

DANIEL GEORGIEV

# 14 tips to make your Monitor more Healthy for the Eyes

*Reduce Eye Pain, Sleep Better and Improve your Health*

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*First edition*

*This book was professionally typeset on Reedsy.*

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# 1

## Introduction

Can you really improve your Eye health when you sit in front

Yes, you can

And I know this from my own personal experience

Back in 2015 I was spending more than 10 hours every day in front of the computer and believe I know what an eye pain is

I was going outside with sunglasses because the I just wasn't used to stay at day light and aside from developing astigmatism I think I also developed some kind of light sensitivity

But Why was this?

Well, I was an 18 years old kid who just wanted to become the best programmer

I was going to work at 10 in the morning stayed there until 20 to program some things for the company and then stayed until 2 am in front at the PC at home

And as you can get sitting in front of the PC for more than 14 hours per day is not so healthy even for a kid

I started using eye drops for eye moisturizing after a couple of months of 2 monitors in front of me at work and really bad lighting

But as every medication this actually made the condition worse

When I finally decided to go to an eye doctor he prescribed me with 1.5 diopter glasses and this was the moment of shock for me

I was training sports my entire childhood and my vision was perfect my entire life

How the hell I managed to mess up my eyes in just 6 months working in front of PCs

Well the reasons are a lot and I'm going to share some of them in this small book

After this point I started to read everything I can find about monitors and eye health

All the medical researches, all the articles, everything there is on the internet about the digital screens effect on our vision

And this is where I decided to create Iris and devote my life to improve all monitors on this world to be more healthy for the eyes

Part of this was that I just didn't wanted to wear glasses till the end of my life and wanted to solve my own problem but this became the most interesting journey of my life

Today Iris is used by 2+ million people in more than 180 countries

We are a small team of a couple of people and try provide the best health product in the world and I'm more than happy that we have more than 500 positive and not even 1 bad review on our Iris Facebook page

Yesterday I also passed my pilot medical exam with perfect vision, which means that my diopter now is bellow 0.25 which I personally still can't believe

I always told the media not to lie and say that Iris can do miracles and remove the need for prescription glasses because even I didn't believed that it's possible to actually improve your vision after it's broken

I still use some anti reflective glasses in front of my PC but my diopter dropped from 1.50 to 0.25 in the last couple of years which is one of the strange things that had happened to me

So if you think that it's normal to feel eye pain or eye strain in front of the PC it's not

There are things you can do today to improve your eye health and vision immediately

And to not waste your time I'm going to give you some tips before I explain the science behind them:

- Place your monitor so the window in the room is left or right to it
- Remove Blue light
- Remove PWM flicker
- Remove Subpixel flicker
- Remove Font smoothing
- Get a Matte monitor or antireflective coating
- Get glasses with small diopter
- Get antireflective coating for your glasses
- Match your screen brightness to the room lighting
- Use dark theme
- Blink more
- Yawn more
- Take some breaks from time to time and look at distant objects
- Place your monitor so you look downwards with your eyes and they are more closed

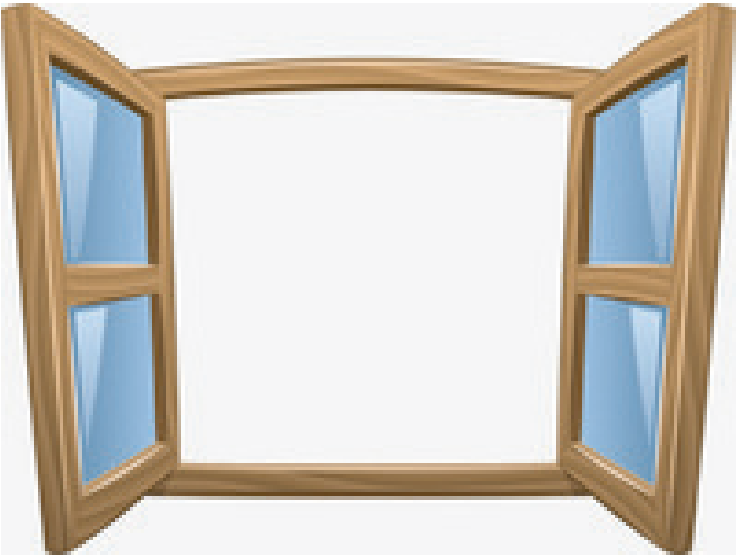
Enough about me, let's make you a superhuman :)

Daniel Georgiev,  
2019.01.19



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## Monitor position in the room



The most important thing to remember is that the window in your room should be left or right to you and your monitor

Behind you is bad because you will see double image and reflections and it will be hard for your eyes to focus on the screen

In front of you is bad because you will look directly at the Sun and it will damage your eyes

Place your PC so the window in the room is left or right to you

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Blue light



*What is Blue light?*

Blue light has a very short wavelength, and so produces a higher amount of energy

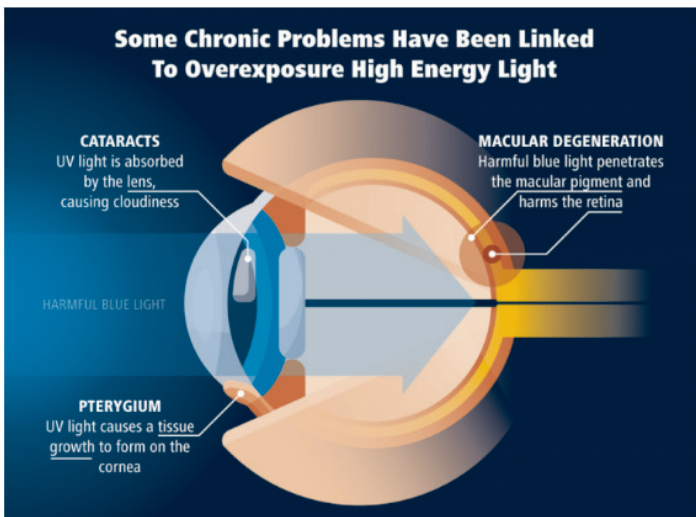
## BLUE LIGHT

Studies suggest that, over time, exposure to the blue end of the light spectrum could cause serious long-term damage to your eyes

Sources of blue light include the sun, digital screens (TVs, computers, laptops, smartphones and tablets), electronic devices, and fluorescent and LED lighting (read more)



### Remove Blue Light

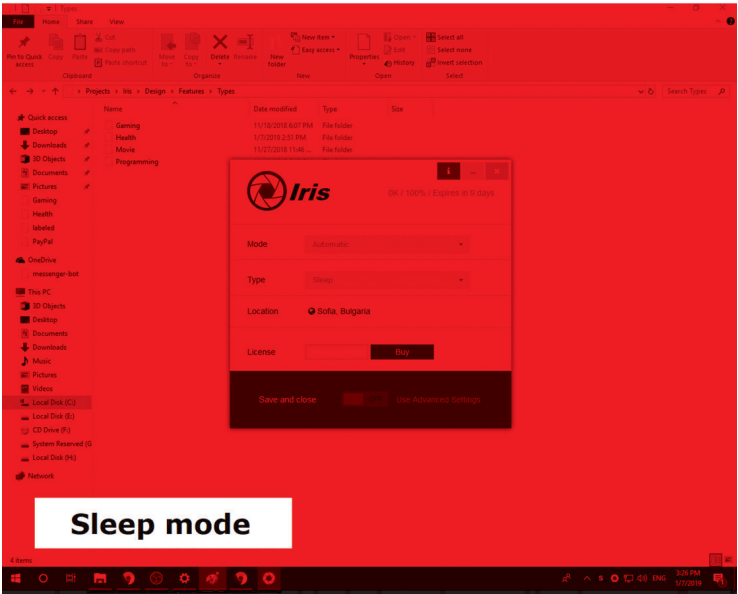


Our monitors emit a lot of Blue light

Sleep mode will remove all blue light emitted from your monitor

14 TIPS TO MAKE YOUR MONITOR MORE HEALTHY FOR THE EYES

Use your monitor and be protected from Blue light (read more)



Try Sleep mode

If the button above doesn't work here are some instructions for manual activation: *How to try Sleep mode*

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PWM flicker



*What is PWM flicker?*

Pulse Width Modulation (PWM) is a method to reduce the energy usage and brightness of your monitor by turning the

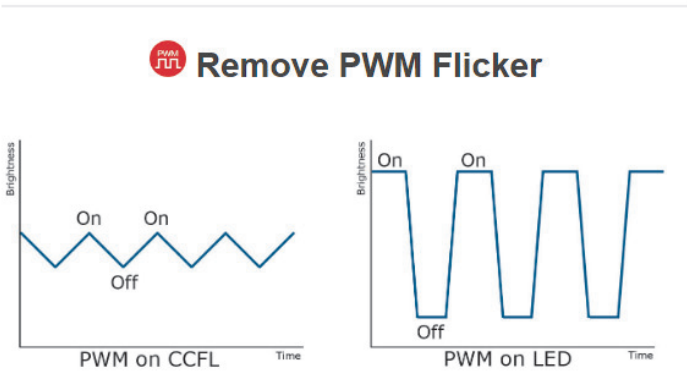


screen ON and OFF at high frequency

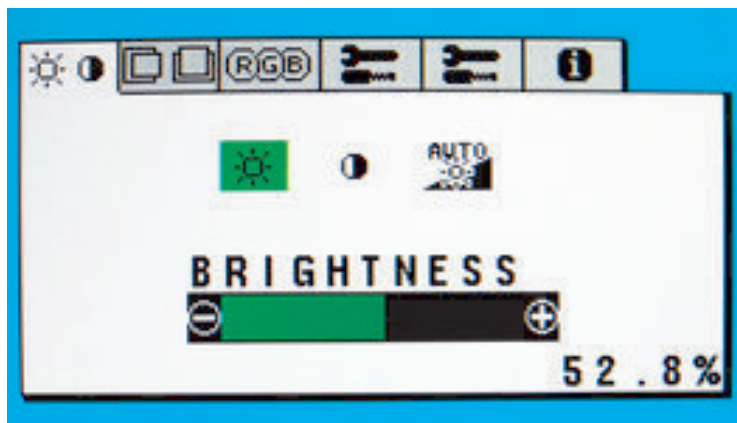
It's the cheapest way to make a brightness control for a monitor and this is why 99% of modern monitors use PWM

You can test if your monitor uses PWM with our PWM flicker test

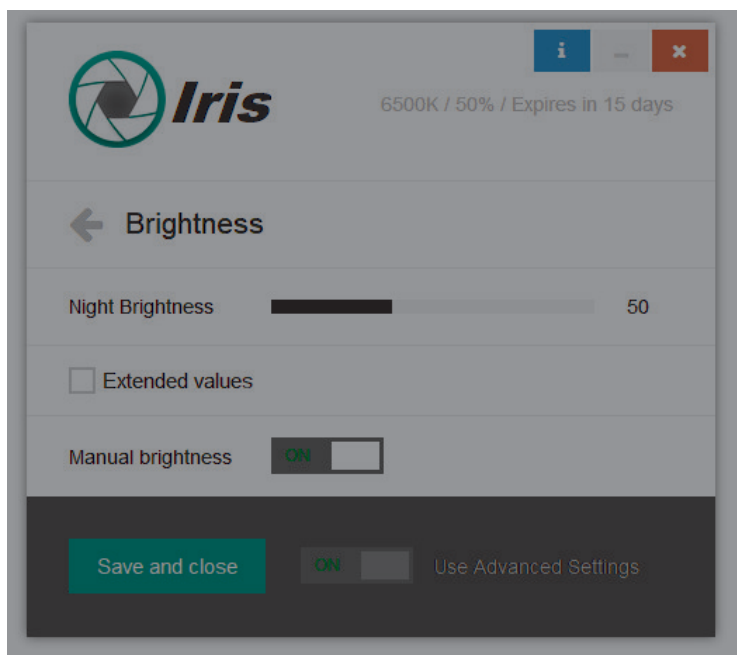
The bad thing about PWM is that our iris opens and closes all the time and this is the main reason why we feel eye pain and headaches (read more)



Most modern monitors use a method called PWM to control the brightness and this is the reason why we feel eye pain, eye strain and headaches in front of your monitor



1. Set your monitor Hardware brightness to 100% using your monitor buttons



## 2. Use Iris to control the brightness without PWM

Iris Brightness will lower the lightness of your screen without PWM (read more)

**Try Iris Brightness**

*If the button above doesn't work here are some instructions for manual activation: [How to try Iris Brightness](#)*

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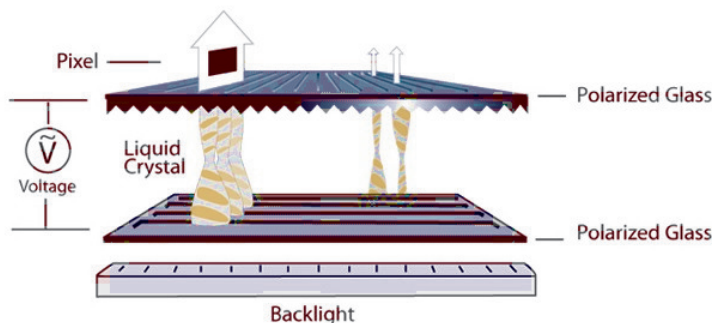
Subpixel flicker



*What is Subpixel Flicker?*

LCD displays are made up of small elements called Liquid

Crystals and this is actually where the name LCD comes from (Liquid-crystal display)



When we use our monitors the picture emitted constantly changes and when the colors are different the liquid crystal rotates a lot

This rotation causes the light to turn invisible and then visible again in a small fraction of the second when the colors change too much

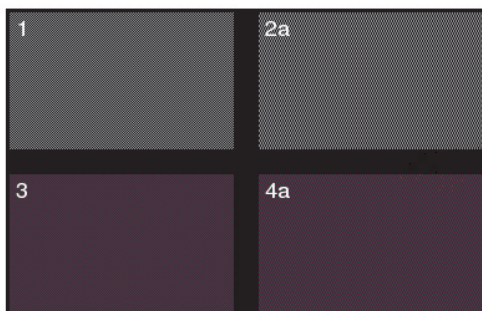
And this ON and OFF of the light when the liquid crystals rotate is what we call Subpixel flicker

Use can test if your monitor has subpixel flicker with our Subpixel flicker test

The bad thing about subpixel flicker is that we start to feel eye pain and headaches of this constant change of the lightness emitted from the monitor pixels (read more)



## Remove Subpixel Flicker



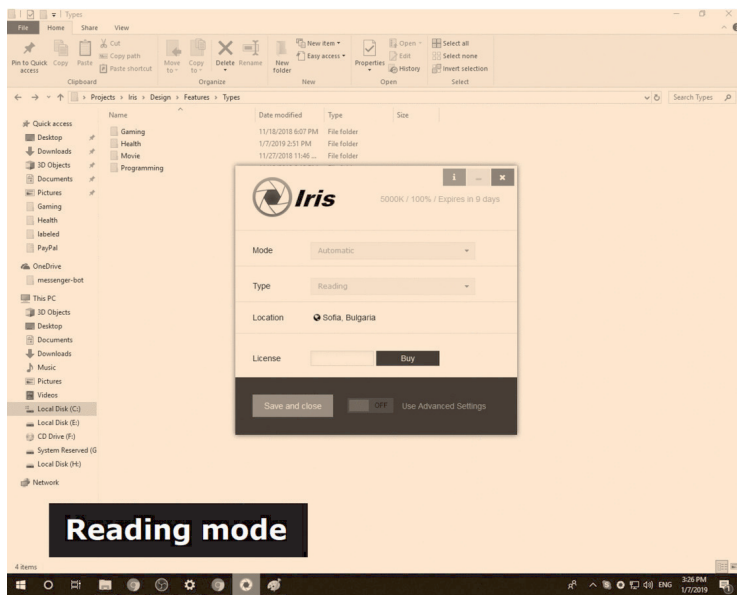
When the liquid crystals of LCD monitors rotate they cause a change in the intensity of light emitted from individual pixels on the screen

This thing is called Subpixel flicker and is one of the main causes of eye pain and headaches in front of the PCs

Use Reading, Sleep or Biohacker type to remove subpixel flicker from your monitor

Remove Subpixel flicker and make your LCD monitor more healthy for your eyes (read more)

## 14 TIPS TO MAKE YOUR MONITOR MORE HEALTHY FOR THE EYES



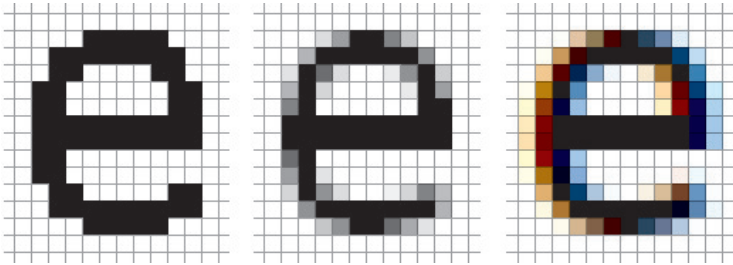
### Try Reading mode

*If the button above doesn't work here are some instructions for manual activation: How to try Reading mode*



## 6

### Font smoothing



Modern OS use a technique called subpixel anti-aliasing to make the fonts more beautiful

Our eyes however move on the screen in movements called cascades and they need a sharp edges to focus

When font smoothing is enabled the letters are more smooth and blurry and it's hard for our eye to read and move on the screen

Disabling font smoothing and subpixel anti-aliasing will help to reduce your eye strain in front of the PC

You can do this from your operating system settings or by using the Iris Fonts Menu

## Matte monitor



Prefer matte over glossy screens

Matte screens have coating for anti-reflection

With Glossy screens you will see double image and reflections

## 8

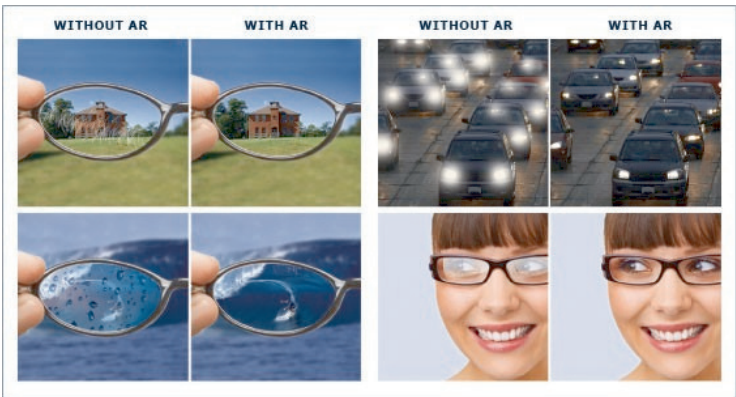
### Prescription Glasses



Go to an eye doctor to see if you need to wear glasses

Sometimes a small diopter like 0.5 will reduce your eye pain a lot and will improve your vision in front of the PC

## Anti-reflective coating



Get anti-reflective coating on your glasses

The anti-reflective coating makes the image more clear and protects you from reflections

# 10

## Brightness matching

Try to match your monitor brightness to the lightness in the room

The screen should look like a book and not like a light source

# 11

## Dark themes

Use dark themes at night

This will lower the brightness and match it to the room lighting

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## Blinking

Blink more

Blinking will help you to moisten your eyes



# 13

## Yawning

Yawning is the most effective and easy way to produce more tears

Don't use artificial tears

Yawn instead

# 14

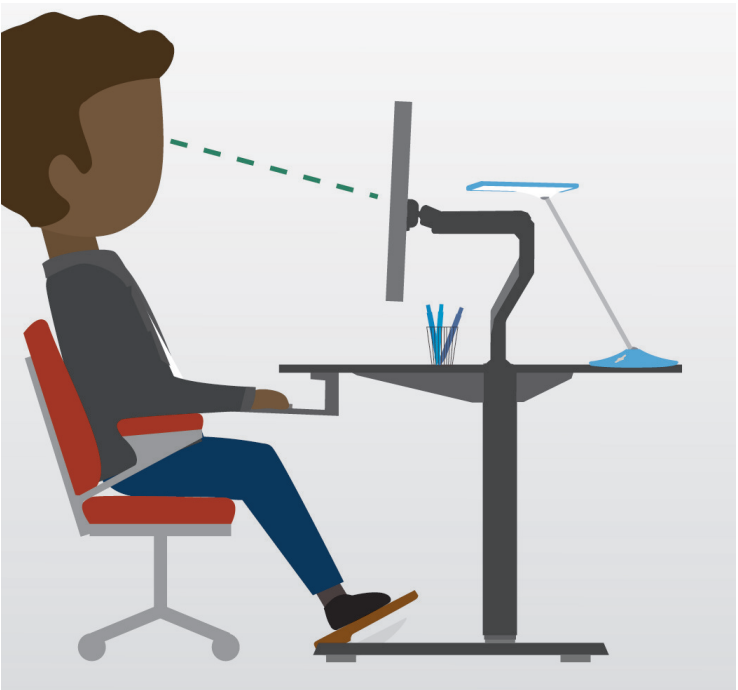
## Breaks

From time to time stand up from your PC and look at distant objects

Looking at distant objects will help your eyes to relax more and you will feel way better

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Eye position



Place your monitor more lower

Your eyes relax more when they look downwards

This way your eyes are more closed

The monitor upper corner should be on the level of your eyes

Don't place your monitor too high because to see the image you will look up and strain your eyes