



AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS
SINCE 1975

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Model AV-147-TRA1

General Specifications

Output waveform:	See enclosed sketch.
Output amplitude:	-10 Volts or +10 Volts to 50 Ohms.
Pulse width:	50 ns to DC. Output pulse width equals input trigger pulse width.
Input trigger:	Differential ECL.
Max. duty cycle:	100%.
Rise, fall time:	≤ 2 ns (not a function of input rise, fall time).
Overshoot:	≤ 5%.
Settling time:	25 ns (to 1%).
Source impedance:	Approx. 15 Ohms.
Chassis size:	1.0" x 2.0" x 5.0".
Chassis material:	Extruded aluminum, sand-blast finish.
Prime power:	+15 VDC, 300 mA (max). -15 VDC, 300 mA (max).
	The unit does not contain any DC-DC switching convertors or regulators.
Cooling:	Unit should be fan cooled (or conductor cooled).

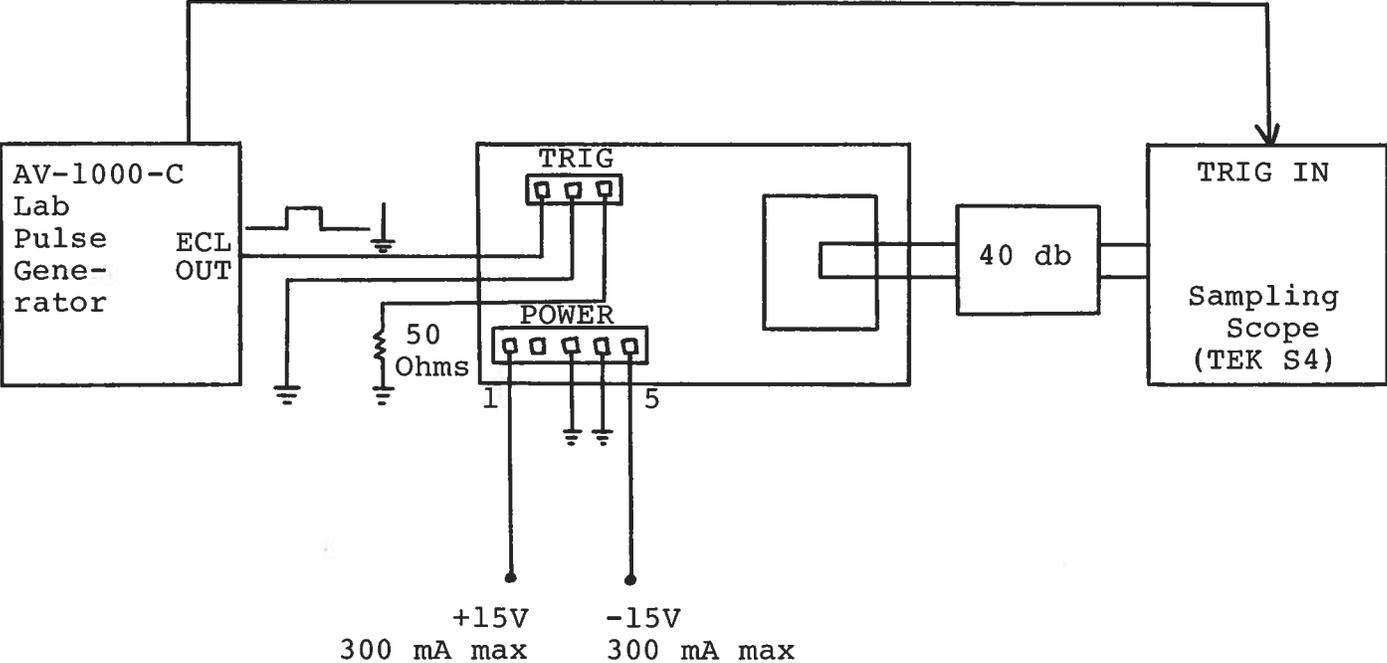
Connectors: All connectors are on a 1" x 2" face (see enclosed sketch).

ECL input connector: 3 0.025" pins on 0.1" centers to mate to 3M monosignal 3-position socket connector TLA (see enclosed sketch).

Output connector: SMA.

Power connectors: 5 0.025" pins on 0.1" centers (see enclosed sketch).

TEST ARRANGEMENT



Notes:

a) POWER CONNECTION:

- i) Apply +15 Volts (± 0.20 Volts) to PIN 1
- ii) Apply -15 Volts (± 0.20 Volts) to PIN 5
- iii) PINS 3 and 4 are internally grounded
- iv) There is no connection to PIN 2

b) TRIG:

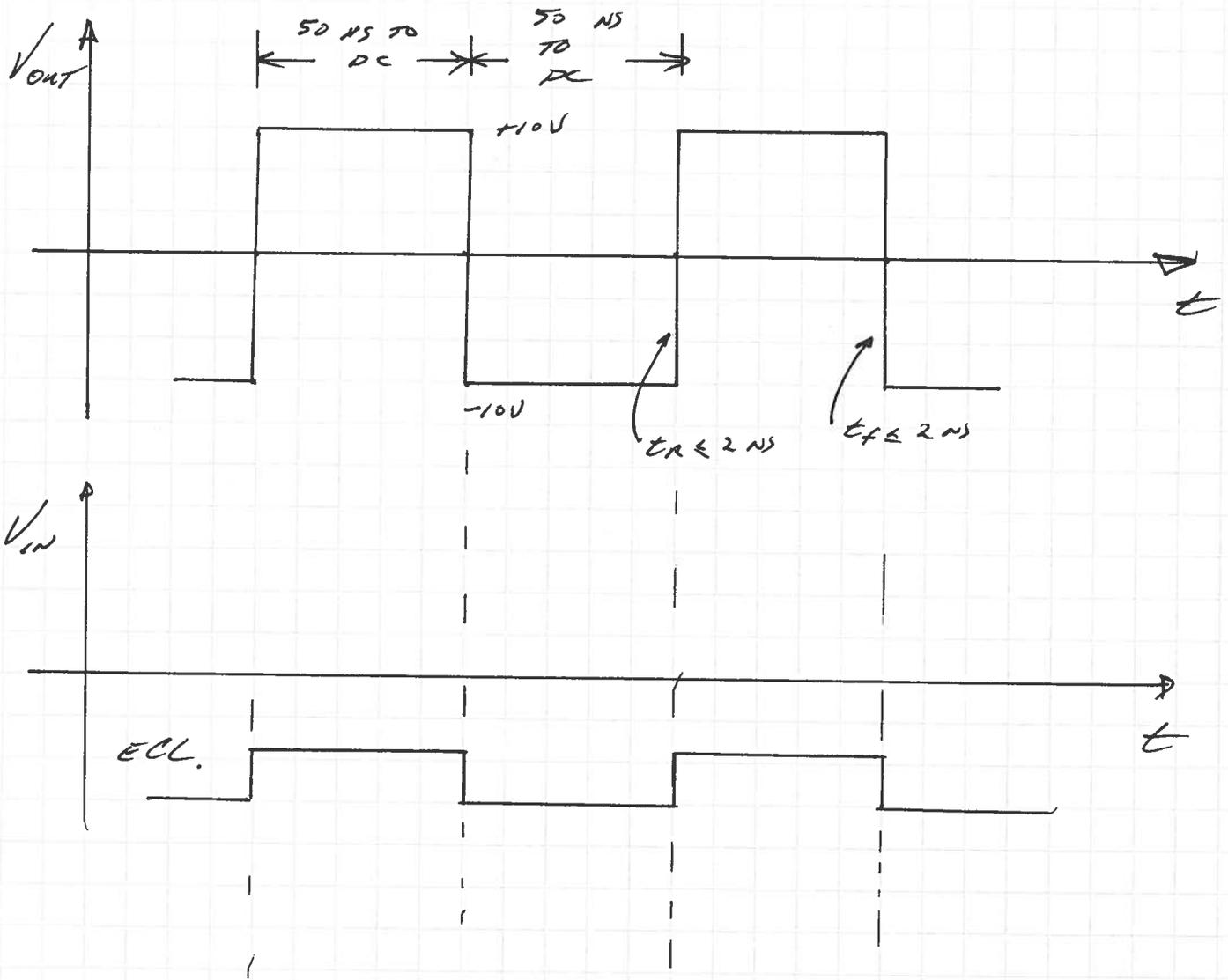
- i) The unit was tested with the input signal connections shown above.
- ii) PINS 1 and 3 are terminated internally by 130 Ohms to -5V and 82 Ohms to ground. PIN 2 is connected to ground.

c) HEATSINKING:

Cooling heat conductor may be achieved by connection to the four 2-56 TAPPED holes on the bottom of the chassis or to the six 2-56 TAPPED holes on the top of the chassis. For the latter case, the top cover may be removed by removing the six counter sink 2-56 screws and attaching a heatsink plate in place of the cover plate. The cover plate shipped with the unit may be used as a template.

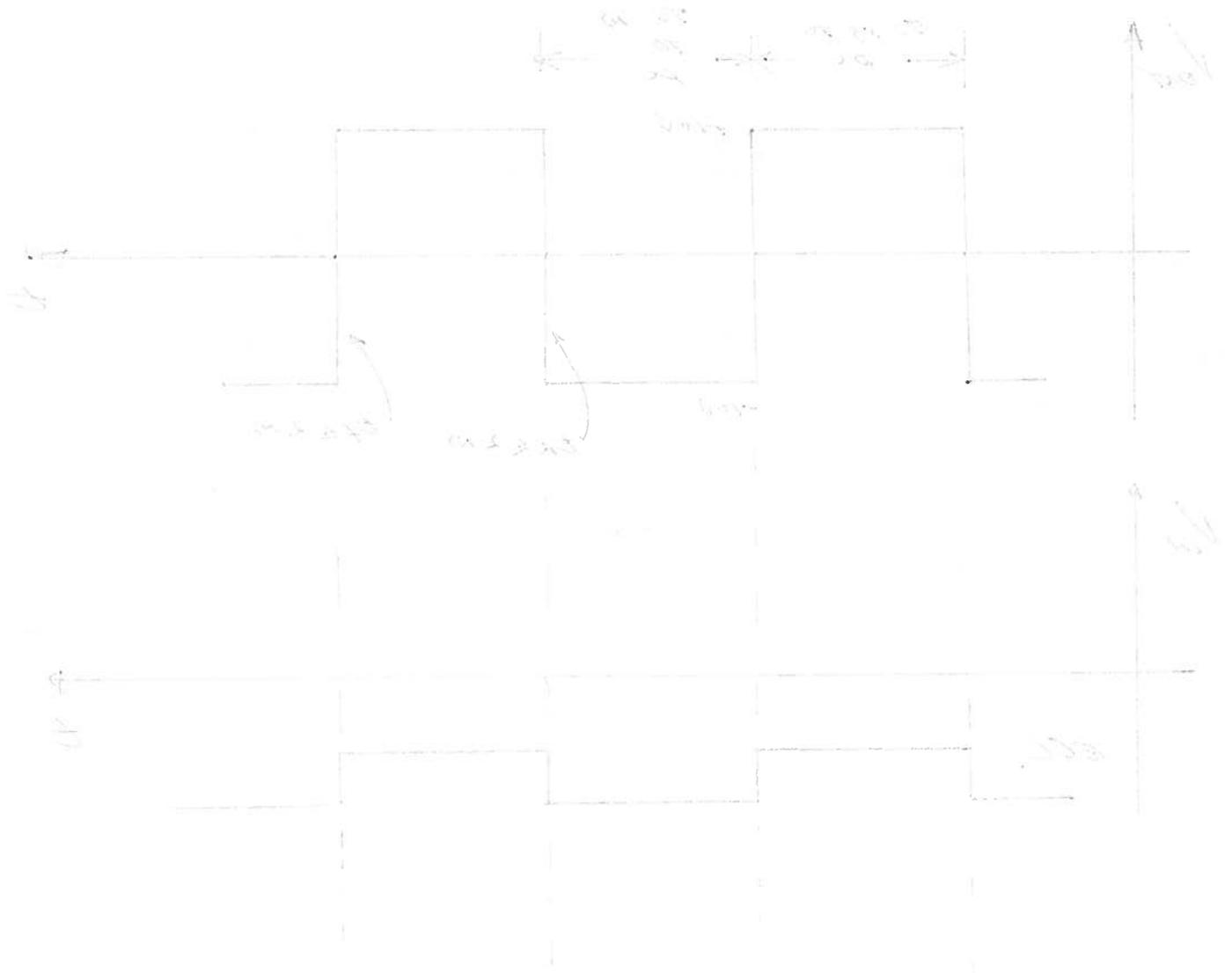
d) For additional assistance:

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19V-147-TRAI INPUT +
OUT OUT WAVEFORMS

Oct. 13, 1993



100 - 100 - 100 - 100
10 - 10 - 10 - 10