

Imagestore-Modular

Single card, 3Gbps/HD/SD master control & branding

Imagestore-Modular is a low cost, single card master control and branding processor (3Gbps/HD/SD). It offers exceptional space and energy efficiency, with up to 10 channels in a 3RU Densité frame. Master control features include AB video/audio mixing (16 channels) plus voice-overs. Designed for pre-rendered graphics, it can provide five layers of keying (3 internal stores), character generation and EAS, as well as clock and temperature insertion.



KEY FEATURES AND BENEFITS

Modular, 3Gbps / HD / SD branding processor

- › Single, card master control and branding processor
- › Module is housed in Densité 3 frame, with up to 10 cards (channels) per frame
- › Supports 3 Gbps/HD/SD (1080p, 1080i, 720p, 576i, 480i, 59.94 Hz and 50 Hz)
- › Uses widely adopted Oxtel automation protocol (Ethernet, RS 232/422)
- › Manual control options include Branding Panel, PresStation, Vertigo Xpanel GUI, and iControl PC-based control

Multi-layer channel branding

- › Five independent keying layers: three can be fed by internally stored stills/animations, and two layers are fed by external graphics devices (dual fill & key inputs)
- › Integral storage capacity of up to 4000 images/animations
- › Independent preview output
- › Automated character generation for static or data-driven text rendering and crawls
- › In-vision digital / analog clock insertion (with CG option)
- › Emergency Alert System (EAS) support (USA only)
- › Multi-channel voice-overs and audio clip playback
- › Temperature sensor option

Master control switching

- › AB video mixing, with 16 channel audio mixing
- › X-fade, V-fade and asymmetric V-fade transitions

Streamlined workflow

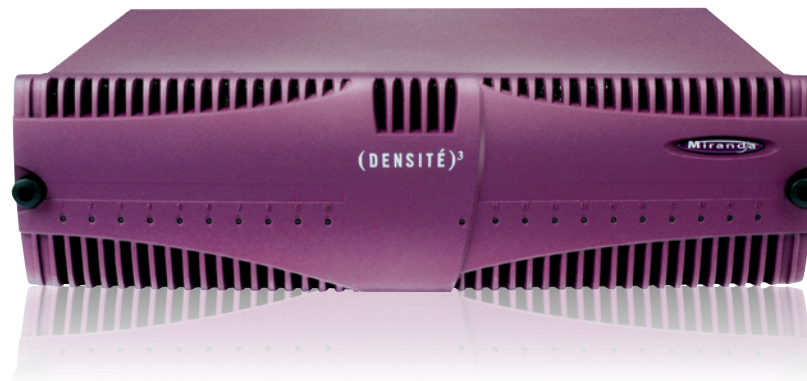
- › Fully compatible with Vertigo branding graphics automation and asset management system for highly productive, cost-saving workflows
- › Easy integration into a familiar After Effects based workflow, using the Vertigo After Effects Plug-in

Robust design

- › Compact flash memory for O/S and graphics storage
- › Rugged Linux architecture
- › Densité 3 frame offers redundant, hot-swappable power supplies
- › Mechanical bypass of program input
- › Easy diagnostics via Densité 3 front panel, video thumbnails over IP, and iControl monitoring and control system (see page 533)

Comprehensive Densité range

- › Imagestore-Modular can be easily combined with other Densité modules in the 3RU Densité frame, including signal processors, DAs, and multi-viewers (see page 43)



Imagestore-Modular can be easily combined with other Densité modules in the 3RU Densité frame

For full specifications on the Imagestore-Modular, see page 172.



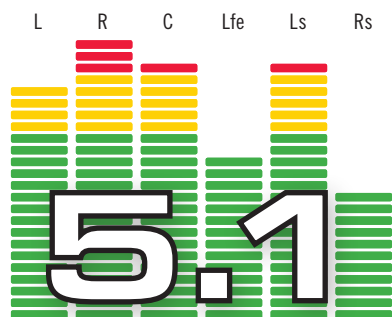
Graphics applications

- > Imagestore-Modular is ideal for pre-rendered animated/still graphics, such as logos and lower thirds
- > The most intensive, full screen dynamic HD graphics are best performed by the top of the range Vertigo XG processor (see page 394)



Automated character generation and EAS

- > The optional automated, template-based character generator 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
- > The EAS option (USA) enables emergency text and voice-overs to be inserted automatically via GPI and RS-232, when the processor is connected to an external EAS receiver (EAS audio requires an A to D converter)

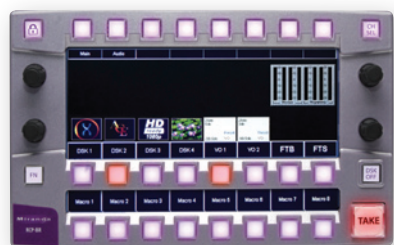


Audio mixing and voice-overs

- > Imagestore-Modular features 16 channel audio mixing, and optional 8 channel voice-over/audio clip storage and payout (simultaneous payout of two clips)
- > Background audio is automatically ducked during voice-overs
- > Audio is accepted as embedded audio or by four external AES inputs

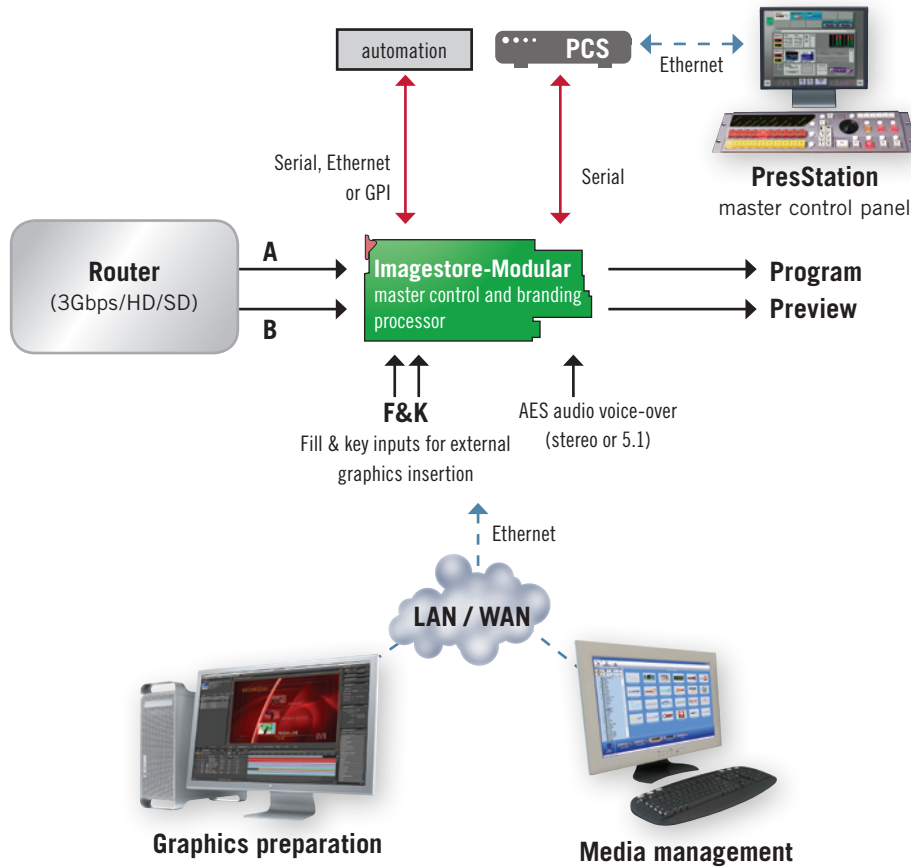
Advanced manual control

- > Imagestore-Modular operates with the compact Branding Panel, the Vertigo Xpanel GUI, and the PresStation master control panel (see page 393)

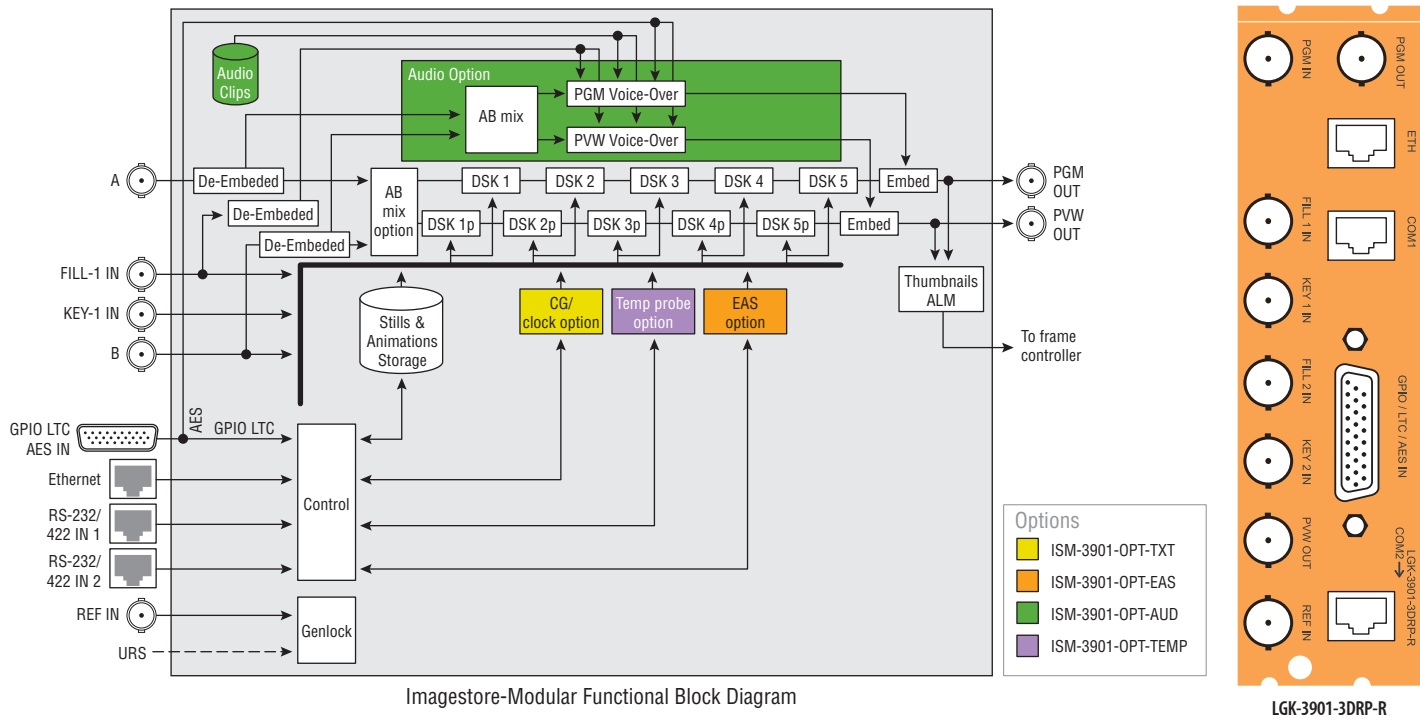


Imagestore-Modular: typical applications

Specialty channel master control switching and branding



For a simpler logo insertion version of Imagestore-Modular, please see the LGK-3901 on page 168



TECHNICAL SPECIFICATIONS

PROGRAM AND FILL/KEY INPUTS

Signal: 3G/HD/SD-SDI SMPTE 424M, 292M, and 259M-C compliant
 Supports data rates of 270, 1483.5, 1485, 2967, 2970 Mbps

Cable length (Belden 1694A): 60 m (180') @ 3Gbps
 120 m (360') @ 1.5 Gbps
 300 m (1000') @ 270 Mbps

Return loss *: >15 dB for up to 1.5 GHz
 >10 dB from 1.5 GHz to 3 GHz
 * Return loss figures may differ when signal is routed through the bypass relay

PROGRAM AND PREVIEW OUTPUTS

Signal: 3G/HD/SD-SDI SMPTE 424M, 292M, and 259M-C compliant
 Supports data rates of 270, 1483.5, 1485, 2967, 2970 Mbps

Return loss *: >15 dB for up to 1.5 GHz
 >10 dB from 1.5 GHz to 3 GHz
 * Return loss figures may differ when signal is routed through the bypass relay

Jitter (wideband): HD/SD: <0.2 UI
 3Gbps: <0.3 UI

REFERENCE INPUT

Signal: SMPTE 170M/SMPTE 318M/ITU 624-4/ BUT 470-6 or comp. sync
 SMPTE 274M / SMPTE 296M tri-level sync
 Return loss: >35 dB up to 5.75 MHz

SERIAL CONTROL

Connector: RJ-45
 Signal: RS-232/422
 Data rate: 9600, 19200, 38400, 57600, 76800, 115200

VIDEO PROCESSING PERFORMANCE

Signal path: 10 bits

EMBEDDED AUDIO PROCESSING PERFORMANCE

Quantization: 20-24 bits
 Sampling: 48 KHz, synchronous
 Number of channels: 16, 4 groups

ELECTRICAL

Power 25 W

ORDERING INFORMATION

ISM-3901 Imagestore-Modular 3Gbps/HD/SD master control switcher and logo inserter with 8GB storage
 ISM-3901-SD Imagestore-Modular SD master control switcher and logo inserter with 8GB storage

Housing Frame

Densité 3 frame Housing frame with (1) PSU (AC in), (1) Ethernet controller with front control panel, blank rear panels (up to 10 Imagestore-Modular processors per 3RU frame)

Options

ISM-3901-OPT-TXT
 ISM-3901-OPT-EAS
 ISM-3901-OPT-AUD
 ISM-3901-OPT-TEMP
 ISM-3901-HD-UPG
 ISM-3901-16GB-UPG*
 ISM-3901-32GB-UPG*

Easytext Character Generator (includes Analog / Digital Clocks)
 EAS Support - USA only
 Audio/voice-over/audio clip option
 Temperature probe option
 Upgrade from SD to HD for Imagestore-Modular-SD
 16GB upgrade for logos / animations
 32GB upgrade for logos / animations

*Check for availability