📖 README.md

Guide to Test

Updated 19 May 2020
Stream New Time From GPS Passed
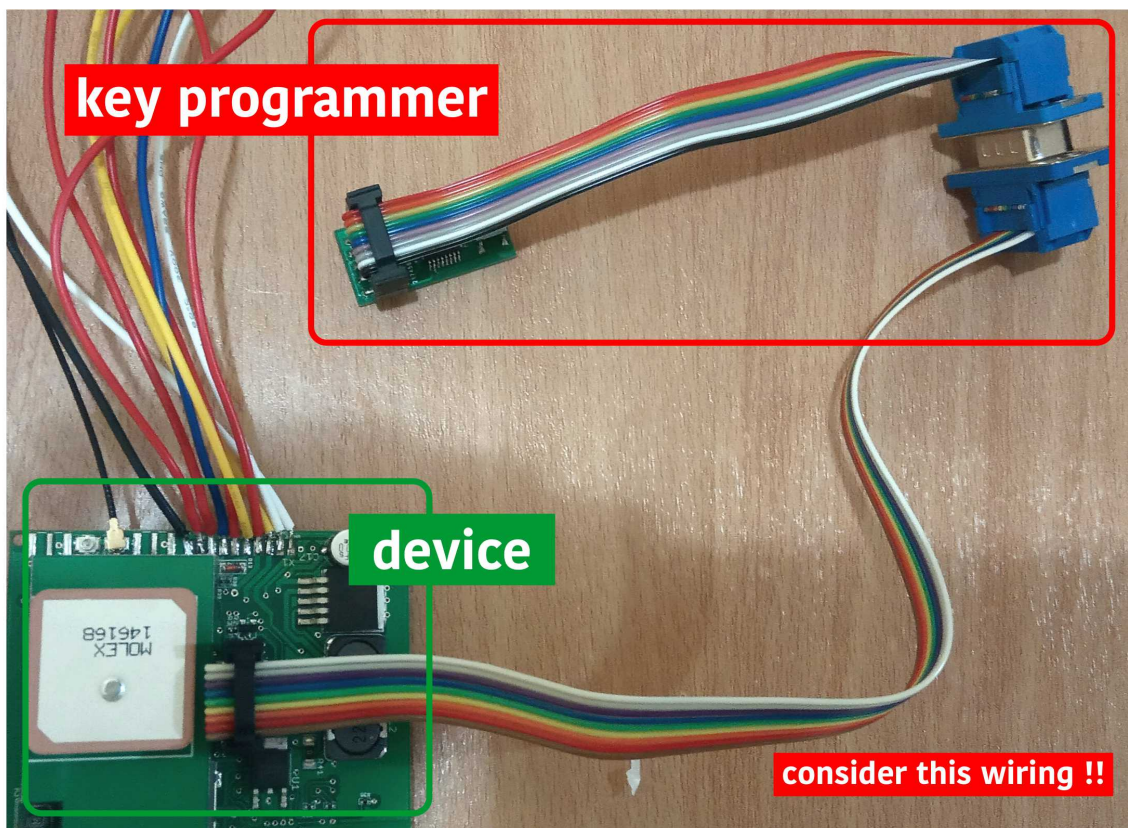
Preparing Firmware

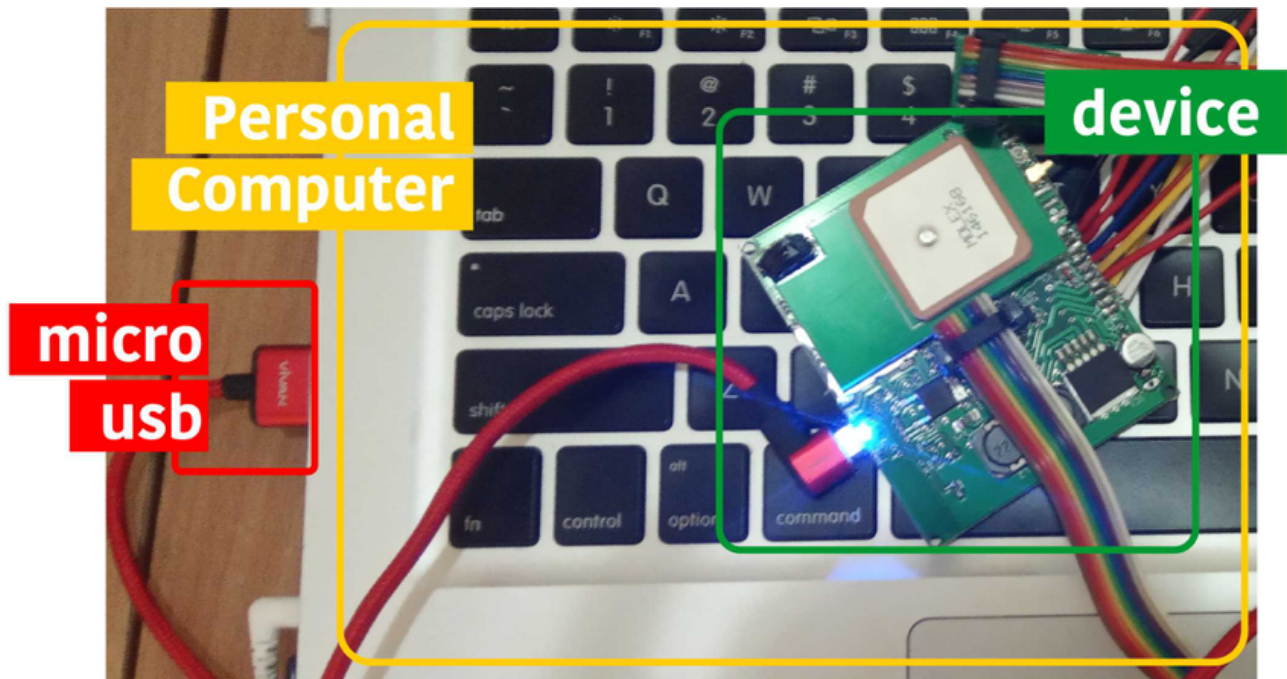Go to **Teensy Loader** to install downloader tool and choose according to the OS on your PC

Operating System	Step
Windows	Steps for Windos
Linux	Steps for Linux
MacOs	Steps for Mac OS

It's time to embed the test system.

1. Install **Key Programmer** to device as shown below :

2. Connect device to PC using microUSB connector as shown below

3. Download the firmware by clicking on this link.

4. Open **Teensy Loader** application, and open hex file by press "open Hex File" as shown in the red box below

5. It will appear like this, and find "firmware.hex" file and choose that hex file has been downloaded.

find &
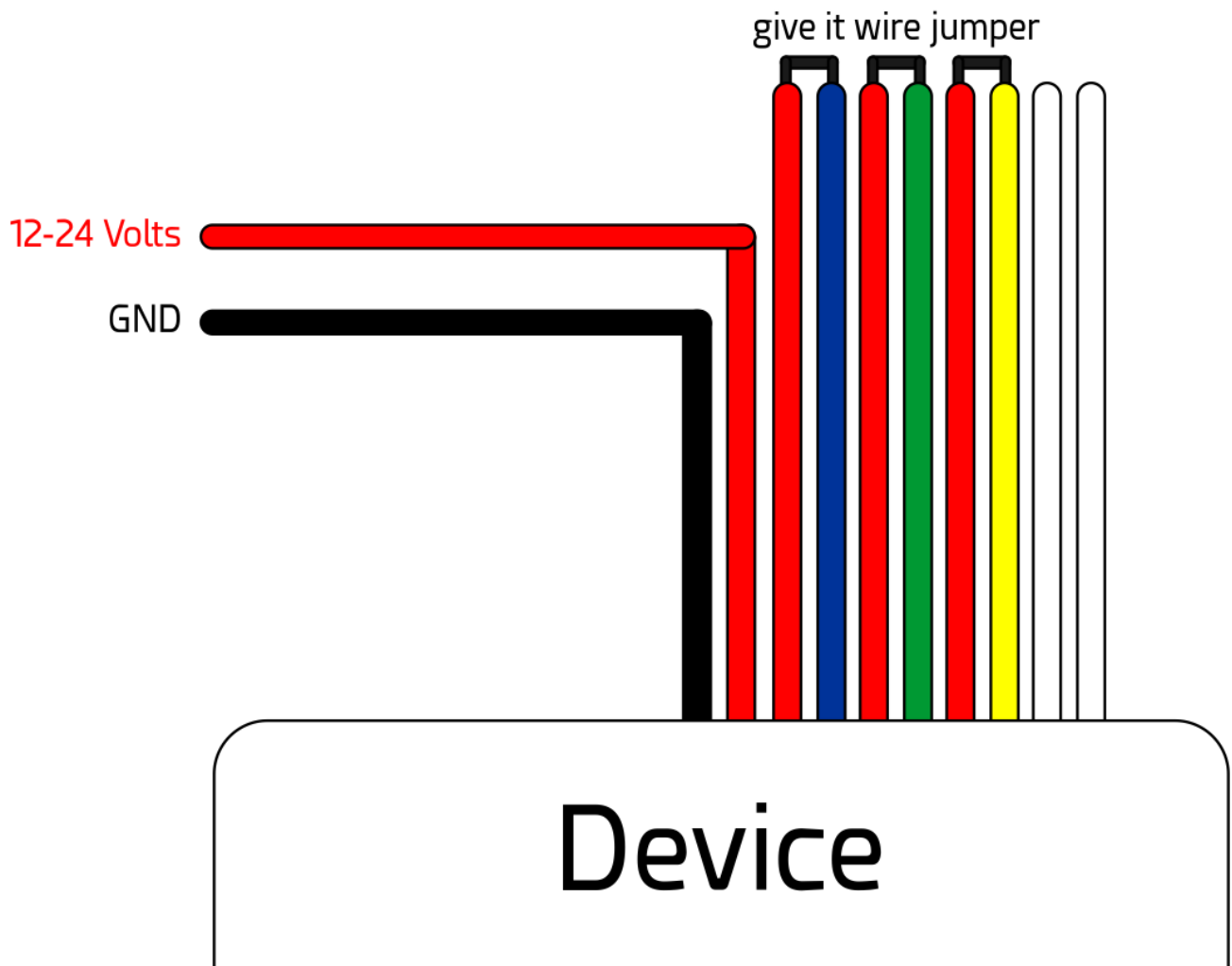select "firmware.hex"
that has been downloaded
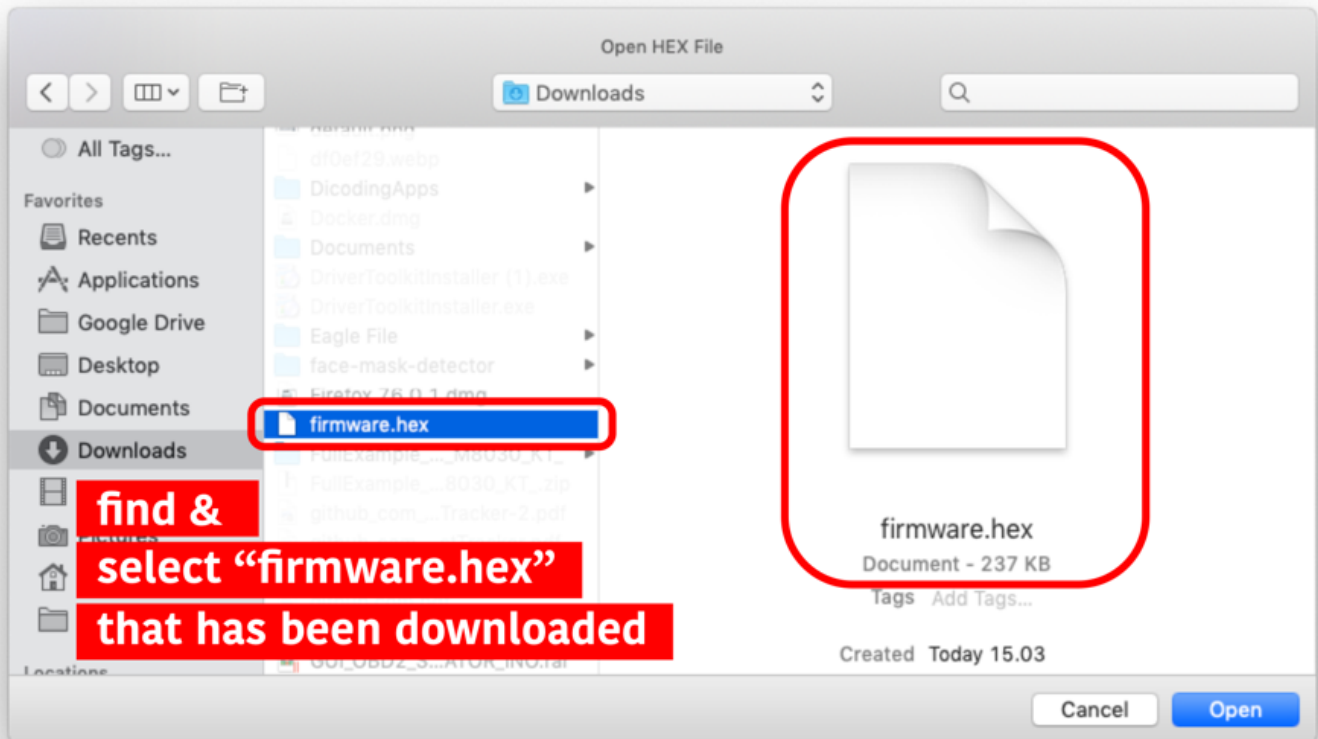
6. It should appear that the hex file will be embedded, as shown below :

hex file will be seen here
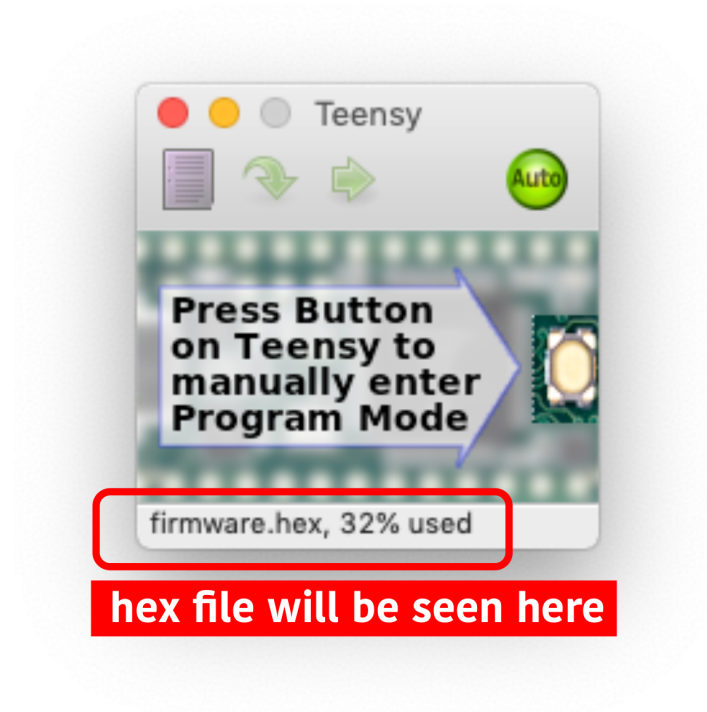
7. Hold and press the button on the key programmer and wait a minute and finish. Ignore the resistor.
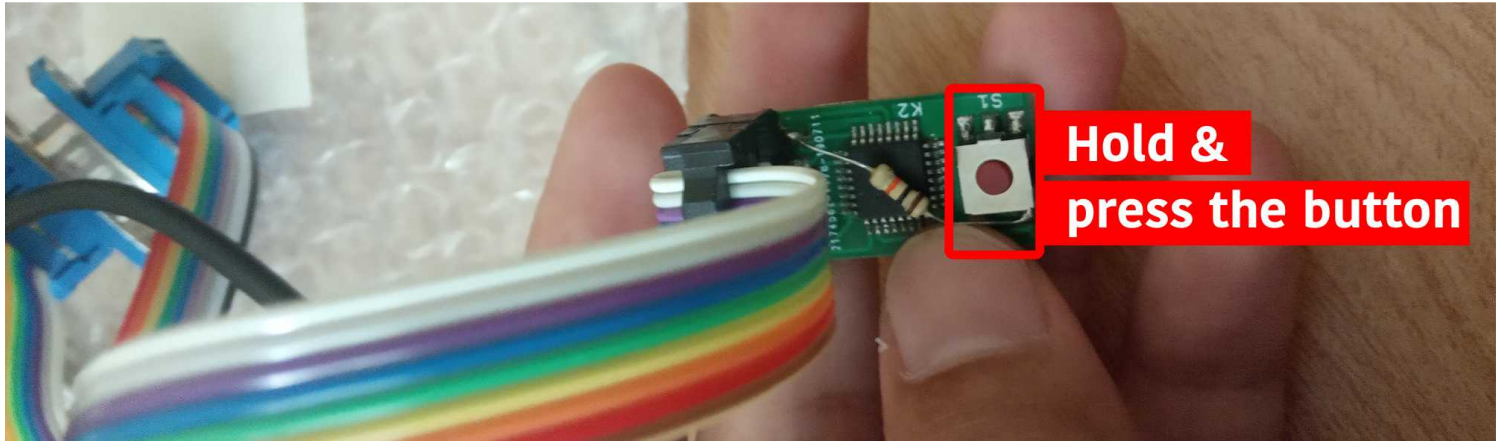
Testing will start if the power is between 12 to 24 volts.

> If there is a tone of sound 3 times and a half second interval, then it is a sign of failure. The device must be given a voltage between 12 volts to 24 volts.

> However, if there is no failure, it will sound a complicated tone and start the test iteration.

Test iteration started from 1 tone until 6 tones.

Total Tone	Indicator Means
1	Control Power at Super Capacitor's Voltage
2	Voltage at 3 wires (yellow, green, blue)
3	Storage Disk Card
4	Celluler
5	GPS
6	IMU

[1 Tone] Control Power at Super Capacitor's Voltage

> In this iteration the test usually lasts for 1 minute less, if it fails usually the tone will sound once and try again

Statement	Indicator
Succed	Led blinks 10 times quickly
Failed	Led lights on and on for one time periodically
Reset	You can repeat by following this tutorial.

[2 Tones] Voltage at 3 wires (yellow, green, blue)

> To test it, you have to install these 3 wire to 12 Volts or install each of these wire to the red wire

Statement	Indicator
Succed	Led blinks 10 times quickly
Failed	Led lights on and on for two times periodically
Reset	You can repeat by following this tutorial.

[3 Tones] Storage Disk Card

Statement	Indicator
Succed	Led blinks 10 times quickly
Failed	Led lights on and on for 3 times periodically
Reset	You can repeat by following this tutorial.

[4 Tones] Celluler

Statement	Indicator
Succed	Led blinks 10 times quickly
Failed	Led lights on and on for 4 times periodically
Reset	You can repeat by following this tutorial.

[5 Tones] GPS

Statement	Indicator
Succed	Led blinks 10 times quickly
Failed	Led lights on and on for 5 times periodically
Reset	You can repeat by following this tutorial.

[6 Tones] IMU

Statement	Indicator
Succed	Led blinks 10 times quickly
Failed	Led lights on and on for 6 times periodically
Reset	You can repeat by following this tutorial.

Done

> if this test is complete and successful, then the LED will blink continuously and no sound. if you want to repeat it, you just need to turn the power supply to a voltage below 12 volts and raise it again between 12-24 volts

Repeat Testing

if you want to repeat the test, then you can do it by giving a power voltage below 12 volts or you break it for 1 second and return it to between 12-24 volts again.