



# AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS  
SINCE 1975

□ P.O. BOX 265  
OGDENSBURG, NY  
U.S.A. 13669-0265  
TEL: (315) 472-5270  
FAX: (613) 226-2802

TEL: 1-800-265-6681  
FAX: 1-800-561-1970

e-mail: [info@avtechpulse.com](mailto:info@avtechpulse.com)  
<http://www.avtechpulse.com>

□ P.O. BOX 5120 STN. F  
OTTAWA, ONTARIO  
CANADA K2C 3H4  
TEL: (613) 226-5772  
FAX: (613) 226-2802

## INSTRUCTIONS

### MODEL AVR-E1-GD1 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

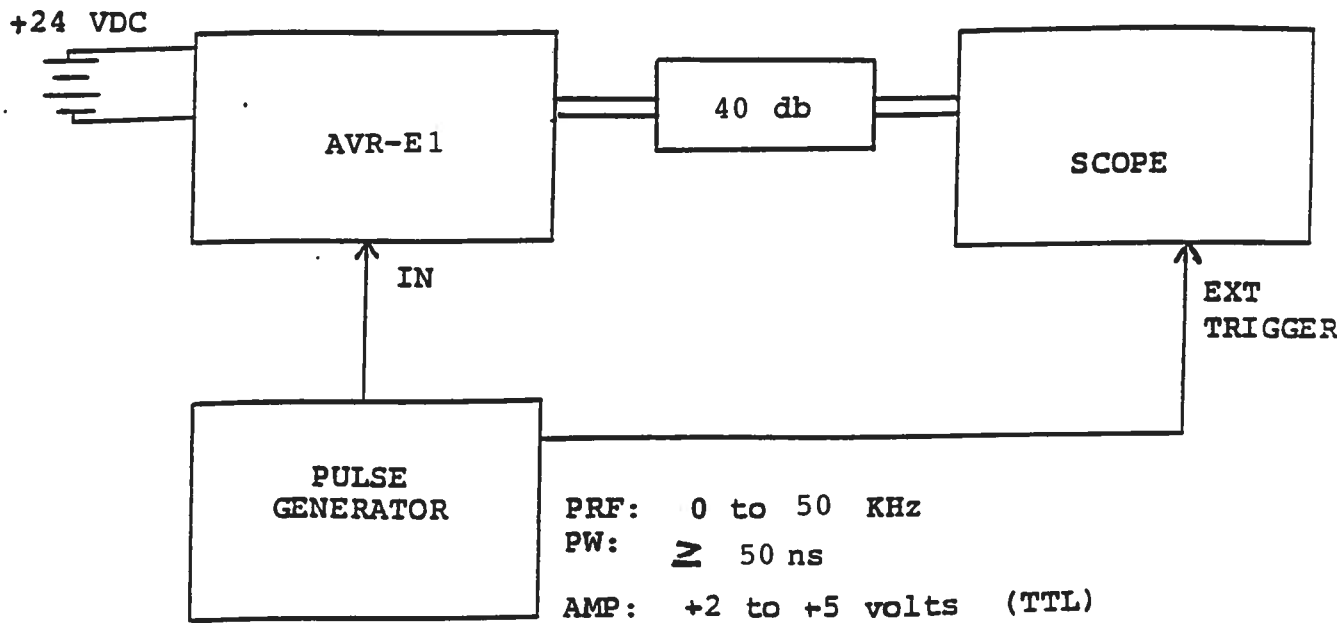
E-mail: [info@avtechpulse.com](mailto:info@avtechpulse.com)

World Wide Web: <http://www.avtechpulse.com>

## TABLE OF CONTENTS

WARRANTY.....	2
TABLE OF CONTENTS .....	3
FIG. 1: PULSE GENERATOR TEST ARRANGEMENT.....	4
GENERAL OPERATING INSTRUCTIONS .....	5
PERFORMANCE CHECK SHEET .....	6

Manual Reference: Q:\office\instructword\Avr-e\AVR-E1-GD1.doc, created June 3, 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 2 GHz.
- 2) The use of 40 dB attenuator at the scope vertical input channel will insure a peak input signal to the scope of less than one Volt (necessary only if sampling scope used). If a high impedance real time scope is used, the pulse generator should be terminated using a shunt 50 Ohm resistor. Note that for proper and reliable operation, this unit requires a 50 Ohm termination at all times.
- 3) The output pulse width is controlled by means of the front panel one turn PW control.
- 4) The output pulse amplitude is controlled by means of the front panel one turn AMP control.
- 5) Note that at amplitudes below 10 Volts, the overshoot on the rising edge may be excessively high and for that reason it is recommended that attenuators be used for such applications.
- 6) The module should be bolted to a heat sink capable of dissipating about 10 Watts.
- 7) For additional assistance:

Tel: (613) 226-5772

Fax: (613) 226-2802

**PERFORMANCE CHECK SHEET**



# AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS  
SINCE 1975

P.O. BOX 265  
OGDENSBURG, NY  
U.S.A. 13669-0265  
TEL: (315) 472-5270  
FAX: (613) 226-2802

TEL: 1-800-265-6681  
FAX: 1-800-561-1970

e-mail: [info@avtechpulse.com](mailto:info@avtechpulse.com)  
<http://www.avtechpulse.com>

P.O. BOX 5120 STN. F  
OTTAWA, ONTARIO  
CANADA K2C 3H4  
TEL: (613) 226-5772  
FAX: (613) 226-2802

Fax No:	<u>4396</u>	Sender's Fax:	<u>613-226-2802</u>
File:	<u>Q:\office\QUOTES\Q9277.doc</u>	Receiver's Fax:	<u>336-698-8508</u>
To:	<u>General Dynamics</u>	Receiver's Phone:	<u>336-698-8711</u>
Attn:	<u>Tim Meyer</u>	Date:	<u>April 5, 1999</u>
Subject:	<u>Price and delivery quotation</u>	Number of pages:	<u>4</u>

Following our telephone conversation of April 5th, we are pleased to quote as follows:

Quote Number:	9277
Model designation:	AVR-E1-P-GDI
Output amplitude:	0 to +20 Volts to 50 Ohms. One turn control.
Pulse width out:	50 to 500 ns. One turn control.
Rise, fall time:	≤ 300 ps
PRF:	0 to 50 kHz
Other:	See standard AVR-E1, pages 30 and 31, Cat. No. 10.
Price:	\$2,498.00 US each FOB destination
Delivery:	45 days

Thank you for your continuing interest in our products. Please call or email me if you require any further information.

Regards,

  
Dr. Walter Chudobiak  
Chief Engineer

WC:cb