## TRIP WIRE(LESS) IF YOU CAN'T BEAT THEM, JOIN DETECT THEM.

#### DEFCON 26



Replying to @k8em0 @clevrcat @CaesarsPalace

Hotel sec @ the Paris banged on my door 2 days ago while I was sleeping & let themselves in while I was walking towards the door to open it. They did this again two hours later while my personal security guy was trying to have a nap. WTF

53 PM - 11 Aug 2018



Current status: two members of hotel security banging on my door after I asked to go into my room and verify them with hotel security. I'm on speaker phone with hotel security, asking for a supervisor to come verify. I'm terrified. What the hell is this @CaesarsPalace #DEFCON

18 PM - 11 Aug 2018



of room cleaning and used defcon discount they will check your room and WILL confiscate soldering irons + more!

Not a drill! Spread the word! #defcon #badgelife #dc26 #DEFCON26

7:36 PM - 10 Aug 2018

Steve Ragan

Hey @defcon if you have had lockpicks confiscated at #defcon26 by hotel security please reach out to me.

7:31 PM - 11 Aug 2018



Replying to @k8em0 @CaesarsPalace

We have video of them in our room touching stuff, knocking over gear, and taking pictures of all my pelican cases and gear with their phones.

11 PM - 11 Aug 2018

#### WHAT TO EXPECT



```
def security.check(guestroom):
       security.allowed_actions.remove(open_drawer)
       security.allowed_actions.remove(open_cases)
       security.allowed_actions.remove(interfere_belongings)
guest.enable([staff.ID_check(), staff.uniform_check(), security.call()])
if status.type == 'Do Not Disturb' and status.duration > security.short_interval:
       security.check(guestroom)
if "red flag" in staff.concerns:
       staff.require( [ security.call(), guest.inform() ] )
```





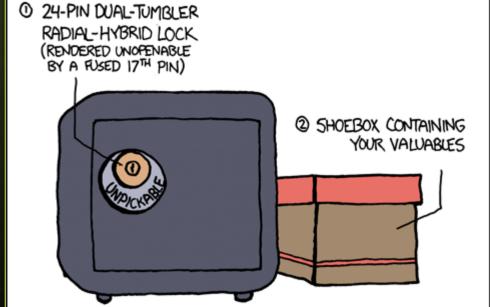
For those trying to figure out how to avoid the hotel room (in)security checks, I've used this setup and so far no intrusions in two days.

O 230 4:07 PM - Aug 11, 2018

① https://marcrogers.org/2018/08/13/open-letter-to-the-hacker-community/

So I offer you my resignation. By not being aware of Caesars' statement I failed you. I WILL not let this happen again. However if you no longer feel I am the man to defend you, my community, then I will leave. I suspect much of my team will leave too but....plus ça change.

HACKER SHIELD GEEK-PROOF SAFE SYSTEM:



https://xkcd.com/916/

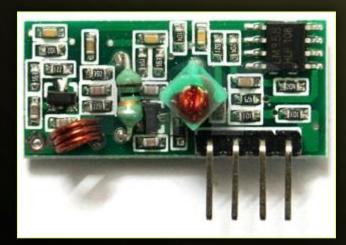
# WHAT TO DO

#### **SUPPLIES**

Raspberry Pi



433 MHz Receiver



Jumper wires



Security window/door sensors



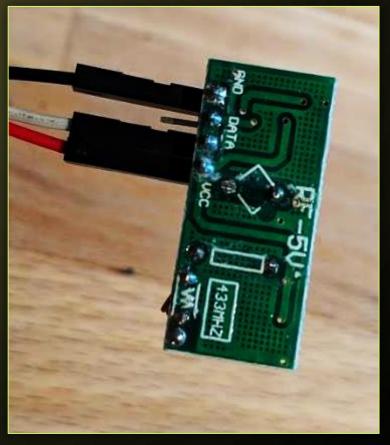
#### **BUILD IT**

```
USB
  10000000000000000000
       Pi Model ???V1.3
                                 USB
        SoC
                                 Net
                    : a020d3
Revision
                      BCM2837
                    : 1024Mb
Storage
                    : MicroSD
USB ports
Ethernet ports
Wi-fi
Bluetooth
                    : False
                    : False
Camera ports (CSI) : 1
Display ports (DSI): 1
 GPI03
                  GPI01
                  GPI012
                 GPI016
       (37) (38) GPI020
   GND (39) (40) GPI021
For further information, please refer to https://pinout.xyz/
```

pinout gpio readall

#### BUILD IT

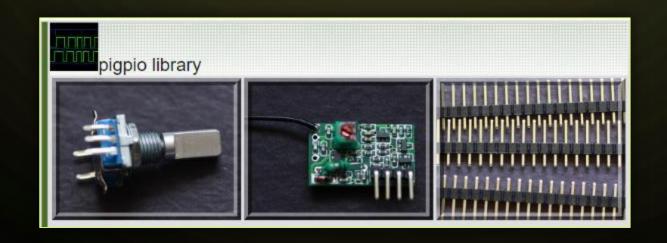




#### INSTALL DEPENDENCIES

```
$ sudo apt-get install pigpio
$ sudo systemctl start pigpiod  # start daemon
$ sudo systemctl status pigpiod  # confirm daemon active
$ sudo pip3 install pgiozero pigpio
```

- \$ wget http://abyz.me.uk/rpi/pigpio/code/\_433\_py.zip
- \$ unzip 433 py.zip



### SCRIPT import time import pigpio import 433 # Change RX to the GPIO pin being used on the Raspberry Pi RX=27favorite things = {}

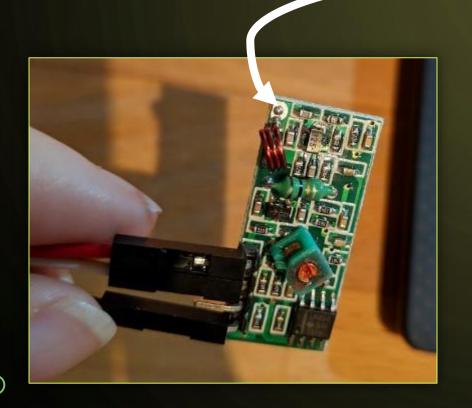
#### **SCRIPT**

```
def rx callback(code, bits, gap, t0, t1):
    if code in favorite things:
        print(favorite things[code], 'has been disturbed!')
    else:
        print('New code detected:' , code)
        new thing = input('Write a name, or press Enter to skip:')
        if new thing != '\r\n':
            favorite things[code] = new thing
pi = pigpio.pi() # Connect to local Pi
rx= 433.rx(pi, gpio=RX, callback=rx callback)
# Keep script running indefinitely
while True:
    pass
```

#### DEMO VIDEO



#### **BUILD IT BETTER!**



14 or 28 cm wire antenna

- Reduce number of disturbance notifications
- import tweepy
   <a href="https://www.geeksforgeeks.org/tweet-using-python/">https://www.geeksforgeeks.org/tweet-using-python/</a>
- Set up SMTP
   <a href="https://realpython.com/python-send-email/">https://realpython.com/python-send-email/</a>
- Annoy all your friends on Slack by posting in #general every time you open your closet https://www.fullstackpython.com/blog/build -first-slack-bot-python.html

#### Me:

- https://github.com/4F4D414841/tripwireless/
- https://twitter.com/4F4D414841
- omaha@nullpop.com

#### Sources:

- Various Twitter posts from DEFCON 26
- http://marcrogers.org/2018/09/11/follow-up-to-my-open-letter/
- <a href="http://abyz.me.uk/rpi/pigpio/examples.html#Python%20code">http://abyz.me.uk/rpi/pigpio/examples.html#Python%20code</a>