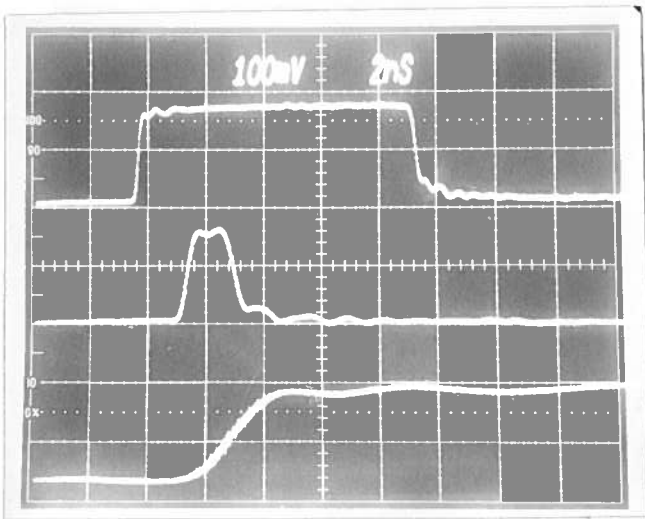


PULSE GENERATOR  
PERFORMANCE CHECK

Model: AVI-U-12-B-P-MTB

S.N.: 10813

Date: DEC 11 2003



- a) Output signal amplitude:  
+50 Volts (70-80V)
- b) Pulse width:  
1 to 10 NS
- c) Rise time:  
≤ 200 ps (20-80V)
- d) Fall time:  
≤ 500 ps (20-80V)
- e) PRF:  
0 to 100 kHz.
- f) Jitter, stability:  
OK
- g) Prime power:

100 - 240V  
50 - 60Hz

50 dB ATTEN ∴ 32 V/DIV  
TOP 2 NS/DIV (Pulse)

MID 1 NS/DIV (Pulse)

BUT 200 ps/DIV (RISE TIME)

PRF = 100 kHz.



# 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/

BOX 5120, LCD MERIVALE  
OTTAWA, ONTARIO  
CANADA K2C 3H4  
TEL: (613) 226-5772  
FAX: (613) 226-2802

## "-B" Functional Test & Calibration Certificate

Date of test:	December 10, 2003				Tester:	MJC
Programmed model name:	AVI-V-2L-B-P-MTB					
Programmed serial number:	10813					
Firmware revision:	2.54					
Internal trigger checked at:	1 Hz	100 Hz	1 kHz	10 kHz	100 kHz	
Actual measured output <sup>1</sup> :	0.999 Hz	99.97 HZ	1.000 kHz	10.00 kHz	100.1 kHz	
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:	1 ns	3 ns	6 ns	10 ns	100 kHz, to	
Actual measured output <sup>2</sup> :	1.0 ns	3.1 ns	6.2 ns	10.4 ns	50Ω	
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	1 kHz, to 50Ω	
Actual measured output <sup>1</sup> :	97.7 ns	1.000 us	10.04 us	100.4 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:	N/A					
Actual measured output <sup>2</sup> :	N/A					
Amplitude polarity:	N/A					
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 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:	N/A		
DC fuses:	Positive:	0.8A	Negative:	N/A		
AC Current:	Quiescent:	0.19A @ 115V	Max. Load:	0.20A @ 115V		
		0.16A @ 230V		0.17A @ 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.