



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
<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 AVB2-TC-SB1 MONOCYCLE 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

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

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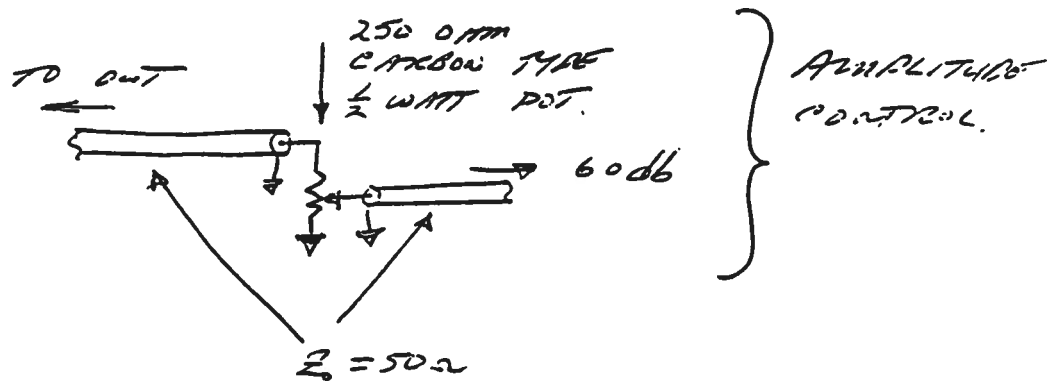
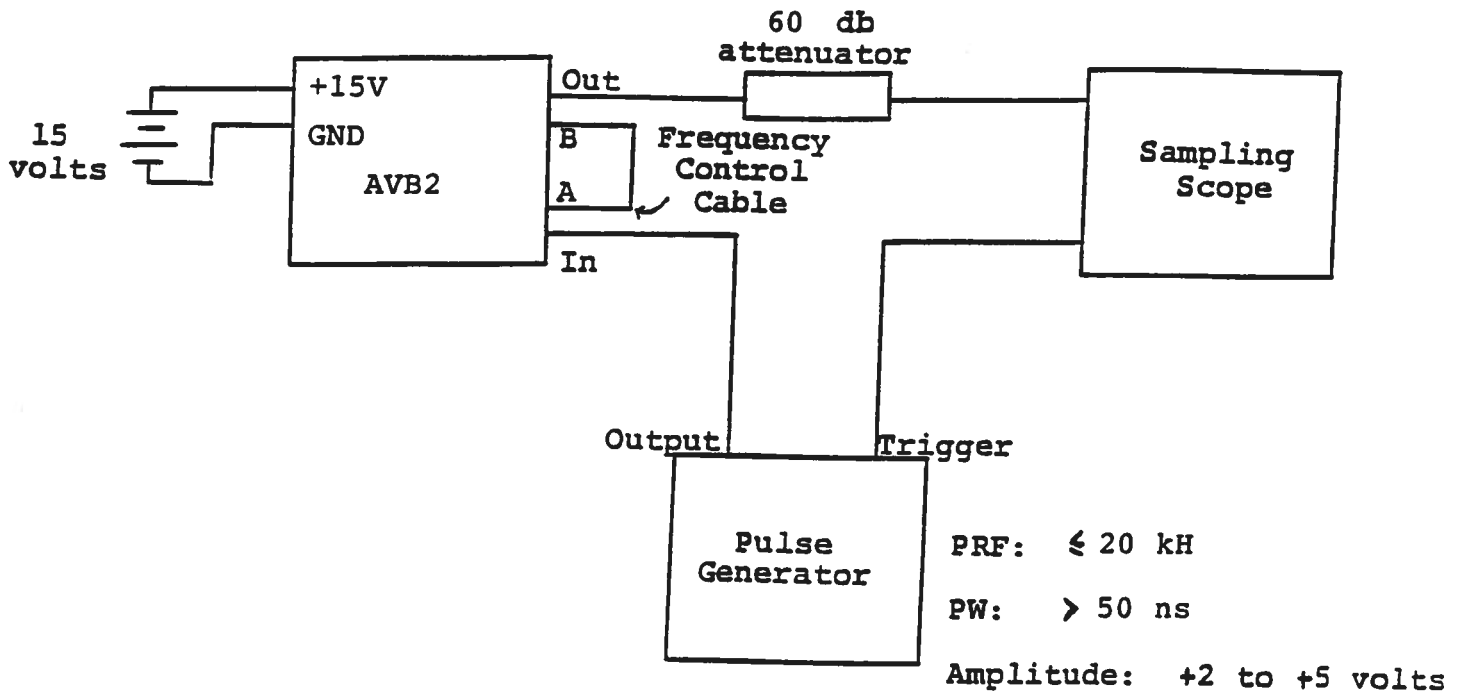
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Manual Reference: Q:\office\instructword\Avb\AVB2-TC-SB1.doc, created January 11, 1999

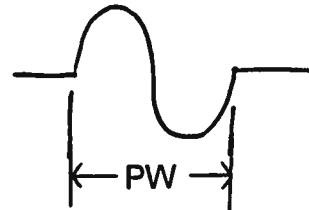
FIG. 1: MONOCYCLE GENERATOR TEST ARRANGEMENT



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 one gigahertz.
- 2) The use of 60 dB attenuator will insure a peak input signal to the sampling scope of less than one volt.
- 3) 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 monocyte generator output is delayed with respect to the trigger input signal by about 50 ns (typically).
- 4) The frequency control cable (see attached graph) may be fabricated from RG174 miniature coax or from 85 mil semi-rigid cable. Increasing the cable length increases the "pulse width" or period of the output waveform as follows:

L	PW
36"	10 ns
6"	6 ns



- 5) The P1 and P2 terminals on the front panel are normally shorted together. However, for operation at long pulse widths, eg. 10 ns, 100 MHz, it may be necessary to remove the shorting bar to attain the full 10 ns pulse width.
- 6) The monocyte generator can withstand an infinite VSWR on the output port.
- 7) **CAUTION:** The +15 Volts supply should be disconnected when changing or removing the frequency control cable. (DC potential as high as 380V are applied to the center conductor).
- 8) For additional information:

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OTTAWA, ONTARIO
CANADA K2C 3H4
TEL: (613) 226-5772
FAX: (613) 226-2802

August 12, 1998

Brian Starkoski
Sunnybrook Health Sciences Centre
2075 Bayview Avenue
North York, Ontario
M4N 3M5

Dear Brian:

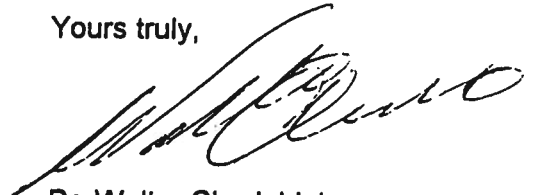
Following our telephone conversation of August 11th, I am pleased to provide a price and delivery quotation for a special purpose monocyte generator meeting the following specifications:

Quote No:	8854
Model designation:	AVB2-TC-SB1 This module unit employs the same technology as Model AVB2-C, S.N. 4200
Frequency:	100 to 170 MHz (Controlled by a delay line which connects to two SMA connectors on the 1.7" x 3.0" face).
Amplitude:	0 to 300 Volts peak to peak. AMP control is via a user-supplied 250 Ohm pot in the output line. Instructions included.
PRF:	0 to 20 kHz
Input trigger required:	TTL, PW \geq 50 ns
Prime power:	+ 15 VDC, 400 mA
Chassis size:	1.7" x 3.0" x 6.0"
Input and output connectors:	SMA (on 1.7" x 3.0" face)

Other: See standard AVB2-TC-C, page 85, Cat. No. 10.
Price: \$3,598.00 US each, FOB destination.
Note: This price includes our standard 5% academic discount.
GST: 7% extra.
PST: 8% extra, if applicable.
Delivery: 60-90 days ARO.

Thank you for your continuing interest in our products. Please call me again (1-800-265-6681) if you require any additional information.

Yours truly,



Dr. Walter Chudobiak
Chief Engineer

WC:hw