

Pyroterra Lighttoys
presents

FIRMWARE UPDATE GUIDE



V2.3
(ENG)

Introduction

Firmware update is a process that updates the internal program that runs your FT remotes, Visual, FT and FT2 devices. This guide will walk you through the process.

Why to update

Firmware update brings new functionality, improves stability and fixes problems with your Lighttoys props. It is recommended to perform the firmware update every time LtComposer offers it.

When to update

Firmware update is a sensitive procedure, which might need several tries and a place with low radio interference. Therefore, we recommend that you perform the update only when you are in no stress and have plenty of time before the next show :)

What you need

To perform the firmware update process, you need to download the latest version of the LtComposer software, available from our [downloads page](#) for both Windows and macOS.

LtComposer already contains all the necessary firmware files for the update process, so it can be used as is.

What props are supported

LtComposer supports the firmware update of the following Lighttoys props:

- FT remote controllers (FT remote, FT Remote PRO)
- FT devices (Zebra Poi FT, LED Fans FT, ...)
- Visual Poi V4 & V5 devices (Poi, Wand)
- FT2 devices (Visual Hoop, LED Club FT2, FT2 chip, Lumi props...)

Before you start

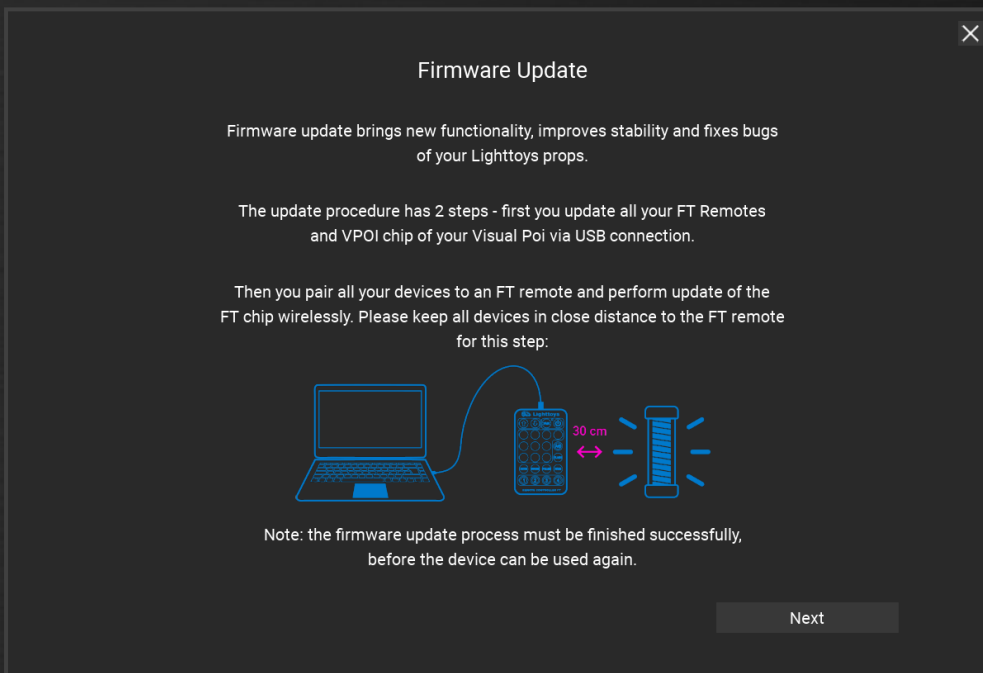
1. Gather all FT remotes and Lighttoys props to be updated, **make sure the batteries are well charged.**
2. Find a place with low 2.4GHz radio interference.
3. Launch the LtComposer software.

Open the update assistant



To start updating your props, launch LtComposer and go to the top menu **“Tools”** and click on the **“Firmware Update”** button.

A new window will open with a brief explanation of the update process:



Click **“Next”** to continue.

The firmware update process consists of the **2 separate steps**, which must be both finished for a successful update of all your props:



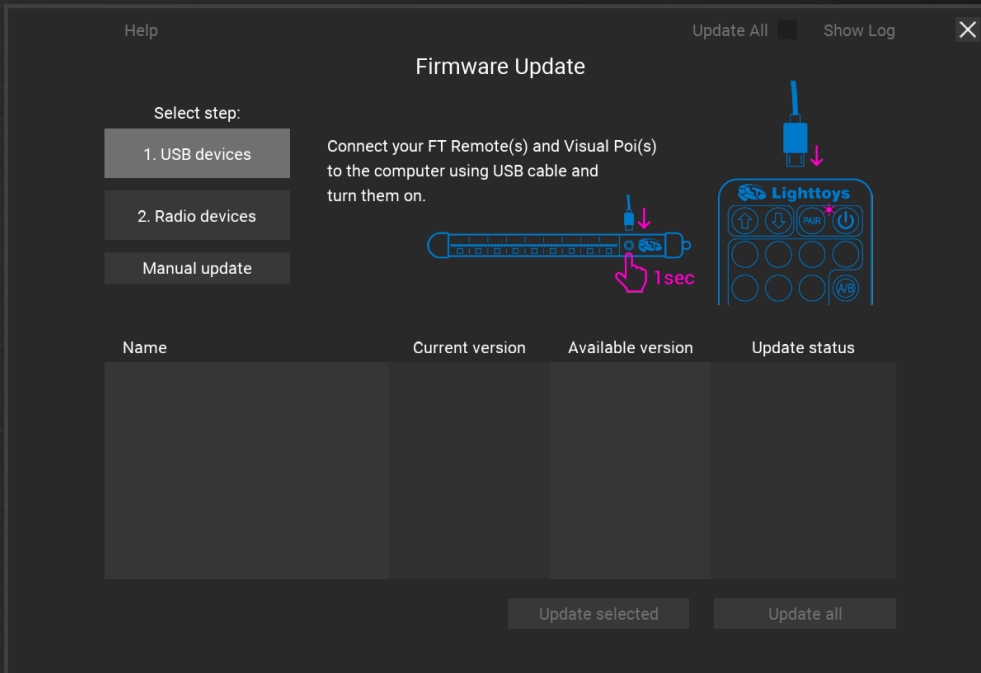
1. USB devices – in this first step you update all your FT remote controllers and VPOI chip of your Visual Poi devices (if you own any) using a USB cable connection.

2. Radio devices

2. Radio devices – in this second step you update all your FT, FT2 devices and FT chip in Visual Poi(s) wirelessly, using a paired FT Remote connected to your computer.

Firmware Update Step 1 – USB devices

In the new window, click on the **1. USB devices** button:



Now start connecting your FT Remotes and Visual Poi(s) (if you have any) to your computer using a USB cable. Make sure they are all turned on.


The devices will start appearing in the table below, showing their current and available firmware versions (in **YYMMDD** date format, higher number means newer version):

Name	Current version	Available version	Update status
Visual Poi V5 MAXI	v0.32	v0.33	Out of date
Visual Poi V4 CLASSIC	v0.47	v0.47	
Remote control 1	20240701	20250306	Out of date
Remote control 2	20241223	20250306	Update

The **“Update status”** column will show one of the following 3 states:

Out of date 

The firmware is very old or contains known issues. You should perform the update as soon as possible.

Update 

The firmware is not current; improvements can be obtained by the update.

Empty field (no text) – the firmware is the latest, no action is needed in this update step.

To update all devices to the latest firmware, click the button **“Update all”**. If you want to update selectively just a single device, click the **“Update selected”** button instead.

The update will start, a blue progress bar will show the actual progress of the update:

Updating 80%

Done

After the update is finished successfully, the Update status will change to status **“Done”**.

Unplug the already updated USB devices from your computer and plug others that still need the update and perform it the same way.

At the end of this update step, all your FT Remotes, Visual Pois / Wands (if you have any) should have their main chip updated.

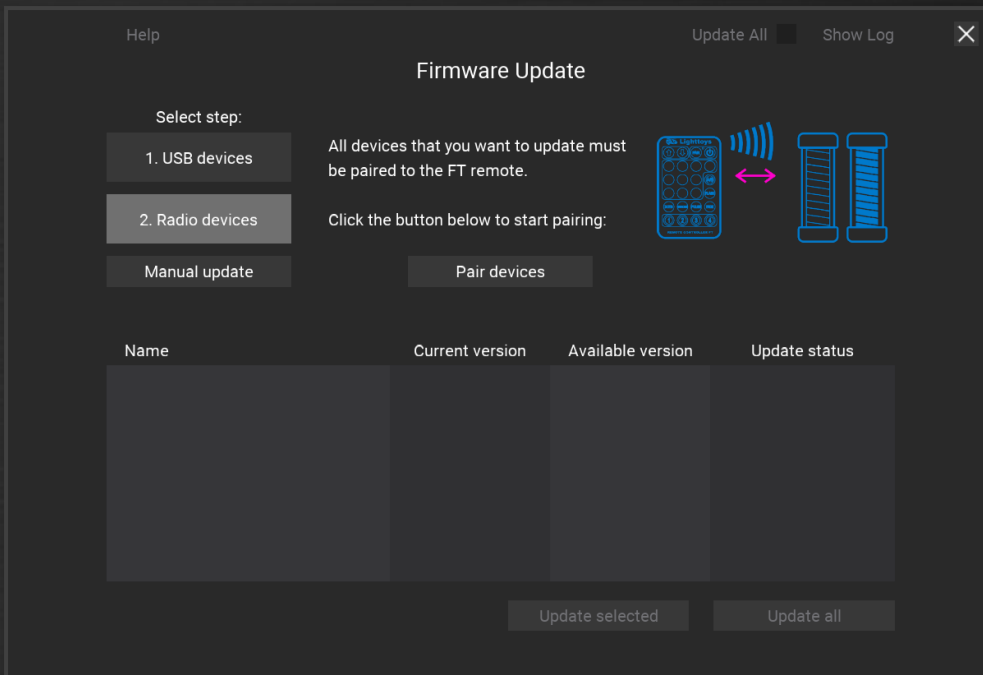
Firmware Update Step 2 – Radio devices

Note: we recommend unplugging any USB devices still connected from Step 1.

Important: to proceed, you need to have access to an FT Remote sold from year 2022 onwards, with HW revision **LTC-2.0.0** or newer (check it in Devices menu). Older HW revision **LTM-1.3.0** doesn't have the processing power for the automatic update to work unfortunately.

Take any supported FT Remote with current firmware in it, plug it to your computer with USB cable and make sure the remote is turned on.

In the update window, click on the **2. Radio devices** button:

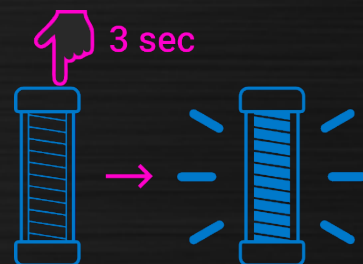


Initiate a new pairing procedure, press the **“Pair devices”** button.

Start pairing all devices that you need to update – including FT and FT2 devices, and also the FT chip of Visual Poi and Visual Wand:

Make sure that all devices to be paired are turned off first.

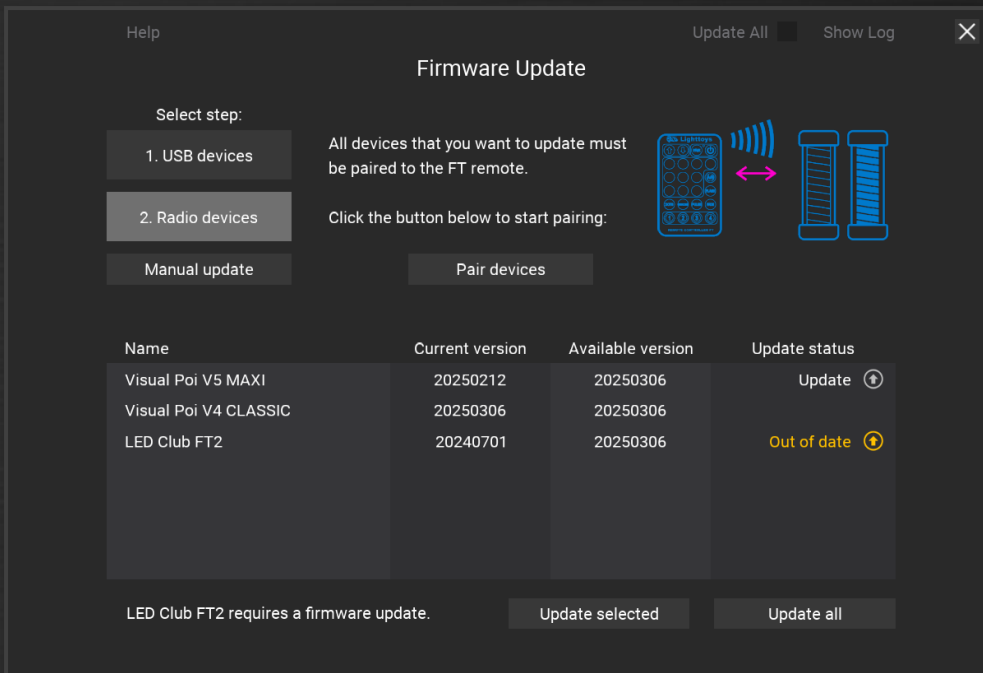
Then press the power button for **3 seconds** on each device, until it blinks in white color.



If you cannot finish the pairing process of any device (it doesn't pulse in white color at all, or blinks in green color), go to [Manual Update](#) section instead.

Note: if you have a lot of Lighttoys equipment, you do not need to pair all of the devices at the same time, you can do it in smaller batches.

Finish the pairing procedure by clicking the **“Finish Pairing”** button:



Again, all paired devices will be listed in the table below, showing their current and available firmware versions:

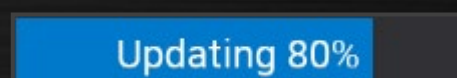
Name	Current version	Available version	Update status
Visual Poi V5 MAXI	20250212	20250306	Update
Visual Poi V4 CLASSIC	20250306	20250306	Update
LED Club FT2	20240701	20250306	Out of date

Arrange all the paired devices on your desk, so they are in close proximity to the FT Remote (less than **30cm** is optimal):



To update all paired devices to the latest firmware, click the **“Update all”** button. To update just a single paired device, click the **“Update selected”** button.

The update will start, a blue progress bar will show the actual progress of the update:



Done

If the update is finished correctly, the Update status will change to status **“Done”**.

The device will enter either standby mode (FT or FT2 devices) or bank 1-4 selection (Visual Poi). This device is completely updated and can be used normally.

Error 

In some cases, the radio update might not finish correctly and produce an error, this will be indicated by the **red error message** in the list.

Locate the problematic devices – in most situations they will be **blinking in green color** every **1 second** or be completely turned off.

For each failed device in the list, do the following:

1. Make sure the device is turned on.
2. Place the device really close to the FT Remote, its FT chip should be located less than **10cm** from the FT Remote.
3. Click on the **“Update selected”** button to restart the update.

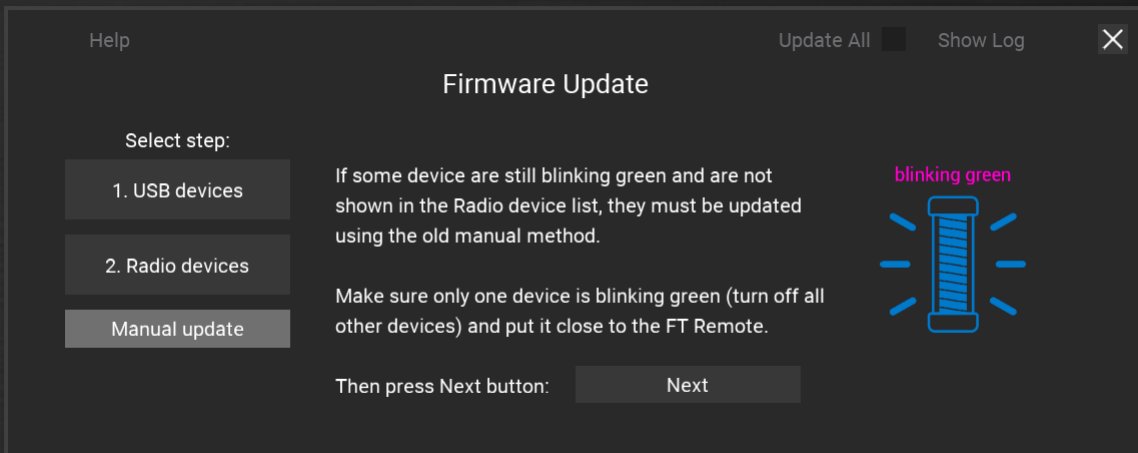
If you are not successful after many tries or the **green blinking device** is not shown in the list, please continue with the **Manual Update** method instead.

Manual Update

In some rare situations, the automatic firmware update process might not work, for example:

1. LtComposer may crash during the automatic firmware update process and lose track about the unfinished devices.
2. The device cannot be paired to the FT remote (doesn't pulse in white color).
3. The device firmware may get corrupted, being stuck in blinking green state when turned on.

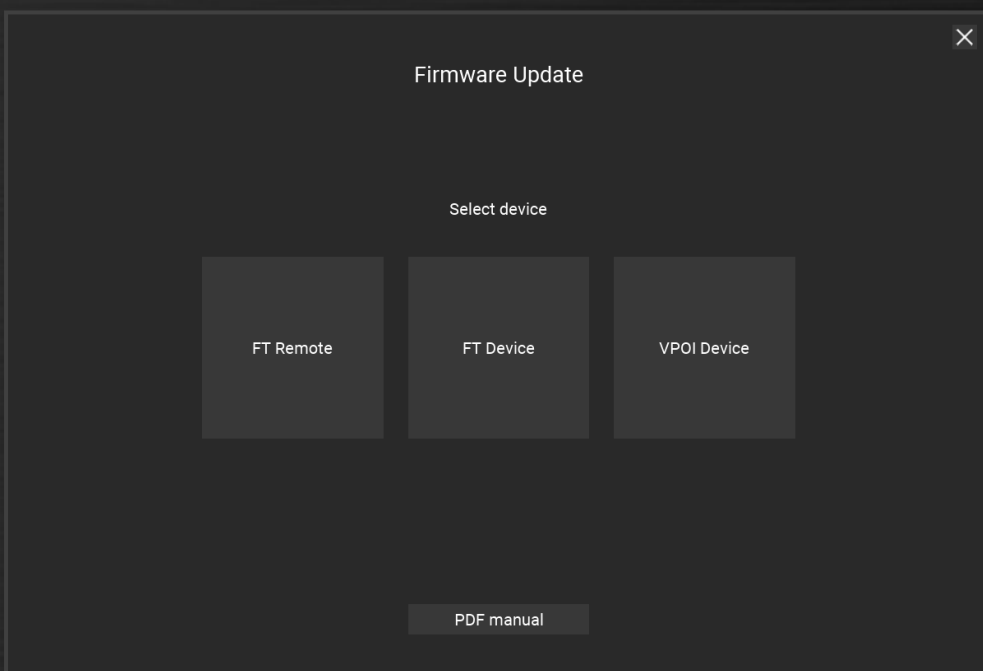
For these situations, there is a special third button **“Manual update”**, please click on it:



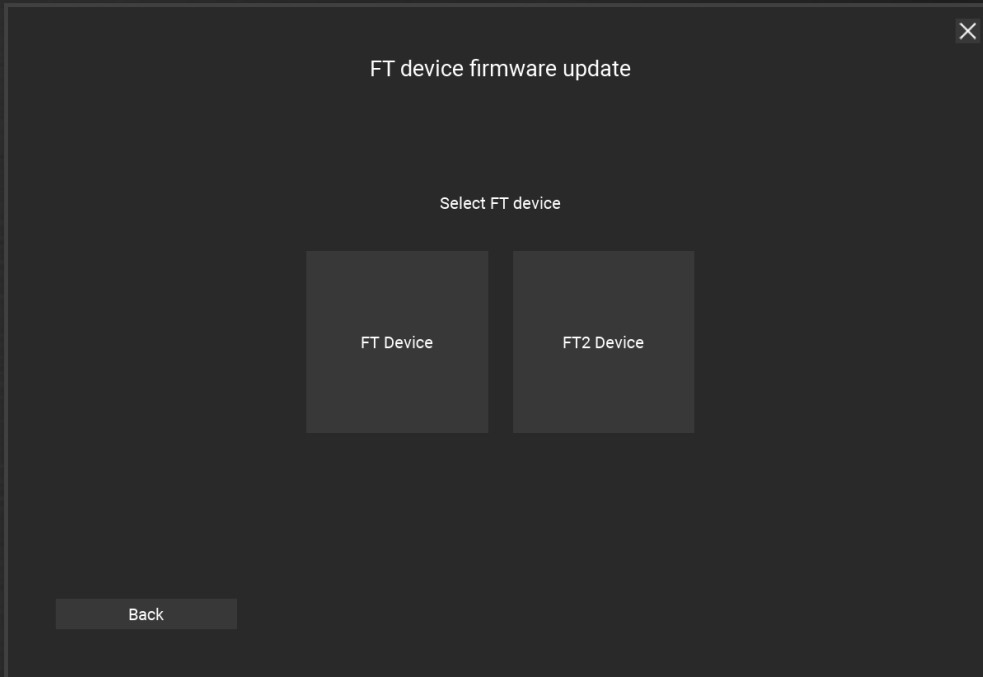
Unlike the automatic process, in **Manual update** only **1 device** can be served at a time. Make sure only one device is **blinking green** (turn off all other devices) and put it very close to the FT Remote.

Then press the **“Next”** button.

A new window will appear, where you manually select the type of Lighttoys device that you are currently updating:



To update any of your FT and FT2 devices, click on the **“FT Device”** button. You will have the following 2 options to choose from:



Since the firmware files are different for each device, it is important that you select the correct button in this step:

Select the **"FT Device"** button for:

Zebra Poi FT
Zebra Stick FT
Fantastick FT
Contastick FT
LED Buugeng FT

LED Fans FT
Moon Fans FT
LED Club FT
Omni Light RGB FT
FT chip

Select the **"FT2 Device"** button for:

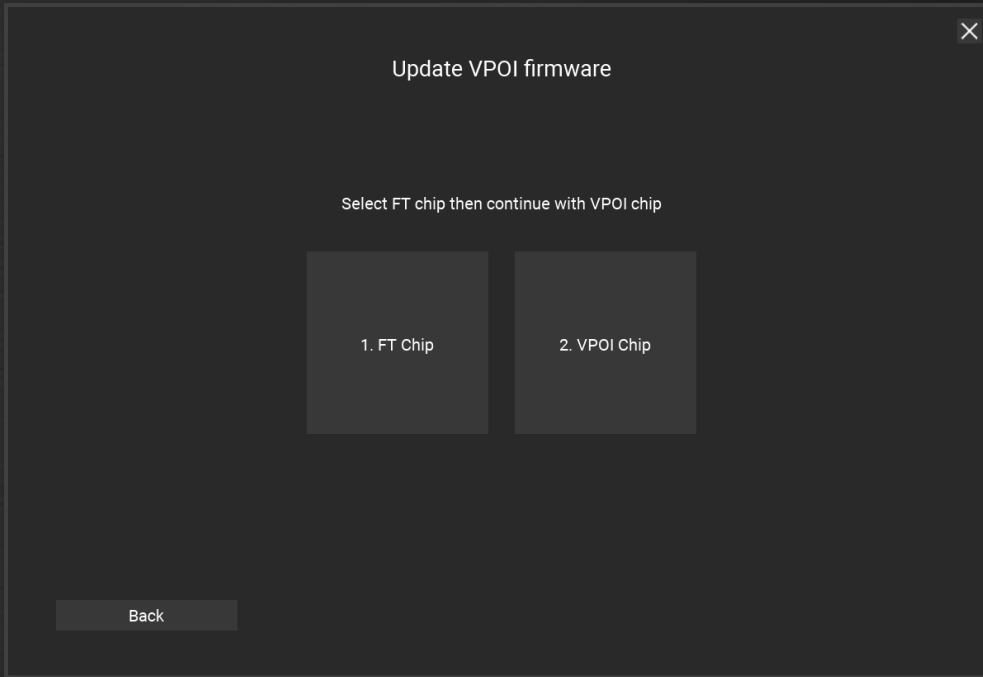
Visual Hoop
LED Club FT2
LED Buugeng FT2
LED Cyr Wheel FT2

Lumi Staff FT2
Lumi Cube FT2
Lumi Wand FT2
FT2 chip

Follow the onscreen instructions to finish the update process of your FT device, you should see **Status: SUCCESS** at the end.

If you see **Status: FAILED**, the update procedure unfortunately failed. In that case press the button **Retry** until it finishes correctly.

To update all your Visual Poi and Visual Wand devices, click on the **"VPOI Device"** button instead. You will see the following 2 options:



Click on the **“1. FT Chip”** button. Follow the instructions until you are finished. If the update fails, press the button **Retry** until it finishes correctly.

Finishing steps

If you are updating from a very old firmware (early 2022), it is recommended that you perform the following clean up steps to ensure correct functionality:

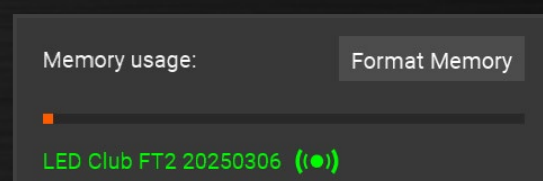
Reset the FT remotes

For each FT remote, attach it to the computer with a USB cable and launch LtComposer. Go to the **“Devices”** menu, select the FT remote in the list and click the button **“Reset Remote”**.

Disconnect the FT remote from the computer and turn it OFF and ON again, to finish the reset procedure.

Format device memory

Connect the Lighttoys device to the LtComposer, make sure it is turned on and detected. In the Upload dialog or Devices menu, click the **“Format Memory”** button:



Auto-detection of the old firmware

When you attach any Lighttoys device running an older firmware, LtComposer will automatically detect it and display it in the status bar in orange message:



Clicking on the message will bring you to the Devices menu, where you can see exactly which device needs to be updated, with a small arrow icon that brings up the update assistant automatically:



So, you do not need to worry about forgetting to update some of your devices, you will be notified about it the moment you attach them to LtComposer :)

*We wish you many great moments
with Lighttoys FT!*

