

# 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 Remove the Access Plate

With the dropper block facing you such that you can see the ‘A’ and ‘B’ notations, locate the access plate that does not house the battery port. In order to remove this plate, remove the screws using a 2.0mm hex driver. These screws are marked with red circles in Figure 1.

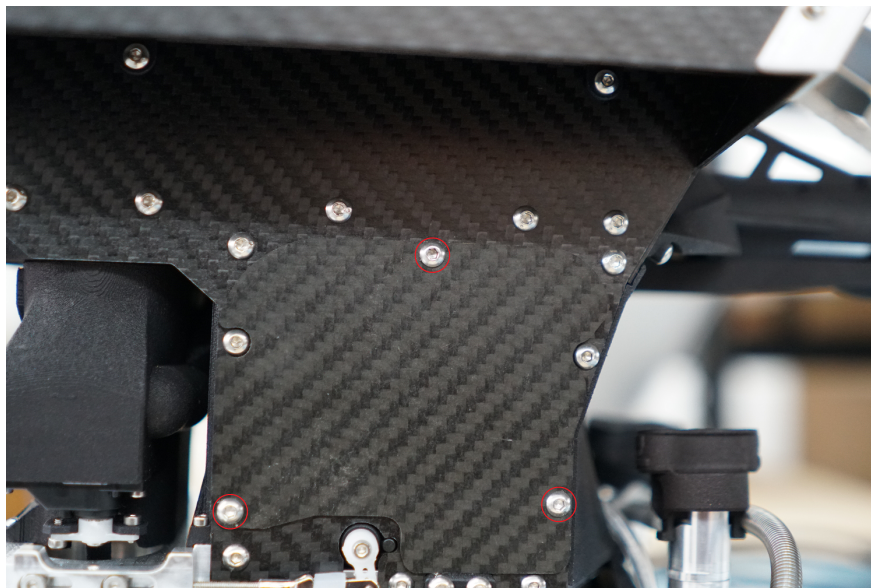


Figure 1: The access plate of Ignis v2. The screws that hold the plate in place are marked with red circles and can be removed using a 2.0mm hex driver.

# 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, shown in Figure 2, while powering it on.

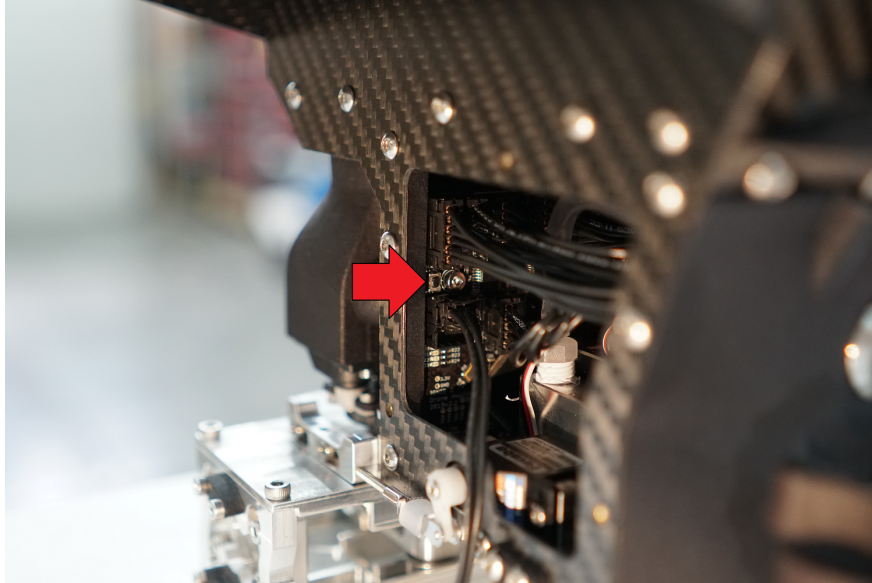


Figure 2: The location of the Ignis reset button.

You may need to brace Ignis so that you can plug in the battery while holding down the reset button. If you experience difficulty reaching the button, a pen or similarly shaped object should work as well. If you are successful, Ignis will not perform its regular calibration sequence. You can release the button after two seconds have passed.

## 4 Connect Ignis to your Computer

First, locate a USB to serial connector as shown in Figure 3. The cable can be found in the spare parts bag that comes with an Ignis system. Once located, connect the serial side to the upper serial port of the Ignis system as shown in Figure 4. Connect the USB side to the computer you installed LM Flash Programmer on. It is recommended that a USB extension cable is used to ensure a secure connection to your computer.



Figure 3: The Ignis updater USB cable, shown atop the spare parts bag it can be found in. The bag itself can be found in the upper left area of the Ignis case.

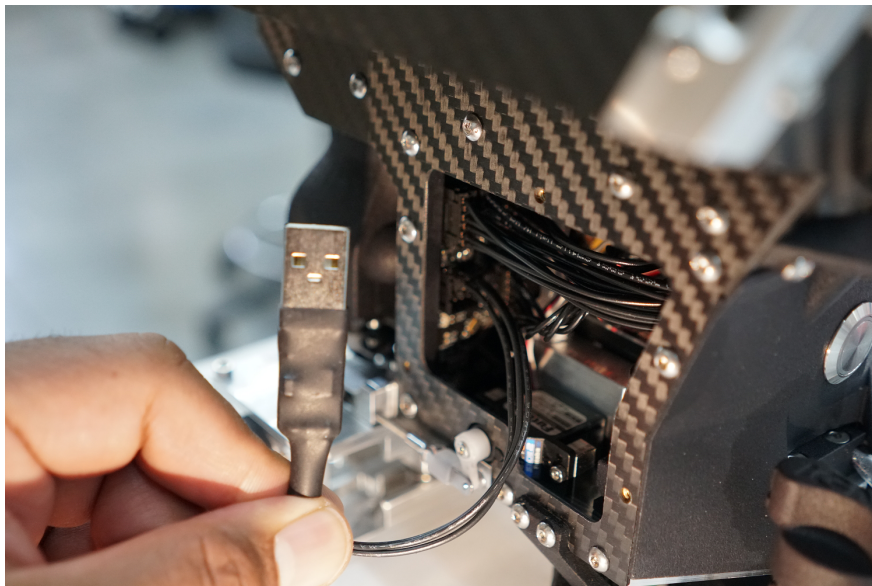


Figure 4: The Ignis updater USB cable, connected to the upper serial port on Ignis. The cable can be found in the spare parts bag that comes with an Ignis system.

## 5 Configure LM Flash Programmer

Start LM Flash Programmer. LM Flash Programmer will open a window similar to Figure 5.

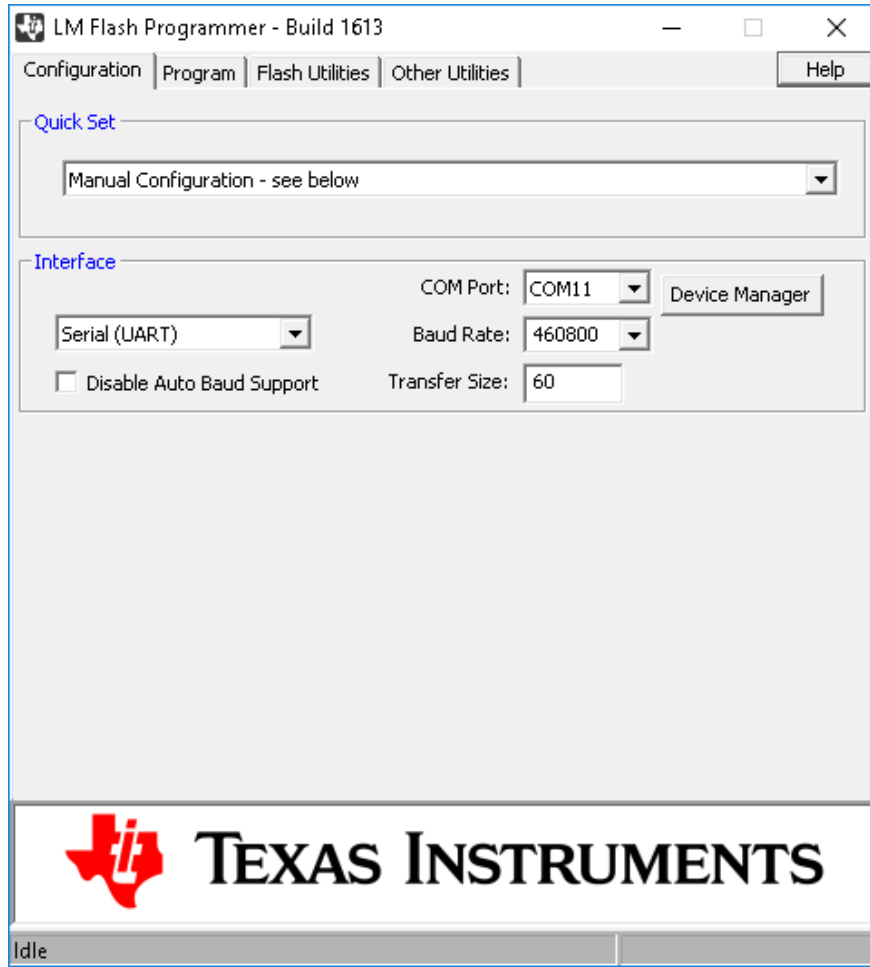


Figure 5: LM Flash Programmer Configuration Tab.

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 6.

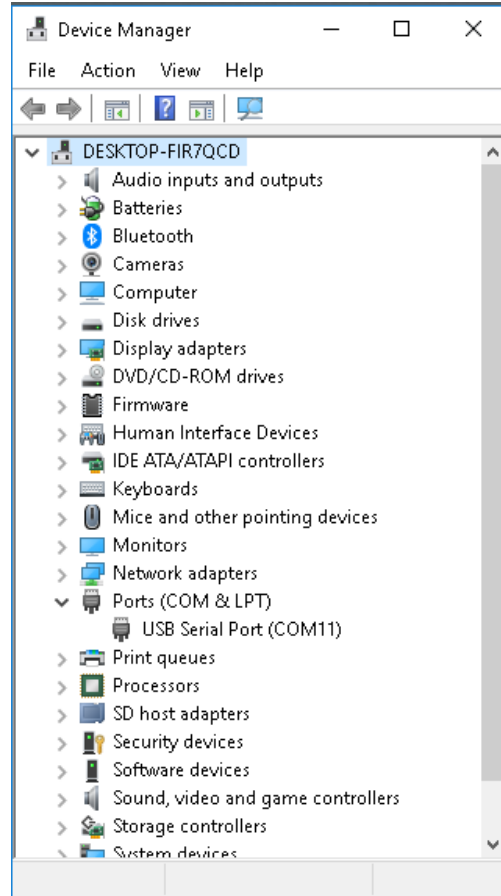


Figure 6: Windows Device Manager.

Expand the "Ports (COM & LPT)" dropdown menu, and you should see something on one of the COM ports. In Figure 6, 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 5. Set the Baud Rate to 460800. The configuration tab of LM Flash Programmer should match Figure 5, except for the COM Port.

## 6 Program Ignis

Next, go to the "Program" tab of LM Flash Programmer, which should look similar to Figure 7.

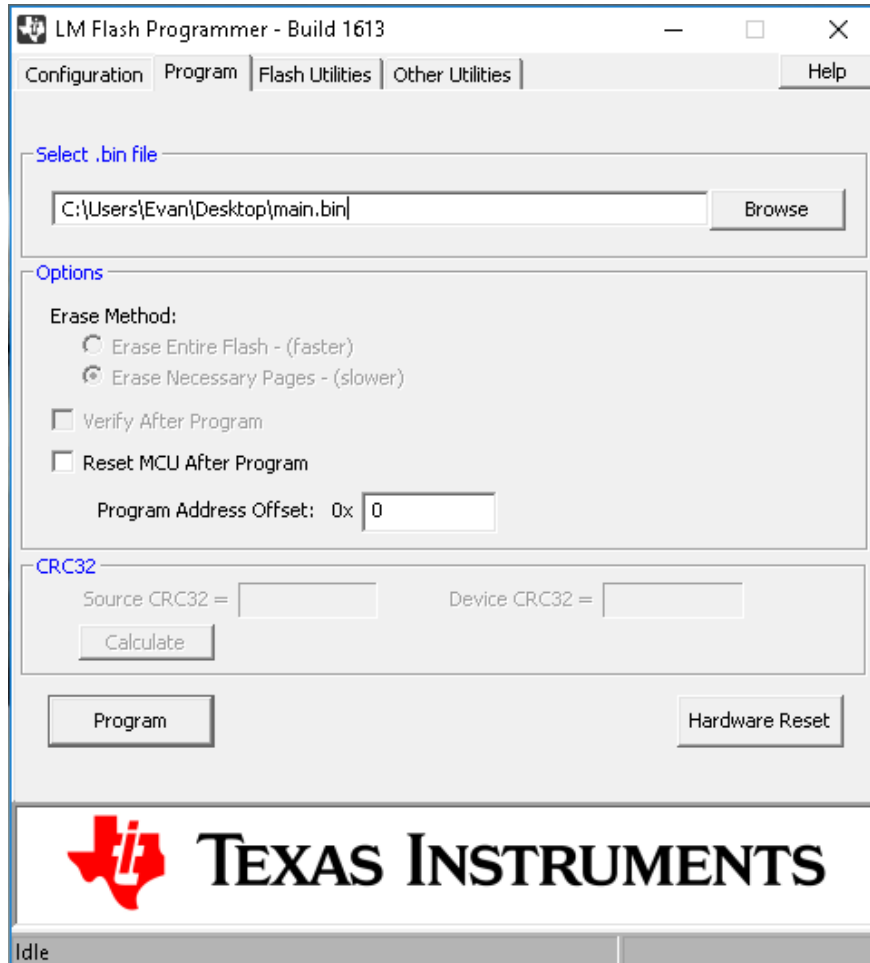


Figure 7: LM Flash Programmer Program Tab.

Press the "Browse" button and select the binary Ignis firmware file. The program tab of LM Flash Programmer should match Figure 7, 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.