

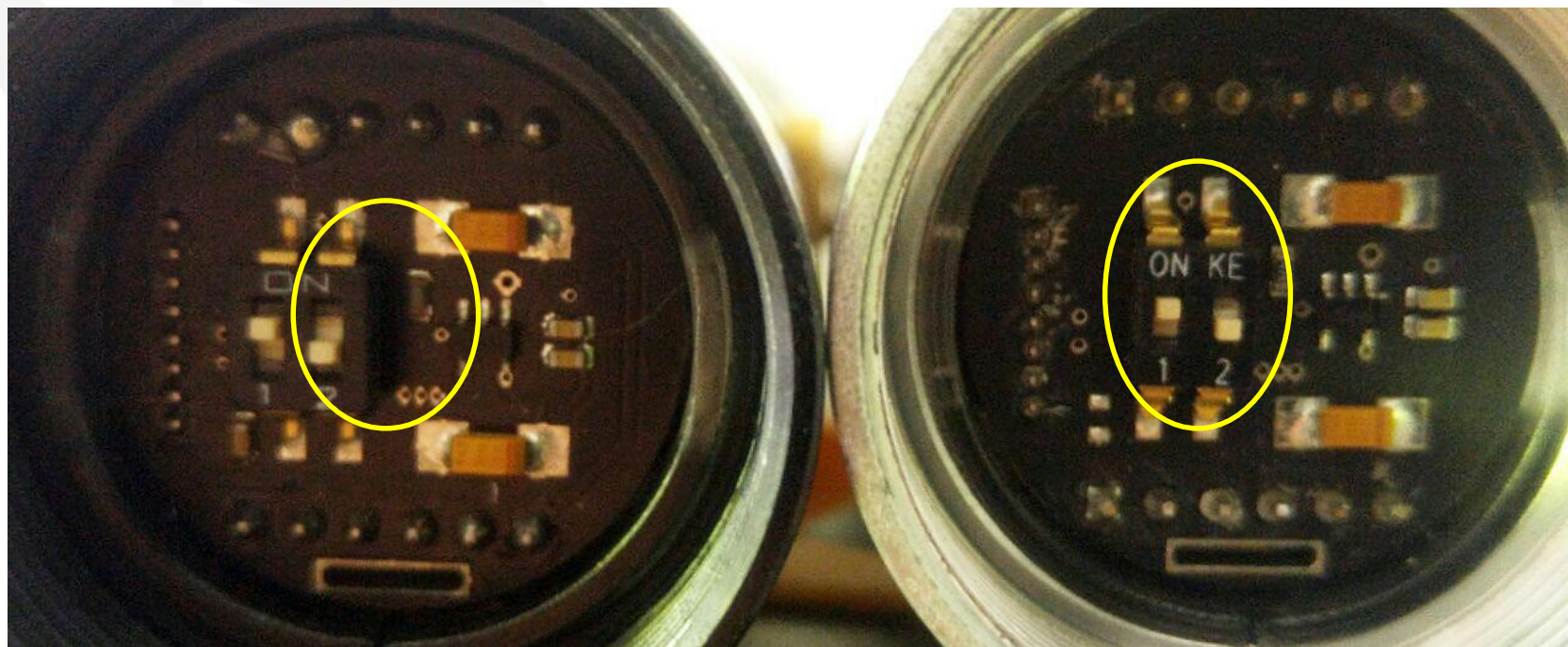
# FIAMMANERA FIRMWARE FLASH PROCEDURE v.1

## *DEVELOPER NOTES:*

- a) Enhanced firmware hex36 requires use of FiammaManager v14 or higher*
- b) Standard firmware hex31 requires use of FiammaManager v10*
- c) Flash procedure can be used to either upgrade or downgrade firmware versions*

## STEP 1: Recognize FiammaNera generation to know what procedure you must follow.

*Unscrew Polaris pommel and check FiammaNera board type*



**First generation → use FLIP program  
to install hex file (STEP 2a);**

**October 2016 (or later) CE Marked  
generation → use FiammaManager  
v14 to install hex file (STEP 2b);**

**REMINDER:** Fiammanera™ is equipped with two dipswitches allowing you to select mode of use and to energize / de-energize the electronics.

*Keeping the microUSB port on your right, three different modes.*

**ACTIVE:** move Switch 1 in low position first, then repeat the same action with Switch 2;

**OFF:** move Switch 2 in high position (position of Switch 1 is irrelevant). Select this mode to minimize power consumption during stand-by. OFF position is mandatory in case of flights;

**BOOT:** Use only when loading a new Firmware (hex).

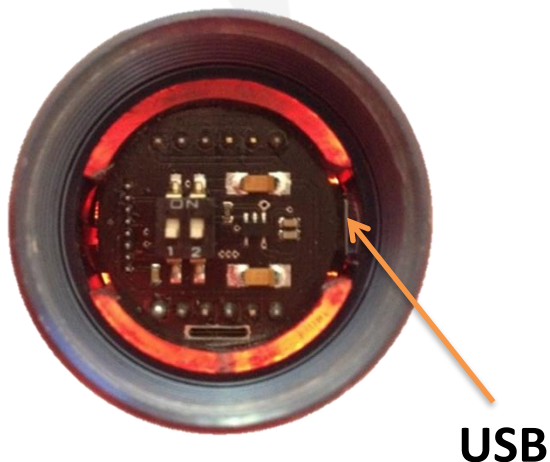
(1) move Switch 1 in high position,

(2) move Switch 2 in high position (this necessary step was not mentioned in the previous instructions);

(3) move Switch 2 in low position.

**NOTE:** If green LED activates, you have one FiammaNera CE Marked.

**ACTIVE**



**OFF**



**BOOT**



## STEP 2a: Firmware installation procedure for first generation

1. Download third party program FLIP using the link <http://www.atmel.com/images/JRE%20-%20Flip%20Installer%20-%203.4.7.112.exe>
2. Backup any special LED settings before flashing the new firmware, the settings will be overwritten (Sound files will not be affected);
3. Put dipswitch in BOOT position. Move switch “2” as after “1”.  
***NOTE: if blade LED becomes green, you are on the wrong procedure.***
4. Connect FiammaNera board to PC;
5. Open Flip software and click on the processor Icon, selecting ATXMEGA128A4U;
6. Click on the cable icon and confirm clicking “OPEN”;
7. Open “FILE” menu and select the desired Firmware version;
8. Click “RUN” (bottom left);
9. If the procedure ends correctly, the “VERIFY PASS” message appears;
10. Restart the Polaris by first bringing Dipswitch 2 to “NO” position and then Dipswitch 1 to “1” position following by Dipswitch 2 in “2” position;

NOTE: Saber parameters need to be reconfigured (see Operation Manual) connecting it with FiammaManager. The memory map has been re-assigned.

## STEP 2b: Firmware installation procedure for CE Marked generation

1. Move FiammaManager “.exe” file on your pc;
2. Backup any special LED settings before flashing the new firmware, the settings will be overwritten (Sound files will not be affected);
3. Put Polaris into ACTIVE mode;
4. Connect Polaris to PC;
5. Open FiammaManager v14;
6. Select [SetUp] mode in “Fiamma Status” box;
7. Click [FW] button on the top right corner of the screen and confirm;
8. After that the dialog box appears, prompting “Please put the dipswitch in position in BOOT position **without** disconnecting Polaris from your PC (**NOTE: if blade LED DOES NOT become green, you are on the wrong procedure!**) and then press [OK]. Disregard serial number, hex36 is a free upgrade;
9. Click [File] button and select the “.hex” file containing the firmware and press [Open] in the dialog box;
10. Click [Erase Flash]. Blade LED turns blue;
11. Click [Program] and wait until FiammaManager pop up advises that programming is finished (Flashing of the firmware requires normally 4 minutes);
12. Restart the Polaris in ACTIVE mode;

NOTE: Saber parameters need to be reconfigured (see Operation Manual) connecting it with FiammaManager. The memory map has been re-assigned.



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