



Unity UI Firmware Update

Work instructions covering how to update the firmware of the Unity UI Face Board. Doc. #: 506.0136.001.0A

Written By: Adam Gromotka

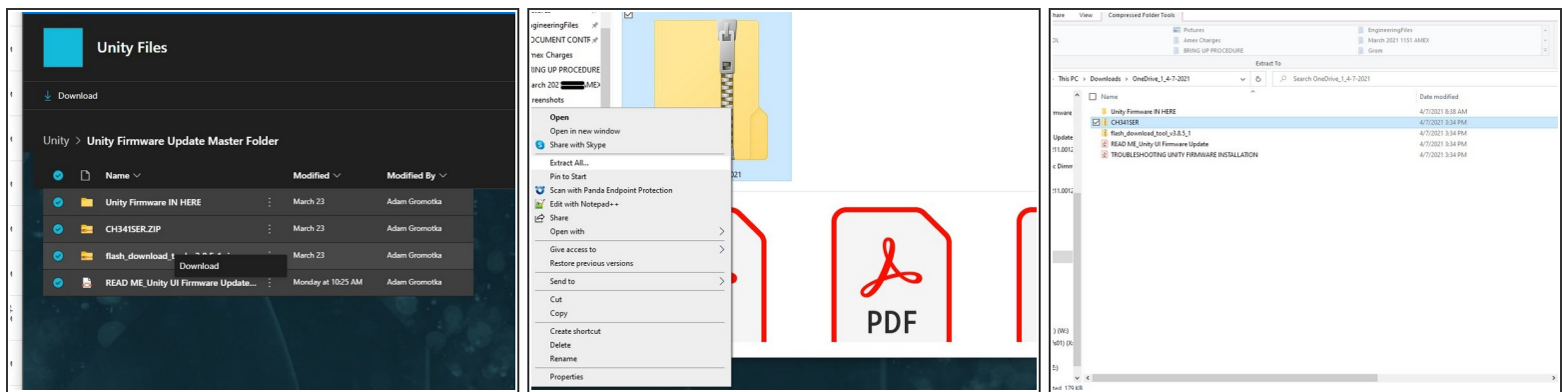


Step 1 — Prepare your equipment



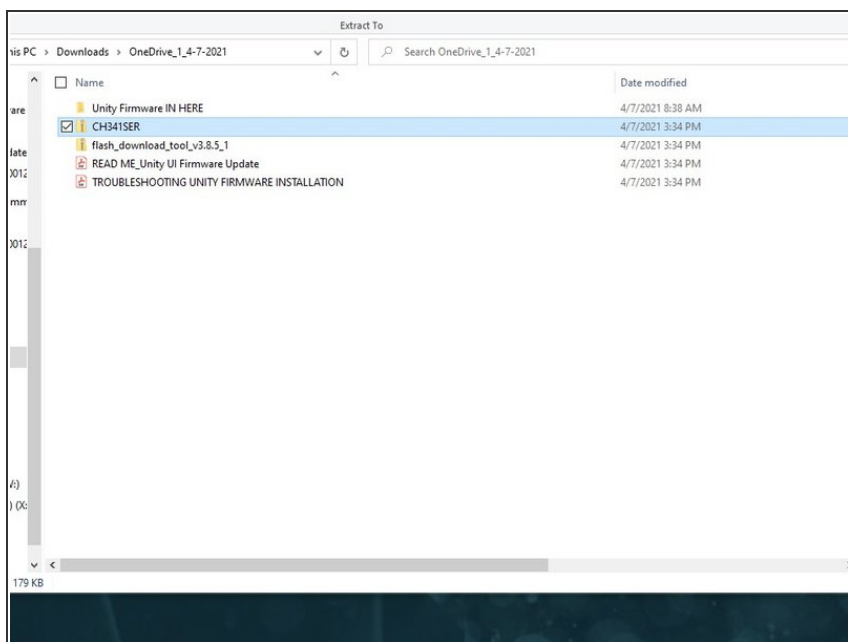
- Using a Windows PC, connect a male-to-male, standard USB-A cable to a port on the computer. If you have never updated firmware through your device, please connect to your Unity first and then install the drivers mentioned below. This process must be done just once to help your computer properly transfer information.
 - Connect the other end of the cable to the USB port at the front of the Unity box labeled "UI FW Update."
- ⚠ If you have taken the steps to install CH341SER and download and extract the flash_download_tool driver, you can skip ahead to step 6. The following 4 steps only apply to initial setup. (The flash_download_tool folder does not have to be installed. It simply must be present and not zipped.)
- ⚠ Power on the Unity. The Unity must be connected to full power to complete firmware installation without errors.

Step 2 — Downloading All Files



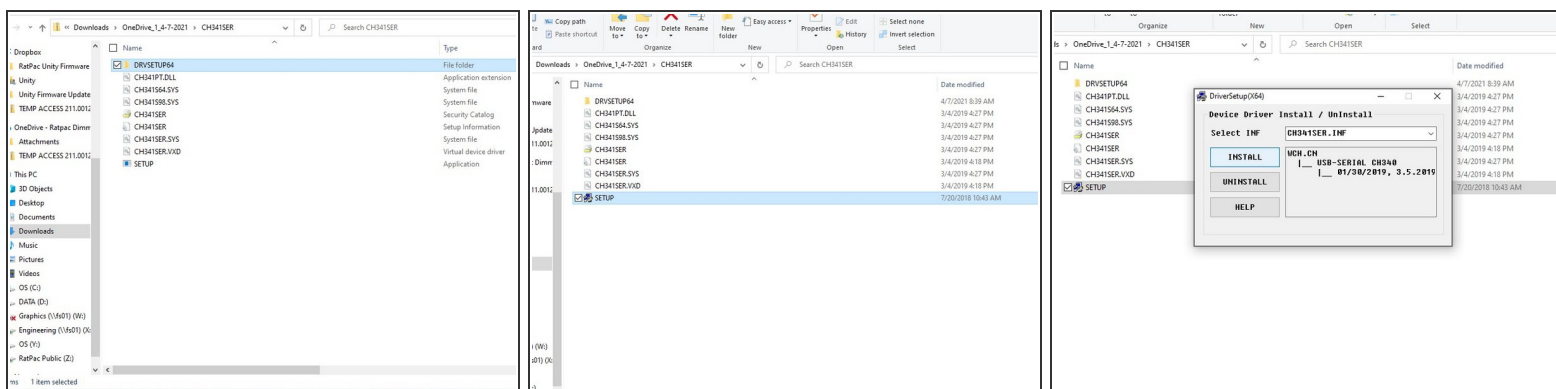
- ⚠️ Download ALL documents and folders in the firmware portal. You can select all items and right click -> download, or download them all individually by selecting the three dots to the right of each file's name. When downloaded, they will default to your download folder. Make sure all files are downloaded.
- If you downloaded all files as a single download, go to your downloads folder or wherever the package is located and right click, then extract all. Save to somewhere on your computer that's easily accessible. The default will also work.
- ⓘ If you downloaded files individually, they will appear in your default download folder as individual files, some zipped.
- ⚠️ In certain cases, your Desktop folder, downloads folder, or other related folders, especially if backed up remotely, may not be connected to your local drive (oftentimes labeled "C:"). All software for this process **MUST** be saved somewhere **ON YOUR MACHINE**.

Step 3 — Extract the CH341SER Driver



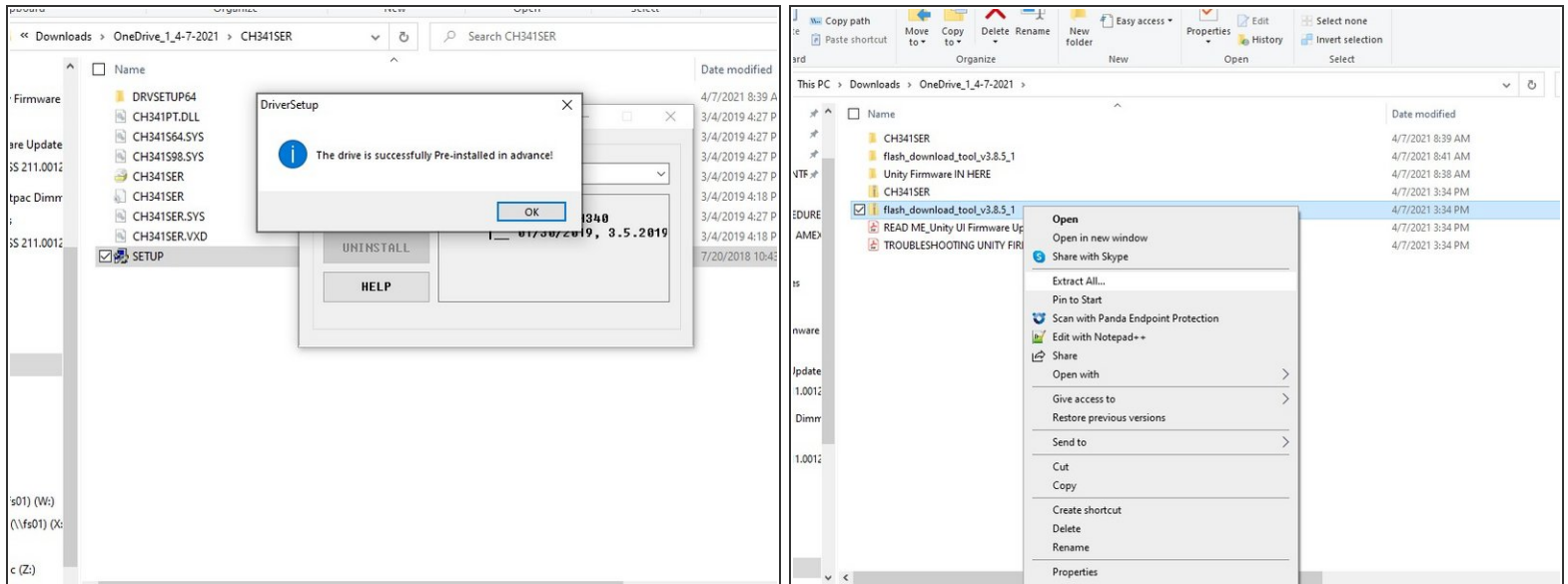
- Locate the zipped CH341SER driver folder.
- Right click the folder and select extract all. The default extraction location is recommended.

Step 4 — Extracting and Installing CH341SER Driver Cont'd



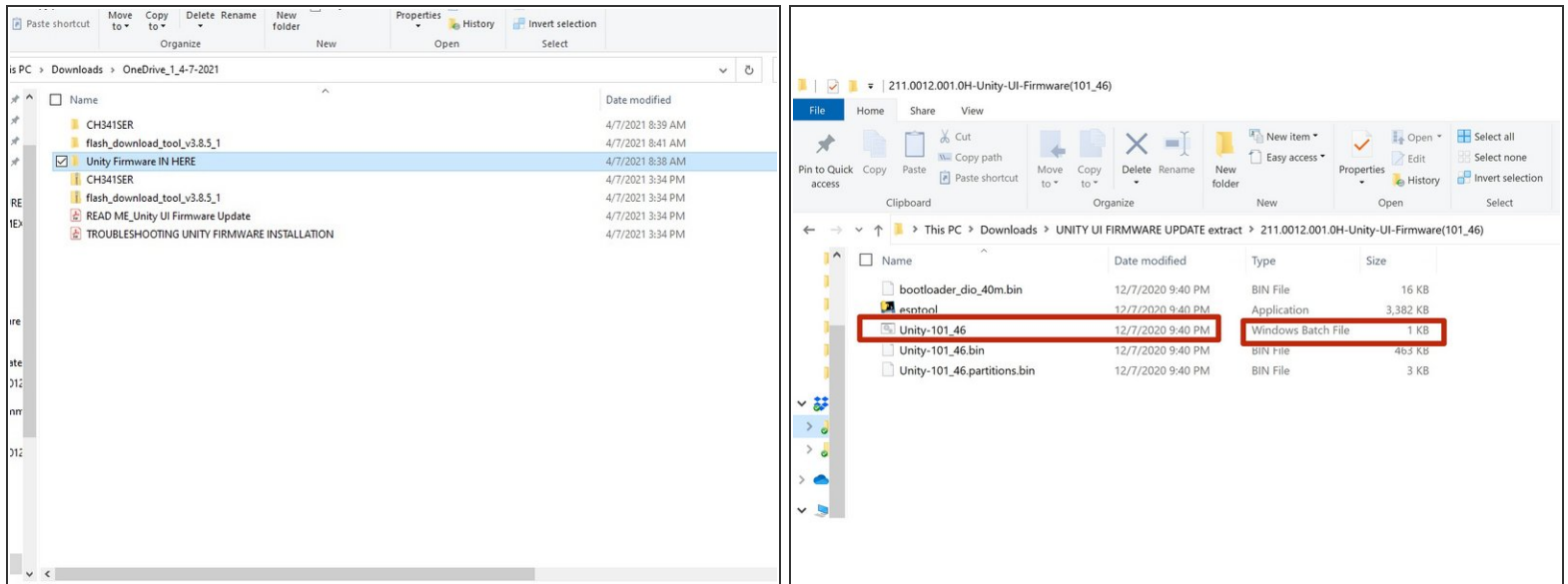
- Double click the unzipped folder for CH341SER. You will see files shown in the first image.
- Double-click the SETUP application, seen in the second image. You *may* be prompted to extract the files again. Click yes to continue.
- An installer will open. Your computer may ask if you trust the application. Approve this to continue.
- You will be presented with a simple GUI. Press Install to continue.


Step 5 — Finishing up Driver Prep



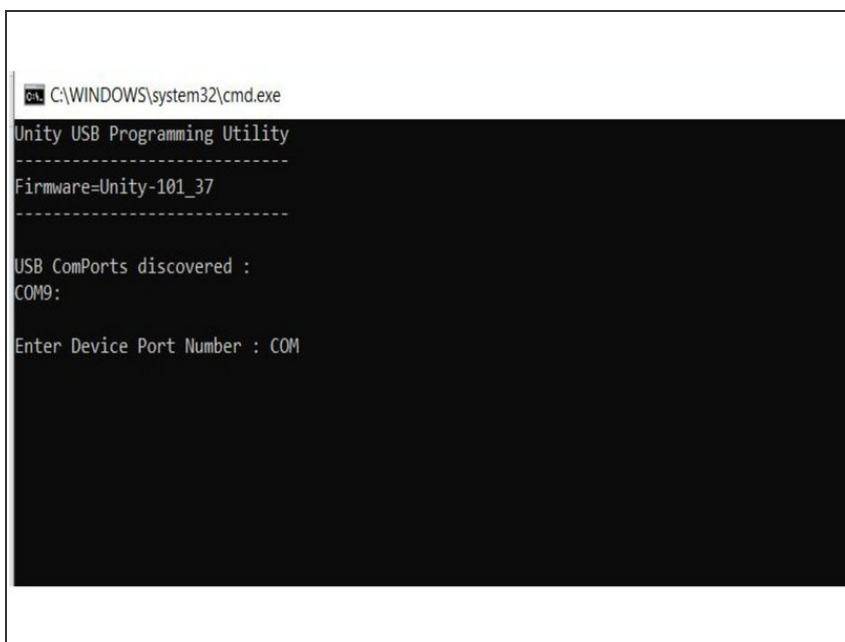
- You should receive a confirmation once the CH341SER driver is finished installing. Click away and close the program.
- Return to the root folder that contains all of the Unity files you downloaded from the portal. Locate the flash_download folder, right click, and select extract all.
- 🗑️ You can now delete both of the ZIPPED versions of the flash_downloader tool and the CH341SER files. **Do not delete the unzipped files that you extracted.**
- 📄 This process is complete. You can now continue with the remainder of the instructions. The setup process for the CH341SER and flash_download_tool only need to be completed once per computer.

Step 6 — Selecting the right file



 Locate and double-click the folder titled "Unity Firmware IN HERE." **The executable file will read: Unity-101_XX.** It will be a **Windows Batch File** file type. The XX represents the most current firmware version and will change as new releases are available.

Step 7 — Uploading the firmware



```
C:\WINDOWS\system32\cmd.exe
Unity USB Programming Utility
-----
Firmware=Unity-101_37
-----
USB ComPorts discovered :
COM9:
Enter Device Port Number : COM
```

- Double click the Batch file in step 6. A console will open. **Your system may prompt you regarding security warnings. Click "More Info" and then "Run Anyway."**
 - You will be presented with a list of available ports. In this case, the only port is "COM9" which represents the USB connection.
 - A sequence will run. After a countdown of 10 seconds, you will then be asked to press any key to continue firmware loading. After a moment, the console screen will notify you that the update is complete. You can now disconnect the device from the USB and power.
- i** Note: New releases may not require additional input after 10 seconds as instructed above. This document will be updated at that time to reflect the process.