

Ingression Measurement Transmitter Operating Instructions

Included in the package you will find:

- 1) One Ingression Measurement Transmitter, suitable for documentation purposes.
- 2) Two Ingression Measurement Transmitters - modified, suitable for F.C.C. Certification Testing.
- 3) One power cable, for applying DC power to the unit
- 4) One cable with DB-9 connectors on each end. *
- 5) All documentation required per the "checklist" issued by Washington Labs.

Additional items required to operate the transmitter include:

- 1) a personal computer with a serial port running the Disk Operating System (DOS)
- 2) a regulated DC power supply of 13.8 volts capable of supplying 20 amperes
- 3) 50 ohm load for the antenna, capable of dissipating 20 watts

Plug the DC power cable into the "POWER" jack on the rear panel of the IMT.

Plug the DB-9 connector into the DB-9 receptacle on the rear panel of the IMT.

Connect a suitable load (resistive, 50 ohm) to the "ANTENNA" connector on the rear panel of the IMT.
DO NOT OPERATE THIS TRANSMITTER WITHOUT A PROPER 50 OHM LOAD!

After making sure the power supply is in the "off" state, connect the free end of the power cable to the DC power supply. Red wire is positive and black wire is negative.

Connect the other end of the DB-9 cable to the test computer

Flip the power switch on the power supply to the "ON" state.

Flip the power switch on the front panel of the IMT to the "ON" state.

Copy the test program "IMT-TEST.EXE" from the cdrom to your test computer. The main screen of the test program will display all instructions necessary to proceed with setting frequency and transmit control.

It is possible that, during the testing cycle, the IMT will overheat. There is a built-in temperature sensor that prevents transmitter operation when this condition occurs. There is an LED on the front panel that will illuminate indicating this condition.

This transmitter was designed with a 1:9 duty cycle, specifically 100mS on and 900mS off. The modified test units have larger wattage collector resistors, giving the ability to transmit for longer periods of time. Do not transmit for more than 5 to 6 seconds at a time. Damage to these resistors will occur.

There is a 3 pin header located near U5. Placing the jumper on one side of the header will enable the FM deviation and placing it on the other side of the header will disable the FM deviation.

* You must use the cable provided. The connector on the rear panel of the IMT is not standard.