## How To Use This Manual In the toolbar:



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## On the page:

Click on the text within the Contents page to jump to information on that topic. Click on any red text to automatically jump to more information about that topic.

## **Printing:**

While optimized for onscreen viewing, the pages of this manual are formatted for printing on  $8 \frac{1}{2} \times 11^{"}$  and A4 sized paper, giving you the option to print the entire manual or just a specific page or section.

## To Exit:

From the Menu bar at the top of your screen, select: File > Quit.

# Icons Used In This Manual

Italicized paragraphs feature an icon describing the type of information being given.



Important Info: This icon refers to an important step that must be followed.



Tech Note: This icon refers to tips to help maximize performance.



Caution! This icon indicates a potential hazard, and gives tips on how to avoid them.

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## **FCC Information**

#### Information For Users

Any changes or modifications made to this device which are not expressly approved by LaCie are prohibited and may void the user's authority to operate this equipment.

#### **General Information Statement**

This device complies with Part 15 of the FCC Rules. Operation of this device is subject to the following two conditions: 1. This device may not cause harmful interference, and

2. This device must accept any interference received, including interference that may cause undesired operation. 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 Rules. These limits are designed to provide reasonable protection against harmful interference in a commercial installation. This equipment causes, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. There is no guarantee, however, that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and then on, the user is encouraged to try to correct the interference by one or more of the following measures:

- 1. Reorient or relocate the receiving antenna
- 2. Increase the separation between the equipment and the antenna
- 3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- 4. Consult the dealer or an experienced TV/radio technician for help

#### FCC Compliance Statement For United States Users

This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and if not installed and used in accordance with the instructions may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause

harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult dealer or an experienced radio/TV technician for help.





FOR HOME OR OFFICE USE

Changes or modifications not expressly approved by the manufacturer could void the authority of the user to operate this equipment.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions;

- 1. this device may not cause harmful interference, and
- 2. this device must accept any interference received, including interference that may cause undesired operation.

#### For Canadian Users

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numerique de la classe B est conforme a la norme NMB-003 du Canada.

#### For European Users

This product conforms to the requirements of EC Directives 73/23/EEC and 89/336/EEC. Declaration of Conformity / Déclaration de Conformité / Erklarung zur einhaltung von Produktnormen:

Sequel Imaging, Inc.
25 Nashua Road, Londonderry, NH 03053-USA
Product Name/ Designation / Produktname:
Sequel Imaging
Model Number / Numéro de modèle / Modelnummer:
Digital Control
Conforms to the following Product Specifications / Satisfait aux spécificatons produit suivantes / Den folgenden Produktspezifi-kationen enspricht:
EMC: EN 60950 / EN 55022:1994 Class B / EN 61000-4-4:1995 / EN 55024:1998 / EN 61000-4-5:1995 EN 61000-4-2:1995 / EN 61000-4-6:1996 / EN 61000-4-3:1996 / EN 61000-4-11:199

# 1. Introduction

Enter the LaCie blue eye 2 color management solution. The LaCie blue eye vision colorimeter and LaCie blue eye 2 software deliver precise color control for monitors, allowing for calibration of the three red, green and blue gains of the monitor individually, and then creating an ICC profile of the monitor.

These profiles provide a description of the monitor's individual characteristics, measuring the gamma, white point and luminance. Profiles created with a colorimeter and software, such as those created by the LaCie blue eye 2, are more accurate and help programs like Adobe PhotoShop display images properly.

Graphic professionals working in color-managed environments will be able to adjust every monitor in their image chain, allowing them to evaluate images and perform real-time edits with assured accuracy. A properly calibrated



and profiled monitor also allows for "soft-proofing," because the image is verified, which saves time and money. Whether you're using Macs or PCs, CRTs or TFTs, every monitor will display the images as they were intended.

# 1.1. What Your LaCie blue eye 2 Can Do

- Calibrate CRT and TFT display monitors
- Allows you to manage your color with ICC profiles
- Provide precise, accurate color correction

# 2. Your LaCie blue eye 2

## 2.1. Minimum System Requirements

#### **Mac Users**

- Mac OS 9.2 or greater or Mac OS10.2.x or greater
- Power PC processor
- 128MB RAM
- 24-bit color display
- USB port

#### Windows Users

- Windows 98SE, Me, 2000 or XP
- Intel Pentium III or higher compatible processor
- 128MB RAM
- 24-bit color display
- USB port

# 2.2. Package Contents

Your LaCie blue eye 2 should include the following:

- LaCie blue eye vision Colorimeter with attachments
- LaCie Color Utilities CD-ROM

# 3. Color Management

The digital age has brought about many important gains for color-conscious professionals, whether they work in fields such as graphic design, pre-press, video or digital photography. With these improvements, though, new challenges arose. One of those issues confronting professionals is the variability of the reproduction of color from one monitor to another.

Every monitor has its own color characteristics. In order to effectively deal with this variability in monitor "personalities," it's important to have a means of controlling, or managing, this difference. The most effective color management solution for monitors involves using a piece of hardware (the LaCie blue eye vision) and software (the LaCie blue eye 2) to adjust and control the color among different monitors.

To implement color management, it is essential to properly calibrate and create custom, individual profiles for all your monitors. Once a monitor has been calibrated and a profile has been created, the profile then communicates with the operating system and the application software to ensure that images are displayed accurately.

This section will help to explain how color is created and how the LaCie blue eye 2 utilizes calibration and profiles to help you implement your color management solution.

# 3.1. Basic Issues With Monitor Color Rendering

Human perception of color is the result of the addition by our brain of the stimuli received from three types of nerve cells located in our eyes that are sensitive to the red, green and blue areas of the color spectrum. This is why the method used in a computer monitor to reproduce color is for each pixel to be composed of three dots that respectively emit red, green and blue light.

#### 3.1.1. Monitors Create Color With The Three Primaries - Red, Green And Blue





The intensity of the light emitted by the red, green and blue dot in each pixel is set as a function of three values commonly called R,G and B. The R, G and B of a given pixel can be set as any integer value from 0 to 255.

- A pixel set to R=255, G=255, B=0 has its red and green dots emitting at maximum intensity and the blue dot not emitting at all. The result is an intense yellow.
- A pixel set to R=128, G=128, B=128 has its three dots emitting red, green and blue lights at a medium intensity. The combined result is that this pixel is perceived as an intermediate gray.
- A pixel set to R=0, G=0, B=255 has its red dot and its green dot emitting no light and its blue dot emitting blue light at its maximum intensity. The resulting pixel is globally perceived as emitting an intense blue.

#### 3.1.2. RGB Values Are Device-Dependent

As we noted earlier, every monitor has its own individual settings for reproducing the RGB, because monitor manufacturers make very different choices as to the components that are used in their monitors. This leads to very strong differences between the color produced by any given RGB settings on separate monitors.

Besides the different components, there are also several reasons for this variation. On a TFT, for instance, here are some of the most important factors that come into consideration:

- the color filters used to create the dots of each pixel
- the nature of the backlights
- the light transmittance characteristics of the liquid crystal technology used in the display
- the brightness, contrast and other settings used on the monitor
- the age of the monitor

With this in mind, moving back to our example about the RGB setting to produce blue. We know that we're getting the color blue, but is the color of blue being displayed accurate? One particular monitor could display the blue as akin to sky blue, another as Navy Blue, and another as another shade of blue. And this the case for all colors, not just blue.

Because the color that is actually produced by a given RGB setting is not necessarily the same from one monitor to another, color scientists say that RGB values are device-dependent.

#### 3.1.3. The Consequences Of Device Dependency

The direct consequence of this is that a given image (for instance a digital photograph) will not necessarily appear the same on two separate monitors. One may often observe color shifts, loss of contrast or loss of detail.

As a result, considerable inefficiencies can appear in professional workflows. When receiving a picture from its photographer, the news agency may have the impression that some color correction needs to be performed on the photograph, even though it may already have been done by the photographer before sending the picture to the agency. The same problem can occur when a printer receives digital art included in their customer's document. The colors displayed on the printer's monitor may not be identical to the ones displayed at the customer site.

# 3.2. Monitor Calibration And Device Profiles

The LaCie blue eye 2 implements a convenient solution to these problems. It entails two steps:

#### Step 1

The monitor is set to a calibrated state that is described in terms of its Brightness, Gamma and White Point Temperature. This allows the color-conscious professional to knowingly choose the range of colors that will be displayed on the monitor; and in particular to be certain that the colors displayed on the monitor correspond to a standard environment.

#### Step 2

An ICC (International Color Consortium) monitor profile is created and systematically embedded in the artwork produced from the professional's workstation. The ICC profile acts as a translator between RGB values and absolute colorimetric measurements that are expressed in a scientific color model such as CIELAB or Yxy.



ICC Profiles form the links in your image chain between device-dependent monitors and the device-independent PCS.

By taking into account the translation mechanisms contained in the ICC profile, another computer monitor (or any other device, such as a printer, for example) can reproduce the exact same absolute colors even though its components, settings and aging may be significantly different. The benefit is that both professionals see the same colors, and that there is no color shift across the workflow.

#### 3.2.1. Monitor Calibration

The calibration process allows the professional to influence the range of colors displayed. The main settings that influence the range of colors displayed are the following:

The **Gamma Curve**. This curve determines the characteristics of the absolute colors associated with all the RGB values between the white point and the black point. It expresses the intensity of the light emitted by each of the RGB dots for each of the intermediary values between 0 and 255. The shape of the gamma curve in particular determines the level of detail and contrast that are displayed on the

		Store 1		
		Target Settings		
		4 steps remaining		
1.8	\$	To make a new calibration please define your target settings and press <next>.</next>		
		Tales and to act the manifest of alloce to		
5000 K	\$	your target settings as possible. The close		
5000		less corrections are needed. This improves the accuracy and increases the gamut of		
		the calibration.		
🖲 Maximum		To test the current status of your monitor		
100 %	* *	press < lest and Report>.		
100				
	1.8 5000 К 5000 100 % 100	1.8 5000 К 5000 100 % ‡ 100		

monitor. A practical way of describing this curve is through the use of a numerical value that describes its slope.

The **White Point**, i.e. the characteristics of the color displayed by the RGB value: R=255, G=255, B=255. These characteristics are often summarized with the term White Point Temperature, because scientists have developed a model where a given body brought to a certain temperature emits light of a given color. This temperature is expressed in degrees Kelvin (°K). Common White Point Temperature settings in the pre-press workflow are 5000 K and 6500K. To influence White Point Temperature, it is necessary to adjust the respective intensities (also called gains) of red, green and blue light that are emitted by the RGB value of (255, 255, 255).

The Luminance controls the overall brightness of the monitor.

With the LaCie blue eye 2, you can fine-tune all of these factors and target the Brightness, Gamma and White Point Temperature settings of your choice. The sensor that is included is an advanced device that measures the light emitted by your monitor and expresses it in absolute colorimetric terms.

#### 3.2.2. Device Profiles

Device profiles are the most important part of the color management puzzle, because without an ICC profile within your image chain, you can't implement color management.

Profiles serve three very important functions:

- They describe what color the RGB pixel values actually represent.
- They relate device-dependent RGB values to device-independent CIELAB/Yxy values.
- They contain data to convert between the RGB value that each device produces, and the CIELAB/Yxy number value.

**Tech Note:** CIELAB refers to the Commission Internationale de l'Eclairage, and L= the "lightness"; A= the position of a color on a red-green axis; and B= the position of a color on a yellow-blue axis.

**Tech Note:** Yxy refers to a specification where a color is specified by its x and y co-ordinates on a chromaticity diagram graph.

# 4. Installing Your LaCie blue eye 2

# 4.1. Installing The LaCie blue eye 2 Software

#### 4.1.1. Mac Users

#### Mac OS 9.x

Insert the LaCie Color Utilities CD-ROM into your computer's CD or DVD drive. Once the disc appears on your desktop, double-click the icon to open the folder. From this folder, simply launch the software by clicking on the LaCie blue eye 2 icon.

#### Mac OS 10.x

Insert the LaCie Color Utilities CD-ROM into your computer's CD or DVD drive. Once the disc appears on your desktop, double-click the disc icon to open the LaCie Color Utilities CD-ROM. From this folder, click on the LaCie blue eye 2 installer icon. Follow the on-screen instructions to begin the installation process. If you don't have administrator privileges, click on the **User Install** button, and if you have administrator privileges, click on the **Admin Install** button. By clicking on the **User Install** button, the LaCie blue eye 2 program folder will be created and placed in the User/Applications folder. By clicking on the **Admin Install** button, the LaCie blue eye 2 program folder will be created and placed in the main Applications folder. You may need to enter your Administrator name and password to proceed. Please refer to your Apple User's Manual for information about Administrator rights and privileges.

#### 4.1.2. Windows Users

Insert the LaCie Color Utilities CD-ROM into your computer's CD or DVD drive. Follow the on-screen instructions to install the software. Once installation is complete, go into **Programs** and launch the LaCie blue eye 2 software.

# 4.2. Connecting The LaCie blue eye vision Colorimeter



**Important Info:** Before connecting the LaCie blue eye vision to your monitor, clean the monitor to remove fingerprints and dust.

Simply connect the USB end of the LaCie blue eye vision colorimeter to an available USB port on your computer.

**C**) **Tech Note:** You may attach the LaCie blue eye vision colorimeter to powered USB hubs.

The LaCie blue eye vision has two separate attachments for calibrating CRT and LCD monitors. To calibrate CRT monitors, utilize the attachment with the suction cups. To calibrate LCD monitors, utilize the attachment with the soft felt.



# 5. Using Your LaCie blue eye 2 Color Management Tools

This chapter details how to use the LaCie blue eye 2 software and LaCie blue eye vision colorimeter to calibrate your monitor and build a profile.



**Caution!** Before you begin to calibrate, ensure that the following conditions are met:

• Ensure that you have a copy of your monitor's User's Manual for OSD (On-Screen Display) reference, and to help determine factory presets and configuration.

• Make sure that your monitor has been powered on for at least one hour. This ensures that the monitor has had enough time to warm up and stabilize.

• Disable any screen savers.

• Delete or disable any competing profile programs you may have installed. These programs could compete for control of the display, and it is important that only one program is running at a time.

• If another profile program is installed and it has a startup utility that is used at your computer's boot time, this program will need to be deleted.

• Setup your work area in the way that you will use it after calibrating and profiling. Room lighting has an affect on the appearance of screen images.

• Tilt the monitor upwards 10° (with the axis measuring from the horizontal length of the bottom of the monitor). This helps to prevent unwanted light from affecting the results.

• If your monitor's OSD offers color adjustment mechanisms, set them as close to your targeted workflow settings as possible before launching the LaCie blue eye 2 software.

# 5.1. Calibrating Your Monitor

Start by launching the LaCie blue eye 2 application by double-clicking on its icon. The LaCie blue eye 2 main application window will then appear.



**Tech Note:** The LaCie blue eye 2 is capable of calibrating more than one monitor connected to your computer, but only one monitor may be calibrated at a time. In order to calibrate more than monitor connected to your computer, move the LaCie blue eye 2 application window onto the monitor that you want to calibrate. Repeat this process for each monitor that you wish to calibrate.

#### 5.1.1. Setting Target Values STEP 1 TARGET SETTINGS

The initial window of the LaCie blue eye 2 application invites you to provide your target values for your monitor's settings of **Gamma**, **White Point Temperature**, and **Luminance**.

• **Gamma** can be set at any value between 1 and 3 in 0.1 increments. Please choose the gamma value that corresponds to your working environment.

• White Point Temperature can be set either through a preset value (From 5000 Kelvin to 9500 Kelvin in 500 K increments), or manually.

Target Setting 4 steps remainin		
4 steps remainin		
To make a new calibration please define your target settings and press <next>.</next>		
Take care to get the monitor as close to		
your target settings as possible. The close		
monitor setup and target settings are the less corrections are needed. This improves the accuracy and increases the gamut of		
the calibration.		
To test the current status of your monitor		
press <test and="" report="">.</test>		

• Luminance can be targeted as an absolute value in cd/m2 (candelas/meter2), or a predefined value expressed as a portion of the maximum luminance offered by the monitor.



**Important Info:** Depending on the White Point Temperature target you choose, the software may lead you to diminish the gain associated with one or several of your monitor's three primaries: Red, Green, and Blue. This will reduce the global luminance of your monitor. It is therefore recommended to use a Brightness target that is slightly higher than the luminance you want to work with.

**Important Info:** Although high Luminance settings can be attractive, they may result in fatigue for the user. If you are using a TFT monitor, high luminance settings may also reduce the lifetime of your monitor's backlights. If you use your monitor in a darkened environment, it may not be necessary to use high luminance settings after all.

Once you have established your targeted values, continue onto Step 2 by clicking on the Next button.

#### **5.1.2. Brightness Adjustment** STEP 2 BRIGHTNESS ADJUSTMENT

The **Brightness Adjustment** window will assist you in placing your monitor in the optimal range of brightness. When in this range, two conditions are met:

• Full black and the darkest gray can be distinguished one from the other. This insures there is no loss of detail in the dark zones of your artwork.

• The darkest black remains black. This prevents any potential loss of contrast.



1) In your monitor's OSD, please choose the lowest possible value for Brightness.

2) Place the colorimeter over the (dark) measurement area and click Start.

3) You will now slowly increase the Brightness control in your monitor's OSD a few increments at a time. While you do this, the colorimeter constantly measures the actual luminosity of the monitor and displays it with the slider.

As you increase the brightness of your monitor, the slider will move to the right towards the green area. When it reaches the green zone, a message will inform you the monitor is bright enough. You may then click on the Next button to go to the Contrast Adjustment window.



**Tech Note:** If you cannot reach the green zone after adjusting your monitor to its maximum brightness, move to the next step, <u>5.1.3. Contrast Adjustment</u>, by clicking on the **Next** button.



**Caution!** Please do not modify your monitor's brightness setting after this stage. Doing so will force you to start the calibration and profiling process over.

#### **5.1.3. Contrast Adjustment** STEP 3 CONTRAST ADJUSTMENT

The **Contrast Adjustment** window will assist you in placing your monitor in its optimal dynamic for your colors. The right contrast setting produces brighter colors through continuous tones, detailed shadows and highlights.



**Important Info:** If your monitor does not have an OSD control for contrast, move on to the next step, <u>5.1.4. White Point Adjustment</u>, by clicking on the **Next** button.

00	blue eye 2		
	Step 3 Contrast Adjustment		
	2 steps remaining		
	Please set the contrast to maximum. Place the device on the monitor and press <start>. Decrease the contrast until the quality is fine. Take care that the OSD does not cover the measurement area.</start>		
	If your monitor does not support contrast adjustment, you may skip this step.		
	+		
	Start Next		

1) Using your monitor's OSD, set your monitor to its highest contrast value.

#### 2) Press Start.

3) Using the OSD, decrease your monitor's contrast value a few increments at a time. As you decrease the contrast of your monitor, the slider will move to the left towards the green area. When it reaches this green area, a message will inform you the monitor is correctly set. You may then click on the **Next** button to go to the **White Point Adjustment** window.



**Caution!** Please do not modify your monitor's brightness setting after this stage. Doing so will force you to start the calibration and profiling process over.

#### **5.1.4. White Point Adjustment** STEP 4 WHITE POINT ADJUSTMENT

The value of the **White Point Temperature** determines the actual color of white.



**Important Info:** Some monitors do not offer individual R, G, B settings. If your monitor does not offer these settings, check to see if your monitor's OSD settings let you choose a color temperature. If this is the case, choose the nearest value to your preferences. If your monitor does not offer this feature, click **Next** to skip this step.

0 0	blue eye 2
	Step 4 White Point Adjustment 1 step remaining
	If you monitor does not support white point adjustments, you may skip this step. Place the device on the monitor and press <start>. Use the R,G,B adjustments in the OSD menu of your monitor to move the quality indicators to the middle.</start>
	- + + + + + + + + + + + + + + + + + + +

During this phase of the calibration process, the LaCie blue eye vision colorimeter constantly measures the colorimetric characteristics of white as displayed by your monitor. To reach your target **White Point Temperature**, you will adjust the relative quantities of Red, Green and Blue used by your monitor to create white.

To do this, you will sequentially increase or decrease the R, G, and B gain settings of your monitor, using the OSD.

#### 1) Press the **Start** button.

2) Identify which of the settings need to be decreased by looking at the three sliders. The slider that needs to be reset first will be the setting whose slider is furthest away from the center. Reduce or increase this setting's gain by decreasing its gain using your monitor's OSD. The corresponding slider should move to the center towards the green area. When it reaches this green area, this setting is correct.

3) Repeat the above steps on the next two sliders until all of the R, G, and B sliders have reached the green area. Your monitor's RGB gains are now set according to your target **White Point Temperature**.

Once the White Point Temperature has been set, click on the Next button to continue onto the last step.

# **5.2. Creating A Monitor Profile**

CALIBRATION



**Caution!** Do not modify your monitor's OSD settings, or you will have to restart the entire calibration process.



**Caution!** During this process, ensure that nothing disrupts the measurement: the LaCie blue eye vision colorimeter should remain aligned on the measurement area at all times and no other window should appear on the monitor.



After completing Steps 1, 2, 3 and 4, the LaCie blue eye 2 program will finish calibration by creating a custom ICC profile of your monitor based on the information provided to the program by displaying color patches (which are measured by the LaCie blue eye vision colorimeter) and comparing them to the theoretical values to be displayed. Press the **Start** button to begin the profiling process.

#### 5.2.1. Saving The Profile

Once Step 5 is complete, the **Save Profile** window will automatically appear. In this window, you can simply choose the default filename, or enter a custom filename for your profile to be saved under. The default profile filename contains the date of calibration, color temperature, gamma and luminance settings. With this practical format you can easily remember, at a future date, when your last calibration took place, and what the settings were.

Once you have chosen the profile's filename, click on the **Save Profile** button.



- In Mac OS X, this file is stored in the Home/Library/ColorSync profile folder.
- In Mac OS 9.x, this file is stored in the System Folder/ColorSync Profiles folder.
- In Windows XP, this file is stored in the Windows/System32/Spool/Drivers/Color folder.

Your new profile automatically becomes the current profile for your monitor settings.



**Important Info:** The correctness of the ICC profile depends on your monitor's OSD settings. If at any time you need to change them, you will need to rebuild a profile. Likewise, if you want to change your monitor's settings (to move to a different White Point, for instance) you will need to rebuild a profile.

#### 5.2.2. Calibration Report

Now that your monitor has been calibrated, you can run a test to verify the quality of the calibration. The LaCie blue eye 2 software will measure the quality of the color correction performed by the ICC profile you have built. The measured values for gamma, white point temperature and luminance are displayed. There should only be a small difference between your target values and those actually displayed.





#### Left Diagram – Chromaticity Diagram

The Chromaticity Diagram provides a graphic representation of the monitor's color gamut, with the current settings applied. The larger the area of the displayed triangle, the better.

#### Right Diagram – Gamma Curve

The Gamma Curve represents the three correction curves that were applied to your computer's video card's Computer Lookup Table (CLUT).

## 5.3. Test And Report

Before beginning the calibration process, you have the opportunity to test your monitor's current settings for **Gamma**, **White Point** and **Luminance**. If you would like to continue with the calibration process without first testing your monitor, click on the **Next** button and refer to section <u>5.1.1. Setting Target Values</u> for more information.



By clicking on the **Test & Report** button, you will be directed to place the LaCie blue eye vision Colorimeter onto your monitor. The blue eye 2 software will display a sampling of colors to determine the current values of your monitor's **Gamma**, **White Point** and **Luminance**.

At the end of the process, the blue eye 2 software will display a chromaticity diagram of your monitor's current settings, before calibrating. It also lists your monitor's current settings for **Gamma**, **White Point** and **Luminance**. To continue with the calibration process, press the **Calibration** button. To close the program, click the **Quit** button.



Garma Kelvir

Calibration

2.1

Quit

# 6. Contacting Customer Support

# Before You Contact Technical Support

#### 1) Read the manual.

2) Try to isolate the problem. If possible, make the device the only external device on the CPU, and make sure that all of the cables are correctly and firmly attached.

If you still can't get your LaCie device to work properly, contact us via the provided Web link. Before contacting us, make sure that you are in front of your computer and that you have the following information on hand:

- Your LaCie device's serial number
- Monitor brand and model
- Video card brand and model
- Operating system(Mac OS or Windows) and version
- Computer brand and model
- Names of CD or DVD drives installed on your computer
- Amount of memory installed
- Names of any other devices installed on your computer

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# LaCie Technical Support

#### LaCie Australia

Contact Us At: http://www.lacie.com/au/contact/

LaCie Canada Contact Us At: http://www.lacie.com/caen/contact/ (English)

LaCie Finland Contact Us At: http://www.lacie.com/fi/contact

LaCie Germany Contact Us At: http://www.lacie.com/de/contact/

LaCie Japan Contact Us At: http://www.lacie.co.jp

LaCie Norway Contact Us At: http://www.lacie.com/no/contact/

LaCie Sweden Contact Us At: http://www.lacie.com/se/contact/

LaCie United Kingdom & Ireland Contact Us At: http://www.lacie.com/uk/support/request

LaCie Grand Export Contact Us At: http://www.lacie.com/intl/contact/ LaCie Belgium Contact Us At: http://www.lacie.com/be/contact/

LaCie Denmark Contact Us At: http://www.lacie.com/dk/contact/

LaCie France Contact Us At: http://www.lacie.com/fr/contact/

LaCie Italy Contact Us At: http://www.lacie.com/it/contact/

LaCie Netherlands Contact Us At: http://www.lacie.com/nl/contact/

LaCie Spain Contact Us At: http://www.lacie.com/es/support/request

LaCie Switzerland Contact Us At: http://www.lacie.com/chfr/contact

LaCie USA Contact Us At: http://www.lacie.com/contact/

# 7. Warranty

LaCie warrants your device against any defect in material and workmanship, under normal use, for the period designated on your warranty certificate. In the event this product is found to be defective within the warranty period, LaCie will, at its option, repair or replace the defective device.

This warranty is void if:

- The device was operated/stored in abnormal use or maintenance conditions;
- The device is repaired, modified or altered, unless such repair, modification or alteration is expressly authorized in writing by LaCie;
- The device was subjected to abuse, neglect, lightning strike, electrical fault, improper packaging or accident;
- The device was installed improperly;
- The serial number of the device is defaced or missing;
- The broken part is a replacement part such as a pickup tray, etc.
- The tamper seal on the device casing is broken.

LaCie and its suppliers accept no liability for any loss of data during the use of this device, or for any of the problems caused as a result.

LaCie will not, under any circumstances, be liable for direct, special or consequential damages such as, but not limited to, damage or loss of property or equipment, loss of profits or revenues, cost of replacement goods, or expense or inconvenience caused by service interruptions.

Any loss, corruption or destruction of data while using a LaCie device is the sole responsibility of the user, and under no circumstances will LaCie be held liable for the recovery or restoration of this data.

Under no circumstances will any person be entitled to any sum greater than the purchase price paid for the device.

To obtain warranty service, call LaCie Technical Support. You will be asked to provide your LaCie product's serial number, and you may be asked to furnish proof of purchase to confirm that the drive is still under warranty.

All drives returned to LaCie must be securely packaged in their original box and shipped with postage prepaid.



Important Info: Register online for free technical support: <u>www.lacie.com/register</u>