



How To Set Up & Calibrate Your EIZO Monitor



INTRODUCTION

Congratulations!

You've invested in an EIZO monitor.
You've gone through the exciting unboxing process.
Now what?

In this e-book, we will go through step-by-step how to set up and calibrate your EIZO monitor. By the end of this guide, you will know how to set up your monitor, run your first calibration and set up the two universal profiles to get you started with a colour managed workflow.

TABLE OF CONTENTS

- 1** Choosing the right cables
- 2** Why calibration is important
- 3** How to calibrate your monitor
- 4** The universal ISO settings
- 5** Frequently asked questions



CHAPTER ONE

Choosing The Right Cables

1. Choosing The Right Cables

In this chapter, we'll look at the different cables needed to connect your computer to your EIZO monitor.

If you're using a Mac, you will use either a mini DisplayPort or a type-c port, so you will need one of the following cables:*

Mini DisplayPort to DisplayPort (Included in the box)	USB C to DisplayPort (Not included in the box)
	

*If you're unsure, check your user manual to find out the ports available on your computer.

If you're a PC user, you will have the option of DVI, mini DisplayPort or a type-C port. The DVI cable is included in the box. You will need to source a USB-C to DisplayPort cable if you need to connect this way:*

DVI Cable (Included in the box)	USB C to DisplayPort (Not included in the box)
	

*If you're unsure, check your user manual to find out the ports available on your computer.

Once you have connected your power cord to the monitor and identified which cable connects your computer to your EIZO monitor, switch them on and you're now ready to begin calibration.

Power Cable (Included in the box)	USB to AB Cable For calibration (Included in the box)
	



CHAPTER TWO

Why Calibration Is Important

2. Why Calibration Is Important

Let's dive into why monitor calibration is important.

Maintaining a level of consistency is crucial in the creative work flow. Whether you're creating for yourself or for a client, you want to ensure what you see on your screen (that you're no doubt spending countless hours on), is what your client will experience.

How many times have you found yourself having to print an image over and over because what you have printed, isn't matching what you see on the screen?

This is one of the biggest frustrations photographers and creatives face in the final stage of the workflow.

You should be able to enjoy every aspect of your workflow, including editing and printing. This is where monitor calibration comes into play. Another cause for stress is the amount of paper and ink that is wasted.

The key benefits of monitor calibration and colour management are a significant increase in:

- **Accuracy**
- **Consistency & Quality**
- **Productivity**

Accuracy: With EIZO, you can rest assured that what you're capturing in camera, is being displayed accurately on screen. For example, an image shot in RAW with an Adobe RGB colour space will be reflected on your EIZO monitor displaying a 99% Adobe RGB Gamut.

Consistency and quality: Regular calibration and colour management ensures consistency throughout your workflow.

Your workflow maintains a standard of consistency when you practice regular monitor calibration and colour management.

When you shoot in Adobe RGB, import to your computer and edit in Adobe Lightroom or Capture One, all the raw uncompressed information that's embedded in your image will be displayed accurately on your screen. This results in reassurance that your client is receiving a quality output.

Productivity: When you utilise colour management and monitor calibration together to create consistency, you will see an increase in productivity. With all devices from start to finish in synchronicity with each other, your trust in what you are creating and seeing will allow for efficiency in your workflow.

Accuracy, consistency, quality and productivity are a result of a colour managed workflow. Calibrating your monitor should be slotted into your calendar as a non-negotiable.

Remember, there will be discrepancies that will influence any colour managed workflow. But, with the right dose of diligence, managing them will be a piece of cake.



CHAPTER THREE

How To Calibrate Your EIZO Monitor

3. How To Calibrate Your EIZO Monitor

Whether you're using an EIZO that is eight years old or two months old, ColorNavigator is the software you need to know. ColorNavigator is EIZO's own creation, developed and designed like no other colour management software. ColorNavigator comes loaded with many features that will add great value and increase efficiency to your workflow. These include –

- Hardware calibration
- Creating an ICC profile
- Adjusting the displayed colors
- Soft proofing
- Match other monitors
- Emulate devices

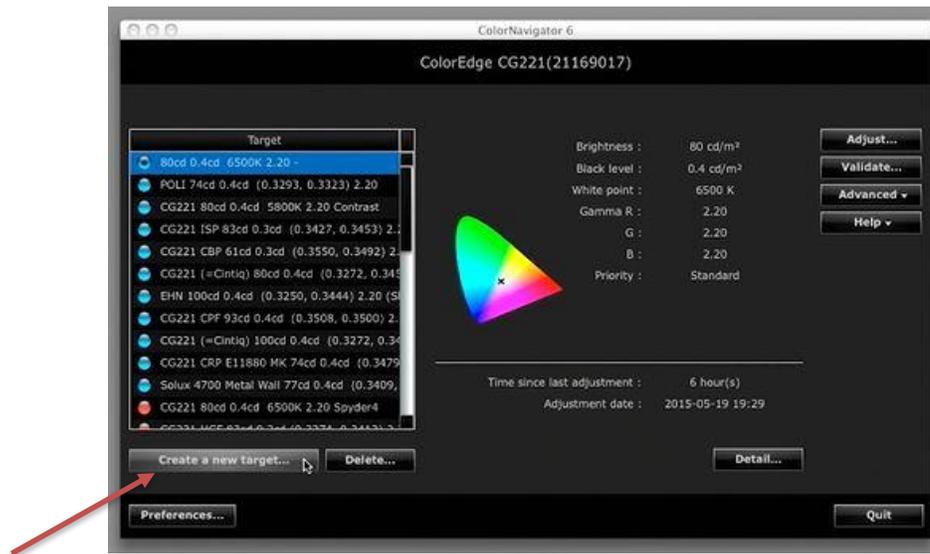
To run ColorNavigator, connect the USB to A-B cable to your computer and to the monitor.

The software is a free download from the EIZO Global website and can be accessed [here](#) by finding your model number.

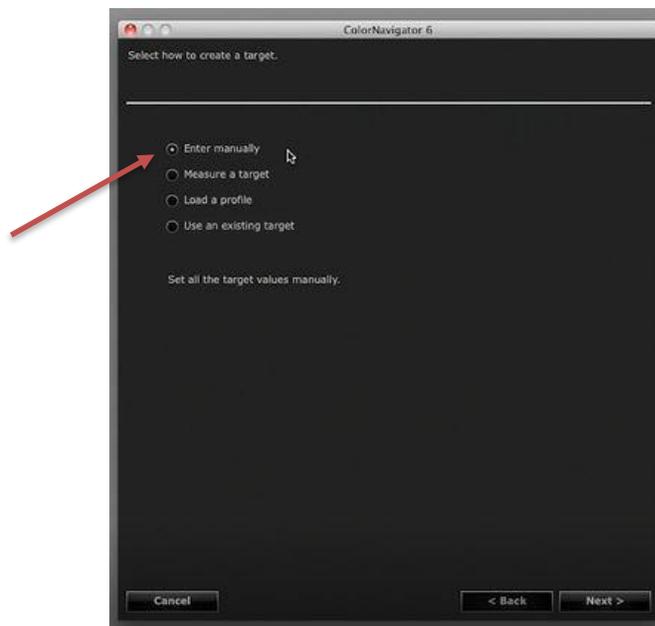
Once you have installed the program onto your computer, you're now ready to run your first calibration!



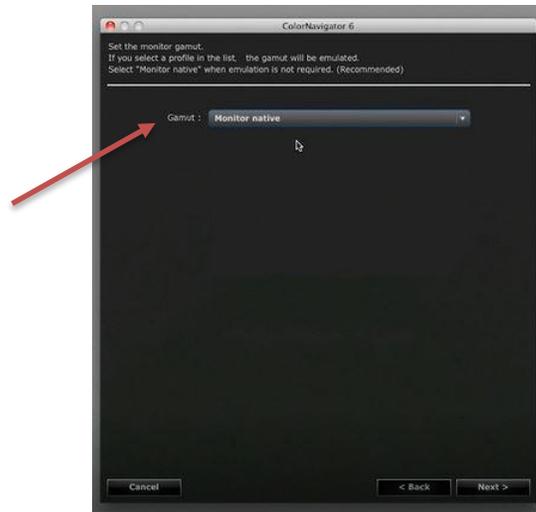
To start your monitor calibration, launch *ColorNavigator*. Have one of the two universal profiles ready to enter into *Create A New Target* (the profile settings can be found in the next chapter).



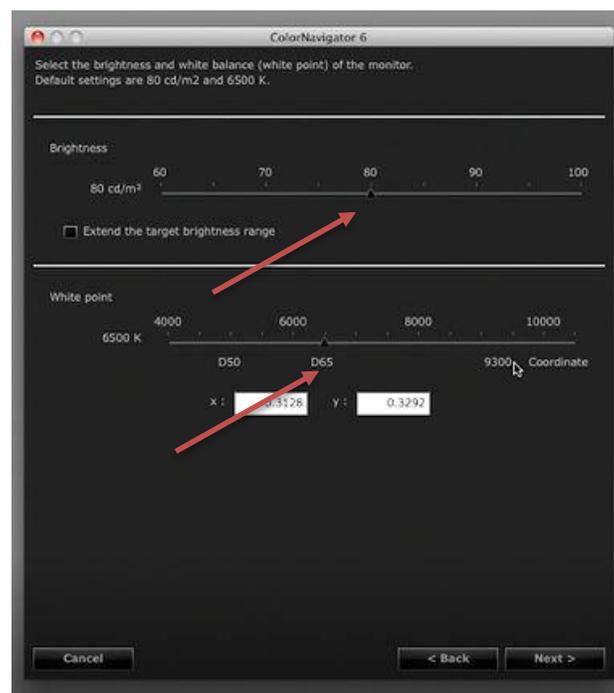
Select *Enter Manually*-



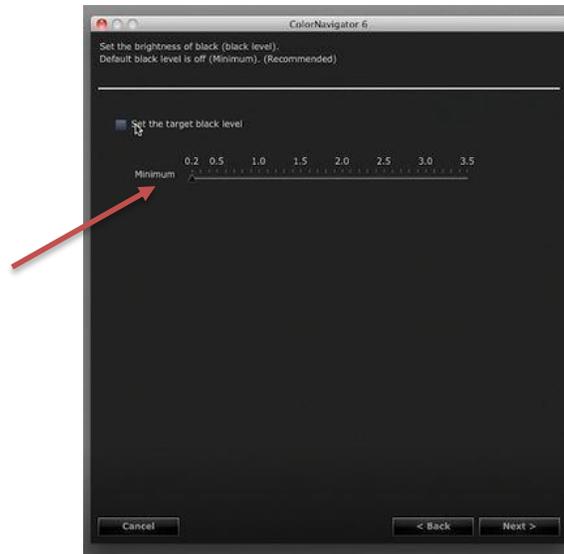
Select *Monitor Native* for your gamut to ensure the widest range of colours.



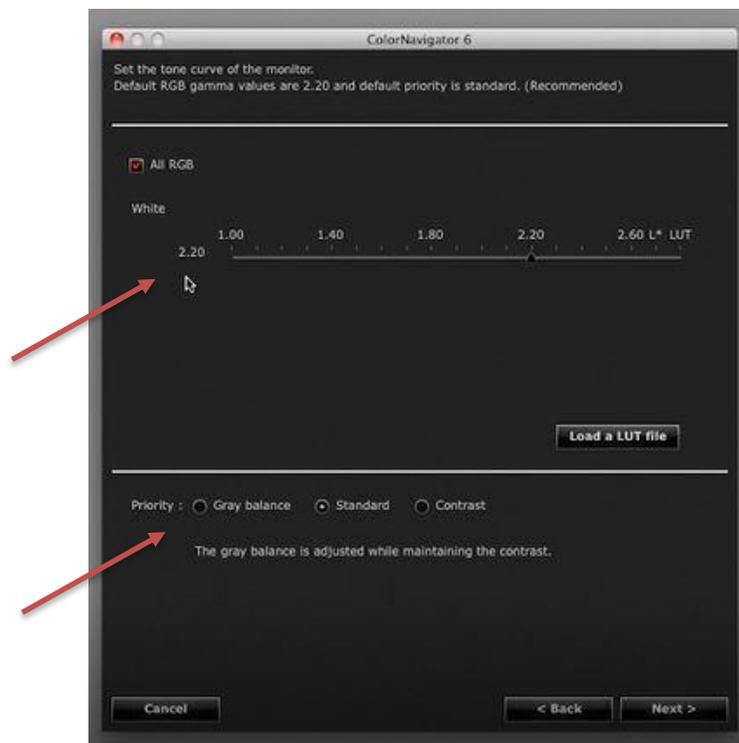
Select the brightness based on the profile and on your environment (between 80-120cd/m² is recommended).
Enter in your White Point at D65 (ISO 3664) or D50 (ISO 12646)



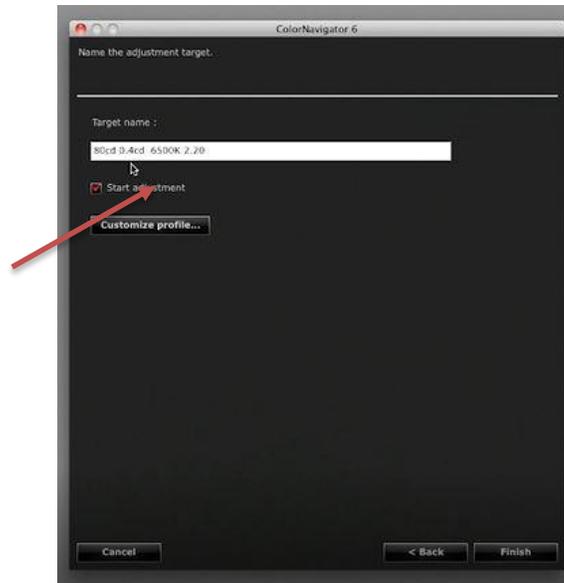
Select minimum black point for ISO 3664 or move the cursor to 0.4 for ISO 12646



For your **Gamma Curve**, keep it at 2.2 for both profiles and Priority set at **Standard**.



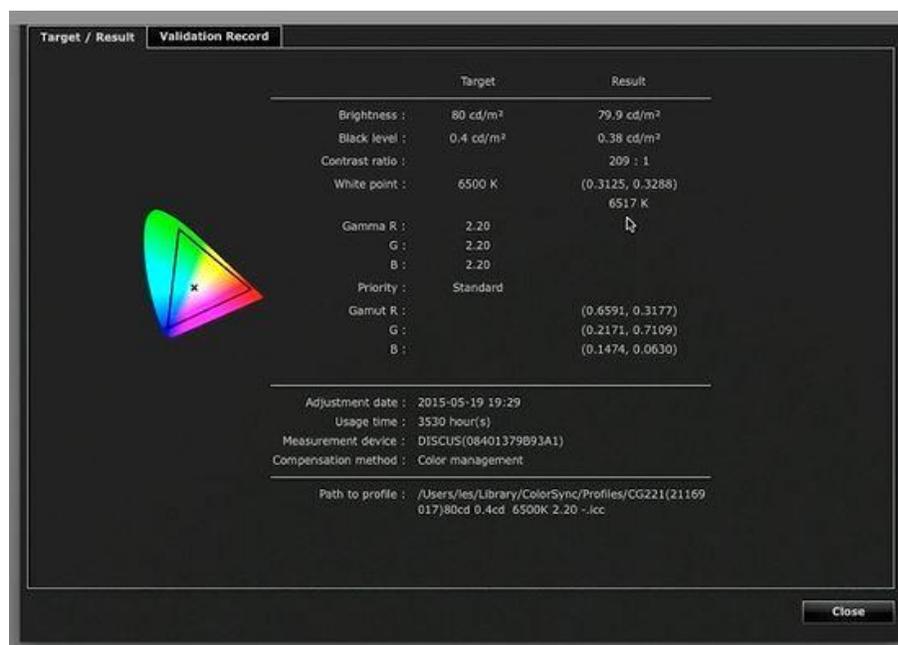
Rename your profile to something you will remember and will be easy to switch between the two profiles. You can rename them as ISO 3664 or ISO 12646 for your convenience.



Click *Finish* and the software will begin self calibration. The monitor can take up to 10 minutes to calibrate, depending on your model.

Make yourself a coffee while you wait!

Once calibrated, you can compare the results based on what you entered vs what the monitor calibrated to.





CHAPTER FOUR

The Universal ISO Standard Settings

4. The Universal ISO Standard Settings

When you open the program ColorNavigator for the first time, you will see that there are three profiles pre-installed:

- Photography
- Web Design
- Printing

You can chose to calibrate your monitor according to these profiles or you can chose to calibrate according to the Universal ISO Standard Settings.

Depending on your objective and point of workflow you're in, there are two universal standard settings we recommend:

- **ISO 3664** for viewing conditions and editing
- **ISO 12646** for colour proofing and print

The following tables will show you the difference in the settings that you will need to enter when you start calibration.

ISO 3664

Monitor White Point	CIE D65 (6500K)
Monitor White Luminance	80cd/m2 to 100cd/m2
Black Point	Minimum
Gamma Curve	Standard 2.2
Ambient Light Glare	No Reflections On Monitor
Ambient Light Extraneous	Baffle from View all windows, light sources etc.

ISO 12646

Monitor White Point	CIE D50 (5000K)
Monitor White Luminance	80cd/m2 to 120cd/m2
Black Point	0.2-0.4 (Depending on the luminance)
Gamma Curve	Standard 2.2
Ambient Light Glare	No Reflections On Monitor
Ambient Light Extraneous	Baffle from View all windows, light sources etc.

ISO 12646 is the foundation of your printing profile. If your intention is digital output, you will do most of your editing in the ISO 3664 profile.



CHAPTER FIVE

Frequently Asked Questions

5. Frequently Asked Questions

Q. Does the power ON/OFF operation shorten backlight life?

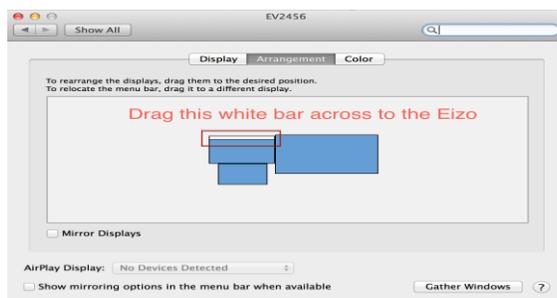
A. No, as long as the power ON/OFF operation does not exceed about 25 times per day, it does not affect backlight life.

Q. My monitor is set to ISO 3664 for editing and then I switch it to ISO 12646 when I am ready to print. When I switch to the ISO 12646 it then looks different because of the shift in white point. Does that mean I should then make the changes to the image? Or would you normally use 12646 profile to start with, if the image is to be printed?

A. ISO 12646 is the basis of your print profile. Yes, you're right. You will see a difference when you switch between the two profiles. The aim is to edit in ISO 3664 to make all of your main adjustments and manipulations in whatever program you chose to use. Once you're ready to print (if this is your final step and intention for your work), switch profiles to ISO 12646, however you may have to make further changes based on the paper you chose to use. The reason why ISO 12646 is your universal standard for print and soft proof is based on standard paper stock (including luster and matt paper). Within this profile, you can refine your profile based on colour matching your screen to match the paper.

Q. I have my Mac connected to my EIZO and sometimes it looks like the quality of the screen isn't sharp or lacking saturation. This is always the case, it seems like it happens when I'm in Photoshop or sometimes it does it on its own!

A. Ensure that the EIZO monitor is set as the primary monitor (go to system preferences, displays, arrangement, and drag the white bar over to the EIZO monitor icon (if it isn't there already). Do this before you open your Adobe software. If you've set your Mac as your main monitor, it will keep reverting itself to display its preferred settings rather than reading the signal from the monitor. This can be changed in your System Preferences on your Mac.



Q. How often should I calibrate my monitor?

A. This depends on the amount of time you spend on your EIZO Monitor. If you're editing up to 40 hours a week, calibrate once a week. If you edit up to 25 hours a week, calibrate every 2 weeks and if you edit up to 15 hours a week, calibrate once a month.

Use this as a guideline, you can calibrate every day if you wanted to. Keep an eye on your environment and surroundings too. If you decide to move your monitor or desk to another room with different conditions or chose to edit in both direct light and dark rooms, have a separate profile for both as they are different lighting conditions.

Q. Can I calibrate my monitor without purchasing expensive equipment?

A. The CG models in the ColorEdge range are self-calibrating, so there is no need for a third party sensor. However, if you are using a CS model or an older EIZO without the self-calibration, you can invest in a calibration device that range from few hundred dollars to over a thousand dollars. You can view the list of compatible sensors on our website.

Q. In some applications, tone characteristics and the color of the image are not displayed correctly causing low tones to appear lost.

A. This may be solved by changing the profile policy of ColorNavigator or the application's settings.

- If the application has Rendering Intent settings (e.g.:Photoshop (Adobe))

Choose 'Perceptual' or 'Relative' and uncheck 'Black Point Compensation' in the pull-down menu under Rendering Intent.

- If the application does not have Rendering Intent settings (e.g. Preview (Mac), Phocus (Hasselblad))

Uncheck 'Reflect black level in tone curve' in the profile policy setting menu.

Q. I edit photos in AdobeRGB & then change profile to sRGB before sending. Should the monitor be set as sRGB or AdobeRGB to edit?

A. If you're shooting in Adobe RGB and setting your Image Quality to RAW, you will want to maintain that consistency through to your monitor too. You can make your final changes such as file type, size, colour space etc. in your final output however, this is also entirely up to you. If you decide to have your monitor in sRGB, keep in mind that you will not have as many colours available to you as you would in Adobe RGB.

Additional Resources

For more information about monitor calibration or colour management, check out the following links –

[Dr Les Walkings Website](#)

[EIZO Global](#)

[EIZO APAC](#)



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A lot of people I meet spend a fortune on their computer, but invest relatively little in their monitor. My principle is the opposite, I tend to invest more in my production monitor than the computer because the monitor is the window into my creative world. I don't hold back when it comes to the quality of my images, no matter where they are displayed

Dr. Les Walkling – Fine Art Photographer, Educator & Consultant



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