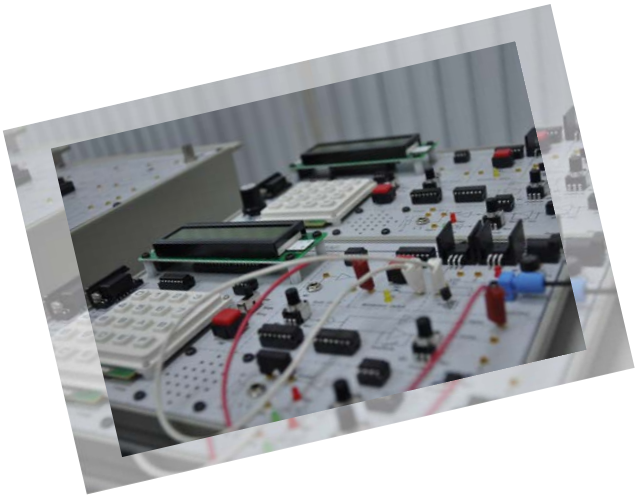
Fiber Optic Transmission Training System

KL-900D

Fiber optic communication is one of the most popular technologies in the modern days due to its high transmission speed, high bandwidth and anti-interference. Fiber optic transmission technology has been implemented in industrial control, medical and communication system.



Basic structure of Fiber Optic

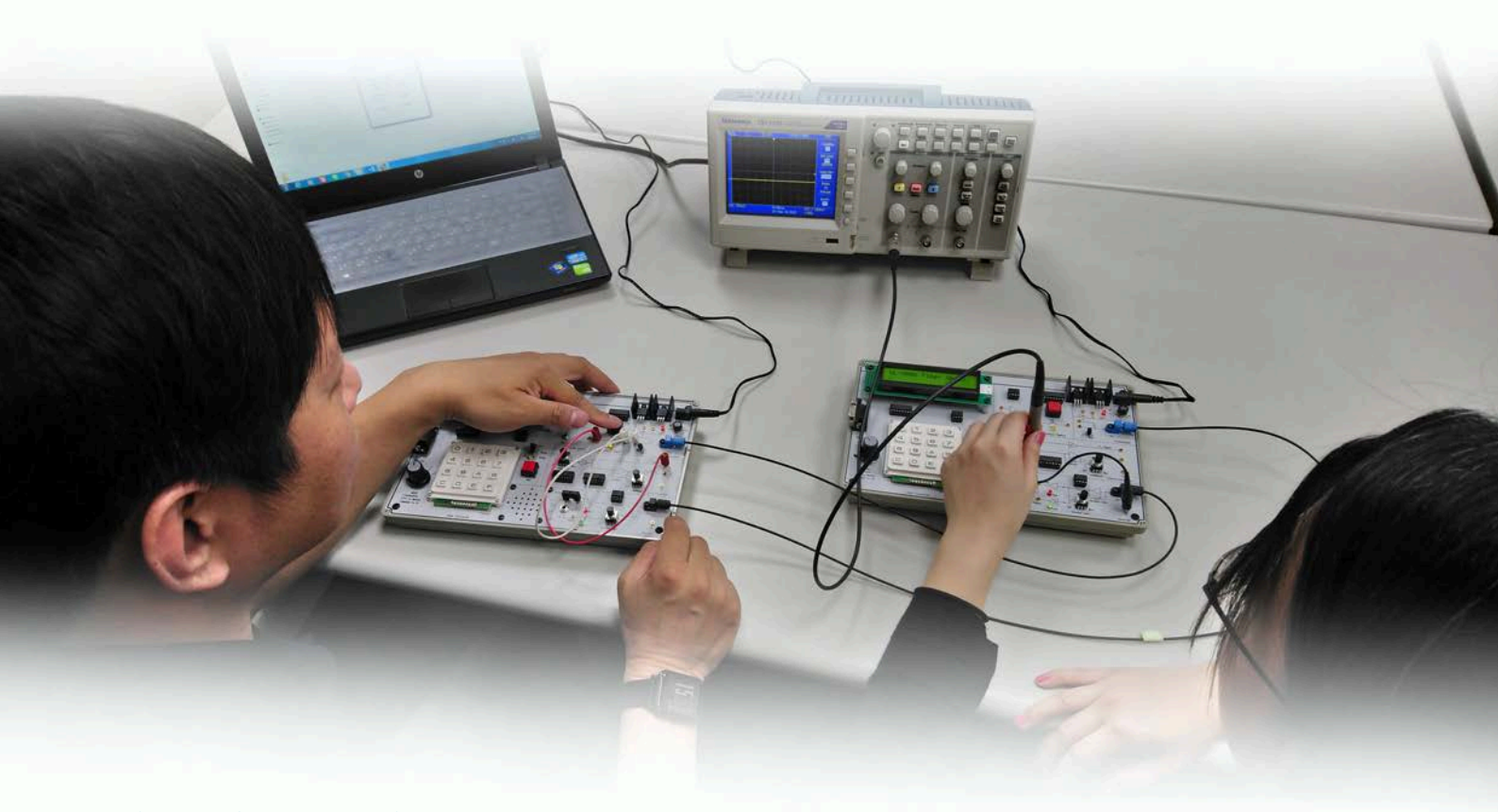
1. Core : The core is the innermost part. It is made of glass or transparent plastic.
2. Cladding: The cladding is also made of glass or transparent plastic, but less dense than the core. It is used to prevent refraction during data transmission.
3. Jacket : The jacket is used to protect the core and the cladding.

Advantages of Fiber optic transmission

- Extremely high bandwidth
- High transmission speed
- Long transmission distance
- Anti-electromagnetic interference
- Low security risk
- Small size
- Light weight

Features

1. KL-900D helps students learn connectors, cutting and grinding technology of fiber optics.
2. Four different fiber optic data transmission methods : self-module transmission, module- to-module transmission, PC-to-module transmission, and module-to-PC transmission.



List of Experiments

1. Fiber optics at the beginning
2. Applications of fiber optics
3. Light sources of fiber optics
4. Light and optical fiber interaction
5. Fiber optic transmitter
6. Fiber optic receiver
7. Fiber optic network and expand
8. Fiber optic connectors and fiber polishing
9. Data transmission - One module
10. Data transmission - Module to module
11. Data transmission - PC to module
12. Data transmission - Module to PC
13. CVSD data transmission (Optional)
14. ASK data transmission (Optional)
15. PSK/QPSK data transmission (Optional)