# *Flight Controller Firmware Upgrade*

$\boxed{\textit{V1.0}}$

# Content

# Install Driver

Please install the the drive program to your computer if you donot have it already.

（1）Please choose the compatible driver for your computer, link:

http://www.silabs.com/products/mcu/pages/usbtouartbridgevcpdrivers.aspx

（2）Install the drive program on your computer.

（3）Please switch the ESC switch to ON.

（4）Connect flight controller to computer with Micro USB cable.

（5）Follow steps to install the driver.

# Tools for upgrading firmware

1、Flash Loader Demonstrator

http://code.google.com/p/afrodevices/downloads/list

2、Latest baseflight firmware

https://github.com/multiwii/baseflight/tree/master/obj

Please refer to the above links to download and install flash loader demonstrator and latest Baseflight firmware.

Note: Baseflight can be download at the above link and also can be download by configuration software directly. Please follow the below steps to download the latest Baseflight firmware:

（1）Open Baseflight configurator software, connecting to flight controller is not necessary.

（2）Click "Firmware Flasher" (Fig 1).

（3）Click on " Load Firmware (online)"  (Fig 2)

（4）Click "Loaded Online Firmware: (…bytes)". (Fig 3)

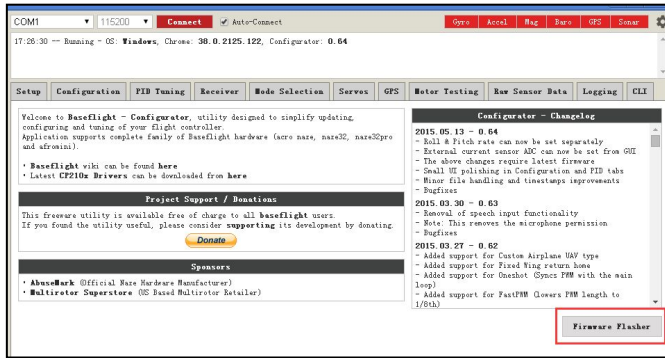（5）Choose the file destination and save the latest firmware.

**Fig 1**


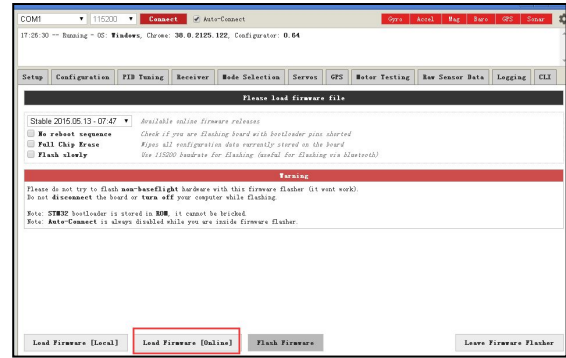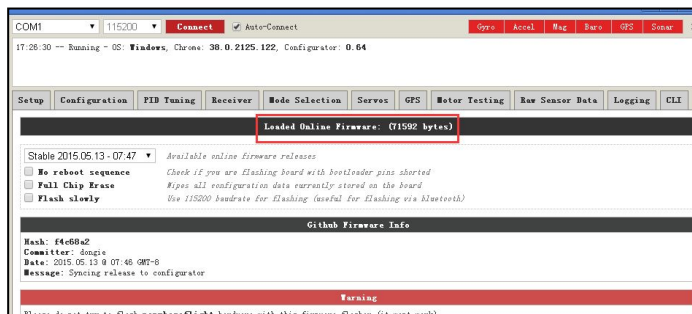**Fig 2**


Fig 3

# Entering Bootloader mode

Before upgrading firmware, please make sure the controller must be in "Bootloader Mode".

（1）Using a tweezers or metal tool to short connect the "BOOT" pad on the control board.

（2）Power the control board by USB, only POWER light will on at this time. Then disconnect the "BOOT" pad. If during this period the other 2 lights lit or cannot continue to the next step, please repeat the operation.

# Firmware Upgrading

After fight controller enters Bootloader mode, firmware can be upgraded.

（1）Run Flash Loader Demonstrator software.

（2）Select COM port, baud rate select 115200, and then choose "parity" EVEN. See Fig 4. Then press "Next".

（3）Select 128K and then press "Next". See Fig 5.

（4）Download setting and select file. See Fig 6.

－Select Download to device.

－Select the latest firmware (.hex file) at the file loading box.

－Select "Erase necessary pages" or" Global Erase".

－Select "Jump to the user program".

－Press "next" to download upgrade firmware.

（5）After download complete. During download, there will be download progress bar. When download progress bar turns green from blue, that means firmware download completed. The indicator light on flight controller will indicate to
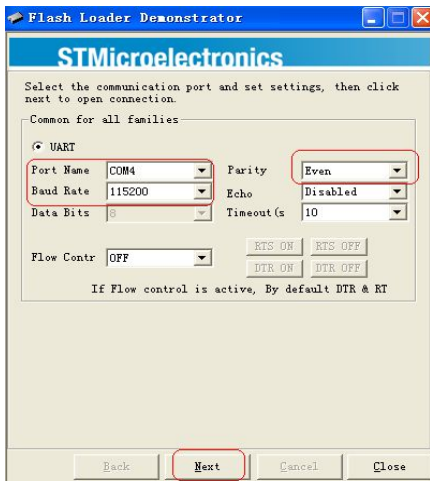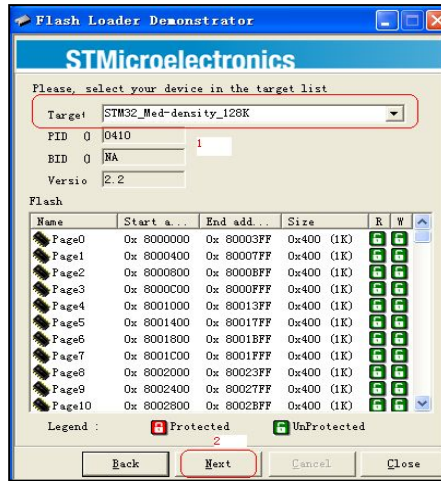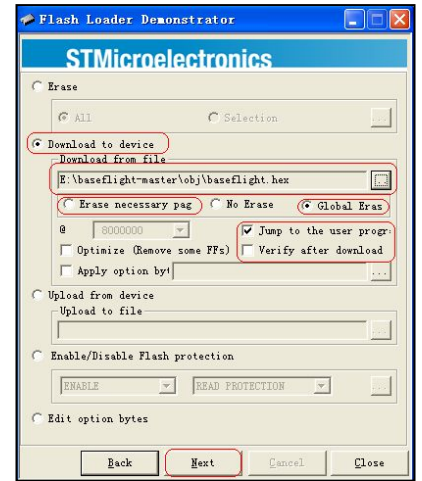
initialization.



**Fig 4**



**Fig 5**



**Fig 6**