

INSTRUCTIONS

MODEL AVB2-TC-SB1 MONOCYCLE GENERATOR

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

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Manual Reference: /fileserver1/officefiles/instructword/avb/AVB2-TC-SB1edb.doc, created January 6, 2000

FIG. 1: MONOCYCLE GENERATOR TEST ARRANGEMENT

## GENERAL OPERATING INSTRUCTIONS

- 1) The bandwidth capability of components and instruments used to display the pulse generator output signal (attenuators, cables, connectors, etc.) should exceed one gigahertz.
- 2) The use of 60 dB attenuator will insure a peak input signal to the sampling scope of less than one volt.
- 3) In general, the pulse generator trigger delay control should be set in the < 100 ns range. Other settings should be as shown in the above diagram. The monocycle generator output is delayed with respect to the trigger input signal by about 50 ns (typically).
- 4) The frequency control cable (see attached graph) may be fabricated from RG174 miniature coax or from 85 mil semi-rigid cable. Increasing the cable length increases the "pulse width" or period of the output waveform as follows:

| L   | PW    |
|-----|-------|
| 36" | 10 ns |
| 6"  | 6 ns  |

- 5) The P1 and P2 terminals on the front panel are normally shorted together. However, for operation at long pulse widths, eg. 10 ns, 100 MHz, it may be necessary to remove the shorting bar to attain the full 10 ns pulse width.
- 6) The monocycle generator can withstand an infinite VSWR on the output port.
- 7) CAUTION: The +15 Volts supply should be disconnected when changing or removing the frequency control cable. (DC potential as high as 380V are applied to the center conductor).
- 8) For additional information:

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PERFORMANCE CHECK SHEET