

# Lighttoys FT chip

## installation instructions

**Note:** installation of the FT chip should be done only by individuals with previous experience of electronic circuits and soldering!

## Specification

**dimensions:** 35 x 13 x 3 mm, **weight:** 1.6 g

**compatible LED strips:** 12V analogue RGB LED strips only

**supply voltage:** 8.7-12.6V (3-cell 11.1V Li-ion battery recommended)

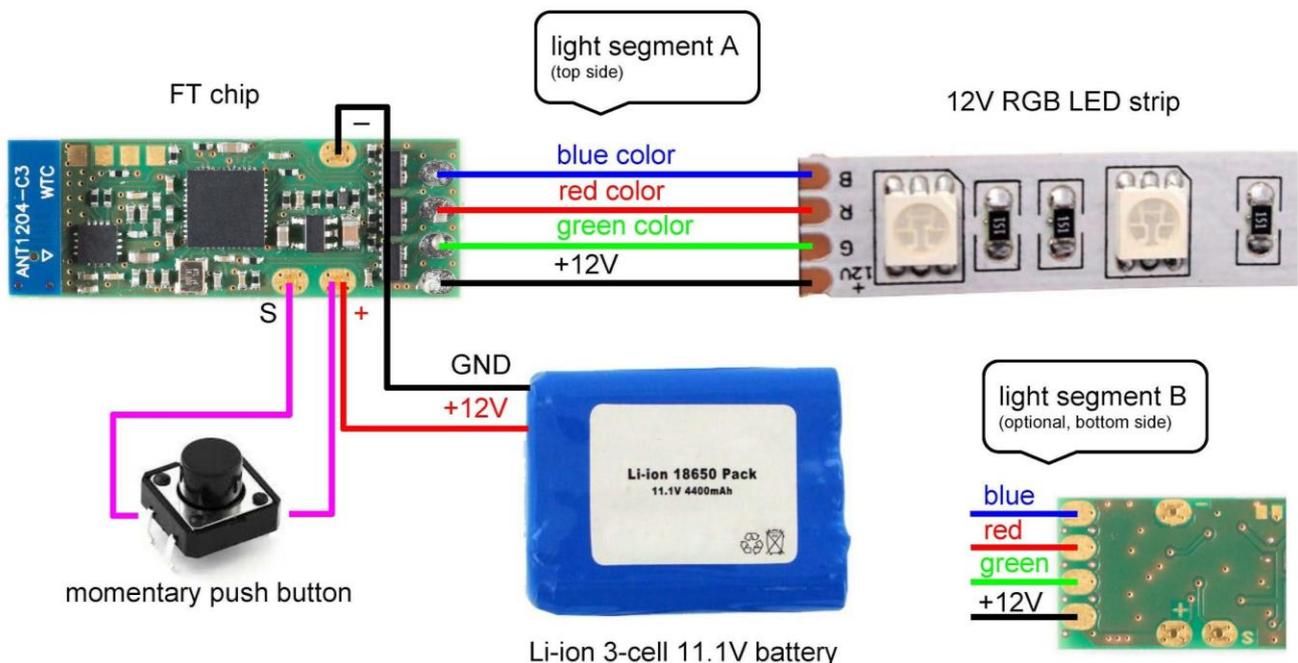
**FT chip consumption:** 10-35 mA

**max. current per each color output:** 2.0A (maximum ~600 LEDs per LED strip)

**operational temperature:** -10°C to +90°C

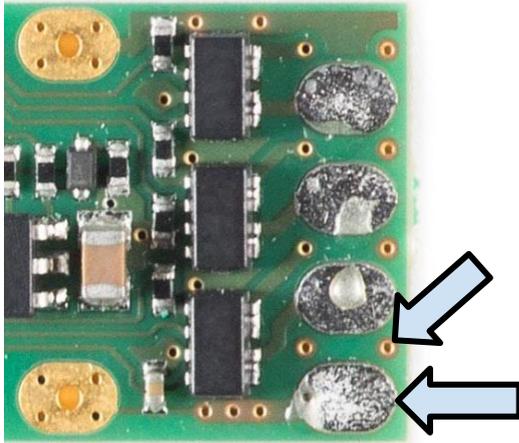
## Recommended wiring diagram

A typical connection of the FT chip is shown below. Be extra careful with the polarity of the power supply, reversing the polarity will lead to the damage of the FT chip!



## Tips & Tricks

- 1) When soldering the wires from the LED strip to the FT chip, be careful that the solder joints are nice and round (apply solder flux if needed). Make sure the solder joints do not extend over the round pad, as there is a risk of a short-circuit with the other side of the board, see the arrows below:



- 2) The FT chip outputs don't have protection against short-circuit. Before powering your setup for the first time, be extra careful that the RGB color wires are not touching anywhere the +12V wire. You can use a multimeter set to Ohms ( $\Omega$ ), you shouldn't read 0 between any color and +12V.
- 3) After connecting the FT chip and testing it works correctly (hold the power button for 1 second, the LEDs should light up), we recommend to cover the FT chip with a heat shrink tube and attach it to the battery / prop with a hot glue gun or cable tie, to fix it in place against vibrations.
- 4) Make sure the FT chip is not enclosed in a metal container or shielded by other metal objects, this will lead to a loss of the signal range.

## Warranty & Disclaimer

The FT chip is a highly reliable, yet consumable product, so Pyrotterra Lighttoys doesn't offer standard warranty for it. Pyrotterra Lighttoys guarantees that the FT chip was rigorously tested and functional when shipped to the customer.

Please understand, that the installation of the FT chip is at your own risk. You agree that Pyrotterra Lighttoys do not take any responsibility or liability for the possible damage caused by (mis)use of this product in your specific application.



*Team Pyrotterra Lighttoys  
wishes you many great moments with the FT technology!*