

PULSE GENERATOR  
PERFORMANCE CHECK

Model: *AVRH-3-B-PN*

S.N.: *10304*

Date: *MAR 10 2004*

- a) Output signal amplitude:  
*0 TO  $\pm 3000$  V TO  $R_L \geq 10K$*
- b) Pulse width:  
*200 ns TO 2.5  $\mu$ s*
- c) Rise time:  
 *$\leq 100$  ns (20-80%)*
- d) Fall time:  
 *$\leq 100$  ns (20-80%)*
- e) PRF:  
*0 TO 1 KHz*
- f) Jitter, stability:  
*OK*
- g) Prime power:  
*100  $\rightarrow$  240 V*  
*50-60 Hz*



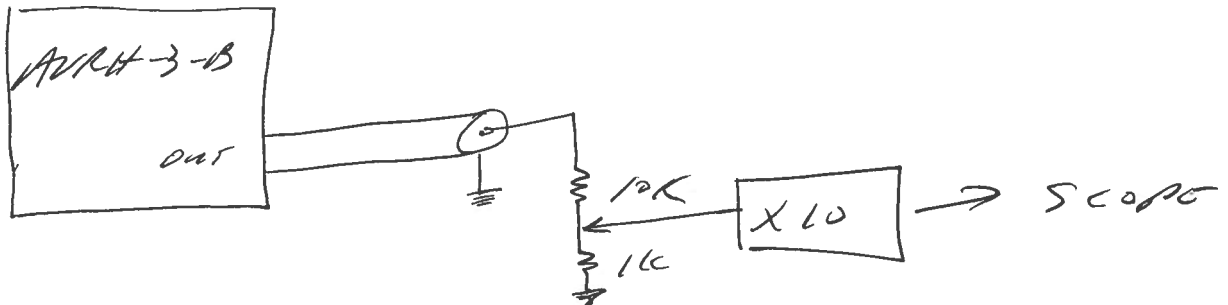
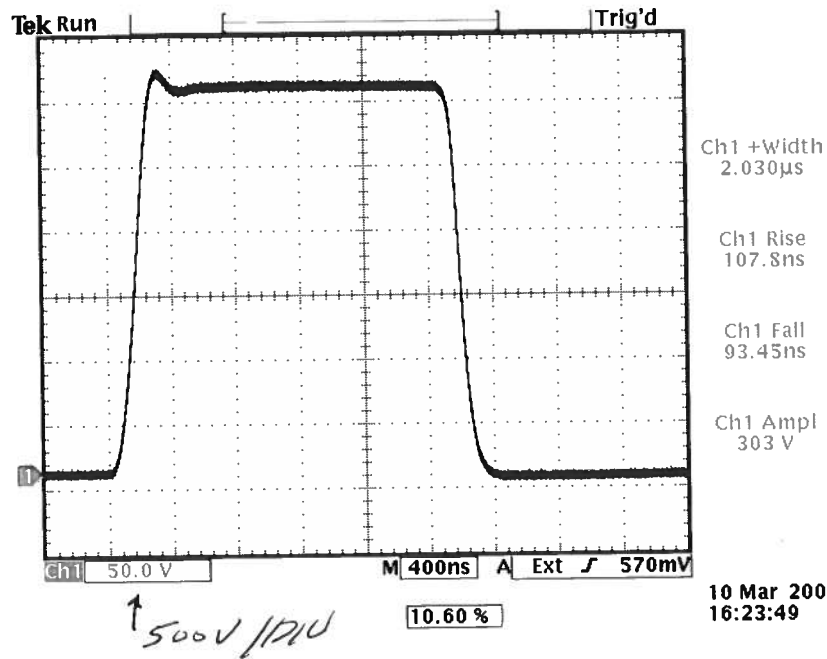
(A)

10804

P85 OUT.

$R_L \approx 10K.$

$PRF = 100 \text{ Hz}$



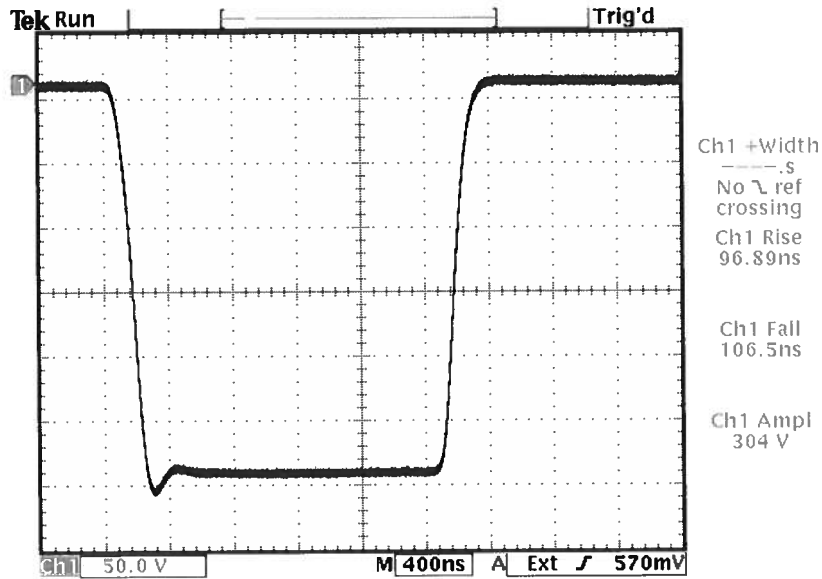
(B)

10804

NFB OUT.

$R_L \approx 10K$

$PRF = 100kHz$



↑ 500V/DIV

10.60%

10 Mar 2004  
16:24:57



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## "-B" Functional Test & Calibration Certificate

Date of test:	March 10, 2004				Tester:	MJC
Programmed model name:	AVRH-3-B-PN					
Programmed serial number:	10804					
Firmware revision:	2.57					
Internal trigger checked at:	1 Hz	10 Hz	100 Hz	1 kHz		
Actual measured output <sup>1</sup> :	1.000 Hz	9.981 Hz	99.8 Hz	0.999 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:	200 ns	1 us	2.5 us	10 Hz, +3 kV to 10 kΩ		
Actual measured output <sup>2</sup> :	201 ns	0.990 us	2.54 us			
PWin = PWout mode checked:	Yes				DC mode checked:	N/A
Duty Cycle Limit:	0.25%					
Delay nulled:	Yes					
Delay checked at:	100 ns	1 us	10 us	100 us	10 Hz, +3 kV to 10 kΩ	
Actual measured output <sup>1</sup> :	100 ns	1.009 us	10.08 us	100.6 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:	+300V	+1000V	-2000V	+3000V	100 Hz, 2.5 us to 10 kΩ	
Actual measured output <sup>2</sup> :	+304V	+1020V	-2030V	+3070V		
Amplitude polarity:	+/-					
Zout calibration:	N/A					
Electronic amplitude control:	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					
LCD pull-ups installed:	N/A					
PCB 108G/H resistor updates:	Yes					
PN trigger pull-downs installed:	Yes					
Sync pulse width checked:	200 ns					
Circuit Boards:	PS:	158F	Main:	108G		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	6.2k		
DC fuses:	Main:	2A	Overload:	1A		
AC Current:	Quiescent:	0.28A @ 115V	Max. Load:	0.46A @ 115V		
		0.18A @ 230V		0.26A @ 230V		
AC fuse:	0.8A (for 115V)					
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.