



Dolby
3D Color
Processor

Cine-tal

User Manual

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:

Dolby 3D Color Processor

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.

Dolby 3D Color Processor User's Guide

Copyright © 2007 Cine-tal Systems, INC.

All Rights Reserved

Reproduction, adaptation, or translation of this document without prior permission is prohibited, except as allowed under copyright laws.

Printed in the United States

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

Cine-tal Systems, INC.

Official Notices	i
Limitation of Liability	i
Cine-tal Software License Agreement and Warranty	i
I. Software License Agreement.....	i
II. Cine-tal Limited Warranty	iii
III. Cine-tal Extended Warranty.....	iv
IV. Limitations	v
V. Warranty and Service Support	vi
VI. Customer's Acknowledgement	vii
Section 1: Setting up the System.....	1
Chapter 1: Administrative Tasks	1
Establishing network settings	1
Setting the Matrix Password	3
Section 2: Getting Started.....	4
Changing Matrix Coefficients	6
Gamma IO	8
IO Color.....	9
Startup Settings	12
Updates.....	13
Unit Info.....	14

Official Notices

Limitation of Liability

CINE-TAL SYSTEMS INC. SHALL NOT BE LIABLE FOR INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES; FOR DAMAGES THAT DIRECTLY OR INDIRECTLY ARISE FROM YOUR USE OF, OR INABILITY TO USE, THE SYSTEM; FOR COMMERCIAL LOSS OF ANY KIND; FOR THE PROCUREMENT OF SUBSTITUTE GOODS—WHETHER ARISING IN TORT, CONTRACT OR ANY OTHER LEGAL THEORY, EVEN IF CINE-TAL SYSTEMS INC. HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. IN ANY EVENT, CINE-TAL SYSTEMS INC.'S LIABILITY SHALL BE LIMITED TO THE AMOUNT ACTUALLY PAID BY YOU FOR THE SYSTEM GIVING RISE TO ANY SUCH DAMAGE. THIS LIMITATION IS INTENDED TO LIMIT CINE-TAL SYSTEMS INC.'S LIABILITY AND SHALL NOTWITHSTANDING ANY FAILURE OF ESSENTIAL PURPOSE OF ANY LIMITED REMEDY.

Cine-tal Software License Agreement and Warranty

BEFORE YOU OPEN AND USE THE ENCLOSED PRODUCT THAT INCORPORATES THE 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.

I. Software License Agreement

WARNING: THE 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.

1. **Grant of License.** Subject to the terms and conditions of this Agreement and in consideration for your purchase of the enclosed Cine-tal product (the "Product"), Cine-tal grants you a nonexclusive, nontransferable, limited license, without right of sublicense, to use the software installed on the Product and any updates and modifications to the Product (collectively "Software") as set forth in this Agreement. Cine-tal shall provide you with any enhancements, updates, modifications, patches, error corrections or upgrades (collectively, "Upgrades") to the major version of its Software currently licensed to you under this Agreement within a commercially reasonable time after its general public release. In the event Cine-tal develops and releases a newer version of the Software, you are not entitled to such newer version under this Agreement. This Agreement is for a license of intellectual property, and not for the sale of goods (even though some tangible items may be provided) and not governed by the Uniform Commercial Code.

2. **Restrictions.** The Software is protected by both United States copyright law and international treaty provisions. Unauthorized copying of the Software is expressly forbidden. You may not distribute copies of the Software to others, including but not limited to, your consultants, affiliates, independent contractors, or any other third party. You may not modify, adapt, translate, reverse engineer, decompile, disassemble, or create derivative works based on the Software. You may be held legally 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 Cinetal'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 Warranty

Cine-tal makes the following limited 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 Cine'mage 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 Cine'mage products ("Cine'mage 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 Cine'mage Products shall be free of defects for 90 days from the date of purchase; and
 - B. Following 90 days from the date of purchase, the LCD panel in Cine'mage Products shall conform with the standards described in the Cine-tal LCD Panel Warranty Defect Definitions And Standards, which is available upon request, for the remainder of one year from the date of purchase.
4. Cine-tal software media related to and incorporated in Cine-tal Products and Cine'mage 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 Cine'mage Products shall be free of defects in materials and workmanship in the repair for 90 days from the date of repair.

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

III. Cine-tal Extended Warranty

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

Should Customer purchase an Extended 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 Warranty period for Cine-tal Products;
2. Cine'mage Products shall be free of defects in materials and workmanship for one year following the expiration of the Limited Warranty period for Cine'mage Products, except that:
 - A. The LCD panel in Cine'mage Products will conform to the standards described in the "Cine-tal LCD Panel Warranty Defect Definitions And Standards," for one year following the expiration of the Limited Warranty period for Cine'mage Products;
 - B. Should the LCD panel in a Cine'mage Product cease to conform to the standards described in the Cine-tal LCD Panel Warranty Defect Definitions And Standards during the one year following the expiration of the Limited Warranty period, Cine-tal will replace the LCD panel with a panel that conforms to the standards described in that document. Cine-tal warrants that the replacement panel will meet the standards in the Cine-tal LCD Panel Warranty Defect Definitions And Standards at the time of replacement only. Cine-tal provides no warranties, guarantees, or other promises with respect to future performance or quality beyond the date of replacement; and
 - C. Should the LCD panel in a Cine'mage Product cease to conform to the standards described in the Cine-tal LCD Panel Warranty Defect Definitions And Standards during the one year following the expiration of the Limited Warranty period, and should the Customer elect to upgrade that replacement with an LCD panel warranted to be defect free for 90 days, the Customer may do so at a price to be determined by Cine-tal at the time of purchase of the Extended Warranty. Customer's purchase of this upgrade must be confirmed in writing by Cine-tal at the time of purchase.

The extended warranties described above are referred to herein as the "Extended Warranty," and are referred to in combination with the Limited Warranty as the "Cine-tal 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 Warranty is strictly limited to the abovedescribed defects that exist at the time of sale and arise during normal use of Cine-tal Products and Cine'mage Products. The Cine-tal Warranty does not apply if (i) the Cinetal 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 Cine'mage 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 Cine'mage Product or affected component with a comparable Cine-tal Product or Cine'mage Product or component. The replacement Cine'tal Product or Cine'mage Product or component may be new or reconditioned, and may include used Cine'tal Products or Cine-mange Products and/or components, but will have functionality at least equivalent to the original. However, repair or replacement of LCD panels in Cine'mage Products under the Extended Warranty shall be limited as stated in paragraph 2 of the Extended Warranty.

3. **Repairs.** All repairs to Cine-tal Products and Cine'mage 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 nontransferable.

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 STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF LIABILITY FOR CONSEQUENTIAL OR INCIDENTAL DAMAGES. THE ABOVE LIMITATIONS MAY NOT APPLY TO CUSTOMERS IN THOSE STATES.

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.

V. Warranty and Service 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.

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

AMERICAS, WESTERN EUROPE, ASIA & 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-5:30pm **EST (GMT 14:30-23:30)**

Support e-mail:

support@cine-tal.com

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

Dolby 3D Color Processor User Manual v1.2

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 Cinetal, 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.

5. In certain limited circumstances, Cine-tal may, at its election, provide Customer with new or refurbished Cine-tal Products or components in advance of Cine-tal's receipt of returned Cine-tal Products or components. Should Cine-tal elect to do so, Customer must provide (i) a company purchase order (or credit card deposit) for the value of the Cine-tal Products or components being provided, and (ii) the serial number of the Cine-tal Products or components being returned. Your PO or credit card will not be billed if the non-functioning items are returned within 7 days of Cine-tal's receipt of the items.

6. Returned Cine-tal Products must be properly packed, undamaged, properly insured, and shipped pre-paid to Cine-tal with the RMA number clearly displayed on the outside of the package and on the accompanying RMA form. Cine-tal will refuse to accept any package without a valid RMA number.

7. Normal labor, material, and shipping charges will apply to repairs outside the scope of the Cine-tal Warranty and are the sole obligation of the Customer.

VI. Customer's Acknowledgement

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: Setting up the System

Chapter 1: Administrative Tasks

When setting up your Dolby 3D Color Processor for the first time, there are some administrative tasks that must be completed using a local connection to the device. For this setup you will need a VGA monitor, a mouse (either USB or PS/2), and a keyboard (either USB or PS/2). Connect each of these to their corresponding port on the back of the unit, and power up the device.

The first administrative task to be performed is:

Establishing network settings

To establish the network settings of the Dolby 3D Color Processor, you will first need to determine if the device will connect to your local network using a dynamically or statically configured IP address. If you are unsure which method is correct, contact your system administrator to determine what is standard for your facility. **Note:** The device defaults to a dynamically assigned IP configuration. If this is the standard for your facility, then no further action is required for network configuration of the device.

If a static IP address is required, perform the following steps to configure the network settings of the device:

Close the Dolby 3D Color Processing Control Application. The tab to close the application will be found in the upper right hand corner of the screen.

Once closed, enter the Setup tab, found on the top of the screen.

Once you have entered the Setup tab, you should see the following screen:

The screenshot shows a web-based control panel with a navigation bar at the top containing 'Controls', 'Setup', and 'Help'. The 'Setup' tab is active. The main content area is divided into two panels: 'IP Address' and 'Machine Information'.
The 'IP Address' panel contains two radio buttons: 'Obtain an IP address automatically' (which is selected) and 'Use the following IP address'. Below these are four input fields: 'IP address:', 'Subnet mask:', 'Default gateway:', and 'DNS address:'. Each field has a 'Verify' button next to it. The 'Subnet mask' field contains the value '255.255.255.0'.
The 'Machine Information' panel displays: 'Machine Name: labrat5.AccessTech.loc', 'IP Address: 192.168.1.118' (with a 'Refresh' button), and 'MAC Address: 00-16-EC-48-A9-69'.
Below the 'IP Address' panel is a 'Matrix Password' input field. At the bottom center, there is a box containing the text: 'This button enabled after settings are verified. Click the button to commit any changes reboot.' and a 'Commit Changes and Reboot' button.

Select the “Use the following IP address” radio button. Fill in the fields below with the IP Address, Subnet Mask, Default Gateway, and DNS address with their corresponding information. You will need to fill in all of these fields to properly establish your static IP address. Once you have finished, click the “Verify”. The system will go out and register itself on the network. The IP address field will update as soon as the device has established a valid IP address on your network.

Once you have completed these steps, you can re-enter the Dolby 3D Color Processor Control Application without a system reboot. These networks settings will be saved on the next power down of the device using the switch on the front panel.

Setting the Matrix Password

The next administrative task to be performed while connected locally to the device is to set the administrative password, also known as the Matrix Password. This password is used to unlock the device to establish presets, and make adjustments to the color matrices. On initial power-up, the unit is locked. The default password is **insecure**. It is recommended that the system administrator set the password during the installation process. To set the Matrix Password follow these steps:

The screenshot shows a web-based configuration interface with three tabs: 'Controls', 'Setup', and 'Help'. The 'Setup' tab is active. It is divided into two main panels: 'IP Address' and 'Machine Information'.
The 'IP Address' panel contains two radio button options: 'Obtain an IP address automatically' (which is selected) and 'Use the following IP address'. Below these are four input fields: 'IP address', 'Subnet mask', 'Default gateway', and 'DNS address', each with a 'Verify' button.
The 'Machine Information' panel contains three fields: 'Machine Name' (labrat5.AccessTech.loc), 'IP Address' (192.168.1.118 with a 'Refresh' button), and 'MAC Address' (00-16-EC-48-A9-69).
Below the panels is a 'Matrix Password' text box. Below that is a 'Commit Changes and Reboot' button. A callout box points to this button with the text: 'This button enabled after settings are verified. Click the button to commit any changes reboot.'

Enter the new Matrix Password in the text box provided.

Press the Commit Changes and Reboot button. This will lock in the new password and reboot the system.

Section 2: Getting Started

Matrix Operate: 192.168.1.67

http://192.168.1.67/

exact target Pandora Radio Apple Yahoo! Google Maps Wikipedia News (301) Popular

DOLBY 3D DIGITAL CINEMA
Dolby 3D Color Processor

Cine-tal

Matrix A			
R	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
G *	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="0"/>
B	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>

Get

Matrix B			
R	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
G *	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="0"/>
B	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>

Get

Setup	
Click to unlock	
Set IO Gamma:	<input type="text" value="2.6"/>
Set IO Color:	<input type="text" value="4:2:2 YCbCr P3 (DCI)"/>
Select Preset:	<input type="text" value="Select Preset..."/>
Selected Reference:	<input type="text" value="SDI 1"/>
Autoformat Enable:	<input type="text" value="ON"/>
Video Format:	<input type="text" value="1080 i 59.94"/>

Update

Upload Choose File no file selected

NO UPDATE FOUND

Unit Info
Environment: 4
Matrix: v1.2b2
Input FPGA: 3.5
Output FPGA: 3.5
Boot FPGA: 3.1

NOTE: From this point on, all screen shots will be same for either local or network access to the device.

When booting the Dolby 3D Color Processor for the first time, it will come up in a locked state. To make changes to the color matrices or to save or import presets you will need to enter the password. Press the Click to **Unlock** Button, and you be given the below prompt:

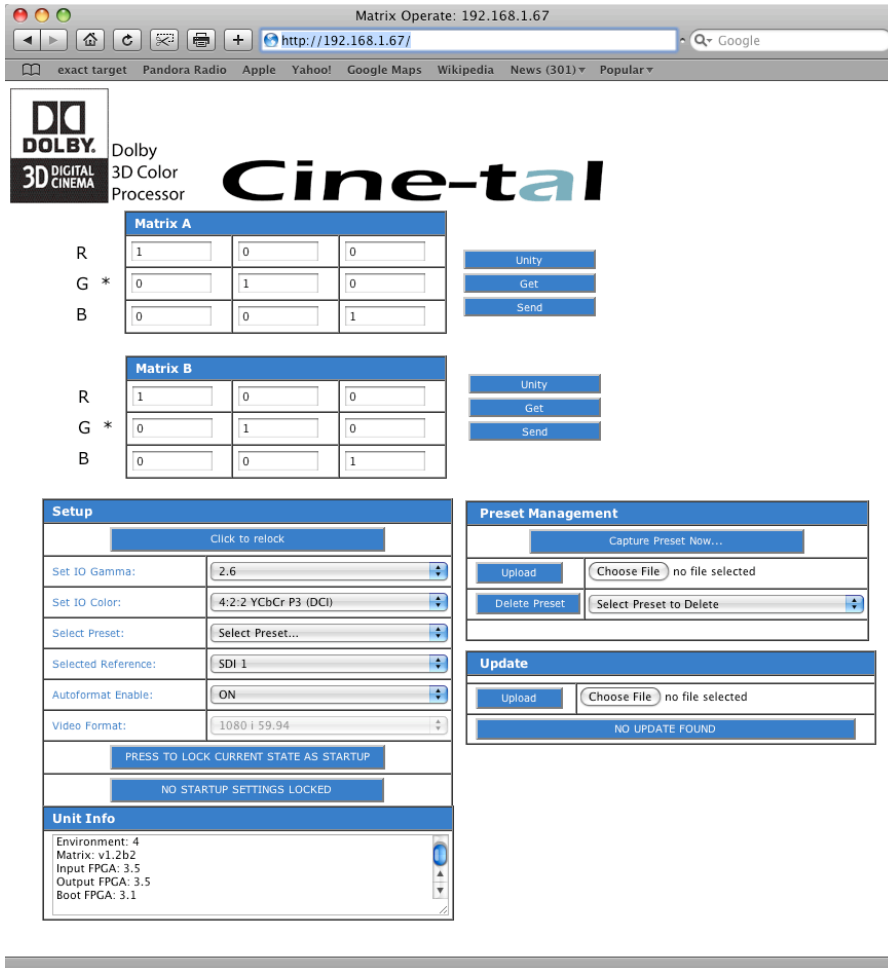
http://192.168.1.67

Please enter password.

Cancel OK

The default password is **insecure**. This password should be changed as soon as possible by the system administrator.

Entering the correct Matrix Password will open several options within the main operation page:



Unlocking the system will allow you to make changes to the color matrices, save presets, set the input and output gammas, set the input and output color spaces, and set the startup settings of the device.

Changing Matrix Coefficients

To make changes to matrix coefficients, with the system unlocked, simply enter your new values into the grid provided.

Matrix A			
R	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
G *	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="0"/>
B	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>

Unity
Get
Send

The grid is arranged as Red, Green, Blue from left to right; and Red, Green, Blue from top to bottom. Matrix A is for the left eye view, Matrix B for the right eye view. The default, or Unity Matrix, contains the coefficients seen above.

When changes are made that have not been applied yet, the changed field will turn red in color:

Matrix A			
R	<input type="text" value="1"/>	<input type="text" value=".6"/>	<input type="text" value=".1"/>
G *	<input type="text" value="1"/>	<input type="text" value=".6"/>	<input type="text" value=".2"/>
B	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>

Unity
Get
Send

To apply the changes, press the **Send** button.

Matrix A			
R	<input type="text" value="1"/>	<input type="text" value="0"/>	<input type="text" value="0"/>
G *	<input type="text" value="0"/>	<input type="text" value="1"/>	<input type="text" value="0"/>
B	<input type="text" value="0"/>	<input type="text" value="0"/>	<input type="text" value="1"/>

Unity
Get
Send


To update the coefficients to the current state of the device, press the **Get** button.

Matrix A		
R	1	0
G *	0	1
B	0	1

Unity

Get

Send



Pressing the **Unity** button will return the device to the default matrix coefficients.

Gamma IO

Beginning with Dolby Matrix v1.2 the operator is able to select an arbitrary gamma correction curve for their input and output. The gamma can be set in increments of .1, from .5 to 4.9. The gamma setting will default to the standard gamma for the selected color space until it has been changed. To change the Input and Output Gamma, simply select the proper setting from the **Gamma IO** pulldown menu in the **Setup** pane:

The screenshot shows the Matrix Operator web interface. At the top, there is a browser window with the address bar showing 'http://192.168.1.67/'. Below the browser, the interface features the Dolby 3D Digital Cinema logo and the 'Cine-tal' title. The main content area is divided into several sections:

- Matrix A**: A 3x3 grid of input/output matrices for Red (R), Green (G), and Blue (B) channels. The G channel is marked with an asterisk (*). The matrix values are: R (1, 0, 0), G (0, 1, 0), B (0, 0, 1). Buttons for 'Unity', 'Get', and 'Send' are to the right.
- Matrix B**: A 3x3 grid of input/output matrices for Red (R), Green (G), and Blue (B) channels. The G channel is marked with an asterisk (*). The matrix values are: R (1, 0, 0), G (0, 1, 0), B (0, 0, 1). Buttons for 'Unity', 'Get', and 'Send' are to the right.
- Setup**: A configuration pane with various settings. The 'Set IO Gamma' dropdown is highlighted with a blue arrow and set to '2.6'. Other settings include 'Set IO Color' (4:2:2 YCbCr P3 (DCI)), 'Select Preset' (Select Preset...), 'Selected Reference' (SDI 1), 'Autoformat Enable' (ON), and 'Video Format' (1080 i 59.94). A 'Click to reload' button is at the top. Below the settings are buttons for 'PRESS TO LOCK CURRENT STATE AS STARTUP' and 'NO STARTUP SETTINGS LOCKED'.
- Unit Info**: A section showing system information: Environment: 4, Matrix: v1.2b2, Input FPGA: 3.5, Output FPGA: 3.5, Boot FPGA: 3.1.
- Preset Management**: A section with a 'Capture Preset Now...' button, 'Upload' and 'Delete Preset' buttons, and a 'Choose File' button with 'no file selected' text.
- Update**: A section with an 'Update' button, a 'Choose File' button with 'no file selected' text, and a 'NO UPDATE FOUND' status bar.

IO Color

Beginning with Dolby Matrix v1.2, support has been added for multiple color spaces. Choices include: YCbCr SMPTE (64-940), YCbCr Full Range (0-1023), YCbCr Extended Range (64-1023), YCbCr P3 (0-1023), and SD 601 (64-940). To change the input and output color space, select the proper setting from the **Set IO Color** pulldown menu in the **Setup** pane:

The screenshot shows the web interface for the Dolby Matrix v1.2 processor. The browser address bar shows the URL <http://192.168.1.67/>. The interface includes the Dolby 3D Digital Cinema logo and the 'Cine-tal' branding. Two color matrices are displayed:

	Matrix A		
R	1	0	0
G *	0	1	0
B	0	0	1

	Matrix B		
R	1	0	0
G *	0	1	0
B	0	0	1

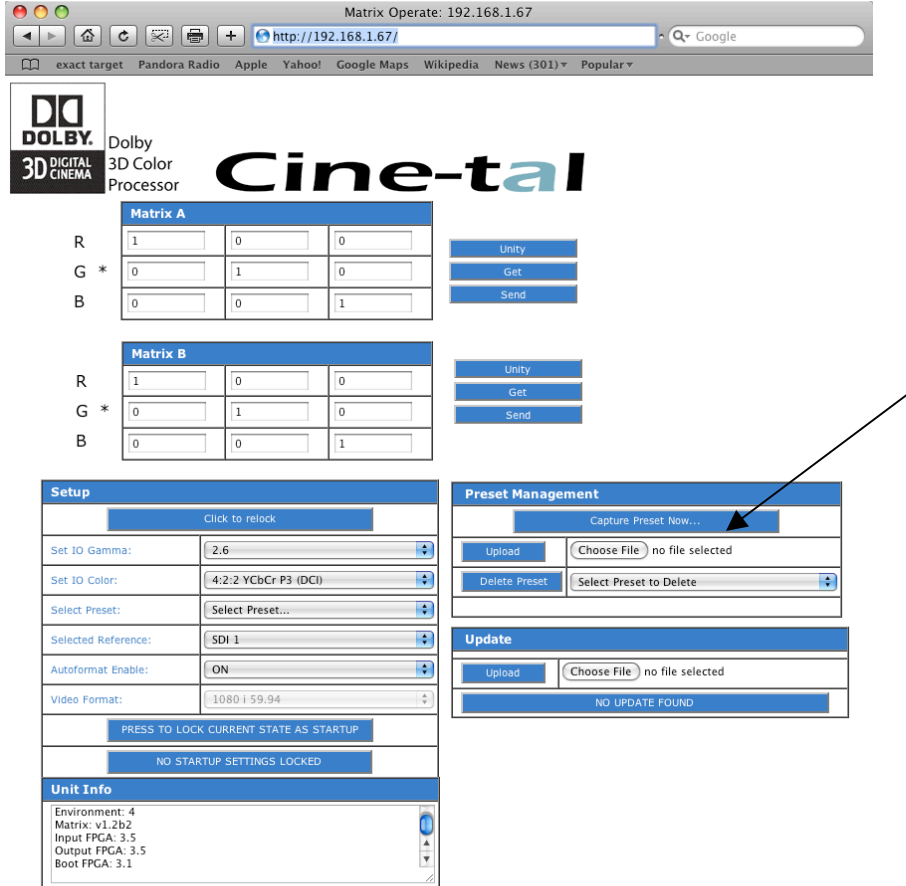
Buttons for 'Unity', 'Get', and 'Send' are provided for each matrix. The 'Setup' pane is expanded, showing the following settings:

- Click to relock
- Set IO Gamma: 2.6
- Set IO Color: 4:2:2 YCbCr P3 (DCI) (indicated by an arrow)
- Select Preset: Select Preset...
- Selected Reference: SDI 1
- Autoformat Enable: ON
- Video Format: 1080 i 59.94
- PRESS TO LOCK CURRENT STATE AS STARTUP
- NO STARTUP SETTINGS LOCKED
- Unit Info: Environment: 4, Matrix: v1.2b2, Input FPGA: 3.5, Output FPGA: 3.5, Boot FPGA: 3.1

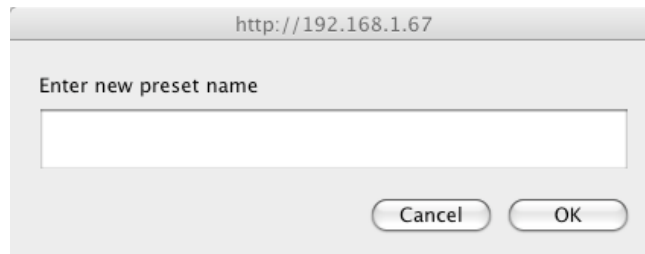
The 'Preset Management' pane shows options for 'Capture Preset Now...', 'Upload', 'Delete Preset', and 'Select Preset to Delete'. The 'Update' pane shows 'Upload', 'Choose File', and 'NO UPDATE FOUND'.

Preset Management

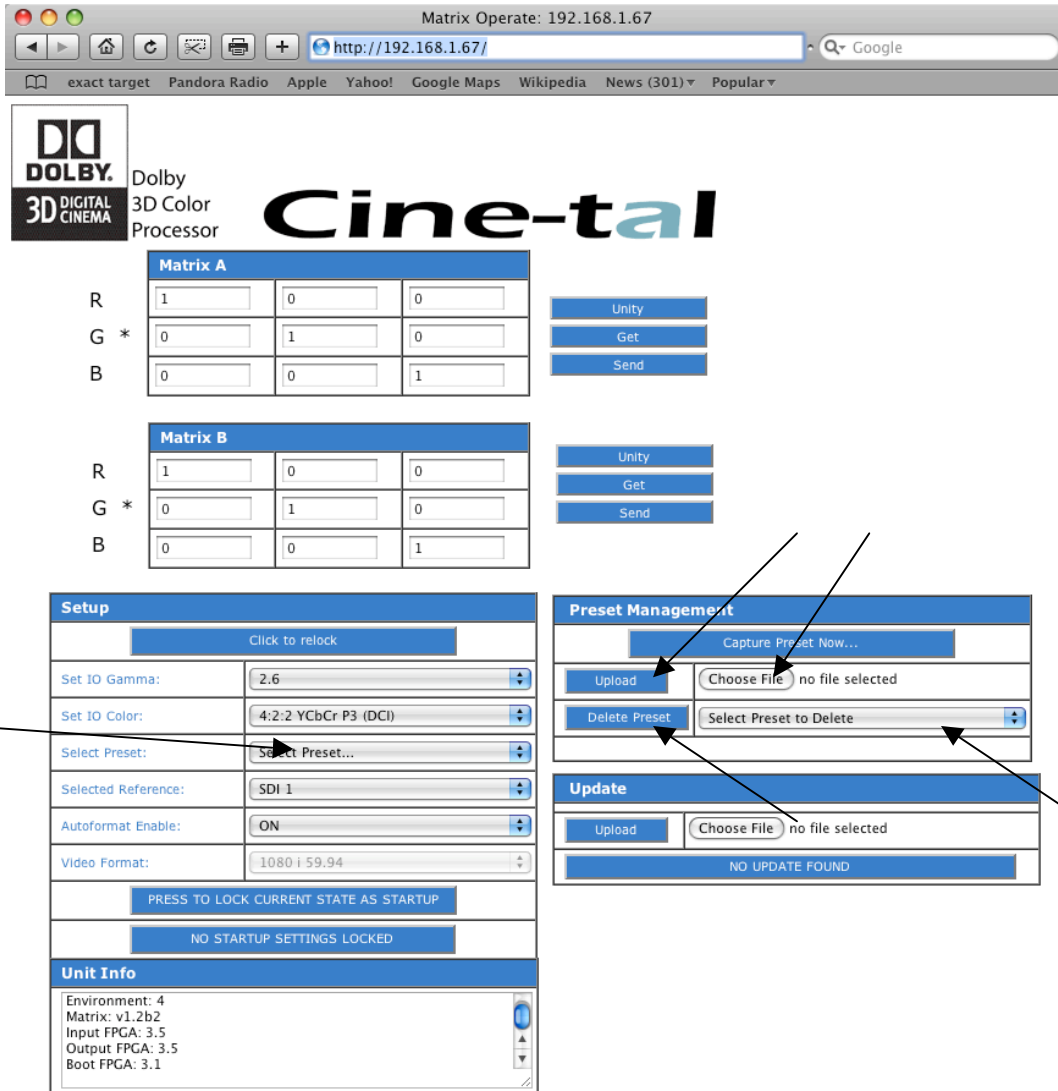
Once you have set matrix coefficients for both Matrix A and B, you can capture those matrix settings as a preset so they can be easily recalled at a later time. To do this, simply press the **Capture Preset Now** Button:



Upon pressing this button you will be given the following prompt to name the preset:

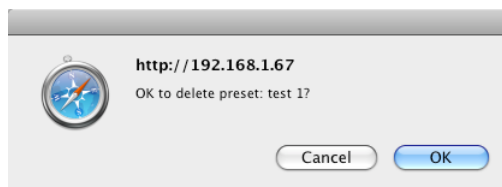


Once you have saved your preset, it will be available for recall by selecting it from the **Preset** pulldown menu:



You can also add Presets from a remote file location. To do this, select the **choose file** button to locate the preset you would like to upload to the device. When you have located and selected your preset, press the **upload** button to store that preset locally on the device and make it available in the pull-down menu.

To delete preset, select that preset from the **Select Preset to Delete** pull-down menu, and press the **Delete Preset** button. You will be given the below prompt to confirm deleting the preset:



Startup Settings

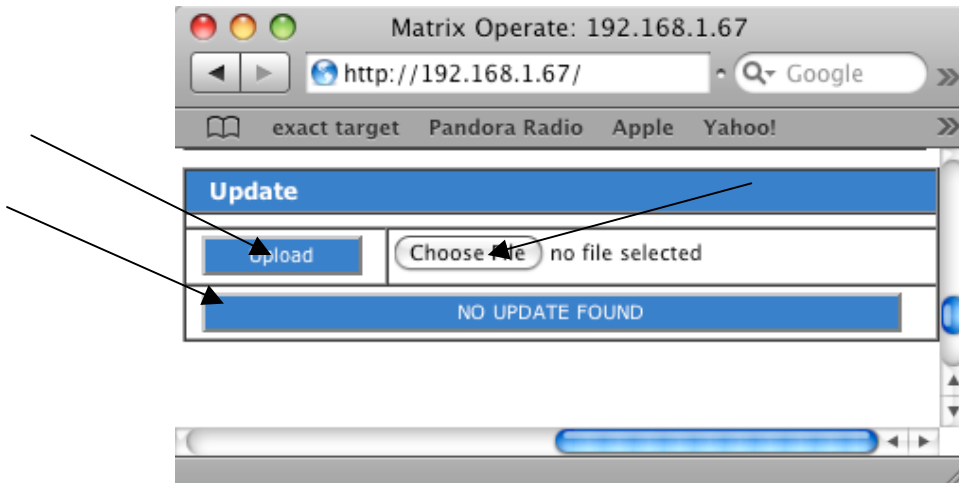
The Dolby 3D Color Processor gives you the ability to lock in a state as “permanent” startup settings. This operation can only be done or undone with the system in an unlocked state. These startup settings will include the current loaded matrix coefficients, the selected reference, and selected video format. The unit will continue to boot up in this saved state until the startup settings are cleared. If no startup settings are locked in, the system will reboot in the state it was in when shut down.

To lock in the current settings as the startup settings, simply press the **Press to Lock Current State as Startup** button:

The screenshot shows the web interface for the Dolby 3D Color Processor. At the top, there is a browser window with the URL <http://192.168.1.67/>. The main content area features the Dolby 3D Digital Cinema logo and the 'Cine-tal' branding. Below this, there are two matrix configuration sections: Matrix A and Matrix B. Each matrix section has three rows labeled R, G, and B, with input fields for coefficients. To the right of each matrix is a 'Unity' button, a 'Get' button, and a 'Send' button. Below the matrices are three main panels: 'Setup', 'Preset Management', and 'Update'. The 'Setup' panel includes a 'Click to relock' button, dropdown menus for 'Set IO Gamma' (2.6), 'Set IO Color' (4:2:2 YCbCr P3 (DCI)), 'Select Preset...', 'Selected Reference' (SDI 1), 'Autoformat Enable' (ON), and 'Video Format' (1080i 59.94). A blue button labeled 'PRESS TO LOCK CURRENT STATE AS STARTUP' is highlighted with a red arrow. Below it is a status bar that says 'NO STARTUP SETTINGS LOCKED'. The 'Unit Info' panel at the bottom shows system details: Environment: 4, Matrix: v1.2b2, Input FPGA: 3.5, Output FPGA: 3.5, and Boot FPGA: 3.1. The 'Preset Management' panel has a 'Capture Preset Now...' button, an 'Upload' button, a 'Choose File' button (no file selected), and a 'Delete Preset' button with a 'Select Preset to Delete' dropdown. The 'Update' panel has an 'Upload' button, a 'Choose File' button (no file selected), and a 'NO UPDATE FOUND' status bar.

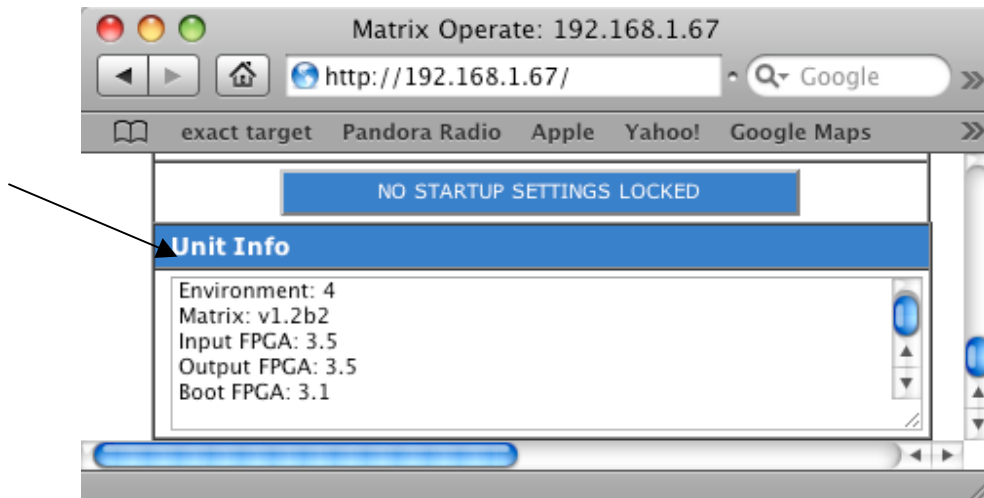
To clear the saved Startup state and resume saving startup settings on power down, press the Press to Erase Startup Settings button.

Updates



To perform a software or firmware update to the Dolby 3D Color Processor, you will utilize the update pane of the operation window. Press the **Choose File** button to locate the updater file on your local machine, then press the **Upload** button “push” the update across the network. The button below will Update to “press to run *****” (where ***** is the filename of the update) when the update has been uploaded to the system. Press the button to begin the update procedure. The unit will power itself off when the update is complete.

Unit Info



The Unit Info pane provides information about the system, including the original software build, any subsequent updates, and the firmware version numbers.