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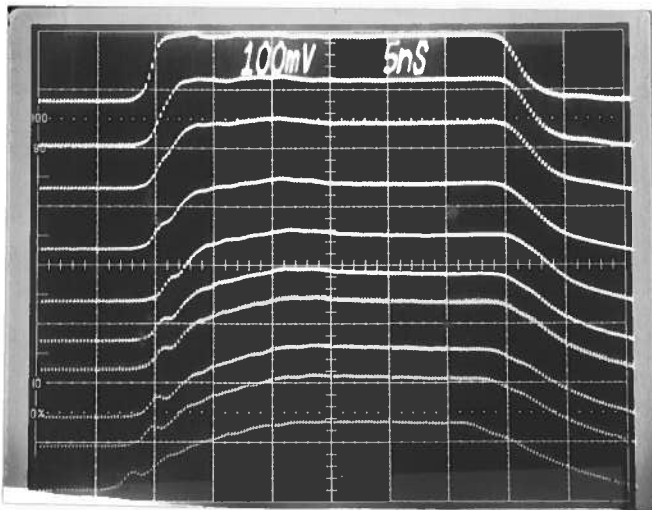
BOX 5120, LCD MERIVALE  
 OTTAWA, ONTARIO  
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PERFORMANCE CHECKSHEET

Model: *AVL-AV-1-B-PN-M-T*

S.N.: *11377*

Date: *JAN 15 2006*



*60dB ATTEN.: 100 V/DIV*

*RISE TIME VARIED  
 FROM 1 TO 10 NS  
 IN 9 STEPS.*

*PRF = 5 KHZ.*

a) Output Signal Amplitude:

*0 TO ± 100 V (TO 50V)*

b) Pulse Width(FWHM):

*3 TO 100 NS.*

c) Rise Time (20%-80%):

*1 TO 10 NS*

d) Fall Time (80%-20%):

*2 TO 10 NS*

e) PRF:

*0 TO 5 KHZ*

f) Jitter, Stability:

*OK*

g) Prime Power:

*100 TO 280V  
 50-60 HZ*

**AVTECH****AVTECH ELECTROSYSTEMS LTD.**
 NANOSECOND WAVEFORM ELECTRONICS  
 SINCE 1975

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## "-B" Functional Test & Calibration Certificate

Date of test:	January 16, 2006				Tester:	MJC
Programmed model name:	AVL-AV-1-B-PN-M-T					
Programmed serial number:	11377	MAC address:	00:90:c2:c6:a1:3b			
Firmware revision:	3.37					
Internal trigger checked at:	5 Hz	50 Hz	500 Hz	5000 Hz		
Actual measured output <sup>1</sup> :	4.97 Hz	49.6 Hz	497 Hz	4982 Hz		
External trigger checked:	Yes			Gate checked:	Yes	
Manual trigger checked:	Yes					
Pulse compression checked:	N/A		Low Amplitude PW Distortion Nulled:	N/A		
Pulse width checked at:	3 ns	10 ns	30 ns	100 ns	5 kHz, +100V to 50 Ohms	
Actual measured output <sup>2</sup> :	2.9 ns	9.9 ns	29.9 ns	100.0 ns	50 Ohms	
PW <sub>in</sub> = PW <sub>out</sub> 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	10 Hz, 3 ns, +100V to 50 Ω	
Actual measured output <sup>1</sup> :	100.3 ns	1.000 us	9.997 us	100.1 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:	+25V	+50V	+75V	+110V	5 kHz, 100 ns to 50 Ω	
Actual measured output <sup>2</sup> :	-25V	+50V	-76V	+108V		
Amplitude polarity:	+/-					
Zout calibration:	N/A					
Electronic amplitude control (+ and -):	N/A					
External amplify mode:	N/A					
Bleeder resistors adequate:	Yes					
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		Telnet control checked:	N/A		
LCD pull-ups installed:	N/A					
PCB 108H oscillator buffer resistor:	N/A		PW, delay bias (1k/820/108H or 1k/604/108M):	N/A		
PCB 108N TP14/C26 resistor:	OK					
PN trigger pull-downs installed:	N/A					
Sync pulse width checked:	100 ns nominal					
Circuit Boards:	PS:	158K	Main:	108N		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	33k		
DC fuses:	Main:	1A	Overload:	0.25A		
AC Current:	Quiescent:	0.24A @ 115V	Max. Load:	0.25A @ 115V		
		0.17A @ 230V		0.18A @ 230V		
AC fuse:	0.5A					
1.5 kV <sub>RMS</sub> , 5s, switch on, Hypot Test:	OK					
25A RMS Ground Continuity Test:	OK					
Fan operational:	Yes					
Top cover vent required:	No					
Photographed:	Yes					

<sup>1</sup> Checked with: Fluke PM6681 Counter (S/N 9446 066 81016), referenced to Datum ExactTime 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.