

INSTRUCTIONS

MODEL AVMR-2-P-OT-M1 PULSE 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

Phone: 613-226-5772 or 1-800-265-6681

Fax: 613-226-2802 or 1-800-561-1970

E-mail: [info@avtechpulse.com](mailto:info@avtechpulse.com)

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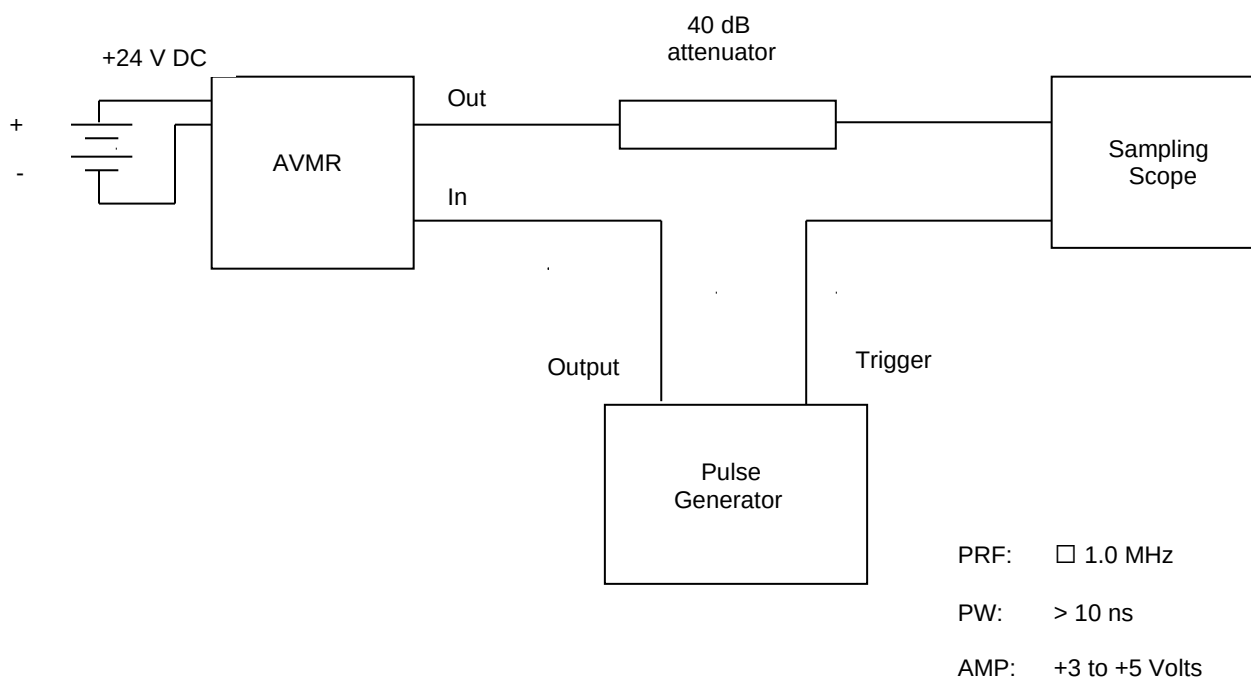


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Manual Reference: /fileserver1/officefiles/instructword/avmr/AVMR-2-P-OT-M1-fig.doc, created November 30, 1999

FIG. 1: PULSE 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 ten gigahertz. The module should be bolted to a heat sink capable of dissipating about 10 Watts.
- 2) The use of 40 dB attenuator will insure a peak input signal to the sampling scope of less than one volt.
- 3) In general, the source pulse generator trigger delay control should be set in the 0.1 to 1.0 us range. Other settings should be as shown in the above diagram.
- 4) The Model AVMR pulse generator requires a 50 Ohm load.
- 5) WARNING: Model AVMR may fail if triggered at a PRF greater than 1.0 MHz.
- 6) The output pulse width is controlled by means of the one turn potentiometer (PW). The pot should initially be set maximum clockwise and the pulse width adjusted using an oscilloscope. Note that the output duty cycle must not exceed 10% (eg. 100 ns at 1.0 MHz).
- 7) The output pulse amplitude is controlled by means of the one turn potentiometer (AMP). The pulse width may change by several nanoseconds as the output amplitude is reduced from maximum to minimum. Therefore, it is convenient to first set the desired amplitude and then set the desired pulse width.
- 8) Some properties of the output pulse may change as a function of the amplitude pot setting. For some demanding applications, it may be desirable to use a combination of external attenuators and the amplitude pot to achieve the desired output amplitude.
- 9) The output DC offset is variable from 0 to  $\pm 5$  Volts using the one turn "OT" control. The DC offset potential appears at the rear panel "OS" solder terminal.
- 10) For additional assistance:  
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PERFORMANCE CHECK SHEET