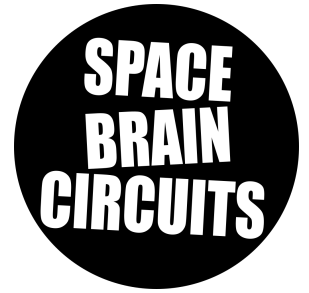


DarkSky-4

Firmware Manual



Things you will need:

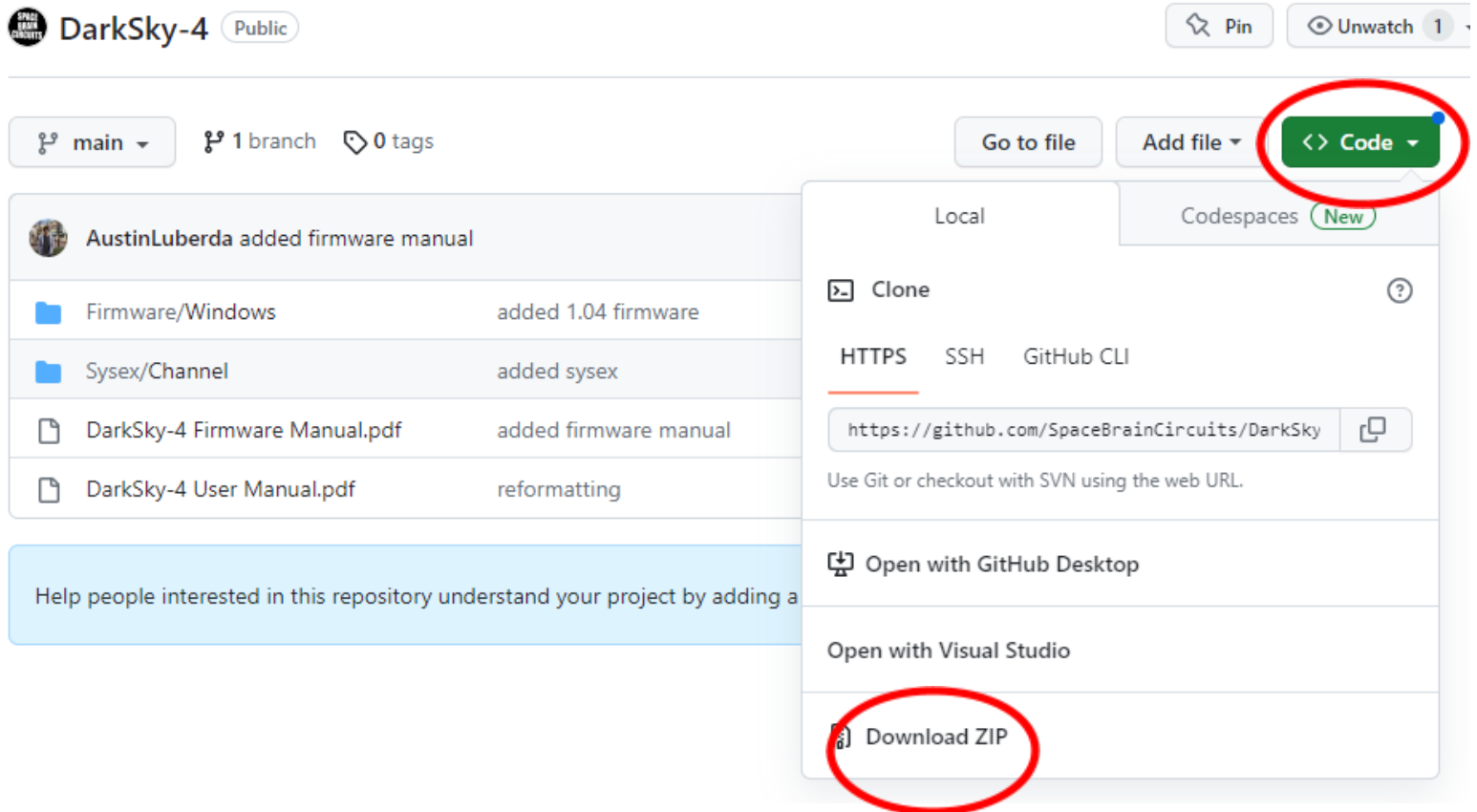
MiniUSB cable

Small object with narrow tip (toothpick, paperclip, etc.)

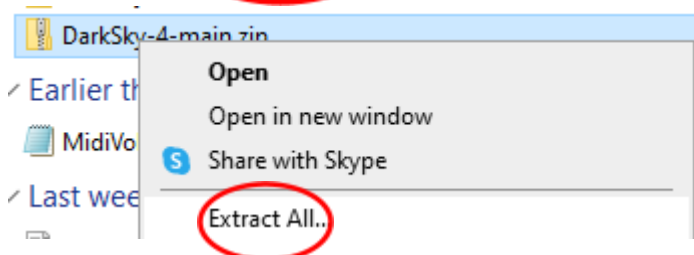
Computer

1. Download firmware files

- Go here: <https://github.com/SpaceBrainCircuits/DarkSky-4>
- Download files by clicking Code and Download Zip.



2. Right click the zip file, and extract all...



3. Navigate to firmware upload directory

- a. Firmware -> Windows -> DarkSky-4 ver1.04

c:\Sky-4-main > DarkSky-4-main > Firmware > Windows > DarkSky-4 ver1.04			
Name	Date modified	Type	Size
env	8/24/2023 8:56 AM	File folder	
Notes.txt	8/24/2023 8:56 AM	Text Document	1 KB
Upload.exe	8/24/2023 8:56 AM	Application	5,621 KB

4. Power on DarkSky-4 and plug the DarkSky-4 into the computer using a MiniUSB cable.

5. Using A toothpick (or similar), press the reset button on the bottom left hand side of DarkSky-4.

- a. DarkSky-4 will start listening for new firmware.



6. Double click upload.exe file

7. If you see the image on the right, Firmware is now installed!

8. Restart DarkSky-4.

Note: Perform this operation within 8 seconds of pressing the reset button, otherwise, you will need to press the reset button again.

9. Troubleshooting

If you do not see the screen as shown on the right.

1. Verify your USB is connected to both DarkSky-4 and your computer.
2. Make sure you are clicking upload.exe within 8 seconds of pressing the reset button.
3. Contact me and I will help you! spacebraincircuits@gmail.com

```
DarkSky-4 - FourVoice1.04.hex
Uploading Firmware now...

Connecting to programmer: .
Found programmer: Id = "CATERIN"; type = S
  Software Version = 1.0; No Hardware Version given.
Programmer supports auto addr increment.
Programmer supports buffered memory access with buffersize=128 bytes.

Programmer supports the following devices:
  Device code: 0x44

avrdude.exe: AVR device initialized and ready to accept instructions

Reading | ##### | 100% 0.01s

avrdude.exe: Device signature = 0x1e9587 (probably m32u4)
avrdude.exe: NOTE: "flash" memory has been specified, an erase cycle will be performed
  To disable this feature, specify the -D option.
avrdude.exe: erasing chip
avrdude.exe: reading input file ".\env\scripts\FourVoice1.04.hex"
avrdude.exe: writing flash (26654 bytes):

Writing | ##### | 100% 2.73s

avrdude.exe: 26654 bytes of flash written
avrdude.exe: verifying flash memory against .\env\scripts\FourVoice1.04.hex:
avrdude.exe: load data flash data from input file .\env\scripts\FourVoice1.04.hex:
avrdude.exe: input file .\env\scripts\FourVoice1.04.hex contains 26654 bytes
avrdude.exe: reading on-chip flash data:

Reading | ##### | 100% 0.73s

avrdude.exe: verifying ...
avrdude.exe: 26654 bytes of flash verified

avrdude.exe: safemode: Fuses OK (E:CB, H:D0, L:FF)

avrdude.exe done. Thank you.

Finished!
```