

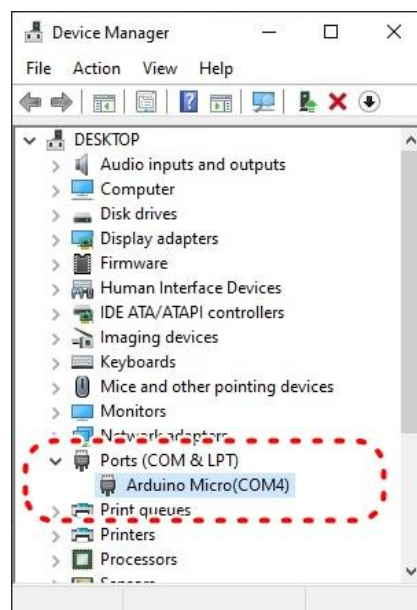
# Pitta Firmware Uploader

Pitta Uploader is a firmware flash tool for PITTA Base.

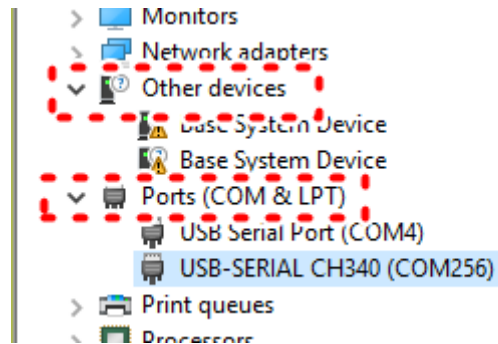
1. Copy the Uploader folder to any directory on your PC
2. Disconnecting the communication cable with the 3D printer
3. Power on the Pitta base
4. Connect PC and Pitta base with USB serial cable



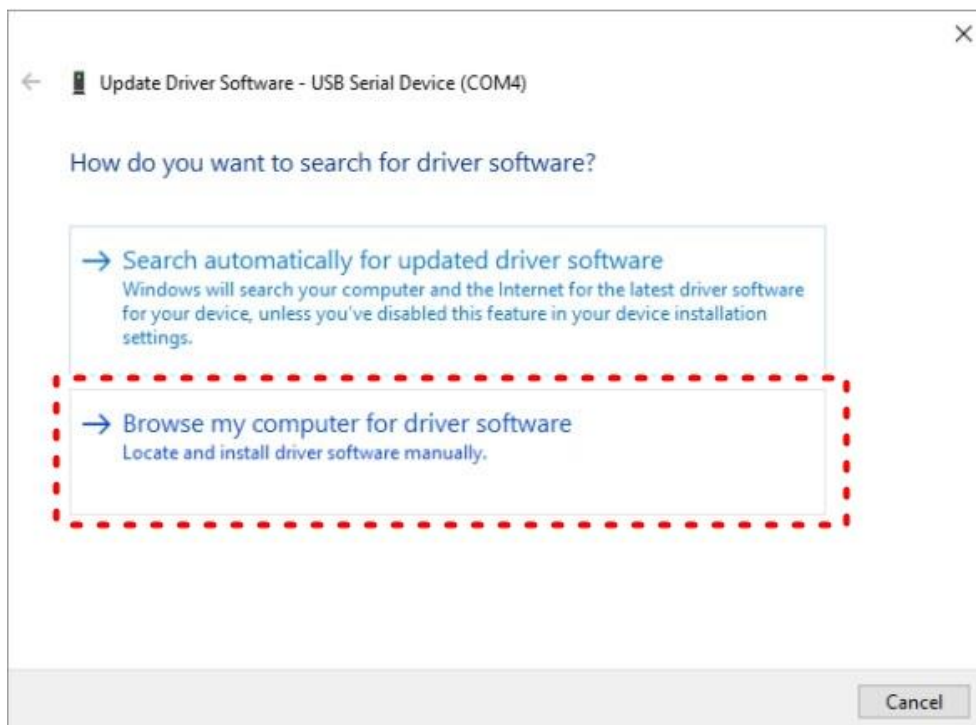
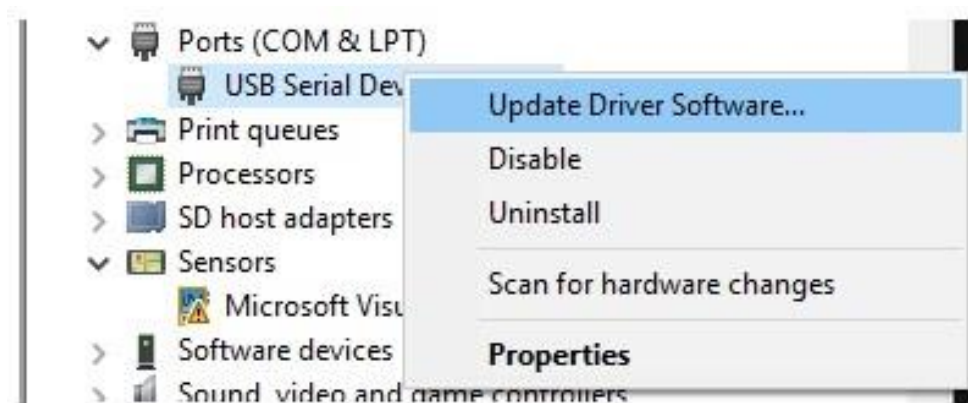
5. Make sure the Arduino Driver is installed (Skip this step if you already have the Arduino driver installed.)
  - Run "Device Manager" to check whether Arduino driver is installed



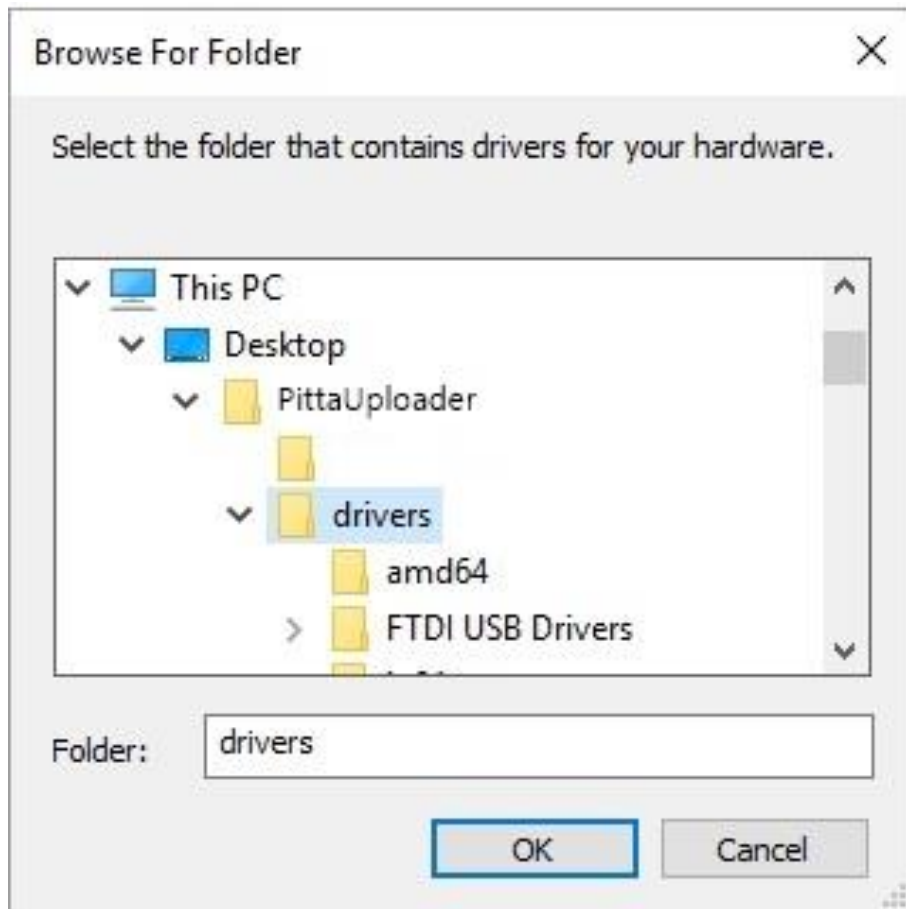
- If the Arduino Driver is not installed and it is recognized as a different name in other devices or Ports, you need to install the driver manually.



- In the Device Manager, mouse right-click the COM port that should be identified as Arduino (check when USB cable is plugged in and out of PC). Select "Update Driver Software..." from the menu that pops up.



- Find the "drivers" folder. This folder is located in Pitta Uploader tool was saved.

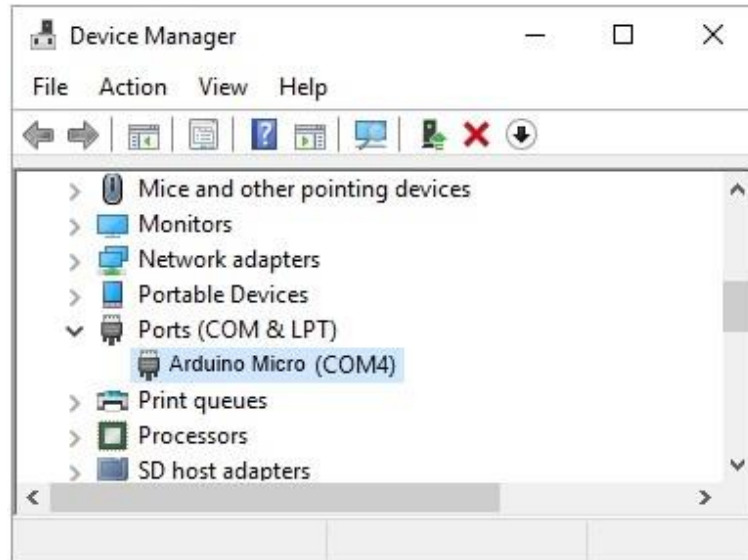


- In the Windows Security dialog box that pops up, click Install

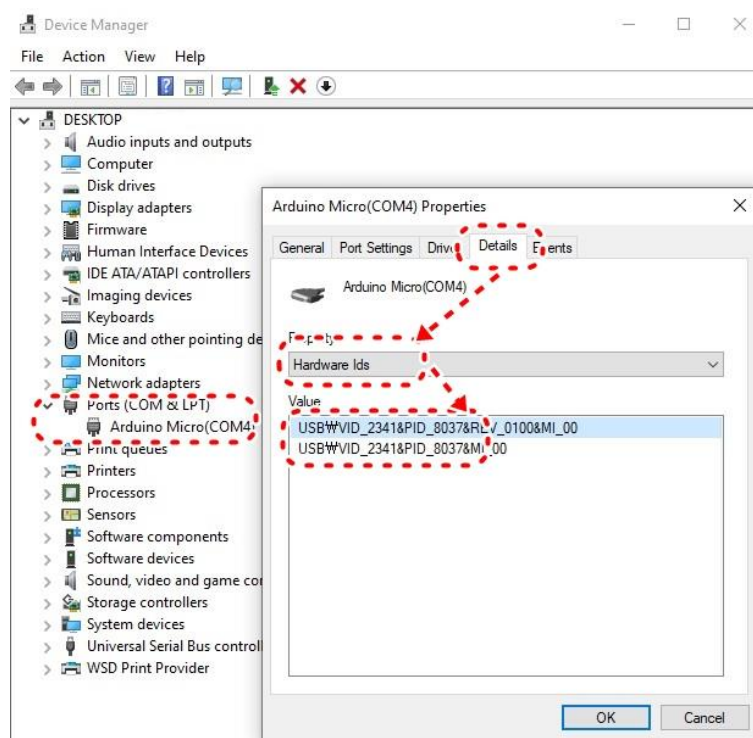


## 6. Check VID and PID of Arduino Port

- Run Device Manager and check that the COM port is identified as Arduino Micro.

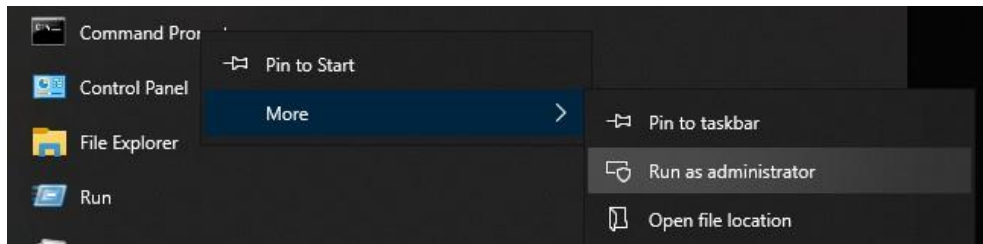


- **Check Hardware ID (VID, PID) of Arduino Micro Port**

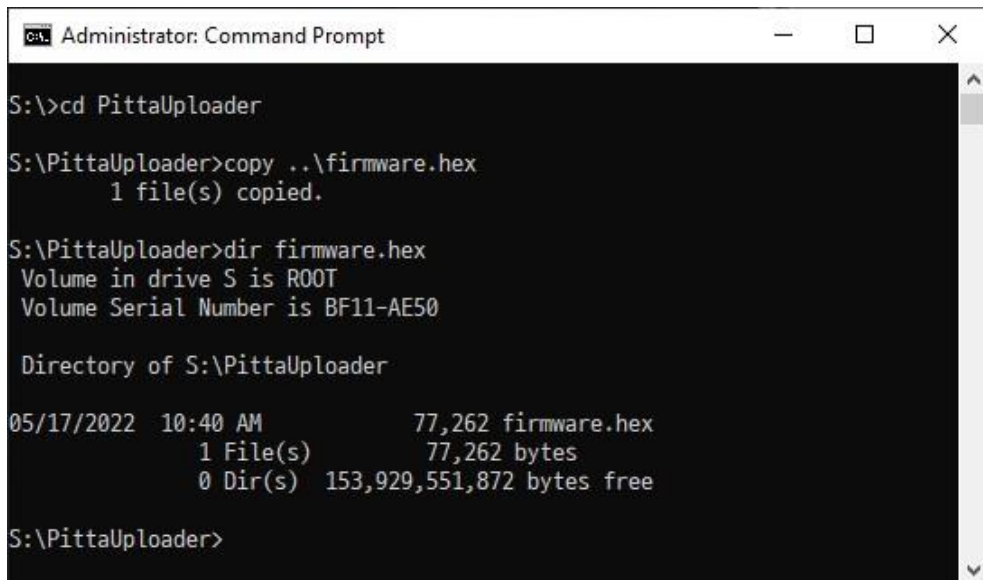


- **Record the 4-digit VID, PID number (For example, the VID is 2341, PID is 8037)**

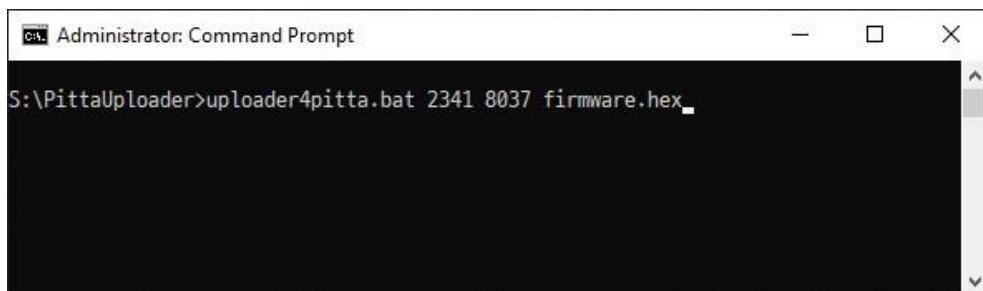
7. On your PC, open "Command Prompt" with administrator right



8. Change directory to uploader tool folder
9. Copy firmware.hex file to uploader tool folder

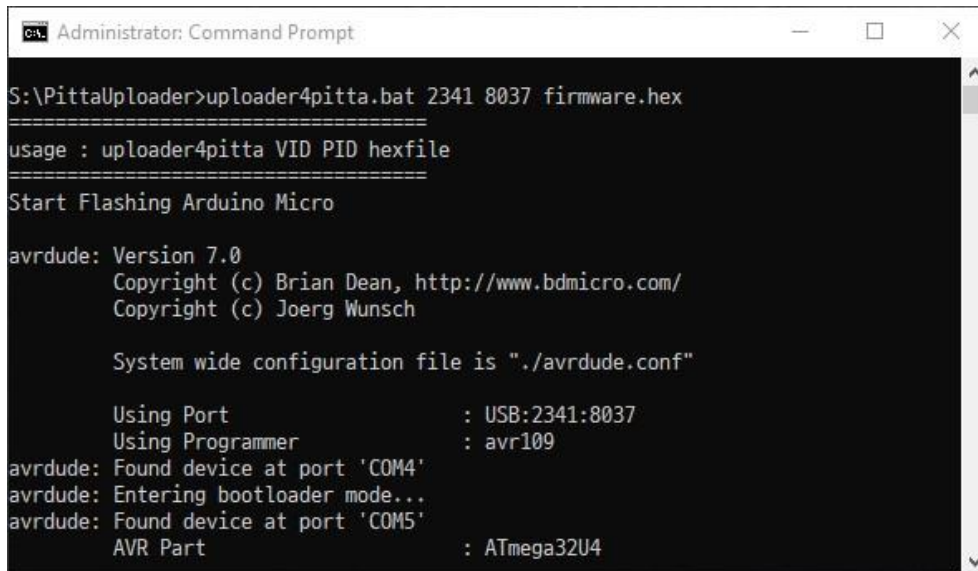


10. **Run "uploader4pitta.bat VID PID firmware.hex" at Command Prompt (For example, uploader4pitta.bat 2341 8037 firmware.hex)**



11. Upload progress displayed in the command prompt window

- Detect Pitta's VID, PID, COM port
- Reset Pitta MCU
- Detect Bootloader's COM Port



```
C:\> Administrator: Command Prompt

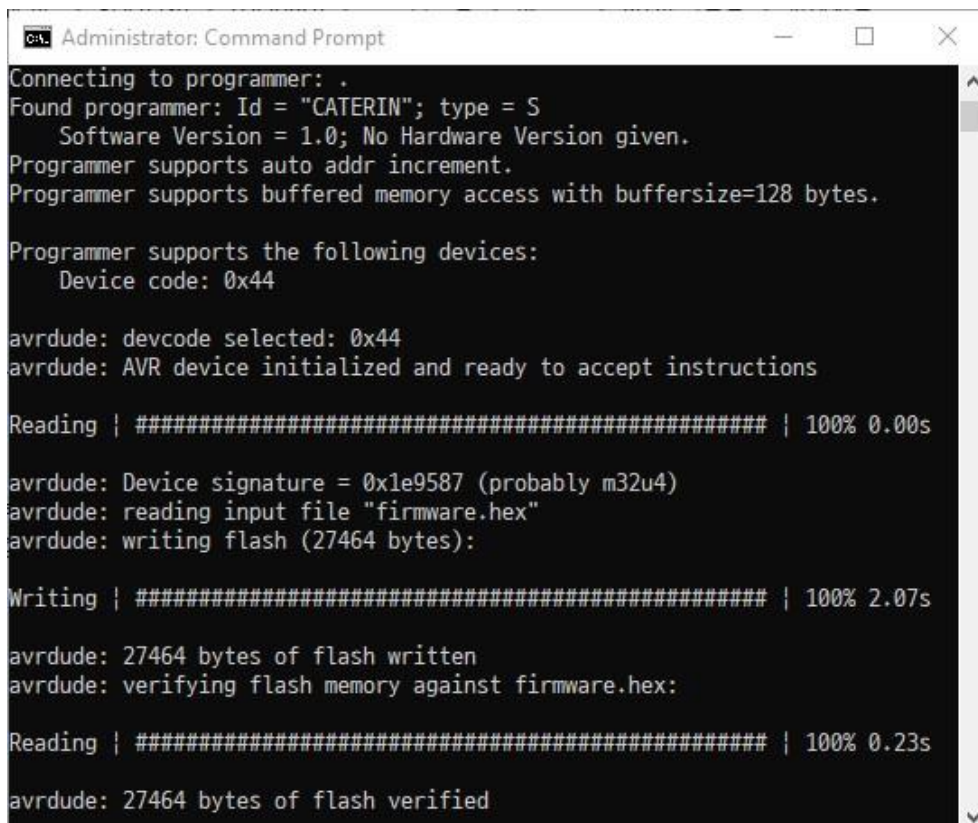
S:\PittaUploader>uploader4pitta.bat 2341 8037 firmware.hex
=====
usage : uploader4pitta VID PID hexfile
=====
Start Flashing Arduino Micro

avrdude: Version 7.0
        Copyright (c) Brian Dean, http://www.bdmicro.com/
        Copyright (c) Joerg Wunsch

        System wide configuration file is "./avrdude.conf"

        Using Port                : USB:2341:8037
        Using Programmer           : avr109
avrdude: Found device at port 'COM4'
avrdude: Entering bootloader mode...
avrdude: Found device at port 'COM5'
        AVR Part                  : ATmega32U4
```

- Upload firmware.hex file (Read -> Writing -> Verifying) to Pitta Base



```
C:\> Administrator: Command Prompt

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: devcode selected: 0x44
avrdude: AVR device initialized and ready to accept instructions

Reading | ##### | 100% 0.00s

avrdude: Device signature = 0x1e9587 (probably m32u4)
avrdude: reading input file "firmware.hex"
avrdude: writing flash (27464 bytes):

Writing | ##### | 100% 2.07s

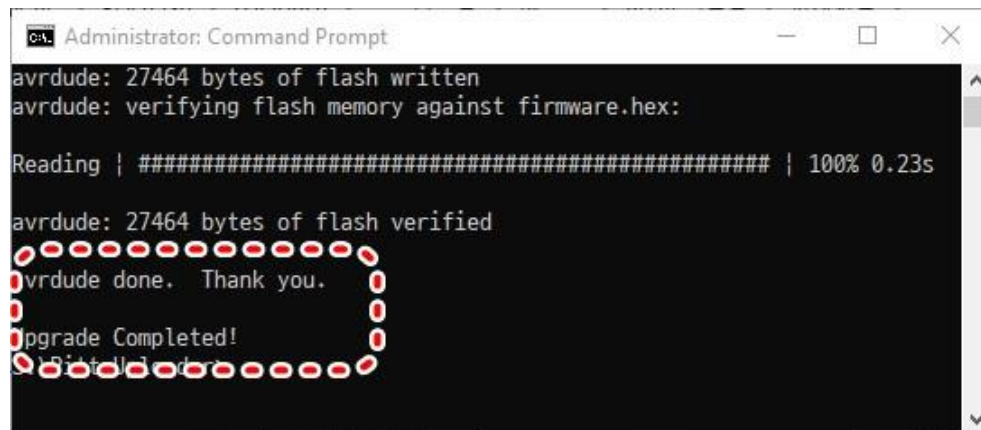
avrdude: 27464 bytes of flash written
avrdude: verifying flash memory against firmware.hex:

Reading | ##### | 100% 0.23s

avrdude: 27464 bytes of flash verified
```



## 12. Confirm upload complete



```
Administrator: Command Prompt
avrdude: 27464 bytes of flash written
avrdude: verifying flash memory against firmware.hex:

Reading | ##### | 100% 0.23s

avrdude: 27464 bytes of flash verified
avrdude done. Thank you.
Upgrade Completed!
Pitt-Holodot
```

The screenshot shows a Windows Command Prompt window titled "Administrator: Command Prompt". The output of the avrdude command is as follows: "avrdude: 27464 bytes of flash written", "avrdude: verifying flash memory against firmware.hex:", a progress bar for "Reading" showing 100% completion in 0.23s, "avrdude: 27464 bytes of flash verified", "avrdude done. Thank you.", "Upgrade Completed!", and "Pitt-Holodot". A decorative border of red dots surrounds the text "Upgrade Completed!" and "Pitt-Holodot".