

Basic Antenna Trainer has been designed to provide useful tools for hands on experimentation and teaching of various commonly used antennas in UHF-Microwave band in the laboratory for students of all levels. It can be used in stand-alone mode. In this system, receiving antenna is rotated manually from 0 to 360 degrees and accordingly the signal strength can be monitored on the Receiver. It comes with a Polar plotting software for storing readings manually

The system consists of a set of two tripods one for mounting the transmitting antenna and another for mounting the receiving antenna, 11 Antennas, RF Transmitter/ Receiver, Antenna Plotting Software and relevant accessories/ cables.

Network Analyser: RF Transmitter & Receiver:

Frequency	:	86 - 860 MHz PLL synthesized
Step Size	:	0.05, 0.1, 0.25, 0.5, 1, 10, 100 Mhz
Accuracy	:	0.01%
Display	:	16X2 Backlit LCD
Functions	:	Menu, Enter, Escape, Up & Down
Memory Location	:	1000 individual frequencies and level can be stored/recalled
Output Impedance	:	50 Ohms
RF Level	:	90 dBuV Typical
Measurement	:	RF level in dBuV with 0.1dB resolution
Dynamic Range	:	60 dB Log
Manual Mode	:	Data logging for antenna gain & polar/cartesian plot
USB interface	:	Easy connectivity to PC using polar pattern plotting software
Power Supply	:	230V @ 50 Hz



Experiments:

- ♦ Variation of field strength with distance
- ♦ Plot radiation pattern of omni directional antenna
- ♦ Plot radiation pattern of directional antenna
- ♦ Polarization of vertical and horizontal antenna
- ♦ Study resonant and non resonant antenna
- ♦ Demonstrate reciprocity theorem of antennas
- ♦ Study current distribution along the element of antenna
- ♦ Study different antennas polar plots, radiation patterns, gain, beam width, front back ratio
- ♦ Comparison of different antennas

Shipping List :

Antennas

01. Dipole L/2
02. Dipole L/4
03. Dipole 3L/2
04. Folded Dipole
05. Yagi Uda (3E)
06. Yagi Uda (4E)
07. Ground Plane with Reflector & Director
08. Endfire (Phase Array L/2)
09. Square Loop
10. Zeppelin/ Horizontal End Feed
11. Broadside Array L/2

Other Accessories

- a. RF Transmitter Tripod & Receiver Tripod
- b. Experimental Manual
- c. Antenna Plotting Software CD

Note: Specifications are subject to change.

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