

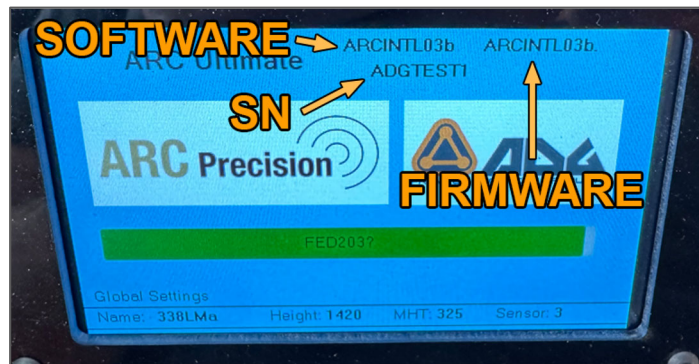
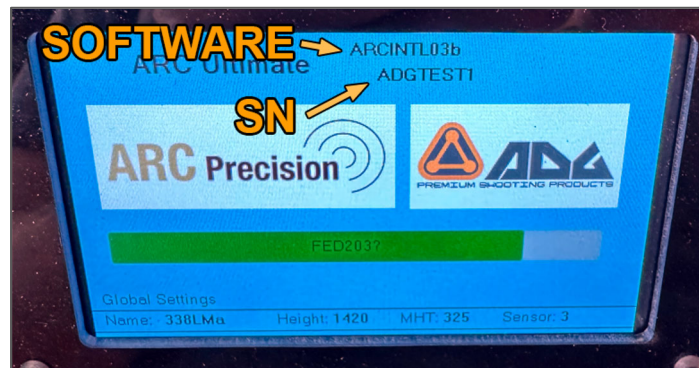
ARC ULTIMATE FIREWARE UPDATE PROCEDURE

Required Items:

- Window's Based PC
- USB-A to USB-C Cable
- Windows CH340 Driver Installed on PC – [[Windows-CH340-Driver.zip](#)](OPTIONAL)
- Xloader Software Installed on PC – [[Xloader.zip](#)]
- Current Firmware File [[ARCINTLxxx.hex](#)]

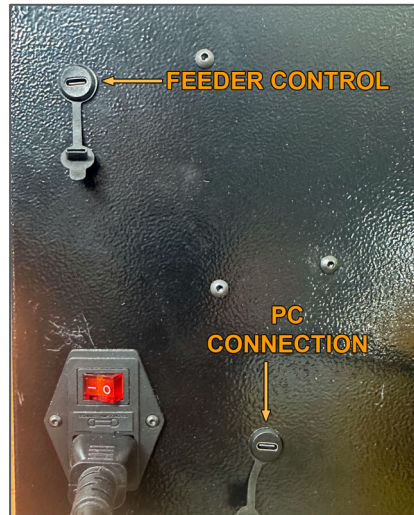
STEP 1: Determine the firmware currently installed on the ARC Ultimate

1. Power the ARC Ultimate on and watch the startup screen. Initially, the TFT Software version and Serial Number will show on the main screen.
2. As the green bar gets to the end of the field, the Firmware version will flash on the screen

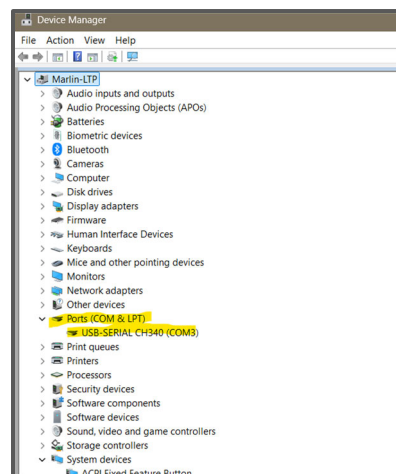


STEP 2: Determine if CH340 Driver is Required

1. Power ON the ARC Ultimate Annealer
2. Open Windows Device Manager on your PC
3. Connect the USB-C connector to the **LOWER PORT** on the back of the ARC Ultimate



4. Connect to USB-A connector to the PC and watch the Device Manager for a change to the “PORTS” device. *NOTE: When not plugged in, there may not be a “Ports” device listed*



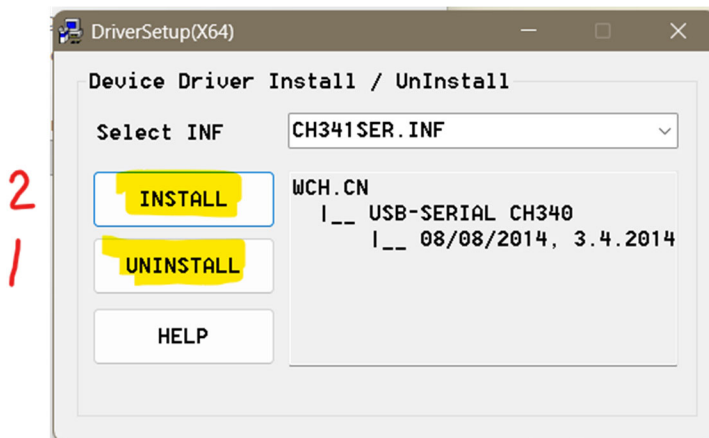
5. **Note the COM#** for the CH340 device (COM3 in the example above)
6. If the USB-SERIAL CH340 (COMx) does not show up, you will need to install the Windows CH340 device driver. If the USB-SERIAL CH340 (COMx) does appear, go to STEP 4.

STEP 3: Download the Required Files from ADG Document Server

1. Go to the ADG Document Server Website: <https://adgds.com:36666/Login>
USER NAME: ARCOwner
PASSWORD: ARCOwner123\$ *(Both the User Name & Password are CaSe SenSItIvE)*
2. Click on the following files (they will automatically download to your PC):
 - ARCINTLlnna.hex (Firmware File)
 - Windows-CH340-Driver.zip (CH340 Communications Driver – If Required)
 - Xloader.zip (Communication Link Software)
3. Save to your PC and extract the two zip files into their own folders

STEP 4: Install Windows CH340 Driver (IF REQUIRED)

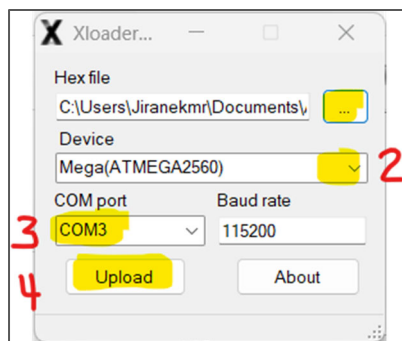
4. Extract files from [\[Windows-CH340-Driver.zip\]](#) file onto your PC
5. Run the executable file [\[SETUP.EXE\]](#)



6. Click the “UNINSTALL” button first
7. Click the “INSTALL” button
8. Verify that the driver is operational – Follow STEP 2 to verify the driver is working

STEP 5: Install & Run Xloader Software – Update Firmware

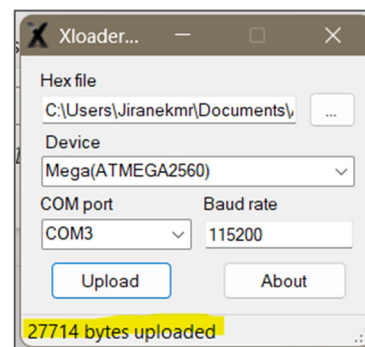
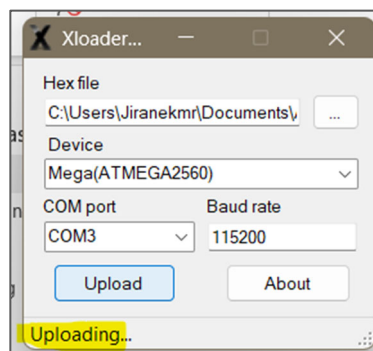
1. Extract files from [Xloader.zip] file to your PC
2. Power ON the ARC Ultimate Annealer
3. Connect the USB-C connector to the LOWER PORT on the back of the ARC Ultimate
4. Connect the USB-A connector to your PC
5. Run the executable file [Xloader.exe]
6. In the Xloader window:
 1. Click the three dots in the upper right corner, navigate to the firmware update file [ARCINTLxxx.hex] and select “OPEN”



2. Select “**Mega(ATMEGA2560)**” from the Device dropdown menu
3. Select the COM port you noted in STEP 2
4. Select “**Upload**”

**DO NOT POWER OFF THE ARC ANNEALER OR UNPLUG THE CABLE DURING UPLOADING
IT WILL RESULT IN A DEAD UNIT – NOT COVERED BY WARANTEE**

7. At this point, the lower left of the Xloader window will display a message “*Uploading...*”
8. When complete, the lower left of the Xloader window will display a message “*xxxxx bytes uploaded*”



9. Unplug the communication cable between the PC and ARC Ultimate
10. Power OFF the ARC Ultimate
11. Power ON the ARC Ultimate and verify the firmware update (STEP 1)