

Ignite

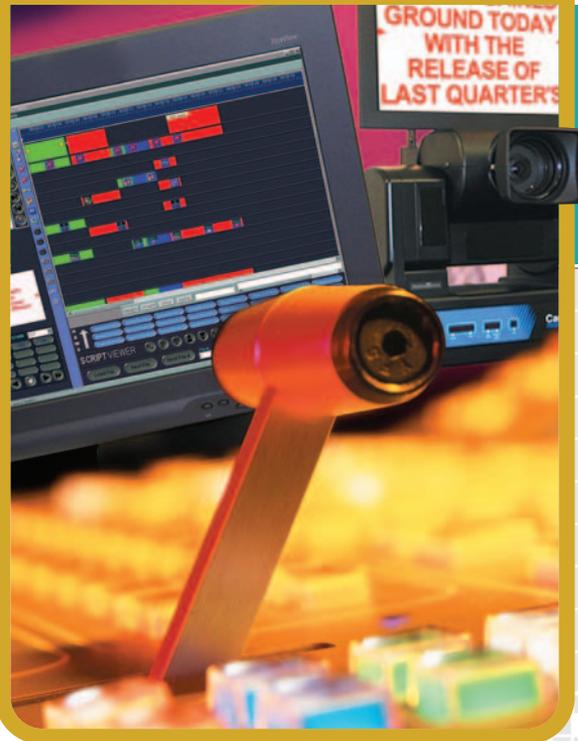
Integrated Production Solutions

Grass Valley™ products from Thomson offer affordable digital solutions for acquisition, live production, storage, and playback—and support a range of applications, including corporate and government presentations, distance learning, and broadcast education.

The Grass Valley Ignite™ line of integrated production solutions is an integrated software and hardware environment that lets you produce and broadcast live newscasts and other programs with one or two operators. It's also perfect for non-scripted events, such as election coverage, talk shows, live entertainment segments, and breaking-news stories. An Ignite system can speed your transition to digital production, improve your on-air look and feel, and virtually eliminate technical errors—all while developing stories and using personnel to their fullest.

The scalable Ignite line is available for the most value-conscious small-market television stations and the most demanding top-market broadcasters requiring the most sophisticated video, audio, and control I/O configurations. Our value-priced Ignite systems are also ideally suited for professional audio video applications, including corporate and government presentations and distance learning and communications.

As the industry's first and most complete link between the control room and the newsroom, the Ignite line facilitates a single workflow, multi-distribution model that provides a highly efficient solution for launching new digital channels and generating alternate revenue streams. To that end, the Grass Valley WebSTATION™ software for real-time production of Ignite content for on-demand viewing is an important part of our single-workflow, multi-distribution effort.



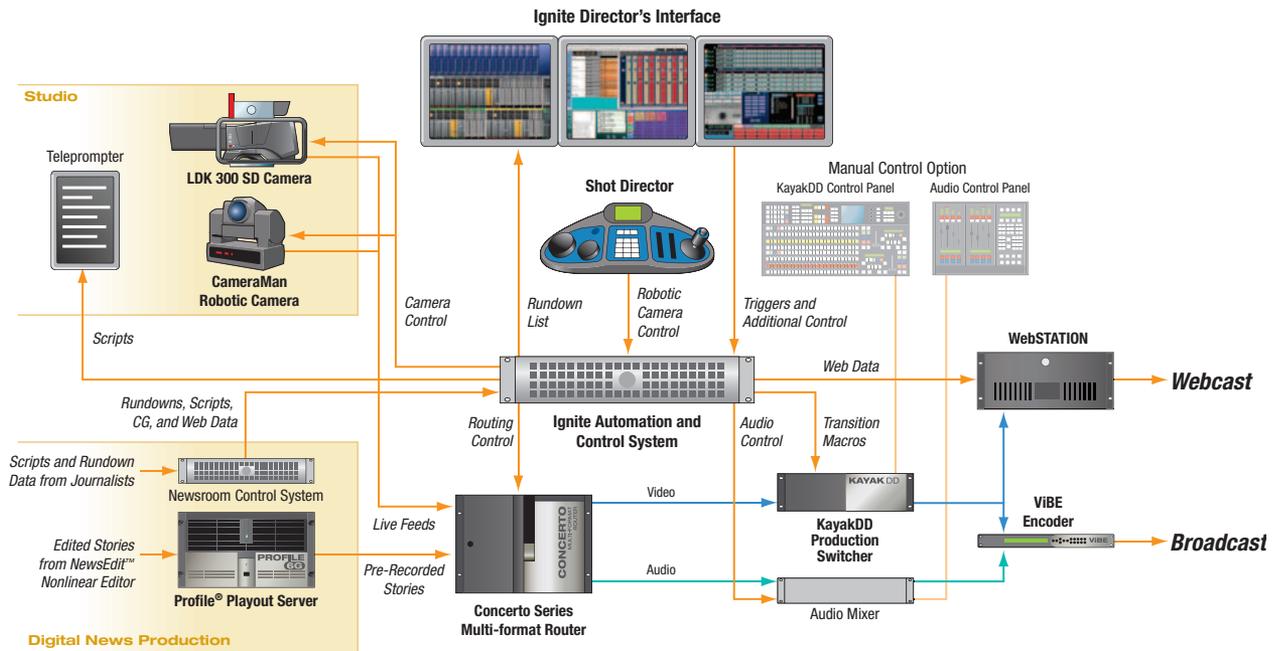
Ignite Hardware Platform

The scalable Ignite hardware platform includes the Grass Valley KayakDD digital video production switcher, the Grass Valley Concerto Series routing switcher, and analog and digital audio mixing/processing. It also includes Ignite automation control software (see below) and supports third-party devices and all major newsroom computer systems. The Ignite

key features

- Scalable systems for small-, medium-, and large-market applications
- Systems support:
 - Grass Valley KayakDD™ digital production switcher
 - Grass Valley Concerto™ Series routing matrix
 - Grass Valley CameraMan® and LDK 300 cameras
 - Vinten, Radamec robotic cameras
 - All major newsroom computer systems
 - Most major third-party peripherals
 - Advanced hardware designed to increase I/O, ease of use, and system security with packaged firewall
- Transition Macro Element (TME) timeline commands sent to individual modules creating an on-air event upon execution
- **NEW!** Page/slug and story-level groupings for efficient identification and to address dynamic changes
- Advanced rundown list provides a list of story, page/slug, and Transition Macro groups on the timeline linking an NRCS and an Ignite system
- Automation directors can navigate through the rundown list, moving through one or more events on the synchronized timeline
- Rundown monitor alerts users to any changes in the NRCS
- Enhanced switcher layout makes two or more switcher M/Es visible simultaneously and easily configurable for application-specific tasks, such as traffic camera or talk-show switching
- Enhanced Shot Box™ functionality helps configure button labels, colors, and functions for easy identification and tactile user interface
- **NEW!** CG list display tracks CGs by slug/page
- Dynamic script synchronization keeps scripts synched to timeline changes
- Manual control enhancements
 - 352 color-coded configurable News-FLASH™ hot keys
 - 147 configurable and assignable camera preset hot keys for robotic cameras
 - 17 CG hot keys per CG
 - Three-page audio layout with 16 configurable sliders per page

The Grass Valley line of Ignite integrated production solutions is the industry's first and most complete link between the control room and newsroom.



platform can also control broadcast-quality Grass Valley CameraMan systems and third-party robotics such as Vinten/Rademac systems with Grass Valley LDK 300 cameras.

Pairing an Ignite system with an optional KayakDD control panel lets you choose between producing some programs in an automated mode and others using a manual approach with an optional KayakDD control panel. Existing KayakDD users can take advantage of the Ignite system's capabilities through an upgrade kit.

The scalable Grass Valley Ignite hardware platform includes the Ignite 1000 1 M/E and 2000 2 M/E systems for small- and mid-market applications and the 3000 3 M/E and 4000 4 M/E systems for larger-market networks and station groups.

Ignite Automation Software

The Grass Valley Ignite automation software features a highly intuitive, feature-rich graphical user interface and scalable applications to help automate your production process.

The innovative Ignite software offers program lists that replicate a station's news segment order. During the rundown-monitoring process, if a change is made, the software can alert a director to take those modifications and add them to the show quickly. The Ignite software then automatically updates the new files and readies them for air, providing improved producer and director communications, faster show pacing, and error-free productions.

Along with improved timeline functions, the new features of the Ignite software include a character-generator (CG) list display, tight integration with news automation system scripts, and a rundown list that illustrates story, page (with associated slug name), and all events associated with that specific story.

The Ignite software also features dynamic script synchronization, which synchronizes scripts as changes are made on its Transition Macro timeline—such as skipping, inserting, adding, or deleting stories. It also offers enhanced Shot Box functionality, which lets you configure and store button labels, colors, and functions—then download that information to our Shot Box programmable controller.

Designed to increase the efficiency and ease of use, Grass Valley Ignite software also lets you reconfigure Ignite hardware to customize a system and maximize its performance.

Applications

- Broadcast news live production
- Around-the-clock 24-hour news
- Late-breaking news
- Cut-ins
- General live production programming
- Multi-casting – 24-hour news, sports, distance learning, shopping, and civic local channels
- Webcasting – designed to support WebSTATION software

System Selection Configuration Matrix

Base System Specifications								
	Video			Audio*				Control Ports RS-232, RS-422
	In		Out	In		Out		
	Standard	Opt.		Standard	Opt.	Standard	Opt.	Standard
1 M/E	16	32, 64, 96	15	24	32, 48, 64, 96	8	16, 24, 40, 48	16
2 M/E	32	64, 96	20	24	32, 48, 64, 96	8	16, 24, 40, 48	16
3 M/E	62	96	27	24	32, 48, 64, 96	8	16, 24, 40, 48	32
4 M/E	61	96	28	24	32, 48, 64, 96	8	16, 24, 40, 48	32

* Audio options are offered in the following configurations only: 32 in x 16 out, 48 in x 24 out, 64 in x 40 out, 96 in x 48 out.

Specifications

Device Control

Control Ports: Up to 32 – for cameras, VTR/servers, CG/SS, etc.

Signal Type: RS-232, RS-422 (software selectable)

Serial Interface: RS-232, RS-422 – RJ-45 (8-pin)

Video Inputs and Outputs

Video System Data

Video System Data Standards: Interlaced 525 lines or 625 lines switchable or autosenesing

Data Rate: 270 Mbit

Aspect Ratio: 4:3 or 16:9 switchable

Signal Processing: 4:2:2 in conformity with ITU-R 601

Minimum Delay: 20 μ s

Blanking Horizontal: Transparent for background signal

Blanking Vertical: Transparent for background signal, lines 6 and 319 (625/50 Hz)

Number Bits: 10-bit, 4:2:2

Keys: Four keys per M/E, each with linear, luminance, and Chromatte™ chroma key functionality per M/E

Key Channels: Four channels of digital effects per M/E for a total of up to 16

Serial Digital Video Inputs

Number and Format: Up to 93 inputs according to ITU-R656, 270 Mb/s

Return Loss: >15 dB, 5-270 MHz

Type of Connector: 75 Ω BNC (SMPTE 259M)

Nominal Amplitude: 800 mV peak-to-peak terminated

Autophasing Range: 43 μ s

Channel Coding: Conforms to SMPTE RP-259M

Ancillary Data: Blanked or passed (user selectable)

Embedded Audio: Blanked or passed (user selectable)

EDH: Blanked

Input Impedance: 75 Ω

Max. Cable Length: 50m

Serial Digital Video Outputs

Number and Format: Up to 28 outputs according to ITU-R656, 270 Mb/s

Return Loss: >15 dB, 5-270 MHz

Type of Connector: 75 Ω BNC (SMPTE 259M)

Nominal Amplitude: 800 mV peak-to-peak \pm 10% (SMPTE 259M)

Rise and Fall Times: 400 to 1400 ps 75 Ω termination between 20% and 80% amplitude

Jitter: ITU R 601/656

Output Impedance: 75 Ω

DC Offset: <50 mV with 75 Ω termination

Analog Reference Input

Video Standard: 525-line or 625-line BNC, 0.3V sync, black-burst or CCVS

Return Loss: >40 dB, up to 5 MHz

Connectors: 2 BNC loop-through

Impedance: 75 Ω external

Audio Inputs and Outputs

I/O

Audio Inputs: Up to 96

Audio Outputs: Up to 48

Dynamics

- Digital mixing/mix-minus
- Gain control
- Compressor, expander/gate, and limiter
- Parametric equalizer

Dynamic Range

Analog Line Output @ Unity Gain (RMS) Source Impedance = 600 Ω : 111 dB

Analog Line Input, Unity Gain (RMS) Max. Input Level = +15 dBu: 103 dB

Frequency Response

Analog Line Output 20 Hz to 20 kHz: -0.15 dB

Analog Line Input 20 Hz to 20 kHz: ± 0.05 dB

Crosstalk

Analog Line Output 20 Hz to 20 kHz: -95 dB

Analog Line Input 20 Hz to 20 kHz: -97 dB

THD+N

Analog Line Output 20 Hz to 20 kHz: 0.02%

Analog Line Input 20 Hz to 20 kHz: 0.002%

Differential Frequency Distortion

Analog Line Output -6 dBFS, Max. Output Level = +15 dBu: 0.07%

Analog Line Input -6 dBFS, Max. Input Level = +15 dBu: 0.01%

Max. Input Level

Analog Line Reference Full Scale Digital: +22 dBu

Max. Output Level

Analog Line Reference Full Scale Digital: +22 dBu

Gain Trim Range

Analog Line: Reference full scale digital +12 dBu/+15 dBu/+16 dBu/+22 dBu

Nominal Output Levels

Bus Outputs Balanced: +4 dBu

Monitor Outputs Balanced: +4 dBu

Mix-Minus Outputs Balanced: +4 dBu

Digital Audio Sync

Internal Sample Rate: 44.1 – 48 kHz

External Sample Rate (source devices) AES Input with SRC: 22.5 – 56 kHz

Wordclock Sync Input, Output: BNC

AES/EBU Sync Input: XLR

Processing Resolution Internal: 56-bit

Conversion

A/D Conversion: 20-bit

D/A Conversion: 20-bit

Digital Signal Format

Signal Format: AES-3, S/PDIF

AES-3 Input Compliance: 24-bit

AES-3 Output: 24-bit

Common Mode Rejection

Analog Line Input, Unity Gain 20 Hz – 20 kHz: 60 dB

Ordering Information

For full ordering information, please consult the Ignite configuration wizard.

Available Options

- Shot Box Programmable Controller
- KayakDD Manual Control Panel (1 M/E or 2 M/E)
- KLOTZ Digital Audio Manual Control Panel
- Vinten/Rademec Integration
- ScriptViewer™ Teleprompting System
- CameraMan 4:3 SDI Cameras w/Shot Director Multi-Camera Joystick Controller
- CameraMan 4:3/16:9 Switchable SDI Cameras w/Shot Director Multi-Camera Joystick Controller

Customer Service Commitment

The Thomson Broadcast & Media Solutions Service Team delivers complete service solutions that enhance our line of Grass Valley products. Let our experienced professional staff help you build a state-of-the art network and deliver the best content possible for your advertisers and viewers.

Our suite of SupportPRO Services provides support throughout the product life cycles:

- Networking and consulting services
- StartPRO and on-site support
- Preventative maintenance packages
- Training and educational programs
- Technical support services and centers
- Parts, kits and repair services
- Support agreement
 - TechPRO all-inclusive package with software, hardware and on-site support coverage
 - ServicePRO semi-inclusive with software and part coverage
 - PartsPRO with advance exchange of parts only
- Software and documentation

For more information contact Service Sales in your region or visit us online at www.thomsongrassvalley.com/support.

Headquarters

Thomson Worldwide Headquarters

17 rue du Petit Albi – BP 8244
95801 Cergy Pontoise Cedex
FRANCE

Integrated Production Solutions

7140 Baymeadows Way, Suite 101
Jacksonville, FL 32256
USA

www.thomsongrassvalley.com

IPS-1020D

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Sales and Technical Support Numbers

North America

Sales/Support +1 800 547 8949
+1 530 478 4148
Fax +1 530 478 3347

Pacific

Sales +852 2531 3000
Support +852 2531 3056
Fax +852 2802 2996

Latin America

Sales +1 305 477 5488
Support +1 530 478 4148
Fax +1 305 477 5385

Rest of the World

Sales +33 (0) 1 34 20 70 00
Support +800 80 80 20 20
(West/North Europe only)
+33 (0) 1 48 25 20 20
(East Europe, Middle East, Africa)
Fax +33 (0) 1 34 20 70 47