# Manual and technical data

# **Lighting controller 1.2**

"Saamoday", Vinica, Macedonia June 6, 2019

## **Content**

1. Introd	uctic	on	1				
2. Plug in	1		2				
3. Installing the software  4. Unlocking  5. Main Window			8-11				
				6. Conne	cting	5	13
				7. Way of controlling			14-31
	-	Sliders for Red, Green and Blue color	14				
	-	Sliders for Color, Saturation and Brightness	15				
	-	Buttons with predefined colors	16				
	-	Buttons with saved colors	16				
	-	Special purpose buttons	17-32				
		<ul> <li>Button "Sound to light"</li> </ul>	17-23				
		o Button "Fade colors"	24				
		o Button "Jump colors"	25				
		o Button "Flash"	26				
		<ul> <li>Button "Colorful wheel"</li> </ul>	26-28				
		Button "Reorder colors"	29-31				
8. Other			32-37				
	-	Drop down list "Choice"	32-34				
		<ul> <li>Start me with computer</li> </ul>	32				
		<ul> <li>Show announce window</li> </ul>	33-34				
	-	Manual	35				
	-	About controller (refers to the software)	35-36				
	=	Updates/Upgrades	36-37				
0 Tochni	ادعا د	Nata.	20				

## Introduction

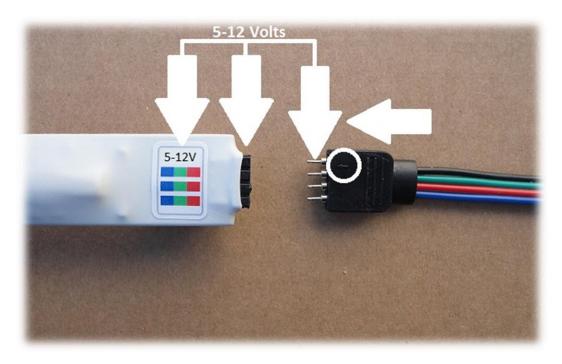
The lighting controller serve for controls the RGB LED strips via computer. The device to which the strips are attached is connected to the computer with USB cable. The controller offers you a simple way to change the color of your LED strips in different ways, offering accurate color reproduction. Below is the list of features of this controller:

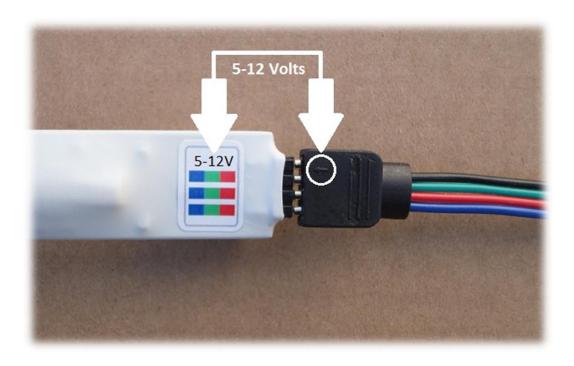
- 1. Color selection with individual sliders for Red, Green and Blue color.
- 2. Color selection, color saturation and color brightness with corresponding sliders.
- 3. Select color with 25 buttons with predefined colors.
- 4. 10 buttons for saving the previously selected color by the user.
- 5. Lighting of the LED strip according to the sound of the played track with the possibility LED strip to change the color or only the brightness of the selected color and selecting the maximum allowed brightness level.
- 6. Lighting of the LED strip according to the sound of the microphone (this option will not be available to Windows Vista users).
- 7. A VU Meter that shows the sound volume.
- 8. Fade of colors with the option of speed and brightness selection.
- 9. Jumping from one color to another with the user's choice of colors to be jumped, brightness and the speed of jumping.
- 10. Flashing of the selected color with the ability to select brightness and the speed.
- 11. Color selection from a colorful wheel.
- 12. Reorder the colors (it's a very useful option if you have a strip with a different color layout).
- 13. The software remembers the last selected color, selected jumping buttons, saved colors, sound settings, color wheel settings, settings for reordering of colors and independently selected speeds for "Fade colors", "Jump colors" and "Flash".
- 14. Controlling can be done with a touch screen.

The software works on: Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows 10 (32bit and 64bit, for all)

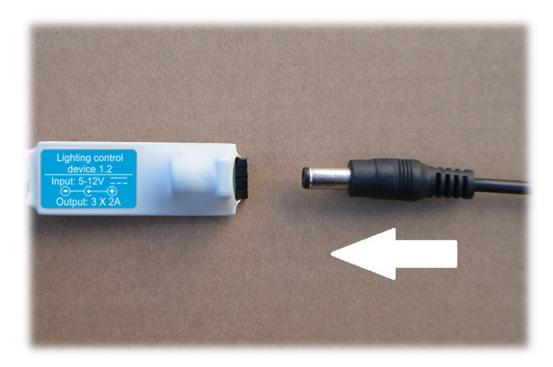
## Plug in

Plug in LED strip connector to the device, taking care that the arrow on the LED strip connector is on the same side with the "5-12Volts" label on the device. Look at the pictures.



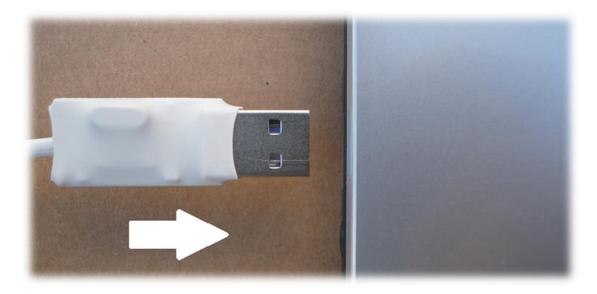


Then, connect your power supply. Look at the pictures.

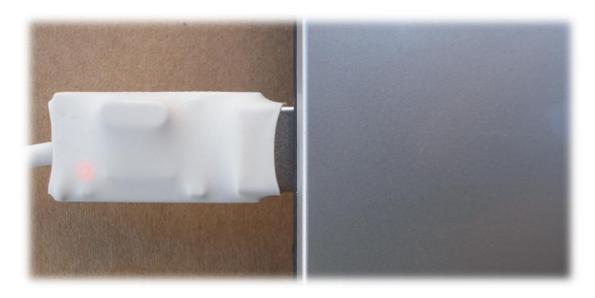




At the other end of the cable is located USB connector. Plug in to your computer.



Immediately after plug in, a red lamp, which is located near the cable, will illuminate.



## Installing the software

After downloading the Installer, open it and follow the steps.



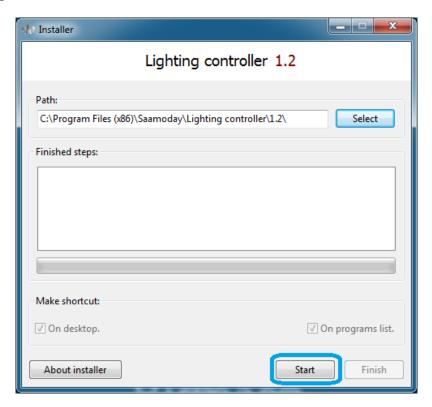
Installer

When the installer window opens, if you want to select another folder in which the lighting controller will be installed, press the "Select" button.



**Folder selection** 

If you do not want to change the folder, leave it as it is. Then, press the "Start" button to begin the installation.



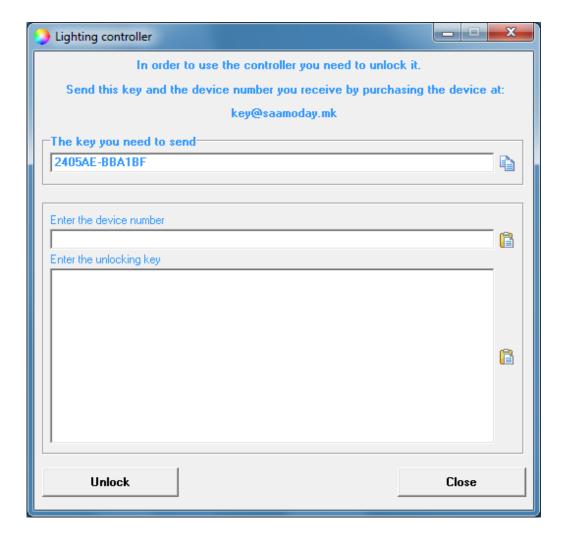
Starting the installation

In the section "Finished Steps:", will be displayed the completed steps, one by one. Once the installation is completed, choose where to make shortcuts for the software, and finally press the "Finish" button.



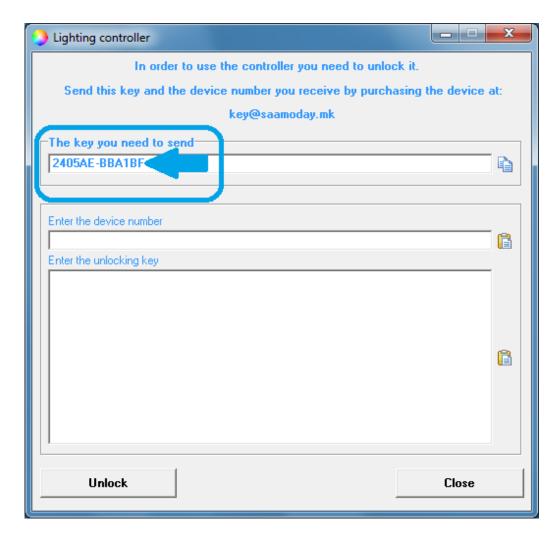
## **Unlocking**

After you start the software, the unlocking window will appear.



**Unlocking window** 

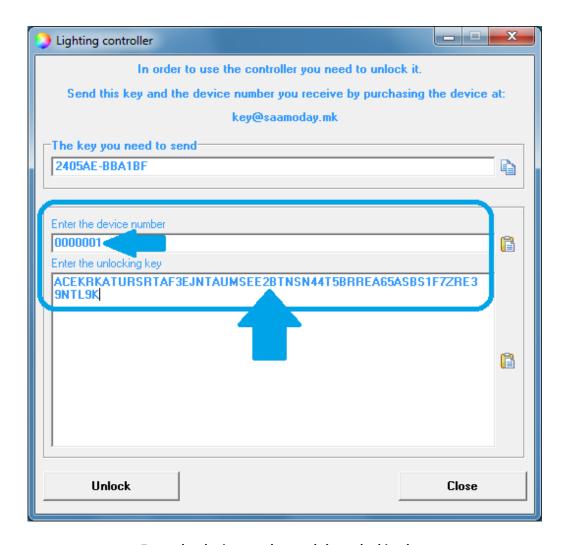
In the field under "The key you need to send", there is a key similar to that in the picture. Send this key and the device number that is on the warranty card that you receive with your purchase to key@saamoday.mk. Look at the next picture.



The key you need to send along with the device number

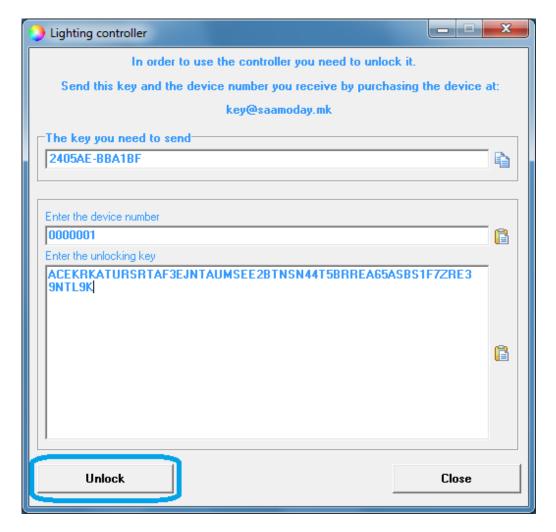
After you send the key along with the device number, on their basis, an unlocking key will be created for you and will be sent back to you. The entire procedure usually does not last more than 24 hours in working days. Look at the next picture.

Enter the device number and received unlocking key in the appropriate fields.



Enter the device number and the unlocking key

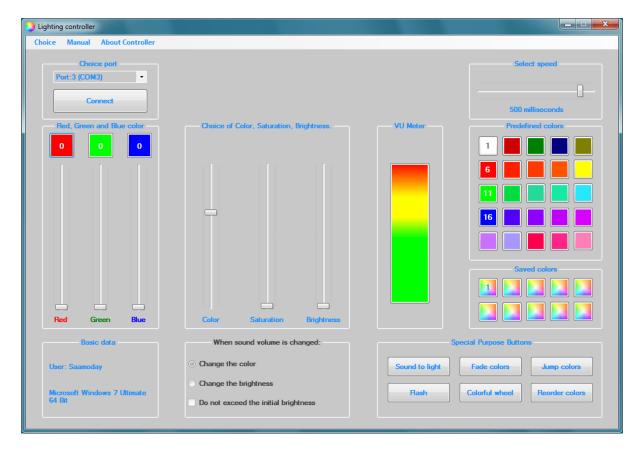
#### Finally press the button called "Unlock".



Unlock

ATENTION: The software can not be unlocked on computers with RAID disk drives. Usually, the number of RAID disk drives is no more than 2-5% of the total number of users. However, if you use a RAID disc drive, you will not be able to use the device.

## Main window

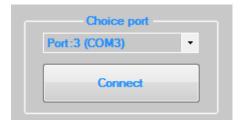


Main window

After unlocking the software and after you agree to rights and authorizations, the main window will appear. You can see the various ways in which you can change the color and brightness of the LED strips. But first, you will need to connect with the device.

## **Connecting**

Press the drop-down list and select the port. Then press the "Connect" button and wait for the connection to the device to end.

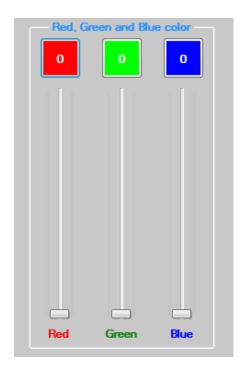


Connecting

## Way of controlling

After successful connection, you have various controlling options available. In the following, we will look at one by one.

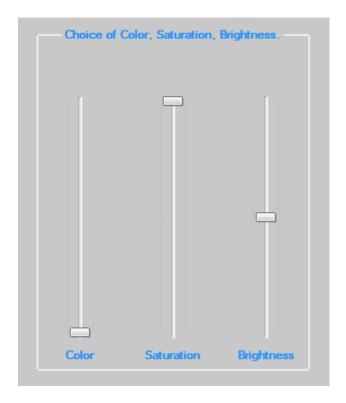
## Sliders for Red, Green and Blue color



Sliders for Red, Green and Blue color

Each of these 3 sliders allows changing the brightness of its color. Values are from 0 to 255. Press on slider with the left mouse button and slide it up or down. Moving these 3 sliders to different levels creates color mixing. Above the sliders there are 3 buttons with appropriate colors. When you press any of these buttons, if the corresponding slider has a value of 0, then it passes to 255 (the strongest brightness of the selected color). If the slider has any other value then it goes to 0 (off). Controlling is simple.

### **Sliders for Color, Saturation and Brightness**

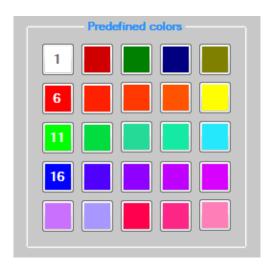


**Sliders for Color, Saturation and Brightness** 

These 3 sliders offer a slightly different way of controlling colors. While with the previous 3 sliders, each slider is used to control one color, here, different colors are selected with the first slider, the second selects how much saturation will have color selected with the first slider and the last slider selects how much will be the brightness of the selected color. Here it is important to remind two things:

- 1. If you want to notice more significant color changes when moving the color slider, you need to place the slider for saturation on the top, and the brightness slider on the middle(see the above picture).
- 2. If you have already chosen color and saturation, and you want to change only the brightness of that color, do not move the brightness slider for more than the middle, because from the middle upward the color slowly turns to white.

## **Buttons with predefined colors**



**Buttons with predefined colors** 

The basic purpose of these 25 buttons is to turn on predefined colors. Each button is for one color.

For the second purpose of these buttons, we will talk below, in the "Special Purpose Buttons", the "Jump Colors" button.

### **Buttons with saved colors**



**Buttons with saved colors** 

These 10 buttons allow you to save color in your choice. Use the sliders to select the color you like and press the right mouse button on one of these 10 buttons. A number will appear on the button indicating that the color has been successfully saved. Then if you want to turn on this color simply press the button with the saved color with the left mouse button.

## **Special purpose buttons**



**Special purpose buttons** 

Below will be explained the purpose of all these buttons.

### **Button "Sound to light"**



**Button "Sound to light"** 

The "Sound to light" button allows you to change light according to the change in sound, and you have the option to choose whether to change the color or brightness of the already selected color. Additionally, with the brightness slider you can choose the maximum level of brightness. The change of light will be done either from a played track or from a microphone. Below is an explanation.

By pressing this button, on the left, in the frame named "When sound volume is changed:", there are options to choose what to happen when sound volume is changed.

If, when changing the sound you want to change the color, press "Change the color".



Change the color

If you want to change the brightness of selected color, press on "Change the brightness".



**Change the brightness** 

Here is another option. "Do not exceed the initial brightness".



Do not exceed the initial brightness

By choosing this option even at the highest sound, the color will never be brighter than the one you selected, or the one you choose with the brightness slider. If this option is not selected, at higher sounds, the color will exceed the initial value. Try it. When "Change the brightness" is selected, then at any time you can press any of the buttons with predefined colors and choose the desired one.

#### Microphone

NOTE: This feature is not available for Windows Vista users.

If you want the changes to be made when changing the sound from the microphone, then follow the steps below:

With the right mouse button, press on the speaker located on the taskbar, next to the clock.



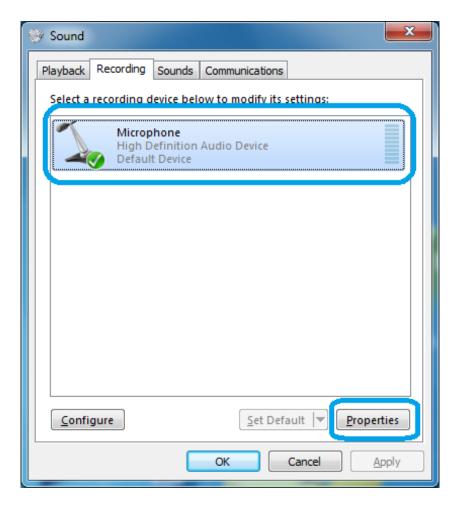
Speaker

#### Then, press on "Recording devices".



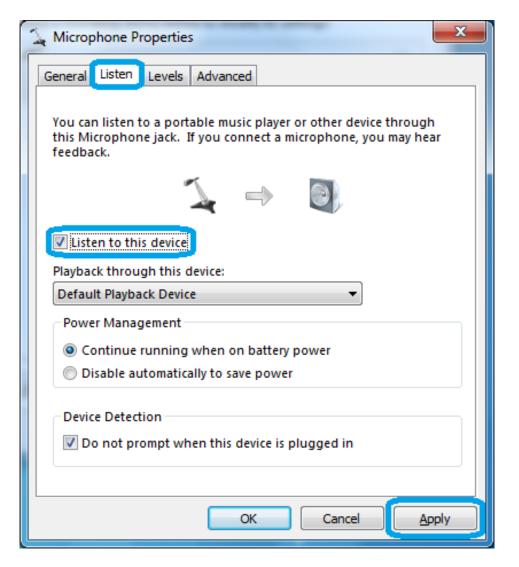
**Recording devices** 

A new window will open and there, with the left mouse button, double-press on your microphone, or press once to select it, and then down to the right of the same window, press on the "Properties" button.



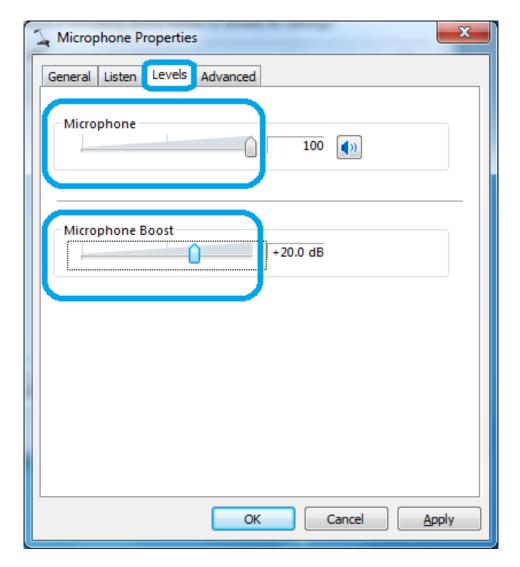
Select a microphone

A new window will open again. In the new window, press on the tab "Listen", then "Listen to this device" and finally press the "Apply" button.



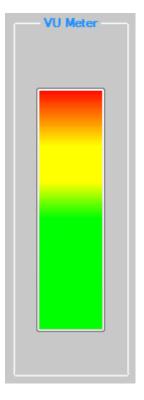
Listen to this device

The last thing you need to do is to determine the sensitivity and boost of the microphone. These settings are not the same for each microphone and each computer, so you will have to research yourself. To do this, on the same window, press the tab with the name "Levels" and with this two sliders select the values that suit you. The tests were performed with the most ordinary microphone, and the values that suit most were 100 and + 20.0dB. Try it.



Levels

The volume level is displayed on the VU Meter, whether a track is playing or the sound comes from the microphone.



**VU Meter at maximum sound volume** 

You can stop the sound to light by pressing the same button, or by pressing any of the special purpose buttons.

#### **Button "Fade colors"**



**Button "Fade colors"** 

By pressing the "Fade colors" button, it starts fading from one color to another. You can change the fading speed with the speed slider.



Slider for speed selection

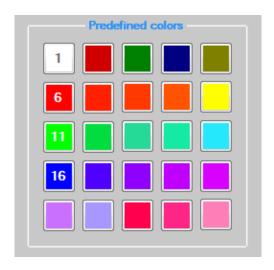
With the speed selection, you determine how many milliseconds are needed for next change. While colors are fading, you can make changes at any time with the brightness slider. To stop fading, press the same button or press on any of the special purpose buttons.

## **Button "Jump colors"**



**Button "Jump colors"** 

Pressing this button starts jumping from one color to another. Here's a big advantage is that you can choose which colors will jumping. Selecting is done by pressing with right mouse button on the desired button of the buttons with predefined colors.



**Buttons with predefined colors** 

A number appears on the button, indicating that the color is selected. In the same way, you can remove the color that you no longer want to use. The above picture shows that white, red, green, and blue are selected, respectively, the numbers 1,6,11 and 16. The speed of jumping can be changed with the speed slider. With the slider for brightness you can select the brightness of the color. To stop jumping, press the same button or press on any of the special purpose buttons.

#### **Button "Flash"**



**Button "Flash"** 

Pressing this button allows you to flash only one color. You can change the color in any way, through buttons with predefined and saved colors and through the sliders. The flashing speed is determined by the speed slider. With the slider for brightness you can select the brightness of the color. To stop the flashing, press the same button or press on any of the special purpose buttons.

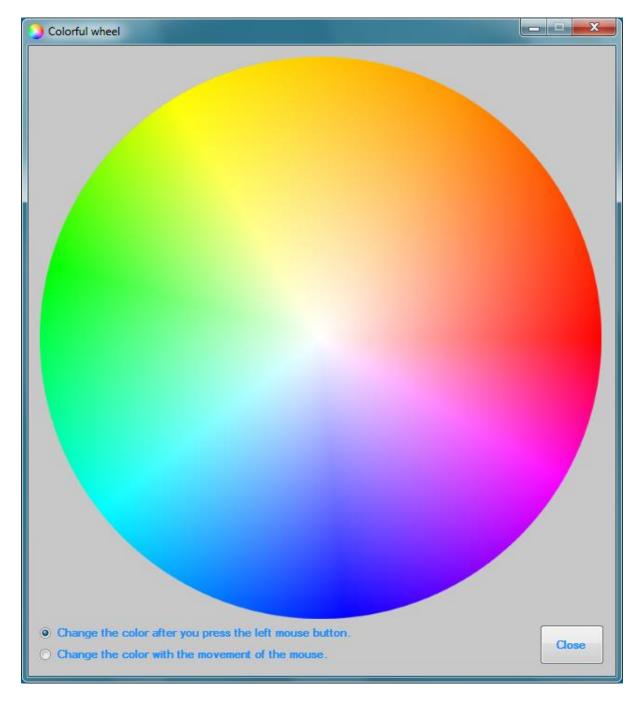
### **Button "Colorful wheel"**



**Button "Colorful wheel"** 

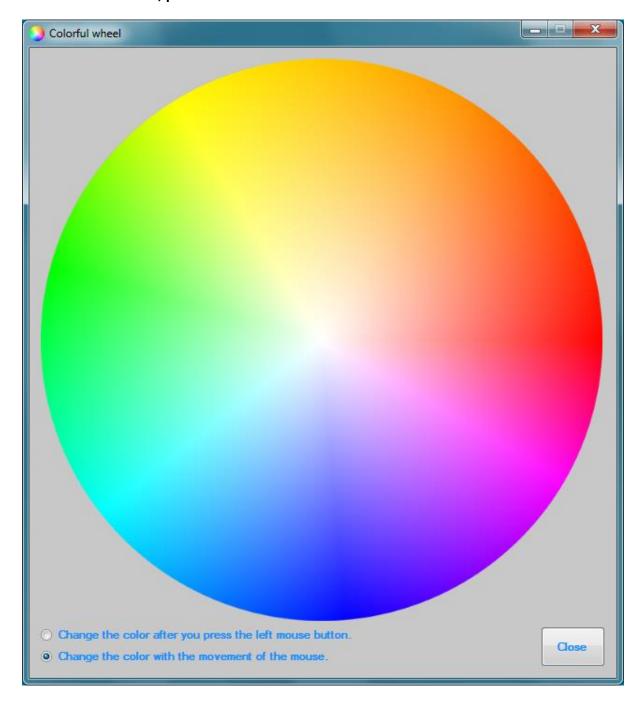
Pressing on the "Colorful wheel" button opens a new window with a colorful wheel, and the color selection is done with the mouse in two ways.

If you choose "Change the color after you press the left mouse button", then you will see the change of color after you press the left mouse button on the desired color, and this window will close.



Colorful wheel - "Change the color after you press the left mouse button."

If you choose "Change the color with the movement of the mouse", then you will see the color change while you move the mouse through the colorful wheel. When you see the desired color, press the left mouse button and the window will close.



Colorful wheel - "Change the color with the movement of the mouse"

You can also close this window by pressing the "Close" button.

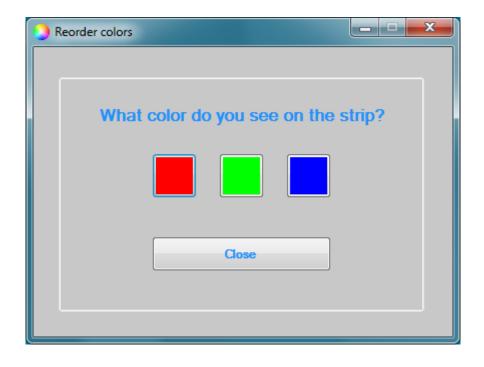
#### **Button "Reorder colors"**



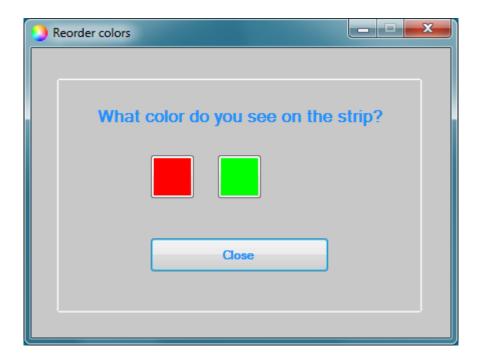
**Button "Reorder colors"** 

Reorder colors is an option that is very useful if you come across a LED strip with a different color layout. Clearly speaking, if the color layout on the LED strip does not correspond to that of the control device, when you turn on red color in the software, the LED strip may light up green, or the like. With this option to reorder the colors, this side-effect is avoided. The procedure is clarified below:

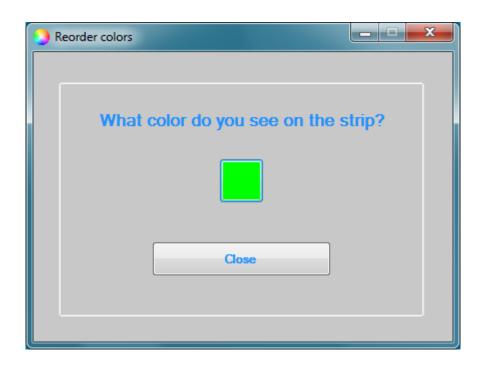
After pressing the "Reorder colors" button, a new window opens and at the same time on the LED strip will be turned on one of the three basic colors (red, green or blue).



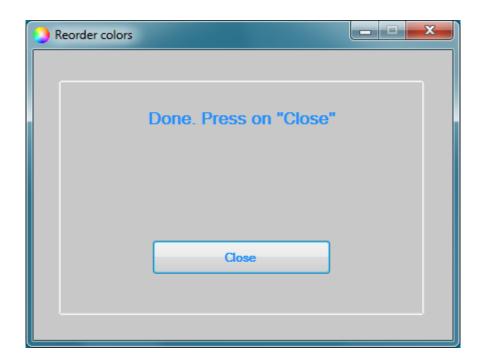
At the top of the window there is a question: "What color do you see on the strip?". Answer this question by pressing the button of the same color as on the LED strip. Let's say that the color on LED strip is blue. Press the blue button. The pressed button will disappear, and on the LED strip will turn on another color.



Press the button that matches the new color you see on the LED strip. Let's say it's red. And this button will disappear, and the last color, or green, will light up on the LED strip.



Finally, press the last button. The LED strip will be turned off and the message will be displayed on the window: "Done. Press on "Close"". Now press the "Close" button and this window will be closed. Colors are properly arranged.



## Other

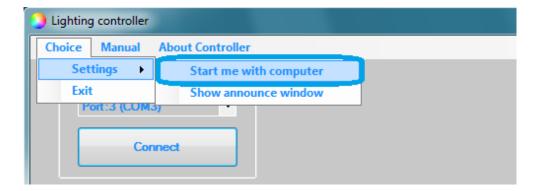
## **Drop down list "Choice"**

From the drop-down list "Choice" you have the option to choose two settings:

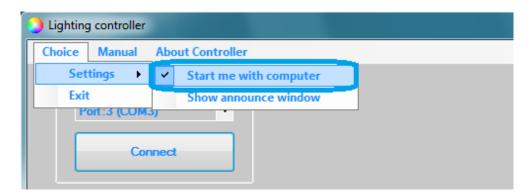
- 1. Start me with computer
- 2. Show announce window

### Start me with computer

This setting allows you to start the software along with the computer. Go to Choice > Settings and press on "Start me with computer". If you no longer want the software to start with the computer, repeat the same procedure.



**Before pressing** 



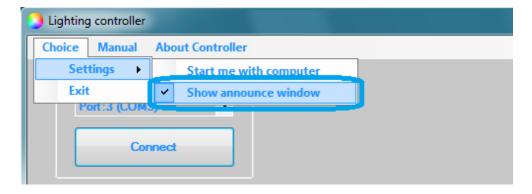
After

## Show announce window

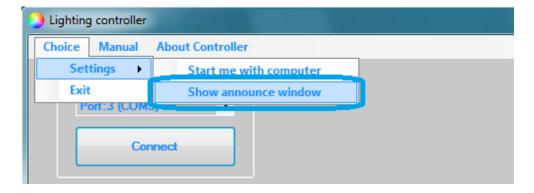


**Announce window** 

If you do not want the announce window to be shown before turning on the software, go to Choice > Settings and press the "Show announce window". If you want to display the announce window again, repeat the same procedure.



**Before pressing** 



After

#### Manual

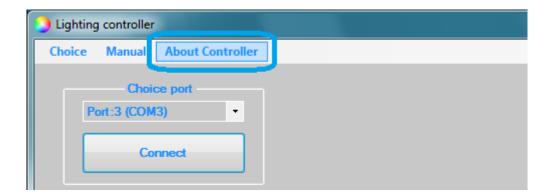
You can open this manual at any time and through the software by pressing on "Manual". Look at the picture.



Manual

### **About controller**

To see the basic information for this controller you need to press "About the Controller". Look at the picture.



**About Controller** 

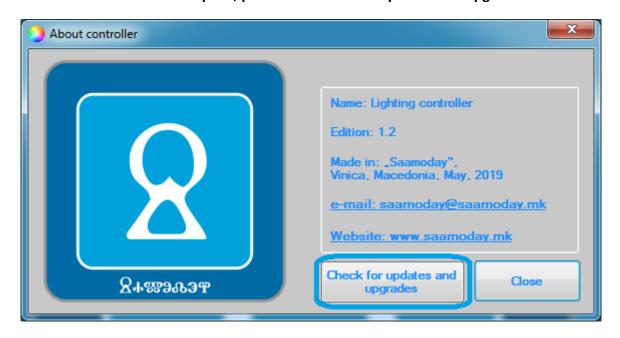
This opens a new window with basic information about this controller. Look at the picture.



"About controller" Window

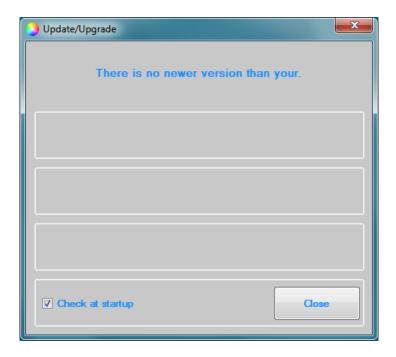
## **Updates/Upgrades**

To check for an update or upgrade of this controller, press on "About Controller" and when the new window opens, press the "Check for updates and upgrades" button.



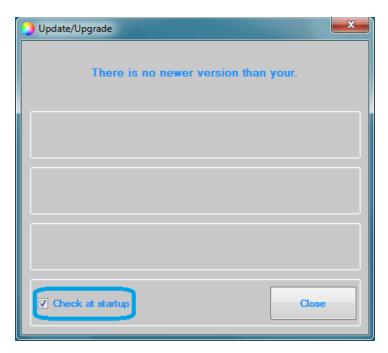
**Check for updates and upgrades** 

A new window will open again. At the top of this window a message will be written that will let you know if there is a newer version than yours.



"Update/Upgrade" window

At the bottom of this window you have the option to choose whether the software itself should check for updates and upgrades on startup.



**Check at startup** 

## **Technical data**

Length: 5 meters. It can be made with length according to your needs.

Connections: USB-A connector, 5.5-2.1mm socket, 1x4, 2.54mm female pin header.

Working voltage: 5-12 VDC

Output current: 3 x 2A

Software work on: Windows Vista, Windows 7, Windows 8, Windows 8.1, Windows 10( 32bit and 64bit, for all).

"Saamoday", Vinica, Macedonia June 6, 2019