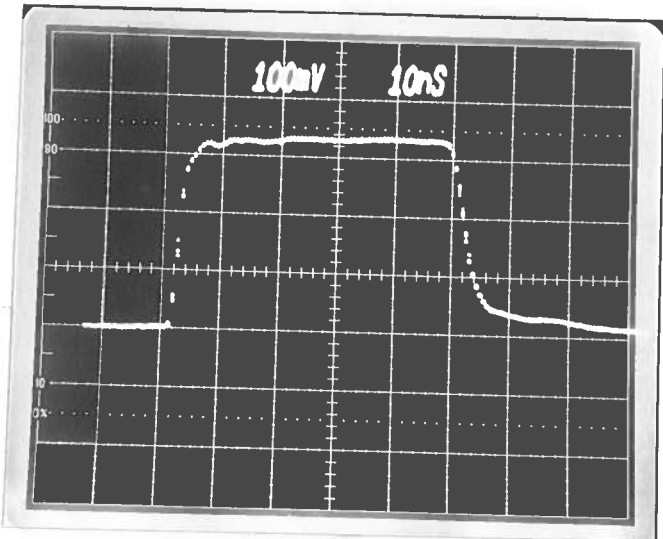


PULSE GENERATOR  
PERFORMANCE CHECK

Model: *AUL-2-B-P-M*  
S.N.: *10989*  
Date: *AUG 5 2004*



- a) Output signal amplitude:  
*0 TO + 320V (70.50A)*
- b) Pulse width:  
*5 TO 100 NS*
- c) Rise time:  
*≤ 2 NS*
- d) Fall time:  
*≤ 3 NS*
- e) PRF:  
*0 TO 5 KHz*
- f) Jitter, stability:  
*OK*
- g) Prime power:  
*100 → 240V*  
*50-60 Hz*

*60dB ATTN*  
*100 V/DIV*  
*PRF = 2 KHz*



# AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS  
SINCE 1975

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<http://www.avtechpulse.com/>

BOX 5120, LCD MERIVALE  
OTTAWA, ONTARIO  
CANADA K2C 3H4  
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## "-B" Functional Test & Calibration Certificate

Date of test:	August 5, 2004				Tester:	MJC
Programmed model name:	AVL-2-B-M-P					
Programmed serial number:	10989	MAC address:	N/A			
Firmware revision:	2.58					
Internal trigger checked at:	5 Hz	50 Hz	500 Hz	5000 Hz		
Actual measured output <sup>1</sup> :	4.97 Hz	49.6 Hz	498 Hz	5004 Hz		
External trigger checked:	Yes				Gate checked:	Yes
Manual trigger checked:	Yes					
Pulse compression checked:	Yes				Low Amplitude PW Distortion Nulled:	N/A
Pulse width checked at:	5 ns	20 ns	50 ns	100 ns	2 kHz, +320V to 50Ω	
Actual measured output <sup>2</sup> :	5.2 ns	19.3 ns	50 ns	100 ns		
PWin = PWout mode checked:	N/A				DC mode checked:	N/A
Duty Cycle Limit:	N/A					
Delay nulled:	Yes					
Delay checked at:	100 ns	1 us	10 us	100 us	5 Hz, 100 ns, +320V to 50Ω	
Actual measured output <sup>1</sup> :	100.2 ns	1.007 us	9.86 us	98.4 us		
Double pulse checked:	N/A					
Invert mode checked:	N/A					
ECL/TTL modes checked:	N/A					
Zout switch checked:	N/A					
Amplitude checked at:	+50V	+100V	+200V	+320V	5 kHz, 50 ns, to 50Ω	
Actual measured output <sup>2</sup> :	+50.5V	+97V	+200V	+325V		
Amplitude polarity:	+					
Zout calibration:	N/A					
Electronic amplitude control:	N/A					
External amplify mode:	N/A					
Bleeder resistors adequate:	N/A					
Burst mode:	N/A					
Monitor V/I Ratio:	N/A				Monitor offset nulled:	
LCD Monitor calibrated:	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					
LCD pull-ups installed:	N/A					
PCB 108G/H resistor updates:	Yes					
PN trigger pull-downs installed:	N/A					
Sync pulse width checked:	200 ns nominal					
Circuit Boards:	PS:	158E	Main:	108G		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	20k		
DC fuses:	Main:	1A	Overload:	0.5A		
AC Current:	Quiescent:	0.20A @ 115V	Max. Load:	0.27A @ 115V		
		0.16A @ 230V		0.18A @ 230V		
AC fuse:	0.5A					
1.5 kV RMS, 5 second Hypot Test:	OK					
25A RMS Ground Continuity Test:	OK					
Fan operational:	Yes					
Photographed:	Yes					

<sup>1</sup> Checked with: Fluke PM6681 Counter (S/N 9446 066 81016), referenced to Datum ExacTime 9390-6000 (S/N 4461) GPS Frequency Reference

<sup>2</sup> Checked with: Tektronix TDS3052 digital oscilloscope (S/N B014783) for PW ≥ 5 ns, Tektronix 7704A/7S11/7T11/S4 sampling oscilloscope (Cal. Label 112506) for PW < 5 ns.