Channel Box
Real-Time animation controller for Branding, Promos and Snipes.

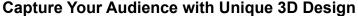The Company the Whole World Watches.

Powerful Graphics Creation and Automation Control

Channel Box is an HD/SD-switchable turnkey branding and automated promo system, featuring 2D/3D design and playout for branding applications, including tickers, crawls, snipes, promos and end-credits. The system's real-time video, graphics effects, 2D and 3D DVE (optional), clips (optional) and audio can be integrated with automation systems, or the system can be used as a standalone branding device. User-designed control panels enable quick and accurate, real-time operator playout control.

Two configurations are offered: Channel Box HA is a high-availability configuration, with RAID storage in a server-grade chassis with redundant power supplies, for critical placement in the video stream; the standard configuration of Channel Box provides dual striped drives and is a cost-effective solution for on-air use, as well as a content creation and qualification station.

Capture Your Audience with Unique 3D Design

Channel Box offers exciting 3D design capabilities with controllable playout, giving designers the ability to create stunning new looks for their graphics.

Designed with Your Workflow in Mind

Channel Box is a workflow-enabled product! Seamlessly integrate clips and graphics content with your existing infrastructure of Lyric®-based graphics products. With the Monitor and Control option, you can remotely view a real-time proxy of the actual output channel, as well as have full playout control. Asset management simplifies your workflow, as it enables content management and inter-system content transfer over Gigabit Ethernet.

Persistent scenes in Channel Box allow for scenes to remain animating on- or off-screen while other scenes are loaded and aired. This means that you can separate your graphics requirements into small, independently controlled scenes for maximum flexibility. The new Intelligent Triggers feature allows you to create triggers in one scene that affect other scenes already loaded and playing on output.

Sophisticated Design and Control Tools

The customizable Control Interface Builder enables designers to build user interface control into individual scenes as they are created, and provides overall control of multiple scenes and events. For example, separate events such as insertion and removal of a TV ratings guide, sponsor bugs and tickers can all be customized and controlled from a Control Interface Builder GUI designed by the user. All functionality exposed through the control interface is also directly addressable via automation.

An intuitive Branding Design Interface makes graphics creation easy; elements are placed exactly as they would appear in a scene, enabling design in a WYSIWYG environment. Easy-to-use, timeline-based animation tools are familiar to broadcast graphics designers. All events in a scene are maintained within a timeline and controlled through a GUI designed by the user in the Control Interface Builder, providing real-time triggering of the animation via user controls or automation.

Advanced Network Options

Channel Box takes full advantage of network speed and capability with advanced options which operate over Gigabit Ethernet network: Networked Asset Management and Distribution provides scene and dependent asset distribution; Networked Monitor and Control provides remote scene editing, playout control and monitoring. These applications are available for Channel Box or PC operation.

Features

- HD/SD channel branding and auto promo system

- Real-time 2D/3D video, DVE (optional), clips (optional), graphics, effects and audio

- Air multiple persistent scenes simultaneously

- Create scenes that interact with each other using Intelligent Triggers

- Intuitive Control Interface Builder and user-designed control panels

- Timeline control of events, including GPI outputs to trigger external devices (GPI I/O optional)

- HD/SD-switchable platform

- 3D design capabilities

- 2D/3D DVE (optional)

- Dynamic text fulfillment

- Flexible, rich text-based rolls and crawls

- Direct support of multiple file formats

- Real-time, hardware-based video proxy window

- Offline creation and GUI building

- Clip playout (optional)

- Audio playout, gain control and routing

- Dolby® E-compliant for pass-through

- GPI triggers for Channel Box animations (GPI I/O optional)

- VDCP support for external control by VDCP-enabled devices

- Serial or Ethernet automation control supporting Chyron's industry-standard Intelligent Interface®

Technical Specifications

HD/SD-Switchable Video Inputs/Outputs (per Channel)

Input		1 SDI Video In - can also serve as digital Gen/Lock input; optional Second Video Input provides 1 additional SDI Video In
Outputs		1 SDI Video, 1 SDI Key
Type		All BNC for input and output
Impedance		75 ohms
Data Formats:	SD	10-bit, 270 Mb/s ITU-R Bt.601 SMPTE 259M-C
	SD	10-bit, 270 Mb/s ITU-R BT.656-4
	HD	10-bit, 1.485 Gb/s ITU-R Bt.709 SMPTE 292M

Analog Input - Gen/Lock

Gen/Lock	1 analog black burst; can also accept tri-level analog sync
Type	BNC
Impedance	75 ohms
Format	1 volt p-p composite video, 525/625

Analog Output - Monitoring

Monitoring	1 SD analog composite out downconverted from Program Out
Type	BNC
Impedance	75 ohms
Format	NTSC/PAL

GPI/O Connections (Channel Box HA - Requires GPI Option)

Connections	32 (16 In/16 Out)
Type	DB37
Format	TTL level only

GPI I/O Connections (Channel Box - Requires GPI Option)

Connections	24; can be configured in groups of eight as GPI In or GPI Out
Impedance	50 ohms
Format	TTL level only

Dimensions - Channel Box HA

Chassis	Height	Width	Depth	Weight
3RU	13.2cm/5.2"	45cm/17.7"	64.8cm/25.5"	32.7kg/72lbs

Dimensions - Channel Box

Chassis	Height	Width	Depth	Weight
4RU	17.8cm/7"	43.0cm/17"	55.9cm/22"	16.8kg/37lbs

Power - Channel Box HA

Power Supply	760W AC power supply with Power Factor Correction (PFC)
Power Requirements	100-240V @10A; 50-60Hz

Power - Channel Box

Power Supply	300W redundant AC power supply with Power Factor Correction
Power Requirements	85-264VAC@6A; 5/7-63Hz

Audio

Inputs	2 AES3id for 4 mono tracks
Outputs	4 AES3id for 8 mono tracks
Type	BNC, unbalanced

Video Formats Supported

1080i @ 60/59.94/50 fields per second
1080PsF @ 24/23.976 frames per second
720p @ 60/59.94/50 frames per second
525i @ 59.94 fields per second
625i @ 25 frames per second

Control Interfaces

Intelligent Interface® over RS-232 or Telnet, VDCP, GPI

Base System Configuration

Windows® XP Professional OS

2.0 GHz or greater dual Intel® Xeon® processors - Channel Box HA

3.2 GHz or greater Pentium® processor - Channel Box

2GB DDR-RAM

eFX video processing board

Graphics accelerator card

Drives - Channel Box HA:
RAID 0 System drives (2 redundant mirrored drives): Total storage 500 GB
RAID 5 media drives (4 redundant striped drives): Total storage 1300 GB

Drives - Channel Box:
Standard System drive: Total storage 320 GB
RAID 1 media drives (2 performance striped drives): Total storage 640 GB

DVD±RW drive

3.5" floppy drive

PS/2 PC keyboard and mouse

Dual RJ-45 Gigabit Internet ports (Channel Box HA)

RJ-45 Gigabit Ethernet (Channel Box)

Hardware/Software Options

Extended HD (Channel Box HD only - for HD use only)

eFX Clip Option

DVE Option

Second Video Input

Video Bypass Panel

GPI/O Option

RAID 5 Drive Option - Provides 1300GB capacity (Channel Box HA)

Striped Drive Pair for Media (Channel Box)

Networked Monitor and Control (Channel Box and PC Versions)

The Company the WholeWorld Watches.

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