INSTRUCTIONS

MODEL AVH-HV1-EA5-M1 IMPULSE GENERATOR

S.N.:

<u>WARRANTY</u>

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 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

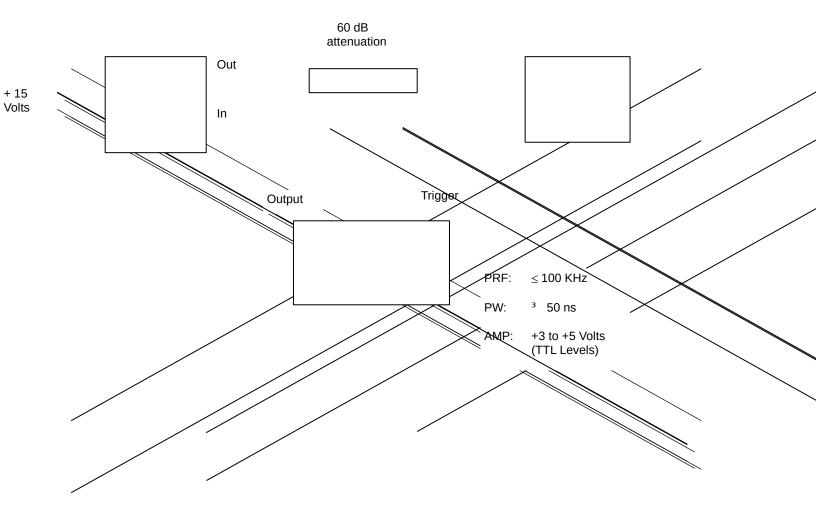
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TABLE OF CONTENTS

WARRANTY	2
TABLE OF CONTENTS	4
IMPULSE GENERATOR TEST ARRANGEMENT	5
GENERAL OPERATING INSTRUCTIONS	6
PERFORMANCE CHECK SHEET	7

Manual Reference: /fileserver1/officefiles/instructword/avh/AVH-HV1-EA5-M1A,ed1.doc, created December 2, 2005

IMPULSE GENERATOR TEST ARRANGEMENT



GENERAL OPERATING INSTRUCTIONS

- 1) The bandwidth capability of components and instruments used to display the impulse generator output signal (attenuators, cables, connectors, etc.) should exceed ten gigahertz.
- 2) The use of 60 db attenuation will insure a peak input signal to the sampling scope of less than one volt.
- 3) The output amplitude is controlled by applying 0 to +5 VDC to the front panel "AMP" solder terminal (RIN \ge 10K)
- 4) Minor adjustments to the output pulse width and pulse shape can be made by adjusting the ten turn T_R and ten turn T_F controls on the top of the module. Clockwise rotation of the T_F controls causes the pulse width of the output to increase by moving the falling edge of the waveform. Clockwise rotation of the T_R control causes the pulse width to decrease by moving the leading edge of the waveform. The T_R control also slightly affects the output amplitude and at the time of shipping is set to provide maximum amplitude. The T_F control is set to insure a maximum pulse width of 1.0 ns (at the 10% rise point).
- 5) 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 impulse generator output is delayed with respect to the trigger input signal by about 70 ns. (typically).
- 6) The impulse generator can withstand an infinite VSWR on the output port.
- 7) To DC offset the output pulse connect a DC power supply set to the required DC offset value to the terminals marked O.S. The maximum attainable DC offset voltage is ± 50 volts (option).
 - 8) For additional assistance:

Tel: (613) 226-5772 Fax: (613) 226-2802 Email: info@avtechpulse.com

PERFORMANCE CHECK SHEET