PixelPower
broadcast graphics solutions

Channel Master

SCALABLE CHANNEL PLAYOUT SOLUTION WITHOUT COMPROMISE

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Get noticed – Get revenue through outstanding graphics

Channel graphics are the key to raising a channel's profile and driving its revenues. Whereas most integrated channel playout systems compromise on the quality of the branding and promotional graphics possible, ChannelMaster features Pixel Power's industry leading graphics engine, giving you access to outstanding graphics.

Easily utilise your content

Organisations typically have content to be played out in a variety of formats. ChannelMaster provides the flexibility to support a range of file formats and wrappers, through the use of industry standard decoders. No need to waste time and effort re-purposing existing content.

Launch channels quickly and at low cost

ChannelMaster™ is a fully integrated system that delivers all the hardware and software functionality needed to quickly get a channel on air in a single device, at a lower cost than a traditional playout chain. It can operate autonomously or as a part of a group of ChannelMaster devices controlled and managed by a range of third-party automation and MAM systems. A single ChannelMaster system can deliver a single complex channel or two simpler channels within 3RU.

Fits existing infrastructure

ChannelMaster does not tie you to a particular automation system – Pixel Power partners with leading automation system suppliers through its own PixelXML2 protocol or legacy VDCP and M2100 protocols.

Key Features

- Integrated local content cache
- Integrated 2D and 3D graphics
- Manual master control for live events
- Fully resilient broadcast quality 3RU hardware platform
- Scalable architecture for single or multi-channel playout
- Integrates seamlessly with existing automation systems
- Sophisticated audio processing including duck, mute and mix

Pixel Power ChannelMaster

A highly integrated, sophisticated and scalable channel playout system that provides a cost effective and highly reliable approach to deploying new channels, without compromise. Pixel Power's ChannelMaster provides an out-of-the-box solution to bringing new channels to air quickly and cost-effectively. ChannelMaster integrates Storage, Graphics, DVE, Audio, Subtitling, Master Control, Live Feed and long-form Video playout within a single dedicated hardware platform.

ChannelMaster integrates with third party automation and MAM systems and can replace many devices in the traditional playout chain, with no compromise in quality. ChannelMaster may also be controlled by Pixel Power's own graphics and media management architecture software.

Graphics

ChannelMaster systems are available in three variants reflecting different levels of integrated graphical capability:

Channel Master — Integrated channel playout system supporting 2D text and animations, clocks, tickers, optional 2D DVE.

Channel Master CLIPS — Integrated channel playout system supporting 2D text and animations, clocks, tickers, 2D DVE, multi-channel graphics and audio clip playback.

Channel Master 3D — Integrated channel playout system supporting 2D text and animations, clocks, tickers, 2D DVE, multi-channel graphics and audio clip playback, 3D text and animations, 3D live texture mapping and 3D DVE.

Automation and control

ChannelMaster can be controlled by Pixel Power's Pixel XML2 protocol, XML over TCP/IP, giving full access to all aspects of the ChannelMaster architecture. ChannelMaster will also emulate industry standard VDCP and M2100 protocols.

Ingest and Asset Management

Media may be ingested from live HD-SDI or SD-SDI using the ChannelMaster system itself. The system also supports file based delivery under the control of a third party MAM system.

Graphics and Subtitling

ChannelMaster graphic templates are created offline using Pixel Prep – Pixel Power's graphics creation tool – or a Clarity system. The creation UI provides the template designer with a powerful set of easy to use tools presented as a set of dockable windows allowing the UI to be tailored to the task in hand, saving

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time and complexity. The tool enables designers to create a wide range of graphic effects including multi-layer static and animated graphics, tickers, clocks, rolls and crawls. The Clips and 3D variants of ChannelMaster are supported by matching Pixel Prep versions and add the ability to include animated clips and complex 3D elements. In addition ChannelMaster integrates full support for open subtitles.

Master Control

Although most playout will be controlled by the third party automation system, full support is also provided for manual and live events. ChannelMaster incorporates full master control switcher capability with support for A/B mixing and control of external upstream router sources as inputs to Program and Preset buses. The ChannelMaster platform supports up to 10 internal DSKs, which can be independently mapped to a variety of sources. A software control panel can be hosted alongside the schedule automation interface within PPMC that allows automation to be suspended whilst manual control of primary and secondary events takes place. ChannelMaster also supports Pixel Power's fully configurable hardware control panel – the Video Switch Panel (VSP).

Audio

ChannelMaster's extensive audio capabilities eliminate the need for additional audio devices. Operations such as audio duck, mix and mute are fully supported using any combination of embedded SDI and discrete AES audio sources. An optional Dolby processing module allows Dolby-E multi-channel audio to be decoded, mixed with audio from other sources, and re-encoded as either Dolby E or Dolby Digital (AC3) for output on either embedded SDI channels or discrete AES.

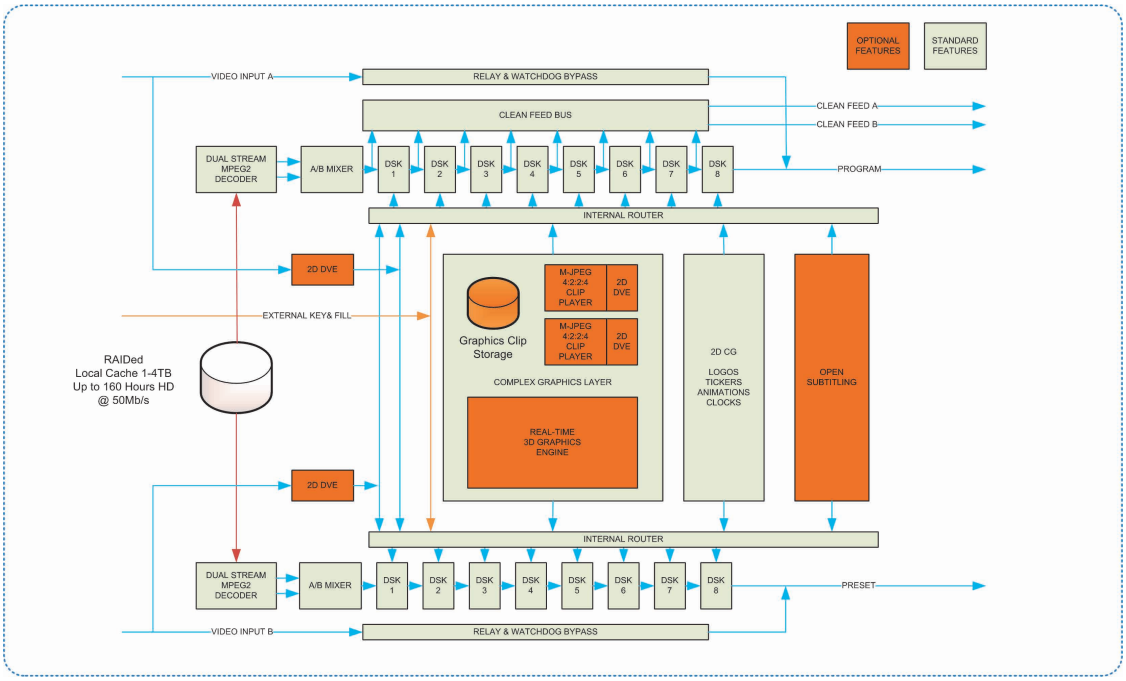
Support for VOs and the delivery of multi-lingual audio on separate audio tracks is also possible using ChannelMaster where VOs can be assembled on-the-fly by concatenation of multiple audio clips.

Content storage

ChannelMaster includes 1 TB of RAIDed storage (expandable up to 4TB internally) for the local cache storage of long form video content, which supports up to 40 (160) hours of playout of MPEG-2 Long GOP, HDV or IMX content at 50Mbps.

The video server supports two dual stream hardware video decoders. Additionally, ChannelMaster Clips and 3D include up to eight hours of HD graphics clip storage (I-Frame JPEG) for use in graphics secondary events.

ChannelMaster Single Channel Configuration Block Diagram



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