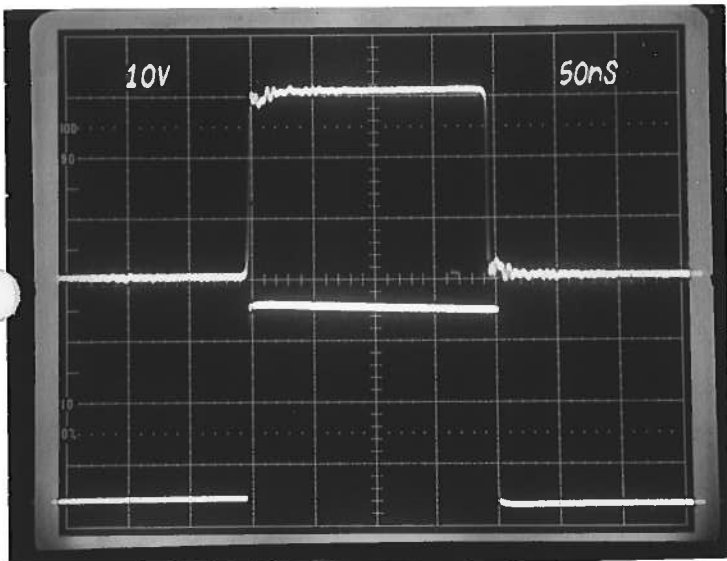


PULSE GENERATOR
PERFORMANCE CHECK

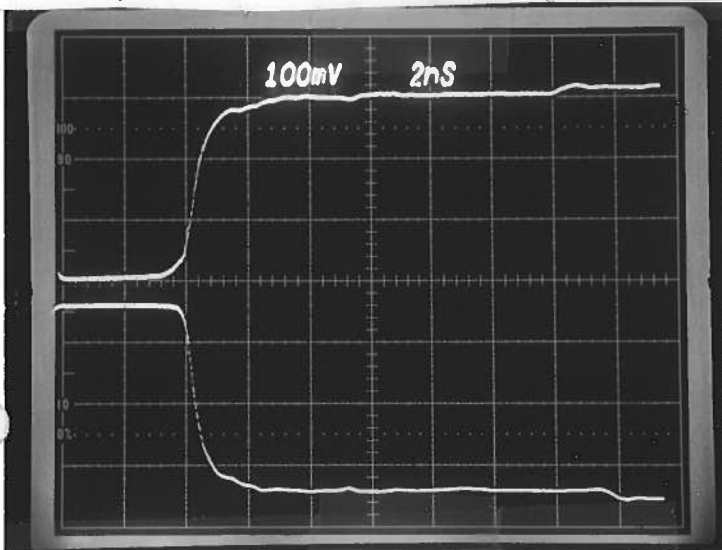
Model: AVR-D2-B

S.N.: 9438

Date: Sept 8, 2000

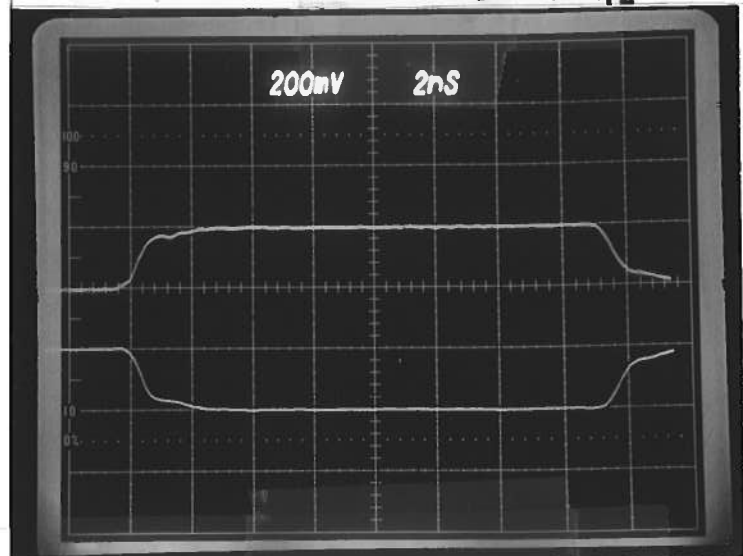


Top: 20ns PW, 50ns/div, 5V/div, CH1.
Bot: 20µs PW, 5µs/div, 5V/div, CH1



Top: CH1, +30V, 10V/div, 2ns/div
Bot: CH1, -30V, 10V/div, 2ns/div
D.C. Time Test

- a) Output signal amplitude: ✓
 1) 0 to ±30V, $R_L = 50\ \Omega$
 2) ±2V, $R_L = 50\ \Omega$ ✓
- b) Pulse width:
 1) 20ns to 30µs
 2) 15ns
- c) Rise time: ✓
 $\leq 1\text{ns}$
- d) Fall time: ✓
 $\leq 1\text{ns}$
- e) PRF: ✓
 0 - 50kHz, 10% max. duty cycle ✓
- f) Jitter, stability: ✓
- g) Prime power: 120/240V_{AC}, 50-60Hz ✓
 OK ✓



Top: CH2, +2V, 2V/div, 2ns/div
Bot: CH2, -2V.



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"-B" Functional Test & Calibration Certificate

Date of test:	September 8, 2000				Tester:	MJC
Programmed model name:	AVR-D2-B					
Programmed serial number:	9438					
Firmware revision:	2.22					
Internal trigger checked at:	5 Hz	50 Hz	500 Hz	5 kHz	50 kHz	
Actual measured output ¹ :	5.05 Hz	50.5 Hz	506 Hz	5.02 kHz	49.6 kHz	
External trigger checked:	yes			Gate checked:	yes	
Trigger load resistor present:	yes					
Manual trigger checked:	yes					
Pulse compression checked:	yes					
Pulse width checked at:	CH1: 200 ns	CH1: 2 us	CH1: 20 us	CH2 (fixed)	100 Hz, +30V	
Actual measured output ² :	197 ns	2.01 us	20.3 us	15.6 ns	and +2V	
PWin = PWout mode checked:	N/A			DC mode checked:	N/A	
Duty Cycle Limit:	10%, CH1					
Delay nulled:	yes					
Delay checked at:	200 ns	2 us	20 us	100 Hz, CH1		
Actual measured output ¹ :	206 ns	2.02 us	20.2 us	to SYNC		
Double pulse checked:	N/A					
Invert mode checked:	N/A					
ECL/TTL modes checked:	N/A					
Zout switch checked:	N/A					
PRF, PW, delay min-to-max check:	yes					
Amplitude checked at:	CH1: -10V	CH1: +30V	CH2: -2V	CH2: +2V	1: 100Hz, 10 us	
Actual measured output ² :	-10.0V	+30.2V	-2.0V	+2.0V	2: 10 kHz	
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:	-20 dB, approx			Monitor offset nulled:	N/A	
LCD Monitor calibrated:	N/A			Monitor offset nulled:	N/A	
Mon. Single Pulse/Min PW OK:	N/A			SHA Cap:	N/A	
Offset checked at:	CH1: +15V	CH1: -15V	CH2: -1V	CH2: +1V	zero amplitude	
Actual measured output ² :	+15.1V	-15.1V	-0.99V	+0.98V		
Offset nulled (output on):	yes			Amplitude-dependent offset nulled:	N/A	
Offset nulled (output off):	N/A					
RS-232 checked:	yes					
Sync pulse width checked:	200ns approx					
Circuit Boards:	PS:	93	Main:	108		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	3.6k		
DC fuses:	Positive:	1A	Negative:	N/A		
AC Current at 115 VAC:	Quiescent:	0.53A	Max. Load:	0.88A		
AC fuse:	0.5A (for 240V operation)					
Photographed:	yes					

¹ Checked with: HP5370A Universal Time Interval Counter

² Checked with: Tektronix TDS360 digital oscilloscope for PW ≥ 5 ns,
Tektronix 7704A/7S11/7T11/S4 sampling oscilloscope system for PW < 5 ns.