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INSTRUCTIONS

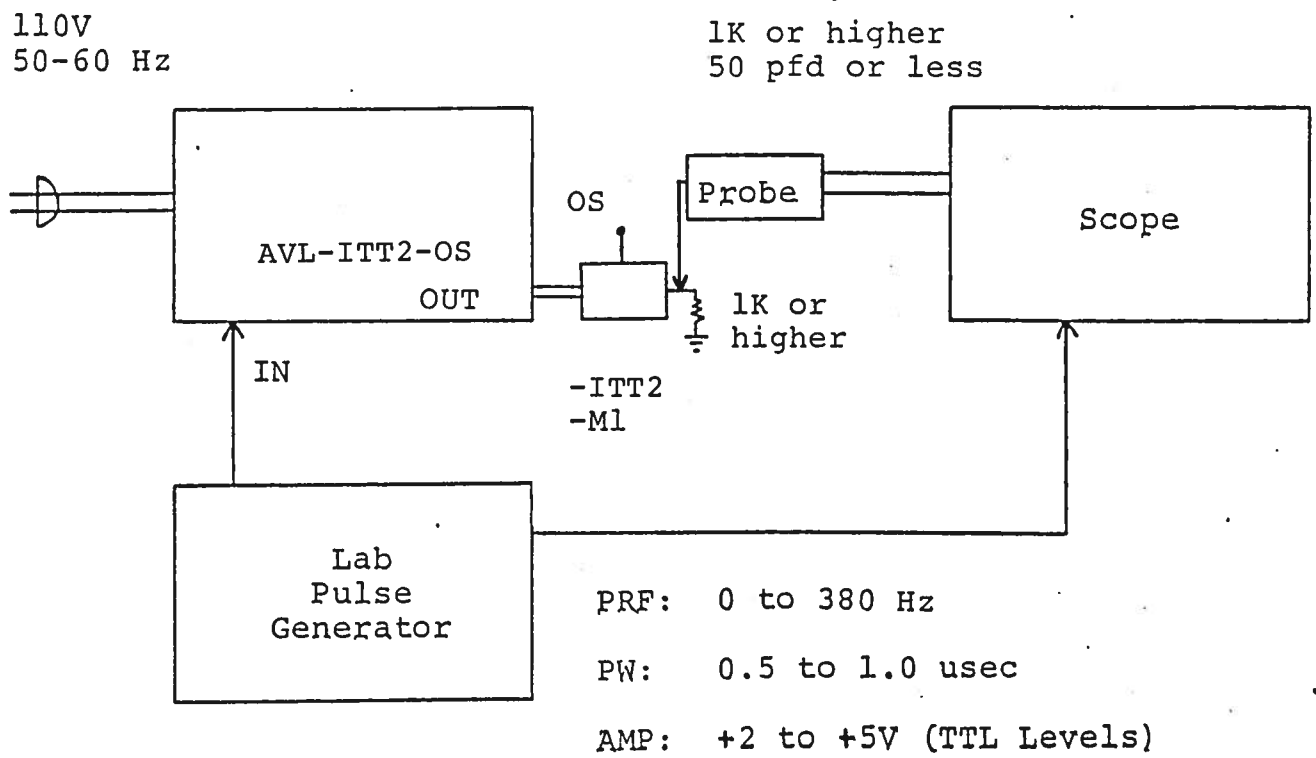
MODEL AVL-ITT2-0S PULSE GENERATOR

S.N.:

## WARRANTY

Avtech Electrosystems Ltd. warrants products of its manufacture to be free from defects in material and workmanship under conditions of normal use. If, within one year after delivery to the original owner, and after prepaid return by the original owner, this Avtech product is found to be defective, Avtech shall at its option repair or replace said defective item. This warranty does not apply to units which have been disassembled, modified or subjected to conditions exceeding the applicable specifications or ratings. This warranty is the extent of the obligation or liability assumed by Avtech with respect to this product and no other warranty or guarantee is either expressed or implied.

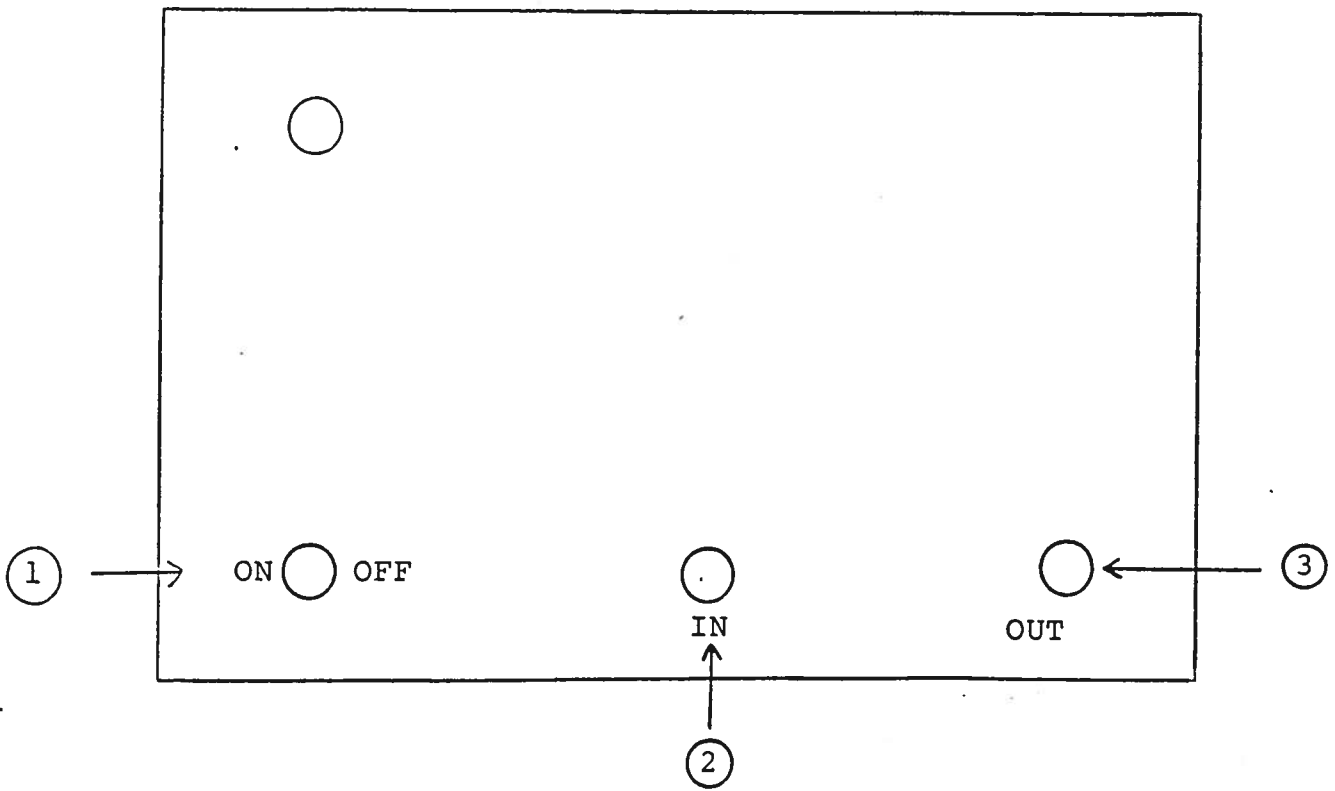
TEST ARRANGEMENT



Notes:

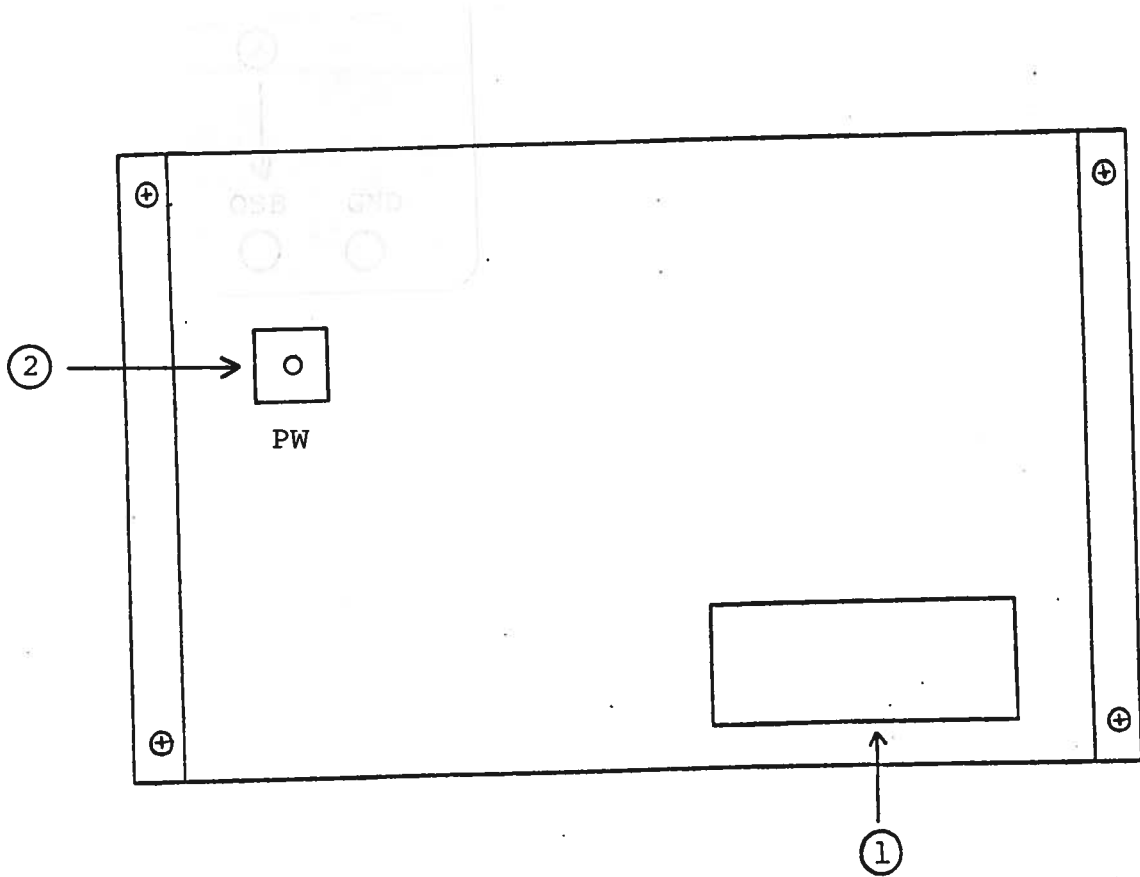
- 1) The equipment should be connected in the general fashion shown above. A scope with a bandwidth of at least 500 MHz should be used to view the outputs.
- 2) The output amplitude is fixed at -200 V. Care should be taken to insure that the scope and the load resistor can withstand this high voltage (and high output power for wide output pulse widths).
- 3) The output pulse width is variable from 5 nsec to 100 nsec by adding 50 ohm coaxial to the rear panel PW connector. Cable such as RG 174 or RG 58 (or better) is recommended. The output pulse width increases by 3 nsec for every additional foot of cable added. CAUTION: The center conductor at the PW port is at a potential of about 400 volts so the prime power should be turned off when replacing or adjusting the PW cable.
- 4) The output PRF is equal to the input PRF applied to the IN port.
- 5) The ITT2-M1 module connects to the OUT A port via a 50 ohm cable. The length of this cable is not critical. The high impedance load is placed in parallel across the ITT2-M1 output terminals.
- 6) To offset the output connect the desired offset voltage (0 to +50 volts) to the OS terminals on the ITT2-M1 module.

FRONT PANEL CONTROLS



- (1) ON-OFF Switch. Applies prime power to all stages.
- (2) IN. Input trigger applied here (TTL levels, 0.5 to 1.0 usec).
- (3) OUT Connector. SMA connector to which ITT2-M1 module is connected via fifty ohm cable. High impedance load connects to output terminals on ITT2-M1 module.

BACK PANEL CONTROLS

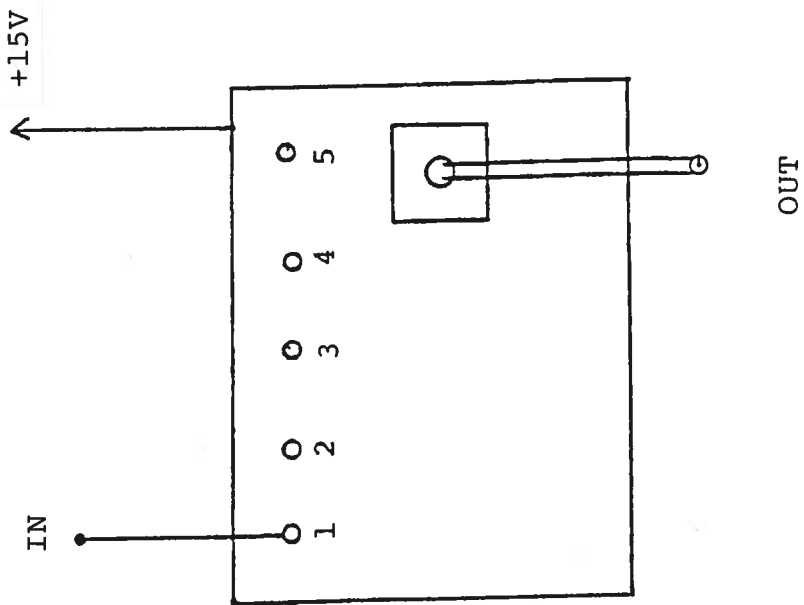


- (1) FUSED CONNECTOR, VOLTAGE SELECTOR. The detachable power cord is connected at this point. In addition, the removable cord is adjusted to select the desired input operating voltage. The unit also contains the main power fuse.
  
- (2) PW. SMA connector to which fifty ohm cable is attached to control output pulse width. Pulse width increases 3 nsec for each additional foot of cable added. Use RG 174 or RG 58 (or better) cable.



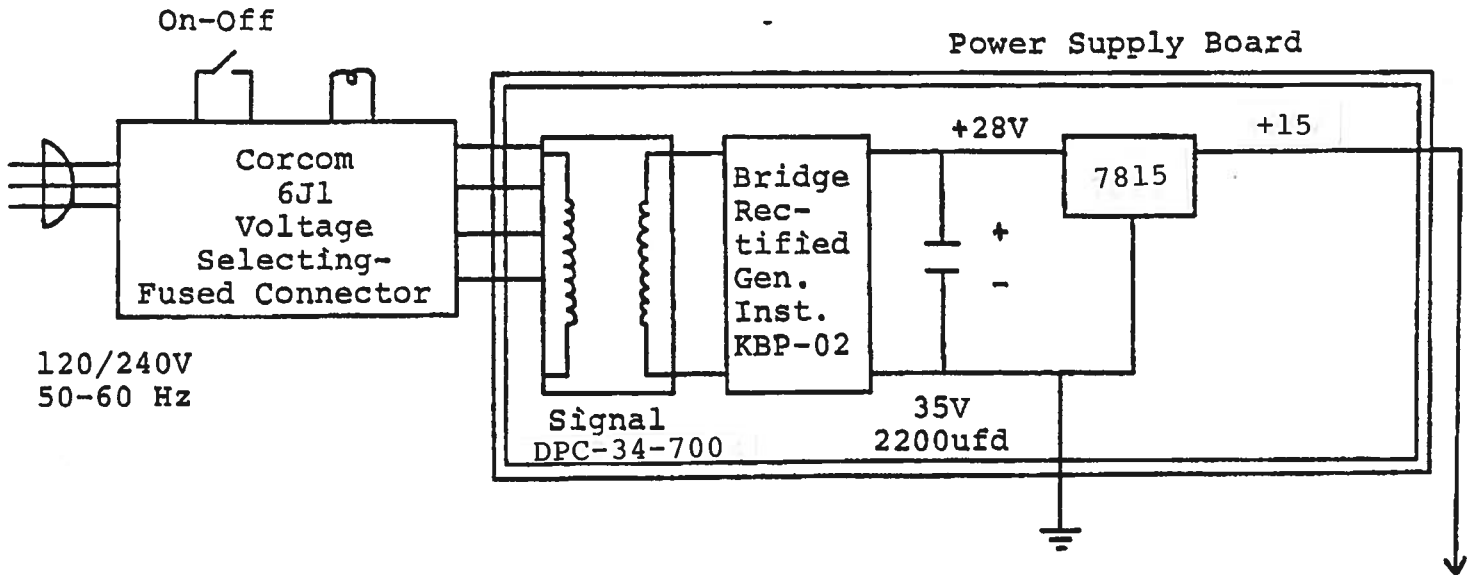
## SYSTEM DESCRIPTION

The AVL-ITT2 consists of pulse generator module and a power supply board which supplies +15 volts (600 mA max) to the module. In the event that the unit malfunctions, remove the instrument top cover, thereby exposing the modules. Measure the voltage at the +15 V pin of the PG module. If this voltage is substantially less than +15 volts, unsolder the line connecting the power supply board output and connect a 50 ohm 10 W load to the power supply output. The voltage across this load should be about +15 V DC. If this voltage is substantially less than 15 volts the power supply board is defective and should be repaired or replaced. If the voltage is near +15V then the pulse generator module is defective and the unit should be returned to Avtech for repair.



AVL-ITT2-OS BLOCK DIAGRAM

POWER SUPPLY BOARD



Schroff

03.04.88

1984

1984

1984-03-03