

Fibre-Optic Trainer for Numerical Aperture and Fibre Loss Measurement has been designed specifically for the study of Numerical Aperture and Fibre Loss Measurement.

Practical experience on this Trainer carries great educative value for Science & Engineering Students.



#### Object:

Study of :

01. Fibre Optic Transmitter and Receiver.
02. Numerical Aperture of PMMA Fibre.
03. Loss in 1 Mtr / 5 Mtr. PMMA Patch Chords.
04. Electrical - Optical Converter Characteristics.
05. Optical to Electrical Converter Characteristics.
06. Intensity Modulation System.

#### Features:

The trainer consists of the following built-in parts:

01. IC regulated D.C. power supply.
  02. Fibre-Optic Analogue Transmitter @ 660nm
  03. Fibre-Optic Analogue Transmitter @ 850nm
  04. Fibre-Optic Receiver.
  05. One-metre PMMA Fibre patch cord.
  06. Five-metre PMMA Fibre patch cord.
  07. In-line SMA adaptor.
  08. Two potentiometer to vary forward current of LED in Transmitter & current of phototransistor in receiver.
  09. SPDT switch for selecting wavelengths 660nm and 850nm.
  10. NA JIG with scale marked on it to measure length.
  11. Mandrel.
  12. NA measuring Scale to measure width of Fibre Optic's LED.
  13. Adequate no of other electronic componets.
  14. Mains ON/OFF switch, Fuse and Jewel light.
- \* The unit is operative on 230V  $\pm$ 10% at 50Hz A.C. Mains.
  - \* Adequate no. of patch cords stackable 4mm spring loaded plug length 1/2 metre.
  - \* Good Quality, reliable terminal/sockets are provided at appropriate places on panel for connections / observation of waveforms.
  - \* Strongly supported by detailed Operating Instructions, giving details of Object, Theory, Design procedures, Report Suggestions and Book References.

#### Other Apparatus Required:

- \* AF/RF Generator 10Hz to 1MHz Order Code - 16902
- \* Digital Fibre-Optic Power meter Order Code - 28509
- \* Digital Multimeter Order Code - 16901
- \* Cathode Ray Oscilloscope 20MHz.

Note: Specifications are subject to change.

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