

The XBox offers unparalleled flexibility and performance in a video converter. The XBox can be configured to convert between multiple video formats including HDTV, standard definition digital video and computer RGB video. The XBox's advanced modular design permits users to configure a system to their specific requirements and later add new functionality with the addition of new video input, output and processing modules.

The XBox has an extensive list of standard features including complete aspect ratio controls and advanced image enhancement filters. The aspect ratio controls include anamorphic stretch, separate horizontal and vertical controls for black bars as well as zoom, and smooth pan/scan controls. You can create your own aspect ratio presets or use the factory presets.

The XBox's unmatched image quality is achieved via proprietary conversion technology that evaluates the video source characteristics and selects the appropriate filter and conversion algorithms. Separate video modules perform each major signal processing function. This permits simple upgrades to incorporate any future video standards.

HDTV upconversion & downconversion

HD to HD format conversion

525 to/from 625 format conversion

Resolution and frame rate conversion

Aspect ratio conversion

Computer RGB to video conversion

Film mode with 3:2 and 24fps capability

Intuitive graphical control interface

Modular design for simple upgrades

Advanced proprietary digital filters

Features

- Complete aspect ratio adjustment
- Smooth pan/scan with variable speed control
- ◆Zoom control up to 1600%
- Unlimited user-defined presets
- Filters for anti-alias, flicker, Moiré removal
- Separate horizontal and vertical filters
- ◆15 levels of horizontal and vertical filters
- ◆Off-speed PAL (625/24fps) input/output
- ◆Field, frame and 3:2 conversion modes
- Control software for remote operation
- Black matte generator
- Internal test patterns
- ◆HD tri-level and composite sync out
- •Genlock input & internal sync lock
- ◆10 bit video path and 12 bit processing
- Optional front panel touch screen display
- Optional scene detector
- ◆Optional audio delay
- Optional time code delay and 3:2 tracking



System Design

The XBox system consists of a motherboard, two frame buffer modules, a conversion module, a system control module and six expansion slots. The expansion slots require a minimum of one input and one output module. The remaining four expansion slots can be used for additional input, output, or processing modules to add further functionality to the XBox.

Remote Software



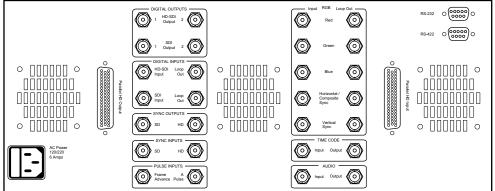
The remote control software provides control for all the functions of the XBox from a Windows 2000, 9x or NT computer. All frequently used functions are displayed on the main screen. The software also includes factory presets for popular aspect ratios. The control software is required for operation of the XBox if the front panel display is not ordered.

Film Mode

The XBox can further improve the quality of the upconversion if the video source was originally transferred from film. If the source contains a 3:2 sequence the XBox in film mode can reassemble the original film frames to aid in upconversion. The 3:2 sequence can be provided via an outside pulse from a telecine or time code trigger device available from Visual Matrix. In addition, with the time code option the XBox can internally track the 3:2 sequence automatically. Film mode can also accept off-speed PAL (24fps) video to upconvert to 1080 or 720p by performing an internal 3:2 pull down.

Rear Panel

(Full system below shown with optional features)



Ordering Information

Downconverter XB-30DP		Converts HD-SDI to 525/625
Upconverter XB-30UP		Converts 525/625 to HD-SDI
HD Format Converter XB-30HP		Converts between HDTV standards
SD Format Converter XB-30SP		Converts between 525 and 625 digital video
Scan Converter XB-30SC		Converts computer RGB to 525/625 video
Options	XBlcd XBsd XBau XBtc	Front panel touch screen display Scene detector Audio delay Time code delay and 3:2 tracking

Specifications

Input

SDI (SMPTE 259M) 525, 625, 625/24 HD-SDI (SMPTE 292M) 480p 59.94 720p (59.94, 60) 1035i (59.94, 60) 1080i (50, 59.94, 60) 1080p 24 Segmented frame input (SFI) **HD** Parallel

Same outputs as HD-SDI RGB with auto sync detect Horizontal timing:

15-90KHz Maximum of 2048x2048 lines Genlock to composite or HD sync Frame Pulse and A Pulse Time Code (Option) Audio (Option)

Output

SDI (SMPTE 259M) 525, 625, 625/24 HD-SDI (SMPTE 292M) Same standards as inputs **HD** Parallel Same standards as inputs HD and Composite sync output Time Code (Option) Audio (Option)

General

Control Ports: RS-232, RS-422, USB 4RU - 19" rack mountable Auto switch 120 - 240v Weight: prox. 30lbs. 1 year parts and labor warranty

Note that some of the specifications and features listed in this brochure are only available as part of specific packages or options.

Specifications subject to change without notice.

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