**MICROWAVE BENCH SETIUP**



**KLYSTRON MOUNT**

Klystron Mount are meant for mounting corresponding klystrons such as 2K2 723A/B,726 A etc. These consists of a section of waveguide flanged on one end and terminal with a movable sport on the other end. An octal-base with cable is provided for klystron

**VARIABLE ATTENUATOR**

Simple and convenently variable type set-level attenators to provide at least 20bd of continuously variable attenuation. These consists of a movable lossyvane inside the section of a waveguide by means of a micrometer. The configuration of lossy vane is designed to obtain the low VSW characteristics over the entire frequency band.These are meant for adjusting power levels and isolating a source and load etc.

**FREQUENCY METER**

Frequency Meter to give direct frequency on the dial provided. These are recommended for use whenever quick determination of frequency and easily reading are desired in laboratory and production testing.
These are designed to have 5MHz resolution and off resonance VSWR of 1.01

**SLOTTED SECTION**

Slotted Section consists of a precision waveguide slotted line and the probe - carriage.
The waveguide slotted line, comprises of an accurately machined section of waveguide in which a small longitudinal slot has been cut which is a basic means for monitoring wave - patterns inside the wave guide system. A precision built probe carriage has a centimeter scale verniner reading of 0.1mm least cout and a dial guage can be mounted easily.

**TUNABLE PROBE**

Tunable Probes is used with the Slotted sections. These are meant for exploring the energy of the elecric fieldin a suitable dfabricated section of waveguide. The depth of penetration into waveguide section is adjustable by the knob of the prob. The tip pickup the RF power from the line & this power is rectified by crystal detector, which is then fed to the VSWR meter.

**DETECTOR MOUNT**

Detectr Mounts are simple and easy to use instrment for detecting microwave power through a suitable detector. It consists of a detector crystal mounted in a section of waveguide and a shorting plunger for matching purpose. The O/P from the crystal may be fed to an indicating instrument. In K and R bands detector mounts, the plunger is driven by a micrometer.

**GUNN OSCILLATORS**

Gunn Oscillators are solid state microwave energy generators. These consists of waveguide cavity flanged on one end and micrometer driven plungerfitted on the other end. A Gunn diode is mounted inside the waveguide with BNC(F) connector for D.C. bias.

**MATCHED TERMINATION**

Matched Termination are low power and non-reflective type of terminations. These consists of a small and highly dissipative taper flap mounted inside the center of a section of waveguide. Matched Termination are as a precise reference loads with Tee junctions, Directional couplers and other similar dividing devices.

**SLIDE - SCREW TUNERS(S.S. TUNERS)**

Slide Screw Tuners are used for matching purpose by changing the penetration and position of a screw in the slot, provided in the centre of the waveguide. These consists of a section of waveguide, flanced on both ends and a pin slot is provided in the board wall of the waveguide. A carriage carring the screw is provided over the slot. A VSWR upto 20 can be tuned to a value less than 1.02 at certain frequency.

### ISOLATORS

### MAGIC TEE

### PIN MODULATORS

### MULTIHOLE DIRECTIONAL COUPLERS

### WAVEGUIDE STANDS

### CROSS DIRECTIONAL COUPLERS

### H-PLANE TEE

### GUNN POWER SUPPLY

### KLYSTRON POWER SUPPLY

### VSWR METER