



RECOGNIZED WORLD LEADER IN FIBER OPTIC TECHNOLOGY
QUALITY FIBER COMPONENTS, EQUIPMENT, & SUPPLIES

Product Data Sheet

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Fiber Optic Kits



Optical Voice Link



Communication Kit



Lab Course & Kit



Designer's Kit

Optical Voice Link

For students and experimenters alike, the Optical Voice Link is the ideal introduction for those first learning about the marvels, mysteries, and science of light transmission through optical fiber. The kit allows you to hear your own voice after it has been converted into light then coupled into, through, and out of an optical fiber. The Optical Voice Link can be extended up to 10 meters.

The Optical Voice Link is designed to meet a wide variety of educational, commercial, and industrial applications, including:

- Science projects
- Inexpensive classroom demonstrations
- Home projects for hobbyists
- Hands-on practical industrial training
- Short, audio fiber optic curriculums for schools
- Voice transmission in critical electrical isolation applications

Kit includes: printed wiring boards, switches, electronics, microphone, 8 Ohm speaker, 3 meters of plastic optical fiber, an uncomplicated tutorial and step-by-step instructions. No prior fiber optics experience, special tools or training necessary. Some experience with soldering is recommended for completion of the unassembled version.

Educational Communication Kit

This is our most popular kit, providing students the opportunity to examine fiber optic communication technology at its basics. It's a great hands-on educational product as well as an opportunity for the serious investigator/ experimenter to explore fiber optic technology inexpensively. The Communication Kit is an easy-to-assemble, digital link for experimenting and beginner science projects. (This digital link also can be used to construct high-voltage isolation for telephones, modems and computers.)

Kit contains red LED and photodetector, one meter of optical fiber, printed wiring boards, polishing film, oscillator chip, electronic components and instruction booklet. Suitable for students in grades 9 and above. (We recommend some soldering experience for assembly.)

Industrial Fiber Optics



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FEATURES

- Visible fiber optic source and detector
 - Built-in oscillator for testing and demos
 - TTL and CMOS logic compatible inputs and outputs
 - Low-voltage operation
 - Utilizes plastic optical fiber with simple terminations
 - 32-page comprehensive booklet covering assembly, schematics, experiments, fiber optic fundamentals and circuit operation.
- Kit contains red LED and photodetector, one meter of optical fiber, printed wiring boards, polishing film, oscillator chip, electronic components and instruction booklet. Suitable for students in grades 9 and above. (We recommend some soldering experience for assembly.)

Lab Course & Lab Kit

The core element of the Lab Course is a 68-page technical manual, now in its second edition, written in an easy-to-understand style. This manual can complement any text or course on fiber optics.

The Lab Kit contains nine ready-to-use experiments that allow students to work with state-of-the-art opto-electronic components and connectors unique to fiber optics, and later to apply their new knowledge to a practical problem.

Designer's Kits

A "creativity-friendly" kit for technicians, experimenters, scientists and enterprising students who are searching for a quick solution for prototypes or special-purpose interfaces requiring fiber optics capabilities. This very low-cost "active link" requires a single +5-volt power supply and interfaces with all TTL/CMOS logic. It includes 10 meters of 1000 μm plastic optical cable; efficient dry, non-polish connectors, bulkhead interfaces, and splices; integrated photodetector(s) and LED(s); and top-quality multi-layer printed wiring boards. Full instructions and technical data sheets complete the package. The operable range of both kits can be extended to 60 meters with additional cable purchased separately. Designer's Kits have been the basis of many fiber optics "brainstorms" and solutions.



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Science Project Kit



Learn about fiber optics the easy way by experimenting and building fascinating, functional projects. No prior optical experience is needed. Our practical, 224-page text begins with easily grasped discussions about fiber optics fundamentals. Next are eight lab experiments and a final section with five intriguing projects, including "Getting Acquainted with a Light Pipe," "AM Fiber Optic Receiver," and "Fiber Optic Light-Pen Cable." Finished products such as an analog voice link and a light pen have many daily uses and applications to further study.

(Kit includes all necessary fiber optic components, connectors and cable. Ideal for science projects in advanced junior high and high school classrooms.)

Ordering Information

IF-OVL10-K	Unassembled Voice Link Kit	IF-OVL20-K	Unassembled Duplex Voice Link Kit
IF-OVL10-A	Assembled Voice Link Kit	IF-OVL20-A	Assembled Duplex Voice Link Kit
IF-E22	Educational Communication Kit	IF-LM	Lab Manual
IF-LMH	Lab Manual with Lab Kit	IF-SD11	Single Channel Simplex Kit
IF-DD11	Bi-Directional Duplex Kit	IF-E33	Science Project Kit