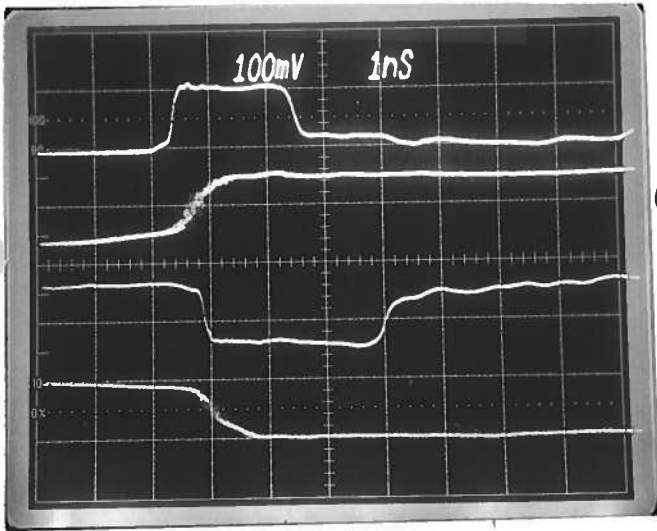


PULSE GENERATOR  
PERFORMANCE CHECK

Model: *AUP-AU-1-B-PN*

S.N.: *10731*

Date: *OCT 9 2003*



- a) Output signal amplitude:  
*0 TO ±10 V (TO 50Ω)*
- b) Pulse width:  
*0.4 TO 4.0 NS*
- c) Rise time:  
*≤ 200ps*
- d) Fall time:  
*≤ 200ps*
- e) PRF: *0 TO 1.0 MHz.*
- f) Jitter, stability:  
*OK*
- g) Prime power:  
*100 ± 10 V*

*40dB ATTEN - 10 VOLTS/DIV*

- ① *Pout 1 NS/DIV*
- ② *Pout 200ps/DIV, RISE TIME*
- ③ *Nout 1 NS/DIV*
- ④ *Nout 200ps/DIV, RISE TIME*

*50\* - 60 MHz*

*PRF = 100K Hz*



# AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS  
SINCE 1975

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U.S.A. 13669-0265  
TEL: (315) 472-5270  
FAX: (613) 226-2802

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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:	October 8, 2003	Tester:	MJC		
Programmed model name:	AVP-AV-1-B-P-PN				
Programmed serial number:	10731				
Firmware revision:	2.53				
Internal trigger checked at:	1 Hz	100 Hz	1 kHz	10 kHz	1 MHz
Actual measured output <sup>1</sup> :	0.990 Hz	99.3 Hz	0.993 kHz	10.00 kHz	1.010 MHz
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:	0.4 ns	1 ns	2 ns	4 ns	10 kHz, +10V
Actual measured output <sup>2</sup> :	0.4 ns	1.0 ns	2.0 ns	4.1 ns	to 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		10 kHz, +10V
Actual measured output <sup>1</sup> :	99.2 ns	1.006 us	10.09 us		to 50Ω
Double pulse checked:	N/A				
Invert mode checked:	N/A				
ECL/TTL modes checked:	N/A				
Zout switch checked:	N/A				
Amplitude checked at:	-2V	+4V	-7V	+10V	10 kHz, 2 ns
Actual measured output <sup>2</sup> :	-2.1V	+3.9V	-7.2V	+10.2V	to 50Ω
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				
Offset nulled (output off):	N/A				
Amplitude-dependent offset nulled:					
RS-232 checked:	Yes				
LCD pull-ups installed:	Yes				
PN trigger pull-downs installed:	Yes (PCB 151)				
Sync pulse width checked:	200 ns nominal				
Circuit Boards:	PS:	93	Main:	108G	
Overload Trigger Resistance:	Trips at:	N/A	Installed:	N/A	
DC fuses:	Positive:	N/A	Negative:	N/A	
AC Current:	Quiescent:	0.31A @ 100V	Max. Load:	0.35A @ 115V	
		0.16A @ 220V		0.18A @ 230V	
AC fuse:	1A				
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 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.