



The Radar Trainer NV2001 is a very useful and realistic classroom training equipment. It is provided with different types of accessories for experimentation and a Windows® based software for observation and calculation. On-board Test points are provided which enable students to observe the signals on Oscilloscope or PC. The trainer is capable to measure the Speed of object, Frequency of vibrations and RPM of any fan. Students can also study the properties of different types of material like Metal, Acrylic, Teflon, Bakelite, etc.

Technical Specifications

Transmitter Frequency : 10 GHz

Output Power : 10 to 15 mW

Operating Voltage : 8.6 V

Antenna : Horn

IF Output : Audio range

Power Supply : 230 V \pm 10%, 50 Hz

Alarm : Onboard detected signal indication

About Software

Oscilloscope : Real time/Storage mode with FFT analysis

Display : Peak to Peak Voltage

Time domain window : Display the Doppler Frequency in Time domain

Frequency domain window: Display the Doppler Frequency in Frequency domain

Control Panel window :

User interface for :

- Measurement of Doppler Frequency, Amplitude
- Measurement of Velocity, RPM

Utilities :

- Start / Stop of Display
- Setting of Time base and Amplitude range on display window
- Printing of Doppler Frequency signal
- Cursors for Time & Voltage measurements
- Save, Load



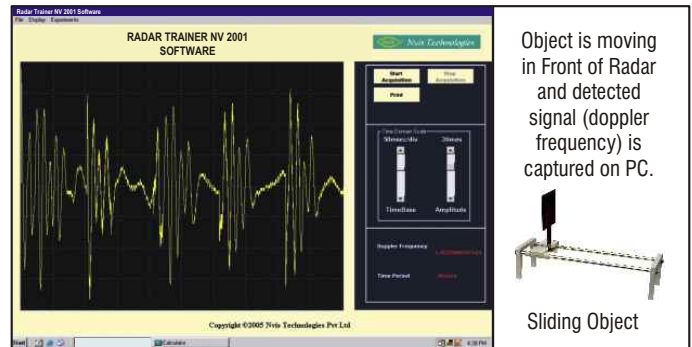
- ▣ Complete hardware and software setup to demonstrate Radar concepts
- ▣ Signals study on Software / Oscilloscope with the help of test points given on trainer
- ▣ Object counter provided on trainer
- ▣ Real time fan RPM measurements and vibrations measurements with the help of tuning forks
- ▣ Tripod stand provided for height and level matching
- ▣ LED Indication for Doppler Echo Signal
- ▣ On board alarm for detected signals

Experiments that can be performed

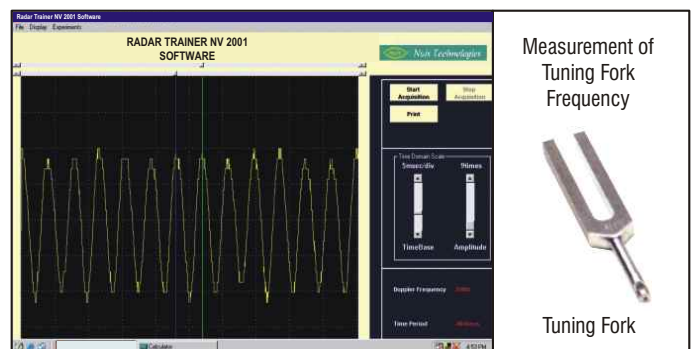
- To study the working of Doppler Radar
- To determine the Velocity of the object moving in the Radar range
- To understand the principle of Doppler Radar of Time and Frequency measurement with the help of moving pendulum
- To study an Alarm System by using Radar
- To study the Object Counting with the help of Radar
- To study the detection of vibration of different Tuning forks
- Determine the rotation per minute (RPM) of a moving object (Fan)
- To study the effect of different types of materials on Radar receiving or detection

Included Accessories

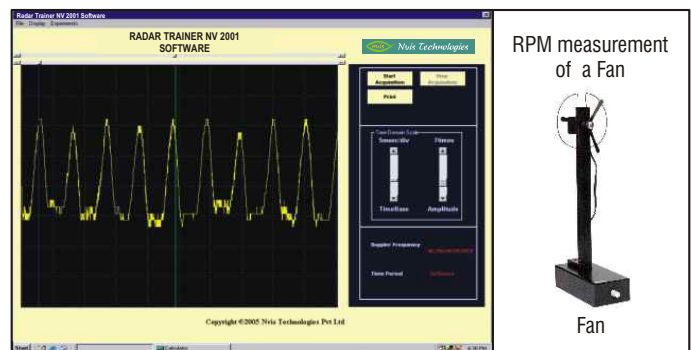
| | | |
|----|----------------------------------|---|
| 1 | Trainer Board | 1 |
| 2 | Audio Cable for PC Line In input | 1 |
| 3 | Din connector cable (5 Pin) | 1 |
| 4 | Mains Cord | 1 |
| 5 | Tripod Stand | 1 |
| 6 | Fan Stand | 1 |
| 7 | Fan | 1 |
| 8 | Sliding Platform | 1 |
| 9 | Different objects | 3 |
| 10 | Horn Antenna | 1 |
| 11 | Trans-receiver Unit | 1 |
| 12 | Software CD | 1 |
| 13 | Pendulum | 1 |
| 14 | Stand for moving the pendulum | 1 |
| 15 | Tuning forks | 3 |
| 16 | Operation manual | 1 |



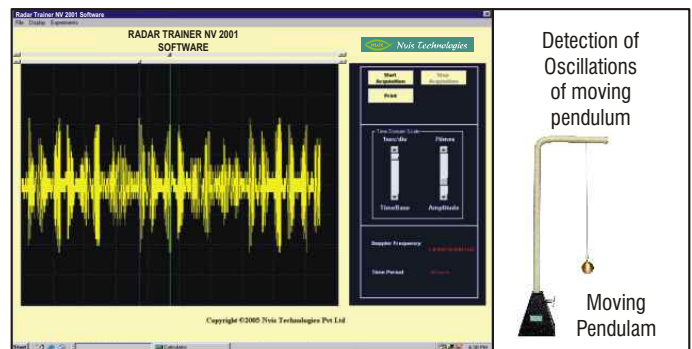
Application software window



Application software window



Application software window



Application software window

Subject to change