

Ignis Firmware Update Instructions

Drone Amplified, INC

FIRE MANAGEMENT TECHNOLOGY

IGNIS



1 Install LM Flash Programmer

Download and install LM Flash Programmer onto a Windows computer. The software can be downloaded for free from the Texas Instruments website at this hyperlink:

<http://www.ti.com/tool/LMFLASHPROGRAMMER>

2 Unplug Dropper from Hopper

Unplug the USB cable connecting Ignis's Dropper to the faceplate of the Hopper.

3 Start Ignis's Bootloader

Touch something metallic to discharge any static electricity from your body.

Start Ignis's bootloader by holding down the reset button while powering it on. The reset button is shown in Figure 1.

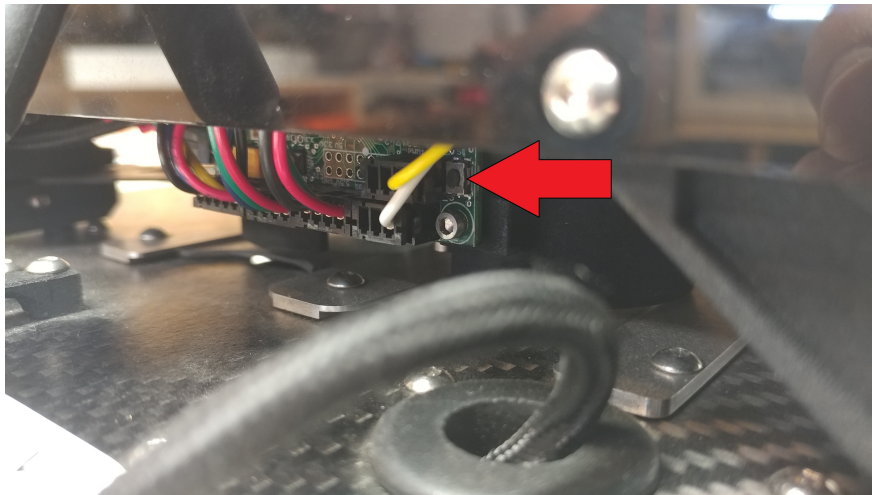


Figure 1: Ignis reset button.

You may need to brace Ignis so that you can plug in the battery while holding down the reset button. If you are successful, none of Ignis's LED's should turn on. You can release the reset button after two seconds.

4 Connect Ignis to your Computer

Connect the hidden firmware update USB cable to the computer you installed LM Flash Programmer on. The cable is concealed behind the wall of the Hopper, as shown in Figure 2. It may be convenient to use a USB extension cable to reach your computer, or to remove the Hopper from the Dropper.

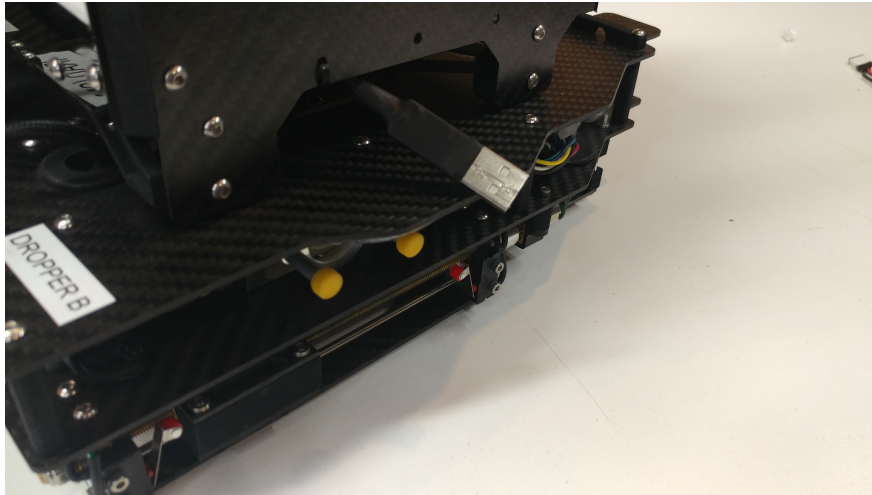


Figure 2: Ignis firmware update USB.

5 Configure LM Flash Programmer

Start LM Flash Programmer. LM Flash Programmer will open a window similar to Figure 3.

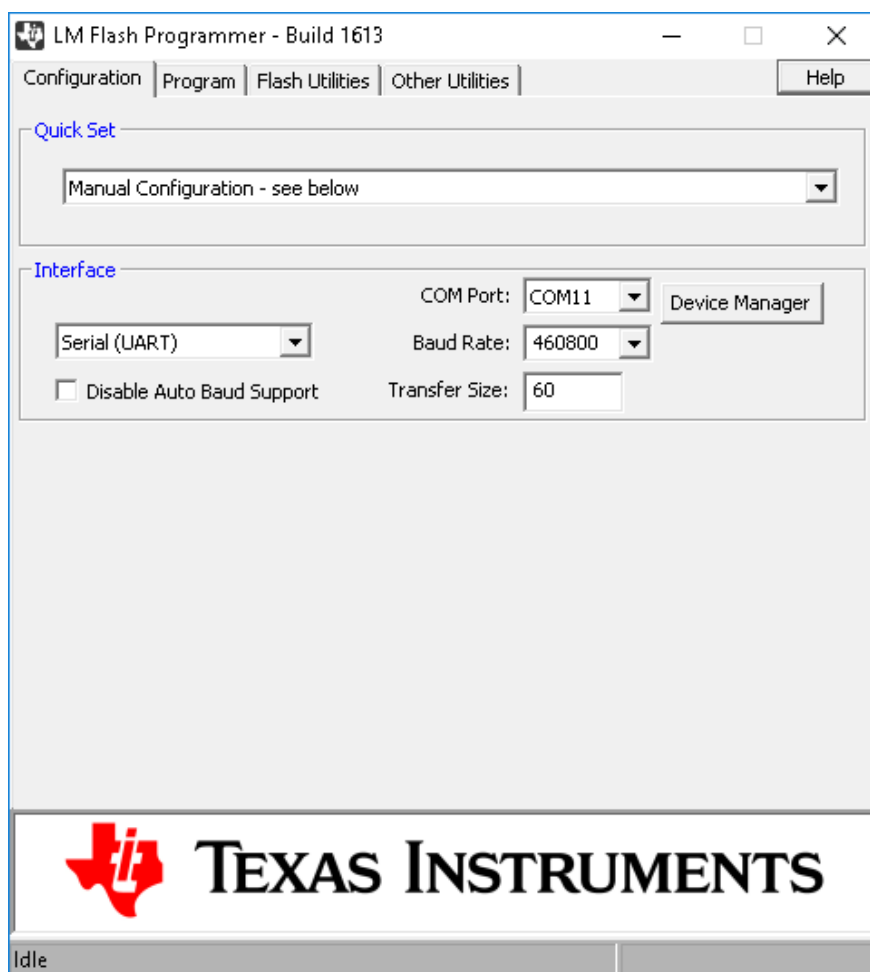


Figure 3: LM Flash Programmer Configuration Tab.

Change the drop-down menu on the left side of the Interface box to "Serial (UART)". Make sure "Disable Auto Baud Support" is not checked. Press the "Device Manager" button. This will open up Window's Device Manager, which will look similar to Figure 4.

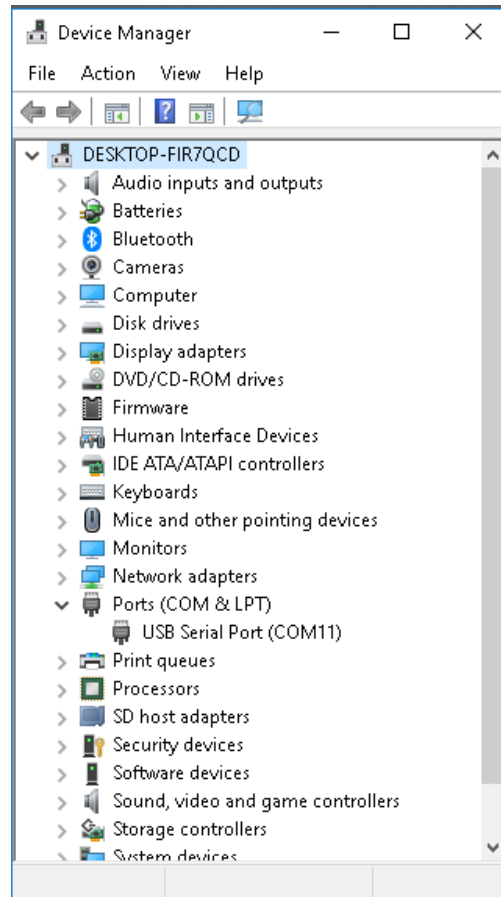


Figure 4: Windows Device Manager.

Expand the "Ports (COM & LPT)" dropdown menu, and you should see something on one of the COM ports. In Figure 4, Ignis is on COM11. Remember the COM port you see and close the Device Manager.

In LM Flash Programmer, set the COM Port to the COM Port that showed up in Device Manager, as shown in Figure 3. Set the Baud Rate to 460800. The configuration tab of LM Flash Programmer should match Figure 3, except for the COM Port.

6 Program Ignis

Next, go to the "Program" tab of LM Flash Programmer, which should look similar to Figure 5.

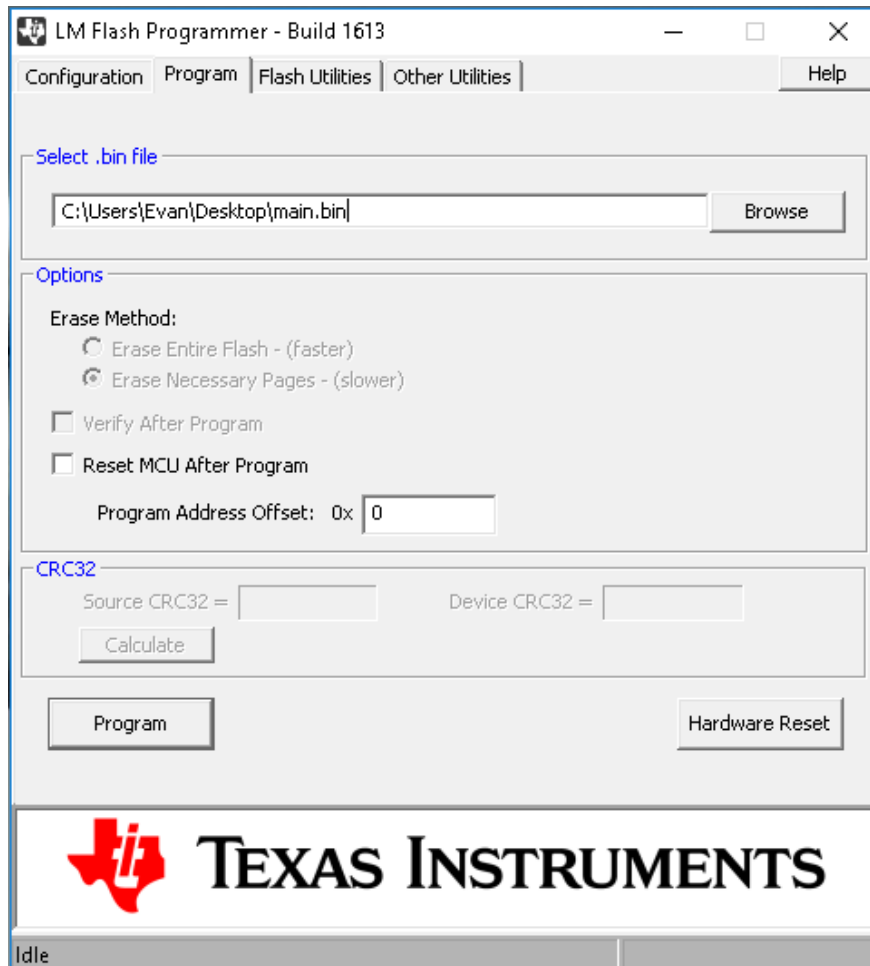


Figure 5: LM Flash Programmer Program Tab.

Press the "Browse" button and select the binary Ignis firmware file. The program tab of LM Flash Programmer should match Figure 5, except for the path to the .bin file.

Press the Program button to start programming Ignis. A progress bar will appear to show the programming progress. Once programming is complete, power-off and power-on Ignis. If the cable is accidentally disconnected while LM Flash Programmer is programming Ignis, simply reconnect the cable and attempt to program it again.