

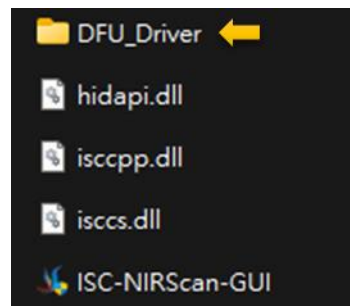
Application Note

First Time to Update TIVA Firmware

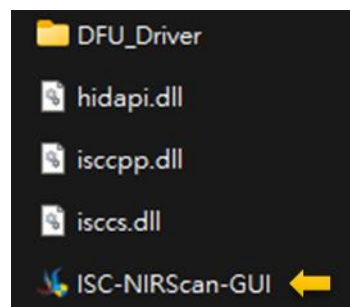
If this is your first time updating TIVA firmware, please follow the instructions below:

1 Download ISC WinForms GUI (<https://github.com/InnoSpectra/ISC-NIRScan-GUI>),

unzip the software package, which contains the DFU driver, as shown below.



2 Execute ISC WinForms GUI.



3 Connect your device via USB, power on the device, and the device and GUI are ready.

4 Go to Utility page and select TIVA firmware.

5 Press “Update” to enter bootloader mode, and the PC will check the driver.

6 Open the “[Device Manager](#)” of the PC as shown in Figure A-1.

7 If USB driver automatic installation is failed, then there will be an unknown device named “Tiva Device Firmware Update” on the PC’s device manager shown in Figure A-1.

8 Right click on the “[Tiva Device Firmware Update](#)” and select “Update Driver.”

9 Browse my computer for driver software, select the DFU driver folder and search

for drivers in this location.

10 Update the driver.

11 After updating the driver, the GUI and device need to be restarted before the update process can be performed again.

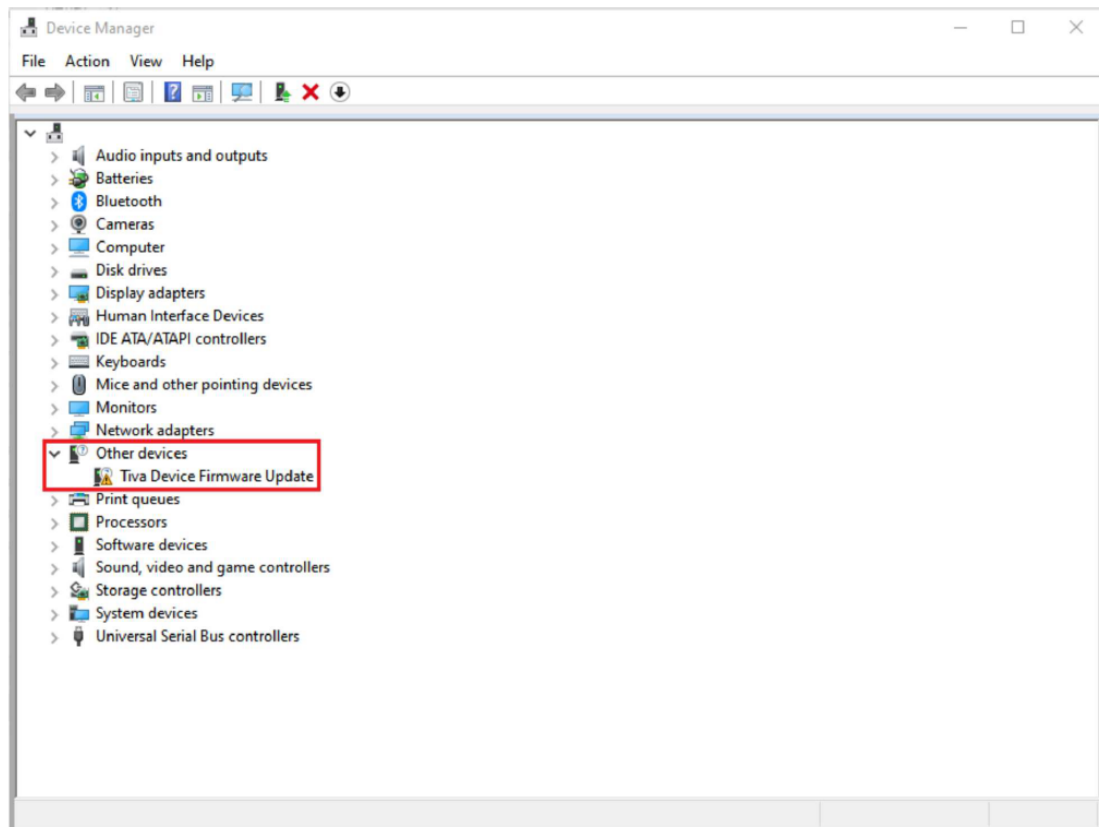


Figure A-1 Device Manager

Tiva Firmware Update

The TIVA firmware update interface is shown in the Figure A-2 below. To update the TIVA firmware, the first step is to click the "Browse" button to search for the TIVA firmware file (e.g. ISC-NIRScan-Tiva-Release-v2.6.3.bin). Then, click the "Update" button. The firmware will be flashed in TIVA's internal memory and a progress bar will indicate the update process. If the TIVA firmware update fails, the corresponding error message will be displayed. Please share screenshots with us.

ISC WinForms SDK GUI v3.9.8: Standard (Wavelength Range: 900 - 1700nm)

Scan Utility About

Model Name

Get

Serial Number

Get

TIVA Firmware Update
File Name: Browse

Date and Time

Sync Get

Lamp Usage
 (hours)
Set Get

DLPC150 Firmware Update
File Name:

Sensors
Battery Charger Status
Battery Capacity
System Humidity
System Temp
Tiva Temp
Lamp Indicator

Calibration Coefficients
Cal Coeff Ver: Pix-Wave Coeff 0
Ref Cal Ver: Pix-Wave Coeff 1
Scan Cfg Ver: Pix-Wave Coeff 2
☐ Write Enable Shift Vect Coeff 0
Shift Vect Coeff 1
Shift Vect Coeff 2

Activation Key
Input Key:
Status: Activated
Log File
Log File Status: Enabled

Bluetooth LE Advertising Name

Default Set Get

Device Information
GUI Version: 3.9.8
Tiva SW Version: 2.6.3
DLPC Flash Version: 2.3.1
Main Board Version: D
Detector Board Version: B
Model Name: NIR-S-G1
Device Serial Number: 928R028
Manufacturing Serial Number: 95U8122GC1A928R028
Device UUID: DE:67:0C:88:67:77:45:21
Lamp Usage: 55min 10sec
BLE Advertising Name: NIR-S-G1-928R028

Device
Reset System
Update Reference Data
Restore Factory Reference
Restore Factory Config
Factory Data Reset
Button Status: Unlocked!

Standard Wavelength Device: NIR-S-G1 (928R028)

Figure A-2 TIVA Firmware Update