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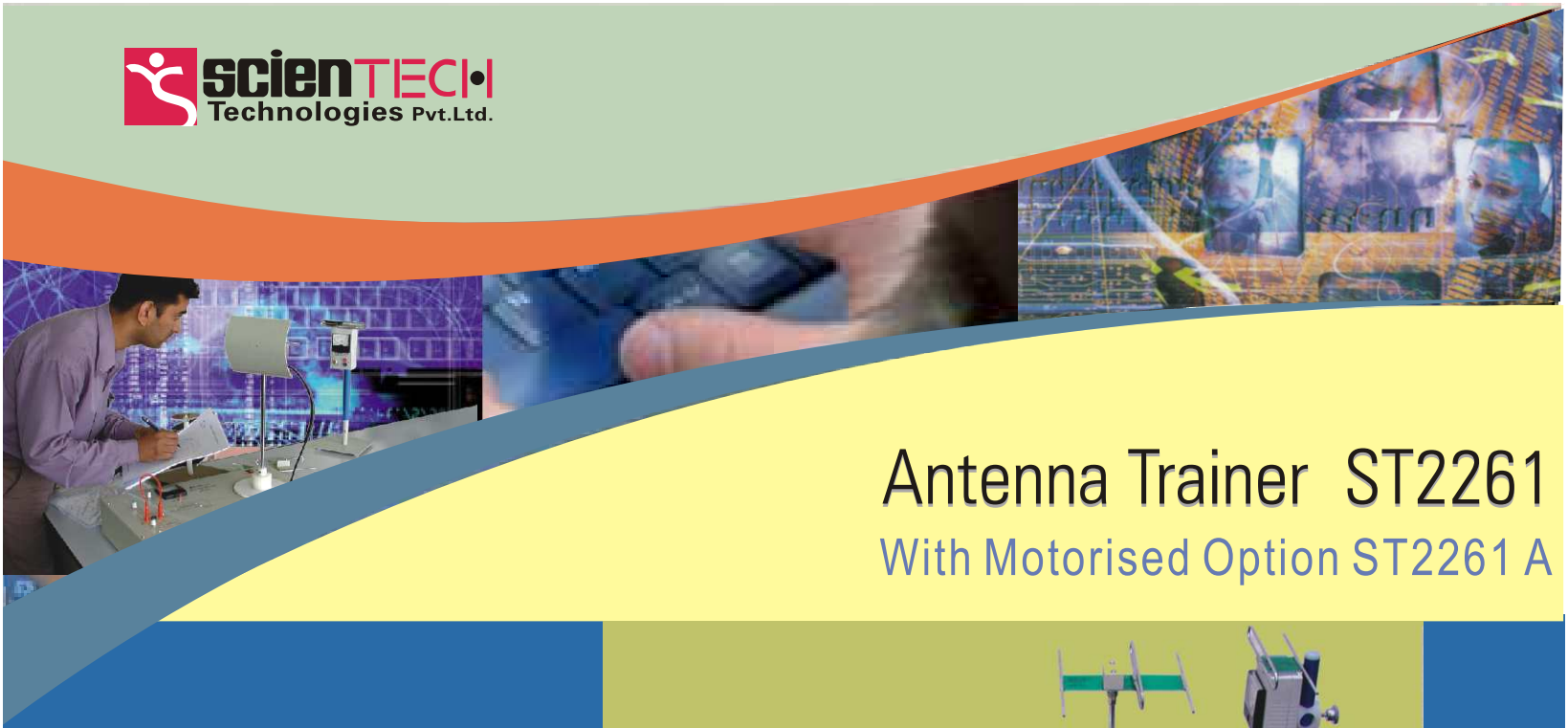

Antenna Trainer ST2261

With Motorised Option ST2261 A

- Self contained, easy to operate trainer
- On board RF generator, Tone generator, Directional coupler, Matching stub, Forward/ Reverse meter and Goniometer.
- Experiment with different types of antennas
- Forward / Reverse power & SWR measurements
- Functional blocks indicated on board mimics
- Fully documented student workbook and operating manual
- Antenna fabrication kit
- Book entitled "Antennas" by John D. Kraus with each trainer
- Built in DC Power Supply
- Compact and Light weight

The desktop Antenna Training System ST 2261 has been specially designed for engineering colleges and training centers. It is very useful for introducing practical verification of antenna operation to the students. The work book provides theoretical concepts and detail procedure of experiments with each type of antenna.

The training system includes set of modular mechanical elements forming various antennas, a transmitter unit and a detector unit. All the accessories are packed in a convenient carrying case.

The Antenna Training System also comes with **Motorised Antenna Unit** (Model ST2261A) to automate the recording of the radiation pattern of the antennas. Normally this operation is performed by rotating the transmitting antenna at different angles (ST2261)by hand and measuring the radiated intensity. The Motorised Antenna Unit consists of a Microcontroller based system for Capturing, Displaying and Printing of Antenna radiation pattern. The system capture signal at an interval of 1^0 rotation using stepper motor and radiation pattern is displayed on PC . The Windows based Software is supplied in CD form. The PC Communication is via RS232 port.

Antenna Trainer ST2261

With Motorised Option ST2261 A

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Technical Specifications

RF Generator	: 750 MHz approx (output adjustable).
Tone Generator	: 1 KHz approx (output adjustable).
Directional Coupler	: Forward & Reverse (selectable).
Matching Stub	: Slider type.
Antenna Rotation	: 0-360 deg. Resolution 1 deg.
Receiving Antenna	: Folded dipole with reflector.
Detector Display	: level adjustable meter.
Power Supply	: 230V ± 10% 50Hz.
Interconnections	: 4mm Banana sockets.
Dimensions (Main unit)	: W 520 x D 300 x H 120 mm.
Weight (Main unit)	: 2.8 kg. approx.

Accessories Included

1. Transmitting Antennas

- Dipole 2 ● Folded Dipole /2
- Dipole /4.● Yagi UDA Folded Dipole(3 E)
- Yagi UDA Folded Dipole(5 E)
- Yagi UDA Dipole (7 E)
- Yagi UDA Dipole (5 E)
- Horizontal End Fed Hertz Antenna
- Horizontal End Fed Zeppelin Antenna
- Ground Plane Antenna
- Ground Plane with Reflector & Director
- Slot Antenna /2
- Loop Antenna ● Helix Antenna
- /2 Phase Array ● /4 Phase Array
- Combined Collinear Array
- Log Periodic Antenna ● Rhombus Antenna
- Cut Paraboloid Reflector Antenna

2. **Current Probe**
3. **Mounting stands**
4. **BNC-Tee**
5. **BNC-BNC adapter M**
6. **BNC-BNC adapter F**
7. **BNC-BNC cable**
8. **Screwdriver**
9. **Operating manual**
10. **Student workbook**
11. **Text Book "Antennas" by John D. Kraus**
12. **Polar graph**
13. **Antenna fabrication kit**
14. **Power cord**
15. **Accessories case**

Experiments that can be performed

- Polar plots & polarization.
- Wave modulation and demodulation.
- Antenna gain
- Antenna beam width
- Element current study
- Front-back ratio study
- Antenna matching
- Antenna radiation with distance

ST2261A Motorized Antenna Unit & Software

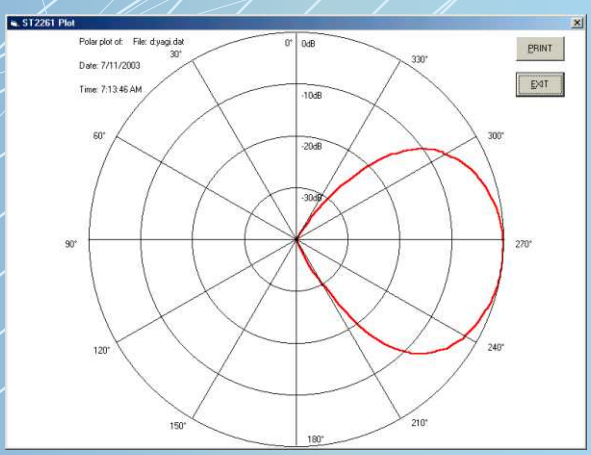
Features

- Microconroller Based High Precision DC Stepper Motor.
- Automatic Zero Point setting
- Built-in DC Power Supply
- Instant Plotting of radiation Pattern
- Resolution : 1°
- RS232 data link to PC
- Software running under Windows 98

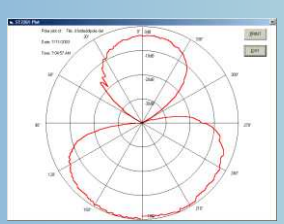
Technical Specifications

RF Input : from ST2261
Detector : Active with 5 pin Din Connector
Antenna Rotation : 360° (1° Resolution)
Power : 230V ± 10%, 50Hz
Dimensions (mm) : W260, H100, D340
Weight : 3 Kg. (approx.)
Accessories : Mains Cord, 5 Pin DIN cable, Patch Cords, BNC-BNC Cable, RS 232 Cable.

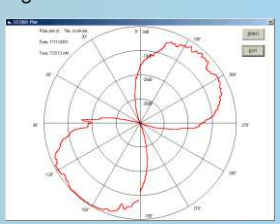
Software Screen Shots



Radiation Pattern for Yagi Antenna



Radiation Pattern for Folded Dipole Antenna



Radiation Pattern for Simple Diploe λ/4Antenna

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