







POSSIBLE SETUP

<p>Klystron Microwave Test Bench</p>  <p>Order Code - 10401</p>	<p>Gunn Microwave Test Bench</p>  <p>Order Code - 10402</p>
<p>Gunn Microwave Test Bench (Dielectric)</p>  <p>Order Code - 10403</p>	<p>Klystron Microwave Test Bench 4 (Antenna)</p>  <p>Order Code - 10404</p>
<p>Klystron Microwave Test Bench</p>  <p>Order Code - 10405</p>	<p>Gunn Microwave Test Bench</p>  <p>Order Code - 10406</p>

The Microwave Test Benches are precision made microwave systems, which use standard type rectangular wave-guide components to illustrate the essential elements of this field for study.

The equipment consist of :

- A selection of wave-guide components
- The power supply for the microwave source
- A detector
- A meter, which monitors the detector output
- Wall Chart
- Microwave Components Chart

These Training Benches are completely self-contained & provide the means to allow students to carry out practical work at extremely low cost. A comprehensive manual containing extensive microwave theory and a progressive series of assignments is supplied with the Trainer.

Experiments

- Study of Reflex Klystron
- Frequency, Guide Wavelength Measurement
- SWR, Reflection Co-efficient Measurement
- Impedance Measurement
- Study of Gunn Oscillator
- Frequency, Guide Wavelength Measurement
- Dielectric Constant Measurement of Solids
- Dielectric Constant Measurement of Liquid
- Phase Shift Measurement
- Measurement of Radiation Pattern of Antennas
- Measurement of Gain of Antennas
- Measurement of Polar Pattern of Antennas
- Study of E-Plane, H-Plane & Magic Tees

Note: Specifications are subject to change.

- Study of Directional Couplers
- Study of Fixed and Variable Attenuators
- Study of Isolator and Circulators
- Measure the gain of a waveguide Horn Antenna
- Study & Measurement with Multihole Directional Coupler
- Study of Magic Tee, Q & Bandwidth Measurement in cavity resonator

Instruments

- 10501 Klystron Power Supply -----1
- 10502 VSWR Meter Digital -----1
- 10503 Gunn Power Supply -----1

Components

- | | | | |
|--------|--|-------|--|
| 10504 | Coaxial Waveguide Adaptor | 10545 | Wave Guide Stand |
| 10505 | Cooling Fan | 10546 | Wave Guide Twist |
| 10506 | Cross Directional Coupler 20 dB | 10547 | Wave Guide Cavity |
| 10507 | Detector Mount | 10548 | Y Circulator |
| 10508 | Dielectric Antenna | 10549 | Samples of Solid Dielectric |
| 10509 | E-Plane Bend | 10550 | Smith Chart (100 Pc Pad) |
| 10510 | E-Plane Sectoral Horn Antenna | 10551 | Crystal Diode IN 23 |
| 10511 | E-Plane Tee | 10552 | Cable BNC - BNC |
| 10512 | Fixed Attenuator 3 dB | 10553 | Cable TNC - TNC |
| 10513 | Fixed Attenuator 6 dB | 10554 | Tripod Stand |
| 10514 | Fixed Attenuator 10 dB | 10555 | Low Pass Filter - Microwave Component |
| 10515 | Fixed Short | 10556 | High Pass Filter - Microwave Component |
| 10516 | Frequency Meter - Digital | 10557 | Band Pass Filter - Microwave Component |
| 10517 | Gunn Oscillator | 10558 | Cable N Type to TNC |
| 10518 | H-Plane Bend | 10559 | Cable N Type to N Type |
| 10519 | H-Plane Sectoral Horn Antenna | 10560 | Microphone + Headphone |
| 10520 | H-Plane Tee | 10561 | Fasteners (Brass Fly-Net Set) |
| 10521 | Isolator | 10562 | Waveguide Bend to Connect Antenna |
| 10522 | Klystron Mount Only - No Klystron Tube | 10563 | Cable N type to BNC |
| 10522A | Klystron Tube | 10564 | Mains Cord |
| 10523 | Liquid Dielectric Cell | 10565 | Product Demo CD/Video Demo + Smith Chart + Wall Charts + Theoretical / Experimentation Video |
| 10524 | Magic Tee / E-H Tee | 10566 | Wave Guide Section WR90 (1 Foot Length) |
| 10525 | Matched Termination | 10567 | Microwave Simulation Software Single License |
| 10526 | Movable Short | | |
| 10527 | Multi Hole Directional Coupler 10 dB | | |
| 10527A | Multi Hole Directional Coupler 6 dB | | |
| 10528 | Multi Hole Directional Coupler 3 dB | | |
| 10529 | Parabolic Dish Antenna | | |
| 10529A | Helical Antenna | | |
| 10529B | Conical Antenna | | |
| 10530 | Phase Shifter | | |
| 10531 | Pick Up Horn Antenna | | |
| 10532 | Pin Modulator | | |
| 10533 | Precision Short | | |
| 10534 | Pyramidal Horn Antenna | | |
| 10535 | Radiation Pattern Turn Table | | |
| 10536 | S. S. Tuner | | |
| 10537 | Slotted Antenna Broad Wall | | |
| 10538 | Slotted Antenna Narrow Wall | | |
| 10539 | Slotted Section | | |
| 10540 | Solid Dielectric Cell | | |
| 10541 | Standard gain Horn Antenna | | |
| 10542 | T Circulator | | |
| 10543 | Tunable Probe | | |
| 10544 | Variable Attenuator 20 dB | | |

Optional Components

- 10502A VSWR Meter - Analog
- 10516A Frequency Meter - Direct Read Out Analog

Note: Specifications are subject to change.