## **INSTRUCTIONS**

## MODEL AVX-TD-GIB BIAS INSERTION UNIT

S.N.

- 1) The -GIB suffix denotes a DC current rating of 500 mA (rather than the standard 250 mA).
- 2) The AVX-TD-GIB unit has a parasitic DC resistance of about 16 Ohms in the DC to out path and so that DC output voltage is 16 x I<sub>DC</sub> Volts less than the DC voltage applied to the DC port.
- 3) The AV-1011-C-GIA and the AVX-TD-GIB should be configured as shown below. The applied pulse may be positive or negative and the DC may also be either polarity.
- 4) The AV-1011-C-GIA includes an "ON-OFF" switch which activates or de-activates the short circuit protection feature. For driving load resistances of less than 50 Ohms, the switch must be in the "OFF" position. The unit was shipped with the switch in the "OFF" position. The switch may be accessed by removing the top cover (by removing the four Phillips screws on the top cover and then sliding the top cover back and off).
- 5) The source resistance switch on the AV-1011-C-GIA must be in the 2 Ohm position when using the AVX-TD-GIB unit.

## 6) <u>CAUTION</u>:

- a) The AV-1011-C-GIA may be damaged if operated with a load resistance of less than 20 Ohms (if the switch is in the OFF position).
- b) The AVX-TD-GIB will be damaged if the DC current exceeds 500 mA.
- c) The output pulse droop will exceed 10% for pulse widths greater than 50  $\mu s$  (for an assumed load resistance of 20 Ohms). The droop will be less for higher load resistances.
- d) The 50 Ohm cable between the AV-1011C-GIA and the AVX-TD-GIB should be less than one meter (for load resistances other than 50 Ohms).
- 7) For additional assistance:

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