



Cinémage B420

Cinémage B230

Cinémage B190

APPLICATIONS:

- Production
- Post Production
- Color Pre-Visualization
- Telecine
- Digital Intermediate
- Color Grading
- Blu-ray Authoring
- DCI Authoring
- Quality Control & Assurance



For more information,
please visit
www.cine-tal.com

Features

- High performance, precision 2K, HD & SD monitoring
- 10 or 12 bits SDI, HDSDI, Dual Link & DVI-D inputs / outputs
- YCbCr, RGB and XYZ colorspace support
- 10 bit Wide Color Gamut display⁽¹⁾
- Calibration using integrated cineSpace™ technology
- Precision gamut control for Rec 709 and DCI color primaries
- Wide Gamut consumer television emulation mode.
- Display emulation with cineCube Visual™⁽²⁾
- Superior black level performance
- Full 1920 x 1080 resolution
- Gigabit network connectivity
- Quantitative digital video analysis and pixel data analysis
- Integrated waveform monitor and vectorscope
- 3D and 1D Look Up Tables (LUTs) for Color pre-visualization
- Frame capture/ store locally, to network file server or USB drive
- Seamless integration with existing equipment through web-appliance interface

(1) B420 and B230 models only. (2) cineCube Visual sold separately.

Precision Monitoring

The Cinémage product family revolutionizes critical reference monitoring for digital cinema and video applications. Get full image confidence through precision reference monitoring during digital production, post production, telecine and DI. Cinémage provides precision calibration, quantitative video analysis, video signal quality assurance, and color pre-visualization tools. With Cinémage you can conduct both critical visual analysis and quantitative digital analysis of 2K, HDSDI 4:2:2 or 4:4:4 in either YCbCr, RGB and XYZ colorspace. The Cinémage flexible image data processing system provides tools for linear or logarithmic data stream.

Display Technology Leadership from Cine-tal

Cine-tal's leading edge technology provides unprecedented solutions for digital video monitoring. Integrated within Cinémage is advanced image data processing including signal routing, framestores, color processing (color matrices, 1 D LUTs & 3D LUTs) as well as digital signal monitoring and measurement. These powerful tools make Cinémage the most fully featured digital cinema and video reference monitoring tool available. Internal to Cinémage is a powerful image processor that generates real time data about the digital image stream. The data is used to generate waveforms, vectorscopes, gamut information and status of the incoming signal. Cinémage provides for full digital calibration of the display to meet Rec709, DCI or any custom user defined specifications. Use Cinémage in conjunction with Cine-tal's cineSpace software and emulate any display system, even display systems that do not conform to industry standards like iPods, Consumer TV's, cell phones, digital signage and event venue displays. The powerful color pre-visualization tools in Cinémage work with color grading tools such as Iridas SpeedGrade for on-set pre-visualization. Cinémage is a network appliance, you can operate Cinémage from any device with a web browser connected to the local network. Capture still frames during production automatically transmitted and stored to your iPhone, laptop or other web enabled device. A full Application Programming Interface (API) is also available for custom applications and automated workflow development.

FULL 10 BIT DISPLAY

Cinemage B230 and B420 provide a full 10 bit display providing accurate color reproduction and smooth gradations.

AUTOMATED AND MANUAL CALIBRATION SYSTEM

The Cinemage calibration system provides accurate calibration for industry standards DCI and rec 709. Users can also create custom calibrations with full control over primaries, white point and gamma. The automated calibration software function provides internally generated color patches to measure and profile the LCD panel. The profile is used to determine precision settings for 21 bit matrices, 3D LUTs and 1D LUTs. The automated calibration system ensures continued calibration long after delivery. A manual calibration feature allows the user to set custom RGB levels while taking measurements with any third party photometer or spectrophotometer. Use with cineCube Visual™ to emulate any display system.



WIDE COLOR GAMUT PRECISION

All Cinemage models have precision color gamut control. The Cinemage B230 has wide gamut primaries. This enables the B230 model to reach DCI(2) color primaries. The Cinemage B230 can also be set to emulate wide gamut consumer television sets. When using the Cinemage color calibration system, color primaries are processed through a combination of 16 bit precision matrices, 3D LUTs and 1D LUTs.

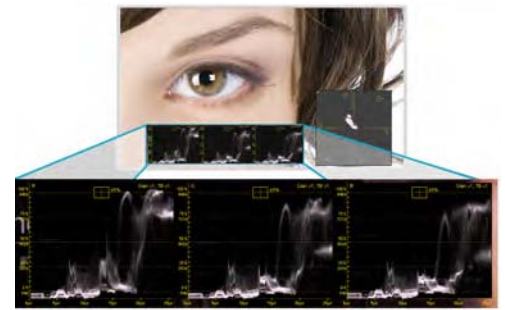
COLOR PRE-VISUALIZATION (3D and 1D LUTs)

A combination of high precision 3D Look Up Tables (LUTs) and 3x1D LUTs provide extensive tools color pre-visualization. The Cinemage is compatible with many look up table formats ranging from 9 points to 65 points. Floating point tri-linear interpolation is used for a high level of 3D color precision. LUTs can be stored locally, on network storage or on a portable USB thumb drive. Use the web appliance interface to load and retrieve LUTs from any web browser enabled device. Capture and store color pre-visualized frames locally, on network storage or on a portable USB thumb drive. Recall frames from previous shoots for scene matching, continuity, or to compare color pre visualization. The powerful color pre-visualization tools in Cinemage work with color grading tools such as Iridas SpeedGrade for on-set pre-visualization. The web appliance interface allows remote colorists to color grade frames and load LUTs from anywhere in the world.

- LOOK UP TABLE FORMATS:**
- Assimilate
 - daVinci
 - Pandora
 - ASC CDL
 - Kodak CDM
 - Filmlight
 - Digital Film Technologies
 - Autodesk
 - NuCoda
 - Iridas
 - Apple
 - DVS
 - Quantel
 - Chrome

WAVEFORM / VECTORSCOPE & PIXEL DATA ANALYSIS

Three levels of waveform monitoring and vectorscope are available as an option to Cinemage. The display only version provides a YCbCr parade waveform and vectorscope great for camera setup. The HD version provides a full function 4:2:2 RGB or YCbCr HD waveform in parade or stacked mode with vectorscope. The Dual Link version provides a full function 4:4:4 and 4:2:2 RGB, ZYX or YCbCr HD waveform in parade or stacked mode with vectorscope. The cine-tal Pixel Data Analysis option analyzes any pixel to give the user RGB or YCbCr data values. Users can enable a cross hair to select specific pixels. YCbCr and RGB data values are displayed in the head up display and in the local operator menus. Pixel Data Analyses can be used in conjunction with pan and zoom to select specific pixels for analysis.



XYZ / RGB / YCbCr Waveform Monitor

GAMUT ERRORS

Cinemage provides a Gamut Error Display function that detects out of gamut data on the input signal. Users can setup out of gamut warning for broadcast standards or any custom data values. When out of gamut data is detected users can have the error shown as a flashing error in the image display or as an accumulation of pixel errors in the head up display (HUD). The Gamut Error Display is a convenient feature that instantly alerts viewers of such signals without using a waveform monitor.



Pixel Data Analysis

TEST PATTERN GENERATOR

An optional test pattern generator provides standard test patterns. Test patterns have full routing capability to the display, LUT processor; and HDSDI outputs.

ROUTE

Full signal routing allows the user to route any signal source to any output or process within the system. Users can monitor input 1 with color processing for pre-visualization while sending the same signal to output 1 by-passing the color pre visualization processing. Cameras with sLog or Log encoding can be processed to standard gamma for display on the screen and routed processed to output 1 and unprocessed to output 2.



Route

HEADS UP DISPLAY (HUD)

The Cinemage Head Up Display provides real time information on the signal sources including input format, output format, signal routing, LUTs, ASC CDL, Checksum (CRC) errors, ancillary (ANC) data errors, out of gamut data errors, out of gamut warning and accumulated errors, pixel data readings, timecode, out of calibration warnings and tally.



SPLIT SCREEN

A split screen function provides simultaneous display of two signal sources. Compare camera inputs for matching, compare captured frames from previous sessions to current input video, and compare a color-graded input to non-graded input. Cinemage provides a real time pan and zoom feature to allow for pixel level analysis and display. A replicated pixel method is used to maintain data integrity and provide the ability to select a single data point for analysis or just zoom into an area for a better view of the pixel data. When used in conjunction with pixel data analysis, any pixel on any line can be selected, and the real time data can be measured.



Split Screen

MARKERS

Cinemage has a full user control for both standard and custom markers that can be scaled and positioned anywhere on screen. Two markers may be displayed at the same time.



Markers

PRESETS

Every system setting can be saved as a preset for quick recall. The Cinemage control panel feature "radio station" button preset controls. Just press and hold and your current setup is memorized for instant recall. Presets are also available for recall through one of our network based control applications. Use system presets to quickly change setups and create efficient workflow. You can store presets locally, on network storage or on a portable USB data key so you can move your presets from monitor to monitor or room to room.

MODULAR CONTROL PANEL

Cinemage operator control panel is modular and can be separated from the main unit. The modular control panel can be placed convenient to the operator or mounted in a standard 19" rack. Communication to the monitor is made through a standard USB cable.



Modular Control Panel

SCAN MODES

The Cinemage scaler provides full control of re-sizing for standard definition and 2K video formats. For standard definition re-sizing allows selection between pixel accurate, small, medium, large, full screen, Anamorphic 625 (PAL), 16x9 525 (NTSC) (these stretch the video to fit horizontally as well as vertically), Anamorphic, and Square-Pixel Full (emulates the square pixels of Computer monitors). For 2K modes the scaler provides pixel accurate – left-right-center, full screen and anamorphic 2K.

RESIZE SHARPNESS

When resizing SD video to HD resolutions it is standard to create some interpolation to eliminate unsatisfactory display artifacts. Interpolation that can't be controlled by the user eliminates the ability to conduct proper quality assurance of the image. Cinemage provides full control of the resize interpolation allowing full analysis of image quality before and after resize interpolation.



FIELD MODES / DEINTERLACER

The Cinemage B230 and B420 provides multiple field processing modes giving the widest variety of image quality control and assurance. Field modes control how interlaced sources are converted to progressive for display on the LCD system. Field modes include:

- RAW progressive (no processing)
- User controlled motion interpolation
- Single field mode with motion clamping
- Black frame insertion
- Interlace simulation

WEB APPLIANCE

Cinemage is a web appliance. Many operations and functions are accessible remotely through any web browser. Use your iPhone, laptop or tablet PC to control the system, grab and e-mail captured still frames, upload and download color pre-visualization LUTs. Communicate image data with your production partners. Have remote colorists grab frames create LUTs and load them into Cinemage for color pre-visualization on set. Conduct engineering setup for a post session from your office desk or home. A full Application Programming Interface (API) is available for custom application and workflow automation.

Time Code Display

Tally, Closed Caption, time code display, H&V delay.



WORLD CLASS CUSTOMER SUPPORT

Cine-tal products are backed with a comprehensive hardware and software warranty that includes:

- Phone technical support Monday – Friday 9AM to 8PM Eastern USA
- E-mail technical support (support@cine-tal.com)
- Extended warranty and service agreements
- A comprehensive product support web site (http://cine-tal.com/training-support)
- A global network of authorized service centers covering EU, Asia and N. America

DCI and Adobe color gamut is covered by 95% of the native system capabilities on the B230 model. Models B190 and B420 cover 100% of the Rec709 color gamut.

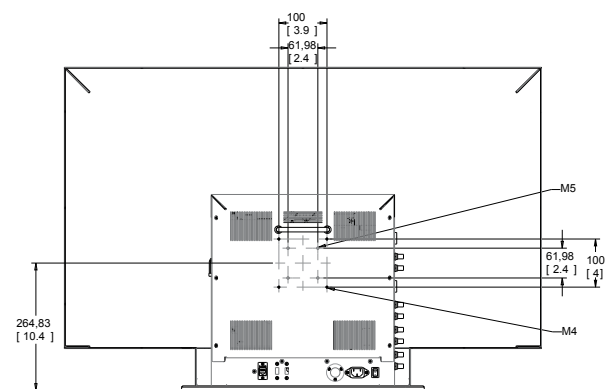
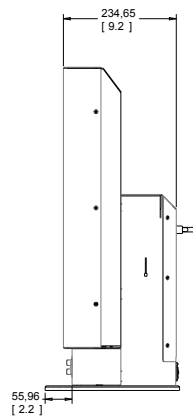
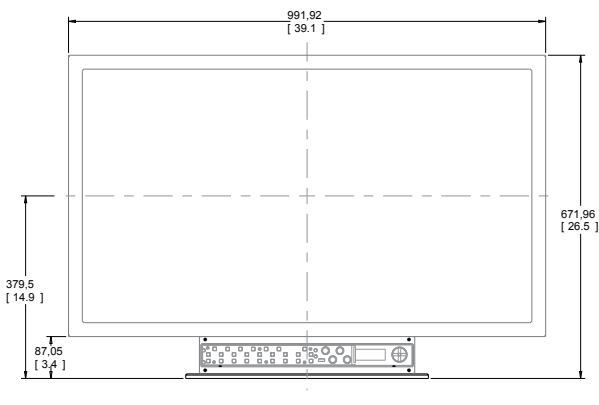
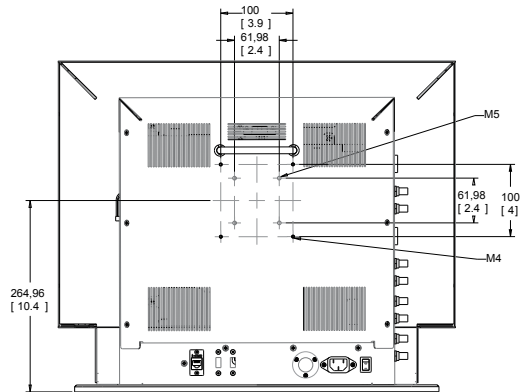
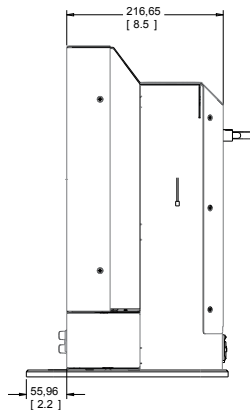
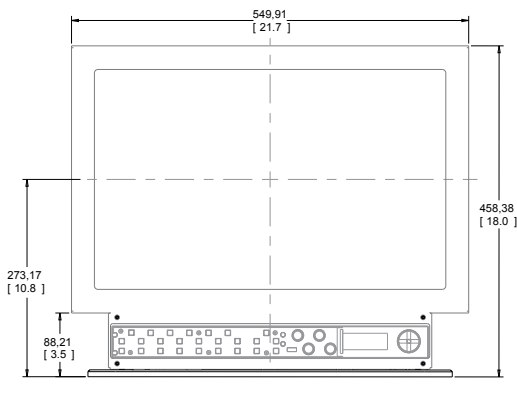
Tally system and closed captioning is part of system software not yet released at the time of this printing. Check www.cine-tal.com for software release notices and downloads.

SPECIFICATIONS

SIGNAL FORMATS:	486i /59.94 (see note 1) 576i /50 (see note 1)	ITU-R BT.656.4
	720p / 23.98, 24, 25, 29.97, 30, 50, 59.94, 60 Hz 1080sF / 23.98, 24, 25, 29.97, 30 Hz	SMPTE 296M
	1080i / 50, 59.94, 60 Hz 1080p / 23.98, 24, 25, 29.97, 30 Hz	SMPTE 274M
	Dual-link 1080sF / 23.98, 24, 25, 29.97, 30 Hz 1080i / 50, 59.94, 60 Hz 1080p / 23.98, 24, 25, 29.97, 30 Hz	SMPTE, 372M
VIDEO INPUTS:	2K 2048x1080 / 23.98p, 24p, 23.98sF, 24sF	
	SDI / HDSDI (4:2:2), HDSDI Dual Link (4:4:4) DVI-D at 1920 x 1200 50 -60 Hz	SMPTE 292M/372M
VIDEO OUTPUTS:	SDI / HDSDI (4:2:2), HDSDI Dual Link (4:4:4) DVI-D at 1920 x 1200	SMPTE 292M/372M

DISPLAY:	Model	B190	B230	B420
	Size	19 inch	22.5 inch	42 inch
	Bit Depth	24 bits / pixel	30 bits / pixel	30 bits / pixel
	Backlight	CCFL		
GENERAL:	Native Resolution	1280 x 1024	1920 x 1200	1920 x 1080
	AC Power	120-240v		
	Power Consumption	125W	150W	175W
	DC Power(2)	12V	12V	N/A
SERIAL:	Operating Temperature	0-35 degrees Celsius		
	Weight	15kg	22kg	38kg
CERTIFICATIONS:	USB			
	Network	IEEE 802.1p,802.10,802.3,802.3ab,802.3U,802.3X		
OPTIONS:	FCC Class A, CE			
	Waveform Monitor & Vectorscope			
	a) Display Only (YCbCr Parade only)			
	b) HD (4:2:2)			
Supplied Accessories:	c) HD Dual Link & 2K (4:4:4)			
	XRite Eye One Display Photometer (for calibration) VESA Mount Stand			
NOTES:	Control Panel, Mouse, AC Power Cord, Rack mount kit, Operators Manual, Software.			
	(1)Waveform / Vectorscope options operate only in HD and 2K modes (2)DC versions are shipped with an external AC power supply and do not have integrated AC/DC power systems.			

Specifications subject to change.



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