

Imagestore 750

HD/SD master control and branding processor with advanced audio processing

Imagestore 750 is our top of the range master control and branding processor for highly automated specialty channels. Many advanced audio features include 16 channel audio mixing/payout plus dynamic shuffling and gain control. There's also stereo to 5.1 Upmixing, 4 Dolby decoders/encoders; and sophisticated Metadata processing. Multiple, high performance graphics features include dual DVEs, and Stereoscopic 3D channel branding with a variable 'Z-plane'.



KEY FEATURES AND BENEFITS

Multi-level branding graphics

- › Designed for high impact, multi-level channel branding
- › Easy selection between SD and HD (720p or 1080i at 50 Hz and 59.94 Hz)
- › Four independent keying layers with preview output
- › Integral flash-based store with capacity for more than 4000 HD/SD images
- › Dual fill and key inputs allow operation with an Intuition XG graphics co-processor for the most advanced graphics effects (see page 460)
- › Emergency Alert System (EAS) crawls and audio mix-ins
- › In-vision digital/analog clock insertion with Bugclock option
- › Easytext template-based, automated character generator option for data-driven graphics, such as in-show promos
- › Full compatibility with Vertigo graphics automation and asset management (see page 428)

Advanced audio mixing and processing

- › 16 channel audio mixing using embedded audio, and/or 8 AES pairs, for 5.1 and multi-lingual audio
- › Dynamic shuffle and gain control
- › Up to 4 Dolby decoders / encoders per Imagestore-750
- › 5.1 Up-mixing using Linear Acoustic upMAX™ technology
- › Versatile Easyplay 2 audio clip player, with simultaneous payout of up to four clips (16 channels), for voice-overs
- › Advanced metadata processor with support for embedded metadata (as per RP-2020), metadata switching, and metadata generation
- › Audio description (AD) with automated mixing of commentary track
- › User-friendly audio configuration tool

Video mixing

- › A/B video mixing by cuts and fades
- › Independent clean feed and auxiliary outputs
- › Single or dual channel 2D DVE options for squeeze-and-reveal and picture-in-picture effects
- › C and D inputs available to feed DVE, and can also be used as extra fill and key inputs for future expansion

Automated and manual control

- › Full automation control using widely supported Oxtel protocol (serial, Ethernet) and GPI
- › Manual control by iMC, Branding Panel, PresStation or Vertigo Xpanel (see page 442)

Robust design

- › Flash memory for graphics storage and operating system
- › Broadcast quality, real-time operating system
- › Redundant hot-swappable power supplies
- › Mechanical bypass of program input
- › Front panel diagnostics: configuration, temperature, power supplies, PLL

Imagestore 750: scalable mixing & graphics capabilities

The entry level Imagestore 750 can be upgraded with multiple options to suit graphics-rich channels, requiring advanced DVE transitions and multi-channel audio mixing/payout. This helps to minimize the initial outlay, and also simplifies system expansion and development.



Powerful, single/dual channel DVEs

The integral dual or single channel HD/SD DVEs are ideal for branding and promotional transitions:

- › High quality picture-in-picture and squeeze-and-reveal type DVE transitions
- › 10-bit processing, advanced interpolation and sub-pixel motion and scaling
- › Automated or manual control of DVEs



Animation, storage and payout

A wide range of multi-layer animation payout effects can be performed:

- › Four independent keying layers with preview output enable the payout of high impact, multi-level channel branding
- › Integral still/animation store with capacity for more than 4000 HD/SD images



Automated character generation

Imagestore 750 is ideal for highly automated, template-based character generation for channel branding and automated promos:

- › Each of the four keying layers can insert a crawl layer or static (dynamically updated) text layer
- › High quality characters are output with 256 level anti-aliasing, with easy drop shadow and transparency control
- › Unicode characters in Truetype fonts, from 6 to 600 pixels, in any RGB color



Emergency Alert System support

Broadcast quality EAS emergency text and audio messages can be inserted automatically using the EAS option:

- › EAS operates with an external EAS receiver
- › EAS messages are triggered by a GPI and the text is sent via RS-232
- › The EAS audio requires an A to D converter to provide AES input to the Imagestore 750



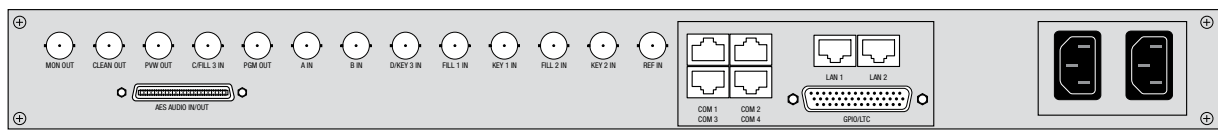
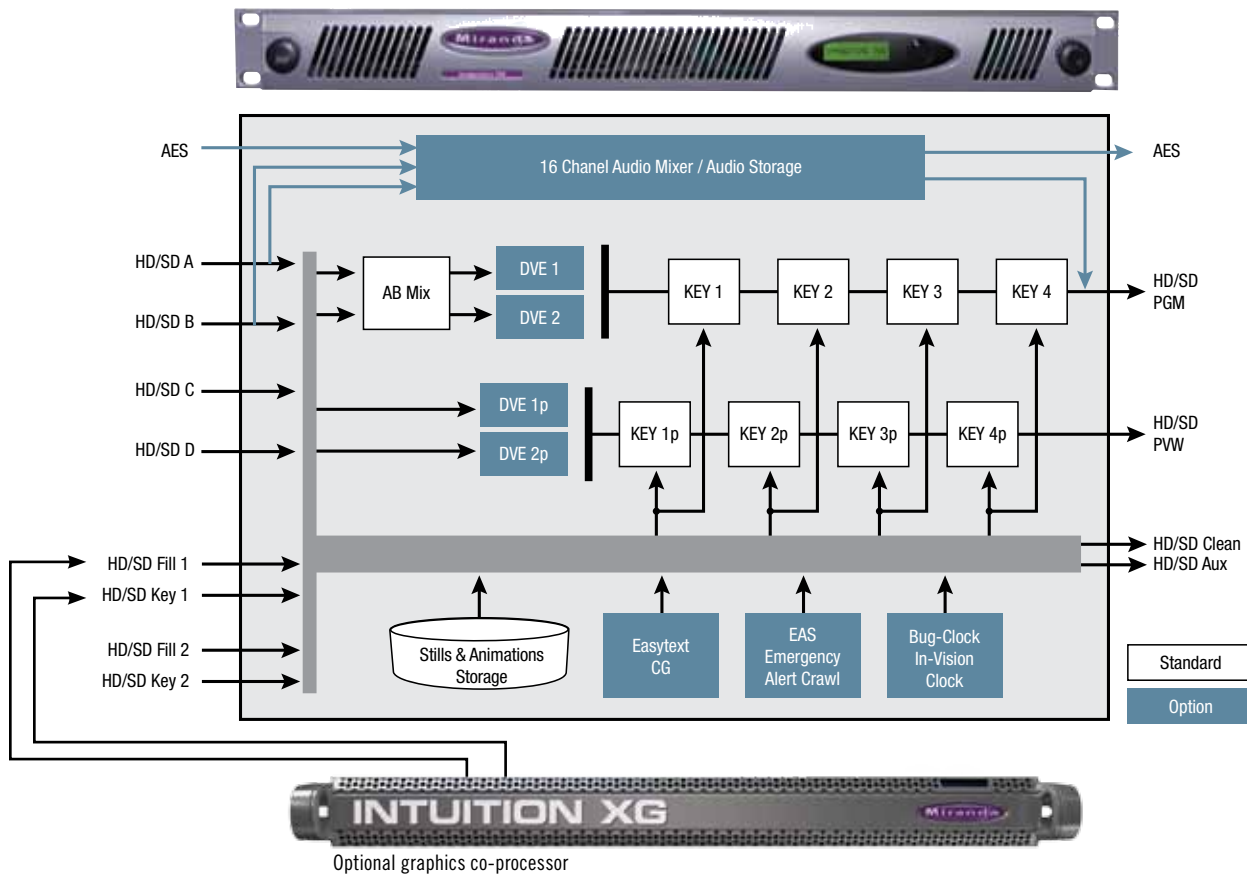
Flexible multi-channel, manual control options

- › iMC fully featured, master control switching panel system for live and specialty channels
- › Branding Panel provides highly graphical, touch-screen control, with multiple 'hard' knobs and switches (see page 444)
- › PresStation panel gives full control over branding, but also allows for full router control and source selection (see page 445)
- › Vertigo Xpanel GUI offers highly adaptable and intuitive control of multiple channels with channel ganging and full tallies



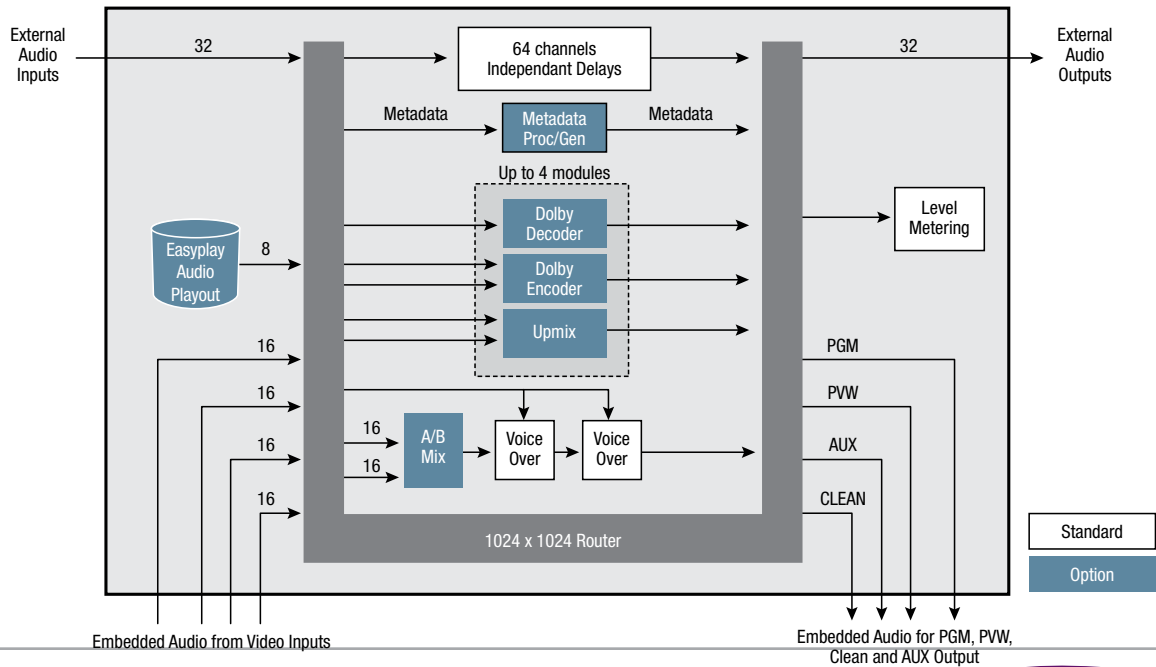
Optional graphics co-processor

- › Imagestore 750 can be integrated with Intuition XG graphics co-processor
- › Intuition XG offers a powerful HD/SD character generator, ideal for dynamic, data-driven graphics



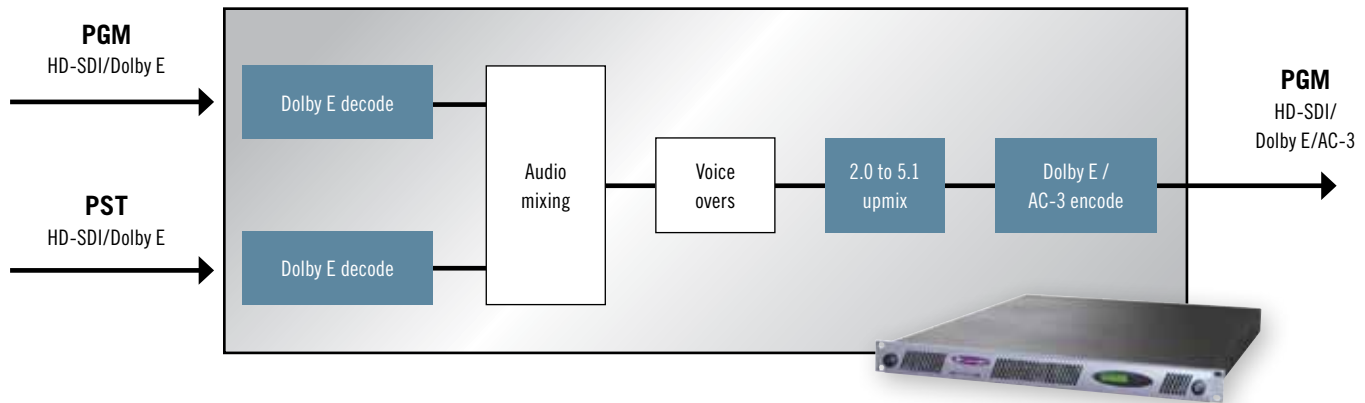
Imagestore 750 rear view

Advanced audio features include Dolby encoding/decoding and 5.1 upmixing

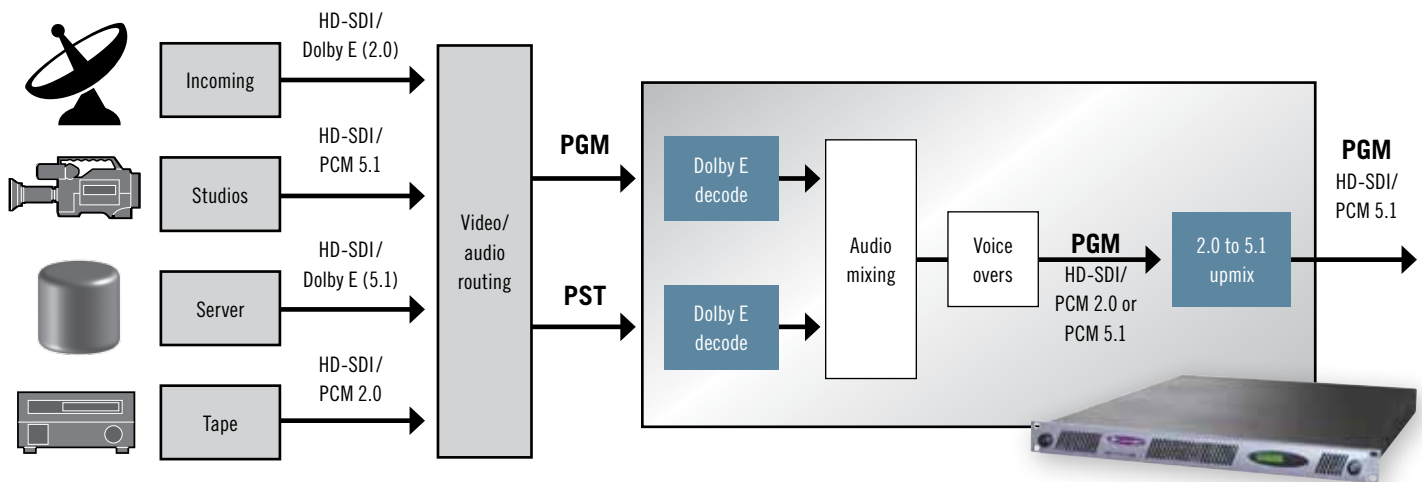


Imagestore 750: Dolby encoding/decoding & upmixing

Two key challenges with the playout of HD channels have traditionally been the handling of Dolby E during program mixing, and the use of 5.1 Upmixing to maintain the continuity of the audio when dealing with 5.1 and 2.0 signals. The Imagestore 750 simplifies these problems significantly, with integral Dolby E decoding/encoding and 5.1 Upmixing using Linear Acoustic technology.



Imagestore 750 can perform Dolby E decoding and audio mixing, and then Upmix before Dolby E/AC-3 encoding



Using Imagestore 750 in a typical playout configuration with Dolby E decoding and 5.1 upmixing, with audio output as PCM 5.1

The Imagestore 750 can be fitted with up to four Dolby E decode/encode or 5.1 Upmixing processing modules, without any limitation on the possible combinations. The audio engine produces reliable and outstanding results, as the Dolby processing relies on genuine Dolby technology, while the Upmixing engine is based on the industry leading Linear Acoustic UpMAX™ technology.

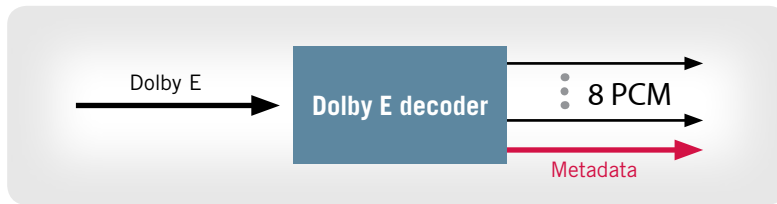
Imagestore 750 can manage up to four streams of Metadata, and is able to generate up to four presets (Metadata banks). Moreover, its delay

capabilities allow the video/audio/Metadata to remain synchronous, and the audio can be switched seamlessly, regardless of the audio type (PCM 5.1 to PCM stereo, Dolby to PCM stereo etc).

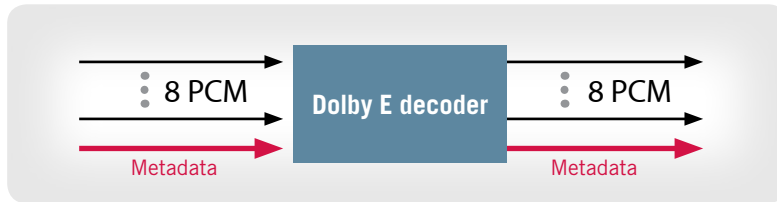
This high level of integration of Dolby E decoding/encoding, Upmixing and Metadata processing makes the Imagestore 750 the ultimate solution for audio management in playout.

Integral dynamic Metadata processing

Imagestore 750 is equipped with an advanced Metadata processor, including support of embedded metadata (as per RP-2020), metadata switching, and metadata generation:



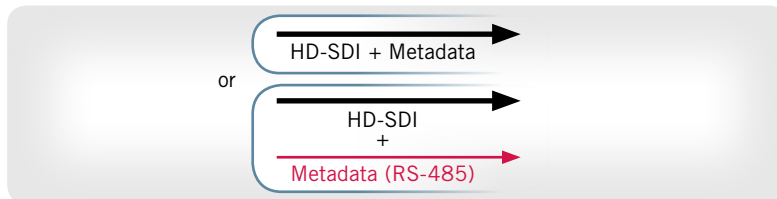
Dolby E input, PCM output + Metadata



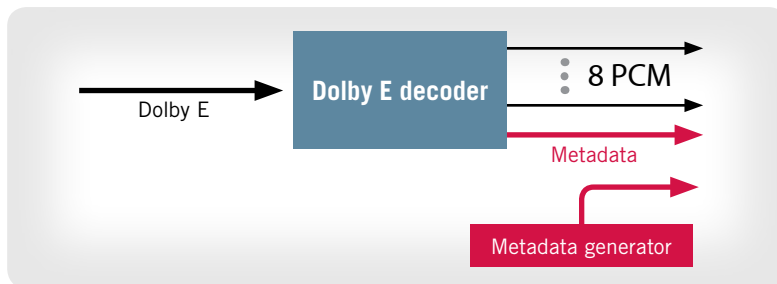
PCM pass-through, Metadata pass through



Metadata switching (AB mix)



Metadata carriage, either embedded in VANC or as serial data



Metadata generation to ensure full, valid data when Metadata missing, or to override incoming data

ORDERING INFORMATION

IS-750

Imagestore 750 channel branding processor (dual input, 2 x f&k, AB mix, PGM, PVW + clean out)

IS-750-EP16

Easyplay 16 channels audio storage/payout

IS-750-ET

Easytext character generator

IS-750-Clock

Bugclock in-vision clock

IS-750-MEM-2GB

2GB of animation payout memory

IS-750-HDD

Internal media storage hard disk drive kit

IS-750-PSU

Redundant (spare) PSU unit for IS-750

PRES-STATION

Master control panel

RCP-BR

Branding Panel

XPanel

SW control panel

iMC-Panel-300

Full size, master control panel

iMC-Panel-200

Mid-size, master control panel

iMC-Panel-GUI

Software GUI master control panel

Options

IS-750-DVE

Single channel DVE

IS-750-DVE-DUAL

Dual channel DVE

IS-750-Audio6

Audio: 6 channels (1 group embedded, 6 AES in, 6 AES out)

IS-750-Audio16

Audio: 16 channels (4 groups embedded, 16 AES in, 16 AES out)

IS-750-EAS

EAS with one AES in

IS-750-DOLBY

Dolby decode / encode bundles (various configurations available)

IS-750-UMX

Audio upmix option

IS-44-TBA

44-pin terminal block adapter for GPIO/LTC/Metadata connections