

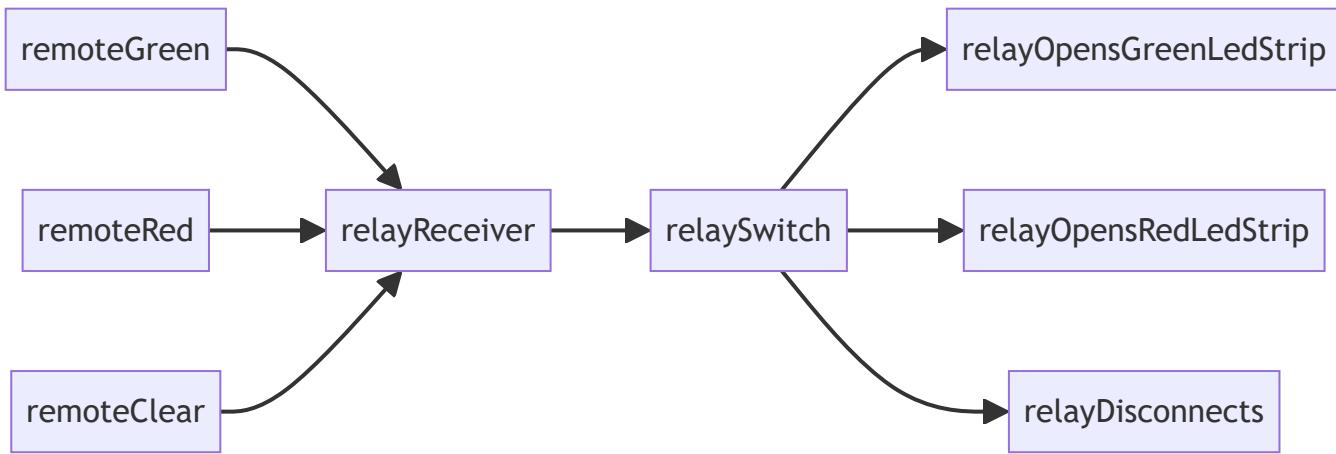
# Controlling LedBar using radio frequency remote

- it all circles to 433MHz rf remote and arduino?
- arduino nano's seem to be used
- hard to avoid using 2 mcu's?
- you need transmitter and receiver (rf)
- ir led and ir receiver alternatively?

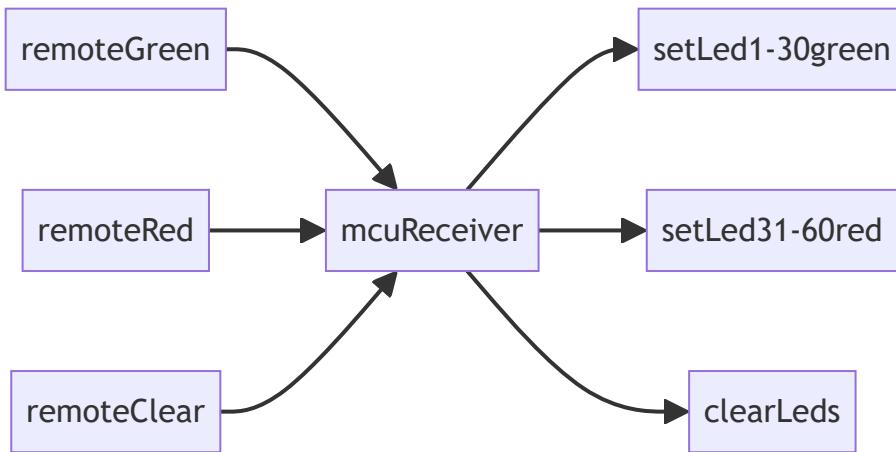
## thinking/ideas

- wire receiver&transmitter to the respective arduino's
- similar to what we do with the esp32 before the nodeJS, use signal to trigger leds directly
- use existing connection pairs and search how to trigger them?
- use the full receiver/transmitter set to communicate, have 3 set states
  - red, green, off
- as the relay uses 12v, and the leds use 12v (assuming there is a dedicated color led strip that works with 12v)
- no need for a transformer or components to manipulate voltage, can use one power line
- use 2 different led lines, one set to red, one set to green - would need dedicated led strips that are hard set to red and green

## Flow for set led strip

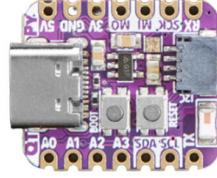
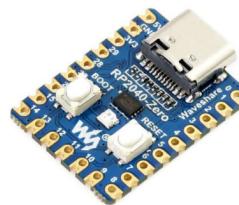
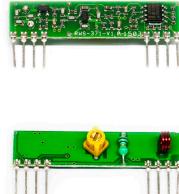


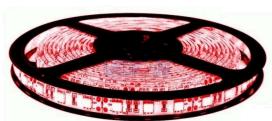
## Flow for one led strip



## component table

Name & Size	Image
24.0x16.0mm - esp32 c3 12f	An image of an ESP32-C3 module, which is a small, rectangular printed circuit board. It features a central ESP32 chip, a晶振 (crystal oscillator), and various other components and pins. The board is labeled with 'EEP-C3-12F' and includes regulatory compliance markings like CE and FCC.

Name & Size	Image
22.0x17.8mm - esp32 c3	
18.0x23.5mm - raspberry pi 2040	
receiver	
receiver transmitter relay set	
receiver (out of stock)	
alternative receiver option	

Name & Size	Image
red button 1	 A red push button switch with a black base and metal contacts.
red button 2	 A red push button switch with a white base and metal contacts.
green button 1	 Two green push button switches, one with a black base and metal contacts, and another with a green base and metal contacts.
green button 2	 A green push button switch with a white base and metal contacts.
red led strip	 A coiled red LED strip with a black PCB and red diodes.
green led strip	 A coiled green LED strip with a black PCB and green diodes.

## **src**

<https://www.youtube.com/watch?v=4QZATgYaFmE&t>

<https://www.youtube.com/watch?v=Na-HthCeSOs>

without micro controller

[https://www.youtube.com/watch?v=7\\_7jkeRlpkQ](https://www.youtube.com/watch?v=7_7jkeRlpkQ)

## **links**

<https://www.direnc.net/esp-c3-12f-4mb-wifi-bluetooth-modulu>

<https://www.direnc.net/esp32-c3-stemma-qt-wifi-gelistirme-karti>

<https://www.direnc.net/raspberry-pi-rp2040-tabanli-mini-gelistirme-karti>

<https://www.direnc.net/433-mhz-mini-alici-verici-set-2ch-10a>

<https://www.direnc.net/433mhz-rf-modul-alici>

<https://www.direnc.net/433mhz-rf-trimerli-alici-rws-371>

<https://www.direnc.net/433mhz-rf-modul-verici>

<https://www.direnc.net/dc184-kirmizi-buton>

<https://www.direnc.net/dc184-yesil-buton>

<https://www.direnc.net/12x12-yesil-led-isikli-tact-switch>

<https://www.direnc.net/12x12-kirmizi-led-isikli-tact-switch>

<https://www.ledfon.com/urun/12v-uc-cip-ic-mekan-serit-led-yesil>

<https://www.ledfon.com/urun/12v-uc-cip-ic-mekan-serit-led-kirmizi>