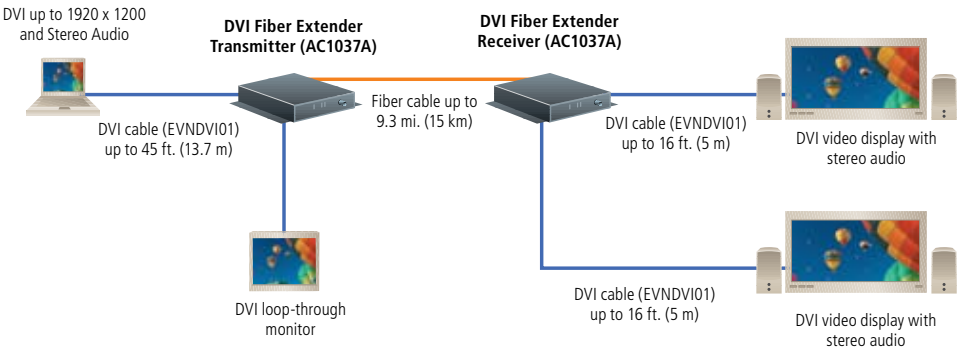
DVI Fiber Extender Kit

Extend DVI multimedia over just a single fiber—and display video on two remote displays!

FEATURES

- Transmits single-link DVI and stereo audio over a single-mode fiber with no deskewing or compression.
- Kit includes a transmitter, receiver, and two power supplies.
- Receive unit feature dual DVI outputs for connecting two DVI displays.
- No video distortion! Advanced input circuit equalizes and reclocks noisy input signals.
- Supports up to 1920 x 1200 at 165 MHz.
- DVI screens can be linked up to 45 feet (13.7 m) from the kit's outputs.
- Enables you to distribute content to the public and keep the video sources locked away in a secure location.
- RoHS compliant.

Distribute high-quality DVI video—and stereo audio—to two different screens.



OVERVIEW

Go farther—up to 15 kilometers (9.3 miles)—by using fiber instead of copper to distribute high-quality DVI video to distant screens.

Use secure, ultra-clear fiber to extend DVI video and stereo audio to the edges of your digital signage or multimedia network with the BLACK BOX® DVI Fiber Extender Kit.

Ideal for broadcast applications or anywhere you need to send high-definition video and stereo audio at great distances, this fiber extender kit transmits single-link DVI resolutions up to 1920 x 1200—without any image skewing. Because it does this over a single fiber, you use your optical media more economically!

Use the system, for instance, in office lobbies, airports, health care or educational settings, theaters, or retail PoS environments. By deploying DVI video in your application, you get bolder, truer colors and sharper images than conventional CRT or other analog displays, and you make better use of graphics processors at the PC end.

What's more, the DVI Fiber Extender Kit supports distances up to 15 kilometers (9.3 miles)—much farther than what's possible with ordinary copper-based technology. And because the system uses all-digital signal processing and transmission, you're ensured the highest DVI video and audio clarity at the end of the fiber link.

Even better, the extender's receiver unit has two DVI outputs, so you can display the same image from your PC on two high-definition panels—and, in the process, reach a larger audience!

The system is easy to set up. No fine-tuning of the image is necessary. You just connect your PC to the DVI input on the transmitter unit and connect the display devices via DVI connectors on the receiver unit. Audio input and output are through stereo jacks on both transmitter and receiver boxes.

To monitor video on the local side, simply plug in a DVI-compatible screen via the loop-through input on the transmitter unit. The output display, as well as those linked remotely, can be up to 16 feet (5 m) from the DVI Fiber Extender system.

The DVI Fiber Extender Kit brings a higher level of security to your application. Simply lock the PC-based video source in a control room as far as 45 feet (13.7 m) from the transmitter and set up a loop-through monitor in an area easily viewable by others. There's no PC or other video source at the remote end to be tampered with, and fiber optic cable is extremely difficult to tap.

Fiber also provides extremely reliable data transmission. It's completely immune to many environmental factors that affect copper cable, such as electromagnetic interference and radio-frequency interference (EMI/RFI). For this reason, this system can be used in areas with a lot of interference-emitting equipment.

It also benefits broadcast applications where you want to keep a noisy PC away from the audio pickups in the studio, as well as any area where there simply isn't room for both a PC and a display.

AC1037A: left: Transmitter; right: Receiver

Technically Speaking

Digital Visual Interface (DVI).

The Digital Visual Interface (DVI) video standard is based on transition-minimized differential signaling (TMDS). In a typical single-line digital signal, voltage is raised to a high level and decreased to a low level to create transitions that convey data. To minimize the number of transitions needed to transfer data, TMDS uses a pair of signal wires. When one wire goes to a high-voltage state, the other goes to a low-voltage state. This balance increases the data-transfer rate and improves accuracy.

Although there are four types of DVI connectors, only DVI-D and DVI-I are commonly used for monitors. DVI-D is a digital-only connector. DVI-I supports both digital and analog RGB connections.

TECH SPECS

Audio Channels — (2) unbalanced
Audio Crosstalk — 100 dB (1 kHz)
Audio Impedance — Input: >24 ohms;
Output: <1 ohm
Audio Level (Maximum) — +10 dBu
Color Space Format Supported — RGB or Y-Pr-Pb
Compliance — RoHS
Distance (Maximum) — Fiber interconnect: 9.3 mi. (15 km);
Input (from PC to transmitter unit): 45 ft. (13.7 m);
Output (to local loop-through display or remote displays): 16 ft. (5 m)
Fiber Loss Budget — 0–15 dB
Fiber Type — 8 to 10/125–µn single-mode
Fiber Wavelength — 1300 to 1600 nm
Pixel Clock Range — 25–165 MHz, continuous
Resolution (Maximum) — 1920 x 1200 at 165 MHz
Video Channels — (1) single-link DVI-D up to 1920 x 1200
Video Processing — 24 bits, no compression or scaling
Video Scanning System Supported — Progressive or interlaced
CE Approval — Yes
Connectors — Transmitter unit: Video input: DVI-D or DVI-I (digital signal only) single-link;
Video output: (1) DVI (in loop-through EDID DDC mode);
Interconnect: (1) ST® (single fiber);
Audio input: (1) stereo jack;
Receiver unit: Output: (2) DVI female;
Interconnect: (1) ST (single fiber);
Audio output: (1) stereo jack
Power — Input: 100–240 VAC, 50–60 Hz, autosensing, with U.S. plug;
Output: 12 VDC
Size — Each unit: 1.2"H x 8"W x 6.5"D (3 x 20.3 x 16.5 cm)
Weight — Each unit: 1 lb. (0.5 kg)

Why Buy From Black Box? Exceptional Value. Exceptional Tech Support. Period.

Recognize any of these situations?

- You wait more than 30 minutes to get through to a vendor's tech support.
- The so-called "tech" can't help you or gives you the wrong answer.
- You don't have a purchase order number and the tech refuses to help you.
- It's 9 p.m. and you need help, but your vendor's tech support line is closed.

According to a survey by *Data Communications* magazine, 90% of network managers surveyed say that getting the technical support they need is extremely important when choosing a vendor. But even though network managers pay anywhere from 10 to 20% of their overall purchase price for a basic service and support contract, the technical support and service they receive falls far short of their expectations—and certainly isn't worth what they paid.

At Black Box, we guarantee the best value and the best support. You can even consult our Technical Support Experts before you buy if you need help selecting just the right component for your application.

Don't waste time and money—call Black Box today.

What's included

- ✦ Transmitter
- ✦ Receiver
- ✦ Power supplies

Item	Code
DVI Fiber Extender Kit	**AC1037A**
You might also need…	
Digital Visual Interface (DVI) Cables with Straight Hoods	
DVI-I Male to VGA HD15 Male	
6-ft. (1.8-m)	**EVNDVI01-0006**
DVI-I Male to DVI-D Male	
6-ft. (1.8-m)	**EVNDVI02-0006**
DVI-I Male to DVI-D Female	
6-ft. (1.8-m)	**EVNDVI03-0006**
Digital Visual Interface (DVI) Cables with 90° Hoods	
DVI-I Male to VGA HD15 Male	
Custom Lengths	**EVNDVI04**