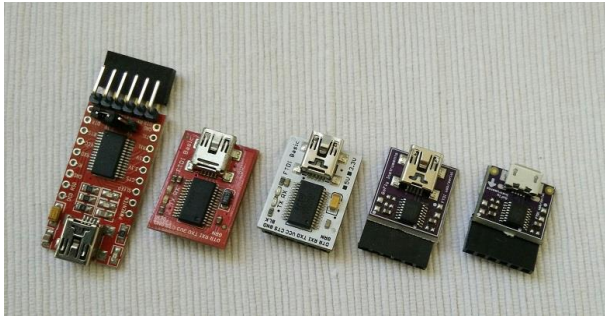# Upgrading GoFly Project V4's Pico Insider variometer/gps module firmware on Windows and MAC

Some first steps are the same for both, Windows and MAC

1. Make sure You have one of these (we will name it FTDI programmer/board) (Please contact me if You have first board on this picture (the biggest in size). This board has to be plugged the opposite way.

2. Shut down V4.
   - Open V4 and get access to Vario/GPS module (we call it Pico Insider).
     - Unplug 4pin wire and plug FTDI board. Be careful, and do not break pins/port.
       - Remember how to plug it back later after everything is finished
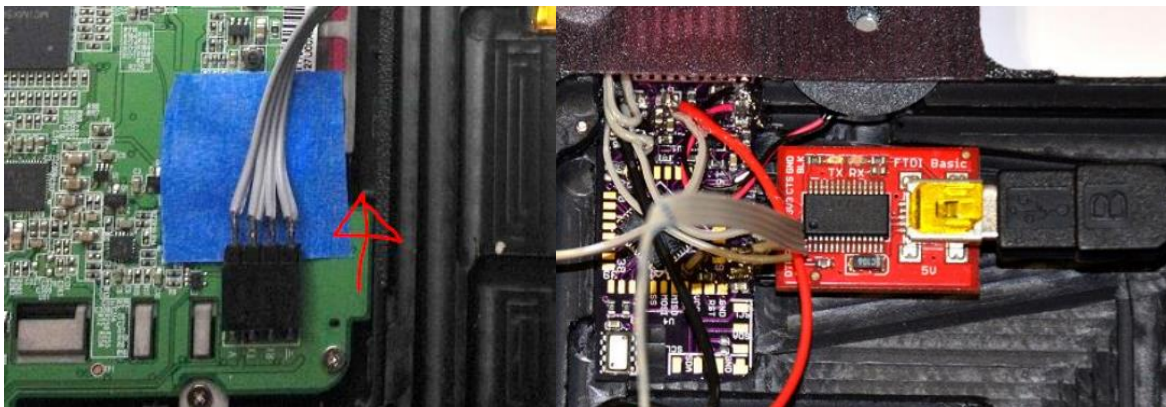
3. Download newest Pico Insider firmware package for vario/gps module and unzip it.
   http://www.goflyinstruments.com/download-3/

4. Connect FTDI programmer board with Windows or MAC machine
   Windows machine might require FTDI drivers (for 32 or 64bit Windows)

http://www.goflyinstruments.com/wp-content/uploads/files/CDM%20v2.08.28%20Certified%20win%2032.zip

http://www.goflyinstruments.com/wp-content/uploads/files/CDM%20v2.08.28%20Certified%20win%2064.zip

Windows computer steps

- ➢ Enter folder where You downloaded and unzipped Pico Insider firmware
- ➢ Execute script by clicking

  UPDATE_GOFLY.bat

- ➢ Script will open command line window and list available serial/usb adapters (FTDI)
  - • Enter serial port name and hit enter, for example: **COM3**
- ➢ Process takes about 30 seconds
  - • After connection is established, there should be bar showing actual progress

MAC machine steps

- Install newest Crosspack platform (this is AVR microcontroller environment for iOS)
  https://www.obdev.at/products/crosspack/download.html
- Open Terminal (Applications -> Utilities ->Terminal)

- Enter folder where You downloaded and unzipped Pico Insider firmware
- Execute script by entering command and pushing Enter

  ./UPDATE_GOFLY.sh

- Process takes about 30 seconds
  - After connection is established, there should be some information showing that FTDI programmer is detected and then few bars showing actual progress

```
Last login: Wed Jun 10 22:42:26 on ttys000
Macbookpro:Downloads laptopuser$ cd GoFlyProjectV4_v.6.2015beta_PicoInsiderFirmware/
Macbookpro:GoFlyProjectV4_v.6.2015beta_PicoInsiderFirmware laptopuser$ ./UPDATE_GOFLY.SH
    avrdude: Version 6.0.1, compiled on Dec 16 2013 at 17:26:24
    avrdude: AVR device initialized and ready to accept instructions
    Reading | ################################################## | 100% 0.01s
    avrdude: Device signature = 0x1e9705
    avrdude: safemode: lfuse reads as 0
    avrdude: safemode: hfuse reads as 0
    avrdude: safemode: efuse reads as 0
    avrdude: erasing chip
    avrdude: reading input file "goflyproject.hex"
    avrdude: input file goflyproject.hex auto detected as Intel Hex
    avrdude: writing flash (36612 bytes):
    Writing | ################################################## | 100% 6.90s
    avrdude: 36612 bytes of flash written
    avrdude: verifying flash memory against goflyproject.hex:
    avrdude: load data flash data from input file goflyproject.hex:
    avrdude: input file goflyproject.hex auto detected as Intel Hex
    avrdude: reading on-chip flash data:
    Reading | ################################################## | 100% 7.75s
    avrdude: verifying ...
    avrdude: 36612 bytes of flash verified
    avrdude: safemode: lfuse reads as 0
    avrdude: safemode: hfuse reads as 0
    avrdude: safemode: efuse reads as 0
    avrdude: safemode: Fuses OK (H:00, E:00, L:00)
    avrdude done.  Thank you.
Macbookpro:GoFlyProjectV4_v.6.2015beta_PicoInsiderFirmware laptopuser$
```