This trainer has been designed with a view to provide practical and experimental knowledge of a general circuit of Fiber Optic.

**SPECIFICATIONS**

a) **Fiber Optic Trainer**
- 950 nm infrared (SHF 450 V)
- 660 nm Red visible (SHF 756V)

**Receivers:**
- Pin photo diode with responsively of 0.3 micro Amp/microwatt (SHF250V)
- Photo detector with TTL output (SHF 551V) Max. 5 MHz data rate

**Modulation Techniques:**
- Direct amplitude modulation/demodulation
- Pulse position modulation/demodulation
- Pulse width modulation/demodulation

**Driver circuit:**
- Analog and digital configuration for 950 nm and 660 nm LED
- Analog Bandwidth: 300 KHz
- Digital Bandwidth: 2 MHz
- Filter circuit: 4th order butter worth filter - Cut off frequency 3.4 KHz

**On board function generator:**
- 1 KHz variable amplitude sine wave
- 1 KHz TTL square wave

In keeping view of SIGMA policy of continuous development and improvement, the Specifications may be changed without prior notice or obligation.

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**Dealer:**
Voice communication:
Fiber Optic voice link using dynamic microphone and speaker
PC-to-PC communication
Using 950 nm and 660 mm LED through RS 232 standard

RS232 port type:
9-pin D type connector
Baud Rate: Max. 9600 Baud
Type of cable: Plastic optical cable, step Index multimode
Core refractive index: 1.492 Clad refractive index: 1.406
NA: 0.5
Accept. Angle: 60 Degrees
Fiber Dia.: 1000µ
Outer data: 2.2 mm
Length: 1 m, 3.3 m
Power supply: +/- 5, +/- 12

B) Fiber optic LED power source
Fiber type: single & multimode
Wavelength: 850 & 1300 nm
Power: 15 dbm
Power selection: variable output using potentiometer
Connection: St type
Power supply: +5 V, + 9 V DC, 200 mA min.

c) Laser Fiber Optic trainer
Transmission module: 60 nm
Mode: ACC & APC
Receiver: Phototransistor, pin diode
Power supply: 6V DC

d) Fiber optic power meter
Fiber type: single & multimode
Readout: dbmon LCD display
Sensor type: germanium photo detector
Calibration wavelength: 850 nm
Input wavelength: 850 & 1300 nm
Calibrated accuracy: +/- 6%, 0.25db
Power supply: 9 Volts

e) PMMA patch cord (SMA) 10m.
f) Glass fiber cable MM 62.5/125-20 m
g) Sample fiber kit
H) Multicolored optical spectrum wall chart