

PULSE GENERATOR  
PERFORMANCE CHECK

Model: *AVD-8A-B-N-M*

S.N.: *10003*

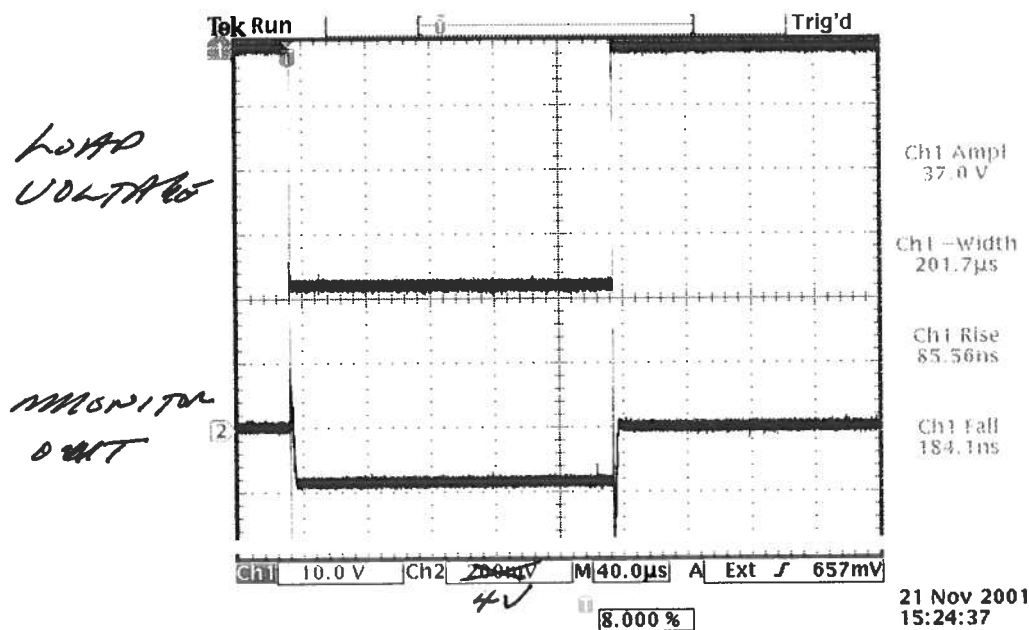
Date: *NOV 21 2001*

- a) Output signal amplitude:  
*0 TO -40 VOLTS TO*
- b) Pulse width:  
 *$R_L \geq 1\Omega$  (40 AMPS MAX)  
2  $\mu$ S TO 1 SECOND*
- c) Rise time: *(w/ DC)*  
 *$\leq 0.5 \mu$ S*
- d) Fall time:  
 *$\leq 0.5 \mu$ S*
- e) PRF:  
*0 TO 1 KHz*
- f) Jitter, stability:  
*OK*
- g) Prime power:
  - a) *120/240V, 50-60Hz*
  - b) *0 TO -42 VOLTS, 40  
AMP DC LAB  
POWER SUPPLY.*



(A)

10003  
NARROW PULSE, LOW DUTY CYCLE  
 $R_c \approx 1.0 \Omega$   
 $V_{DC} \approx 38 \text{ VOLTS.}$



③

10003

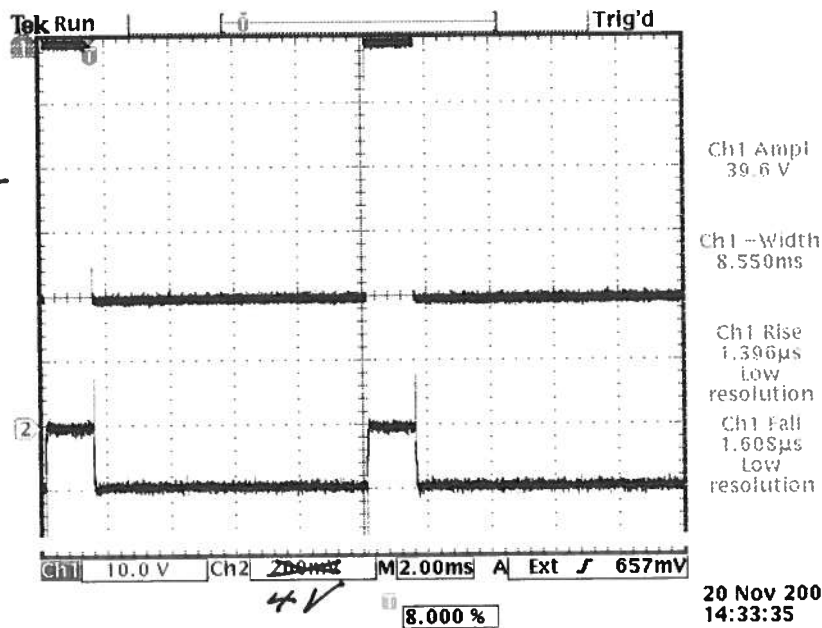
WIDE PULSE, HIGH DUTY CYCLE

$$R_L = 1.0 \Omega$$

$$V_{DC} = 40 \text{ VOLTS}$$

LOAD  
VOLTAGE

MONITOR  
OUT





# 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

## "-B" Functional Test & Calibration Certificate

Date of test:	November 21, 2001				Tester:	MJC
Programmed model name:	AVO-8A-B-N-M					
Programmed serial number:	10003					
Firmware revision:	2.31					
Internal trigger checked at:	1 Hz	10 Hz	100 Hz	1 kHz		
Actual measured output <sup>1</sup> :	0.997 Hz	9.93 Hz	99.2 Hz	0.994 kHz		
External trigger checked:	yes	Gate checked:				yes
Manual trigger checked:	yes					
Pulse compression checked:	yes	Low Amplitude PW Distortion Nulled:				
Pulse width checked at:	2 us	200 us	2 ms	200 ms	2 Hz, at TTL trigger point	
Actual measured output <sup>2</sup> :	2.015 us	201.2 us	2.016 ms	201.2 ms		
PWin = PWout mode checked:	yes	DC mode checked:				yes
Duty Cycle Limit:	N/A					
Delay nulled:	yes					
Delay checked at:	2 us	200 us	2 ms	200 ms	2 Hz, at TTL trigger point	
Actual measured output <sup>1</sup> :	2.011 us	201.1 us	2.011 ms	200.9 ms		
Double pulse checked:	N/A					
Invert mode checked:	N/A					
ECL/TTL modes checked:	N/A					
Zout switch checked:	N/A					
Amplitude checked at:	N/A					
Actual measured output <sup>2</sup> :	N/A					
Amplitude polarity:	negative					
Zout calibration:	N/A					
Electronic amplitude control:	N/A					
External amplify mode:	N/A					
Ultravolt flux removed:	N/A					
Monitor V/I Ratio:	0.1 V/A	Monitor offset nulled:				yes
LCD Monitor calibrated:	yes	Monitor offset nulled:				N/A
Offset checked at:	N/A					
Actual measured output <sup>2</sup> :	N/A					
Offset nulled (output on):	N/A	Amplitude-dependent offset nulled:				
Offset nulled (output off):	N/A					
RS-232 checked:	yes					
Sync pulse width checked:	200 ns					
Circuit Boards:	PS:	93	Main:	108B		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	N/A		
DC fuses:	Positive:	N/A	Negative:	N/A		
AC Current at 115 VAC:	Quiescent:	0.39A (no PG)	Max. Load:	N/A		
AC fuse:	1A					
Photographed:	yes					

<sup>1</sup> Checked with: Fluke PM6681 Counter, referenced to Datum ExacTime 9390-6000 GPS Frequency Reference

<sup>2</sup> Checked with: Tektronix TDS3052 digital oscilloscope for PW ≥ 5 ns,  
Tektronix 7704A/7S11/7T11/S4 sampling oscilloscope system for PW < 5 ns.