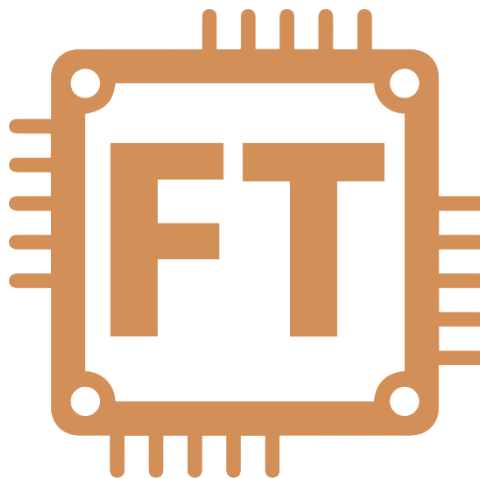


Pyroterra Lighttoys

presents

FUTURE CHIP TECHNOLOGY



Firmware update process

v1.0 (ENG)

Introduction

Firmware update process refers to the update of the internal program that controls your FT remote and FT device. This guide will walk you through the process.

When it's needed

Firmware update should be performed whenever a new FT functionality is released by Pyroterra Lighttoys or when a known error ("bug") is fixed in the new firmware.

The update must be performed for all your FT remote(s) and FT device(s) you own, failure to do so can lead to unexpected behavior.

What is needed

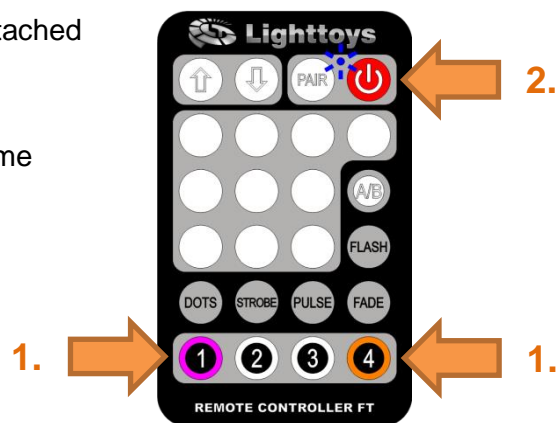
For successful update, you need the following:

- Windows PC (Windows 7 or higher)
- FT loader app
- FT updater app
- latest firmware file for your FT remote (i.e. **REMOTE-fw_170104.lhex**)
- latest firmware file for your FT device (i.e. **STD-SLAVE-fw_170104.lbc**)

Updating your FT remote

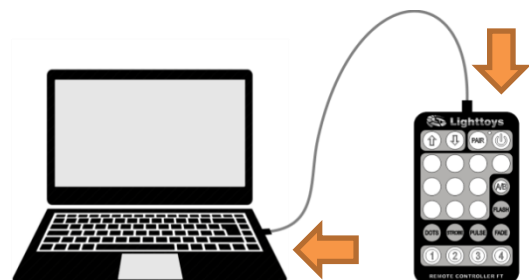
Make sure the remote is turned OFF and not attached to the USB cable.

1. Press and hold the button 1 and 4 at the same time, don't release them yet.
2. Click the red ON/OFF button.
3. The blue indicator LED should start blinking rapidly.
4. Now release the buttons 1 and 4.

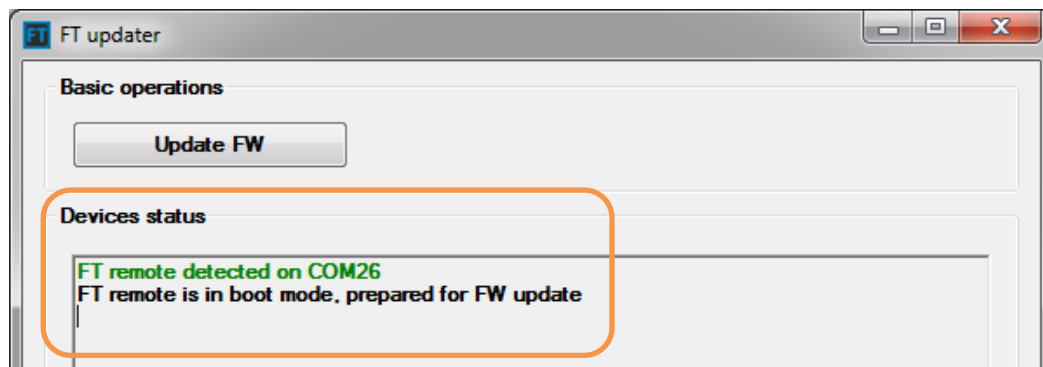



The remote is now ready to be updated.

Now attach the FT remote to your PC with a USB cable:

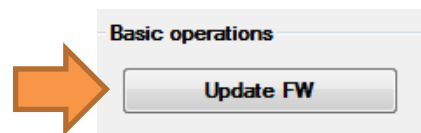


Open the **FT updater** application, the remote should be successfully detected:

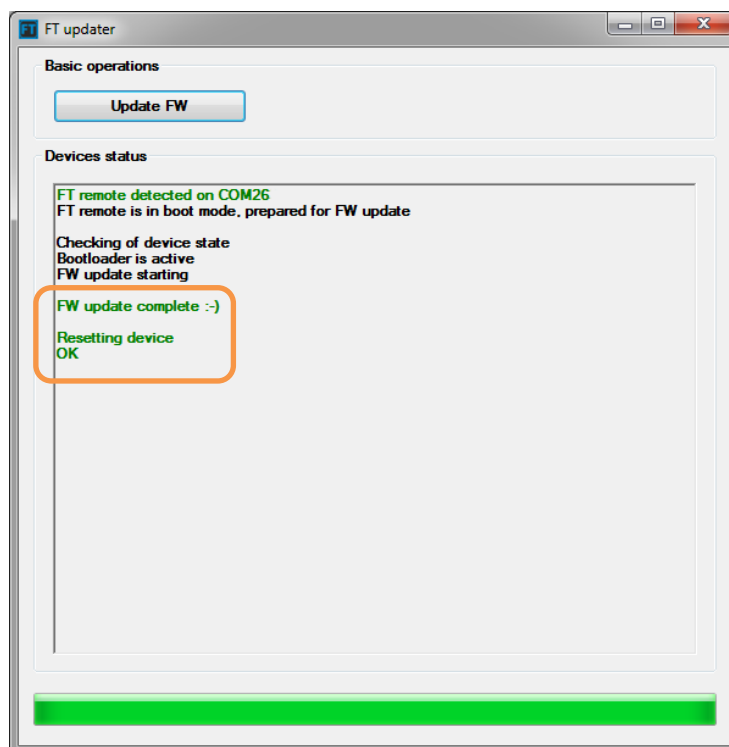


 If the FT remote is not detected, try different USB cable or USB port. Also, make sure that mcp2200 driver is successfully installed on your system.

Click the “**Update FW**” button and select the firmware file. The file format is **REMOTE-fw_YYMMDD.lhex** where YYMMDD substitutes the Year/Month/Day of the release.



Firmware update should start. After a successful update, the blue LED indicator should stop blinking and the FT updater will respond with a message “FW update complete 😊”:



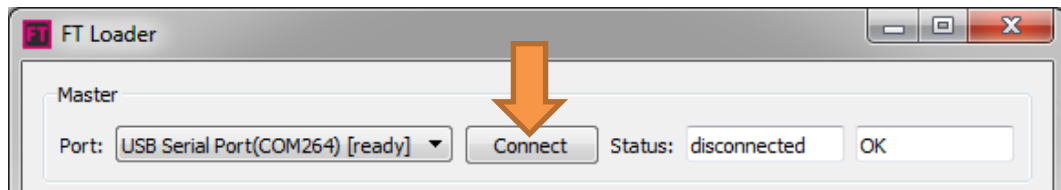
Your FT remote is now ready to be used, you can unplug it from PC and use normally.

Updating your FT device

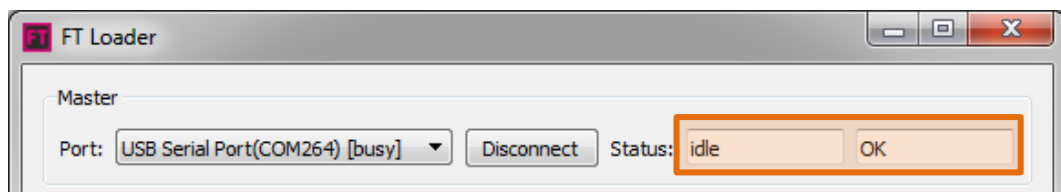
For updating your FT devices, you need to launch the **FT loader** application.

Connect the FT remote

Make sure that your FT remote is connected to the PC with a USB cable and turned on (the blue indication LED shines steadily). Now click the 'Connect' button in the app:



The status bar should indicate successful connection between FT remote and FT loader by displaying "idle", "OK":

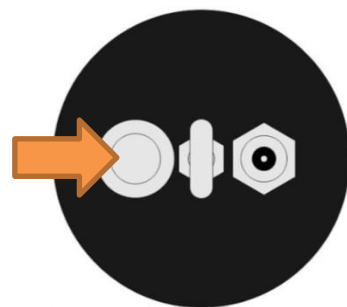


💡 If you can't connect the FT remote, try selecting different port in the left drop-down menu. Also, make sure that mcp2200 driver is successfully installed.

Prepare your FT device

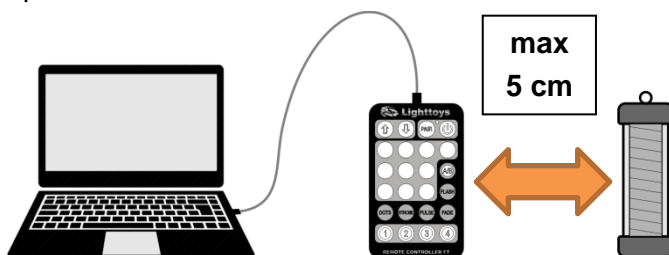
Take your FT device and make sure it is turned OFF. Now press its power button 10 times in a row quickly.

press
quickly
10 x



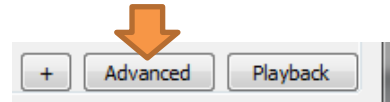
The A channel should start blinking **green color** every second. This indicates the FT device is ready to be updated.

Now place your FT remote and FT device in a very close distance to guarantee trouble-free update:



Perform the update

In the FT loader application, click the “**Advanced**” button.



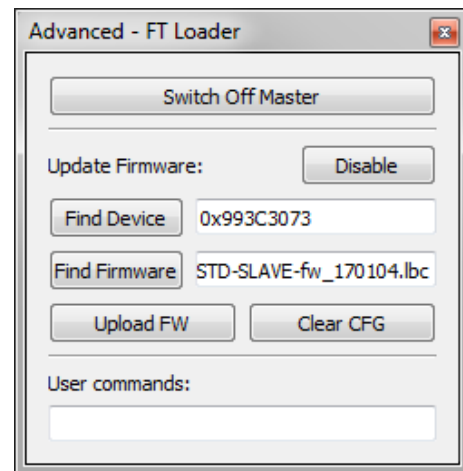
In the new window, click “**Enable**” to initiate the update process.

Click “**Find Device**”. Identification number of the device should be shown (in our example **0x993C3073**).



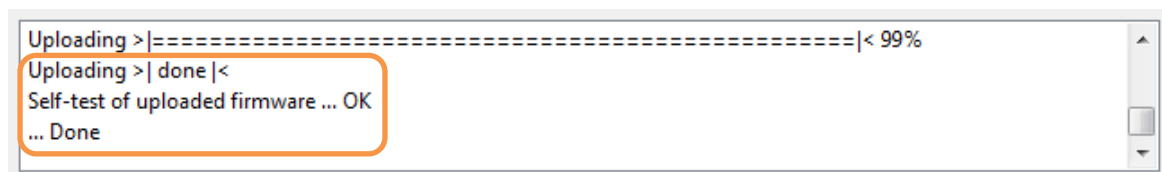
If you only see a dash (“-”) and no number, try moving the FT remote closer and click again.

Now click “**Find Firmware**” and select the firmware file. The file format is **STD-SLAVE-fw_YYMMDD.lbc** where YYMMDD substitutes the Year/Month/Day of the release.



Click “**Upload FW**” button to start the firmware update. The device LEDs will start blinking rapidly **green color**. A progress bar will be shown in the main window of the FT Loader app, indicating progress of the update.

After a successful update, you should see the below message:



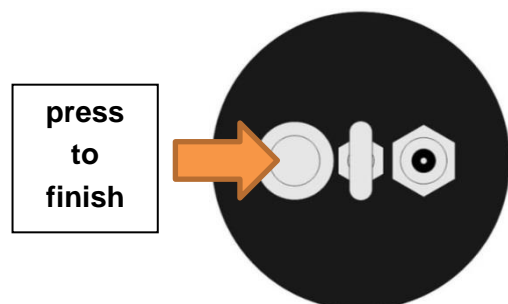
Congratulations, your FT device is now successfully updated!



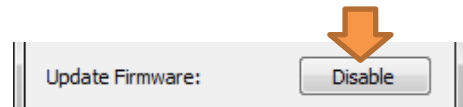
If there is any error during the update, move the FT remote closer to the FT device and click the “Upload FW” button again.

Now press the power button of the FT device once, to exit the update mode (the device LEDs will stop blinking). The FT device is ready to be used normally.

You can now repeat the update procedure with other FT device of your choosing.



After all your FT devices are updated, don't forget to exit the update procedure in the FT Loader. Click the "**Disable**" button in the Advanced window:



You can now close the FT Loader app and enjoy the benefits of the new firmware 😊.

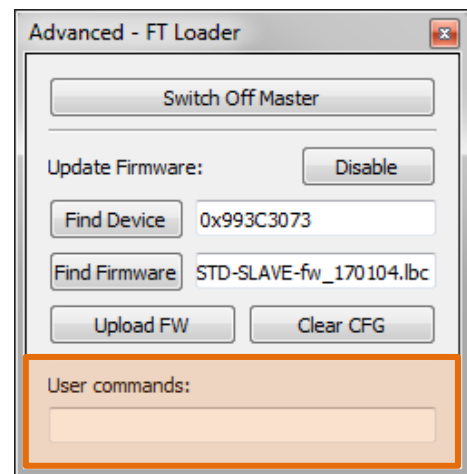
Checking firmware version

To confirm the firmware your FT remote (or FT device) is currently running, follow the below steps:

In the Advanced window, locate the command line.

- 1) To get the firmware version of your FT remote, type **minfo** and press ENTER.
- 2) To get the firmware version of your FT device(s), type **ginfo N** where $N = 2^{\text{LogAddr}}$. "LogAddr" is the device number in the list.

*So to get the firmware version of your 1st, 2nd, 3^d or 4th FT device, you need to type in **ginfo 1**, **2**, **4** or **8** respectively.*



After you issue the command, the firmware version will be written at the bottom of the main window:



The long number shows the build date of the firmware, in the format YYYYMMDDHHMMSS (Year-Month-Day-Hour-Minute-Second).

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

