BLACK BOX®
NETWORK SERVICES

VIDEO SCAN CONVERTER PLUS

Video Scan Converter Plus

INPUT • TEST
POWER •
ZOOM · ANTI-FLICKER · FREEZE
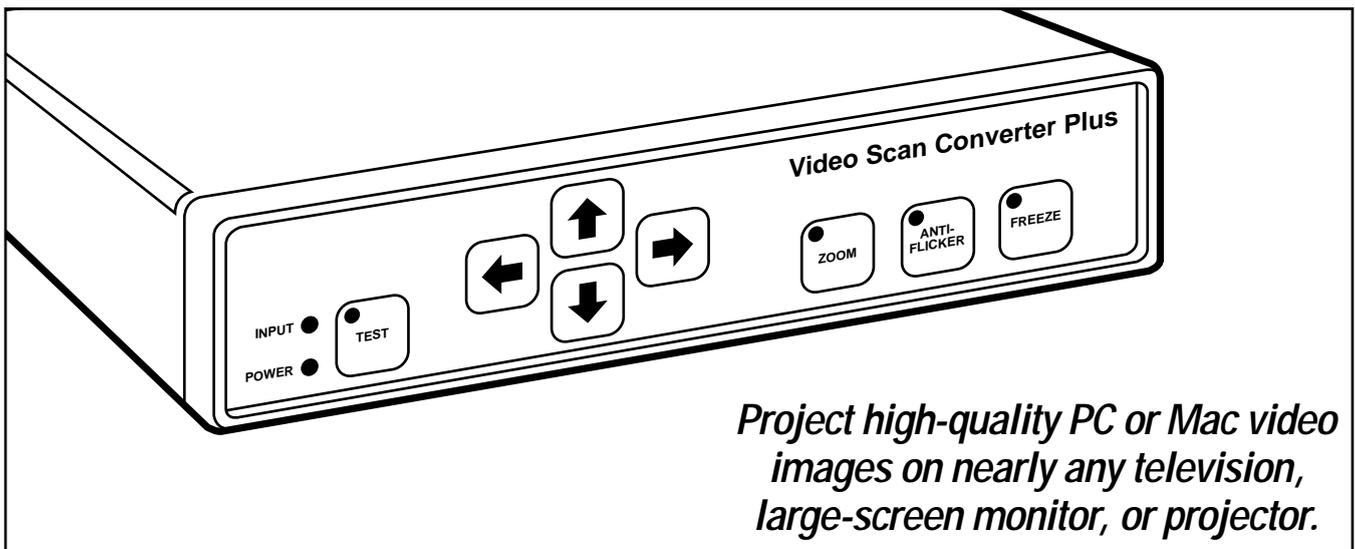
Project high-quality PC or Mac video images on nearly any television, large-screen monitor, or projector.

Key Features

▶ *Supports up to 1280 x 1024 resolution at 60 Hz.*

▶ *31- to 71-kHz sync frequency range.*

▶ *Selectable zoom range from 0.5x to 2.0x with horizontal and vertical positioning.*

▶ *State-of-the-art three-line flicker reduction.*

▶ *Works with composite and S-Video outputs in NTSC or PAL.*

▶ *RS-232 remote control.*

The Video Scan Converter Plus converts your PC or Macintosh® computer-screen images to high-resolution NTSC or PAL images that you can display on a television, large-screen monitor, or projector.

The converter supports up to 1280 x 1024 resolution at 60 Hz. It features input zoom processing for true increase in resolution when zooming, adaptive computer sync processing, composite and S-Video outputs in NTSC or PAL, and a built-in colour bar generator.

And it works with most resolutions supported by PCs, Macintosh, and workstation computers. Use a single cable for either VGA or Mac® operation.

Control all front-panel functions on the converter remotely via an RS-232 terminal.

Furthermore, the converter provides a sync frequency range of 31 to 71 kHz. That gives you non-interlaced analogue RGB resolutions from 320 x 200 to 1280 x 1024 at 60 Hz.

Simply press the anti-flicker button on the converter to activate one of the four levels of flicker reduction.

Choose from 5 levels of zoom for the best size to suit your application. Either repeatedly press the zoom button to cycle through the different image sizes (described in **Table 1** on **page 2**), or use the zoom shortcut keys (described in **Table 2** on **page 2**).

NTSC or PAL?

• NTSC is the standard for the U.S., Canada, Mexico, Japan, and parts of South America.

• PAL is used throughout most of Europe, the Middle East, Southern Asia, and the Pacific Rim.

Technically Speaking

The technology behind television video is far inferior to newer computer video standards. Naturally, computer images converted to video do not look as sharp and vivid as the original computer image. Even the very best scan converter can't produce an image that matches the quality of your original computer picture.

With the Video Scan Converter Plus, however, you can narrow the gap between the relatively new standards of computer video and the 40-year-old standards of conventional TV video.

To get the best possible results from the conversion process, try these tips to work around the limitations of conventional TV video:

• Know what your converted image will look like. While you're creating an image on your computer screen, hook up the converter to inspect your work.

• Use black and white. In standard TV video technology, shades of grey are processed differently than colours. TVs and VCRs process black, white, and all greys in between with minimal distortion.

• Avoid intense colours. Fully saturated colours (such as bright red and green) look terrible on a TV monitor. Recording intense colours to videotape makes them look even worse. Use slightly muted colours instead.

• Use high-grade video tape. When making a VCR recording, use a name-brand videotape with a "Pro" or "Broadcast" grade. Or use an S-VHS tape, even for a standard VHS recording.

• Pay attention to borders. TV and video signals "bleed" off the edges of the screen. So when a computer picture is converted to a TV standard, you'll lose the borders of your picture. To avoid this, use the Zoom feature on the converter to display the image at 85%.

• Eliminate flicker. Flicker is the rapid flashing that appears on your TV screen or that's localised in one particular area. It's caused by the way TV monitors draw the even and odd lines within the picture: in alternating passes. The converter's four-step anti-flicker filter overcomes this problem with only a very slight loss in vertical detail.

• Use S-Video. Almost all new, large-screen commercial TVs have an S-Video jack. S-Video is a superior form of the standard TV video signal. The brightness and colour components of the image are separated into two different signals, so you get far fewer distortions and noticeably superior image quality.

Specifications

Input Sampling: 24-bit (8 bits per RGB) support for 16.8 million colours

Input Sync Types Supported: Separate H&V, composite sync (with or without serration), sync-on-green

Resolution: Up to 1280 x 1024 @ 60 Hz

System Requirements: IBM® PC compatible or Macintosh computer; NTSC or PAL monitor

Video Memory: 720 x 740 x 16 bits

Video Output: NTSL or PAL (switch-selectable); composite and S-Video

Zoom/Shrink Ratios: 5: 85%, 100%, 130%, 160%, 200%

Connectors: Inputs: VGA: DB15 female; Mac: HD15 female; Outputs: VGA: HD15 female; Mac: DB15 female; S-Video: 4-pin mini-DIN female; Composite: BNC female

Power: 100 to 250 VAC, 47 to 63 Hz

Size: 1.5"H x 7.3"W x 11"D (3.8 x 18.5 x 27.9 cm)

Table 1. Using the Zoom Button to Cycle through Image Sizes.

Zoom Ratio	Indicator LED
85%	ON
100%	OFF
130%	ON
160%	ON
200%*	ON

*The 200% zoom ratio may not be available at the highest input frequency.

Table 2. Zoom Shortcut Keys.

Zoom Ratio	Key Combination
85% (lowest zoom; underscan mode)	ZOOM & ↓
100% (standard overscan mode)	ZOOM & →
200% (highest zoom mode)	ZOOM & ↑

What the Package Includes

• (1) Video Scan Converter Plus

• (1) 12-ft. (3.7-m) composite output cable (BNC male to BNC male)

• (1) BNC female to RCA male adapter

• (1) 12-ft. (3.7-m) S-Video output cable (4-pin DIN male to 4-pin DIN male)

• (1) 6-ft. (1.8-m) computer-to-converter input cable (HD15 male to DB15 male)

• (2) Fuses

• (1) Term connector

• (1) AC power cord

• (1) Users' manual

Ordering Information

ITEM	CODE
Video Scan Converter Plus	AC098A

Remember to order cable…

RGBS Cable for AC098A	EHN800-0012