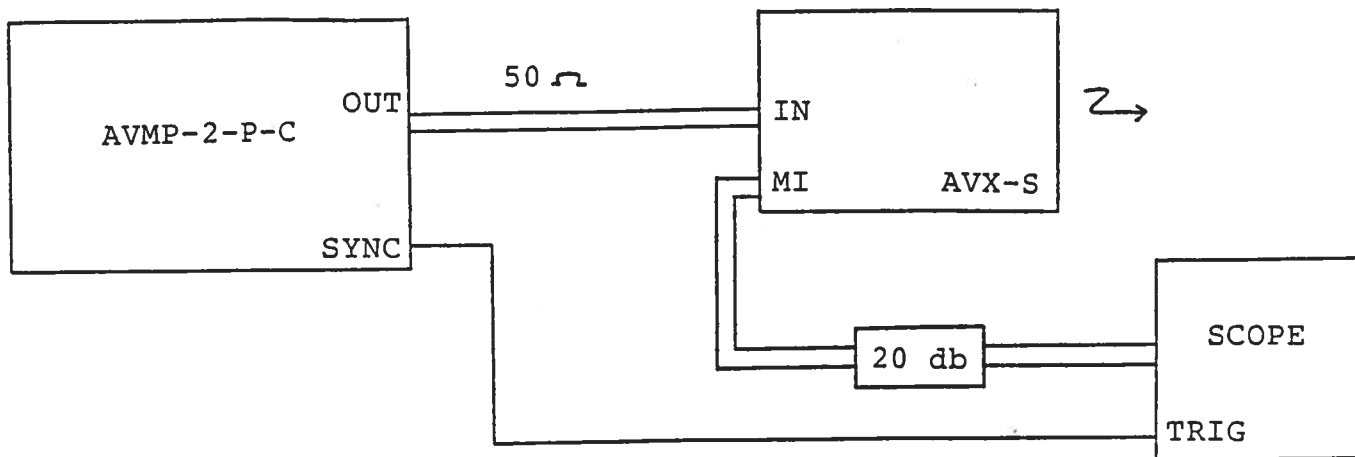
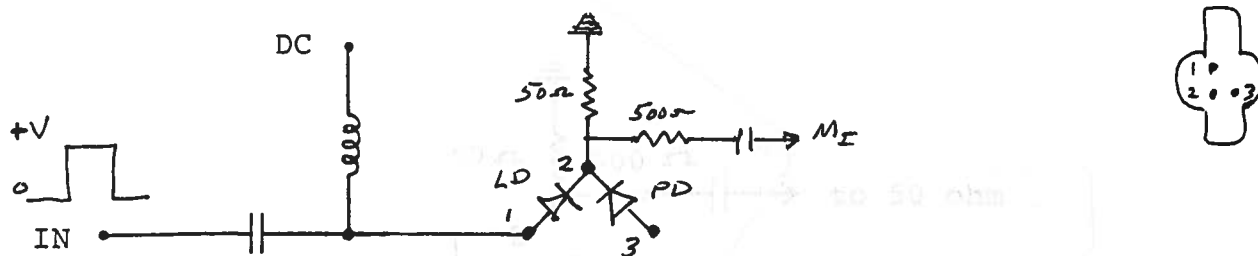


Fig. 2

FUNCTIONAL EQUIVALENT CIRCUIT



- PIN 3: Photo diode
- PIN 1: Anode (LD)
- PIN 2: Cathode (LD).

Notes:

- 1) 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.
- 2) The MI port must be terminated into 50 Ohms. Note that a 20 db (or larger) attenuator should be placed between the AVX-S MI output and the scope input since the MI output is very nearly equal to the amplitude of the input drive pulse.
- 3) The diode current I_D (Amps) and the MI output voltage are related as follows:

$$I_D = 0.2 MI$$

- 4) The AVX-S input may be a sinusoid in the frequency range of 10 MHz to 1 GHz. For this mode of operation, a DC offset must be applied to the DC terminal.

04.30.92

- MI

The first part of the report is a general overview of the project. It describes the objectives, the scope of the work, and the organization of the project. The second part of the report is a detailed description of the work done during the first quarter. It includes a list of tasks, a description of the progress made, and a list of problems encountered.

The third part of the report is a summary of the work done during the second quarter. It includes a list of tasks, a description of the progress made, and a list of problems encountered. The fourth part of the report is a summary of the work done during the third quarter. It includes a list of tasks, a description of the progress made, and a list of problems encountered.

The fifth part of the report is a summary of the work done during the fourth quarter. It includes a list of tasks, a description of the progress made, and a list of problems encountered. The sixth part of the report is a summary of the work done during the fifth quarter. It includes a list of tasks, a description of the progress made, and a list of problems encountered.

CONCLUSION

The project has been completed successfully. The objectives of the project have been met, and the work has been done in a timely and efficient manner. The project has been a valuable experience for all those involved, and it has resulted in a number of important findings.