

# Installing USB to Serial Adapter Drivers

## Overview

An RS-232 serial interface is required to program FreeWave radios used in the Piksi® Multi Evaluation Kit and it can be also used to receive and send data to Piksi GNSS receiver. If your PC does not have such interface use USB to Serial adapter included in the kit. Use the instructions below to install the proper device driver for your operating system.

## Windows

Download (<http://www.ftdichip.com/Drivers/VCP.htm>) and install FTDI's VCP drivers to communicate with Piksi Multi using the provided USB to Serial cable.

## Mac OS

**For Mac OS v10.12 Sierra or later you don't need to install the FTDI driver.**

For Mac OS v10.11 El Capitan or earlier, please follow the following instructions:

Install [version 2.2.18 of FTDI's VCP driver](#).

Notes:

- Two drivers are available: VCP and D2XX. You only need the VCP driver.
  - *Do not install D2XX driver.*
- Piksi requires FTDI driver version 2.2.18, not version 2.3.
- When you run the installer, choose the option for OS X versions 10.4–10.7 (not 10.3).
- If [Gatekeeper](#) displays an "unidentified developer" warning and prevents the driver from installing, you may need to open the driver .dmg file as explained here: [https://support.apple.com/kb/PH14369?locale=en\\_US](https://support.apple.com/kb/PH14369?locale=en_US)

After installing the FTDI VCP driver, you must unload the Apple driver and load the FTDI driver by running the following commands from the Terminal application:

```
sudo kextunload
/System/Library/Extensions/IOUSBFamily.kext/Contents/PlugIns/AppleUSBFTDI.kext
sudo kextload /System/Library/Extensions/FTDIUSBSerialDriver.kext
```

After unloading the Apple driver, you might get one of the messages below in your command window.

```
(kernel) Kext com.apple.driver.AppleUSBFTDI not found for unload request.
Failed to unload com.apple.driver.AppleUSBFTDI (libkern/kext) not found.
```

Or

```
Can't open CFBundle for
/System/Library/Extensions/IOUSBFamily.kext/Contents/PlugIns/AppleUSBFTDI.kext
```

Ignore those messages and load the FTDI driver. The Swift Console will still work as it should.



# Linux

Recent versions of Linux (kernel > 3.0) have built-in native kernel support for the FTDI devices and do not require the above drivers.