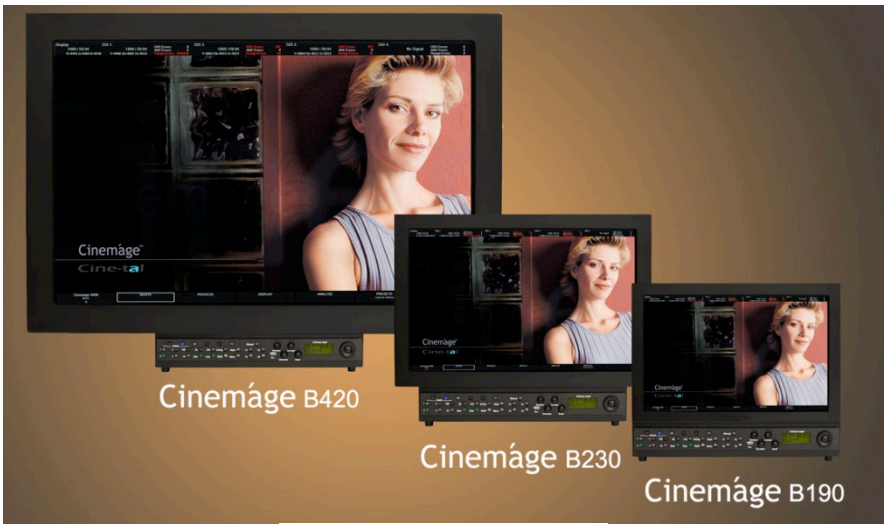

Cinemáge™
(2000, B420, B230, B190)
User Manual Version 4.1.x

Cine-tal Systems, Inc.
8651 Castle Park Drive
Indianapolis, IN 46256

FCC Notice

This device complies with Part 15 of the FCC Rules. To assure continued compliance follow the attached installation instructions and do not make any unauthorized modifications.

This equipment has been tested and found To comply with the limits for a class A digital Device, pursuant to Part 15 of the FCC Class rules. These limits are designed to Provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which the user will be required to correct the interference at his own expense.

WARNING:
TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

CAUTION:
TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD AND ANNOYING INTERFERENCE, USE THE RECOMMENDED ACCESSORIES ONLY.

Preface

This User's Guide includes instruction and reference information for the operation and use of all Cinemage models and all options available for the Cinemage line of products.

Trademarks

All brand and product names mentioned herein are used for information purposes only and may be trademarks or registered trademarks of their respective companies.

Cinemage User's Guide

Printed in the United States

Note: The information in this document is subject to change without notice or obligation.

Cine-tal Systems, INC

Table of Contents

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BEFORE YOU OPEN AND USE THE ENCLOSED PRODUCT THAT INCORPORATES THE FIRMWARE & SOFTWARE SUBJECT TO THIS LICENSE, YOU SHOULD CAREFULLY READ THE FOLLOWING LICENSE AGREEMENT AND WARRANTY. BY OPENING THE PACKAGE AND USING THE PRODUCT/SOFTWARE, YOU INDICATE YOUR ACCEPTANCE OF THIS AGREEMENT. IF YOU DO NOT WISH TO BE BOUND BY THIS AGREEMENT, YOU SHOULD PROMPTLY RETURN THE UNUSED PRODUCT TO CINE-TAL SYSTEMS, INC. ("Cine-tal"), AND YOUR MONEY WILL BE REFUNDED. PLEASE READ THIS DOCUMENT CAREFULLY. THIS IS A LEGAL AGREEMENT BETWEEN CINE-TAL AND YOU.

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WARNING: THE FIRMWARE & SOFTWARE (HERINAFTER REFERRED TO AS "SOFTWARE") INSTALLED ON THE ENCLOSED PRODUCT IS PROTECTED BY COPYRIGHT LAWS AND INTERNATIONAL COPYRIGHT TREATIES, AS WELL AS OTHER INTELLECTUAL PROPERTY LAWS AND TREATIES. UNAUTHORIZED REPRODUCTION OR DISTRIBUTION OF THE SOFTWARE, OR ANY PORTION OF IT, MAY RESULT IN SEVERE CIVIL AND CRIMINAL PENALTIES, AND WILL BE PROSECUTED TO THE MAXIMUM EXTENT POSSIBLE UNDER THE LAW. THE SOFTWARE IS LICENSED, NOT SOLD.

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responsible for any copyright infringement that is caused or incurred by your failure to abide by the terms of this Agreement. Subject to these restrictions, you may make a single backup copy of the Software. You may use the backup copy solely for your archival purposes and to reinstall the Software on the Product. You must reproduce and include any copyright notice on any copy. You may not sell, loan, rent, lease, lend, transfer, assign or otherwise dispose to anyone else the backup copy. Except as expressly provided in this Agreement or by local law, you may not otherwise make copies of the Software, including any printed materials accompanying the Software (the "Documentation"). If this Software contains Documentation, you may copy such Documentation for your internal use only. IF YOU TRANSFER POSSESSION OF ANY COPY, OF THE SOFTWARE OR RELATED MATERIAL TO ANOTHER PARTY, THIS LICENSE IS AUTOMATICALLY TERMINATED.

3. **Ownership of Software.** All title and intellectual property rights in and to the Software (including but not limited to any images, photographs, animations, video, audio, music, text and “applets”, incorporated into the Software), the Documentation and any copies of the Software or Documentation are owned by or licensed to Cine-tal. You agree that no title to the Software or Documentation is transferred to you, and that all rights not expressly granted to you in this Agreement are reserved by Cine-tal. Use of any online services of Cine-tal may be governed by the respective terms of use related to such services.

4. **Assignment/Sublicense.** Except as provided herein, or with Cine-tal’s prior written consent, neither this Agreement nor any rights or obligations under this Agreement, in whole or in part, shall be sublicensed, assigned or otherwise transferred and any attempt to sublicense, assign, or transfer this Agreement or any rights or obligation under this Agreement shall be null and void.

5. **Termination.** This license is effective upon opening and using the Product and also applies to any additional Upgrades you may receive from Cine-tal. You may terminate it at any time by destroying the Software and the related material together with all copies, modifications, and merged portions in any form. This license will also terminate upon conditions set forth elsewhere in this Agreement or if you fail to comply with any term or condition of this Agreement. You agree upon such termination: (a) to destroy the Software and Documentation together with all copies, modifications, and merged portions in any form, and to provide Cine-tal with written certification of destruction; or (b) return the Product together with the Software and Documentation and all copies, modifications, and merged portions in any form to Cine-tal.

6. **Damages.** In the event the Agreement is terminated due to your breach of the terms of this license, you agree to promptly return the Product, Software, and Documentation to Cine-tal, including all copies. You further agree that it is virtually certain that Cine-tal would be damaged due the unauthorized copying, distribution, or reverse engineering of the Software and that the precise amount of such damages is difficult or impossible to calculate. Accordingly, you agree to the imposition of liquidated damages in an amount equal to the maximum statutory damages available per infringing copy. Cine-tal shall be entitled to its reasonable attorney's fees and costs associated with enforcing its rights under this Agreement.

II. Cine-tal Limited Hardware Warranty

Cine-tal makes the following limited hardware warranties to the original buyer or, if purchased from an authorized Cine-tal dealer, the end user (collectively, the "Customer" or "you"):

1. All new products, excluding Cinemage products (collectively, the "Cine-tal Products"), purchased by the Customer shall be free of defects in materials and workmanship for one year from the date of purchase;

2. Demonstration and factory refurbished Cine-tal Products purchased by the Customer shall be free of performance defects in materials and workmanship for 90 days from the date of repair;

3. New Cinemage products ("Cinemage Products") purchased by the Customer shall be free of defects in materials and workmanship for one year from the date of purchase, except that:

   A. The LCD panel in Cinemage Products shall be warranted to meet ISO 13406 -2 International Standard for ergonomic requirements for image quality of flat panel displays class II for one year from the date of purchase. Cine-tal LCD Panel Warranty Defect Definitions And Standards, a separate document available upon request.

4. The media used to deliver any software related to and incorporated in Cine-tal Products and Cinemage Products purchased by the Customer shall be free of defects for 90 days from the date of purchase; and

5. Cine-tal repairs to Cine-tal Products and Cinemage Products shall be free of defects in materials and workmanship in the repair for 30 days from the date of repair.

The warranties described above are referred to herein as the "Limited Hardware Warranty." In specific cases, Cine-tal may, at its sole discretion, elect to warrant demonstration and factory refurbished Cine-tal Products and Cinemage Products as "new" within this Limited Hardware Warranty. Such an election shall be valid only if provided in writing by Cine-tal at the time of purchase.

III. Cine-tal Extended Hardware Warranty

Cine-tal may elect to provide additional limited warranties to Customer in exchange for Customer's purchase of a Cine-tal Extended Hardware Warranty. Cine-tal may provide an Extended Warranty to Customer at Cine-tal's sole discretion upon Customer's payment of the Extended Warranty purchase price. The purchase price for the Extended Hardware Warranty will be determined exclusively by Cine-tal and may change from time to time. Customer's purchase of an Extended Hardware Warranty must be confirmed in writing by Cine-tal at the time of purchase.

Should Customer purchase an Extended Hardware Warranty from Cine-tal, Cine-tal shall provide the following limited extended warranties:

1. Cine-tal Products shall be free of defects in materials and workmanship for one year following the expiration of the Limited Hardware Warranty period for Cine-tal Products;

2. Cinemage Products shall be free of defects in materials and workmanship for one year following the expiration of the Limited Hardware Warranty period for Cinemage Products, except that:

   A. The Liquid Crystal Display sub system or module (the “LCD Panel”) in Cinemage Products shall be warranted to meet ISO 13406 -2 International Standard for ergonomic requirements for image quality of flat panel displays class I for 1 year from the date of purchase; and

   B. Following 1 year from the date of purchase, the LCD panel in Cinemage Products shall be warranted to meet ISO 13406 -2 International Standard for ergonomic requirements for image quality of flat panel displays class II for the

remainder of 2 years from the date of purchase. Cine-tal LCD Panel Warranty Defect Definitions and Standards, a separate document, is available upon request; and

C. Following 1 year from the date of purchase Cine-tal shall provide to customers a special discount for replacement LCD panels that meet ISO 13406 -2 International Standard for ergonomic requirements for image quality of flat panel displays level I. price of replacement LCD panels and the applicable discounts will be based on market prices and availability.

3. The extended hardware warranties described above are referred to herein as the "Extended Hardware Warranty," and are referred to in combination with the Limited Hardware Warranty as the "Cine-tal Hardware Warranty." In specific cases, Cine-tal may, at its sole discretion, elect to provide the Extended Warranty for repairs and demonstration and factory refurbished Cine-tal Products. Such an election shall be valid only if provided in writing by Cine-tal at the time of purchase.

IV. Limitations

1. **Defect.** The Cine-tal Hardware Warranty is strictly limited to the above-described defects that exist at the time of sale and arise during normal use of Cine-tal Products and Cinemage Products. The Cine-tal Hardware Warranty does not apply if (i) the Cine-tal Product is changed, altered, modified, or serviced without Cine-tal's prior written approval, or (ii) the failure of the Cine-tal Product is caused by misuse, abuse, electrical fault, accident (e.g., spilled drinks, dropped), improper packing, shipment, or installation, misapplication, or by act of God or nature, as determined solely by Cine-tal at its discretion.

2. **Repair, Exchange, or Replacement.** Should an above-listed defect be identified in a Cine-tal Product or Cinemage Product by Cine-tal, which exists at time of sale and is presented by the Customer to Cine-tal during the warranty period, Cine-tal will, at its sole discretion, repair, exchange, or replace the Cine-tal Product or Cinemage Product or affected component with a comparable Cine-tal Product or Cinemage Product or component. The replacement Cinetal Product or Cinemage Product or component may be new or reconditioned, and may include used Cine-tal Products or Cinemage Products and/or components, but will have functionality at least equivalent to the original. However, repair or replacement of LCD panels in Cinemage Products under the Extended Hardware Warranty shall be limited as stated in paragraph 2 of the Extended Warranty.

3. **Repairs.** All repairs to Cine-tal Products and Cinemage Products under the Cine-tal Warranty must be conducted by an authorized Cine-tal service representative, at an authorized repair facility, with prior approval by Cine-tal.

4. **Assignability.** The obligations and agreements herein are intended solely for the benefit of Customer and Cine-tal and are non-assignable and non-transferable.

5. **Disclaimer.** EXCEPT AS PROVIDED HEREIN, CINE-TAL DISCLAIMS ANY AND ALL WARRANTIES AND CONDITIONS, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, UNINTERRUPTED OR ERROR-FREE OPERATION, AND NON-INFRINGEMENT.

6. **Damages**. CINE-TAL DISCLAIMS ALL DIRECT, INDIRECT (INCLUDING LOSS OF PROFITS), INCIDENTAL, OR CONSEQUENTIAL DAMAGES ARISING OUT OF CUSTOMER'S USE OR INABILITY TO USE ANY CINE-TAL PRODUCT, WHETHER BASED ON CONTRACT, TORT, OR ANY OTHER LEGAL THEORY AND EVEN IF CINE-TAL WAS ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. SOME JURISDICTIONS DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES. THE ABOVE LIMITATIONS MAY NOT APPLY TO CUSTOMERS IN THOSE JURISDICTIONS.

7. **Attorney Fees.** Cine-tal shall be entitled to its reasonable attorney's fees and costs associated with enforcing its rights under this Agreement.

8. **Governing Law.** The laws of the State of Indiana in the United States of America shall govern this Agreement in all aspects, including interpretation, performance, and enforcement, without regard to principles of conflicts of law.

9. **Indemnity.** You agree to indemnify, defend and hold harmless Cine-tal, together with its officers, directors, employees, and agents, against any liability (including reasonable attorneys' fees) arising out of any claim made against them arising out of or related to your use of the Product, Software, or Documentation, including but not limited to claims arising out of the Software License Agreement and Cine-tal Warranty.

10. **Statutory Legal Rights.** This Warranty does not affect your statutory legal rights within your jurisdiction.

V. Warranty Service and Customer Support

The following information describes our current warranty support procedures, which are subject to change. CUSTOMER MUST FOLLOW THE WARRANTY SUPPORT PROCEDURES LISTED BELOW TO RECEIVE PRODUCT REPAIR OR REPLACEMENT UNDER THE CINE-TAL WARRANTY.

1. Our Customer Support Representatives are available to provide telephone support during normal business hours and after these hours for urgent "emergency" technical support. Please check the hours of operation of the Service Center in your area. No advice, statement, or representation made during such calls shall create an obligation different from the obligations under the Cine-tal Warranty.

2. Before returning a Cine-tal Product for repair or replacement, it is necessary to obtain a Return Merchandise Authorization (RMA) number by calling the appropriate number of your Authorized Service Center in your Area or by contacting Cine-tal at www.cinetal.com. You will be asked to provide the system's serial number (or a copy of the invoice showing date of original purchase) and/or the Hardware Maintenance Agreement number.

3. For repair claims being made under the Limited Warranty coverage, the Customer shall be responsible for shipping charges to return the Cine-tal Product to be repaired to Cine--tal, or one of its Authorized Service Centers. Cine-tal will be responsible for shipping charges to return the repaired/ replaced product from Cine-tal to the Customer.

4. For repair claims being made under the Extended Warranty Coverage, the Customer shall be responsible for shipping charges to return the product to be repaired to Cine-tal, or one of its Authorized Service Centers. The Customer will also be responsible for shipping charges to return the repaired/ replaced product from Cine-tal or one of its Authorized Service Centers to the Customer.

Authorized Service Center Contact Information

JAPAN:
Imagica Digix Inc.
Ship to address:
Imagica Digix Inc
1-11-30 Nagata-cho
Chiyoda-Ku.
Tokyo 100-0014 Japan

Telephone Support Hours of Operation:
Monday-Friday 9:00am-17:30pm **JST**
Tel: +81 03 3595 9101
Support e-mail:
support@digix.imagica.co.jp

EASTERN EUROPE:
Janusz Rupik PVP Sp. z o.o.
Ship to Address:
Janusz Rupik PVP Sp. z o.o.
Ul. Rumiana 3 c
02-956 Warszawa, POLAND

Telephone Support Hours of Operation
Monday-Friday 10:00 – 18:00 **GMT**
Tel: +48 22 257 0080
Fax: +48 22 842 3010
Support e-mail:
support@jr-pvp.pl

WESTERN EUROPE (incl Turkey):
InnoMedia Systems Ltd
Ship to address:
InnoMedia Systems Ltd
ATTN: Russell Branch
86 Siloam Place
Ipswich IP5 1NZ
UK

Telephone support hours of operation
Monday-Friday 9.00 am - 6.00 pm GMT
Tel/Fax +44 (0)1473 231 963
Support e-mail:
support@innomedia.co.uk

AMERICAS, ASIA (except Japan) & AUSTRALIA:
Cine-tal Systems Inc.
Ship to Address:
Cine-tal Systems Inc.
8651 Castle Park Drive
Indianapolis, Indiana 46256

Telephone Support Hours of Operation:
Monday-Friday 8:30am to 5:30pm **EST** (**GMT** 14:30-23:30)
Tel: +1 317 576 0091
Support e-mail:
support@cine-tal.com

VI. Customer's Acknowledgement

BY USING THIS PRODUCT YOU ACKNOWLEDGE THAT YOU HAVE READ THIS AGREEMENT, UNDERSTAND IT AND AGREE TO BE BOUND BY ITS TERMS AND CONDITIONS. YOU FURTHER AGREE THAT IT IS THE COMPLETE AND EXCLUSIVE STATEMENT OF THE AGREEMENT BETWEEN US WHICH SUPERSEDES ANY PROPOSAL OR PRIOR AGREEMENT, ORAL OR WRITTEN,

AND ANY OTHER COMMUNICATIONS BETWEEN US. NO ORAL OR WRITTEN INFORMATION OR ADVICE GIVEN BY CINE-TAL, ITS AGENTS, OR ANY OTHER PERSON OR ENTITY SHALL CREATE OR ASSUME A LICENSE, WARRANTY, LIABILITY, OR OTHER OBLIGATION BY CINE-TAL DIFFERENT FROM THOSE PROVIDED HEREIN.

Section 1: Getting Started

Chapter 1: Introduction

Welcome!

The Cinemage product family revolutionizes critical monitoring for digital cinema acquisition, post production and DI by combining Cine-tal's leading edge IDS (Intelligent Display Server) technology and calibrated full resolution LCD display. Cinemage provides quantitative video analysis, colour pre-visualization, video signal quality assurance, real-time collaboration between acquisition and post production, and an integrated OmniTek™ Waveform Monitor and Vectorscope. With Cinemage you can conduct both critical visual analysis and digital quantitative analysis of your HD SDI or HD SDI Dual Link signal in either YCbCr or RGB, linear or logarithmic, at 8 or 10 bits.

IDS Technology is a joint technology development between Cine-tal and OmniTek. IDS provides image processing, signal routing, frame stores, and colour manipulation (3D LUT's) and test and measurement all in a network appliance configuration. Internal to IDS is a powerful image processor that generates real-time data about the HD video stream. This data is used to generate waveforms, vectorscopes, gamut information and status of the incoming video signal. IDS also provides for display calibration and profiling as well as input signal colour grading for pre-visualization. All data and operations can be performed over a LAN, WAN or wireless network with any web-enabled device.

How to use this guide

This *Cinemage User Guide* is intended to be a learning tool for those new to the Cinemage product as well as a handy reference for experienced operators. The *User's Guide* offers step by step instructions and general information.

If you are new to the Cinemage products we strongly suggest that you read this manual completely and familiarize yourself with all the tasks presented. An investment in time now may save a lot of time later.

Connections for the Cinemage

Starting from the top down:

DVI Output……*Connection to external monitor or projector 1920 x 1200 resolution at 48-60 Hz*

Video Out 1……..*HD SDI Out 1*
Video Out 2……..*HD SDI Out 2*
Video Out 1&2……..*Dual Link Out 1*

DVI Input……*Input from computer device 1920 x 1200 resolution at 48-60 Hz*

Reference Loop……*Analog Reference*

Video Input 4……..*HD SDI Input 4*

Video Input 3……..*HD SDI Input 3*
Video Input 3&4……*Dual Link Input 3&4*

Video Input 2……..*HD SDI Input 2*

Video Input 1……*HD SDI Input 1*
Video Input 1&2……*Dual Link Input 1&2*

USB Connector……..*Storage or Calibration Probe*

Network Connection *Gigabit Ethernet*

Connections for Cinemage B Series B190, B230, and B420

Starting from Top to Bottom:

DVI Output…….*Connection to external monitor or projector 1920 x 1200 resolution at 48-60 Hz*

Video Out 1……..*HD SDI Out 1*
Video Out 2……..*HD SDI Out 2*
Video Out 1&2……..*Dual Link Out 1*

DVI Input…….*Input from computer device 1920 x 1200 resolution at 48-60 Hz*

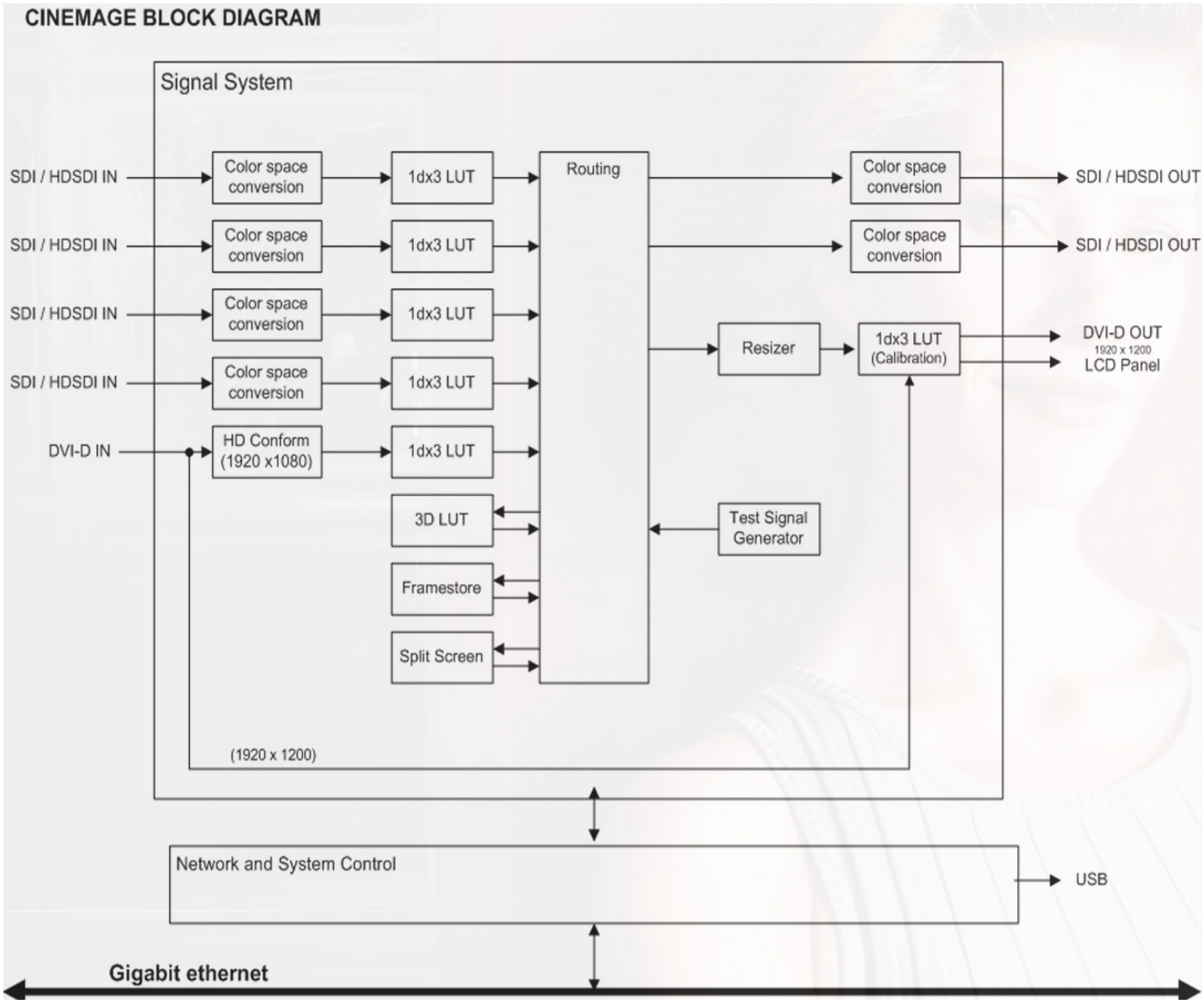
Reference Loop…….*Analog Reference*

Video Input 4……..*HD SDI Input 4*

Video Input 3……..*HD SDI Input 3*
Video Input 3&4…….*Dual Link Input 3&4*

Video Input 2……..*HD SDI Input 2*

Video Input 1……*HD SDI Input 1*
Video Input 1&2……*Dual Link Input 1&2*



NOTE: The 4 HD SDI Inputs and the 2 HD SDI Outputs can be linked as 2 Dual Link Inputs and 1 Dual Link Output.

Front Panel for Cinemage

There are 6 pushbuttons located on the Front Panel. These pushbuttons correspond to the soft menus located above each button. These pushbuttons allow for direct input to the various features of the Cinemage Monitor.

The menus are located in the lower unused portion of the active video screen. The upper unused portion of the active video screen is used as a reference bar going from black to white across the top of the screen as well as heads up display with critical information about the inputs coming into your monitor.

A trackball located on the lower right-hand portion of the monitor. This trackball is used for direct input for cursor positioning, alpha-numeric input and menu level settings. A mouse can be plugged into any of the USB ports located on the monitor. The mouse serves the same purpose as the trackball as well as serving as an additional option for navigating the menus as opposed to the b pushbuttons on the front of the monitor..

Front Panel for Cinemage B Series

In all three models of the Cinemage B Series (B420, B230, B190), an integrated Remote Control Panel is located in the Front Panel. Along the top of the Remote Control Panel are the 6 menu selection buttons that correspond to the 6 menu options when operating a Cinemage B series monitor. These buttons allow for direct input to the various feature of the Cinemage B series monitors as well as performing navigation through the monitors' menus.

The menus are located in the lower unused portion of the active video screen. The upper unused portion of the active video screen is used as a reference bar going from black to white across the top of the screen as well as a heads up display with critical information about the inputs coming into your monitor.

A mouse can be plugged into any of the USB ports located on the monitor. The mouse is used for direct input for cursor positioning, alpha-numeric input and menu level settings. The mouse also serves an additional option for navigating the menus as opposed to the 6 buttons on the top of the Remote Control Panel.

Rear Panel for Cinemage

The rear panel is the location of the On/Off switch, the input AC connector and the 24 volt DC XLR input connector. There are also 4 threaded holes for #4 metric screws for the VESA mount.

Rear Panel for Cinemage B Series

The rear panel is the location of the On/Off switch, the input AC connector and the # volt DC XLR input connector. There is also an Network connection for Gigabit Ethernet, and 2 USB connectors.

Power Requirements for Cinemage

Cinemage runs on 100 to 240V AC at 50 or 60 hertz. Nominal current is 2A.

[OPTION]If you have the DC input option installed you may run the system on 22-30V DC input. Standard Anton Bauer 3 pin XLR connector is used. Pin 1 is ground, Pin 2 is positive and Pin 3 is unused.

The main disconnect for the Cinemage system is the power connector on the real panel of the system. The input supply socket-outlet should be located near the device and should be easily accessible.

Power Requirements for Cinemage B Series (B420, B230, B190)

Cinemage B420 runs on - - -

Cinemage B230 runs on 100 to 240V AC at 50 or 60 hertz. Nominal current is 2A.

[OPTION]If you have the DC input option installed you may run the system on 10-15V DC input. Standard Anton Bauer 3 pin XLR connector is used. Pin 1 is ground, Pin 2 is positive and Pin 3 is unused.

The main disconnect for the Cinemage B230 system is the power connector on the real panel of the system. The input supply socket-outlet should be located near the device and should be easily accessible.

Cinemage B190 runs on - - -

User Serviceable Parts

There are no user serviceable parts inside the Cinemage or Cinemage B Series units. Please refer all service to a Cine-tal authorized technician. The Cinemage monitor and Cinemage B Series monitors front housing is made to be removed for the cleaning of the neutral density filter and LCD display. This action can be performed by the end user or customer.

Instructions on how to remove the front bezel on the Cinemage:

1) Lay the monitor down on its back, with the glass facing up.
2) If you are facing the front of the monitor, there are three screws that need to be removed from the left side (side with inputs) along the front of the housing (side closest to the glass).
3) Next, there are five screws that need to be removed from the top of the monitor.

4) Along the right side of the monitor, there are six screws that need to be removed (only the screws that are attached to the front housing, there is one screw that is not supporting the housing that can be left in.)
5) There are five additional screws along the bottom of the monitor that need to be removed to remove the bezel.
6) Carefully remove the front bezel by pulling up and toward yourself.
7) You can now clean between the glass and the LCD panel. It is recommended that when cleaning inside the monitor to use compressed air. Many glass cleaners will leave streak marks on the glass, and compressed air needs to be used for the LCD panel as not to damage it.
8) After cleaning, replace the front bezel and replace all the screws.

Instructions on how to remove the front bezel on Cinemage B Series Monitors:

1) With the monitor standing upright, locate the 4 screws around the front bezel holding the glass to the main unit.
2) If you are facing the front of the unit, there are two screws on both the left and right hand sides.
3) Carefully remove the front bezel by pulling toward yourself.
4) You can now clean between the glass and the LCD panel. It is recommended that when cleaning inside the monitor to use compressed air. Many glass cleaners will leave streak marks on the glass, and compressed air needs to be used for the LCD panel as not to damage it.

Turning On the Cinemage and Cinemage B Series monitors:

To turn the system on, simply depress the power toggle switch on the rear of the system.

**Note: To protect the system from erratic power outages the system requires a 10 second wait period between power down and immediate power up.

Chapter 2: Menu Overview

In reading this section note that location of menu options may change over product revisions. Furthermore, available menu choices will vary depending on model number and installed options. Functions that are dependent on installed options are marked as [Option]. The Cinemage and Cinemage B Series monitors run off of the same menu systems. If there is a discrepancy in functionality or actual menu navigation it will be noted in the appropriate section of the manual.

Note: Cinemage and Cinemage B Series monitors will accept and display SD and 2K video signals, but with slightly limited functionality. Some of the video processing features available in HD Mode will not function in SD mode, such as the Waveform and Vectorscope and the Framestore. The Menu structure for SD operations is identical to HD operations, with the exception of the non-operational options' buttons being hidden.

External Menu Control

The menu system can be controlled via an external USB keyboard or keypad or with the Cinemage Remote Control Panel. The buttons on the front of your Cinemage correspond with the 1-6 buttons of a keyboard, and the trackball can be controlled using the up, down, left, and right keys of the USB keyboard. There are also multiplier commands available for greater control of the trackball. The multiplier keys are as follows:

Shift + Arrow = 10x
Alt + Shift + Arrow = 100x
Ctrl + Alt + Shift + Arrow = 1000x

When using a USB mouse with either the Cinemage or Cinemage B Series monitors, the mouse serves the same functionality as the trackball in addition to navigating the menus without having to press the 6 menu buttons. Using the wheel on the USB mouse (if present) with enable you to go forward or backward in the cyclical menus that appear in the Cinemage and Cinemage B Series monitors.

Main Menu

After the system performs a power up self test the following menu will appear at the bottom 60 lines of the LCD display. These 60 lines are not part of the active pixel area of a 1920x1080 signal.

Main Menu

Cinemage 2142 Press for lockout menu	Operator Menus	System Menus	Setup Menus	Display Control	Presets original settings	

Each menu item corresponds to one of six buttons found directly underneath each menu. The seventh menu item (far right menu) is controlled by the trackball.

Cinemage 2142
Indicates Cinemage model number. By pressing this button once you will navigate to the ***Lockout Menu***. The ***Lockout Menu*** provides two functions; 1) to blackout the non-video portion of the display and 2) provides a key lock function such that the systems setting can't be changed without an unlock key (see ***Lockout Menu*** in Chapter 2 for more information.)

Operator Menus
The ***Operator Menus*** provide an easy menu interface for selecting the video input, selecting internal video sources, and selecting presets of system configurations saved as a preset. This is designed to be the menu used during normal operation of the monitor.

System Menus
The ***System Menus*** navigates the user to the full system menus including all route, process, display, analyze and setup functions.

Setup Menus
The ***Setup Menus*** navigates the user to all system setup functions and to the system reset.

Display Controls
Will enter theDisplay Control Menu,allowing you to adjust display characteristics; such as Scaler Mode, brightness, contrast, gamma, and backlight brightness.

Presets
Allows you to toggle Presets previously saved into the system.

Operator Menus

To access the Operator Menus select “Operator Menus” from the Main Menu

Main Menu

Cinemage 2142 Press for lockout menu	Operator Menus	System Menus	Setup Menus	Display Control	Presets original settings	

Menu Navigation

Use the trackball to scroll through the Operator Menus, or Select the far right menu on the monitor with the mouse, and scroll through using either the wheel or up and down movement with the mouse. The first menu is the Operator Main Menu.

Operator Menu: Main Menu

Upon pressing the Operators menu button you will get the following menu:

Operator Menu Back	Video Input Select	Video Modes	Presets	3D LUTS	Stills	Operator Menu

Upon pressing the Video Input Routing Menu button you will get the following menu:

Operator Menus: Video Input Source

Select Display Source → Operator Menu	SDI 1 Selected	SDI 2	SDI 3	SDI 4	DVI Input Hold and release for DVI FULLMODE	Video Sources

Operator Menus: Video Input Source

Operator Menu

Returns you to the Operator Main Menu

SDI 1

Routes SDI input 1 to the display. A highlighted button indicates the current source that is routed to the display.

SDI 2 Routes SDI input 1 to the display. A highlighted button indicates the current source that is routed to the display.

SDI 3

[Option]

Routes SDI input 1 to the display. A highlighted button indicates the current source that is routed to the display.

SDI 4
[Option]
Routes SDI input 1 to the display. A highlighted button indicates the current source that is routed to the display.

DVI INPUT
[Option]
Routes the DVI input to the Display. If your DVI signal is a 1920x1200, simply pressing this button will display a 1920x1080 center cut of this signal, at a maximum framerate of 30p. If you wish to display the full 1920x1200 signal, or need to operate at a higher framerate (i.e. 60hz), then you will need to press and hold this button to enter DVI Input FULLMODE. FULLMODE will display the DVI input at 1920x1200. ***Note:*** If you attempt to input a 1920x1080 signal to DVI FULLMODE, there may be some anomalies on your display due to the native resolution of the display.

Operator Menus: Video Modes 1

Operator Menus: Video Modes 1

Select Video Mode→ Back	ADVANCED MODE	SINGLE-LINK	DUAL-LINK	Calibration Mode: Gamut Controlled	Calibration Mode: Full Gamut	

By using the trackball or USB mouse in the Operator Menus you can navigate to the Video Modes menu.

Video Modes are the combination of Dual Link settings, Input Limiting Settings, Calibration Types, and Calibration Settings. This menu allows you to make changes to the entire video processing configuration of the monitor with a single button press.

Back
Returns you to the Operator Menu

Advanced Mode
Enters an additional menu for custom Video Mode Setup *see below for menu explanation*

Single-Link
Allows you to select from all of the available Single Link video modes

Dual-Link [Option]
Allows you to select from all of the available Dual Link video modes

Calibration Mode: Gamut Controlled
Doesn't change the Dual Link or Input Limiting settings, but allows you to select from the available Gamut Controlled calibration settings.

Calibration Mode: Full Gamut
Doesn't change the Dual Link or Input Limiting settings, but allows you to select from the available Full Gamut calibration settings.

NEXT
Advances to the Video Modes 2 menu.

*Operator Menus: Video Modes 1: Advanced Mode

Operator Menus: Video Modes 1: Advanced Mode

Back	CALIBRATION TYPE: Gamut Controlled	CURRENT CALIBRATION: Rec 709	DUAL-LINK MODE: 4:2:2 YCbCr Single-Link	INPUT LIMITING MODE: undershott & overshoot limited	RESIZER OPTION: Pixel-Accurate	

By using the trackball or USB mouse in the Operator Menus you can navigate to the Video Modes 1 menu.

Back
Return to the Video Modes 1 Menu

Calibration Type
Will allow you to change between Gamut Controlled and Wide Gamut mode

Current Calibration
Allows you to cycle through the available calibrations for the calibration type selected.

Dual-Link Mode
Allows you to cycle through the available dual link modes

Input Limiting Mode
Allows you to cycle through the various input limiting modes (see pg. 58 for more information).

Resizer Option
Sets the Scaler Option, controlling resizing of your video to the display (See pg. 136 for more information).

Operator Menus: Presets

Operator Menus: Presets Menu

Back	Save New Preset: 0	Defaults	Original Settings	Unavailable	More Presets	

By using the trackball or USB mouse in the Operator Menus you can navigate to the Presets menus. Each Preset menu page contains 4 presets starting with Defaults and Original Settings. There are 13 Presets available in the system. Use the trackball to advance the Operators Menus to the next Presets page.

Operator Menu
Returns you to the Operator Main Menu

Save New Preset
Will save your settings to the next available Preset. This new Preset can be renamed in the **Manage Presets** menu

Defaults
Restores the system to the settings you had before you selected a Preset. This would include any setup changes made from the time of power up.

Original Settings
This restores the system to the settings loaded at the time of power-up. Power-up settings are settings saved from the previous power down.

Unavailable
Selects the first of the user-defined presets, as sorted alpha-numerically.

More Presets
Moves forward to the next Presets menu. There are a total of 4 Preset menus while scrolling through with the trackball or USB mouse.

Operator Menus: 3D LUTs

Operator Menus: 3D LUTs

By using the trackball or USB mouse in the Operator Menus you can navigate to the 3D LUTs menus. Each 3D LUT menu page contains 3-4, 3D LUTs. There are 15 3D LUTs available in the system. Use the trackball or USB mouse to advance the Operators Menus to the next 3D LUTs page. If you select any of the 3D LUTs while in the Operator Menu: 3D LUTs, they will be routed to the display automatically. They will not be routed to the output unless you go to the Route Menu in System Menus and set it up manually. Reset on 3D LUTs 1 will reset the 3D LUT to off. The Operators Menu button returns you to the Operators Menu.

Operator Menu: Stills

Operator Menu: Stills

By using the trackball or USB mouse in the Operator Menus you can navigate to the Stills menus. Each Stills menu page contains 4 still slots. There are 16 Stills available in the system. Use the trackball or USB mouse to advance the Operators Menus to the next Stills page. If you select any of the Stills while is the Operator Menu: Stills, they will be routed to the display automatically. They will not be routed to the output unless you go to the Route Menu in System Menus. The Operators Menu returns you to the Operators Menu.

System Menus

To access the System Menus select “System Menus” from the Main Menu

Main Menu

Upon pressing the System Menus button you will get the following menu:

System menu

Back

Takes the user back to the Main Menu

Route

The routing menu routes system video signals to the display, HD-SDI Outputs, and allows for toggling of Dual Link Mode[Option].

Process

The Process menu allows the user access to the Framestore Menu [Option], Colour Grade Menu [Option], Input LUT Menu, Pan and Zoom Menu [Option], and H&V Delay Menu.

Display

The Display Menu allows the user access to the Markers Menu, Heads Up Display Menu, Split Screen Menu, Scaler & Deinterlacer Menu, and the Test Pattern Generator menu.[Option].

Analyse

The Analyse Menu allows the user access to the Pixel Data Analysis[Option], Waveform and Vectorscope[Option], Meausre Display Output[Option], Range and Gamut Violations, and Input Status menus.

Presets

The Preset Menu allows the user quick access to various Preset operational conditions. 13 Presets can be stored on the system. These Presets can also be stored to a USB memory stick, or on a network file server.

Setup Menus

To access the Setup Menus select “Setup Menus” from the Main Menu

Main Menu

Back	Operator Menus	System Menus	Setup Menus	Display Controls	Preset: Original Settings	

Upon pressing the Setup Menus button you will get the following menu:

Setup Menus

Back	Unit Information	Video &Display Setup	Preset/ Preferences Setup	Network / USB Datakey Setup	Resets

Back

Returns to the Main Menu

Unit Information

The ***Unit Information*** navigates the user to the menus providing information on the unit including current software version, all software version updates the machine has received, IP Address, MAC Address, TCP/IP machine name, software options installed, diagnostics, network status, software update from USB key, and current date and time.

Video & Display Setup

Takes you to the Video & Display Setup Menu

Preset & Preferences Setup

Takes you to the Preset and Preferences Setup Menu

Network & USB Datakey Setup

Takes you to the Network and USB Data Setup Menu

Resets

Takes you to the Resets Menu.

Lockout Menu

To access the Lockout Menu the user must press the Main Menu's first button "Model Number".

Main Menu

Cinemage 2142 Press to lockout menus	Operator Menus	System Menus	Setup Menus	Display Controls	Presets Original Settings	

Upon pressing the system model number button you will get the following menu:

Back	Blackout	Lockout	Blackout & Lockout	Blackout Top: On	Keyed Lockout: Insert USB Key	

Back
Returns you to the Main Menu

Blackout
Removes the upper reference bar and menus. The menus can be re-activated by pressing any button.

Lockout
Locks access to the menu buttons. Access is re-activated by pressing this button for 5 seconds then releasing the button.

Blackout & Lockout
Performs both a blackout and a lockout. The menus can be re-activated by pressing button number 6 (far right button) for five seconds then releasing.

Blackout Top
Applies a solid black field to the upper segment of the display, disabling the default luma ramp typically displayed.

Keyed Lockout
Locks access to the menu buttons and writes an unlock code onto a USB data key inserted into the system. Access is re-activated by inserting the USB datakey into the USB slot and pressing this button. System verifies the lockout code on the USB key and opens menu access. Lockout does not stay in force through a system power off.

Chapter 3: Remote Control Panel *[OPTION on Cinemage 2000]*

* Note: Pictures in this section use a Prototype of the Remote Control Panel. Actual Product and colors may vary slightly from what is shown below.*

FCC Notice
This device complies with Part 15 of the FCC Rules. To assure continued compliance follow

not make any unauthorized modifications.

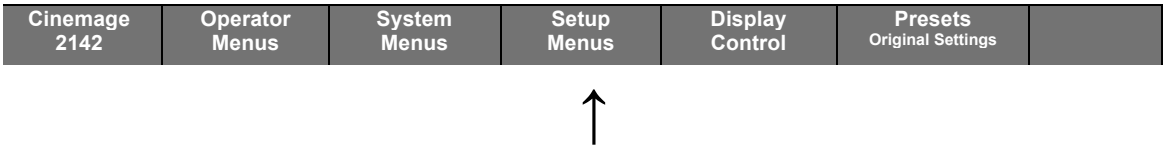
This equipment has been tested and found To comply with the limits for a class A digital Device, pursuant to Part 15 of the FCC Class rules. These limits are designed to Provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which the user will be required to correct the interference at his own expense.

WARNING:
TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

CAUTION:
TO REDUCE THE RISK OF FIRE OR SHOCK HAZARD AND ANNOYING INTERFERENCE, USE THE RECOMMENDED ACCESSORIES ONLY.

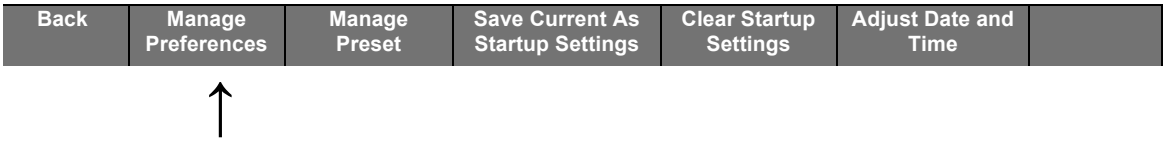
Before using the Remote Control Panel, you must make sure your Cinemage is set up properly.

First, from the Main Menu, enter the Setup Menus

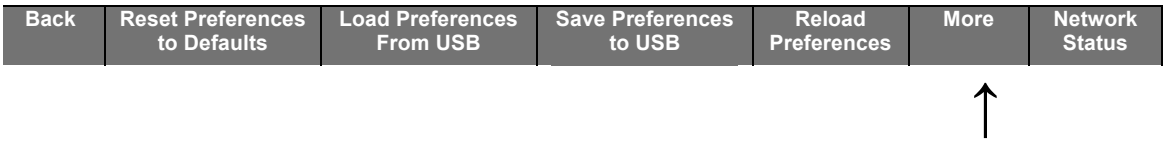


Then enter the Preset & Preferences Menu

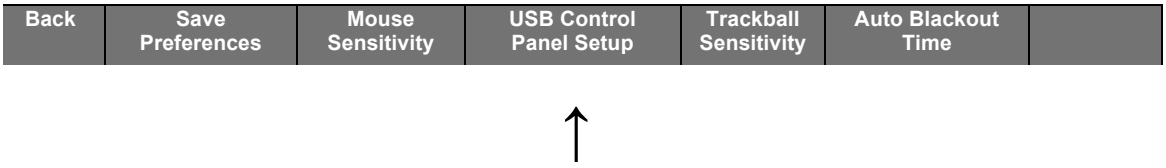
Then enter Manage Preferences



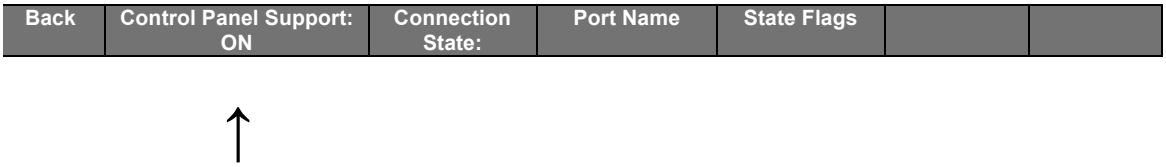
Go to More



Enter USB Control Panel Setup



Make sure that Control Panel Support is turned on. The Connection State Button will tell you the current status of your Remote Control Panel.



The other two items in this menu (Port Name and State Flags, are used for Diagnosis Purposes.)

The Remote Control Panel is available as an option for the Cinemage, but comes with all Cinemage B Series monitors. The Remote Control Panel works with monitors running software version 3.1 and higher. In order to use the Remote Control Panel, you *must* have the latest version of firmware on your monitor.

Top 6 Menu buttons

The top six menu buttons on the USB remote serve as the corresponding menu buttons on the Cinemage and Cinemage B Series monitors. These control the menu navigation for Cinemage and Cinemage B Series monitors.

Input buttons

1
Routes SDI input 1 to the display. A highlighted button indicates the current source that is routed to the display.

2
Routes SDI input 2 to the display. A highlighted button indicates the current source that is routed to the display.

3 [Option on Cinemage and Cinemage B Series monitors]
Routes SDI input 3 to the display. A highlighted button indicates the current source that is routed to the display.

4 [Option on Cinemage and Cinemage B Series monitors]
Routes SDI input 4 to the display. A highlighted button indicates the current source that is routed to the display.

DVI[Option on Cinemage and Cinemage B Series monitors]
Routes the DVI input to the Display. If your DVI signal is a 1920x1200, pressing this button will display a 1920x1080 center cut of this signal, at a maximum framerate of 30p. If you wish to display the full 1920x1200 signal, or need to operate at a higher framerate (i.e. 60hz), then you will need to go into the DVI menu through the top 6 menu buttons on the Remote Control Panel, the menu buttons on the Cinemage unit, or the mouse on the Cinemage or Cinemage B Series monitors. ***Note:*** If you attempt to input a 1920x1080 signal to DVI

FULLMODE, there may be some anomalies on your display due to the native resolution of the display.

Function Buttons

Dual Link [Option on Cinemage and Cinemage B Series monitors]
By setting "Dual Link Mode" to one of the 4:4:4 colorspace modes, the inputs and outputs of the monitor will be configured as 2 dual link inputs and 1 dual link output. Dual Link mode will not turn on automatically when a dual link signal is applied. You must manually select from a list of options. When using Dual Link mode, inputs 1 & 2 on the Cinemage become Input 1 and inputs 3 & 4 become Input 2, while outputs 1 & 2 become Output 1.

Sync
This function sets the reference sync for the monitor. You can choose between **Free run**, **Analog** or **SDI**. For more information on the Sync capabilities of the Cinemage, please refer to Chapter 7.

H/V
This button will turn on H/V Delay, but only after activating the option using the LCD panel and control pad. For more information on what the H/V Delay options does, please refer to page 99. The following steps will walk you through activating the H/V Delay using the Remote Control Panel:

1) Press the center button on the directional pad next to the LCD screen.
2) Highlight Display Settings and press right on the directional pad.
3) Highlight Misc. Settings and press right on the directional pad.
4) Highlight H/V Delay and press right on the directional pad.

The H/V Delay button on the Remote Control Panel is now functional.

NOTE BE AWARE that if H/V Delay is turned on, the H/V Delay is visible downstream.

Scan
Allows you to select between Pixel Accurate displaying, Re-Sized to fill screen, Anamorphic 625 (PAL), 16x9 525 (NTSC) (these stretch the video to fit horizontally as well as vertically), resized to 15 inch CRT, resized to 17 inch CRT, resized to 19 inch CRT, resized to 19 inch CRT Anamorphic, and Square-Pixel Full (emulates the square pixels of Computer monitors). 1080 formats will automatically be displayed in pixel accurate mode with no scaling available.

B-Only

This button causes the display to only output the Blue component of the video signal. Can be used to ensure proper monitor setup by viewing the Color Bars in blue only mode.

R/G/Y
This button causes the display to only output the Red, Green, Blue, Magenta, Yellow, Cyan and Black components of the video signal.

Markers (labeled Grat in pictures)
The Markers enabled button cycles through Markers disabled; Marker A enabled; Marker B enabled; Marker A&B enabled; A Masked; B Masked; and Centered Crosswire

Menu
This button will return you to the top menu of the Cinemage menu system no matter where you are in the menu tree system

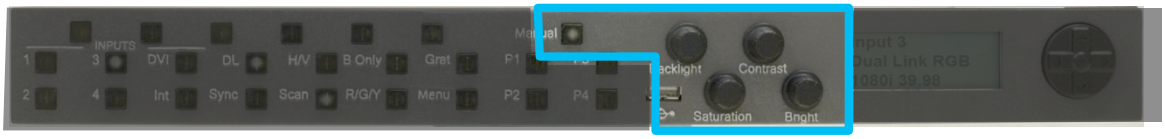
Presets

Preset files describe the way the system interacts with video and how it's used in the workflow. Presets are loaded from the front of the remote control panel when you press the button corresponding to the preset file you want.

In order to save a preset using the remote control panel, make sure the Cinemage is set up with the features you will want to be turned on when activating the designated preset. Then choose which preset you want the current configuration to be saved in. Next, press and hold the preset button until all the buttons on the panel light up. The preset is now saved to the specified location. Some examples of things that are stored in a presets file: Marker/graticule size and position, video standard (if not in automatic mode), heads-up display settings, dual link mode vs. single-link mode, and routing. The only things that cannot be saved in a preset are: operation settings, and trackball preferences.

When using the Remote Control Panel to create a Preset, the Preset is stored within the Remote Control Panel. Because the Presets are saved in the Remote Control Panel, if using the same Remote Control Panel but a different Cinemage, the Preset will still be able to be accessed.

Display Setting Knobs



Backlight
This knob will adjust the setting on the backlight

Contrast
This knob will adjust the contrast setting of the display

Saturation
This knob will adjust the saturation setting of the display

Brightness
This knob will adjust the brightness setting of the display

Manual
This button resets all the changes made using the Display Setting Knobs to factory defaults

> **Special Note about Brightness and Contrast**
> Cinemage emulates the contrast control of a CRT by manipulating the response of the LCD; due to the nature of LCD technology contrast and brightness will start clipping very quickly when these controls are manipulated up. In the general case you will get a better result by manipulation of the backlight and gamma than with the Brightness and Contrast, as backlight and gamma are native LCD controls, not emulated CRT controls.

LCD Display and Directional Buttons on the Remote Control Panel

On the far right of the Remote Control Panel, there is a LCD display and a set of directional buttons with a center select button.

To access the menu, press the center button and use the four directional buttons to navigate the menus. The three options you are given when first entering the Menus are: Display Settings, Other Settings, and Exit.

Display Settings

Press right on the directional pad when Display Settings is selected to enter. When entering the Display Settings Menu you are given the following options: Split Screen, Markers, Misc Settings, and Back/Exit. In order to enter each menu, you must hit right on the directional pad, except for Back, which you will have to hit left on the directional pad.

Split Screen

Mode – This will allow you to choose the type of Split that you want displayed on the screen. In order to enter this menu, you will need to press right on the directional pad, with Split Screen Highlighted. The options in this menu include: Off, H Split (Horizontal Split), H Split Reverse (Horizontal Split Reverse), V Split (Vertical Split), V Split Reverse (Vertical Split Reverse), Back and Exit. In order to choose each option you will need to press right on the directional pad when the option you want is selected. In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Input 1 – This will allow you to choose what will be in the first input to Split Screen. The options available are: SDI 1, SDI 2, SDI 3, SDI 4, Test Pattern Generator, 3D LUT Output, Framestore, DVI Input, LUT Bypass SDI 1, LUT Bypass SDI 2, LUT Bypass SDI 3, LUT Bypass SDI 4, LUT Bypass DVI Input, and Back/Exit. In order to choose an option you will need to press right on the directional pad when the option you want is selected. In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Input 2 – This will allow you to choose what will be in the second input to Split Screen. The options available are: SDI 1, SDI 2, SDI 3, SDI 4, Test Pattern Generator, 3D LUT Output, Framestore, DVI Input, LUT Bypass SDI 1, LUT Bypass SDI 2, LUT Bypass SDI 3, LUT Bypass SDI 4, LUT Bypass DVI Input, and Back/Exit. In order to choose an option you will need to press right on the directional pad when the option you want is selected. In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Marker – When entering the Marker option, this will let you enable a marker on the location of the split screen. There are only two options, on and off, as well as the Back/Exit option. Press right on the directional pad to enable the setting you want when the setting is highlighted. In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Position – When entering the Position option the Backlight knob controls where the Split Screen is taking place on the monitor. There are also Back/Exit options.In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Back/Exit – In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Markers

Enable – Upon entering this menu, you are given multiple options: Disabled, A Enabled, B Enabled, A & B Enabled, A Masked, B Masked, Centered Crosswire, and Back/Exit. For each option, once it is highlighted press right on the directional pad to choose the option. In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

A Setup – When entering this menu, you are given another set of menus including: Enable, Type, Scale, Position, Style, and Back/Exit.

Enable – Options in this menu are Off, On, and Back/Exit. Press right on either Off or On to choose option.In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Type – Options in this menu are: Custom, 1.33:1, 1.55:1, 1.77:1, 1.86:1, 2.35:1, 1.33:1 Safe Title, 1.33:1 Safe Action, 1.55:1 Safe Title, 1.55:1 Safe Action, 1.77:1 Safe Title, 1.77:1 Safe Action, and Back/Exit. When choosing any of these options, press right on the directional pad to make your choice, when the option is highlighted. In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Scale – When entering this menu, there will be on screen directions. The Brightness knob will control the width of the Marker, and the Contrast knob will control the height of the Marker. There is also a Back/Exit option. In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Position – In this menu, you will use the top two dials to control the position of the Marker. The Backlight Dial will control the X Position (PosX), and the Contrast Dial will control the Y Position (PosY). When moving the position of a marker, you are controlling the position of the top left corner of the marker. Make all your decisions based off of this point. There is also a Back/Exit option. In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Style – In this menu, there are two style options to choose from. White or Luma Mod can be chosen by pressing right on the directional pad, when the selection is highlighted. There is also a Back/Exit option. In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Back/Exit – In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

B Setup – When entering this menu, you are given another set of menus including: Enable, Type, Scale, Position, Style, and Back/Exit.

Enable – Options in this menu are Off, On, and Back/Exit. Press right on either Off or On to choose option.In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Type – Options in this menu are: Custom, 1.33:1, 1.55:1, 1.77:1, 1.86:1, 2.35:1, 1.33:1 Safe Title, 1.33:1 Safe Action, 1.55:1 Safe Title, 1.55:1 Safe Action, 1.77:1 Safe Title, 1.77:1 Safe Action, and Back/Exit. When choosing any of these options, press right on the directional pad to make your choice, when the option is highlighted. In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Scale – When entering this menu, there will be on screen directions. The Brightness knob will control the width of the Marker, and the Contrast knob will control the height of the Marker. There is also a Back/Exit option. In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Position – In this menu, you will use the top two dials to control the position of the Marker. The Backlight Dial will control the X Position (PosX), and the Contrast Dial will control the Y Position (PosY). When moving the position of a marker, you are controlling the position of the top left corner of the marker, so make all your decisions based off of this point. There is also a Back/Exit option. In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Style –In this menu, there are two style options to choose from. White or Luma Mod can be chosen by pressing right on the directional pad, when the selection is highlighted. There is also a Back/Exit option. In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Back/Exit –In order to go Back, press left when Back/Exit is selected, in order to Exit, press right when the option you want to enter is highlighted.

Mask Setup – When entering this menu, there are three options: Masked Area, Mask Style, and Back Exit. To enter either of the mask options, press right on the directional pad. In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Masked Area – There are three options in this menu: Inner, Outer, and Back/Exit. Inner will mask the inside of your Marker. Outer will mask the outside of your Marker. In order to select an option, press right on the directional pad when the option you want is highlighted. In order to go

Back, press left when Back/Exit is selected, in order to Exit, press right when the option you want to enter is highlighted.

Mask Style – There are three options in this menu: Black, Darken, and Back/Exit. Black will make the masked area blacked out. Darken will make the masked area darker, but still transparent. In order to select an option, press right on the directional pad when the option you want is highlighted. In order to go Back, press left when Back/Exit is selected, in order to Exit, press right when the option you want to enter is highlighted.

Back/Exit – In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Back/Exit – In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Misc Settings

HV Delay Button – There are three items in this menu. The first is a **warning**, that by turning on H/V delay, you will affect your output video. H/V delay is transmitted in the output, so by turning on this option, you will not get a full image coming through your output. The next option is Enabling or Disabling the H/V Delay button on the Remote Control Panel. When this option is selected, press right on the directional pad to Enable the H/V Delay Button, and left on the directional pad to Disable the H/V Delay button on the Remote Control Panel. The last item is the Back/Exit option.In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Back/Exit – In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Other Settings

Press right on the directional pad when Other Settings is selected in order to enter the menu. Once you enter the menu, you will be given the following options: Menu Settings, Misc Settings, Info, and Back/Exit.In order to enter each menu, you must hit right on the directional pad, except for Back, which you will have to hit left on the directional pad.

Menu Settings

LED Settings – When selecting this option you are given LED Brightness and Back/Exit options. With LED Brightness selected you can press right or left on the directional pad to control the brightness of the buttons on the Remote Control Panel. Right will increase the brightness of the buttons, and left will decrease the brightness. The other option is the Back/Exit selection. In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

LCD Settings – When selecting this option you are given LCD Brightness, LCD Contrast, and Back/Exit options. In order to change the LCD Brightness, select the option and press right or left on the directional pad. In order to change the LCD Contrast, select the option and press right or left on the directional pad. In both cases, right will increase the value and left will decrease the value.

Reset – When selected, press right on the directional pad to reset the LED and LCD settings to defaults on the Remote Control Panel.

Back/Exit – In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Misc Settings

Encoder Rate – After entering this menu, press right or left on the directional pad when Encoder Rate is highlighted in order to change the rate. Right will increase the rate, while left decreases the rate.

Back/Exit – In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Info

Cinemage – When entering this menu, you are given the Model Number and the Serial Number of the Cinemage monitor you are currently attached to. There is a Back/Exit option at the bottom of this menu. In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Hardware – When entering this menu, you are given the Model Number, Serial Number, HW Revision of the Remote Control Panel you are currently using, as well as the Current Date and time. There is a Back/Exit option at the bottom of this menu.In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Software – When entering this menu, you are given the current software information of the Remote Control Panel you are currently using. There is a Back/Exit option at the bottom of this menu.In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Back/Exit – In order to go Back, press left when Back/Exit is selected, in order to Exit, press right.

Chapter 4: Useful Operations

Cinemage Preferences Control: Setting Remote File Locations

The Cinemage and Cinemage B Series monitors feature a remote file access capability that allows for storing and accessing media on remote file servers. This requires that the remote server host a standard readable and writable SMB (i.e. Samba or Windows) file share. Each type of file that can be accessed remotely (still, input LUT, 3d LUT, preset) has a unique share associated with it. Additionally, there is a modal switch that allows the user to access these files either remotely from the share, from a USB memory key attached to the monitor, or on the monitor's local storage.

The advantages to using remote storage are that there are no storage restrictions (beyond that on the server) and that multiple monitors can use the same pool of presets, images and LUTs.

Setting the remote file location can be done either from the front panel or through the preferences file, prefs.xml. Using the front panel controls where this file can be backed up to, saved to, or loaded from a USB memory key.

Here is the procedure for saving the current preferences file to a USB key, manually adding the server information, adding it to the monitor, then connecting and verifying the connection.

Note: This is only one technique for establishing the connection; the alternative is to program it in from the front panel using the trackball.

Step 1: Copy the preferences to a USB key.

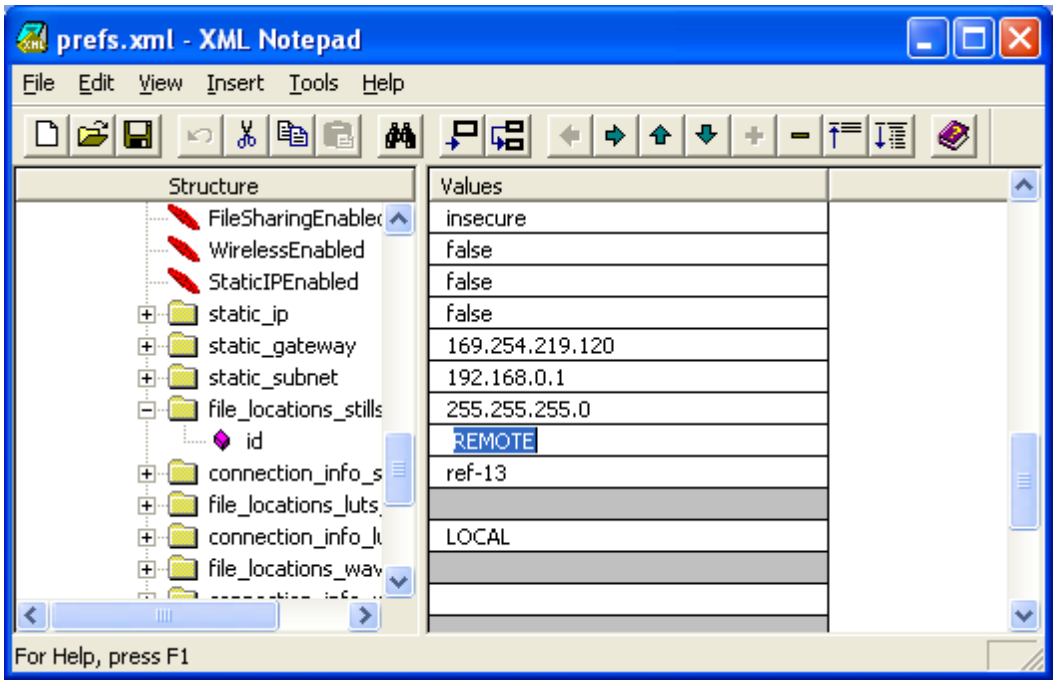
1. Insert a USB memory key that's prepared for the Cinemage (consult your manual for details).
2. From the Main Menu, Select "SETUP MENUS".
3. Select "PRESET & PREFERENCES SETUP".
4. Select "MANAGE PREFERENCES".
5. Select "SAVE PREFERENCES TO USB".

Step 2: Edit the preferences file.

1. Move the USB key to a computer and open the file "cinetal/prefs.xml" in a text editor or xml editor.
2. Find the "connection_info" tag for the desired file type, in this case we're changing the remote path for stills, so that would be "connection_info_stills".
   Text:

```
<connection_info_stillsxsi:type="a1:connect_data"xmlns:a1="http://schemas.microsoft.com/c
lr/nsassem/Philo/PhiloController%2C%20Version%3D1.0.2168.38160%2C%20Culture%3Dneutral%2C%
20PublicKeyToken%3Dnull">
<usernamexsi:null="1"/>
<pathxsi:null="1"/>
<passwordxsi:null="1"/>
</connection_info_luts_input>
```

XML Editor:

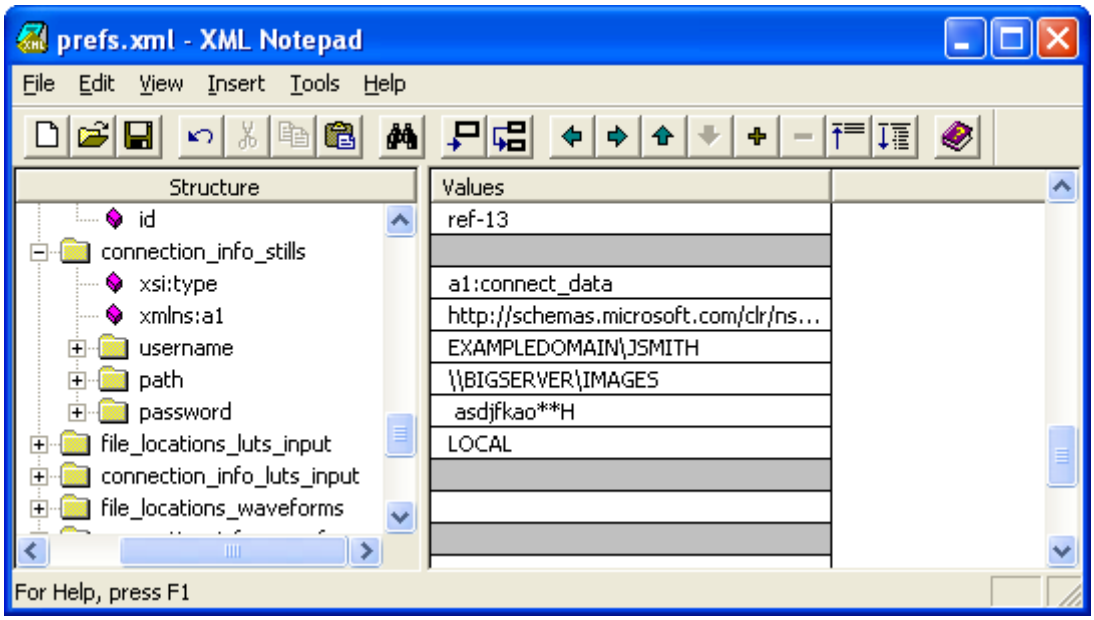


Now insert the proper username, path, and password. Note that the password is stored in cleartext by design (so that this is possible).

Text:

```
<connection_info_stillsxsi:type="a1:connect_data"xmlns:a1="http://schemas.microsoft.com/c
lr/nsassem/Philo/PhiloController%2C%20Version%3D1.0.2168.38160%2C%20Culture%3Dneutral%2C%
20PublicKeyToken%3Dnull">
<usernameid="ref-14">EXAMPLEDOMAIN\JSMITH</username>
<pathid="ref-15">\\BIGSERVER\IMAGES</path>
<passwordid="ref-16">asdjkfao**H</password>
</connection_info_stills>
```

XML Editor:



Step 3: Copy the preferences back to the Cinemage

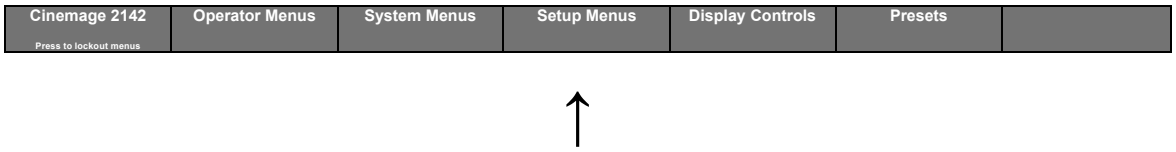
1. Insert a USB memory key into the Cinemage.
2. From the Main Menu, Select “SETUP MENUS”.
3. Select “PRESET & PREFERENCES SETUP”.
4. Select “MANAGE PREFERENCES”.
5. Select “LOAD PREFERENCES FROM USB”.
6. The new preferences are now being loaded. Note that the process of reconnection happens in the background after the button is released.
7. Press “BACK” twice then select “NETWORK & USB DATAKEY SETUP”
8. Press “REMOTE FILE SETUP”
9. Select the file type that you are setting, in this case stills. If the file path appears here then reconnection was a success. Note that the new path will only be saved to preferences again if the connection is complete.

Saving a preference:

Preferences refer to settings that are specific to a given machine and its network environment. Some of these things, such as a selected network path along with usernames and passwords might be sensitive material. Passwords are stored in clear text, so it is good practice to reset (see “reset” below) the preferences to clear any sensitive security information when necessary. Here are some examples of things that are stored in preferences:

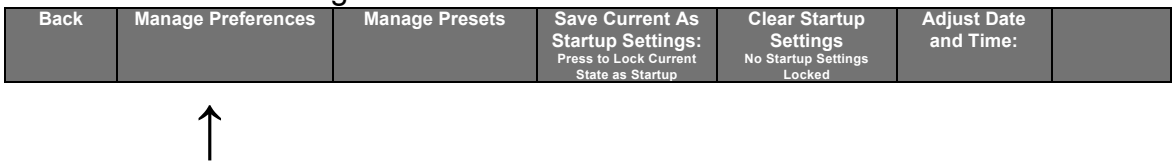
1. Network logons, paths, and passwords for remote file access.
2. FTP server settings (whether the server is enabled and current password).
3. Web settings (if the web server is enabled)
4. Storage information; whether the system is set to use local, remote, or USB storage for stills and various LUTs.

Once you have adjusted your Preference settings (i.e. designated a Network Path), it may be useful to save that setting to a USB key for later recall to enable you to reset the machine to clear any sensitive information. To save or recall your preference settings, enter the Setup menu:

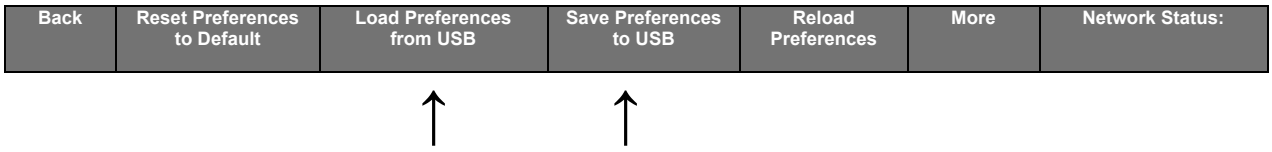


Then enter the Presets/Preferences Setup Menu:

Then enter the Manage Preferences Menu:



From here you can either load your preferences from a USB key, or save them off to a USB key:

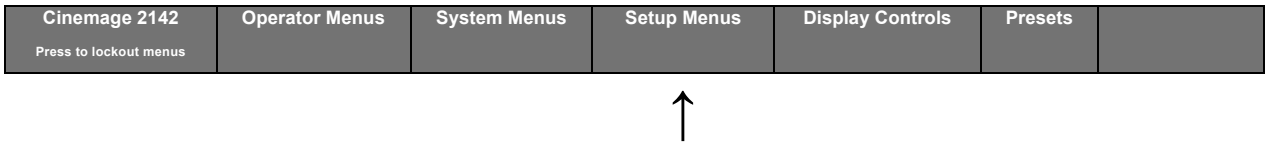


Saving a Preset:

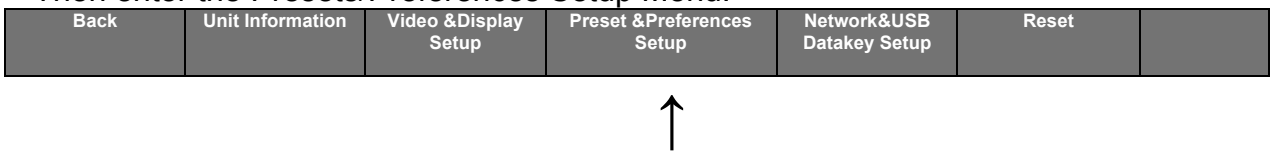
Presets files describe the way the system interacts with video and how it's used in the workflow. Presets are loaded from the front panel at the top-level menu; when you press the button the preset file is loaded and the name of the file appears. Here are some examples of things that are stored in a presets file:

1. Marker (Graticule) size and position.
2. Video standard (if not in automatic mode).
3. Heads-up display settings
4. Dual link mode vs. Single-link mode.
5. Routing.

Saving your presets allows you quick access to your desired workflow. Presets can be saved to and recalled from any of three locations: local memory, a USB datakey, or a remote server location. To change the location the Presets are saved to/ recalled from you must enter the Setup Menu:



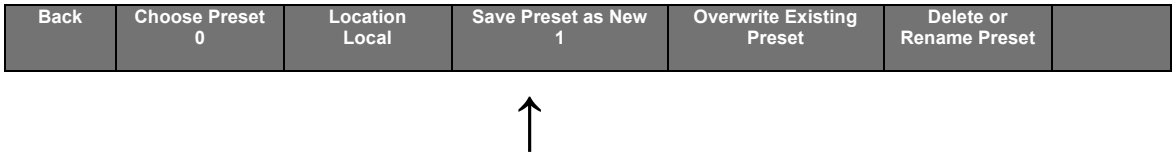
Then enter the Presets/Preferences Setup Menu:



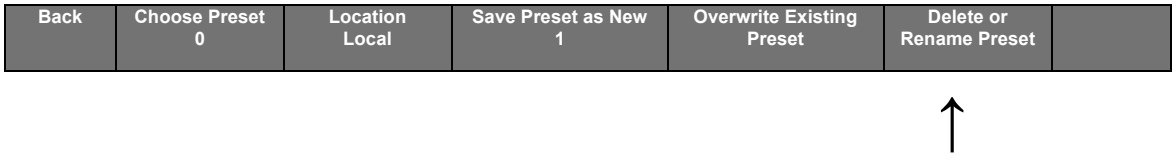
Then enter the Manage Presets Menu:

Then toggle the Location:

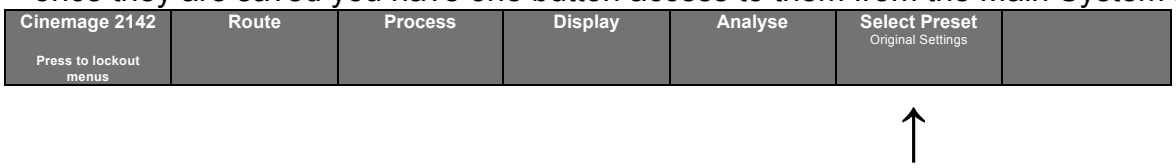
Once the location is set, you may save your settings off to that location by pressing the Save Preset as New button:



And the Preset can be renamed using the trackball to operate the character generator in the Delete or Rename Preset menu:



While this may be a mildly involved process to save all of your workflow settings initially, once they are saved you have one button access to them from the Main System menu:



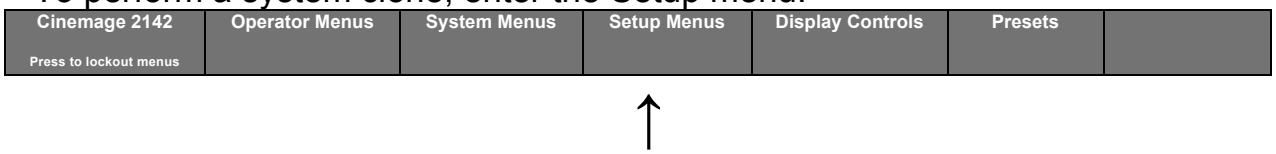
This one button access allows for a greatly expedited workflow that is accessible on any Cinemage unit (provided that unit contains the options included in you preset).

Cloning to/from a USB key:

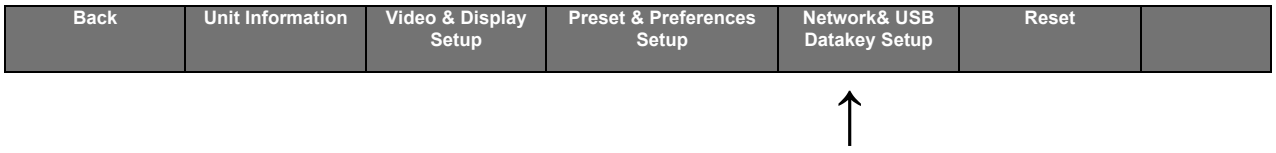
A quick and easy way to save all of your preferences and presets together to/from a USB is to perform a clone. This will save all of the information on the machine to the USB key, including:

1. Stills
2. LUTs
3. Presets
4. Preferences

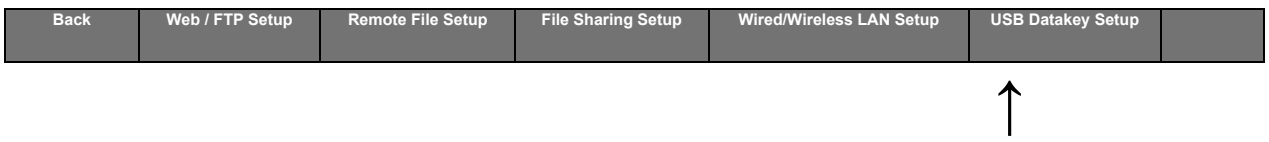
To perform a system clone, enter the Setup menu:



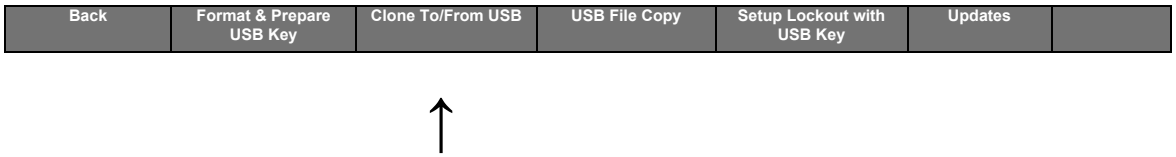
Then enter the Network/USB Datakey Setup menu:



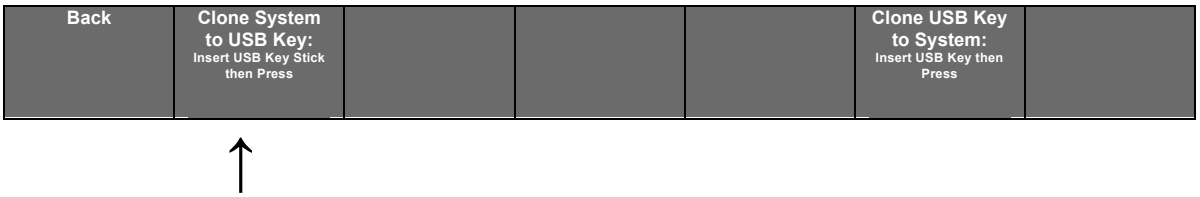
Then enter the USB Datakey Setup menu:



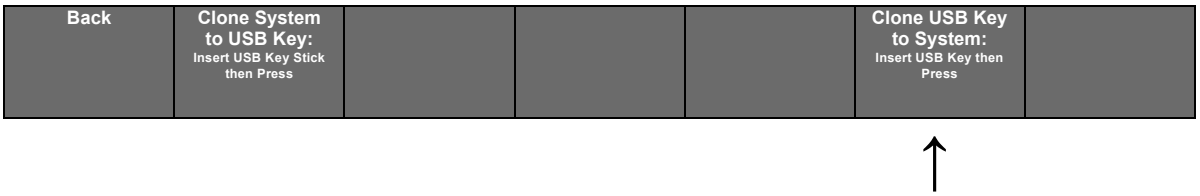
Once you have entered the USB Datakey Setup menu, you will be able to save/load your cloned system setup, allowing for easy access to your previous workflow settings. Go to the Clone To/From USB menu:



To clone to the USB key, simply insert the key into the USB port on the front of the unit and press the Clone System to USB Key button:



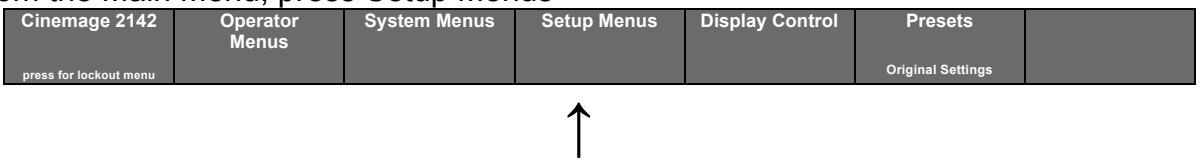
To recall your saved system clone from the USB key, simply insert the key into the USB port on the front of the unit and press the Clone USB Key to System button:



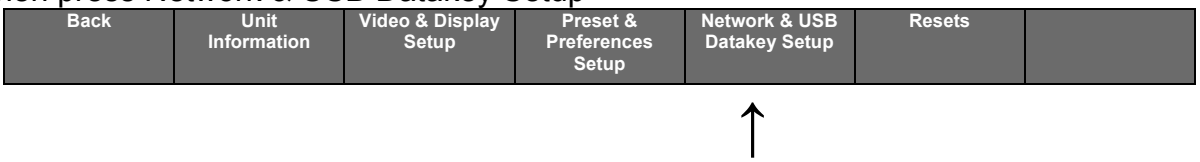
Preparing a USB Datakey for Use with the Cinemage

One important point to note is that your USB key will have to be prepared prior to saving any information from the Cinemage or Cinemage B Series monitors to the datakey so that the USB key will have the Cine-tal file structure and format placed on the key, allowing the system to recognize the formatting and to save and retrieve files.

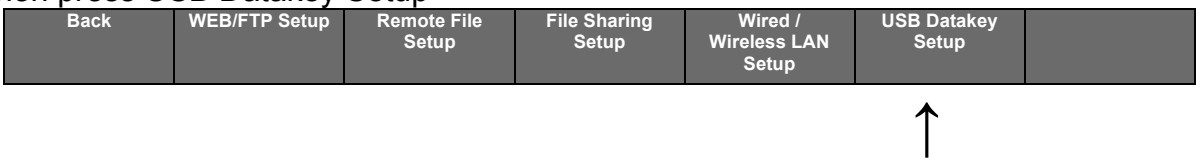
To prepare the USB key, inset the key into the USB port on the front of the unit and from the Main Menu, press Setup Menus



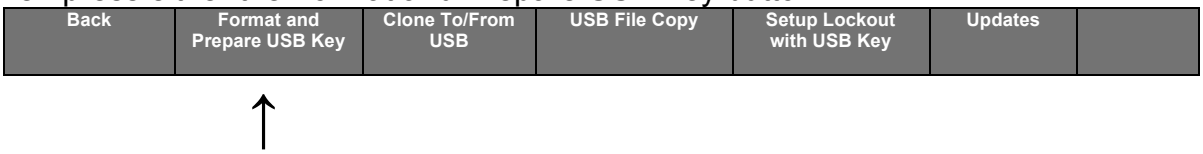
Then press Network & USB Datakey Setup



Then press USB Datakey Setup



Then press either the Format and Prepare USB Key button*:

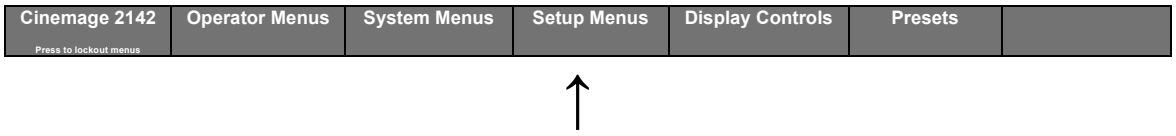


WARNING: Please be advised that the Format and Prepare USB Key button will erase any information on the USB Key before adding the Cine-tal file structure and format.

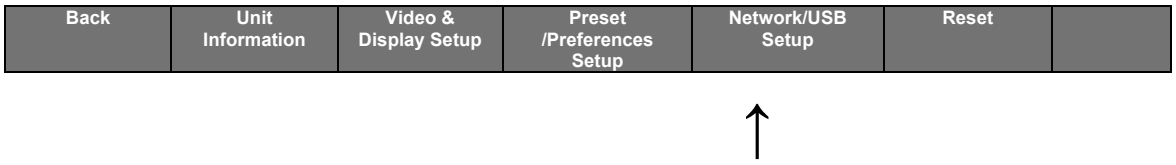
Software Updates/Upgrades:

Cine-tal is continually working towards product improvements to aid in the functionality of our monitors in your production process. As such, software updates will be released to improve the way Cinemage and Cinemage B Series monitors function. In addition to these software updates, you have the ability to purchase or operate on a limited trial basis upgrade licences, to “unlock” software based functions of the Cinemage or Cinemage B Series monitors such as the Waveform Monitor/Vectorscope, Dual-Link Mode, the Test Pattern Generator, Framestore, and 3D Luts. Both of these tasks can be accomplished through the Updates menu, located under the USB Datakey Setup Menu.

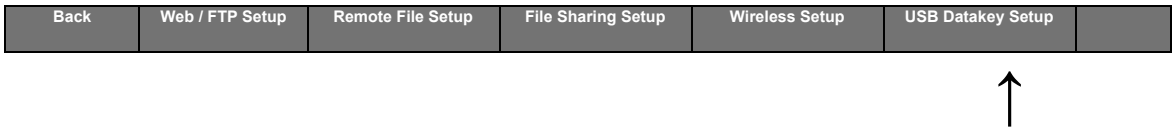
To perform a **software update** with the update loaded from the Cine-tal website to a USB key, start at the Main Menu, press the Setup Menus button:



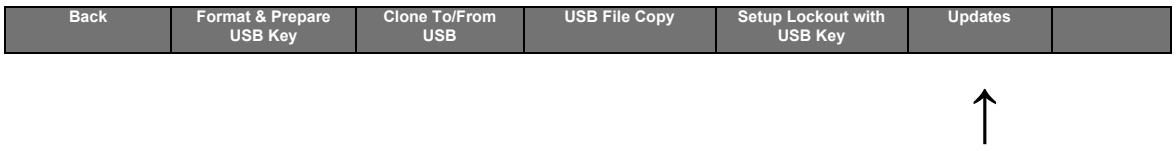
Then enter the Network/USB Datakey Setup menu:



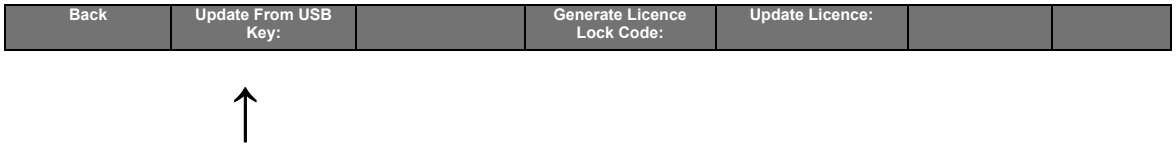
Then enter the USB Datakey Setup menu:



Then press the Updates button:

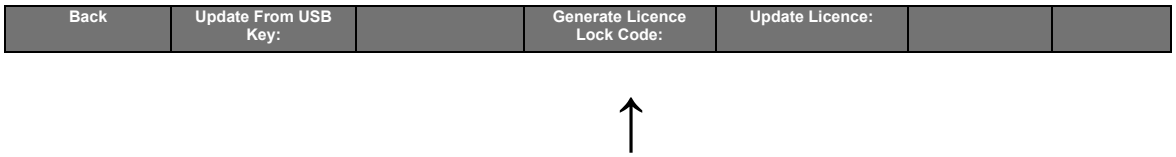


Insert the USB key and press the Update From USB Key button:

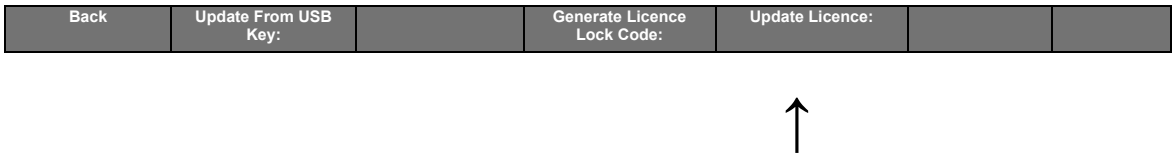


The unit will load the software update into internal memory. Power cycle the unit and the update will be loaded and ready for use.

To perform a **software upgrade**, insert your USB key and press the Generate Licence Lock Code button:



This will install a licence lock code onto the datakey. Remove the USB key from the Cinemage or Cinemage B Series monitors, and insert into the USB port on your computer (Mac or PC). In the Cine-tal directory on the USB key you will find a file named lock_abcdef.lic, where abdef is the last 6 digits of the Cinemage or Cinemage B Series monitors' serial number. Email this file to your Cine-tal Customer Care Team at support@cine-tal.com with the feature request and applicable P.O. if necessary. The Customer Care Team will email back both your original *.lic file and its matching unlock license. Move both of these files downloaded from the email into the Cine-tal directory on the USB key. Make sure that serial number on the *.lic file matches the serial number of the unit you are working on. Insert the USB key back into the Cinemage or Cinemage B Series monitor. Press the Update Licence button:



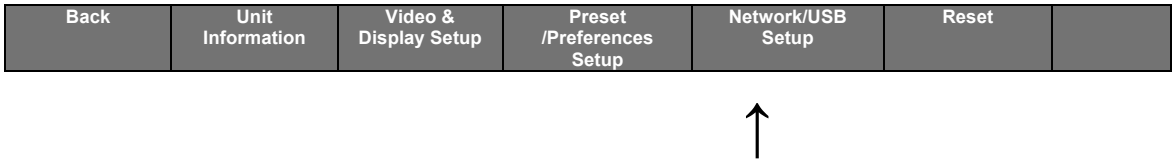
Unlock result will then be displayed as either "Success" or "Failure". Failures will typically result from mismatched or outdated lock/unlock files. Outdated files occur if you do multiple upgrades out of order. Once "Success" is displayed, remove the USB key and power cycle the unit. The upgrade will now be installed and fully operational.

Accessing a router:

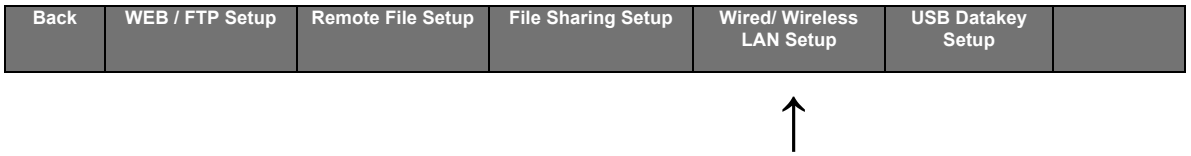
To take advantage of Cinemage or Cinemage B Series monitors' etworking and file sharing capabilities, often it will be necessary to access the unit via a network router. Before connecting the Cinemage or Cinemage B Series monitor to your network always check with your network administrator.

Determine if your network will require the Cinemage or Cinemage B Series unit to be set for static IP or dynamic IP (DHCP) addressing. Typically most networks use dynamic addressing. Go to the Setup Menu**:**

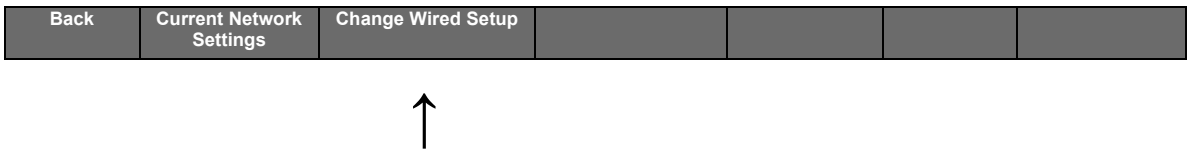
Then press the Network/USB Datakey Setup button:



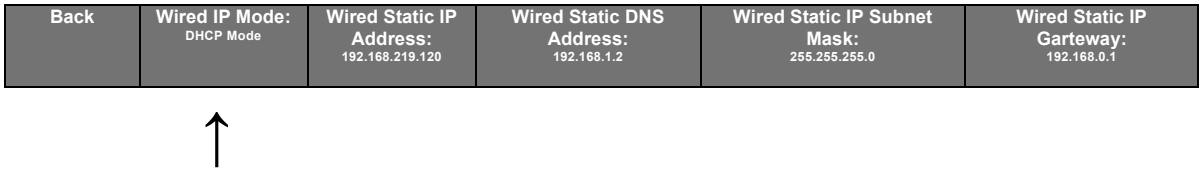
Then enter the Wired/Wireless LAN Setup Menu:



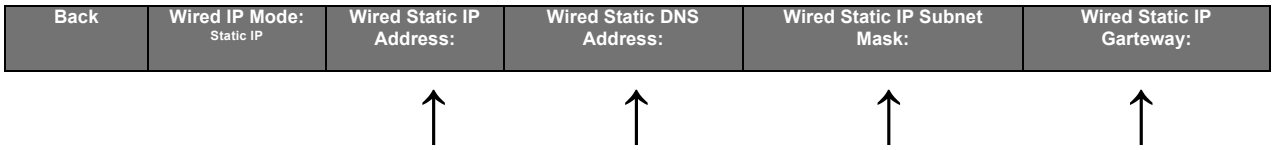
Go to the Change Wired Setup Menu:



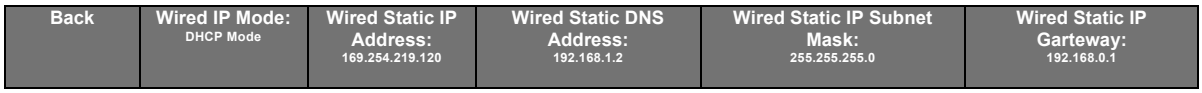
Under the Wired IP Mode set to either DHCP mode or Static IP, whichever your networking requires:



(If your system is set for DHCP, skip this step.) If the system is set for Static IP setup the appropriate numbers for Wired Static DNS Address, Wired Static IP address, Subnet Mask, and IP Gateway (See Addendum A to edit this in the prefs.xml file):

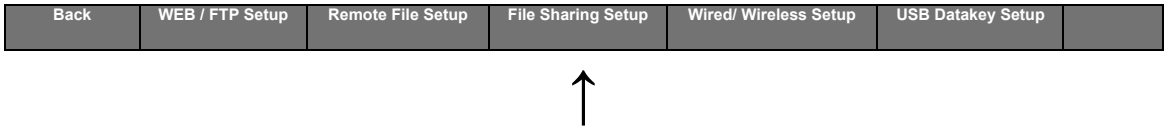


If you desire to restrict access to files stored on the Cinemage or Cinemage B Series unit you may restrict access by setting a username and password for local network access. If security is not a concern the default setting is a username of "guest" with no password. To set the password, press the Back button twice:

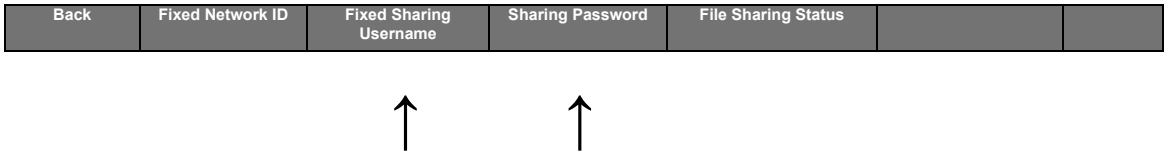


↑(x2)

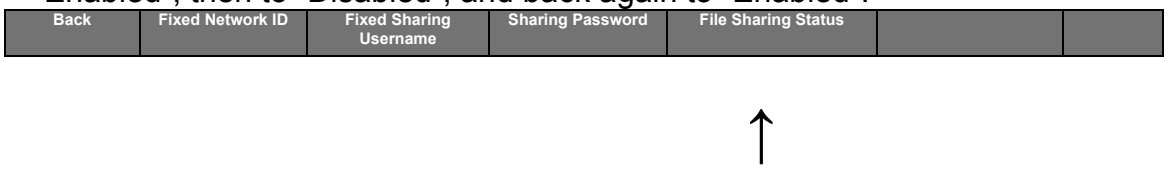
Then press the File Sharing Setup button:



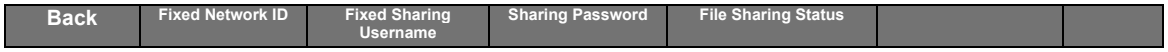
And setup the Username and Password:



Next you must reset the systems network status by toggling the File Sharing Status to "Enabled", then to "Disabled", and back again to "Enabled":

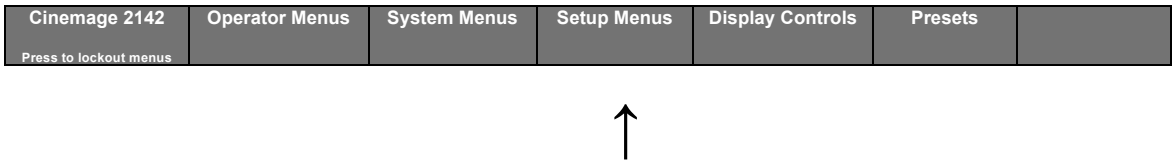


Finally you must ensure that the router has assigned an address to the unit, or that the static IP address is correct. Hit the back button 3 times to return to the Main Menu:

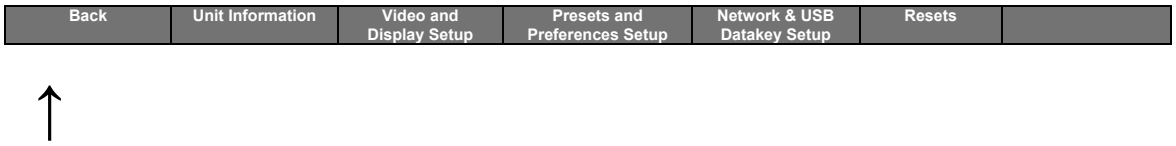


↑(X3)

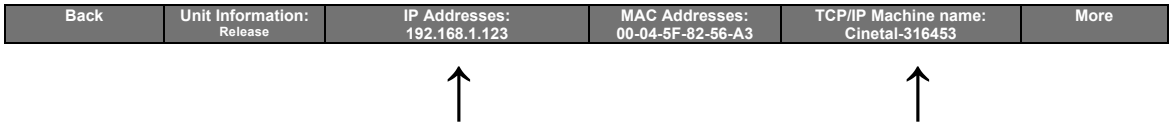
Enter the Setup Menu



Then enter the Unit Information menu:



Verify that that the router has assigned the system an IP address or that the static IP address is correct, and note the TCP/IP Machine Name:



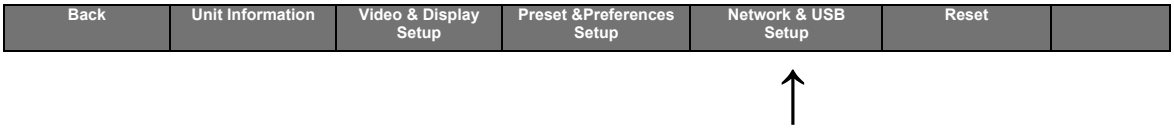
From a Windows or Mac you may browse the network to find the Cinemage Monitor. Cinemage uses a Universal Naming Convention based on its TCP/IP Machine Name.

Remote File Setup:

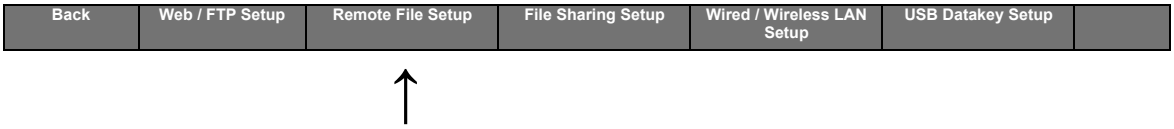
Cinemage and Cinemage B Series, as network appliances, have the ability to remotely store and access important files such as Stills, Presets, Preferences, Input Luts, and 3D LUTs. This allows for remote collaboration across your facility, across the country, or around the world. The file paths, and necessary login information can be edited within the Cinemage unit to allow for this remote file access.

From the Main Menu, press the Setup Menus button:

Then enter the Network &USB Datakey Setup menu:

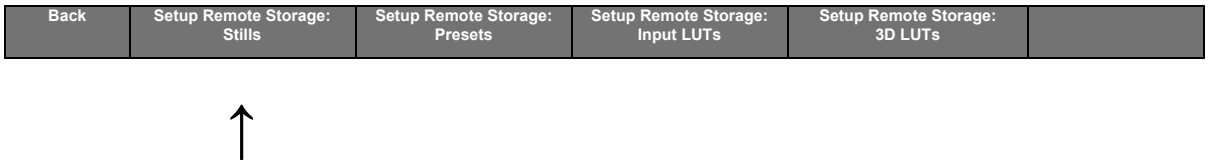


Then enter the Remote File Setup Menu:

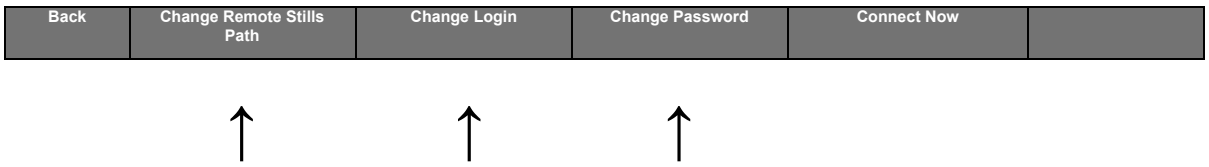


The process is the same for setting up all four areas of the Remote File Setup. Listed are the steps for Stills, but they can be repeated for Presets, Input LUTs, and 3D LUTs.

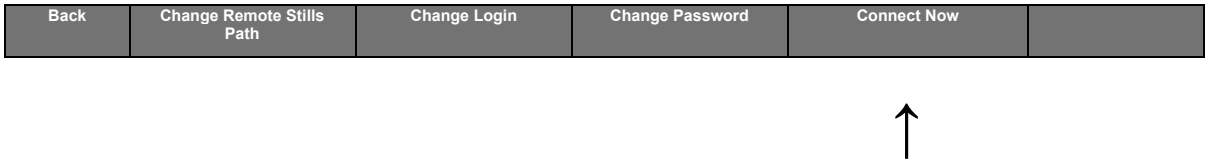
Press the Setup Remote Storage: Stills button:



Enter the Change Remote Stills Path, Change Login, and Change Password menus to adjust the information contained in each. Information can be entered using the trackball and the Select Next Character button:

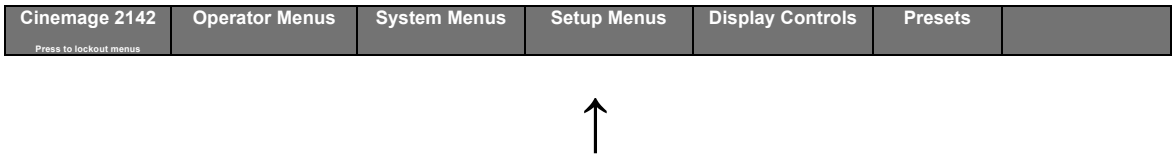


Once the File Path, Login, and Password are set, press the Connect Now button to enable remote access to file and remote storage:

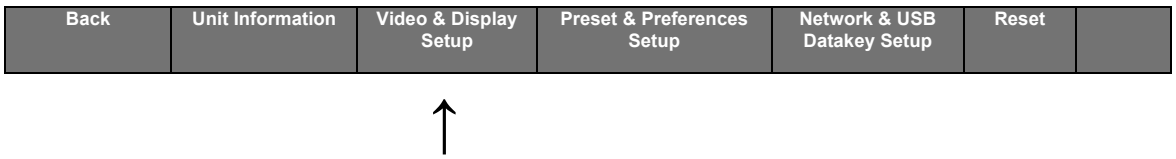


Calibration:

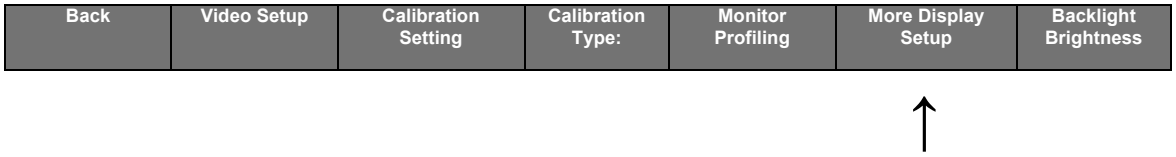
Before navigating the menus, plug the GretagMacbeth (GMB) calibration probe [option] into the USB port. From the main menu, press the Setup Menus button:



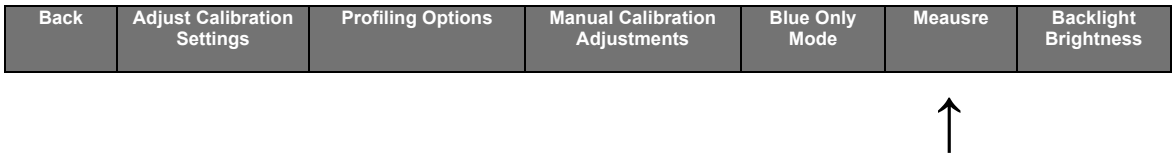
Then select the Video & Display Setup button:



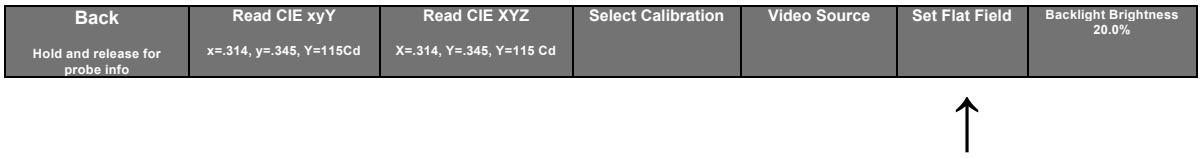
Then select the More Display Setup button:



Then select the Measure button (note: do not select Auto Calibrate yet):



If you are using the GMB EyeOne Pro place the probe on the white calibration tile provided with the probe and Select “Press to Calibrate Probe” Then place the probe on the center of the display. If you are using the EyeOne Display 2 place the probe on a flat black surface (the top of the monitor works well) then press “press to calibrate probe”. When finished place the probe on the center of the display. Press the Set Flat Field button until “100% White” is displayed:



Adjust the backlight to a comfortable setting for your ambient environment using the trackball. Press the Read CIE xyY button:

Back Target: x=.314, y=.345	Read CIE xy,Y x=.314, y=.345, Y=115Cd	Read CIE X,Y,Y X=.314, Y=.345, Y=115 Cd	Select Calibration	Video Source	Set Flat Field	Backlight Brightness 20.0%

Read the "Y" result under CIE xyY, and adjust the backlight either up or down until the desired luminance output is reached, pressing the Read CIE xyY button to display new readings. Once desired luminance is reached, press the Back button twice to return to Display Setup menu:

Back Target: x=.314, y=.345	Read CIE xy,Y x=.314, y=.345, Y=115Cd	Read CIE X,Y,Y X=.314, Y=.345, Y=115 Cd	Select Calibration	Video Source	Set Flat Field	Backlight Brightness 450


(x2)

Select Monitor Profiling:

Back	Video Setup	Calibration Setting:		Monitor Profiling	More Display Setup	Backlight Brightness

Select Auto Profile Display and follow the on screen instructions:

Back	Auto Profile Display	Change Sample Count	Profile Options	Manage Profiles	Reset Probe:	

Check the results against the target located in the menu bar:

Back Target: x=.314 y=.345	Auto Profile Display	Change Sample Count	Profile Options	Manage Profiles	Reset Probe:	

Make adjustments to the backlight for Luminance level and Manual Calibration settings as needed and re-calibrate until you have the desired results.

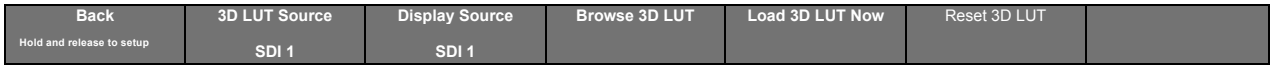
Loading a 3D LUT when in Full Gamut Mode

Use these steps to load and view a 3D LUT while in Full Gamut Calibration Mode:
From the Top Level Menu, Select System Menus:

Then select the Process button:

Then Select the Colour Grade Button:

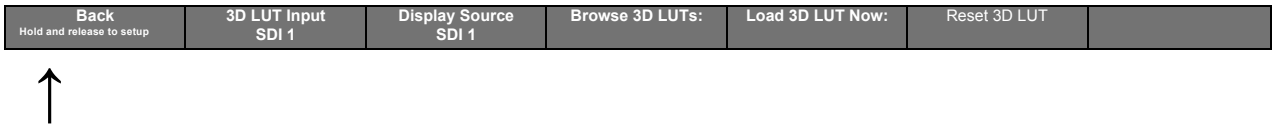
Press and Hold the Back button to enter the 3D LUT setup Menu:



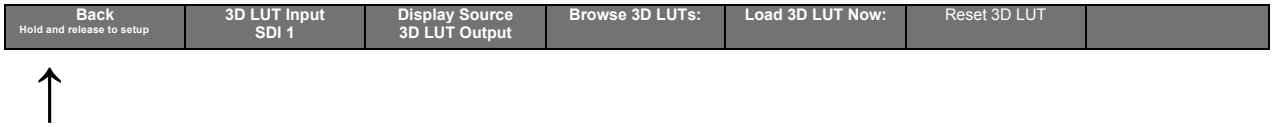
Set the 3D LUT File Location to the storage location you would like to access a 3D LUT from. Your Choices are Local, USB, and Remote:

Once you have set the 3D LUT File Location, return to the Colour Grade Menu:

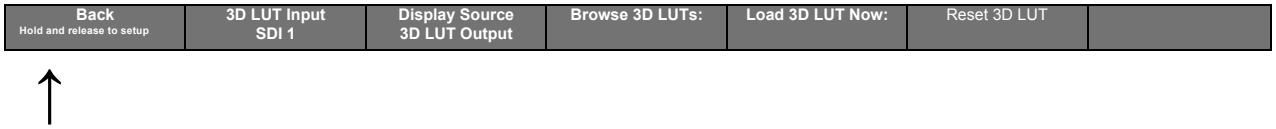
Set the 3D LUT Input to the Input you wish to apply a 3D LUT to:



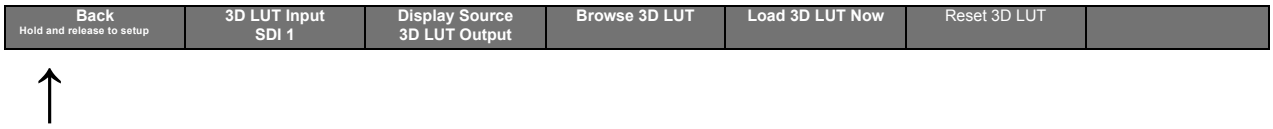
Then set the Display Source to 3D LUT OUTPUT:



Then select the 3D LUT you wish to apply with the Browse 3D LUT button:

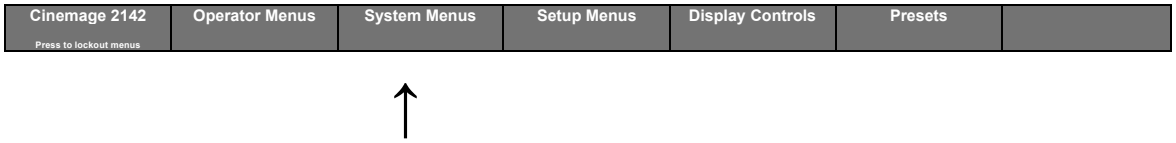


Finally, press the Load 3D LUT Now button, and your LUT will be applied from your selected file location to your selected input:



Loading a 3D LUT when in Gamut Controlled Mode

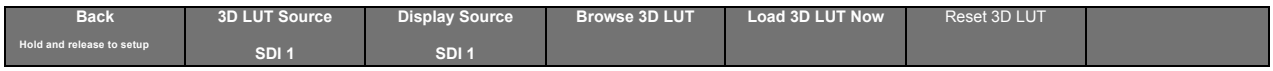
Use these steps to load and view a 3D LUT while in Wide Gamut Calibration Mode:
From the Top Level Menu, Select System Menus:



Then select the Process button:

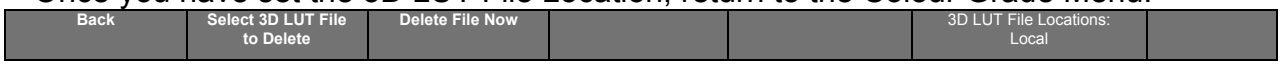
Then Select the Colour Grade Button:

Press and Hold the Back button to enter the 3D LUT setup Menu:



Set the 3D LUT File Location to the storage location you would like to access a 3D LUT from. Your Choices are Local, USB, and Remote:

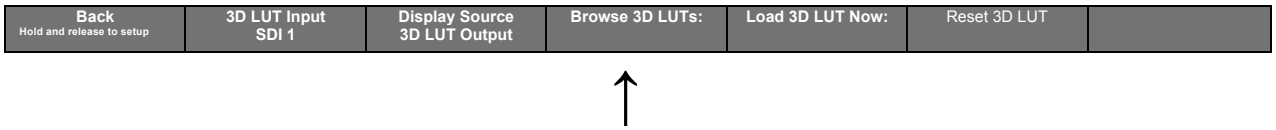
Once you have set the 3D LUT File Location, return to the Colour Grade Menu:



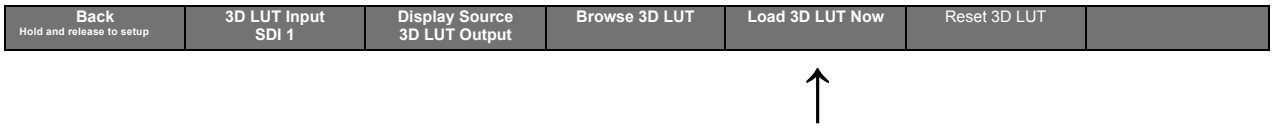
Note #1 With the Gamut Controlled mode of Calibration, the monitor is already utilizing the 3D LUT of the Cinemage and Cinemage B Series monitor. When turning on a 3D LUT in Gamut Controlled mode, you are concatenating the "creative" LUT with the Calibration LUT being applied to the monitor. Due to the nature of the Calibration LUT, the "creative" LUT is then applied to the display no mater what is being routed to it. This means that features such as Test Pattern Generator, Split Screen, and Quad Split will have the "creative" LUT applied. The only way to view the image without the "creative" LUT will be to turn off the "creative" LUT.

Note #2 With the Gamut Controlled mode of Calibration and the XYZ color space, you are using a special 3D LUT inside the monitor on top of the Calibration LUT to get it into a Gamut controlled mode. If you use a 3D "creative" LUT, the Gamut controlled Calibration LUT is turned off, so you are only viewing the XYZ color space and the "creative" LUT.

Then select the 3D LUT you wish to apply with the Browse 3D LUT button:



Finally, press the Load 3D LUT Now button, and your LUT will be applied from your selected file location to the display:



Loading an Input LUT

Use the following steps to load an input LUT:

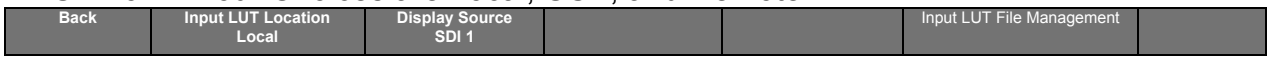
From the Main Menu select System Menus:

Then select the Process button:

Then Select the Input LUTs Button:

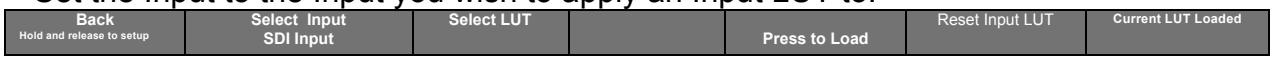
Press and Hold the Back button to enter the Input LUT setup Menu:

Set the Input LUT File Location to the storage location you would like to access an Input LUT from. Your Choices are Local, USB, and Remote:

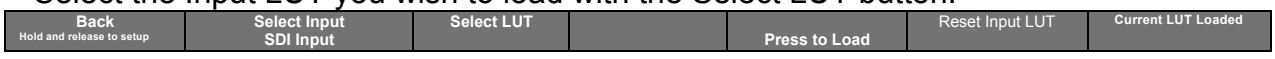


Once you have set the Input LUT File Location, return to the Colour Grade Menu:

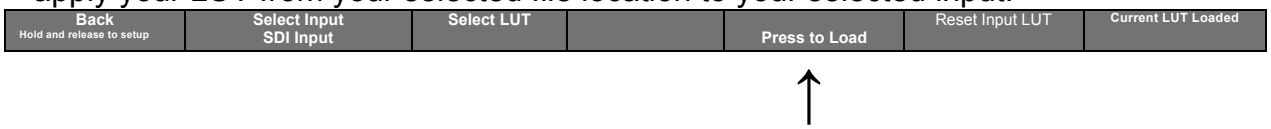
Set the Input to the Input you wish to apply an Input LUT to:



Select the Input LUT you wish to load with the Select LUT button:



Once you have selected the LUT you wish to load, use the Press to Load button to apply your LUT from your selected file location to your selected input:



Capturing, Loading, and Saving a Still Frame

Use these steps to capture, load, or save a still frame:

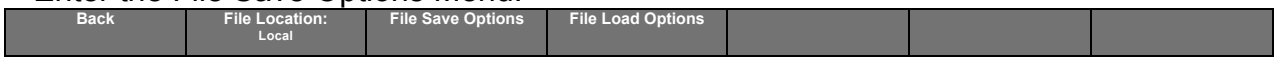
From the Main Menu select System Menus:

Then select the Process button:

Then Select the Framestore Button:

Press and Hold the Back button to enter the Framestore setup Menu:

Enter the File Save Options Menu:



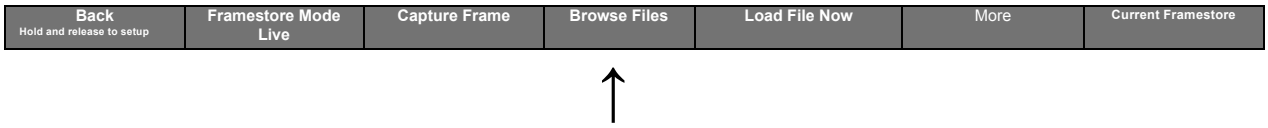
In the Framestore Setup Menu, set the save file format you wish to use.Your choices are .tif, .dpx, .png, .jpg, and .bmp.

Next select the Framestore File Location. Your choices are Local, Remote, and USB:

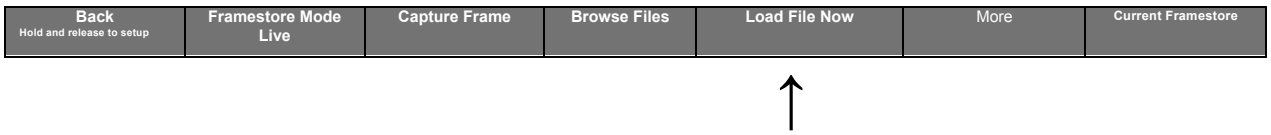
Then press the Back button twice to re-enter the Framestore menu:

(x2)

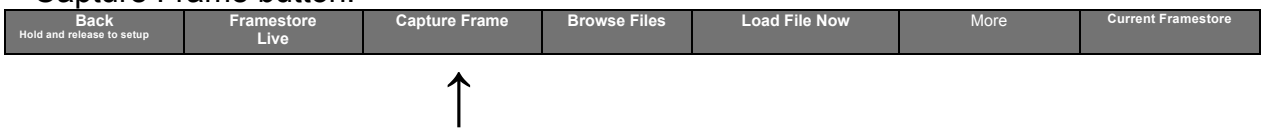
To load a Still Frame that you have already saved, locate the file using the Browse File button:



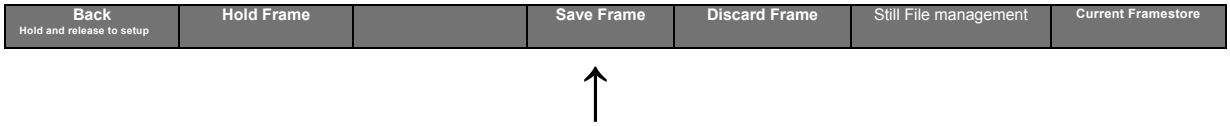
To load the selected file, simply press the Load File Now Button and the Framestore will automatically route to the display and your selected file will be loaded into the current Framestore Slot:



If you wish to capture a still frame from the current input routed to the display, select the Capture Frame button:



The Framestore Menu will advance to the Framestore Menu 2 automatically. To save the still frame to your selected file location in your selected format, simply press the Save Frame button:



Section 2: Setting Up Your System

Chapter 5: Setup Overview

Setup Menus

To access the Setup Menus select “Setup Menus” from the Main Menu

Main Menu

Cinemage 2142 Press to lockout menus	Operator Menus	System Menus	Setup Menus	Display Controls	Presets	

Upon pressing the Setup Menus button you will get the following menu:

Setup Menus

Back	Unit Information	Video & Display Setup Preset & Preferences Setup Network & USB DatakeySetup Resets	

Back
Returns to the Top Menu

Unit Information
Takes you to the Unit Information Menu

Video & Display Setup
Takes you to the Video &Display Setup Menu

Preset & Preferences Setup
Takes you to the Preset and Preferences Setup Menu

Network & USB Setup
Takes you to the Network and USB Data Setup Menu

Resets
Takes you to the Resets Menu

Chapter 6: Unit Information Menus

To access the Unit Information Menus select “Unit Information” from the Setup Menus

Setup Menus

Back	Unit Information	Video & Display Setup	Preset &Preferences Setup	Network &USB Datakey Setup	Resets	

Upon pressing the Unit Information button you will get the following menu:

Unit Information Menus 1

Back	Unit Information: Updates: v3.0, v2.2, v2.2	IP Addresses: 192.168.1.123 Hold and release for details	MAC Addresses: 00-04-5F-82-56-A3	TCP/IP Machine name: Cinetal-316453	More	

Back
Returns to the Main Menu

Unit Information
Provides information on software and firmware versions. Pressing this button will cause the soft menu key to advance to the next section of the unit information menu.

IP Address
The current I/P address for the machine. This may be either a static I/P address or a DHCP Address. (see network setup for more information) If you press and hold this button it will take you into a network status menu.

MAC Addresses
Display the MAC address for the systems wired and wireless network interface[Option].

TCP/IP Machine Name
Provides the UNC designator for the machine on the network. This is used to set a network path **to** the machine from a network workstation.
example: //cinetal-316012

More
Takes you to Unit Information Menu 2

Unit Information Menus 2

Back	Options: Display Calibration: Enabled	Diagnostics: None	Network Status: Network Startup Complete	SerialNumber: 0604-316023	More	

Back
Returns to the Unit Information Menu 1

Options
Provides information on software options enabled. Pressing this button will update the screen with the next option and its status.

Diagnostics
For internal use only

Network Status
Displays status of network startup and acquisition.

Serial Number
Displays System Serial Number.

More
Takes you to Unit Information Menu 3

Unit Information Menus 3

Back	Update From USB: Insert USB Key with Update	Current Date and Time: 5/10/2007 8:40pm				

Back
Returns to the Unit Information Menu 2

Update From USB
Updates to your system software can be downloaded from the Cine-tal website and loaded on your USB datakey. The update facility will only support one update at a time per key, and the unit will display the name of the update to be loaded. Use this button to run the update keeping your system up-to-date with the latest developments from Cine-tal.

Current Date and Time
Gives you a readout of the current date and time as set in the BIOS.

Note: The date and time must be set correctly in order to make use of temporary option licenses. Please see the preferences setup section for details on resetting the date and time.

Chapter 7: Video & Display Setup

Setup Menus

Back	Unit Information	Video &Display Setup	Preset &Preferences Setup	Network &USB Datakey Setup	Reset	

From the System Setup menu select Video & Display Setup and you will get the following menu:

Main Menu: Setup Menus: Video & Display Setup

Back	Video Setup	Calibration Settings: Rec 709	Calibration Type: Full Gamut	Monitor Profiling	More Display Setup	Backlight Brightness: 20%

Video Setup
Takes you to the Video Setup Menu

Calibration Settings
Shows the current calibration standard being used by the monitor. Pressing this button will toggle through the available calibration standards available depending on what Calibration Type you are in. For Full Gamut mode the calibration standards include: DCI v1.0, Linear, Rec 709, Factory REC 709, Factory DCI v1.0, Factory Linear, and Custom (user defined). For Gamut Controlled mode the calibration standards include: Rec 709, Rec 709 D93, DCI, DCI XYZ, NTSC, NTSC D93, and PAL.

Note: Selecting any of the Factory calibration standards will not only return you to factory default settings for that standard, but it will also use the factory display profile to generate the calibration. Selecting any of the non-factory calibration standards will use the most recent display profile saved to the system.

Calibration Type
This will change the way that Calibration functions in the monitor. There are two options here: Full Gamut and Gamut Controlled. The LCD Panel in Cinemage and Cinemage B Series monitors has a Gamut that exceeds the REC 709 colorspace. Because of this, when the monitor is in REC 709 mode, colors can appear more saturated if they appear that way coming from the source. The monitor will show you exactly what is coming in. Full Gamut modes utilizes the full colorspace that the panel is capable of. Gamut Controlled mode will make the panel behave so that only the colorspace that it is in can be shown on the display. So if you are working in REC 709 in Gamut Controlled mode, you will only be able to see the REC 709 colorspace, and nothing beyond that. 3D LUT usage is different in Gamut Controlled mode. Because you are using a 3D LUT to bring the monitor into the desired colorspace, if you apply another 3D LUT, it is either on or off. There is no 3D LUT Routing to the display in Gamut Controlled mode.

Monitor Profiling
Enters the menu that allows you to profile your monitor and control the number of points to sample, giving a more accurate profile if desired. Allows you to change profile options and manage profiles that are saved to the machine. This menu can also give you access to resetting the probe.

More Display Setup
Enters the second display setup menu, giving you access to the Calibration settings menu, the calibration options menu, the manual calibration adjustments menu, blue only mode, and the measure menu.

Backlight Brightness
This feature can be controlled by the trackball on the Cinemage or the USB mouse on the Cinemage B Series and will allow you to set the intensity of the LCD panel backlight. ***Note:*** For best calibration results it is recommended that you set the backlight to the appropriate level before performing your calibration adjustments.

Main Menu: Setup Menus: Video & Display Setup

Back	Video Setup	Calibration Settings: Rec 709	Calibration Type: Full Gamut	Monitor Profiling	More Display Setup	Backlight Brightness: 20%

From the Video & Display Setup Menu, selecting Video Setup will display the following menu:

Main Menu: System Setup: Video & Display Setup: Video Setup Menu

Back	Dual Link Mode: 4:2:2 YCbCr Single-Link Hold and release for advanced options	Sync Source: Automatic	SDI Timing Master: Automatic	Current Format 1080 i 59.94 Hold and Release for setup	Input Limiting Mode: Undershoot & overshoot limited	

Dual Link [Option]
By setting “Dual Link Mode” to either 4:4:4 mode, the inputs and outputs of the monitor will be configured as 2 dual link inputs and 1 dual link output. Dual Link mode will not turn on automatically when a dual link signal is applied. When in **Full Gamut mode or Gamut Controlled** you must manually select between 4:2:2 YCbCr SMPTE, 4:2:2 YCbCr Full, YCbCr Undershoot Clipped, 4:2:2 YCbCr P3 (DCI), SD 4:2:2 601, Independent IO Control, 4:4:4: RGB Full, 4:4:4 RGB SMPTE, Dual-Link RGB Undershoot Clipped, Dual-Link YCbCr Full Range, Dual-Link YCbCr SMPTE Range, Dual-Link YCbCr Undershoot Clipped, or 4:4:4 XYZ (XYZ Internally).

Sync Source
This function sets the sync master for the entire unit. You may choose between **Free run**, **Analog** or **SDI**. If **SDI** is selected the **SDI Timing Master** Menu will appear in the menu bar. The user can then select from any of the **HD SDI** inputs or **Automatic**. In the **Automatic** mode Sync will follow whatever valid sync is routed to the display.

SDI Timing Master
When "Sync Source" is set to SDI you can choose which SDI input is the sync source. Automatic mode automatically selects the timing from whatever source is routed to the display.

Current Format
Automatically detects and displays the input format to the monitor. The Current Format Setup Menu (Hold and release to access this menu) provides the ability turn off the automatic detection mode and manually set the format when using the monitor to output test pattern signals or Framestore stills. Auto Format can **only be disabled if there is no video signal on the selected input** to prevent viewing irregularities, however if Auto Format is turned on with no video connected, it will disable the Framestore until a valid video source is attached to the monitor.

Input Limiting Mode
Cinemage allows you to control how the information above and below peak white is displayed. The following choices are available:

Full Range:
Provides viewing of the full legal value data range on the display. This means that data values below legal black are visible and data values above legal white are visible.

Undershoot & overshoot limited:
Clips values below legal black (16 for 8 bit data, 64 for 10 bit data) and clips values above legal white (240 for 8 bit data, 960 for 10 bit data).

Undershoot limited only:
Clips values below legal black (16 for 8 bit data, 64 for 10 bit data)

Chapter 8: Display Calibration: Full Gamut Mode

From the Main Menu, select Setup Menu to receive the following menu:

Main Menu: Setup Menus:

Back	Unit Information	Video & Display Setup	Preset &Preferences Setup	Network &USB Datakey Setup	Reset	

After selecting Video & Display Setup, you will get the following menu:

Back	Video Setup	Calibration Setting: Rec 709	Calibration Type: Full Gamut	Monitor Profiling	More Display Setup	

After selecting Monitor Profiling, you will get the following menu:

Main Menu: Setup Menu: Video & Display Setup: Monitor Profiling

Back	Auto Profile Display:	Change Sample Count	Profile Options	Manage Profiles	Reset Probe:	

Auto Profile Display
Will lead you through a set of on screen instructions to profile your display

Change Sample Count
Allows you to determine the number of sample points the Auto Profile uses when creating a new profile for your display

Profile Options
Allows you to determine the amount of oversampling the Auto Profile will perform as well as Sample space shape and profiler output format

Manage Profiles
Loads profiles stored in the display as well as reverts to backup profiles or factory profiles

Reset Probe
Clears out current probe settings and reanalyzes what you are currently using as your probe

Auto Profile Display: Full Gamut:

Main Menu: Setup Menu: Video & Display Setup: Monitor Profiling

Back	Auto Profile Display:	Change Sample Count	Profile Options	Manage Profiles	Reset Probe:	

By pressing Auto Profile Display, you can follow on screen directions to create a profile for your display and create a calibration LUT for the display. The Auto Profile Display is adjusted by "Change Sample Count" and "Profile Options"

Main Menu: Setup Menu: Video & Display Setup: Monitor Profiling

Back	Auto Profile Display:	Change Sample Count	Profile Options	Manage Profiles	Reset Probe:	

By pressing Change Sample Count, you will be taken to the following menu:

Main Menu: Setup Menu: Video & Display Setup: Monitor Profiling: Change Sample Count

Back	Sample Count: Use trackball	Reset Sample Count				Sample Count: 64

Back
Returns you to the previous menu

Sample Count
Allows you to use the USB mouse or trackball and change the sample count used in the automatic profiling option

Reset Sample Count
Resets the sample count to the default 18

USB Mouse/Trackball/Sample Count
Adjusts the sample count to desired number

Main Menu: Setup Menu: Video & Display Setup: Monitor Profiling

Back	Auto Profile Display:	Change Sample Count	Profile Options	Manage Profiles	Reset Probe:	

By pressing Profile Options, you will be taken to the following menu:

Main Menu: Setup Menu: Video & Display Setup: Monitor Profiling: Profile Options

Back	Sample Space Shape	Profiler Output Format	Change Oversample Rate			

Sample Space Shape
Lists what sample space you are using for the automatic profile

Profiler Output Format
Lists what format the profiler output is in

Change Oversample Rate
Takes you to a menu very similar to the Sample Count menu and allows you to use the USB mouse or trackball to change the oversample rate. Also allows you to reset to the default oversample rate.

Main Menu: Setup Menu: Video & Display Setup: Monitor Profiling

Back	Auto Profile Display:	Change Sample Count	Profile Options	Manage Profiles	Reset Probe:	

By pressing the Manage Profiles button you will be taken to the following menu:

Main Menu: Setup Menu: Video & Display Setup: Monitor Profiling: Manage Profiles

Back Hold and release for advanced options		Revert to Backup Profile	Revert to Factory Profile		Regenerate Gamut Control Calibration LUTs:	

Back
If held and released, the final two options on the menu appear

Revert to Backup Profile
If a backup profile is available, pressing this button will revert to the backup

Revert to Factory Profile
If a factory profile is available, pressing this button will revert to the factory default

Regenerate Gamut Control Calibration LUTs:
After selecting which profile you are using, this will create a new LUT to match the monitor to the desired colorspace. This utilizes the factory calibration in the monitor and creates a new Calibration LUT to match the factory calibration to the desired colorspace.

Main Menu: System Setup Menu: Video & Display Setup

Back	Video Setup	Calibration Settings:	Calibration Type	Monitor Profiling	More Display Setup	Backlight:

Selecting More Display Setup, you will get the following Display Setup menus:

Main Menu: System Setup: Video & Display Setup: More Display Setup Menu

Back	Adjust Calibration Settings	Profiling Options	Manual Calibration Adjustments	Blue Only Mode	Measure	Backlight Brightness: 20%

Adjust Calibration Settings
This will take you into the Calibration Settings menu to control the linear segment setting, and adjust the white point and gamma correction settings and saturation settings. Will also allow you to save Calibration Settings.

Profiling Options
Enters the Profiling Options menu to control the Display Source, toggle the flat field settings and turn it on and off, turn on probe auto-reading, and changing the dual-link settings.

Manual Calibration Adjustments

This menu allows you to manually adjust the display properties in a similar fashion to the conventional calibration found on CRT monitors. Adjustments made in this menu can be saved by overwriting one of the existing display profiles. For best results, Manual Calibration should be performed after an Auto Calibration to achieve your optimal monitor response curve.

Blue Only Mode
Causes the display to only output the Blue component of the video signal. Can be used to ensure proper monitor setup by viewing the Color Bars in blue only mode.

Measure
Enters the Measure menu

Backlight Brightness
This USB Mouse/Trackball controlled soft menu button will adjust the intensity of the backlight.

Adjust Calibration Settings: Full Gamut:

Main Menu: Setup Menu: Video & Display Setup: More Display Setup Menu

Back	Adjust Calibration Settings	Profiling Options	Manual Calibration Adjustments	Blue Only Mode	Measure	Backlight Brightness: 20%

Pressing the Adjust Calibration Settings button will take you to the following menu:

Setup Menu: Video & Display Setup: More Display Setup Menu: Calibration Settings

Back	Save Calibration Settings		Saturation	Linear Segment Enable: OFF Hold and release for setup	White Point	Gamma: 2.2

Back
Return to the previous menu

Save Calibration Settings
Enters the menu that enables you to save or overwrite existing calibration settings. For more information regarding this menu, please see the Manual Calibration Adjustment section of this manual.

Saturation
Allows you to use the USB mouse/trackball and adjust the Saturation on the screen. Also gives you the option of resetting the saturation to a default level.

Linear Segment Enable
Enabling the Linear Segment will add a linear segment to the exponential Gamma Correction Curve. This feature allows the monitor to fully comply with the technical specifications of Rec 709. Pressing and holding this button will enter the Linear Segment setup menu, allowing you to set the position and slope of the linear segment, as well as causing the monitor to enter an Uncalibrated ("Raw Panel") mode.

White Point
Enters the White Point Setup Menu, allowing you to select the color temperature and the CIE Observer.

Gamma
Use the USB Mouse/trackball to adjust the Gamma setting of the monitor

Main Menu: Setup Menu: Video & Display Setup: More Display Setup Menu: Adjust Calibration Settings

Back	Save Calibration Settings		Saturation	Linear Segment Enable: OFF Hold and release for setup	White Point	Gamma: 2.2

Pressing the Save Calibration Settings button will take you to the following menu:

Main Menu: System Setup: Video & Display Setup: More Display Setup Menu: Calibration Settings: Save Calibration Settings

Back	Calibration Settings to Overwrite: Custom 0	Overwrite Calibration Settings Now		Save Calibration Settings as New	Delete or Rename Calibration Settings	

Back
Returns you to the previous menu

Calibration Settings to Overwrite
Selects from one of the 6 custom calibration profiles or from the user definable REC 709, DCI, or Linear profiles to overwrite with your manual adjustments.

Overwrite Calibration Settings Now
Overwrites the calibration selected in the Calibration to Overwrite button.

Save Calibration Settings as New
Saves your manual changes to the calibration profile that you have elected to overwrite.

Delete or Rename Calibration Settings
Allows you to select and delete or rename any calibration loaded into the Cinemage.

Main Menu: Setup Menu: Video & Display Setup: More Display Setup Menu: Adjust Calibration Settings:

Back	Save Calibration Settings		Saturation	Linear Segment Enable: OFF Hold and release for setup	White Point	Gamma: 2.2

Pressing the Saturation button will take you to the following menu:

Back		Reset:				Saturation: 0

Back
Returns you to the previous menu

Reset
This will reset the Saturation point to the default setting.

USB Mouse/Trackbll
Use this to adjust the saturation setting.

Main Menu: Setup Menu: Video & Display Setup: More Display Setup Menu: Adjust Calibration Settings:

Back	Save Calibration Settings		Saturation	Linear Segment Enable: OFF Hold and release for setup	White Point	Gamma: 2.2

Pressing and holding the Linear Segment enable button will take you to the following menu:

Main Menu: Setup Menu: Video & Display Setup: More Display Setup Menu: Adjust Calibration Settings: Linear Segment Setup

Back	Linear Segment Position	Linear Segment Slope			Uncalibratied (Raw Panel) Mode:	Linear Segment Position:

Linear Segment Position
Pressing this button will select the linear segment position function to be controlled by the USB Mouse/trackball. The default position is .081, which is what is defined in the REC 709 specification.

Linear Segment Slope
Pressing this button will select the linear segment slope function to be controlled by the USB Mouse/trackball. The default slope is 4.50, which is what is defined in the REC 709 specification.

Uncalibrated (Raw Panel) Mode
Disables the Calibration LUT to allow you to see the effects of your calibration settings by letting you view the raw output to the panel.

Set White Point: Full Gamut:

Main Menu: Setup Menu: Video & Display Setup: More Display Setup Menu: Adjust Calibration Settings

Back	Save Calibration Settings		Saturation	Linear Segment Enable: OFF Hold and release for setup	White Point	Gamma: 2.2

Pressing the White point button will bring you to the following menu:

Main Menu: Setup Menu: Video & Display Setup: More Display Setup Menu: Adjust Calibration Settings: White Point

Back		Colour Temperature D65	Observer CIE 1931			

Colour Temperature

Allows you to select from 12 user definable white points, or select a custom white point. The Custom white point moves in steps of 100°K, and ranges from 4000°K to 9800°K, and is controlled by the trackball to the right.

Observer

Selects the observer of CIE 1962 (10 degrees) or CIE 1931 (2 degrees). If you are unsure about this setting please leave it at CIE 1931 or contact Cinetal Customer Support.

Profiling Options: Full Gamut:

Main Menu: Setup Menu: Video & Display Setup: More Display Setup Menu

Back	Adjust Calibration Settings	Profiling Options	Manual Calibration Adjustments	Blue Only Mode	Measure	Backlight Brightness: 20%

Pressing the Profile Options button will give you the following menu:

Main Menu: System Setup: Video & Display Setup: More Display Setup Menu: Profile Options

Back	Source: SDI 1	Flat Field Generator: 100% White	Flat Field Enable: On	Auto Read Probe: OFF	Dual Link: 4:2:2 YCbCr Single-Link	

Source
Selects the source routed to the display

Flat Field Generator
Selects the flat field to be routed to the display. Pressing this button will automatically route the Flat Field generator to the display. Choices of flat fields include Red, Green, Blue, 100% White, Black, and 17 steps of Grey.

Flat Field Enable
Turns on and off the Flat Field Generator. If the Flat Field Generator is routed to the display and you disable it, the previously routed signal will be routed to the display.

Auto Read Probe
Turning on the Auto Read Probe will open a subscript under the back button **IN THIS MENU ONLY**. Once your probe has been calibrated in the Measure menu, the probe will make periodic readings of the display. This can be used in conjunction with the Flat Field Generator button to measure Chromaticity and Linearity across the grey scale.

Dual Link[OPTION]
This menu toggles the Dual Link Modes in the monitor.

Manual Calibration Adjustments: Full Gamut:

Main Menu: Setup Menu: Video & Display Setup: More Display Setup

Back	Adjust Calibration Settings	Profiling Options	Manual Calibration Adjustments	Blue Only Mode	Measure	Backlight Brightness: 20%

Selecting Manual Calibration from the Display Setup menu displays the following menu:
Main Menu: Setup Menu: Video & Display Setup: More Display Setup: Manual Calibration Adjustments

Back	Brightness And Contrast	Adjust x, y, R,G,B Bias and Gain	Adjust High, Mid, Low	Adjust Detailed Calibration Points	Reset Corrections	

Back
Returns you to the Display Setup Menu

Brightness and Contrast
Allows access to the Brightness and Contrast menu to adjust the digital emulation of the brightness and contrast of the display during manual calibration.

Adjust x,y,R,G,B Bias and Gain
Accesses the menu to control the Display biases towards displaying R, G, and B values, as well as the signal gain settings for the R, G, and B components of the signal.

Adjust HIGH,MID, LOW
Accesses the menu allowing you to adjust the x, y, Y, R, G, and B values of the points along gamma curve. Adjustments are made to the gamma curve sections divided into low (1/3 closest to black), mid, and high (1/3 closest to white).

Adjust Detailed Calibration Points
Accesses the menu to make x, y, Y, R, G, and B values to each of the 17 points along the gamma curve that Cinemage identifies for profiling the monitor.

Reset Corrections
Resets all of the unsaved calibration changes that you have made to the monitor in the Manual Calibration menu. Changes made to the calibration profiles will have to be reset using this button as they will not be reset using the Reset menu found in the Setup menu.

Main Menu: Setup Menu: Video & Display Setup: More Display Setup: Manual Calibration Adjustments

Back	Brightness And Contrast	Adjust x, y, R,G,B Bias and Gain	Adjust High, Mid, Low	Adjust Detailed Calibration Points	Reset Corrections	

Pressing the Brightness and Contrast button will take you to the following menu:

Main Menu: Setup Menus: Video & Display Setup: More Display Setup: Manual Calibration Adjustments: Brightness and Contrast

Back		Reset Brightness	Reset Contrast	Brightness	Contrast	Brightness 0

Back
Returns you to the Manual Calibration menu

Reset Brightness
Resets any adjustments made to the brightness setting back to their original position.

Reset Contrast
Resets any adjustments made to the contrast setting back to their original position.

Brightness
Selects the brightness setting for adjustment controlled by the USB Mouse/trackball to the right of the monitor

Contrast
Selects the contrast setting for adjustment controlled by the USB Mouse/trackball at the right of the monitor

Special Note about Brightness and Contrast
Cinemage emulates the contrast control of a CRT by manipulating the response of the LCD; due to the nature of LCD technology contrast and brighness will start clipping very quickly when these controls are manipulated up. In the general case you will get a better result by manipulation of the backlight and gamma than with the Brightness and Contrast, as backlight and gamma are native LCD controls, not emulated CRT controls.

Main Menu: Setup Menu: Video & Display Setup: More Display Setup: Manual Calibration Adjustments

Back	Brightness And Contrast	Adjust x, y, R,G,B Bias and Gain	Adjust High, Mid, Low	Adjust Detailed Calibration Points	Reset Corrections	

Pressing the Adjust x, y, R, G, B Bias and Gain will give you the following menu:

Main Menu: Setup Menus: Video & Display Setup: More Display Setup: Manual Calibration Adjustments: x,y,R,G,B Bias and Gain menu 1

Back	Red Bias	Green Bias	Blue Bias	More	Flat Field Display	Red Bias 0

Back
Takes you back to the second Manual Calibration menu.

Red Bias
Allows you to adjust the monitor's response curve upward for the Red component by using the trackball located at the right of the monitor. Effects of the bias adjustment will be more visible towards the black end of the shading spectrum.

Green Bias
Allows you adjust the monitor's response curve upwards for the Green component by using the trackball located at the right of the monitor. Effects of the bias adjustment will be more visible towards the black end of the shading spectrum.

Blue Bias
Allows you to adjust the monitor's response curve upwards for the Blue component by using the trackball located at the right of the monitor. Effects of the bias adjustment will be more visible towards the black end of the shading spectrum.

More
Advances to the next menu

Flat Field Display
Sets the display to a flat field of black, 17 progressively brighter shades of grey, 100% white, 100% red, 100% green, and 100% blue for display measurement and calibration.

Main Menu: Setup Menu: Video & Display Setup: More Display Setup: Manual Calibration Adjustments: x,y,R,G,B Bias and Gain menu 1

Back	Red Bias	Green Bias	Blue Bias	More	Flat Field Display	Red Bias 0

Pressing the More button will display the following menu:

Main Menu: Setup Menu: Video & Display Setup: More Display Setup: Manual Calibration Adjustments: x,y,R,G,B Bias and Gain menu 2

Back	Red gain	Green Gain	Blue Gain	Adjust x,y	Flat Field Display	Red Bias 0

Back
Returns to the x,y,R,G,B Bias and Gain menu 1

Red Gain
Adjusts the monitor's response curve by adding a multiplier to the red component curve by using the trackball to the right of the monitor. Effects of the adjustment to gain settings will be more visible towards the white end of the shading spectrum.

Green Gain
Adjusts the monitor's response curve by adding a multiplier to the green component curve by using the trackball to the right of the monitor. Effects of the adjustment to gain settings will be more visible towards the white end of the shading spectrum.

Blue Gain
Adjusts the monitor's response curve by adding a multiplier to the blue component curve by using the trackball to the right of the monitor. Effects of the adjustment to gain settings will be more visible towards the white end of the shading spectrum.

Adjust x, y
This trackball controlled menu item allows you to adjust the x and y color coordinates for the entire monitor response curve. Adjustments will be displayed in the format of Δx, Δy.

Set Flat Field
Sets the display to a flat field of black, 17 progressively brighter shades of grey, 100% white, 100% red, 100% green, and 100% blue for display measurement and calibration.

Main Menu: Setup Menu: Video & Display Setup: More Display Setup: Manual Calibration Adjustments

Back	Brightness And Contrast	Adjust x,y, R,G,B Bias and Gain	Adjust High, Mid, Low	Adjust Detailed Calibration Points	Reset Corrections	

Pressing the Adjust High, Mid, Low will give you the following menu:

Main Menu: Setup Menu: Video & Display Setup: More Display Setup: Manual Calibration Adjustments: Adjust High, Mid, Low menu 1

Back	Segment to Modify High	Adjust x	Adjust y	Adjust Y	More	Adjust x 0

Back
Returns to the More Display Setup menu.

Segment to Modify:
Selects either the High, Mid, or Low segment of the monitor's response curve to make adjustments to. High refers to the 1/3 of the curve closest to white, and Low refers to the 1/3 of the curve closest to black.

Adjust x
When selected, this button allows you to use the USB Mouse/trackball to the right of the monitor to make adjustments to the x color coordinate for the selected segment of the monitor's response curve.

Adjust y
When selected, this button allows you to use the USB Mouse/trackball to the right of the monitor to make adjustments to the y color coordinate for the selected segment of the monitor's response curve.

Adjust Y
When selected, this button allows you to use the USB Mouse/trackball to the right of the monitor to make adjustments to the luminance (Y) coefficient for the selected segment of the monitor's response curve.

More
Advances to the next menu

Main Menu: Setup Menu: Video & Display Setup: More Display Setup: Manual Calibration Adjustments: Adjust High, Mid, Low menu 1

Back	Segment to Modify High	Adjust x	Adjust y	Adjust Y	More	Adjust x 0

Pressing the More button will display the following menu:

Main Menu: Setup Menu: Video & Display Setup: More Display Setup: Manual Calibration Adjustments: Adjust High, Mid, Low menu 2

Back	Segment to Modify High	Adjust R	Adjust G	Adjust B		Adjust R 0

Back
Returns to the Adjust High, Mid, Low menu 1.

Segment to Modify:
Selects either the High, Mid, or Low segment of the monitor's response curve to make adjustments to. High refers to the 1/3 of the curve closest to white, and Low refers to the 1/3 of the curve closest to black.

Adjust R
When selected this button allows you to use the USB Mouse/trackball to the right of the monitor to adjust the red component of the monitor's response curve for the segment selected.

Adjust G
When selected this button allows you to use the USB Moue/trackball to the right of the monitor to adjust the green component of the monitor's response curve for the segment selected.

Adjust B
When selected this button allows you to use the USB Mouse/trackball to the right of the monitor to adjust the blue component of the monitor's response curve for the segment selected.

Main Menu: Setup Menu: Video & Display Setup: More Display Setup: Manual Calibration Adjustments

Back	Brightness And Contrast	Adjust x,y, R,G,B Bias and Gain	Adjust High, Mid, Low	Adjust Detailed Calibration Points	Reset Corrections	

Pressing the Adjust Detailed Calibration Points will give you the following menu:

Main Menu: Setup Menu: Video & Display Setup: More Display Setup: Manual Calibration Adjustments: Adjust Detailed Calibration Points menu 1

Back	Point to Modify 1	Adjust x	Adjust y	Adjust Y	More	Adjust x 0

Back
Takes you back to the Manual Calibration menu 2.

Point to Modify
Selects which of the 17 calibration points you would like to make adjustments to in order modify the monitor's response curve. If the Flat Field generator is in use, the flat field will automatically update to a grey field that matches the point on the curve. This allows the user to adjust the color balance and luminance at each point.

Adjust x
When selected this button allows you to use the USB Mouse/trackball to the right of the monitor to make adjustments to the x color coordinate for the calibration point you have selected.

Adjust y
When selected this button allows you to use the USB Mouse/trackball to the right of the monitor to make adjustments to the y color coordinate for the calibration point you have selected.

Adjust Y
When selected this button allows you to use the USB Mouse/trackball to the right of the monitor to make adjustments to the Luminance (Y) coefficient for the calibration point you have selected.

More
Advances to the next menu.

Main Menu: Setup Menu: Video & Display Setup: More Display Setup: Manual Calibration Adjustments: Adjust Detailed Calibration Points menu 1

Back	Point to Modify 1	Adjust x	Adjust y	Adjust Y	More	Adjust x 0

Pressing the More button will display the following menu:

Main Menu: Setup Menu: Video & Display Setup: More Display Setup: Manual Calibration Adjustments: Adjust Detailed Calibration Points menu 2

Back	Point to Modify 1	Adjust R	Adjust G	Adjust B		Adjust x 0

Back
Returns to the Adjust Detailed Calibration Points menu 1.

Point to Modify
Selects which of the 17 calibration points you would like to make adjustments to in order modify the monitor's response curve.

Adjust R
When selected this button allows you to use the USB Mouse/trackball to the right of the monitor to adjust the red component of the monitor's response curve for the calibration point selected.

Adjust G
When selected this button allows you to use the USB Mouse/trackball to the right of the monitor to adjust the green component of the monitor's response curve for the calibration point selected.

Adjust B
When selected this button allows you to use the USB Mouse/trackball to the right of the monitor to adjust the blue component of the monitor's response curve for the point selected.

Measure: Full Gamut: [Option]

This menu allows you to measure the response of the display.

Main Menu: Setup Menus: Video & Display Setup: More Display Setup

Back	Adjust Calibration Settings	Profiling Options	Manual Calibration Adjustments	Blue Only Mode	Measure	Backlight Brightness: 20%

Selecting Measure from the Display Setup Menu displays the following menu:

Main Menu: Setup Menus: Video & Display Setup: More Display Setup: Measure Menu

Back Target: x=.314, y=.345	READ CIE xyY x=.314, y=.345, Y=115Cd	READ CIE XYZ X=.314, Y=.345, Y=115 Cd	Select Calibration Video Source	Set Flat Field	Backlight Brightness 45%

Back

Returns you to the Display Setup Menu. Displays target CIE x,y measurements for rec 709 or D-Cinema if selected as Display LUT.

Read CIE xyY

Provides result of measurement in CIE xyY coordinates.

Read CIE XYZ

Provides result of measurement in CIE XYZ coordinates.

Select Calibration

Selects one of the calibration settings from either the preset defaults programmed into the display or from a list of custom calibrations created by the user

Video Soure

Allows you to change the video source displayed on the screen

Set Flat Field

Sets the display to a flat field of black, 17 progressively brighter shades of grey, 100% white, 100% red, 100% green, and 100% blue for display measurement

Backlight Brightness

This is controlled by either the USB Mouse or the Trackball. Sets the brightness of the backlight. This should be done first to set the total Luminance output desired for your calibration. The brightness control has 1,168 steps for accurate control of the backlight. The Measured output will be the “Y” result read back after calibration is completed. You may use the Measure menu located in the display setup menu to pre-set the backlight before you do your first calibration.

Steps to calibrate your display: Full Gamut

[Option]

Before navigating to the Display Setup menu plug the GretagMacbeth (GMB) calibration probe into the USB port. If the probe is not plugged in before navigating to this menu, the monitor will not be able to "see" the probe until the unit is restarted with the probe attached.

1. From the main menu press select "Setup Menus"
2. Select Video &Display Setup.
3. Select More Display Setup.
4. Select Measure (note: do not select Auto Calibrate yet).
5. If you are using the GMB EyeOne Pro place the probe on the white calibration tile provided with the probe and Select "Read CIE xyY" and follow the on screen directions. (on screen directions).Then place probe on the center of the display. If you are using the EyeOne Display 2 place the probe on a flat black surface (the top of the monitor works well) then press "Read CIE xyY". When finished place the probe on the center of the display.
6. Press "Flat Field" until you have "100% White" displayed.
7. Adjust the backlight to a comfortable setting for your current ambient environment.
8. Press "Measure Now".
   Read the results for display luminance out "Y" under "CIE x,y,Y" Adjust the backlight either up or down and repeat step 7-8 until you reached your desired luminance output setting. The readout will be in both Candelas and Foot Lamberts.
9. Press the back button twice to return to the Video & Display Setup Menu
10. Select "Monitor Profiling"
11. Hit the "Change Sample Count" to determine how accurate of a profile you want to perform on your display. The larger the sample count, the more accurate the profile will be. The tradeoff however is that the larger the sample count, the longer the profile will take to complete. After selecting the Sample Count size, hit the back button. The recommended size is 64.
12. Press the "Auto Profile Display" button and follow the on screen directions as they are given to you.
13. (On screen directions) If you are using a GretagMacbeth *EyeOne Display2* place the probe on a flat black surface (the top of the monitor works well) then press "press to calibrate probe". When finished place the probe on the center of the display. If you are using the GretagMacbeth *EyeOneDesign* place the probe on the calibration tile provided with the Eye One Design and Press "Place Probe and Press". Use the LCD mounting device provided with the Eye One Design and mount the probe on the middle of the display.
14. Check the results and make adjustments to the backlight for Luminance level, and Manual Calibration settings as needed until you have the desired results. ***Note:*** There is no need to perform another Auto Profile of the monitor after making manual calibration adjustment. Performing another Auto Profile may cause unintended effects due to the nature of the calibration process.
15. Save the results of your manual calibration changes.
16. Calibration Complete.

Chapter 9: Display Calibration: Gamut Controlled Mode:

****A Note about Gamut Controlled Calibration Mode:** A new *Gamut controlled calibration mode* with integrated cineSpace 3D LUT calibration is now available. This is quite useful for newer revisions of Cinemage that feature a wide gamut ("WG") panel. Customers without this feature may contact Cine-tal technical support for information about an upgrade.

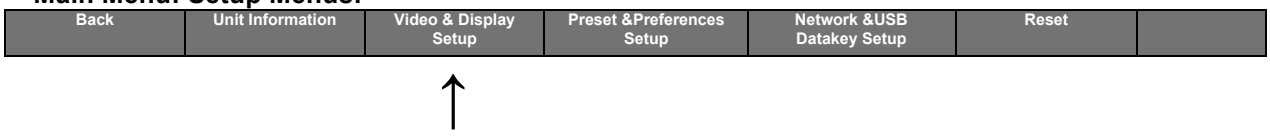
This calibration works by dynamically reading your existing monitor's profile and using proprietary cineSpace algorithms to generate a high-precision (65-points per side, or 274625-point) 3D LUT to remap the color gamut from the native panel gamut to that selected, calibrating the panel as part of the process. This means that when changing profiles the calibration 3D LUTs need to be regenerated, a computationally intense process that adds 2-3 minutes to a panel recalibration process. This feature requires that a hardware 3D LUT option be present inside your Cinemage monitor. This upgrade can be performed by Cine-tal, please contact support for more information.

If you have purchased the 3D LUT option you are free to continue this feature in conjunction with the existing 3D LUT reader with the following changes:
a. The 3D LUT output is *always* routed to the display.
b. 3D LUTs selected or loaded by the user are concatenated to the calibration 3D LUT so that the creative LUT occurs *before* the calibration LUT.

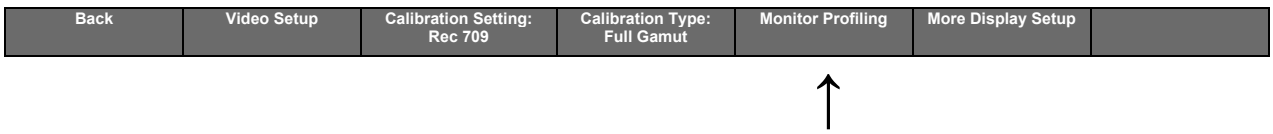
This feature allows complete emulation of a selection of color spaces, including primary, gamma, and white point mapping. As before, brightness, contrast, saturation, gamma, and RGB adjustments are available for manual adjustment. Note that some features (such as Dual-Link video input) are required for some features (such as XZY input).

From the Main Menu, select Setup Menu to receive the following menu:

Main Menu: Setup Menus:

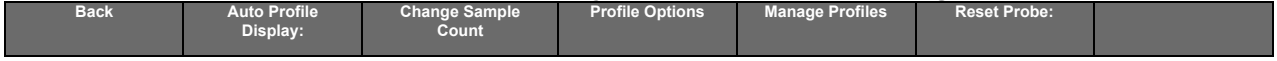


After selecting Video & Display Setup, you will get the following menu:



After selecting Monitor Profiling, you will get the following menu:

Main Menu: Setup Menu: Video & Display Setup: Monitor Profiling



Auto Profile Display
Will lead you through a set of on screen instructions to profile your display

Change Sample Count
Allows you to determine the number of sample points the Auto Profile uses when creating a new profile for your display

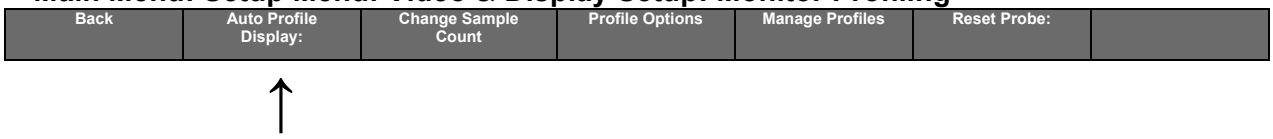
Profile Options
Allows you to determine the amount of oversampling the Auto Profile will perform as well as Sample space shape and profiler output format

Manage Profiles
Loads profiles stored in the display as well as reverts to backup profiles or factory profiles

Reset Probe
Clears out current probe settings and reanalyzes what you are currently using as your probe

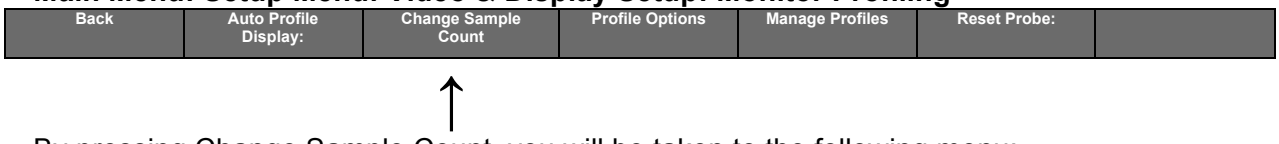
Auto Profile Display: Gamut Controlled:

Main Menu: Setup Menu: Video & Display Setup: Monitor Profiling



By pressing Auto Profile Display, you can follow on screen directions to create a profile for your display and create a calibration LUT for the display. The Auto Profile Display is adjusted by "Change Sample Count" and "Profile Options"

Main Menu: Setup Menu: Video & Display Setup: Monitor Profiling



By pressing Change Sample Count, you will be taken to the following menu:

Main Menu: Setup Menu: Video & Display Setup: Monitor Profiling: Change Sample Count

Back
Returns you to the previous menu

Sample Count
Allows you to use the USB mouse or trackball and change the sample count used in the automatic profiling option

Reset Sample Count
Resets the sample count to the default 18

USB Mouse/Trackball/Sample Count
Adjusts the sample count to desired number

Main Menu: Setup Menu: Video & Display Setup: Monitor Profiling

Back	Auto Profile Display:	Change Sample Count	Profile Options	Manage Profiles	Reset Probe:	

By pressing Profile Options, you will be taken to the following menu:

Main Menu: Setup Menu: Video & Display Setup: Monitor Profiling: Profile Options

Back	Sample Space Shape	Profiler Output Format	Change Oversample Rate			

Sample Space Shape
Lists what sample space you are using for the automatic profile

Profiler Output Format
Lists what format the profiler output is in

Change Oversample Rate
Takes you to a menu very similar to the Sample Count menu and allows you to use the USB mouse or trackball to change the oversample rate. Also allows you to reset to the default oversample rate.

Main Menu: Setup Menu: Video & Display Setup: Monitor Profiling

Back	Auto Profile Display:	Change Sample Count	Profile Options	Manage Profiles	Reset Probe:	

By pressing the Manage Profiles button you will be taken to the following menu:

Main Menu: Setup Menu: Video & Display Setup: Monitor Profiling: Manage Profiles

Back Hold and release for advanced options		Revert to Backup Profile	Revert to Factory Profile		Regenerate Gamut Control Calibration LUTs:	

Back
If held and released, the final two options on the menu appear

Revert to Backup Profile
If a backup profile is available, pressing this button will revert to the backup

Revert to Factory Profile
If a factory profile is available, pressing this button will revert to the factory default

Regenerate Gamut Control Calibration LUTs:
After selecting which profile you are using, this will create a new LUT to match the monitor to the desired colorspace. This utilizes the factory calibration in the monitor and creates a new Calibration LUT to match the factory calibration to the desired colorspace.

Main Menu: System Setup Menu: Video & Display Setup

Back	Video Setup	Calibration Setting: Rec 709	Calibration Type: Gamut Controlled	Monitor Profiling	More Display Setup	Backlight Brightness: 20%

Selecting More Display Setup, you will get the following Display Setup menus:

Main Menu: System Setup: Video & Display Setup: More Display Setup Menu

Back	Adjust Calibration Settings	Profiling Options	Manual Calibration Adjustments	Blue Only Mode	Measure	Backlight Brightness: 20%

Adjust Calibration Settings
This will take you into the Calibration Settings menu to control the linear segment setting, and adjust the white point and gamma correction settings and saturation settings. Will also allow you to save Calibration Settings.

Profiling Options
Enters the Profiling Options menu to control the Display Source, toggle the flat field settings and turn it on and off, turn on probe auto-reading, and changing the dual-link settings.

Manual Calibration Adjustments
This menu allows you to manually adjust the display properties in a similar fashion to the conventional calibration found on CRT monitors. Adjustments made in this menu can be saved by overwriting one of the existing display profiles. For best results, Manual Calibration should be performed after an Auto Calibration to achieve your optimal monitor response curve.

Blue Only Mode
Causes the display to only output the Blue component of the video signal. Can be used to ensure proper monitor setup by viewing the Color Bars in blue only mode.

Measure
Enters the Measure menu

Backlight Brightness
This USB Mouse/Trackball controlled soft menu button will adjust the intensity of the backlight.

Adjust Calibration Settings: Gamut Controlled:

Main Menu: Setup Menu: Video & Display Setup: More Display Setup Menu

Back	Adjust Calibration Settings	Profiling Options	Manual Calibration Adjustments	Blue Only Mode	Measure	Backlight Brightness: 20%

Pressing the Adjust Calibration Settings button will take you to the following menu:

Setup Menu: Video & Display Setup: More Display Setup Menu: Adjust Calibration Settings

Back	Linear Segment Position	Linear Segment Slope:			Uncalibrated (Raw Panel) Mode:	

Back

Return to the previous menu as well as gives you the opportunity to save the calibration settings (see below)

Linear Segment Position

Pressing this button will select the linear segment position function to be controlled by the USB Mouse/trackball. The default position is .081, which is what is defined in the REC 709 specification.

Linear Segment Slope

Pressing this button will select the linear segment slope function to be controlled by the USB Mouse/trackball. The default slope is 4.50, which is what is defined in the REC 709 specification.

Uncalibrated (Raw Panel) Mode

Disables the Calibration LUT to allow you to see the effects of your calibration settings by letting you view the raw output to the panel.

Setup Menu: Video & Display Setup: More Display Setup Menu: Adjust Calibration Settings

Back	Linear Segment Position	Linear Segment Slope:			Uncalibrated (Raw Panel) Mode:	

Pressing the Back button will take you to the following menu:

Main Menu: Setup Menu: Video & Display Setup: More Display Setup Menu: Adjust Calibration Settings: Back

Back	Save Calibration Settings		Saturation			Gamma: 2.2

Back

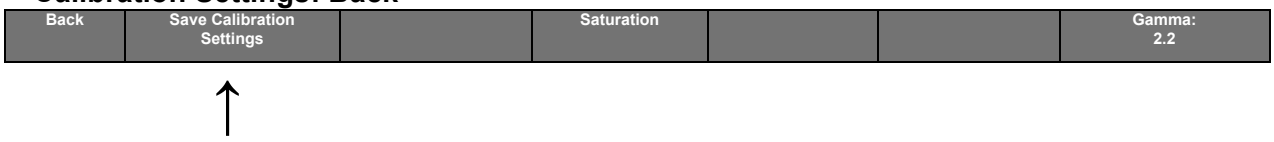
Returns you to the previous menu (More Display Setup)

Save Calibration Settings
Enters the menu that enables you to save or overwrite existing calibration settings. For more information regarding this menu, please see the Manual Calibration Adjustment section of this manual.

Saturation
Allows you to use the USB mouse/trackball and adjust the Saturation on the screen. Also gives you the option of resetting the saturation to a default level.

Gamma
Use the USB Mouse/trackball to adjust the Gamma setting of the monitor

Main Menu: Setup Menu: Video & Display Setup: More Display Setup Menu: Adjust Calibration Settings: Back



Pressing the Save Calibration Settings button will take you to the following menu:

Main Menu: System Setup: Video & Display Setup: More Display Setup Menu: Adjust Calibration Settings: Back: Save Calibration Settings

Back
Returns you to the previous menu

Calibration Settings to Overwrite
Selects from one of the 6 custom calibration profiles or from the user definable REC 709, DCI, or Linear profiles to overwrite with your manual adjustments.

Overwrite Calibration Settings Now
Overwrites the calibration selected in the Calibration to Overwrite button.

Save Calibration Settings as New
Saves your manual changes to the calibration profile that you have elected to overwrite.

Delete or Rename Calibration Settings
Allows you to select and delete or rename any calibration loaded into the Cinemage.

Main Menu: Setup Menu: Video & Display Setup: More Display Setup Menu: Adjust Calibration Settings: Back

Pressing the Saturation button will take you to the following menu:

Main Menu: Setup Menu: Video & Display Setup: More Display Setup Menu: Adjust Calibration Settings: Back: Saturation

Back
Returns you to the previous menu

Reset
This will reset the Saturation point to the default setting.

USB Mouse/Trackball
Use this to adjust the saturation setting.

Profiling Options: Gamut Controlled

Main Menu: Setup Menu: Video & Display Setup: More Display Setup Menu

Back	Adjust Calibration Settings	Profiling Options	Manual Calibration Adjustments	Blue Only Mode	Measure	Backlight Brightness: 20%

Pressing the Profile Options button will give you the following menu:

Main Menu: System Setup: Video & Display Setup: More Display Setup Menu: Profile Options

Back	Source: SDI 1	Flat Field Generator: 100% White	Flat Field Enable: On	Auto Read Probe: OFF	Dual Link: 4:2:2 YCbCr Single-Link	

Source
Selects the source routed to the display

Flat Field Generator
Selects the flat field to be routed to the display. Pressing this button will automatically route the Flat Field generator to the display. Choices of flat fields include Red, Green, Blue, 100% White, Black, and 17 steps of Grey.

Flat Field Enable
Turns on and off the Flat Field Generator. If the Flat Field Generator is routed to the display and you disable it, the previously routed signal will be routed to the display.

Auto Read Probe
Turning on the Auto Read Probe will open a subscript under the back button **IN THIS MENU ONLY**. Once your probe has been calibrated in the Measure menu, the probe will make periodic readings of the display. This can be used in conjunction with the Flat Field Generator button to measure Chromaticity and Linearity across the grey scale.

Dual Link[OPTION]
This menu toggles the Dual Link Modes in the monitor.

Manual Calibration Adjustments: Gamut Controlled Mode:

Main Menu: Setup Menu: Video & Display Setup: More Display Setup

Back	Adjust Calibration Settings	Profiling Options	Manual Calibration Adjustments	Blue Only Mode	Measure	Backlight Brightness: 20%

Selecting Manual Calibration from the Display Setup menu displays the following menu:

Main Menu: Setup Menu: Video & Display Setup: More Display Setup: Manual Calibration Adjustments

Back	Brightness And Contrast	Adjust R,G,B Bias and Gain			Reset Corrections	

Back
Returns you to the Display Setup Menu

Brightness and Contrast
Allows access to the Brightness and Contrast menu to adjust the digital emulation of the brightness and contrast of the display during manual calibration.

Adjust x,y,R,G,B Bias and Gain
Accesses the menu to control the Display biases towards displaying R, G, and B values, as well as the signal gain settings for the R, G, and B components of the signal.

Reset Corrections
Resets all of the unsaved calibration changes that you have made to the monitor in the Manual Calibration menu. Changes made to the calibration profiles will have to be reset using this button as they will not be reset using the Reset menu found in the Setup menu.

Main Menu: Setup Menu: Video & Display Setup: More Display Setup: Manual Calibration Adjustments

Back	Brightness And Contrast	Adjust R,G,B Bias and Gain			Reset Corrections	

Pressing the Brightness and Contrast button will take you to the following menu:

Main Menu: Setup Menus: Video & Display Setup: More Display Setup: Manual Calibration Adjustments: Brightness and Contrast

Back		Reset Brightness	Reset Contrast	Brightness	Contrast	Brightness 0

Back
Returns you to the Manual Calibration menu

Reset Brightness
Resets any adjustments made to the brightness setting back to their original position.

Reset Contrast
Resets any adjustments made to the contrast setting back to their original position.

Brightness
Selects the brightness setting for adjustment controlled by the USB Mouse/trackball to the right of the monitor

Contrast
Selects the contrast setting for adjustment controlled by the USB Mouse/trackball at the right of the monitor

Special Note about Brightness and Contrast
Cinemage emulates the contrast control of a CRT by manipulating the response of the LCD; due to the nature of LCD technology contrast and brighness will start clipping very quickly when these controls are manipulated up. In the general case you will get a better result by manipulation of the backlight and gamma than with the Brightness and Contrast, as backlight and gamma are native LCD controls, not emulated CRT controls.

Main Menu: Setup Menu: Video & Display Setup: More Display Setup: Manual Calibration Adjustments

Back	Brightness And Contrast	Adjust R,G,B Bias and Gain			Reset Corrections	

Pressing the Adjust R, G, B Bias and Gain will give you the following menu:

Main Menu: Setup Menus: Video & Display Setup: More Display Setup: Manual Calibration Adjustments: R,G,B Bias and Gain menu 1

Back	Red Bias	Green Bias	Blue Bias	More	Flat Field Display	Red Bias 0

Back
Takes you back to the second Manual Calibration menu.

Red Bias
Allows you to adjust the monitor's response curve upward for the Red component by using the trackball located at the right of the monitor. Effects of the bias adjustment will be more visible towards the black end of the shading spectrum.

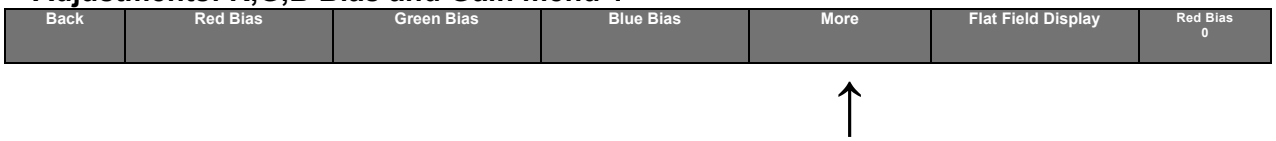
Green Bias
Allows you adjust the monitor's response curve upwards for the Green component by using the trackball located at the right of the monitor. Effects of the bias adjustment will be more visible towards the black end of the shading spectrum.

Blue Bias
Allows you to adjust the monitor's response curve upwards for the Blue component by using the trackball located at the right of the monitor. Effects of the bias adjustment will be more visible towards the black end of the shading spectrum.

More
Advances to the next menu

Flat Field Display
Sets the display to a flat field of black, 17 progressively brighter shades of grey, 100% white, 100% red, 100% green, and 100% blue for display measurement and calibration.

Main Menu: Setup Menu: Video & Display Setup: More Display Setup: Manual Calibration Adjustments: R,G,B Bias and Gain menu 1



Pressing the More button will display the following menu:

Main Menu: Setup Menu: Video & Display Setup: More Display Setup: Manual Calibration Adjustments: R,G,B Bias and Gain menu 2

Back
Returns to the R,G,B Bias and Gain menu 1

Red Gain
Adjusts the monitor's response curve by adding a multiplier to the red component curve by using the trackball to the right of the monitor. Effects of the adjustment to gain settings will be more visible towards the white end of the shading spectrum.

Green Gain
Adjusts the monitor's response curve by adding a multiplier to the green component curve by using the trackball to the right of the monitor. Effects

of the adjustment to gain settings will be more visible towards the white end of the shading spectrum.

Blue Gain
Adjusts the monitor's response curve by adding a multiplier to the blue component curve by using the trackball to the right of the monitor. Effects of the adjustment to gain settings will be more visible towards the white end of the shading spectrum.

Flat Field Display
Sets the display to a flat field of black, 17 progressively brighter shades of grey, 100% white, 100% red, 100% green, and 100% blue for display measurement and calibration.

Measure[Option]

This menu allows you to measure the response of the display.

Main Menu: Setup Menus: Video & Display Setup: More Display Setup

Back	Adjust Calibration Settings	Profiling Options	Manual Calibration Adjustments	Blue Only Mode	Measure	Backlight Brightness: 20%

Selecting Measure from the Display Setup Menu displays the following menu:

Main Menu: Setup Menus: Video & Display Setup: More Display Setup: Measure Menu

Back Target: x=.314, y=.345	READ CIE xyY x=.314, y=.345, Y=115Cd	READ CIE XYZ X=.314, Y=.345, Y=115 Cd	Select Calibration Video Source	Set Flat Field	Backlight Brightness 45%

Back

Returns you to the Display Setup Menu. Displays target CIE x,y measurements for rec 709 or D-Cinema if selected as Display LUT.

Read CIE xyY

Provides result of measurement in CIE xyY coordinates.

Read CIE XYZ

Provides result of measurement in CIE XYZ coordinates.

Select Calibration

Selects one of the calibration settings from either the preset defaults programmed into the display or from a list of custom calibrations created by the user

Video Soure

Allows you to change the video source displayed on the screen

Set Flat Field

Sets the display to a flat field of black, 17 progressively brighter shades of grey, 100% white, 100% red, 100% green, and 100% blue for display measurement

Backlight Brightness

This is controlled by either the USB Mouse or the Trackball. Sets the brightness of the backlight. This should be done first to set the total Luminance output desired for your calibration. The brightness control has 1,168 steps for accurate control of the backlight. The Measured output will be the “Y” result read back after calibration is completed. You may use the Measure menu located in the display setup menu to pre-set the backlight before you do your first calibration.

Steps to calibrate your display

[Option]

Before navigating to the Display Setup menu plug the GretagMacbeth (GMB) calibration probe into the USB port. If the probe is not plugged in before navigating to this menu, the monitor will not be able to "see" the probe until the unit is restarted with the probe attached.

17. From the main menu press select "Setup Menus"
18. Select Video &Display Setup.
19. Select More Display Setup.
20. Select Measure (note: do not select Auto Calibrate yet).
21. If you are using the GMB EyeOne Pro place the probe on the white calibration tile provided with the probe and Select "Read CIE xyY" and follow the on screen directions. (on screen directions).Then place probe on the center of the display. If you are using the EyeOne Display 2 place the probe on a flat black surface (the top of the monitor works well) then press "Read CIE xyY". When finished place the probe on the center of the display.
22. Press "Flat Field" until you have "100% White" displayed.
23. Adjust the backlight to a comfortable setting for your current ambient environment.
24. Press "Measure Now".
    Read the results for display luminance out "Y" under "CIE x,y,Y" Adjust the backlight either up or down and repeat step 7-8 until you reached your desired luminance output setting. The readout will be in both Candelas and Foot Lamberts.
25. Press the back button twice to return to the Video & Display Setup Menu
26. Select "Monitor Profiling"
27. Hit the "Change Sample Count" to determine how accurate of a profile you want to perform on your display. The larger the sample count, the more accurate the profile will be. The tradeoff however is that the larger the sample count, the longer the profile will take to complete. After selecting the Sample Count size, hit the back button. The recommended size is 64.
28. Press the "Auto Profile Display" button and follow the on screen directions as they are given to you.
29. (On screen directions) If you are using a GretagMacbeth *EyeOne Display2* place the probe on a flat black surface (the top of the monitor works well) then press "press to calibrate probe". When finished place the probe on the center of the display. If you are using the GretagMacbeth *EyeOneDesign* place the probe on the calibration tile provided with the Eye One Design and Press "Place Probe and Press". Use the LCD mounting device provided with the Eye One Design and mount the probe on the middle of the display.
30. Check the results and make adjustments to the backlight for Luminance level, and Manual Calibration settings as needed until you have the desired results. ***Note:*** There is no need to perform another Auto Profile of the monitor after making manual calibration adjustment. Performing another Auto Profile may cause unintended effects due to the nature of the calibration process.
31. Save the results of your manual calibration changes.
32. Calibration Complete.

Chapter 10: Preset / Preferences Setup

From the System Setup menu select Preset & Preferences Setup

Main Menu: Setup Menu

Back	Unit InformationVideo & Display Setup	Preset &Preferences Setup	Network &USB Datakey Setup	Reset	

You will get the following Preset &Preferences Setup menus:

Main Menu: Setup Menu: Preset &Preferences Setup Menu

Back	Manage Preferences	Manage Presets	Save Current As Startup Settings: Press to set current state as startup	Clear Startup Settings: Press to erase startup settings	Adjust Date and Time 5/10/2007 8:40pm	

Introduction to Presets and Preferences

The Cinemage™ stores user settings in two types of files:

Preferences constitute settings that are specific to a given machine and its network environment. Some of these things, such as selected network paths along with usernames and passwords, might be sensitive. Passwords are stored in clear text, so it's good practice to reset (see "reset" under System Setup Menu) the preferences to clear any sensitive security information when necessary. Here are some examples of things that are stored in preferences:

1. Network logons, paths, and passwords for remote file access.
2. FTP server settings (whether the server is enabled, and the current password).
3. Web settings (if the Web server is enabled).
4. Storage information; whether the system is set to use local, remote, or USB storage for stills and the various LUTs.

Presets files describe the way the system interacts with video and how it's used in the workflow. Presets are loaded from the front panel at the top-level menu; when you press the button the preset file is loaded and the name of the file appears. Here are some examples of things that are stored in a presets file:

1. Marker (Graticule) size and position.
2. Video standard (if not in automatic mode).
3. Heads-up display settings
4. Dual link mode vs. Single-link mode.
5. Routing.

Both files are standard XML, and are user-editable, most simply by cloning the system to a USB key, transferring the USB key to a standard computer (Mac or PC) editing the files, then cloning the USB key back to the system (See network / USB key setup).

*Note: The Cinemage is an embedded device, so that it cannot give the same kind of specific feedback regarding malformed XML that a desktop computer could give. Malformed or invalid user-edited XML may result in unpredictable behavior by the Cinemage unit. For that reason Cine-tal *__strongly__* suggests that you back up XML files before you attempt to edit them. Cine-tal does not have schema publicly available for these files at the current time, so it encourages users to use the front panel or web controls to configure the unit. Password storage is in clear text *__by design__*. Allowing users to edit the*

preferences file on their local computer (copied to a USB key, edited on a Mac or PC then reloaded into the Cinemage system). Preferences are loaded into the system when upon power-up and when a user clones a USB key to the system. They are re-written when shutting down the system and when cloning the system to a USB key.

Manage Preferences

The Manage Preferences menu allows you to reset the local preference file as well as copy it to and from a USB datakey. From the Preset / Preferences Setupmenu select Manage Preferences.

Main Menu: Setup Menu: Preset / Preferences Setup Menu

Back	Manage Preferences	Manage Presets	Save Current As Startup Settings: Press to set current state as startup	Clear Startup Settings: Press to erase startup settings	Adjust Date and Time 5/10/2007 8:40pm	

You will get the following Manage Preferences menu:

Main Menu: Setup Menu: Preset / Preferences Setup Menu: Manage Preferences 1

Back	Reset Preferences to Default	Load Preferences from USB	Save Preferences to USB	Reload PreferencesMORE	Network Status Network Startup Complete

Reset Preferences to Defaults

Resets preferences back to factory defaults. Removes any customer specific settings.

Load Preferences from USB.

Loads Preference file from the USB data key to the system.

Save Preferences to USB.

Saves Preference file from the system to the USB data key.

Reload Preferences

Reloads an edited preferences file

More

Advances to the next menu.

Main Menu: Setup Menu: Preset / Preferences Setup Menu: Manage Preferences 1

Back	Reset Preferences to Default	Load Preferences from USB	Save Preferences to USB	Reload Preferences	MORE	Network Status Network Startup Complete

After selecting More, you will be given the following menu:

Main Menu: Setup Menu: Preset / Preferences Setup Menu: Manage Preferences 2

Back	Save Preferences	Mouse Sensitivity:	USB Control Panel Setup	Trackball Sensitivity	Auto Blackout Time	

Back
Returns you to the previous menu

Save Preferences
Saves your preferences settings to the location you have specified; either Locally, to a USB Key, or to a Network Device.

Mouse Sensitivity
Adjust the Sensitivity of the mouse

USB Control Panel Setup
Takes you to the Remote Control Panel Setup Menu in order to turn on or off compatibility with the Remote Control Panel **[OPTION on Cinemage]**

Trackball Sensitivity
Sets the sensitivity of the Trackball is determined by pressing the button until the desired level is attained.

Auto Blackout Time
This is a screensaver function to help eliminate any LCD burn-in that may happen with the menus and the upper reference bar. The time selected is the amount of time that must pass without any menu selections being made before the blackout will occur. Only the menus and the upper reference bar will be blacked out. Any sources routed to the display will remain visible. Choices of Blackout Times include 15 seconds, 30 seconds, 1 minute, 5 minutes, 20 minutes, 1 hour, 8 hours, and 24 hours.

Remote Control Panel Setup

Main Menu: Setup Menu: Preset & Preferences Setup Menu: Manage Preferences 2

Back	Save Preferences		USB Control Panel Setup	Trackball Sensitivity	Auto Blackout Time	

After selecting the USB Control Panel Setup Selection, you will be given the following menu:

Main Menu: Setup Menu: Preset & Preferences Setup Menu: Manage Preferences 2: USB Control Panel Setup Selection:

Back	Control Panel Support:	Connection State	Port Name	State Flags		

Back
Takes you back to the previous menu

Control Panel Support
Toggles support for the Remote Control Panel ON or OFF

Connection State
Notifies the user of the current state of the Remote Control Panel with the Cinemage.

Port Name
Used for diagnostic purposes only

State Flags
Used for diagnostic purposes only

Manage Presets

The Manage Presets menu provides management of the naming and storage locations of your presets. Up to 20 presets may be stored on the local system and an unlimited number of presets can be stored on network file servers or the USB datakey. From the Preset / Preferences Setupmenu select Manage Presets.

Main Menu: Setup Menu: Preset/Preferences Setup Menu

Back	Manage Preferences	Manage Presets	Save Current As Startup Settings: Press to set current state as startup	Clear Startup Settings: Press to erase startup settings	Adjust Date and Time 5/10/2007 8:40pm	

You will get the following Manage Presets menu:

Main Menu: System Setup: Preset / Preferences Setup Menu: Manage Presets

Back	Choose Preset 0	Location Local	Save Preset as New 1	Overwrite Existing Preset	Delete or Rename Preset	

Choose Preset

Selects the preset to rename or delete.

Location

Selects the location from which you will choose presets to save or delete.

Save Preset as New

Save current chosen preset with a new name in the selected location.

Overwrite Existing Preset

Overwrites the chosen preset with the current system settings.

Delete or Rename Preset

Allows you to rename presets with custom names or delete presets.

Startup Settings

Main Menu: System Setup: Preset & Preferences Setup Menu

Back	Manage Preferences	Manage Presets	Save Current As Startup Settings: Press to set current state as startup	Clear Startup Settings: Press to erase startup settings	Adjust Date and Time:	

Save Current As Startup Settings:

Sets the bootup state of the monitor as the settings that will be applied every time the monitor reboots, and will disable saving settings at power down. In order to save your current configuration as the startup settings, you will need to power down once via the soft power switch, reboot (and confirm your settings), then select this button.

Clear Startup Settings

Will remove the settings you have designated as Startup Settings, and the monitor will revert to saving your settings on power down, and restore your last saved settings upon power up.

Adjust Date and Time

Allows you to make an adjustment to the date and time without having to enter the BIOS of the unit. This adjustment should only be made in the event that the Date and Time have been altered due to some static or other event that affected the original BIOS settings. Tampering with the Date and Time may result in the loss of any temporary feature licenses contained on the machine.

Chapter 11: USB Datakey Setup

The USB Datakey Setup Menu provides the ability to format a USB datakey and transfer data between the system and the datakey.

From the System Setup menu select Network &USB Datakey Setup**.**

Main Menu: System Setup Menu

Back	Video Setup	Display Setup	Preset /Preferences Setup	Network &USB Datakey Setup	Reset	

You will get the following Network &USB Datakey Setup menus:

Main Menu: System Setup: Network/USB Datakey Setup Menu

Back	Web / FTP Setup	Remote File Setup	File Sharing Setup	Wireless Setup	USB Datakey Setup	

Select USB DataKey Setup for the following menu:

Main Menu: System Setup: Network/USB Datakey Setup: USB Datakey Setup Menu

Back	Format & Prepare USB Key	Clone TO/ FROM USB	USB File Copy	Setup Lockout With USB Key	Updates	

Format and Prepare USB

This selection will completely erase all files and directories on the USB Device. Once formatted, the Key will have the Cine-tal file format loaded on the device. on the USB Datakey.

Clone System To/From USB

Accesses the menu to copy all preferences, presets, LUT's and stills from the local storage area to or from the USB Datakey for storage.

USB file Copy

Accesses the menu to copy individual categories of files, such as 3D LUTs, Input LUTs, Presets, or Stills from the USB key to local memory or from local memory to the USB Key.

Setup Lockout with USB Key

Writes an unlock file to the USB Key and locks the Setup Menus to keep further changes from being made within these menus. Changes will only to be able to be made once the USB key with the unlock file has been inserted into the USB port of the unit. This keyed lockout will persist through a power cycle of the monitor.

Updates:

Gives access to the Updates menu to install software updates, revert from the last update, generate license lock codes, and update software licenses.

USB File Copy Menu:

Selecting USB File Copy from the USB Datakey Setup menu will give you the following menu:

Main Menu: System Setup: Network/USB Datakey Setup: USB Datakey Setup: USB File Copy

Back

Returns you to the previous menu

Disable USB Storage

Disables the ability to save any files to a USB datakey. When coupled with the keyed lockoutof the Setup Menu will ensure that sensitive data, such as proprietary 3D LUTs and stills of current productions, are not able to be saved to a USB storage device.

Copy Files From USB

Allows you to copy files from your USB Datakey to the corresponding folders in the monitor.

Copy Files to USB

Allows you to copy files from the monitor to the corresponding folders in your USB Datakey.

Updates Menu:

From the USB DataKey Setup menu, selecting Updates will give you the following menu:

Back	Update From USB Key:		GenerateLicence Lock Code:	Update Licence:		

Update From USB Key

Installs software updates from a USB datakey.

Generate Licence Lock Code

Generates a lock code for use with software updates obtained from Cine-tal. This is placed on a USB Datakey.

Update Licence

When a USB key with the lock and unlock code for a software upgrade is inserted, this button will “unlock” the software based upgrade. (See “Software Upgrade” in Appendix A).

Note: It is possible, although rare, for an update to fail due to an error in loading the FPGAs. This will result in some unpredictable behavior to be seen on the display. If you believe that an update has failed, please consult the readme file that corresponds with that particular update. All relevant readme files can be found at www.cine-tal.com/downloads.htm

Chapter 12: Network Setup

The Network Setup Menu provides setup and control functions for controlling WEB and FTP services, setting up a network file server location to store stills, LUTs, waveforms and presets. This menu also sets up the Cinemage system to share its locally stored information out to the network.

From the System Setup menu select Network &USB Datakey Setup**.**

Main Menu: System Setup Menu

Back	Unit Information	Video &Display Setup	Preset &Preferences Setup	Network &USB Datakey Setup	Reset	

You will get the following menus:

System Setup: Network/USB Datakey Setup Menu

Back	WEB / FTP Setup	Remote File Setup	File Sharing Setup	Wired/ Wireless Setup	USB Datakey Setup	

Web / FTP Setup

Web services and FTP services can be controlled with this menu. When selecting WEB / FTP Setup you will get the following menu.

Main Menu: Setup Menu: Network &USB Datakey Setup: Web/FTP Services

Back	Web Server: Enabled	FTP Server: Enabled	Fixed FTP User name: ftp_user	Current FTP Password	Change FTP Password	

Web Server

Turns Web Server on or off. When Web Server is on individuals with network connections can access the Cinemage unit through a standard web browser. (See Web Browser Menus)

FTP Server

Turns FTP Server on or off. When FTP Server is on individuals with network connections can upload and download stills, LUTs, waveforms and presets through a standard FTP client.

Fixed FTP Username

The FTP username is fixed and cannot be changed.

Current FTP Password

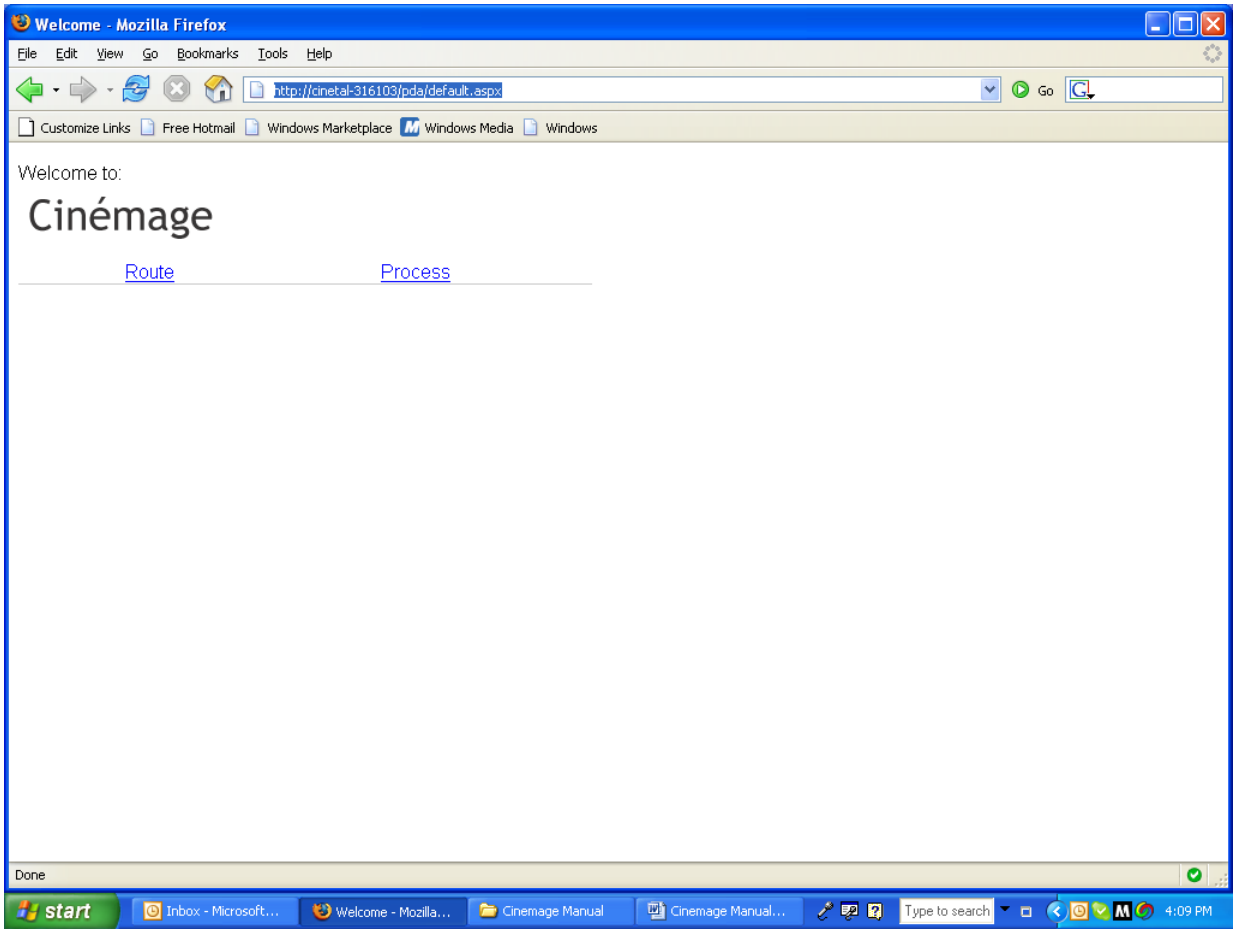
Displays the current FTP password in PLAIN TEXT.

Change FTP Password

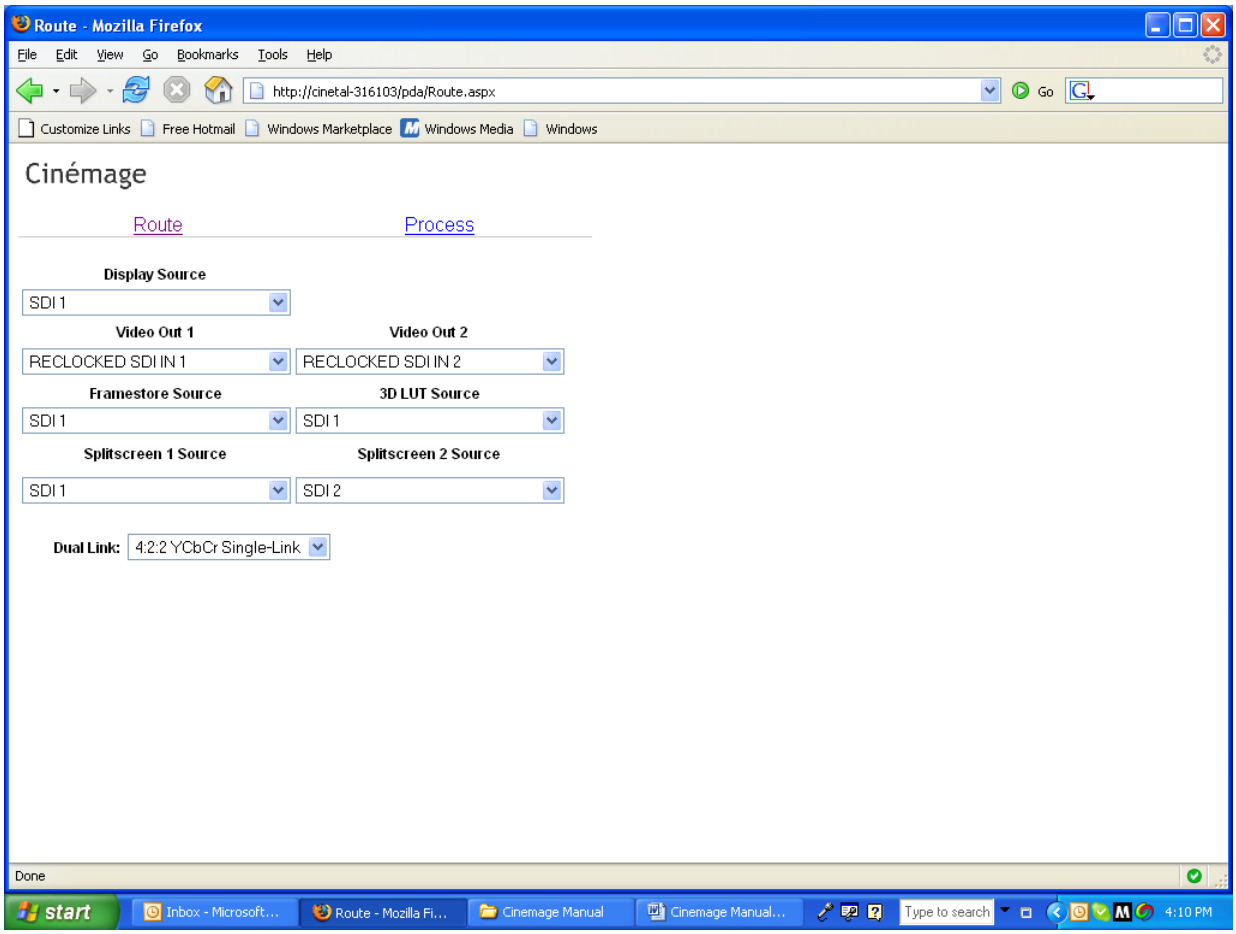
The FTP password can be changed through this menu.

Web Browser Menus

The web server can be utilized to control the Cinemage unit from a remote location. The web server accesses the most common features of the Cinemage unit, but does not enable full functionality. The web server will not display hyperlinks to options that are not enabled on the monitor that you are accessing. In order to make full use of the web service either File Sharing or Remote File Setup must be enabled and configured. For more information on these utilities please refer to their respective sections within this manual. With the web server enabled on the Cinemage unit, navigate to **http://cinetal-******/pda/default.aspx** in your web browser, with ****** being the last six digits of the unit's serial number, also the unit's machine name. The following web page will be displayed:

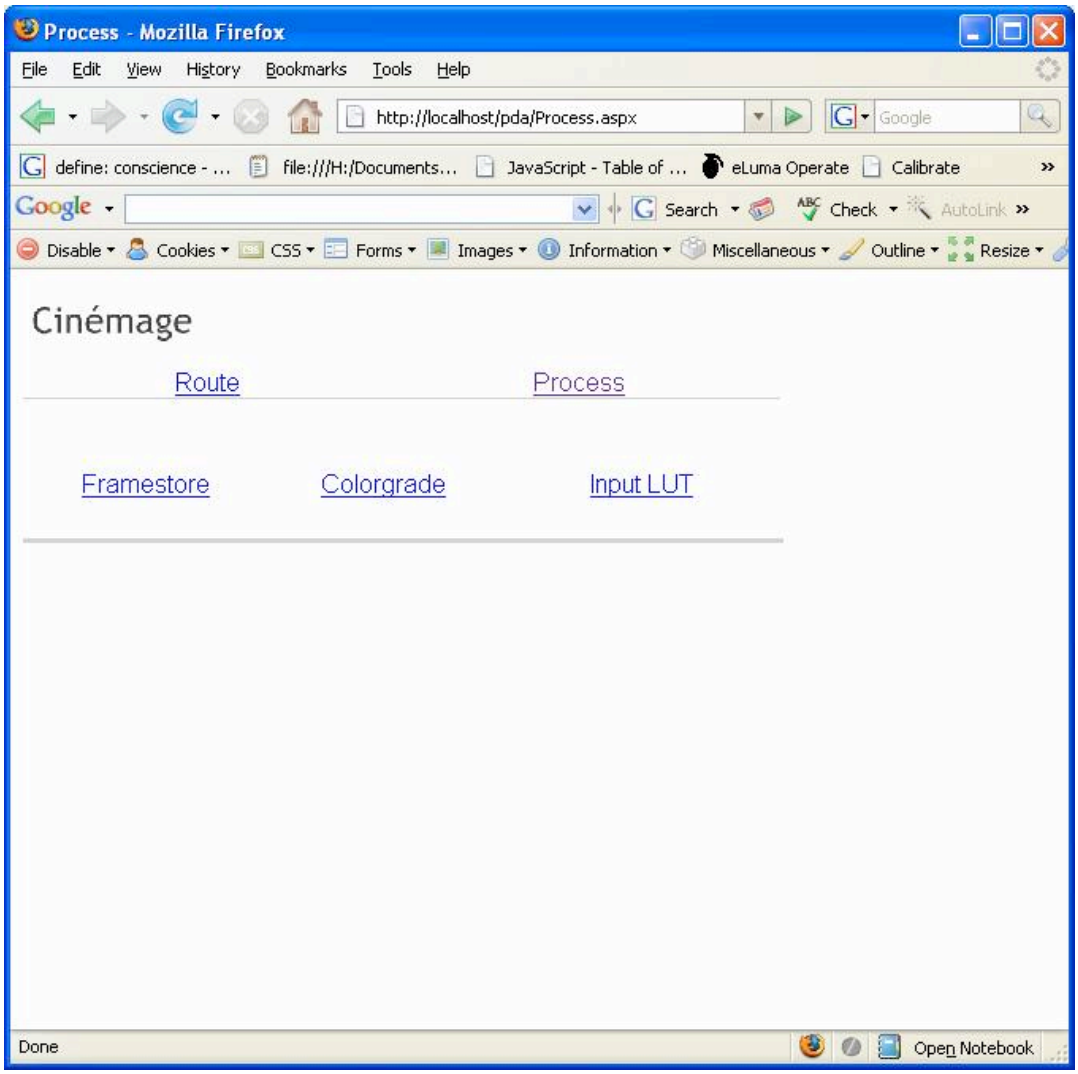


The “Route” hyperlink will take you to the following page, **http://cinetal-******/pda/Route.aspx**:



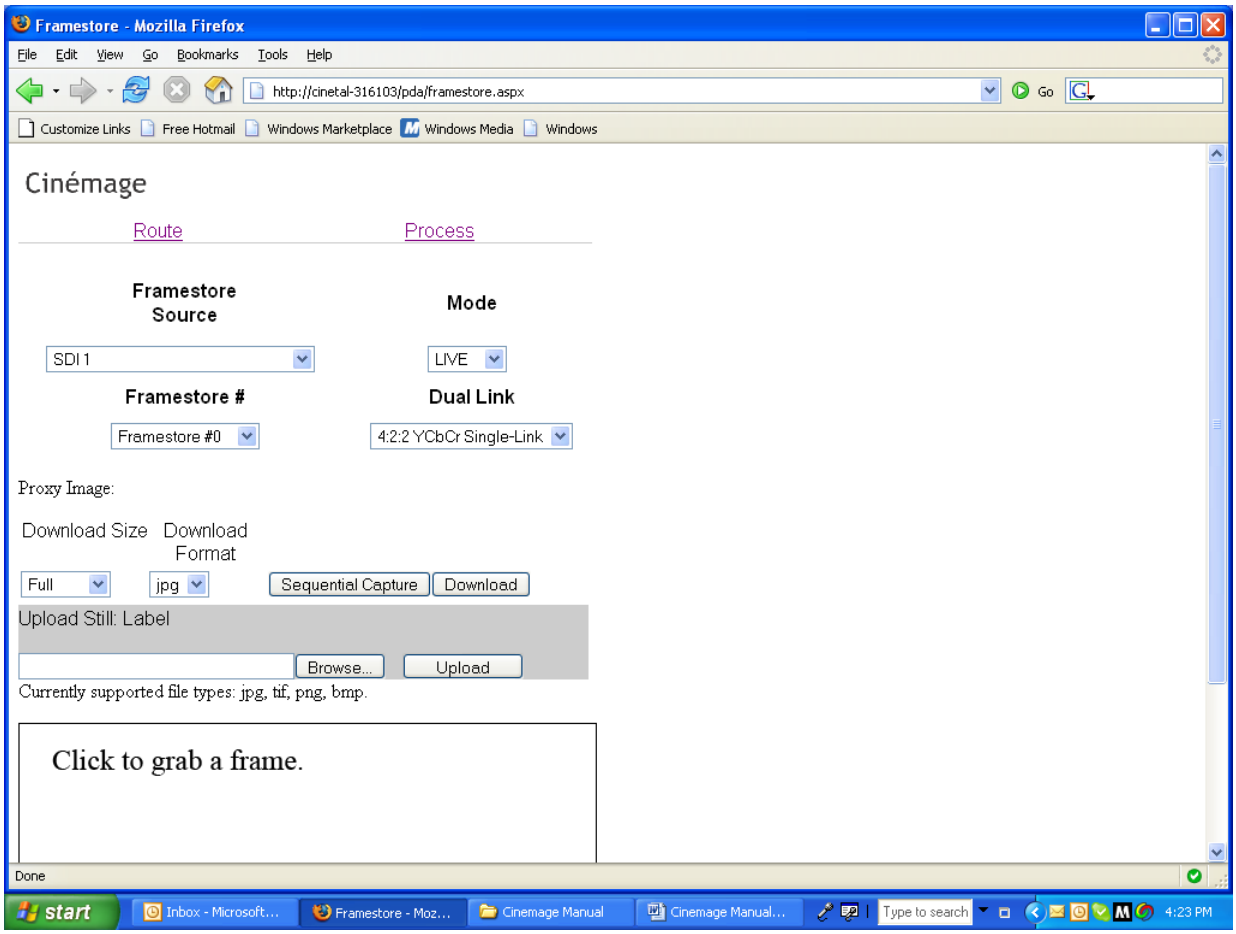
From this page you will be able to route any of the inputs or internal resources to the display or either of the HD-SDI outputs, as well as toggle between single and dual-link operation.

The “Process” hyperlink will take you to the following page,**http://cinetal-******/pda/Process.aspx:**



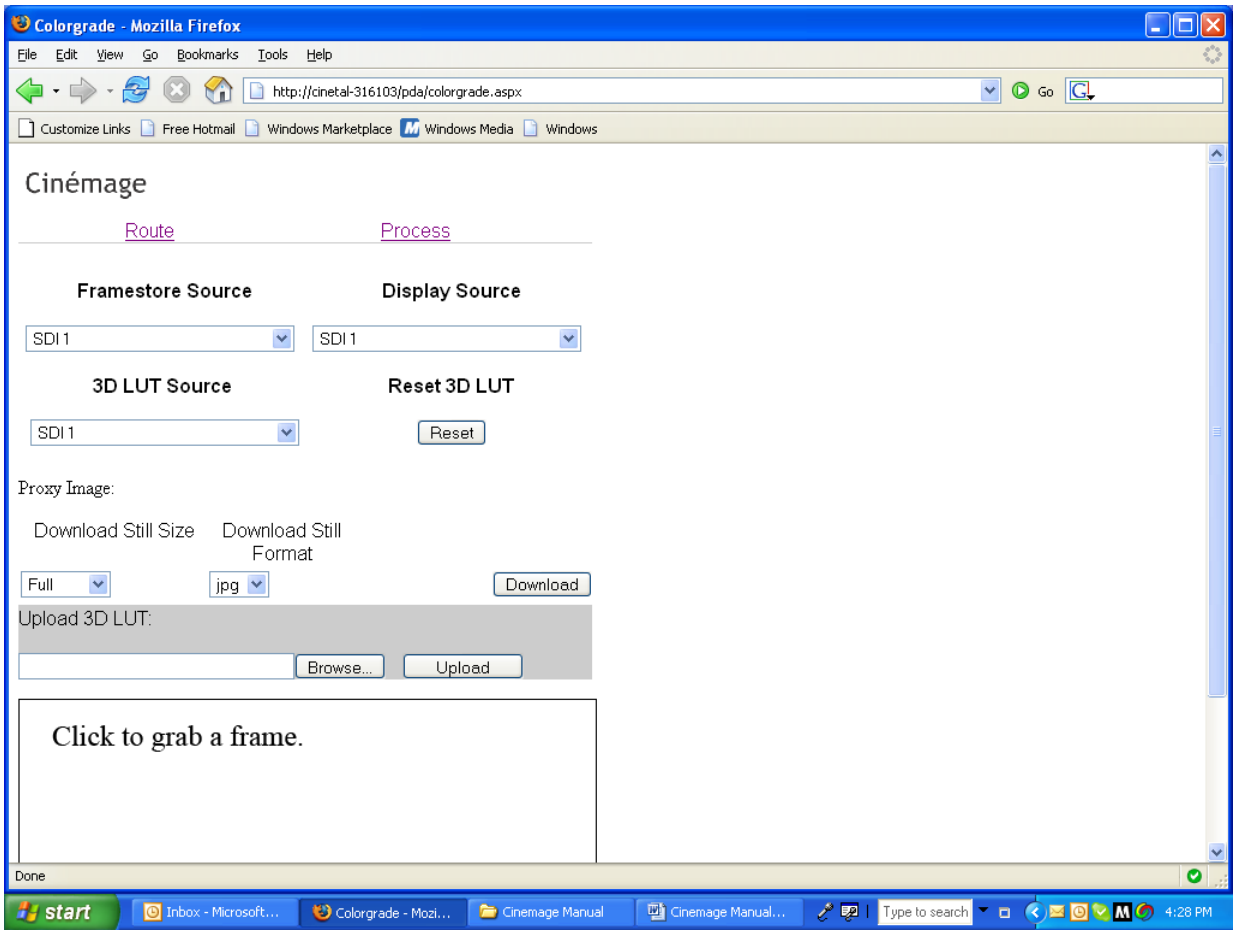
From this page you can access one of the three processing functions available through the web service; Framestore, Colorgrade, and Input LUT.

Following the “Framestore” hyperlink, you will be brought to the following page,**http://cinetal-******/pda/framestore.aspx:**



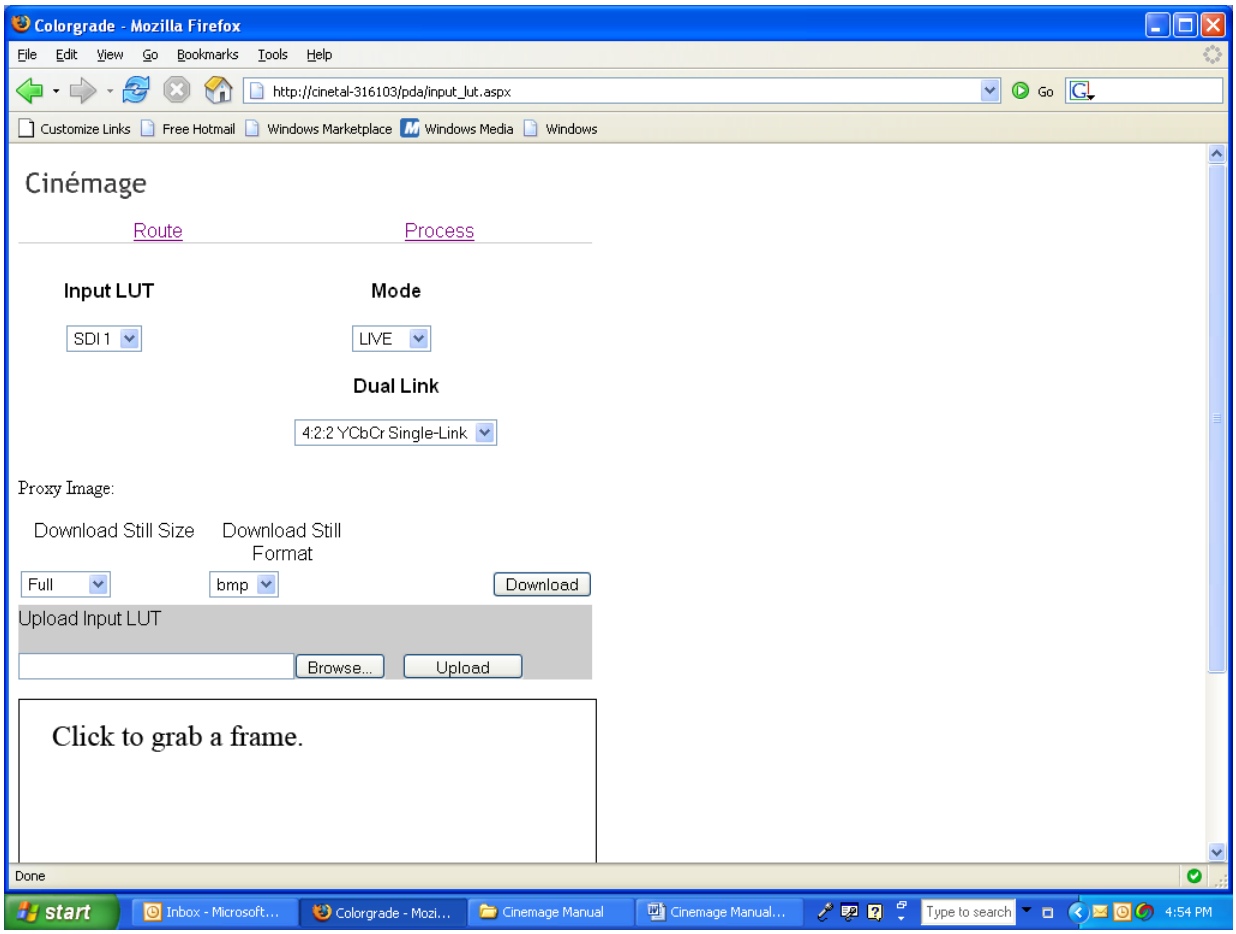
From this page you are able to route any of the inputs or internal resources to the Framestore, set the volatile Framestore number to be utilized, toggle between live and still modes, set the Proxy Image Capture parameters, upload a still, or click in the frame grab pane to capture a preview image. In order to load stills locally from the monitor you will have to enable file sharing. In order to load stills from a remote location, the remote file setup for Stills must be configured and enabled. For details on all of the functions of the Framestore, please refer to the Framestore section later in this manual.

Following the “Colorgrade” hyperlink, you will be brought to the following page, **http://cinetal-******/pda/colorgrade.aspx:**



From this page you are able to route any of the inputs or internal resources to the Framestore, to the Display, or to the 3D LUT processor. You are also able to set the FramestoreProxy Capture parameters, as well as click in the Frame Grab Pane to capture a reference still. In order to upload a 3D LUT to the monitor you will have to have the 3D LUT location set to where you are attempting to load the LUT from. If you are attempting to load LUTs locally from the monitor you must have file sharing enabled. To load 3D LUTs from a remote location, remote file setup must be enabled and configured for 3D LUTs. For a more detailed explanation of the 3D LUT feature, please refer to the “Colour Grade” section later in this manual.

Following the “Input LUT” hyperlink will bring you to the following page, **http://cinetal-******/pda/input_lut.aspx**

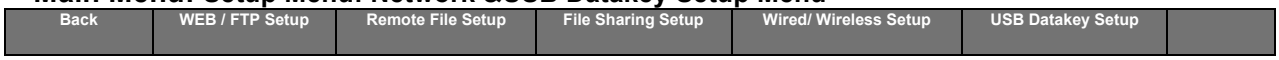


From this page you will be able to upload input LUTs to any of the HD-SDI inputs, set the Framestore Proxy Capture parameters, or click in the Frame Grab Pane to capture a reference still. In order to upload input LUTs to the monitor you must make sure that the input LUT location is set correctly. To load input LUTs locally from the monitor you must have file sharing enabled. For a more detailed description of Input LUTs, please visit the Input LUT section of this manual.

Remote File Setup

Remote file setup defines a network file server location for the system to store stills, Input LUTs, 3D LUTs and presets. From the Network / USB Datakey setup select Remote File Setup.

Main Menu: Setup Menu: Network &USB Datakey Setup Menu



The following menu will be displayed:

Setup Remote Storage Stills

This menu allows you to set a path, login and password to a network file server for network storage of stills loaded to or saved from the framestore. The Connect Now selection makes the remote connection to the file server from the Cinemage unit.

Setup Remote Storage Presets

This menu allows you to set a path, login and password to a network file server for network storage of Presets loaded to or saved from the system. The Connect Now selection makes the remote connection to the file server from the Cinemage unit.

Setup Remote Storage Input LUTs

This menu allows you to set a path, login and password to a network file server for network storage of Input LUTs loaded to or saved from the system. The Connect Now selection makes the remote connection to the file server from the Cinemage unit.

Setup Remote Storage 3D LUTs

This menu allows you to set a path, login and password to a network file server for network storage of 3D LUTs loaded to or saved from the system. The Connect Now selection makes the remote connection to the file server from the Cinemage unit.

File Sharing

File Sharing allows users on the network to have access to the local storage area on Cinemage. Users may access locally stored stills, LUTs, waveforms, and presets. From the Network / USB Datakey Setup Menu select File Sharing Setup.

Main Menu: Setup Menu: Network &USB Datakey Setup Menu

Back	WEB / FTP Setup	Remote File Setup	File Sharing Setup	Wired/ Wireless Setup	USB Datakey Setup	

The following menus will be displayed:

Main Menu: Setup Menus: Network & USB Datakey Setup: File Sharing Setup Menu

Back	Fixed Network ID: CINETAL-0511908	Fixed Sharing Username: Guest	Sharing Password: No Password Only	File Sharing Status		

Fixed Network ID

Displays the network ID for the machine.

Fixed Sharing Username

The username for the system is fixed at guest. You can't change the username.

Sharing Password

The password for file sharing is fixed at no password.

File Sharing Status

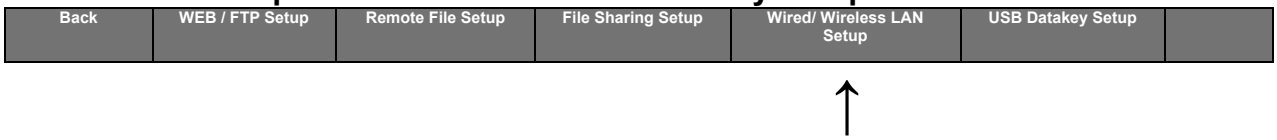
Allows you to turn file sharing on or off and displays the current status of file sharing.

Note: It may be necessary to cycle file sharing from "enabled" to "disabled", and then back to "enabled" to reset the network connection and allow access to Cinemage's files from a remote computer.

Wired/Wireless LAN Setup

From the Network & USB Datakey Setup Menu select Wired/ Wireless LAN Setup.

Main Menu: Setup Menu: Network & USB Datakey Setup:



The following menus will be displayed:

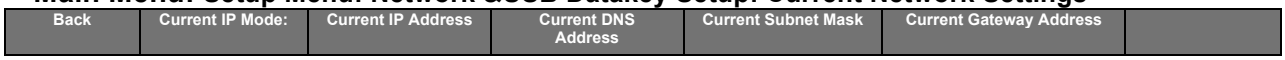
Main Menu: Setup Menu: Network & USB Datakey Setup: Wired/Wireless Setup

Current Network Settings
Takes you to Network Settings information menu

Change Wired Setup
Select to go to the wired setup menu

If the Current Network Settings Button is pushed, the following menu will be displayed:

Main Menu: Setup Menu: Network &USB Datakey Setup: Current Network Settings



Current IP Mode
Lists current IP Mode

Current IP Address
Lists current IP address

Current DNS Address
Lists current DNS address

Current Subnet Mask
Lists current subnet mask

Current Gateway Address
Lists current gateway address

If the Change Wired Setup button is pressed, the following menu will appear

Main Menu: Setup Menu: Network/USB Datakey Setup: Change Wired Setup Menu

Back	Wired IP Mode: DHCP Mode	Wired Static IP Address: 192.168.1.2	Wired Static DNS Address: 169.254.219.120	Wired Static IP Subnet Mask:	Wired Static IP Garteway:

Wired IP Mode
Select between DHCP and Static modes. This button will also give any static IP errors

Wired Static IP Address
Displays current static DNS address. Press to set DNS address

Wired Static DNS Address
Displays current static address. Press to set static address

Wired Static IP Subnet Mask
Displays current static subnet mask. Press to set static subnet mask

Wired Static IP Gateway
Displays current static gateway. Press to set static gateway.

Steps to connect Cinemage to a network router.

Before connecting the Cinemage unit to your network, always check with your network administrator.

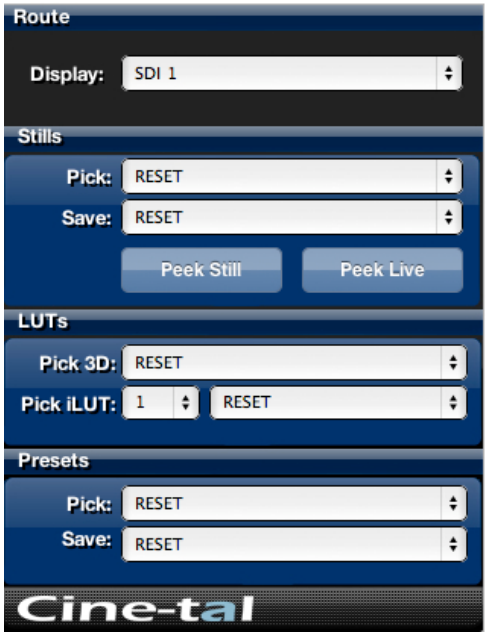
1. Determine if your network will require the Cinemage unit to be set for static IP or dynamic IP (DHCP) addressing. Typically most networks use dynamic addressing.
2. Go to the **System Setup: Network &USB Datakey Setup: Wired/Wireless LAN Setup Menu.**
3. Under the menu item "**Wired Mode:** "set the system for either DHCP mode or Static IP.
4. If the system is set for DHCP Mode skip step 5
5. If the system will be set for Static IP setup the appropriate numbers for Wired Static IP address, Subnet Mask and IP Gateway. See Appendix A to edit this in the prefs.xml file.
6. If you desire to restrict access to files stored on the Cinemage unit you may restrict access by setting a user name and password for local network access. If security is not a concern, the default setting is a username of "guest" with no password. Go to the file sharing setup menu; **System Setup: Network &USB Datakey Setup: File Sharing Setup Menu.** To setup a username and password.
7. In the File Sharing setup menu reset the systems network status by toggling the "**File Sharing Status**" menu from "enabled" to "disabled" and back to "enabled"
8. Go to the Unit Information menu; **File Sharing Setup Menu: Back: Back: Unit Information**
9. Verify that your router has assigned the system an IP address or that the static address you entered is accurate under IP address.
10. Note the TCP IP Machine
11. From a Windows or Mac you may browse the network to find the Cinemage Monitor. Cinemage uses a Universal Naming Convention based on the its TCP IP Machine Name.

Steps to connect to a Cinemage on a wireless network

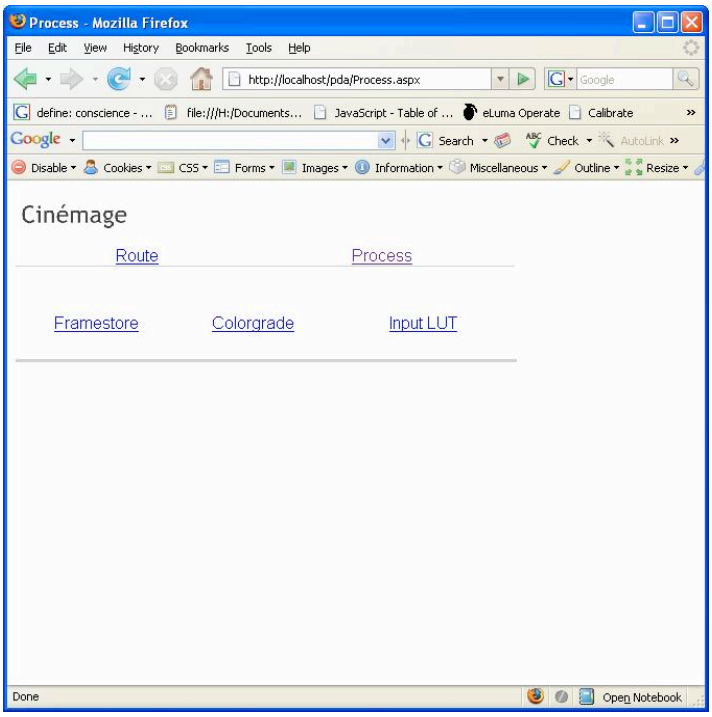
While the Cinemage is not a Wireless Appliance, you can access the monitor wirelessly by connecting it to a wireless router. You can then access the monitor by using a Mac, PC, or Apple iPhone, or iPod Touch connected to the wireless network.

Turn the Web Browser on in the Cinemage. To do this, follow these instructions: Main Menu | System Menu | Network & USB Datakey Setup | Web/FTP Setup | Web Server (Turn Option On)

Next, Open a web browser on the device that is connected to the wireless network and enter the IP Address of the Cinemage you are attempting to connect to in the address bar. If you are using any operating system with any web browser you can also enter the TCP IP Machine Name; Cinetal-****** in the address bar with "******" being the last six numbers of the serial number on the Cinemage you are trying to access (with the exception of Mac OSX 10.5 or higher, which then you must enter Cinetal-******.**local**, with "******" being the last six numbers of the serial number on the Cinemage you are trying to access).If you are using the Apple iPod Touch or iPhone, enter the TCP IP Machine Name in the address bar of the Web Browser. The Web browser then directs you to the Graphic User Interface (GUI). The GUI is the same for the Mac and PC (below), but there is a different GUI for the Apple iPhone and iPod Touch (right).



Apple iPod Touch and iPhone Screenshot (above)



Mac and PC Web Browser Screenshot (left)

In the Mac and PC Web Browser, you have control over: Routing, the Framestore, 3D and 1D LUTs.
In the Apple iPod Touch and iPhone you have control over: Display Routing, Stills, 3D LUTs, and what Presets are currently running on the monitor. You can also grab a still of what is currently showing on the monitor and view it on your iPhone or iPod Touch. The still will continue to update, and the speed at which it refreshes depends on the speed of your network. The still will open in a new browser window that can be resized on your iPod or iTouch device.

Chapter 13: System Reset

The Resets menu allows you to reset all system settings either to your power-up original settings or to the factory original settings. This will also provide a safe way to return to your last saved settings. Each time you power the system down information is stored as the original settings. Upon power-up these settings are loaded into the system remembering the last state of the system settings. Factory settings are the settings at the time the system ships from the factory. Resetting to the factory settings will erase any sensitive network paths, user names or password information.

From the Setup menu select Resets**.**

Main Menu: Setup Menu

Main Menu: System Setup: Resets

Reset to Defaults

Resets will reset all network and system setups to the last saved power-up defaults.

Factory Reset

Resets will reset all network and system setups to the factory settings erasing all network information and user saved files (i.e. 3D LUTs, Stills, etc.).

Section 3: Using Your System
Chapter 14: Routing

The routing menu allows you to route the input video, input DVI, framestore, test patterns, and 3D LUT output to the display or video outputs in the system.

Main Menu: System Menu

Cinemage 2142 Hold and Release for setup	Route	Process	Display	Analyse	Select Preset Original Settings	

From the system menu select Route. The system will display the following menu:

Main Menu: Route Menu

Back	Display Source Framestore	DVI INPUT FULLMODE	V1 Out SDI Input 1	V2 Out Source SDI Input 4	Dual Link Mode 4:2:2 YCbCR Single-Link	

Display Source
All four HD SDI inputs or 2 Dual Link inputs, Quad Input, Framestore, Test Pattern, 3D LUT Output, and DVI Input are routed to the display independent of the output.

DVI Input Fullmode [OPTION]
Routes a 1920x1200 DVI input to the display.
NOTE: This button goes away when there is a 1920x1080 DVI input attached to the monitor to prevent entering an abnormal state.

V1 Out Source
All four HD SDI inputs or 2 Dual Link inputs, Framestore, Test Pattern, 3D LUT Output and DVI Input are routed to the output independent of the display. Selecting one of the four Reclocked SDI sources will route the raw data feed from that input to the output, unaltered by the input LUT's or Color Space Converter.

V2 Out Source
All four HD SDI inputs or 2 Dual Link inputs, Framestore, Test Pattern, 3D LUT Output and DVI Input are routed to the output independent of the display. Selecting one of the four Reclocked SDI sources will route the raw data feed from that input to the output, unaltered by the input LUT's or Color Space Converter.

Dual Link Mode [OPTION]
This menu toggles the Dual Link Mode betweenHD 709 YCbCr Single-Link Full Range, HD 709 RGB Dual-Link, HD 709 YCbCr D93 Single-Link, HD 709 RGB Dual-Link D93 Full Range, DCI Single-Link YCbCr, DCI Dual-Link RGB
(Note: When Dual Link is turned on inputs 1&2 and 3&4 are linked together as single inputs well as video outputs 1&2 as a single output)

Press and hold to enter Advanced options for Dual Link Mode:

Main Menu: Route Menu: Dual Link Advanced Mode

Back	Calibration Type	Current Calibration	Dual-Link Mode	Input Limiting Mode	Resizer Option:	

Back
Returns to the previous menu

Calibration Type
Changes between Full Gamut Mode, and Gamut Controlled Mode

Current Calibration
Allows you to choose the current monitor calibration

Dual-Link Mode
Allows user to change between the Dual-Link modes of the monitor

Input Limiting Mode
Allows you to change the Input Limiting Mode between undershoot limited only, full range, undershoot & overshoot limited

Resizer Option
Allows you to change the resizer options on the input

NOTES: It is possible to create circular routing that would generate feedback. An example would be routing the framestore as a source to the 3D LUT and the 3D LUT output to the framestore. It should also be noted that because Quad Split utilizes the resources of the Framestore, it is not possible to output the Framestorefrom either of the HD-SDI outputs while viewing Quad Split on the display. However, viewing Quad Split on the display is the only way to output the Quad Split through either of the HD-SDI outputs.

Note that in most cases dual-link video is full range, NOT SMPTE range. The input range is controlled in the Video Setup menu with the Input Limiting Mode. In most cases for dual link this should be set to "FULL RANGE".

Chapter 15: Process / Framestore [OPTION]

The framestore provides immediate access for up to 30 frames of stills. You can capture any source into the framestore or load external still files from local, network or a USB Datakey. There are four menus for the framestore; menu 1, menu 2, still file management and setup.

Note: You must have a reference sync input either from a video input or the analog reference input to use the framestore.

Framestore: Menu 1

Main Menu: System Menu

Cinemage 2142	Route	Process	Display	Analyse	Presets	

To navigate the framestore menus select Process from the main menu, the following menu will be displayed:

Main Menu: System Menu: Process Menu

Back	Framestore	Colourgrade	Input LUTS	Pan and Zoom		

Select Framestore from the Process menu and you will get the following menu:

Main Menu: Process Menu: Framestore: Framestore Menu 1

Back Hold & Release for Framestore Setup	Framestore Mode: Live	Capture Frame	Browse Files File_name.dpx	Load File Now File_name.dpx	More	Current Framestore 0

Back / Framestore Setup

Press once to return to the Process Menu. Press and hold for 2 seconds then release to go to the Framestore Setup Menu.

Framestore Mode

Switches the framestore mode from displaying the video source routed to the framestore input (Live Mode) to displaying the output of the framestore listed under Current Framestore (Still Mode). The Current framestore is selected by the trackball.

Capture

Press once to capture the framestore source to the current Framestore and advance to the next set of menus.

Browse Files

Browses through still files located at the selected file location. File locations include local, network, and USB Datakey. File formats supported include, DPX, JPG, BMP, TIFF and PNG.

Load File Now
Loads the file selected in the Browse Files Button.

More
Displays Framestore Menu 2.

Current Framestore
Use the USB Mouse/trackball to select which framestore you are viewing. In "Live Mode" the USB Mouse/trackball will select which framestore you will store a captured still frame.

Framestore: Menu 2
The second framestore menu provides a capture and save function along with a sequential capture function.

Main Menu: Process Menu: Framestore: Framestore Menu 1

Back Hold & Release for Framestore Setup	Framestore Mode: Live	Capture	Browse Files File_name.dpx	Load File Now File_name.dpx	More	Current Framestore 15

By pressing the More button the following menu will be displayed:

Main Menu: Process Menu: Framestore: Framestore Menu 2

Back Hold & Release for Framestore Setup	Framestore Mode: Live	Save Frame: 1106_0004.dpx	Sequential Capture To Framestore	Framestore Source: SDI 1	Still File Management	Current Framestore: 15

Back / Framestore Setup
Press once to return to the Process Menu. Press and hold for 2 seconds then release to go to the Framestore Setup Menu.

Framestore Mode
Switches the framestore mode from displaying the video source routed to the framestore input (View Source) to displaying the output of the framestore listed under Current Framestore. The Current framestore is selected by the trackball.

Save Frame
Capture the framestore source to the current framestore and saves the image at the selected file location. Each file may be given a pre-fix followed be a four digit sequence number.

Sequential Capture
Captures the framestore source to the current framestore and increments the current framestore by one.

Framestore Source
Selects which source is routed to the framestore for capture.

Still File Management
Navigates to the still file management menu.

Framestore: Still File Management Menu
The framestore still file management menu allows you to rename and delete files stored in the selected file location.

To navigate the framestore still file management menu select Still File Management from framestore menu 2.

Main Menu: Process Menu: Framestore: Framestore Menu 2

Back Hold & Release for Framestore Setup	Framestore Mode: View Source	Save Frame: 1106_0004.dpx	Sequential Capture To Framestore	Framestore Source	Still File Management	Current Framestore 15

The following menu will be displayed:

Main Menu: Process Menu: Framestore: Still File Management Menu

Back Hold & Release for Framestore Setup	File to Rename/Delete: Set2_1107_0012.dpx	Delete File Set2_1107_0012.dpx	Reset New Name	Rename File Now	Select Next Character	Character C

Back / Framestore Setup
Press once to return to the Process Menu. Press and hold for 2 seconds then release to go to the Framestore Setup Menu.

File to Rename / Delete
Browse files located at chosen file location (local, network, USB Datakey) to choose a file to rename or delete.

Delete File
Deletes selected file.

Reset New Name
Resets the new file name under construction.

Rename File Now
Renames the selected file with the name shown.

Select Character
Selects the character displayed under the trackball and advances the cursor to the next position.

Character
Use the USB Mouse/trackball to set character.

Framestore: Setup

The framestore setup menu sets the file location and file extension for saved files captured with the framestore.

To navigate the framestore setup menu select, hold and release the back button from any framestore menu.

Main Menu: Process Menu: Framestore: Framestore Menu 2

Back Hold & Release for Framestore Setup	Framestore Mode: View Source	Capture & Save: 1106_0004.dpx	Sequential Capture To Framestore	Framestore Source	Still File Management	Current Framestore 15

The following menu will be displayed:

Main Menu: Process Menu: Framestore: Framestore Setup

Back	File Location: Local	File Save Options	File Load Options			

File Location

Allows you to change the location of where still frames will be saved

File Save Options

Takes you to the File Save Options menu

File Load Options

Takes you to the File Load Options menu

File Save Options

Main Menu: Process Menu: Framestore: Framestore Setup

Back	File Location: Local	File Save Options	File Load Options			

By hitting the File Save Options button, the following menu will be displayed:

Main Menu: Process Menu: Framestore: Framestore Setup: File Save Options

Back	Save File Format: dpx	File Location: Network	Capture as Proxy	Proxy DecimationMORE	

Save File Format
Selects the still file format used when saving stills from the framestore. Formats supported include dpx, bmp, tif, jpg, png

File Location:
Selects the file location where still files are saved when saving stills from the framestore. Choose between local, network and USB Datakey.

Capture as Proxy:
Allows you to save the still as a smaller frame size. Without saving as a Proxy file the standard sizing of the still is 1920x1080.

Proxy Decimation:
Determines the re-sizing factor of the still to be saved. A decimation factor of 1 will save the still at 960x540. At a decimation factor of 2 will save the still at 480x270. At a decimation factor of 3 the file will be 240x135, and at a factor of 4 the file will be 120x67.

More
Advances to the next menu

Main Menu: Process Menu: Framestore: Framestore Setup: File Save Options

Back	Save File Format: dpx	File Location: Network	Capture as Proxy	Proxy Decimation	MORE	

Pressing the MORE button will give you the following menu:

Main Menu: Process Menu: Framestore: Framestore Setup: File Save Options 2

Back	Disable Auto Routing In Framstore Menu	Frame Buffer Access Type	Reset New File Prefix	Set New File Prefix	Select Next Character	Character: A

Disable Auto Routing in Framestore Menu
Turning this Disable on will allow you to capture and save stills in the background while the video continues to play on the display.

Frame Buffer Access Type
Changes the buffer access type between By Image, By Pixel, or By Line

Reset File Prefix
Erases changes made to the Still File prefix.

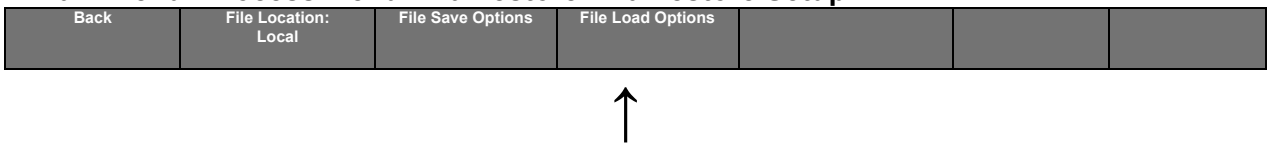
Set File Prefix
Sets the file prefix for Still Frames

Select next Character
Selects the character you have selected with the character generator as the next character in your file prefix

Character
Adjusts the character by moving the USB Mouse or rotating the trackball

File Load Options

Main Menu: Process Menu: Framestore: Framestore Setup



By hitting the File Load Options button, the following menu will be displayed:

Main Menu: Process Menu: Framestore: Framestore Setup: File Load Options

Still Image Load Scaling
Changes the load scaling options

Still Image Load Positioning
Changes the load positioning from either left, right, bottom, top, top left, top right, bottom left, bottom right, or center

Frame Buffer Access Type
Changes the frame buffer access type to either By Image, By Pixel, or By Line

Load File Now
Loads file from USB if available

Force DPX Loads Linear
Toggles the loading option for how the Cinemage handles DPX files

Chapter 16: Process/Colourgrade[OPTION]

The Process menu provides access to the Framestore, Colourgrade and Input LUT functions.

System Menu

Cinemage 2142	Route	Process	Display	Analyse	Presets	

To navigate the Colourgrade menus select Process from the main menu, the following menu will be displayed:

System Menu: Process Menu

Back	Framestore	Colourgrade	Input LUTS	Pan and Zoom	H & V Delay	

Select Colourgrade from the Process menu and you will get the following menu:

System Menu: Process Menu: Colourgrade

Back Hold & Release for Framestore Setup	3D LUT Source: Framestore	Display Source: 3D LUT Output	Browse 3D LUTs: Bypass.a3d	Load 3D LUT Now: Bypass.a3d	Reset 3D LUT	

3D LUT Source

Choose the source for the 3D LUT. All four HD SDI inputs or 2 Dual Link inputs, Framestore, Test Pattern, 3D LUT Output and DVI Input can be routed as an input to the 3D LUT.

Display Source

Routes the system sources to the display.

Browse 3D LUTs

Select a LUT to be loaded into the 3D LUT. LUTs can be browsed locally, from a network source or a USB Datakey. 3D LUT formats tested and known to be supported as of the writing of this document include:

These have been tested and work:

- Discreet Fire 3D cube file
- Discreet Flame 3D cube
- Discreet Flint 3D cube
- Discreet Smoke 3D cube
- Discreet Toxic 3D cube file.
- Discreet Maya and Max 3D cube
- Assimilate Scratch 3D cube
- Kodak CDM 3D cube (unencrypted)
- TruelightFilmlight 2D LUTs and 3D cube (unencrypted, as exported by Iridas)

• IridasFrameCycler 3D cube
• Iridas Speed Grade 2D LUT and 3D cube
• Nucoda 2D LUT and 3D cube file
• QuanteliQ 3D cube file
• Pandora Pogle 3D cube file
• Quantel 3D cube file.
• Chrome matrix
• DVS clipster
• Davinci Resolve
• Thomson LUTher (.txt, unencrypted)

These are believed to work:

• SiliconColorFinalTouch 3D cube file
• Mistika 3D cube file
• Any .a3d, .mga, .3dl, .cms file.

Might or might not work

• .lut or .txt files (often the underlying format is really one of the above and can be detected as such).

Load 3D LUT Now

Loads the selected LUT into the 3D LUT.

Reset 3D LUT

Removes the 3D LUT from the video being displayed.

Chapter 17: Process / Input LUTs

Cinemage supports a variety of 2D LUTs, otherwise known as Input LUTs. This section of the menuing has been changed with the v2.2 software release to enable support of the new ASC-CDL Input LUT format.

System Menu

Cinemage 2142	Route	Process	Display	Analyse	Presets	

To navigate the Input LUT menus select Process from the main menu, the following menu will be displayed:

System Menu: Process Menu

Back	Framestore	Colourgrade	Input LUTS	Pan and Zoom	H & V Delay	

Select Input LUTs from the Process menu and you will get the following menu:

System Menu: Process Menu: Input LUTs

Back Hold and release for setup	Select Input	Select LUT: Blue_only.csv		Press to Load Now	Reset Input Lut Now	Current Loaded LUT:

Back

Returns to the Process Menu. Pressing and Holding for 2 seconds will enter the Input LUT setup Menu

Select Input

Selects the input to apply an Input LUT to. This button will also automatically route that input to the display.

Select LUT

Will cycle through the input LUTs saved in whatever storage location you have selected in the Input LUT Setup.

Press to Load Now

Applies the selected LUT to the Selected Input

Reset Input LUT Now

Removes the LUT from the selected input

Current LUT Loaded

Displays the Currently applied LUT on the input selected

Input LUT Setup

System Menu: Process Menu: Input LUTs

Back Hold and release for setup	Select Input	Select LUT: Blue_only.csv		Press to Load Now	Reset Input Lut Now	Current Loaded LUT:

Pressing and holding the back button will take you to the following menu:

System Menu: Process Menu: Input LUTs: Input LUTs Setup

Back	INPUT LUT Location USB	Display Source SDI 1			INPUT LUT File Management	

Back
Returns you to the Input LUT menu

Input LUT Location
Selects the storage location to recall Input LUTs from. Choices are Local, Remote, and USB.

Display Source
Selects the input routed to the display

Input LUT File Management
Enters the Input LUT File Management menu used to delete or rename Input LUTs in the selected Input LUT location.

Input LUT File Management

Process Menu: Input LUTs: Input LUTs Setup

Back	INPUT LUT Location USB	Display Source SDI 1			INPUT LUT File Management	

Pressing the Input LUT File Management button will take you to the following menu:

Process Menu: Input LUTs: Input LUTs Setup

Back	File to Rename/ Delete	Delete File	Reset New Name	Rename File Now	Select NextCharacter	Character A

Back
Returns you to the Input LUT Setup Menu

File To Rename/ Delete
Selects the file to be renamed or deleted from the storage location selected in the Input LUT Setup Menu

Delete File
Deletes the selected file

Reset New Name
Clears the Character Generator of all characters currently selected

Rename File Now
Resets the file name to the selected name displayed in the subscript

Select Next Character
Adds the currently selected character to the new file name

Character
Controlled by the USB Mouse/trackball, this allows you to select characters for renaming files

Chapter 18: Process/Pan and Zoom [OPTION]

System Menu: Process Menu

Back	Framestore	Colourgrade	Input LUTS	Pan and Zoom	H & V Delay	

From the Process menu, pressing the Pan and Zoom button will provide the following menu:

System Menu: Process Menu: Pan and Zoom 1

Back	Magnification	Horizontal Magnification	Vertical Magnification	Freeze Frame	More	Pan 0,0

Magnification
Controls the magnification of the entire display, both horizontally and vertically. Magnification options are 1x, 2x, 4x, 8x, and 16x.

Horizontal Magnification
Controls the magnification of the display only along the horizontal axis. Magnification options are 1x, 2x, 4x, 8x, and 16x.

Vertical Magnification
Controls the magnification of the display only along the vertical axis. Magnification options are 1x, 2x, 4x, 8x, and 16x.

Freeze Frame
Freezes the video on the display to allow for in depth analysis of a particular portion of the video feed.

More
Advances to the next menu.

Pan
Using the USB Mouse/trackball you are able to manipulate the portion of the magnified video that is being displayed.

Process Menu: Pan and Zoom 1

Back	Magnification	Horizontal Magnification	Vertical Magnification	Freeze Frame	More	Pan 0,0

Pressing the More button will give the following menu:

Process Menu: Pan and Zoom 1

Back	Source	Show Crosswire	Browse Stills	Load Still Now	Display RGB Value	Pan 0,0

Source
Changes the input or internal source routed to the display that is to be magnified for closer inspection.

Show Crosswire
Turns on a cross hair that can be positioned by the trackball. The cross hair determines the pixel being read.

Browse Stills
Browses through still files located at the selected file location. File location include local, network, and USB Datakey. File formats supported include, DPX, JPG, BMP, TIFF and PNG.

Load Still Now
Loads the file selected in the Browse Files Button

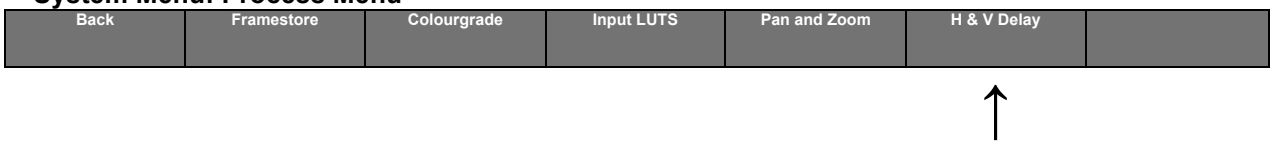
Display RGB Value
Gives the RGB values of the pixel highlighted with the Pixel Data Analysis Crosswire.

NOTES: The magnification and panning of the display will be affected in the Waveform Monitor and Vectorscope as well. As you zoom into a particular portion of the display, the Waveform Monitor and Vectorscope will give you readings of the video signal that is being displayed, allowing for detailed analysis of particular portions of your video signal.

As the Pan and Zoom capability uses the framestore internally, zooming on a split screen with only 1 side originating in the framestore will only zoom that side. Zooming on a splitscreen wherein both sides originate in the framestore (e.g. one on a frame and one on the same frame, colour-graded with the 3D LUT) will maintain the current split position and let you do a left/right compare on the zoomed image.

Chapter 19: H&V Delay

System Menu: Process Menu



From the Process menu, pressing the H&V Delay button will provide the following menu:

System Menu: Process Menu: H&V Delay

Back
Takes you back to the previous menu

H & V Visible Downstream
Takes you to the H&V Delay ON Menu

If you press the H & V Visible Downstream button, you will be taken to the following menu:

System Menu: Process Menu: H&V Delay: H&V Visible Downstream

Back
Takes you back to the previous menu

H&V Delay
Takes you back to the Process menu

Chapter 20: Display / Markers

The Display menu provides access to the Markers, Head-Up Display, Split Screen, Scaler & Deinterlacer, and Test Pattern Generator functions.

Markers Enabled:
The system has two markers that can be independently enabled. Sized and positioned on the display.

System Menu

Cinemage 2142	Route	Process	Display	Analyse	Presets	

To navigate the Marker menus select Display from the main menu, the following menu will be displayed:

System Menu: Display Menu

Back	Markers: Marker A Enabled Hold & Release for Markers Setup	Heads Up Display On Hold & Release for Markers Setup	Split Screen: Off Hold & Release for Setup	Scaler & Deinterlacer	Test Pattern Generator	

The Markers enabled button cycles through Markers disabled; Marker A enabled; Marker B enabled; Marker A&B enabled; A Masked; B Masked; and Centered Crosswire

To access the Marker setup menu hold and release the Marker enabled button. The following menu will be displayed:

System Menu: Display Menu: Marker Setup

Back	Markers Enabled: Marker A	Marker A	Marker B	Mask Setup		

Marker Setup

From the Marker setup menu you may select to adjust Marker A or Marker B or to set masking around the Markers.

After selecting Marker A or Marker B the following menu will be displayed:

Display Menu: Marker Setup: Marker A

Back	Marker Enabled: On	Marker Type: 2.35:1	Marker Scale X=1920 y=1200	Marker Position: Use Trackball	Marker Style: White	

Marker Enable

Turns the Marker on or off

Marker Type

Select from standard Markers of 1.33:1, 1.55:1, 1.77:1, 1.86:1, 2.35:1, and safe title and safe action for 1.33:1, 1.55:1, 1.77, or you may set a custom Marker of any aspect ratio.

Marker Scale

Scale the selected Marker. Use the USB Mouse or trackball to adjust. Size is shown as number of pixels horizontally (x) and number of pixels vertically (y).

Marker Position
Position the selected Marker on the display using the USB Mouse or trackball. The x,y indicator references the first pixel of the Marker in the upper left hand corner.

Marker Style
Choose between a Marker with a white border or a Marker with an inverted luminance border.

Mask Setup
From the Marker setup menu you may select Mask Setup to set masking around the Markers.

After selecting Mask setup from the Mask Setup Menu the following menu will be displayed:

System Menu: Display Menu: Marker Setup: Mask Setup

Back	Marker or Mask	Masked Area		Mask Style		

Marker or Mask
Choose whether the system displays a Marker with or without a mask.

Masked Area
Choose to mask the inner or outer Marker area.

Mask Style
Choose between black or darken.

Chapter 21: Display/ Heads Up Display

The Cinemage system provides a Heads Up Display for important data concerning your video signal.

System Menu

Cinemage 2142	Route	Process	Display	Analyse	Presets	

To navigate to the Heads Up Display setup menus select Display from the main menu. The following menu will be displayed:

System Menu: Display Menu

Back	Markers: Marker A Enabled Hold & Release for Markers Setup	Heads Up Display On Hold & Release for Markers Setup	Split Screen: Off Hold & Release for Setup	Motion Compensation	Test Pattern Generator

Heads Up Display Setup:

From the Display Menu the Heads Up Display can be set to on or off. To setup the Heads Up Display hold the button for 3 seconds and release.

Display Menu: Heads Up Display Setup

Back	Input Status: On	CRC/ANC/Gamut Errors: On	Pixel Data: On	Timecode: Off	Routing Off

Input Status

Displays the status of input 1-4 in the Heads Up Display. Status indicates video signal present and video format. Choices are on or off.

CRC/ANC/Gamut Errors

Displays any CRC or ANC data packet errors in the video signal coming into video inputs 1-4. CRC errors indicate that the error checking in the SDI transport has found a problem with the data. This may be caused by cable or routing issues. ANC errors indicate loss of data carried in the ancillary data packets of the SDI transport. Gamut errors indicate active video data has fallen outside the gamut indicated in the **Gamut Violation Setup** menus located in the **Analyse Menus**.

Pixel Data [OPTION]

Display the pixel data from the **Pixel Data Analysis Menu**. The Pixel Data Analysis Menu allows you the select a specific pixel in active video and display the value in RGB or YcBcR base 10 data values.

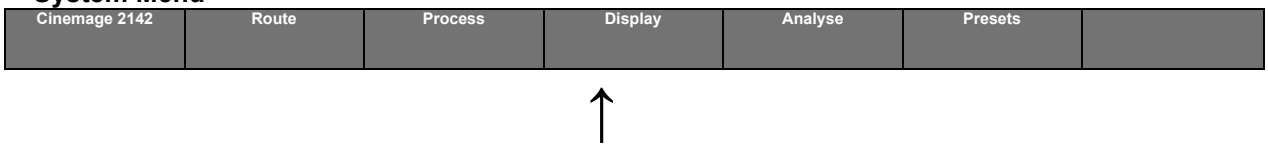
Timecode
Display a timecode overlay in the bottom center portion of the display. Timecode Mode can be set to LITC, VITC 1, VITC 2 or Off. When using multiple sources, if you route from a source displaying timecode to one that is not, the monitor will "hold", and continue to display the last time code recieved from a source outputting valid timecode.

Routing
When turned on the Heads Up Display will display critical routing information, such as what is routed to the display and outputs, what (if any) Input LUT is displayed, and the Dual Link and Input Limiting format of each input

Chapter 22: Display / Split Screen
The Cinemage system provides a split screen generator that allows you to compare two sources simultaneously.

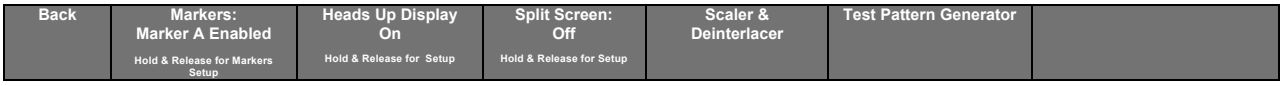
Note: *You must have a reference sync input either from a video input or the analog reference input to use the split screen generator.*

System Menu



To navigate to the split screen generator setup menus select display from the main menu. The following menu will be displayed:

System Menu: Display Menu



Split Screen Setup:
The Split Generator can be set for off, horizontal split, horizontal split reverse, vertical split, and vertical split reverse. To setup the split screen generator hold the button for 3 seconds and release.

Display Menu: Split Screen Setup

Select Split
Choose between Off, H Split (Horizontal Split), H Split Reversed (Horizontal Split Reversed), V Split (Vertical Split), V Split Reverse (Vertical Split Reverse)

Split Screen Source 1
Select Source 1 for the split screen generator.

Split Screen Source 2
Select Source 2 for the split screen generator.

Display Source
Select the display source. If you want to view the split screen output in this menu make sure this is set for “Split Screen Output”.

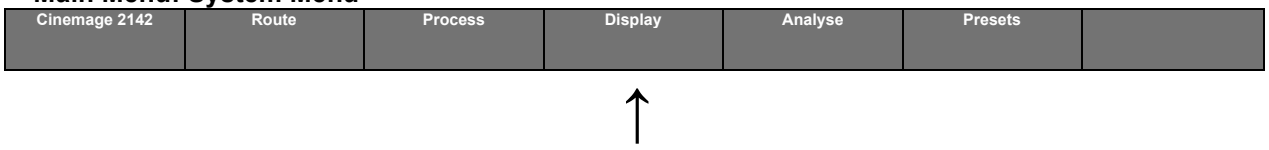
Split Marker Enabled
Enables a white border at the position of the split.

Split Position
Adjusts the position the Splitscreen occurs at by moving the USB Mouse or rotating the trackball.

Chapter 23: Display / Scaler & Deinterlacer

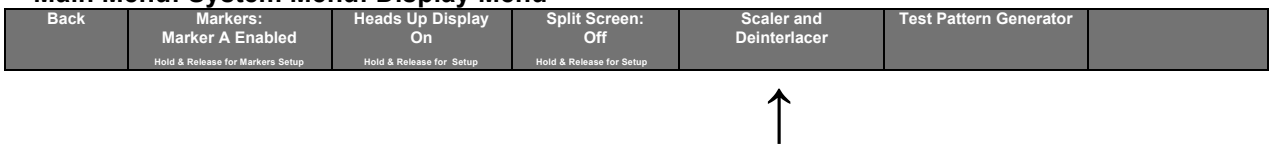
The Cinemage system uses a progressive scan LCD screen for the display. When viewing interlaced material the process of converting from interlaced to progressive scan may cause unfavorable artifacts on moving edges of video content. The Scaler and Deinterlacer menu allows access to several useful features for working with interlaced and SD video sources.

Main Menu: System Menu



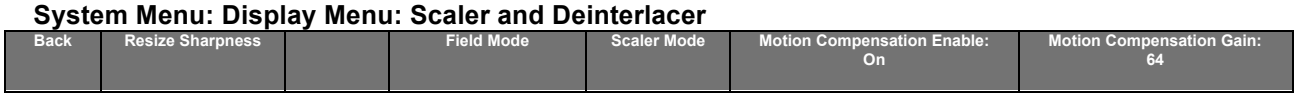
To navigate the Scaler and Deinterlacer menu select Display from the main menu, the following menu will be displayed:

Main Menu: System Menu: Display Menu



Select Scaler and Deinterlacer and the following menu will be displayed:

System Menu: Display Menu: Scaler and Deinterlacer



Resize Sharpness
Allows you to look at the picture with either sharp or soft pixel sizes. This allows you to look at the natural video, or smoothes video without compensation

Field Mode
Toggles between Off and Single Field Mode. Allows you to view a single field of an interlaced video source at a time. Press and hold to adjust the motion clamping of single field mode in order to smooth the juttering in between fields of moving video.

Scaler Mode:
Allows you to select between Pixel Accurate displaying, Re-Sized to fill screen, Anamorphic 625 (PAL), 16x9 525 (NTSC) (these stretch the video to fit horizontally as well as vertically), resized to 15 inch CRT, resized to 17 inch CRT, resized to 19 inch CRT, resized to 19 inch CRT Anamorphic, and Square-Pixel Full (emulates the square pixels of Computer monitors). 1080 formats will automatically be displayed in pixel accurate mode with no scaling available.

Motion Compensation Enable
Turns motion compensation on or off.

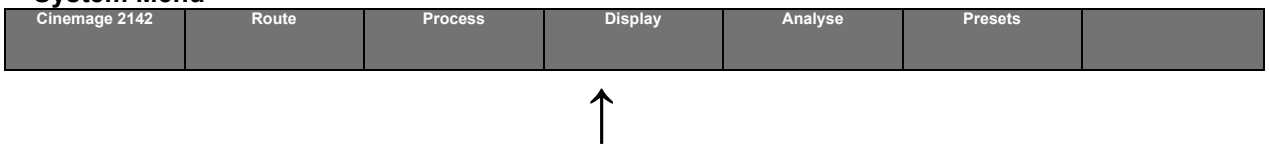
Motion Compensation Gain
Sets the amount of compensation from 0 to 255 by moving the USB Mouse or rotating the trackball.

Note: The Motion Compensation adjustment will provide an adjustment to minimize motion artifacts. Motion Compensation defaults to being on with maximum gain when displaying interlaced material. Motion Compensation will have no effect in Progressive and Progressive Segmented Frame formats.

Chapter 24: Display/ Test Pattern Generator *[OPTION]*

As an option, Cinemage contains a full Test Pattern Generator that is routable downstream through either of the HD-SDI outputs or the optional DVI Output.

System Menu



To navigate the Test Pattern Generator menus select Display from the main menu, the following menu will be displayed:

System Menu: Display Menu

System Menu: Display Menu: Test Pattern Generator

Back	Segment Pattern Control	Segment Size Control	Flat Field Generator Hold & Release for Setup			Full Screen Generator

Segment Pattern Control
Enters the Segment Pattern Control Menu, which allows you to assign up to 4 different Test Patterns to horizontal segments of the screen, as well as assign a separate pattern to the upper portion of the screen.

Segment Size Control
Enters the Segment Size Control menu, which allows you to adjust the height of the horizontal segments of the display to customize your test pattern.

Flat Field Generator
Enters the Flat Field Generator Menu, which allows you to manipulate the R, G, and B color components of any of the Flat Field Test Patterns.

Full Screen Generator
Using the USB Mouse or the trackball you can cycle through available test patterns and apply them to the full display. The included Test Patterns are:

1. 8% GREY
2. 100% FULL-RANGE BARS
3. 75% FULL-RANGE BARS
4. 100% SMPTE-RANGE BARS
5. 75% SMPTE-RANGE BARS
6. LUMA FULL-RANGE RAMP
7. RED RAMP
8. GREEN RAMP
9. BLUE RAMP
10. LINEAR RAMP
11. RED LINEAR RAMP
12. GREEN LINEAR RAMP
13. BLUE LINEAR RAMP
14. BLUE - YELLOW RAMP
15. RED - CYAN RAMP
16. COMBINED COLOR RAMPS
17. 30 MHZ FREQUENCY SWEEP
18. 5, 10, 15, 20, 25, 30 MHZ MULTIBURST
19. PLUGE PATTERN
20. LUMA PULSE & BAR
21. LUMA TEN-STEP
22. LINE-END MARKER PATTERN
23. BLACK TEST BARS
24. SMPTE-RANGE BLACK TEST BARS
25. 100% RED
26. 100% GREEN
27. 100% BLUE
28. 100% WHITE
29. BLACK

Note: The test patterns are all ***internal*** to the monitor, and are thus not corrected by the input range control or the input LUT. This means that the internal PLUGE cannot be used to test black levels; use the pixel analysis tools to do this instead.

Chapter 25: Analyse / Pixel Data Analysis *[OPTION]*

Pixel data analysis provides a means of selecting any pixel on the displayed source getting the data values for Y, Cb, Cr or R, G, B if the system is in dual link RGB mode.

System Menu

Cinemage 2142	Route	Process	Display	Analyse	Presets	

To navigate to the Pixel Data Analysis menus select Analyse from the main menu. The following menu will be displayed:

System Menu: Analyse Menu

Back	Pixel Data Analysis	Waveform / Vectorscope	Measure Display Output	Gamut Violation Setup	Input Status	

Pixel Data Analysis

From the Analyse Menu the select Pixel Data Analysis. The following menu will be displayed:

System Menu: Analyse: Pixel Data Analysis

Back	Pixel Analysis Crosswire: On	Pan and Zoom	Display RGB Pixel Value: R=256, G=230, B=110		More	Pixel to read: 1034,539

Back
Returns to the Analyse Menu

Pixel Analysis Crosshair
Turns on a cross hair that can be positioned by the trackball. The cross hair determines the pixel being read.

Pan and Zoom
See Pan and Zoom Chapter 17.

Display RGB Pixel Value
The Cinemage system must convert all incoming video to 8 bit RGB for the display. This conversion is only for the display and does not affect the general video path input to output. The Display RGB Pixel value will provide you with the result of that conversion at the point indicated by pixel analysis crosshair and the trackball.

More
Goes to the 2nd page of the Pixel Data Analysis menu

System Menu: Analyse: Pixel Data Analysis (*page 2)*

Back	SDI1: Y=0340 Cb=0525 Cr=0496	SDI1: Y=0340 Cb=0525 Cr=0496	SDI1: Y=0340 Cb=0525 Cr=0496	SDI1: Y=0340 Cb=0525 Cr=0496	Display RGB Pixel: R=256, G=230, B=110	Pixel to read: 1034,539

SDI 1
Displays the pixel value on SDI 1 input at the location selected by the USB Mouse or trackball.

SDI 2
Displays the pixel value on SDI 2 input at the location selected by the USB Mouse or trackball.

SDI 3
Displays the pixel value on SDI 3 input at the location selected by the USB Mouse or trackball.

SDI 4
Displays the pixel value on SDI 4 input at the location selected by the USB Mouse or trackball.

Display RGB Value
Displays the RGB pixel value of the Display at the location selected by the USB Mouse or trackball.

Chapter 26: Analyse / Pixel Analysis / Pan and Zoom *[OPTION]*
Pan and zoom provide a means to zoom into the display to look at pixel information up close.

System Menu

Cinemage 2142	Route	Process	Display	Analyse	Presets	

To navigate to the Pan and Zoom menus select Analyse from the main menu. The following menu will be displayed:

System Menu: Analyse Menu

Back	Pixel Data Analysis	Waveform / Vectorscope	Measure Display Output	Gamut Violation Setup	Input Status	

From the Analyse Menu the select Pixel Data Analysis. The following menu will be displayed:

System Menu: Analyse: Pixel Data Analysis

Back	Pixel Analysis Crosswire: On	Pan and Zoom	Display RGB Pixel Value: R=256, G=230, B=110		More	Pixel to read: 1034,539

From the Pixel Data Analysis menu select Pan and Zoom. The following menu will be displayed:

System Menu: Analyse: Pixel Data Analysis: Pan and Zoom

Back	Magnification: 1x	Horizontal Mag: 1x	Vertical Mag: 1x	Freeze Frame: On	More	Pan: 0,0

Magnification
Zooms into the video image. Choose between 2x, 4x, 8x, or 16x.

Horizontal Magnification
Performs a horizontal zoom into the video image. Choose between 2x, 4x, 8x, or 16x.

Vertical Magnification
Performs a vertical zoom into the video image. Choose between 2x, 4x, 8x, or 16x.

Freeze Frame
Freezes the incoming video.

More
Displays the 2nd page of the pan zoom menus. This page provides the ability to load a still into the display while zoomed in. Still file location is selected in the Framestore Menu.

Pan
When in zoom mode provides the ability to pan around the image. The coordinates displayed are the location of the upper right hand pixel within the zoomed image.

System Menu: Analyse: Pixel Data Analysis: Pan and Zoom *(page2)*

Back	Source	Show Crosswire:	Browse Stills:	Load Still Now:	Display RGB Value:	Pixel to Read:

Source
Changes the video on the display

Show Crosswire
Turns on the crosswire for more accuracy when looking for a pixel

Browse Stills
Look through stills saved to display

Load Still Now
Loads still to display and allows user magnification tools on still

Display RGB Value
Gives the R, G, and B values of selected pixel

Pixel to Read
Allows user to know what pixel the crosswire is selecting

Chapter 27: Analyse / Waveform Monitor [OPTION]

The OmniTek HD waveform monitor is integrated into the Cinemage monitor in one of three options:

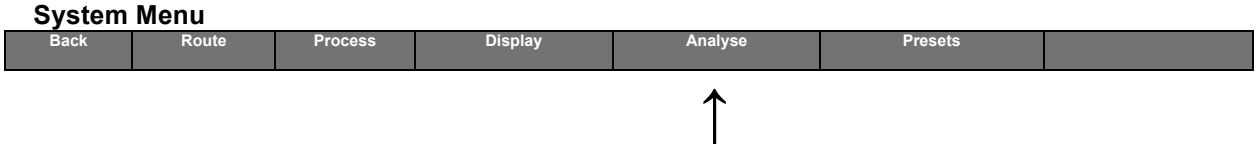
Display Only: OmniTek Waveform Display Only provides a standard SMPTE waveform monitor with a fixed YCbCr parade display in frame mode. The user does not have control over gain, timebase, or fields/lines.

HD: OmniTek HD Waveform is a full functioning high definition video waveform monitor.

Dual Link: OmniTek Dual Link Waveform is a full functioning dual link high definition waveform monitor.

The menu items in this manual will vary depending on the waveform option enabled on your system.

System Menu



To navigate to the Waveform/Vectorscope menus select Analyse from the main menu. The following menu will be displayed:

System Menu: Analyse Menu

Back	Pixel Data Analysis	Waveform/Vectorscope	Measure Display Output	Range and Gamut Violation Setup	Input Status	

From the Analyse Menu select Waveform/Vectorscope. The following menu will be displayed:

System Menu: Analyse: Waveform/Vectorscope

Back	Waveform Vectorscope Source: SDI 1	Waveform Monitor: Hold & Release for Waveform Setup	Vectorscope Mode: Hold and release for vectorscope setup	Line Mode Field 1	Selected Line: 514

Back
Returns to the Analyse Menu

Waveform Vectorscope Source
Selects the source routed to the display and to the Waveform / Vectorscope

Waveform Monitor
Select to turn on and display Waveform Monitor. Hold and release this button to go to Waveform Setup (see **Waveform Setup** chapter 28).

Vectorscope Mode
Select to turn on and display Vectorscope. Hold and release this button to go to Vectorscope Setup (see **Vectorscope Setup** chapter 29).

Line Mode
Select the display mode of the waveform monitor to either Full Field or Single Line mode.

Selected Line
When the waveform display mode is set for Single Line choose the line from either field 1 or field 2 to be displayed in the waveform.

NOTE: The Waveform and Vectorscope will analyze by default the raw data of the video input routed to the display. The recommended way analyze video data that has been corrected by the Input Range control and Input LUTs is to route the source through the splitscreen generator (either in a split with your SDI Input as one source and the Reclocked version of the same input as the other source for a side-by-side analysis; or with your SDI input as Splitscreen source 1 and the split turned off to view only your adjusted video signal).

Chapter 28: Analyse / Waveform Setup *[OPTION]*

The menu items in this manual will vary depending on the waveform option enabled on your system.

System Menu

Cinemage 2142	Route	Process	Display	Analyse	Presets	

To navigate to the Waveform/Vectorscope menus select Analyse from the main menu. The following menu will be displayed:

System Menu: Analyse Menu

Back	Pixel Data Analysis	Waveform/Vectorscope	Measure Display Output	Range and Gamut Violation Setup	Input Status	

From the Analyse Menu select Waveform/Vectorscope. The following menu will be displayed:

System Menu: Analyse Menu: Waveform/Vectorscope

Back	Waveform/Vectorscope Source: SDI 1	Waveform Monitor: On Press and Hold for setup	Waveform Mode: YCbCr Parade	Vectorscope Mode: On Press and Hold for Setup	Line Mode: All Lines	

Press and hold the Waveform button to enter the Waveform Setup menu. The following menu will be displayed:

Analyse: Waveform/Vectorscope / Waveform Setup

Back	Waveform Mode: YCbCr Parade	Waveform Graticule: Full	H Magnification 1X	V Magnification 1X	Waveform Display Options:	Start of Analysed Area: 24.56

Back

Returns to the Waveform-Vectorscope Menu

Waveform Mode

Select the type of waveform display. Choices are; YCbCr Parade, Y, Cb, Cr, YCbCr Stacked, RGB Parade, R, G, B, and RGB Stacked.

Waveform Graticule

Select the type of Graticule for the waveform. Choices are:

SMPTE

Standard SMPTE graticule mapping 0% to a black data value of 16 for 8 bit data or 64 for 10 bit data and 100% to a white data value of 240 for 8 bit or 940 for 10 bit. Use this when your video setup is in YCbCr mode with undershoot and overshoot limited.

Full:
Use this graticule in RGB mode and all YCbCr modes other than YCbCr mode with undershoot and overshoot limited.

H Magnification
Provides a 2x, 5x, or 10x magnification of the time base on the waveform monitor display. Use the USB Mouse/Trackball (horizontal movement) to control which part of the waveform trace is displayed within the graticule.

V Magnification
Provides a 2x, or 4x magnification of the amplitude on the waveform monitor display. Use the USB Mouse/Trackball (vertical movement) to control which part of the waveform trace is displayed within the graticule.

Waveform Display Options
Presents a menu allowing control of the refresh rate of the waveform trace (decay) and the brightness of the trace (gain)

Start of Analysed Area
The first number indicates the pixel that is the start of the waveform trace (-40 to 1920). The second number indicates the vertical offset from the center graticule line in digital scale. (±512).

Chapter 29: Analyse / Vectorscope Setup *[OPTION]*

System Menu

Cinemage 2142	Route	Process	Display	Analyse	Presets	

To navigate to the Waveform/Vectorscope menus select Analyse from the main menu. The following menu will be displayed:

System Menu: Analyse Menu

Back	Pixel Data Analysis	Waveform / Vectorscope	Measure Display Output	Gamut Violation Setup	Input Status	

From the Analyse Menu select Waveform/Vectorscope. The following menu will be displayed:

System Menu: Analyse Menu: Waveform/Vectorscope

Back	Waveform/Vectorscope Source SDI 1	Waveform Monitor: Off		Vector Scope Mode:	Line Mode	Selected Line: 514

Press and hold the Vectorscope button to enter the Vectorscope Setup menu. The following menu will be displayed:

Analyse: Waveform-Vectorscope / Vectorscope Setup

Back	Vectorscope Mode: On	VectorscopeGraticule: 100%		Vectorscope Display Decay: Fast	Vectorscope Display Gain: 6	

Back
Returns to the Waveform -Vectorscope Menu

Vectorscope Mode
Select to turn on and display Vectorscope.

Vectorscope Graticule
Select the type of Graticule for the Vectorscope, 100% or 75%

Vectorscope Display Decay / Gain
Control of the refresh rate of the Vectorscope trace.

Vectorscope Display Decay / Gain
Control of the brightness of the trace.

Chapter 30: Range and Gamut Violation[OPTION]

System Menu: Analyze Menu

Back	Pixel Data Analysis	Waveform/Vectorescope	Measure Display Output	Range and Gamut Violations	Input Status	

Pressing the Range and Gamut Violations button will take you to the following menu:

System Menu: Analyze Menu: Range and Gamut Violations

Back	Colour Input Range Violations	Colour Display Gamut Violations	Input Range Violation Thresholds	Display Gamut Thresholds	Reset Violation Thresholds	

Back
Returns you to the Analyze Menu

Colour Input Range Violations
Turns on a yellow, flashing overlay over input pixels that fall outside of the thresholds set in the Input Range Violation Thresholds Menu

Color Display Gamut Violations
Turns on red, flashing overlay over display pixels that fall outside of the thresholds set in the Display Gamut Thresholds Menu

Input Range Violations Thresholds
Enters the Input Range Violations Menu

Display Gamut Thresholds
Enters the Display Gamut Thresholds Menu

Reset Violation Thresholds
Resets all of the changes to the Input Range and Gamut Violations Thresholds to their default settings

Input Range Violations Thresholds[OPTION]

System Menu: Analyze Menu: Range and Gamut Violations

Back	Colour Input Range Violations	Colour Display Gamut Violations	Input Range Violation Thresholds	Display Gamut Thresholds	Reset Violation Thresholds	

Pressing the Color Input Range Violation Thresholds button will take you to the following menu:

System Menu: Analyze Menu: Range and Gamut Violations

Back	Luma MIN Error Threshold	Chroma MIN Error Threshold	Luma Max Error Threshold	Chroma Max Error Threshold		Luma Min Error Threshold 64

Luma Min Error Threshold

Selects the Luma Minimum Threshold to be controlled by the USB Mouse or Trackball. The default for this threshold is the SMPTE specification of 64. Any data on the input that falls below this threshold will be colored yellow on the display when the Colour Input Range Violation is turned on.

Chroma Min Error Threshold

Selects the Chroma Minimum Threshold to be controlled by the USB Mouse or Trackball. The default for this threshold is the SMPTE specification of 64. Any data on the input that falls below this threshold will be colored yellow on the display when the Colour Input Range Violation is turned on.

Luma Max Error Threshold

Selects the Luma Maximum Threshold to be controlled by the USB Mouse or Trackball. The default for this threshold is the SMPTE specification of 940. Any data on the input that falls above this threshold will be colored yellow on the display when the Colour Input Range Violation is turned on.

Chroma Max Error Threshold

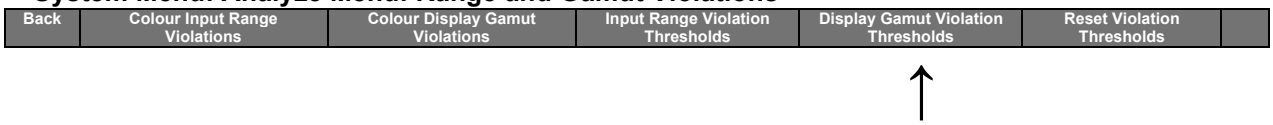
Selects the Chroma Maximum Threshold to be controlled by the USB Mouse or Trackball. The default for this threshold is the SMPTE specification of 960. Any data on the input that falls above this threshold will be colored yellow on the display when the Colour Input Range Violation is turned on.

USB Mouse/Trackball

The USB Mouse or the trackball will control your selected threshold. Moving the USB Mouse up or Rolling the Trackball up will increase the value of your threshold, moving it down or rolling it down will decrease the value.

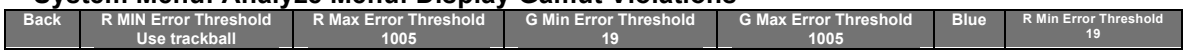
Display Gamut Thresholds[OPTION]

System Menu: Analyze Menu: Range and Gamut Violations



Pressing the Display Gamut Violation Thresholds button will take you to the following menu:

System Menu: Analyze Menu: Display Gamut Violations



Back

Returns you to the Range and Gamut Violations menu

R MIN Error Threshold

Selects the Red Channel Minimum Threshold to be controlled by the USB Mouse or trackball. The default value of this threshold is 19, roughly 1.85% above the lower limit of the LCD panel's capability. Any value falling below this value will flash red when the Colour Display Gamut Violations is set to on. *Note:* The threshold pertains to the display process, and as such will include any processing effects you have put in place; including Input LUTs, 3D LUTs (if routed to the Display), and Calibration.

R MAX Error Threshold

Selects the Red Channel Maximum Threshold to be controlled by the USB Mouse or trackball. The default value of this threshold is 1005, roughly 1.85% below the upper limit of the LCD panel's capability. Any value falling above this value will flash red when the Colour Display Gamut Violations is set to on. ***Note:*** The threshold pertains to the display process, and as such will include any processing effects you have put in place; including Input LUTs, 3D LUTs (if routed to the Display), and Calibration.

G MIN Error Threshold

Selects the Green Channel Minimum Threshold to be controlled by the USB Mouse or trackball. The default value of this threshold is 19, roughly 1.85% above the lower limit of the LCD panel's capability. Any value falling below this value will flash red when the Colour Display Gamut Violations is set to on. ***Note:*** The threshold pertains to the display process, and as such will include any processing effects you have put in place; including Input LUTs, 3D LUTs (if routed to the Display), and Calibration.

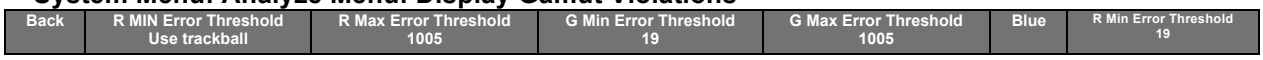
GMAX Error Threshold

Selects the Green Channel Maximum Threshold to be controlled by the USB Mouse or trackball. The default value of this threshold is 1005, roughly 1.85% below the upper limit of the LCD panel's capability. Any value falling below this value will flash red when the Colour Display Gamut Violations is set to on. ***Note:*** The threshold pertains to the display process, and as such will include any processing effects you have put in place; including Input LUTs, 3D LUTs (if routed to the Display), and Calibration.

Blue

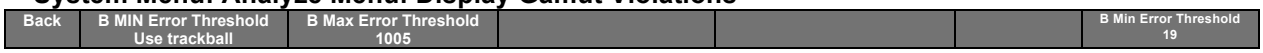
Takes you to the next Display Gamut Threshold Violations Menu to control the Thresholds for Blue Minimum and Maximum Error Thresholds.

System Menu: Analyze Menu: Display Gamut Violations



Pressing the Blue button will take you to the following menu:

System Menu: Analyze Menu: Display Gamut Violations



B MIN Error Threshold

Selects the Blue Channel Minimum Threshold to be controlled by the USB Mouse or trackball. The default value of this threshold is 19, roughly 1.85% above the lower limit of the LCD panel's capability. Any value falling below this value will flash red when the Colour Display Gamut Violations is set to on. ***Note:*** The threshold pertains to the display process, and as such will include any processing effects you have put in place; including Input LUTs, 3D LUTs (if routed to the Display), and Calibration.

B MAX Error Threshold

Selects the Blue Channel Maximum Threshold to be controlled by the USB Mouse or trackball. The default value of this threshold is 1005, roughly 1.85% below the upper limit of the LCD panel's capability. Any value falling above this value will flash red when the Colour Display Gamut Violations is set to on. ***Note:*** The threshold pertains to the display process, and as such will include any processing effects you have put in place; including Input LUTs, 3D LUTs (if routed to the Display), and Calibration.

Cine-tal

Field Service Bulletin: #061220
Title: DVI Input Release Notes
Date: December 20, 2006

Summary:
DVI is enabled on the Cinemage product line in two phases. The first phase is on software version 2.1. In this release the Cinemage supports a DVI-D or DVI-I input at a fixed 1920x1200 resolution with a refresh rate of 60Hz. The DVI input can not be routed to the HDSDI outputs, Framestore, or 3D LUT. When the DVI input is selected it is calibrated and routed directly to the display at the full 1920x1200 resolution. As this is the full resolution of the panel, the menus and heads-up display are not visible.

After selecting the DVI input users can return to the menus by selecting any button. The standard use of the DVI input in version 2.1 is as a calibrated desktop display for a computer workstation with a DVI-D or DVI-I output supporting 1920 x1200 resolution at 60 Hz.

The second phase of DVI support will be in version 2.2. In the 2.2 release the DVI input will support several HD video related resolutions and frame rates. These resolutions may be routed to HDSDI outputs, Framestore, or 3D LUT and is available as a source for the split screen and waveform monitor and vector scope.

Cinemage Supported Resolutions:

Video Format	HD-SDI	DVI	Software Version	Release Date
Computer Graphics DVI-D				
1920 x 1200 / 60 Hz (see note 1)		●	2.1	12/28/2006
Single Link (4:2:2)				
486i /59.94 (see note 1)	●		2.0	Released
576i /50 (see note 1)	●		2.0	Released
720p / 23.98, 24, 25, 29.97, 30, 50, 59.94,	●	●	2.2	2/15/2006 (for DVI-D)
1080sF / 23.98, 24, 25, 29.97, 30 Hz	●	●	2.2	2/15/2006 (for DVI-D)
1080i / 50, 59.94, 60 Hz	●	●	2.2	2/15/2006 (for DVI-D)
1080p / 23.98, 24, 25, 29.97, 30 Hz	●	●	2.2	2/15/2006 (for DVI-D)
Dual Link (4:4:4)				
1080sF / 23.98, 24, 25, 29.97, 30 Hz	●		1.0	Released
1080i / 50, 59.94, 60 Hz	●		1.0	Released
1080p / 23.98, 24, 25, 29.97, 30 Hz	●		1.0	Released

(1) Framestore, Marker, LUTs, &OmniTek options operate only in HD modes

EDID
Extended **D**isplay **I**dentification **D**ata is a VESA standard data format that contains basic information about a monitor and its capabilities, including vendor information, maximum image size, color characteristics, factory pre-set timings, frequency range limits. The information is stored in the display and is used to communicate to computer

graphics adapter. The system uses this information for configuration purposes, so the monitor and computer system can work together. Cinemage systems shipped before December 1, 2006 did not have the EDID set in DVI input chipsets (see Setting EDID). If you are using an operating system in your computer that allows manual settings for monitor support you should set them to:

Pixel Clk:	154	V Active Lines:	1200
H Active Pix:	1920	V Blank:	35
H Blank:	160	V Sync Offset:	3
H Sync Offset:	48	V Sync Width:	6
H Sync Width:	32	V Image Size:	324
H Image Size:	519	V Border:	0
H border:	0	Min V Rate:	56 Hz
Min H Rate:	30 KHz	Max V Rate:	76 Hz
Max H Rate:	81 KHz		
Max PxlClk:	170 MHz		

Setting EDID

Although it is not required to use the DVI input, customers with Cinemage units shipped before December 1, 2006 may want to setup the EDID on their systems. Setting the EDID is accomplished with a field update kit available for loan from Cine-tal. The EDID update kit allows customers to set their EDID without returning the units to the factory. The update kit includes a special DVI cable and WindowsXP based software. System requirements are a WindowsXP based system with a standard RS232 Serial Port. Customers may also return units to Cine-tal for EDID settings. Contact Cine-tal Customer Service (01-317-576-0091) or (support@cine-tal.com) to determine the best method for you.