

Lighttoys FT chip

installation guide

v1.2

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 analog RGB LED strips only

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

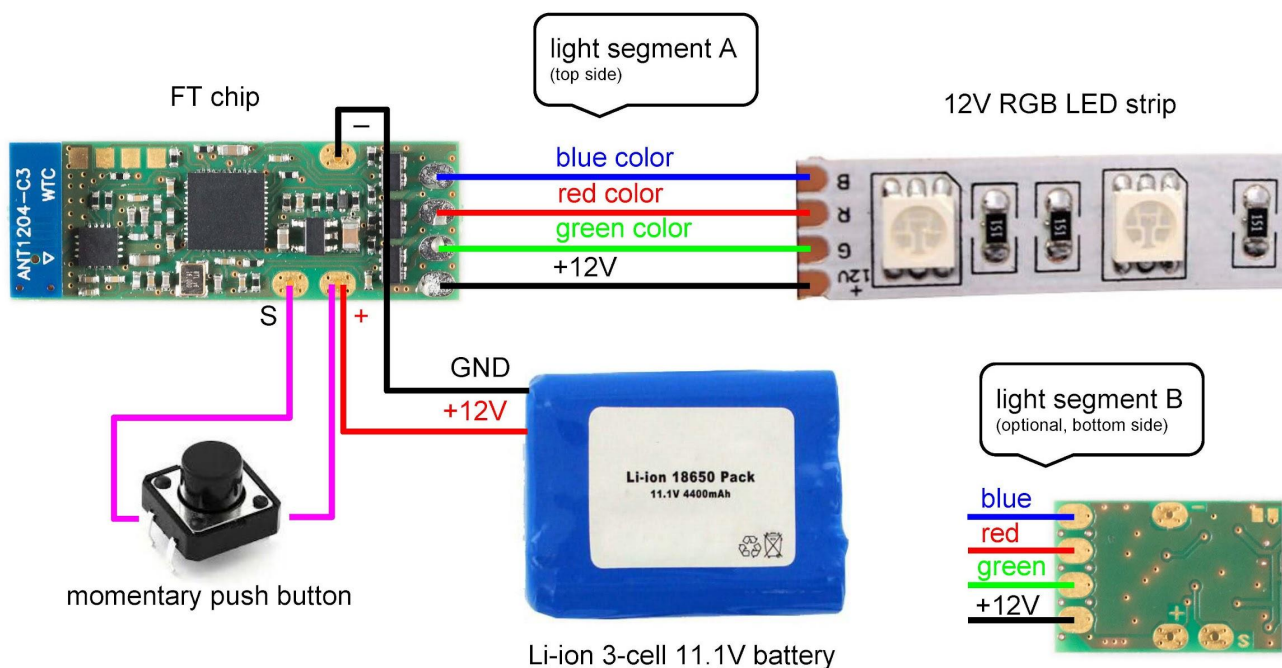
FT chip consumption: 10-35 mA

max. current per each color output: 2.0A (~600 LEDs per each light segment A or B)

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

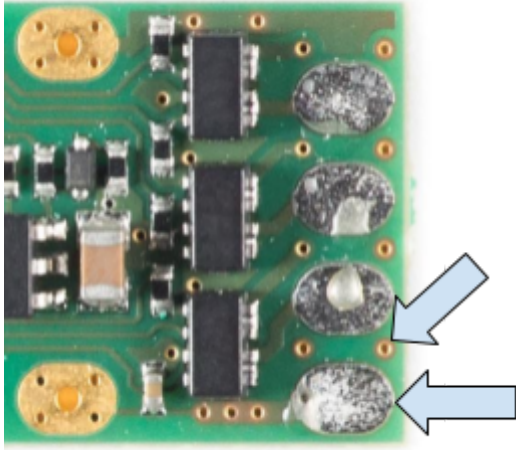
Recommended wiring diagram

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) 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.
- 3) 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.
- 4) When using more than ~300 LEDs on each light segment output, we recommend soldering an auxiliary power wire directly from the positive terminal of the battery directly to the +12V pad on the LED strip(s). Also running parallel +12V,G,R,B wires to the opposite end of the LED strip helps with the voltage drop at the end.

Warranty & Disclaimer

The FT chip is a highly reliable, yet consumable product, so Pyroterra Lighttoys doesn't offer standard warranty for it. Pyroterra 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 Pyroterra Lighttoys do not take any responsibility or liability for the possible damage caused by (mis)use of this product in your specific application.



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