BRITE-VIEW BLS-2000
Professional Progressive Scan Video Converter

INTRODUCTION

While television, DVDs, tapes, and other interlaced sources look good on displays designed for their resolution (Cathode Ray Tube), the results are not as satisfactory when these sources are incorrectly converted for higher resolution (VGA) displays. The scaling circuitry inside projectors, plasma displays or LCD screens is typically very basic and mainly only optimised for computer video sources.

External progressive scan converters (or line doublers) are more advanced and will bring the source one step closer to the native resolution required by projectors, Plasma Displays or other displays.

Brite-View BLS-2000, one of the products of Zinwell's Brilliant Line Series professional video equipment, is an advanced progressive scan converter with some outstanding features like digital noise reduction, adaptive static detect de-interlacing, dynamic colour transience improvement, 3D adaptive comb filter and pixel based motion detection. Features usually not found in the most expensive Video processors.

Brite-View BLS-2000 functions as a resolution multiplier and upscales video to the full native resolutions required by today's LCD monitors, LCD/DLP projectors and high-resolution plasma display panels. Visible scan lines and flicker are eliminated and the result is a picture with improved detail and colour quality that is perfect for professional presentations and home theatre applications.

Brite-View BLS-2000 accepts interlaced PAL/NTSC composite Video, S-Video and YCbCr component Video input signals. Its output (VGA or YPbPr) is pure, flicker-free, progressive video that is optimised for high-definition display.

With an easy-to-use infrared remote control and multi-language on-screen display Brite-View BLS-2000 is not only a high-tech product but also very user friendly.

Brite-View BLS-2000 provides a high-end solution without the high-end price!

APPLICATIONS

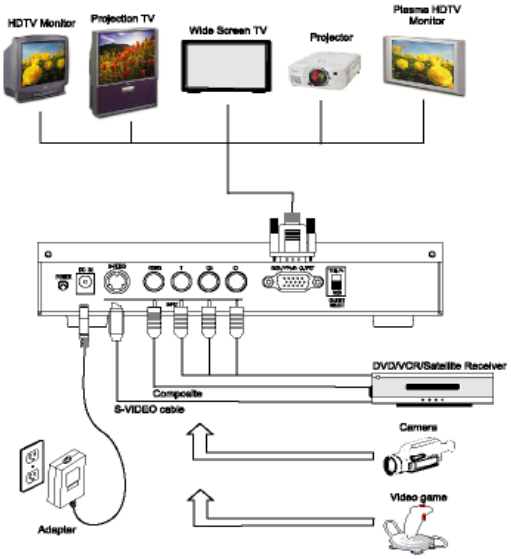
• Home Theatre

• Projector Presentations and Training

• HDTV Up scaling

• Electronic Cinema

• Format Conversion



BRITE-VIEW BLS-2000 FEATURES OVERVIEW

• Accepts Composite video, S-Video or YCbCr from any PAL/NTSC video source

• Scales up to 1280x1024 (SXGA) and 720p (HDTV) resolutions

• RGB or YCbCr component output

• Infrared RC with hot keys for Input selection, Picture settings, Resolution and Output format

• Dynamic digital 3D Comb filter for excellent separation of Y/C signal and improved resolution

• Dynamic chrominance transience improvement by synthesising faster colour edges

• Pixel base motion detection to implement Bob and Weave methodology in the same picture

• Black level extender to improve the contrast

• Motion adaptive noise reduction to reduce noise in non moving parts

• Dynamic adaptive smoothing filter to remove the high frequency noise

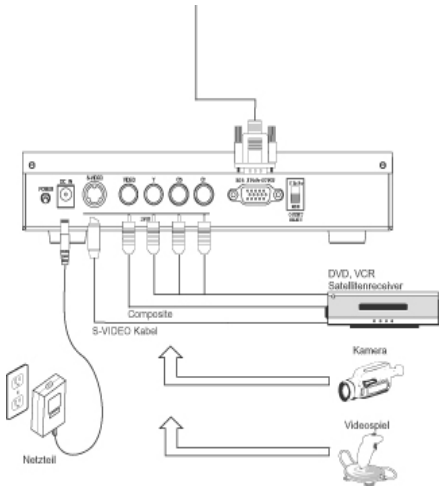
• Adaptive static de-interlacing doubles the resolution of non-moving portions of the picture

• 3:2/2:2 Pulldown detection and correction for best viewing of film-based sources

TECHNICAL SPECIFICATIONS

Input signal

- Analogue: Composite Video (1Vpp), S-Video (Y:1Vpp, C:0.3Vpp)
- Digital: Component Video, YCbCr (Y:1Vpp, CbCr0.7Vpp)
- All PAL and NTSC video standards



Input connectors

- Composite Video: RCA
- S-Video: 4pin, mini DIN
- YCbCr: 3x RCA

Output signal

- hardware switch selectable between VGA and YPbPr (Y:1Vpp)

- Analogue RGB (0.7Vpp, TTL Sync) Resolution: 640x480(VGA), 800x600(SVGA), 1024x768(XGA), 1280x1024 (SXGA)

- Analogue HDTV (YPbPr, 0.7Vpp, Sync on Y), resolution 480p,720p,1080i

- Progressive scan video (line freq. 31.25kHz. for PAL and 31.5kHz. for NTSC)

- Refresh rate: 60Hz

Output connector

- D-sub 15pin, Female type

Video processing

AD and DA conversion
- 10bit ADC and 10bit DAC

Y/C separation
- Programmable 3D adaptive Comb filter with colour edge enhancement circuit (reduces cross talk and improves colour resolution and sharpness)

De-interlacing
- Adaptive static detection (improves sharpness by doubling the resolution of "non-moving" portions)
- Pixel base adaptive motion detection implementing Bob and Weave methodology on same picture (picture "clarity" is enhanced by applying Bob to motion part and Weave to static part of picture
- Automatic 3:2 (NTSC) and 2:2 (PAL) pull down detection (regenerates original film pictures)

Noise reduction
- Dynamic adaptive smoothing filter (reduces high frequency noise)
- Motion adaptive Infinite Impulse Response filter (reduces noise in non moving parts)

Dynamic Picture Enhancements
- Chrominance transience improvement (improves colour sharpness by synthesising faster edges)
- Scan velocity modulation (ensures sharper picture details when there are edges in the picture)
- Black level extender (extends grey to black level to improve contrast)
- Automatic Brightness/Contrast adjustment (depending on picture content)
- White peak level restriction (limits white level of picture)
- Automatic colour temperature correction (adapts Y/C gain to make colours more vivid)

- **Remote control / On screen display**
  - Hot key selection and adjustment of all picture settings
    (contrast, brightness, colour, tint, sharpness, resolution, display format, language)
  - Hot key input selection (YCbCr, VIDEO, S-VIDEO)
  - OSD languages: English, German, French (others available on request)

  Power
  - Adapter with 100~240VAC (50/60Hz) In and 12VDC 1.25Amp Out
  - Consumption: 15 Watts typical

  Operating conditions
  - Temperature: 5~45 degrees C.
  - Humidity: 5~80%

  Dimensions and weight
  - Dimensions: 206 (L) x 157 (W) x 45 (H) mm.
  - Weight: 1080 grams