

PULSE GENERATOR
PERFORMANCE CHECK

Model: AVR-5B-B-PN-EP-R5

S.N.: 9944

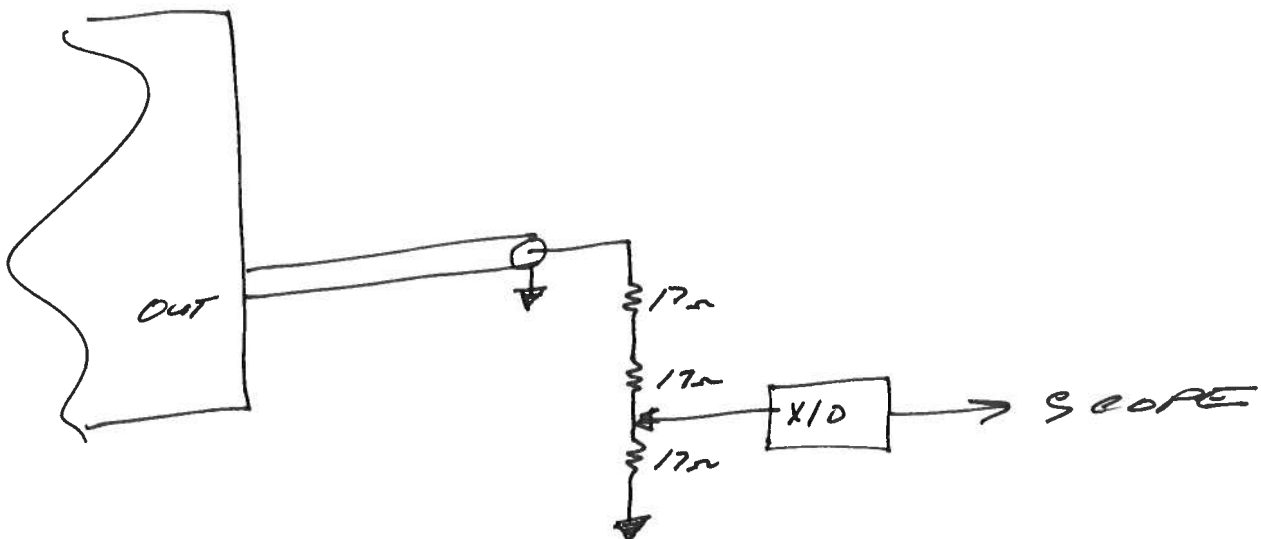
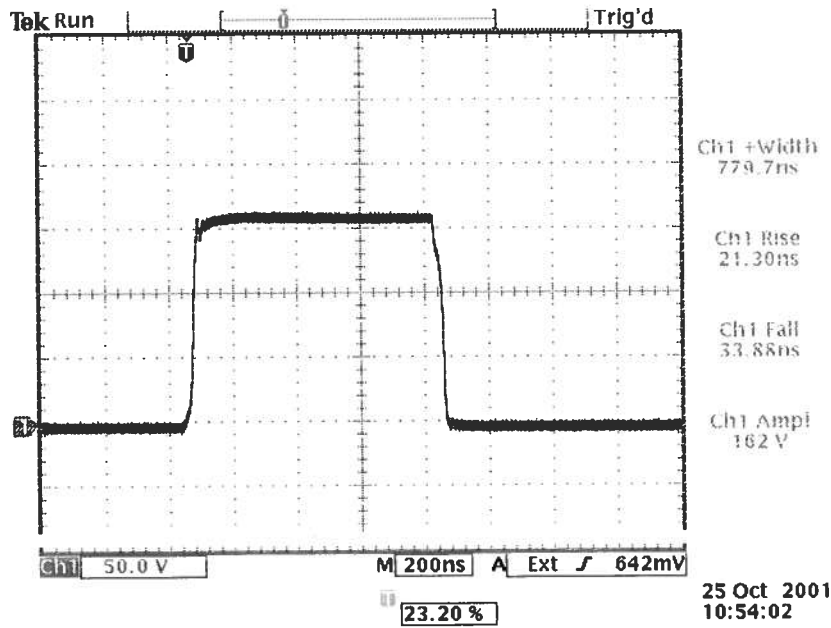
Date: OCT 24 2001

- a) Output signal amplitude:
0 TO $\pm 500V$ ($R_L \geq 50\Omega$)
- b) Pulse width:
0.1 TO 100 μ S
(10% MAX DUTY CYCLE)
- c) Rise time:
 $\leq 30 NS$
- d) Fall time:
 $\leq 30 NS$
- e) PRF: 0 TO 10 KHz
(10% MAX DUTY CYCLE)
- f) Jitter, stability:
OK
- g) Prime power:
120/240V
50-60Hz.



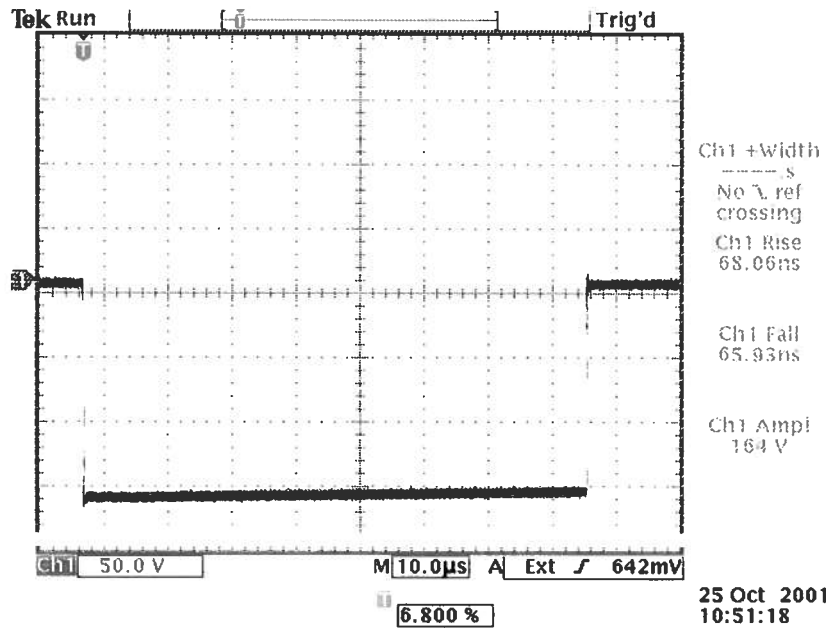
(A)

9944
NARROW PULSE
P_{out}
R_c = 50 Ω



(B)

9944
WIDE PULSE
Naut.
 $R_L = 50 \Omega$
PRF = 100 Hz.



LOAD AS PER (A)



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

P.O. BOX 5120 STN. F
OTTAWA, ONTARIO
CANADA K2C 3H4
TEL: (613) 226-5772
FAX: (613) 226-2802

"-B" Functional Test & Calibration Certificate

| | | | | | | |
|---------------------------------------|-------------------|----------|-------------------------------------|------------------------------------|--------------------------|-----|
| Date of test: | October 24, 2001 | | | | Tester: | MJC |
| Programmed model name: | AVR-5B-B-EA-PN-R5 | | | | | |
| Programmed serial number: | 9944 | | | | | |
| Firmware revision: | 2.28 | | | | | |
| Internal trigger checked at: | 1 Hz | 10 Hz | 100 Hz | 1 kHz | 10 kHz | |
| Actual measured output ¹ : | 1.004 Hz | 10.02 Hz | 100.2 Hz | 1.002 kHz | 10.01 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: | 100 ns | 1 us | 10 us | 100 us | 10 Hz, +500V to 50 Ohms | |
| Actual measured output ² : | 101.2 ns | 0.996 us | 10.00 us | 100.0 us | | |
| PWin = PWout mode checked: | yes | | | DC mode checked: | N/A | |
| Duty Cycle Limit: | 1% | | | | | |
| Delay nulled: | yes | | | | | |
| Delay checked at: | 100 ns | 1 us | 10 us | 100 us | 10 Hz, +500V to 50 Ohms | |
| Actual measured output ¹ : | 100.7 ns | 1.002 us | 10.01 us | 100.0 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: | -50V | +150V | -300V | +500V | 10 Hz, 10 us, to 50 Ohms | |
| Actual measured output ² : | -50.2V | +150.2V | -300.0V | +499.2V | | |
| Amplitude polarity: | +/- | | | | | |
| Zout calibration: | N/A | | | | | |
| Electronic amplitude control: | OK | | | | | |
| External amplify mode: | N/A | | | | | |
| Ultraviolet flux removed: | N/A | | | | | |
| Monitor V/I Ratio: | N/A | | | Monitor offset nulled: | | |
| LCD Monitor calibrated: | N/A | | | Monitor offset nulled: | | |
| Offset checked at: | N/A | | | | | |
| Actual measured output ² : | 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: | yes | | | | | |
| Circuit Boards: | PS: | 93 | Main: | 108B | | |
| Overload Trigger Resistance: | Trips at: | N/A | Installed: | 1.5k 1000uF | | |
| DC fuses: | Positive: | 3A | Negative: | N/A | | |
| AC Current at 115 VAC: | Quiescent: | 0.51A | Max. Load: | 1.45A | | |
| AC fuse: | 1.5A | | | | | |
| Photographed: | yes | | | | | |

¹ Checked with: Fluke PM6681 Counter, referenced to Datum ExactTime 9390-6000 GPS Frequency Reference

² Checked with: Tektronix TDS3052 digital oscilloscope for PW ≥ 5 ns,
Tektronix 7704A/7S11/7T11/S4 sampling oscilloscope system for PW < 5 ns.