



**AVTECH ELECTROSYSTEMS LTD.**

NANOSECOND WAVEFORM ELECTRONICS  
SINCE 1975

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U.S.A. & CANADA

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

INSTRUCTIONS

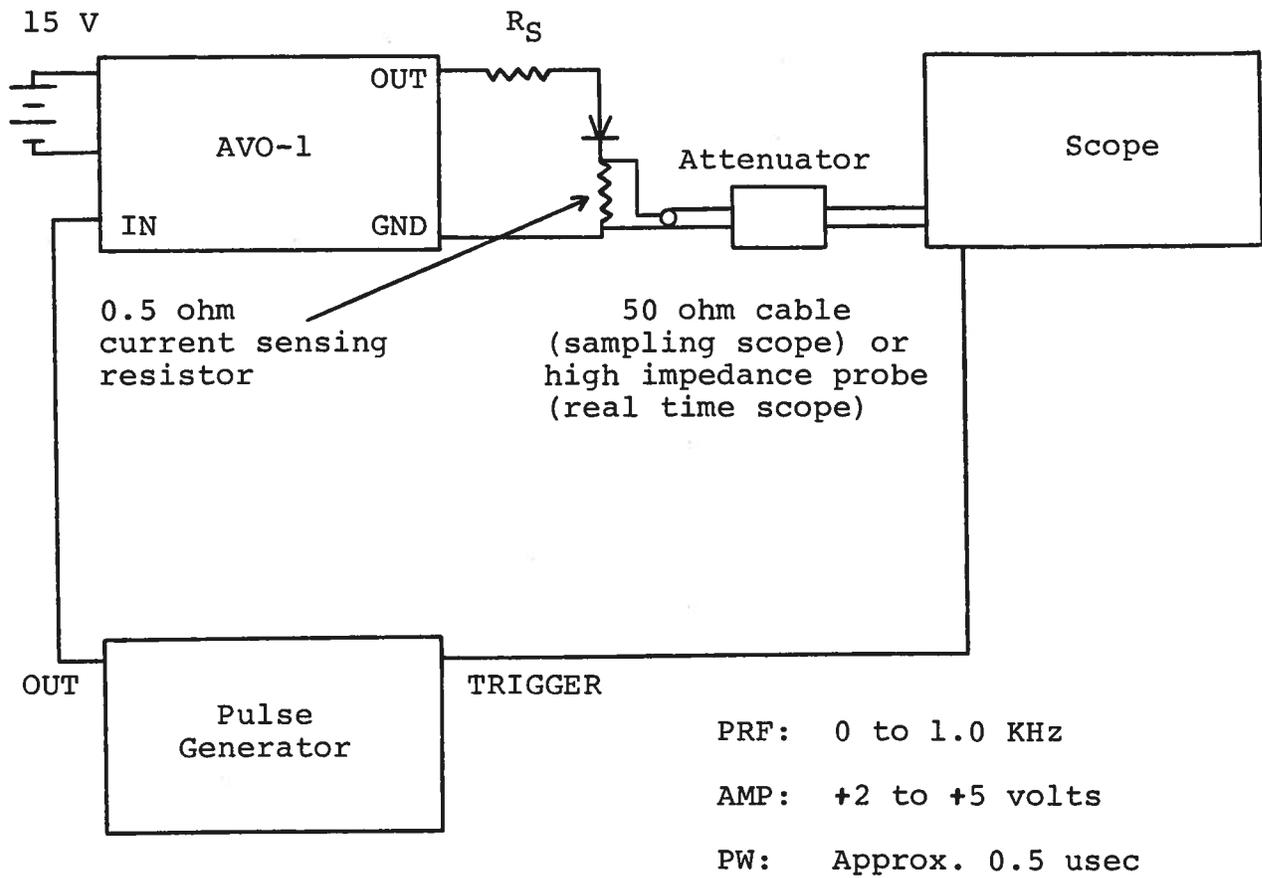
MODEL AVO-1-DPA1 PULSE GENERATOR

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 or liability assumed by Avtech with respect to this product and no other warranty or guarantee is either expressed or implied.

## AVO TEST ARRANGEMENT



Notes:

- 1) The laser diode is connected in series with a current limiting resistor ( $0.5 < R_s < 5$  ohm) between the GND and OUT terminals on the front panel. In order to monitor the diode current a 0.5 ohm current sensing resistor may be connected in series with the diode and resistor  $R_s$ . 1/4 watt carbon film or carbon composition resistors may be used but all leads must be as short as possible ( $< 0.1$  inch). Solder leads directly to the GND and OUT terminals.
- 2) In general the pulse generator trigger delay control should be set in 0.1 to 1.0 usec range. Other settings should be as shown in the above diagram.
- 3) Either a sampling oscilloscope or a high speed real time oscilloscope ( $BW > 200$  MHz) may be used to monitor the voltage across the current sensing resistor and therefore the laser diode current. If a sampling scope is used at least 40 db attenuation should be used to insure a scope input voltage of less than 1.0 volt.
- 4) The amplitude of the diode current is determined by the setting of the rear panel AMP pot control, the series resistor  $R_s + 0.5$  ohm, and by the series resistance of the laser diode. The performance check results given in the following page were obtained using a 1N4736 diode to simulate a laser diode load. With this diode a peak current of 40 amperes was obtained with  $R_S = 2.2$  ohm and the pot set maximum clockwise.
- 5) WARNING: The unit may fail if triggered at a PRF exceeding 3 kHz.
- 6) For additional assistance:

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June 10, 1993.

Tracy Bascon  
DPA Labs  
2251 Ward Avenue  
Simi Valley, CA 93065

Tel: 805-581-9200  
Fax: 805-581-9790

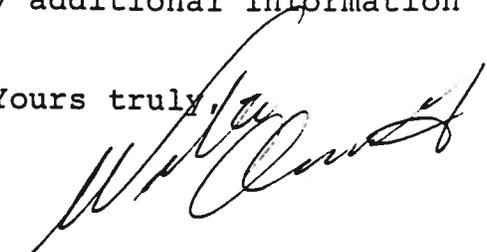
Dear Tracy:

Following our telephone conversation of June 9, I am pleased to provide a price and delivery quotation for a special purpose laser diode driver meeting the following specifications:

Model designation: AVO-1-P-DPA1.  
Pulse shape: Semi-sinusoidal.  
Output amplitude: 10 to 40 Amps.  
PW: 10 ns (FWHM).  
PRF: 0 to 3 kHz.  
Other: See standard AVO-1, pages 72 and 73, Cat. No. 8.  
Price: \$1,505.00 US each, FOB destination (i.e. delivered on your doorstep).  
Delivery: 30 days.

Thank you for your interest in our products. Please call me again (1-800-265-6681) if you require any additional information or modifications to the above quotation.

Yours truly,

  
Dr. Walter Chudobiak  
Chief Engineer

WC:pr  
Encl. Cat. No. 8  
Cat. No. 8S1  
Price list

Nov. 25/93