

Multi DVI Extenders

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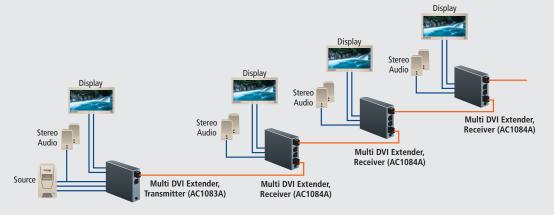
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Daisychain multiple DVI receivers to one DVI transmitter to get unlimited distance over copper or fiber cable.

FEATURES

- Place a DVI video display up to 6.2 miles (10 kilometers) away from the source video over fiber or up to 600 feet (182.4 meters) over copper.
- Daisychain units for unlimited distance.
- Pollable RS-232 models enable management of groups and single units.
- Compatible with practically all video formats over fiber or copper lines.
- Simple to install, configure, and use.

Typical application



OVERVIEW

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With BLACK BOX® Multi DVI Extenders, you can link two or more DVI video displays together. What's more, you don't have to compromise resolution for distance. You get picture-perfect video reproduction at distances up to 6.2 miles (10 kilometers) using single-mode fiber, up to 600 feet (183 meters) using CAT6 UTP or STP cable, or up to 500 feet (152 meters) using CAT5e UTP or STP cable. Resolution levels meet specifications for all VESA standards to UXGA (1600 x 1200) at 60 Hz and all HDTV progressive formats, including 1080p (single-link).

With the daisychainable models, you get nearly unlimited distance from end-to-end! At one end of the connection is a Multi DVI Transmitter. In between are almost unlimited numbers of Multi DVI Receivers with either copper or single-mode fiber linking them (and copper and fiber receivers can be linked in the same daisychain). At the other end of the connection is the last receiver. A high-resolution video display or video display plus audio connects to each transceiver along the daisychain.

We also offer transmitters and receivers with pollable RS-232 ports. With these, you can control addresses for either single receivers or groups of receivers in the daisychain and control them from a PC.

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.

⊗ BLACK BOX 2 of 3





AC1080A



AC1085A

TECH SPECS

Audio Transport — Optional line-level CD quality via Phoenix connector Data Rate — 1.2 kbps to 115.2 kbps

Distance (Maximum) — AC1080A-AC1087A: 1–10,000 m using single-mode fiber;

AC1100A–AC1102A: Single-link UTP: 1 to 600 ft. (183 m) using a single CAT6 UTP or STP or 1 to 500 ft. (152.4 m) using a single CAT5e UTP or STP

HD Modes — 480p, 720p, and 1080p

MTBF — 100,000 hours

Resolution — 1600 x 1200 @ 60 Hz

Serial Data Transport — Optional duplex EIA RS-232 via Phoenix connector

Video Signal Support — All VESA or equivalent formats, from VGA through UXGA, all HDTV including 1080p (single link)

Video Transport — DVI, single-link DVI-D

Connectors — Transmitters: AC1080A: (1) DVI-D in, (1) DVI-D out, (1) RJ-45 UTP out, (1) SFP (simplex LC fiber module) out,

(1) external power connector;

AC1083A: (1) DVI-D in, (1) DVI-D out, (1) 4-position screw terminal (audio) detachable, (1) 5-position screw terminal (detachable) comm, (1) RJ-45 UTP out, (1) SFP (simplex LC fiber module) out, (1) external power connector;

AC1100A: (1) DVI-D in, (1) DVI-D out, (1) RJ-45 UTP out, (1) SFP (empty) fiber out, (1) external power connector;

Receivers: AC1081A: (1) DVI-D out, (1) RJ-45 UTP in, (1) SFP (simplex LC fiber module) in, (1) external power connector;

AC0182A: (1) DVI-D out, (1) RJ-45 UTP in, (1) RJ-45 UTP out, (1) SFP (simplex LC fiber module) in, (1) SFP (simplex LC fiber module) out, (1) external power connector;

AC1084A, AC1086A: (1) DVI-D out, (1) 4-position screw terminal (detachable) audio, (1) 5-position screw terminal (detachable) comm, (1) RJ-45 UTP in, (1) SFP (simplex LC fiber module) in, (1) external power connector:

AC1085A, AC1087A: (1) DVI-D out, (1) 4-position screw terminal (detachable) audio, (1) 5-position screw terminal (detachable) comm, (1) RJ-45 UTP in, (1) RJ-45 UTP out, (1) SFP (simplex LC fiber module) in, (1) SFP (simplex LC fiber module out), (1) external power connector:

AC1101A: (1) DVI-D in, (1) DVI-D out, (1) RJ-45 UTP out, (1) SFP (empty) fiber out, (1) external power connector;

AC1102A: (1) DVI-D out, (1) RJ-45 UTP in, (1) RJ-45 UTP out, (1) SFP (empty) fiber in, (1) SFP (empty) fiber out, (1) external power connector

Indicators — (7) LEDs: (4) Link Status, (1) Option, (2) Power Temperature Tolerance — Operating: 32 to 104°F (0 to 40°C);

Storage: -4 to 140°F (-20 to +60°C)

Humidity — 80%, noncondensing

Power — External power supply (included): 5 VDC @ 1 A maximum

Size — 1.2"H x 4.1"W x 5.5"D (3.1 x 10.4 x 14 cm)

Weight — 1 lb. (0.45 kg)

WHAT'S INCLUDED

All:

- **♦** Transmitter or Receiver
- ◆ Power supply
- ♦ User's manual

AC1086A-AC1087A also include:

♦ (1) Programming kit to set receiver addresses

Item	Code
Multi DVI Extenders	
First, choose a transmitter to suit your application	
Fiber Transmitters	
DVI Only	AC1080A
DVI/Stereo Audio/Pollable RS-232	AC1083A
CATx Transmitter	
DVI Only	AC1100A
Next, choose one or more receivers	
Fiber Receivers	
DVI Only	AC1081A
DVI/Daisychainable	AC1082A
DVI/Stereo Audio/RS-232	AC1084A
DVI/Stereo Audio/RS-232 Daisychainable	AC1085A
DVI/Stereo Audio/Pollable RS-232	AC1086A
DVI/Stereo Audio/Pollable RS-232	
Daisychainable	AC1087A
CATx Receivers	
DVI Only	AC1101A
DVI/Daisychainable	AC1102A



