

PULSE GENERATOR  
PERFORMANCE CHECK

Model: AVR4-3-B-PN  
S.N.: 10122  
Date: APRIL 10 2002

- a) Output signal amplitude:  
0 TO  $\pm 3000$  V TO RL  $\approx$  10K
- b) Pulse width:  
200 NS TO 2.5  $\mu$ S
- c) Rise time:  
 $\leq 100$  NS
- d) Fall time:  
 $\leq 100$  NS
- e) PRF: 0 TO 1 KHz.
- f) Jitter, stability:  
OK
- g) Prime power:  
120/240 V  
50-60 Hz



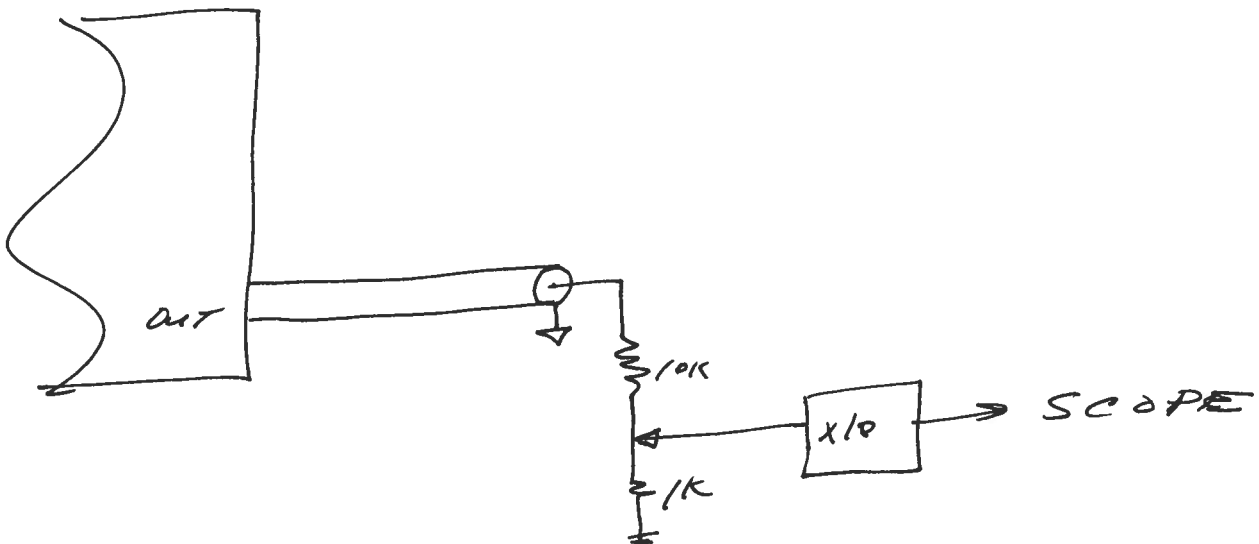
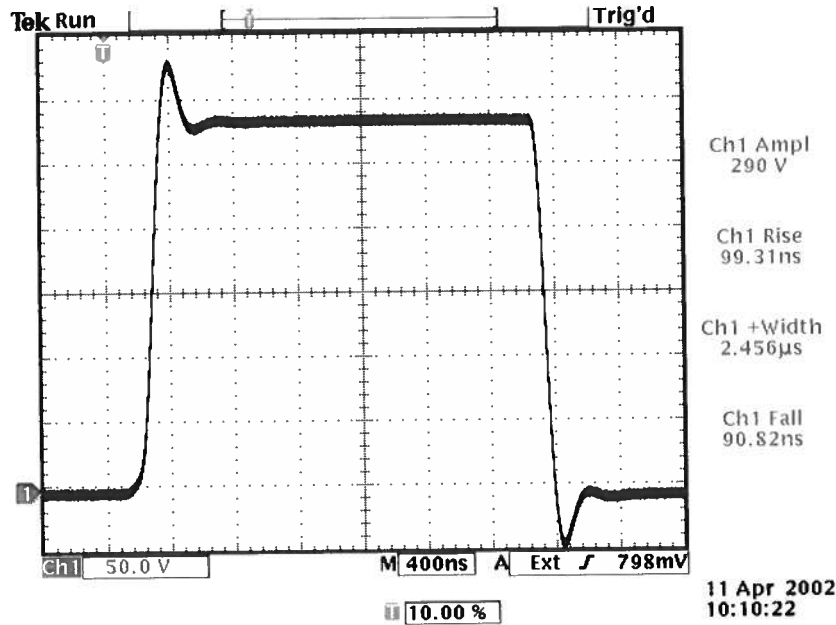
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10122

PDS OUT

$R_c \approx 10K$

PORT = 1.0KHz

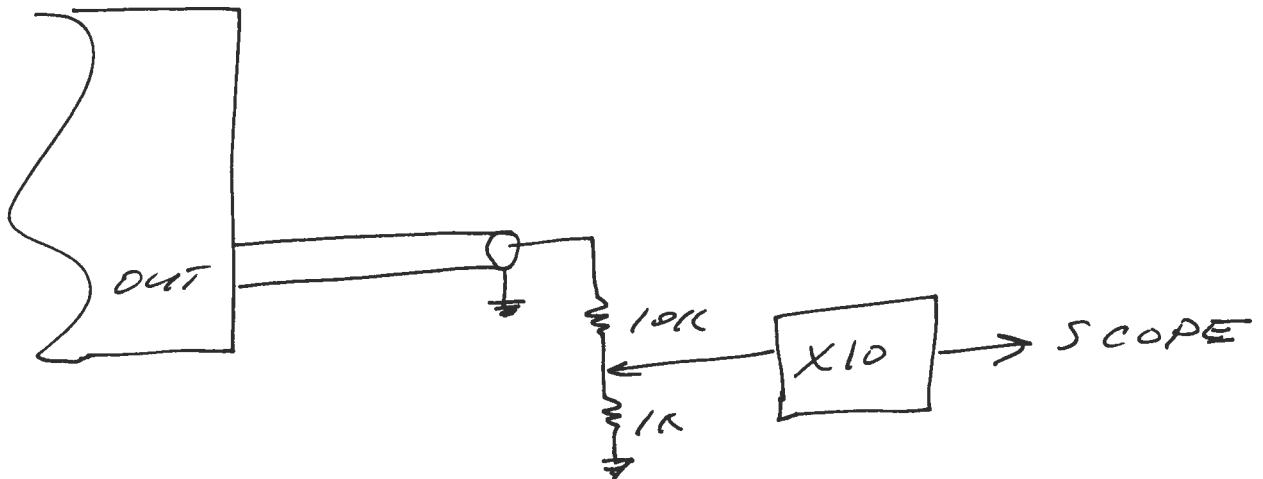
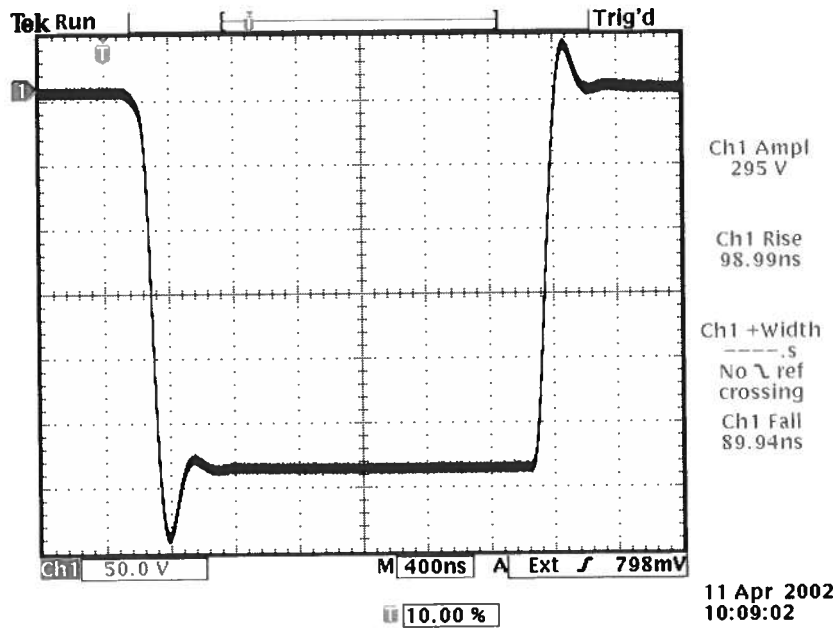


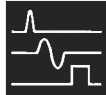
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10122  
NEG OUT

$R_c = 10K$

PRF = 1KHz



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**"-B" Functional Test & Calibration Certificate**

Date of test:	April 11, 2002				Tester:	MJC
Programmed model name:	AVRH-3-B-PN					
Programmed serial number:	10122					
Firmware revision:	2.39					
Temp, RH:	24.9°C, 27.2%					
Internal trigger checked at:	1 Hz	10 Hz	100 Hz	1 kHz		
Actual measured output <sup>1</sup> :	0.998 Hz	9.992 Hz	99.90 Hz	0.999 kHz		
External trigger checked:	yes			Gate checked:	yes	
Manual trigger checked:	yes					
Pulse compression checked:	yes		Low Amplitude PW Distortion Nulled:			
Pulse width checked at:	200 ns	500 ns	1 us	2.5 us	10 Hz, +3.3 kV into 11k Ohms	
Actual measured output <sup>2</sup> :	202 ns	492 ns	0.985 us	2.52 us		
PW <sub>in</sub> = PW <sub>out</sub> mode checked:	yes			DC mode checked:	N/A	
Duty Cycle Limit:	0.25%					
Delay nulled:	yes					
Delay checked at:	100 ns	500 ns	1 us	5 us	10 Hz, +3.3 kV into 11k Ohms	
Actual measured output <sup>1</sup> :	100.0 ns	505 ns	1.004 us	5.07 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	+300V	-3000V	+3000V	10 Hz, 2.5 us into 11k Ohms	
Actual measured output <sup>2</sup> :	-298V	+299V	-3014V	+3025V		
Amplitude polarity:	+/-					
Zout calibration:	N/A					
Electronic amplitude control:	N/A					
External amplify mode:	N/A					
Ultraviolet flux removed:	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					
Sync pulse width checked:	200 ns nom					
Circuit Boards:	PS:	93	Main:	108E		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	3k		
DC fuses:	Positive:	1.5A	Negative:	N/A		
AC Current at 115 VAC:	Quiescent:	0.49A	Max. Load:	0.80A		
AC fuse:	1A					
120/240V operation:	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 system (Cal. Label 112506) for PW < 5 ns.