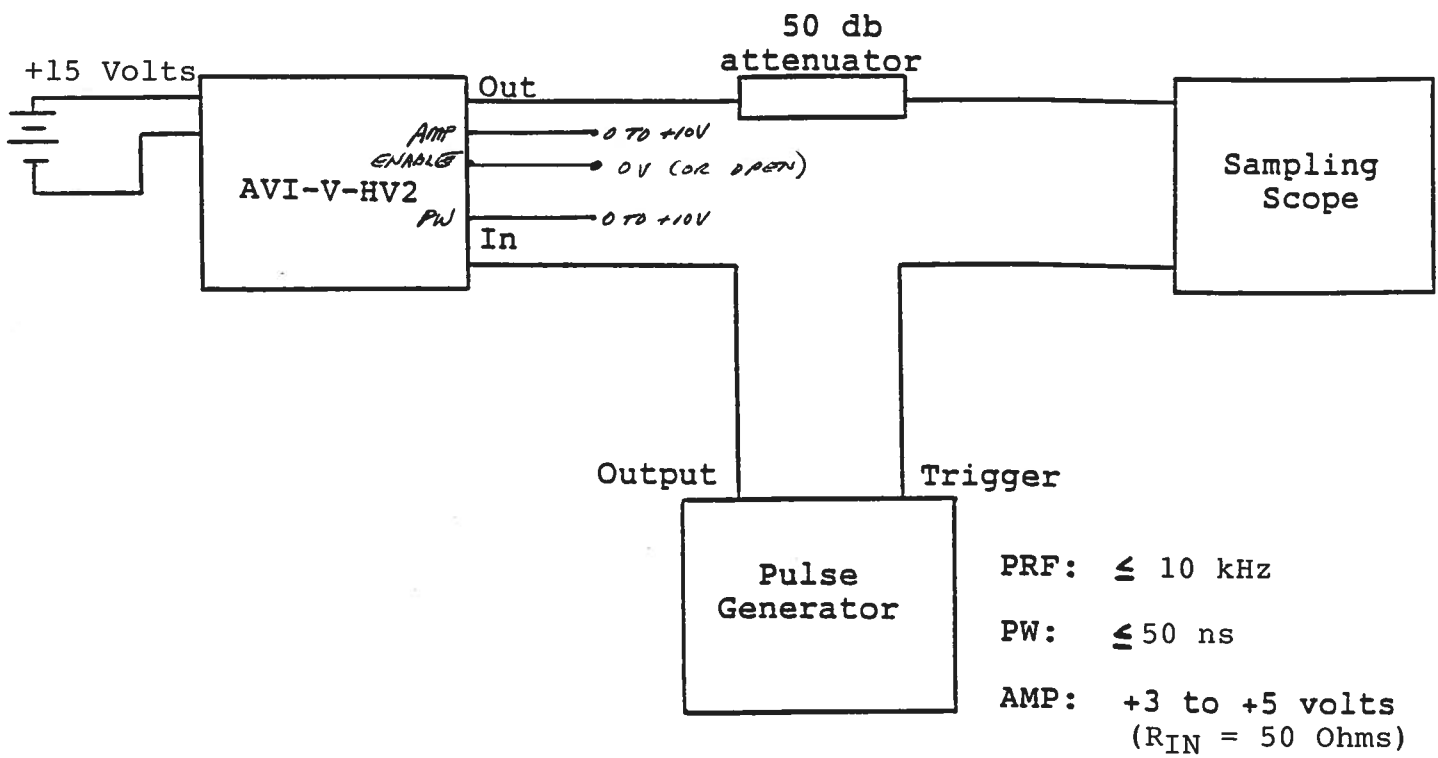## INSTRUCTIONS

MODEL AVI-V-HV2-PE1A-P 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 dissembled, 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.

MODEL AVI-V-HV2 PULSE GENERATOR TEST ARRANGEMENT

+15 Volts

AVI-V-HV2

Out

Amp

ENABLE

_PW_

In

0 TO +10V

0 V (OR OPEN)

0 TO +10V

50 db attenuator

Sampling Scope

Output

Trigger

Pulse Generator

PRF: ≤ 10 kHz

PW: ≤ 50 ns

AMP: +3 to +5 volts
(R_{IN} = 50 Ohms)

Notes:

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 a 50 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 AVI-V-HV2 pulse generator can withstand an infinite VSWR on the output port.

5) <u>WARNING</u>: Model AVI-V-HV2 may fail if triggered at a PRF greater than 10 kHz.

6) Triggering of the unit is inhibited if the ENABLE input is HIGH (+3 to +5 Volts). The unit will trigger if ENABLE input is LOW (0 to +2 Volts) or open circuited.

7) The output pulse width is controlled by applying 0 to +10 VDC to the PW solder terminal ($R_{IN} \geq 10K$).

8) The output amplitude is controlled by applying 0 to +10 VDC to the AMP solder terminal ($R_{IN} \geq 10K$).

AVTECH

Fax Ref No:	10186	**From:**	Avtech Electrosystems Ltd.
To:	Physical Electronics	**Our Fax No:**	(613) 226-2802
		Date:	September 22, 1994
Attn:	Brian Brady	**Receivers Fax No:**	612-828-6235
	Tel: 612-828-5986		
Subject:	Quotation	**No. of pages:**	2

1) Following our phone conversation of Sept. 22, I am pleased to provide the following revised price and delivery quotation:

Model designation:	AVI-V-HV2-PE1A
Output amplitude:	0 to +100 Volts to 50 Ohms. Amplitude controlled by 0 to +10 VDC control voltage. Particular attention given to linearity and matching for amplitude range of +30 to +100 Volts.
Output pulse width:	8 ns to 50 ns. Controlled by 0 to +10 VDC control voltage ($\pm$1 ns linearity). Control is active over full 10 Volt range (ie no dead zone).
Rise time:	$\leq$ 2 ns
Full time:	$\leq$ 2 ns
PRF:	0 to 10 kHz
Input trigger:	+5V, PW $\geq$ 50 ns, 50 Ohm input impedance.
Enable input:	TTL High input will block operation of the pulser.
Prime power:	+15 VDC, 250 mA (MAX)

Chassis size: 1.7" x 3.0" x 6.0"

Connectors: Out: SMA
                           Other: Solder terminals

Price:

Delivery: 3 weeks.

Rgds

Dr. Walter Chudobiak
Chief Engineer

WC:dh

Oct. 14/94   Edition A

    Disk: AVI-HV
    Name: HV2PE1AA