

EZscan Video Processor

High fidelity analog or digital video conversion, re-sizing, and frame rate conversion for resolutions up to UXGA.

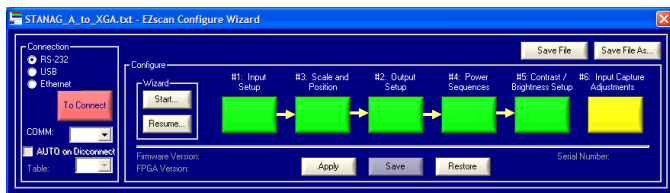


EZscan™ Video Processor

EZscan™ is a universal video processor that supports both video scaling and scan conversion. EZscan™ receives video in various formats, processes the video, and re-transmits the video in a user-selected format. EZscan™ supports the following video formats on both the input and output: RS-343, RS-170, NTSC, PAL, STANAG, DVI-I (TMDS and analog RGB).

User Programmable

With fully customizable input and output timing parameters, the EZscan can be configured for your application. If your display or video input source changes, simply reconfigure the EZscan.



Powerful Configuration Utility

Use Westar's EZscan configuration utility to define the input timing, output timing, and the area-of-interest within the source video and where to map the AOI within the output resolution. The EZscan configuration utility supports user-defined:

- Input timing
- Area-Of-Interest (AOI)
- Output Timing
- Image Scaling
- Border Colors
- Image Flip (Horizontal)
- Image Flip (Vertical)
- Image Rotation (90° increments)

Unique Video Rotation Capability

EZscan supports video rotation for the following applications:

- Drive displays mounted sideways
- Rotate video from cameras mounted sideways, but viewed on standard monitors
- Rotate video that is rendered sideways for side-mounted projectors or displays to be viewed on standard monitors.

Features

Video Conversion

- Conversion of computer-generated (DVI, RGB) and specialty (RS-343, RS-170, STANAG) video sources with separate syncs or sync-on-green
- Generation of monitor (DVI, RGB), TV (NTSC/PAL), and specialty (RS-343, RS170, STANAG) video
- Supports input and output resolutions up to UXGA
- Digitization and de-interlacing of consumer video formats including NTSC and PAL
- Frame rate conversion

Scaling, Windowing, and Area-of-Interest Control

- Independent horizontal and vertical scaling
- Programmable image position within larger background area for both input and output
- Incoming video gain and offset adjustments
- Image can be reversed left to right
- Image can be flipped top to bottom
- Image can be rotated in 90 degree increments

Programmable

- Remote interface for both initial configuration and, if required, operational control via RS-232, USB, or Ethernet (optional)
- Fine phase clock adjustment for pixel sampling

Example Applications

Do you need to convert video from a legacy video source to a new display or from a standard video format to a legacy display?

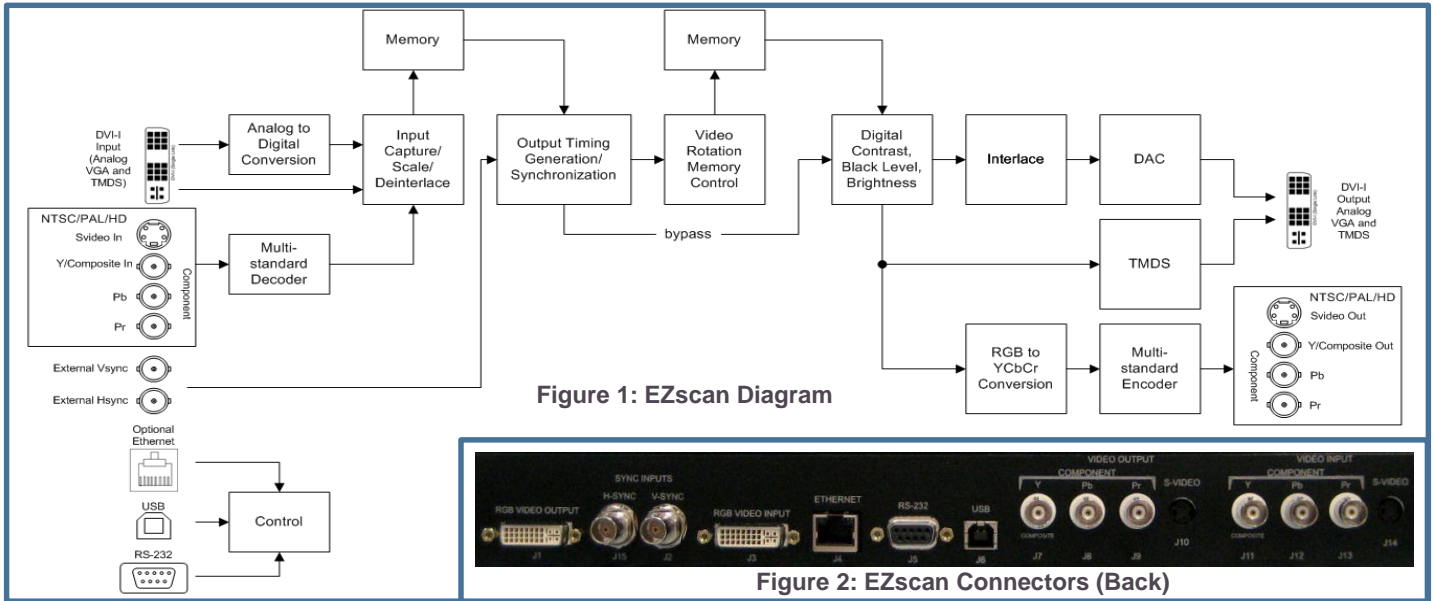
Example: Convert 875 line RS-343 video to SXGA

Your existing video source is 875 line RS-343. With EZscan, you can easily convert to SXGA (1280 x 1024), where the original 1088 x 808 pixels of information in the source are mapped to a 1088 x 808 window within the SXGA output.

Example: Convert SXGA to 875 line RS-343

Your display requires 875 line RS-343. Your video source is a standard PC video card, generating SXGA (1280 x 1024) video. With EZscan, you can map 1088 x 808 pixels of information in the source to a 875 line RS-343 interlaced output.

EZscan Video Processor



Input	Specification
Video Type	Analog RGB (0.7 Volt levels, Interlaced or Non-Interlaced), TMDs, NTSC/PAL
Pixel Rate	Up to 162 MHz
Clocks per Line	Up to 4096
Lines per frame	Up to 2048
Sync Type	HV, Composite Sync, Sync-on-Green
Phase Adjustments	Adjustable sample clock to ensure center sampling
Connectors	<ul style="list-style-type: none"> DVI-I connector for TMDs and Analog RGB (DVI to HD15 adapters included) BNC and S-Video connector for NTSC/PAL (cannot connect to RCA and S-Video simultaneously)
Output	Specification
Video Type	Analog RGB (0.7 Volt levels, Interlaced or Non-Interlaced), TMDs, NTSC/PAL
Pixel Rate	Up to 162 MHz
Clocks per Line	Up to 4096 (1600 active)
Lines per frame	Up to 2048
Sync Type	HV, Composite Sync, Sync-on-Green
Connectors	<ul style="list-style-type: none"> DVI-I connector for TMDs and Analog RGB (DVI to HD15 adapters included) BNC for component output. BNC and S-Video connector for NTSC/PAL (cannot connect to RCA and S-Video simultaneously).

Functional	Specification
Features	<ul style="list-style-type: none"> Interlaced / non-interlaced conversion Image Flip Image Rotation Image Scaling Windowing Programmable Border Colors Brightness and Contrast Adjustments
Output Sync Modes	<ul style="list-style-type: none"> Free run External sync Frame sync to input (up to 135 MPixels/sec)
Color Processing Depth	8 bits per color
Re-sizing Limits	50% horizontal and vertical shrink
Electro Mechanical	Specification
Input Power	IEC Connector, 100-240 VAC, 47-63 Hz, less than 60 Watts
Control	RS-232, USB, Optional Ethernet (:E)
Dimensions	1U Rackmount: 19"(W) x 8" (D) x 1.75" (H)
Weight	Less than 5 lbs.
Warranty	Specification
Warranty	1 Year Limited
Separately Available Accessories	Benchtop feet, VGA to BNC cable

EZscan Operation

Typically, the EZscan operates as follows:

1. Upon power up, the EZscan configures itself based on its internal BIOS
2. Prior to detection of valid video, the EZscan can drive a user-defined color to your display
3. When valid video is detected, the EZscan converts the incoming video per the settings contained in the BIOS
4. When video is lost, the EZscan can drive a pre-defined color (blue-screen), or some other function as defined in the BIOS created using the configuration utility.

What's Included

- EZscan Video Processor
- (2) DVI to HD15 adapters
- RS-232 Serial Cable
- USB Cable
- Power Cable

CD containing:

- Configuration Utility Software
- User's Guide
- Command Line Description

Additional Resources

To view our full line of Video Processors or other products, visit our website at:

www.westardisplaytechnologies.com

Ordering Configurations

EZscan Standard unit
 EZscan:E Standard unit with optional Ethernet