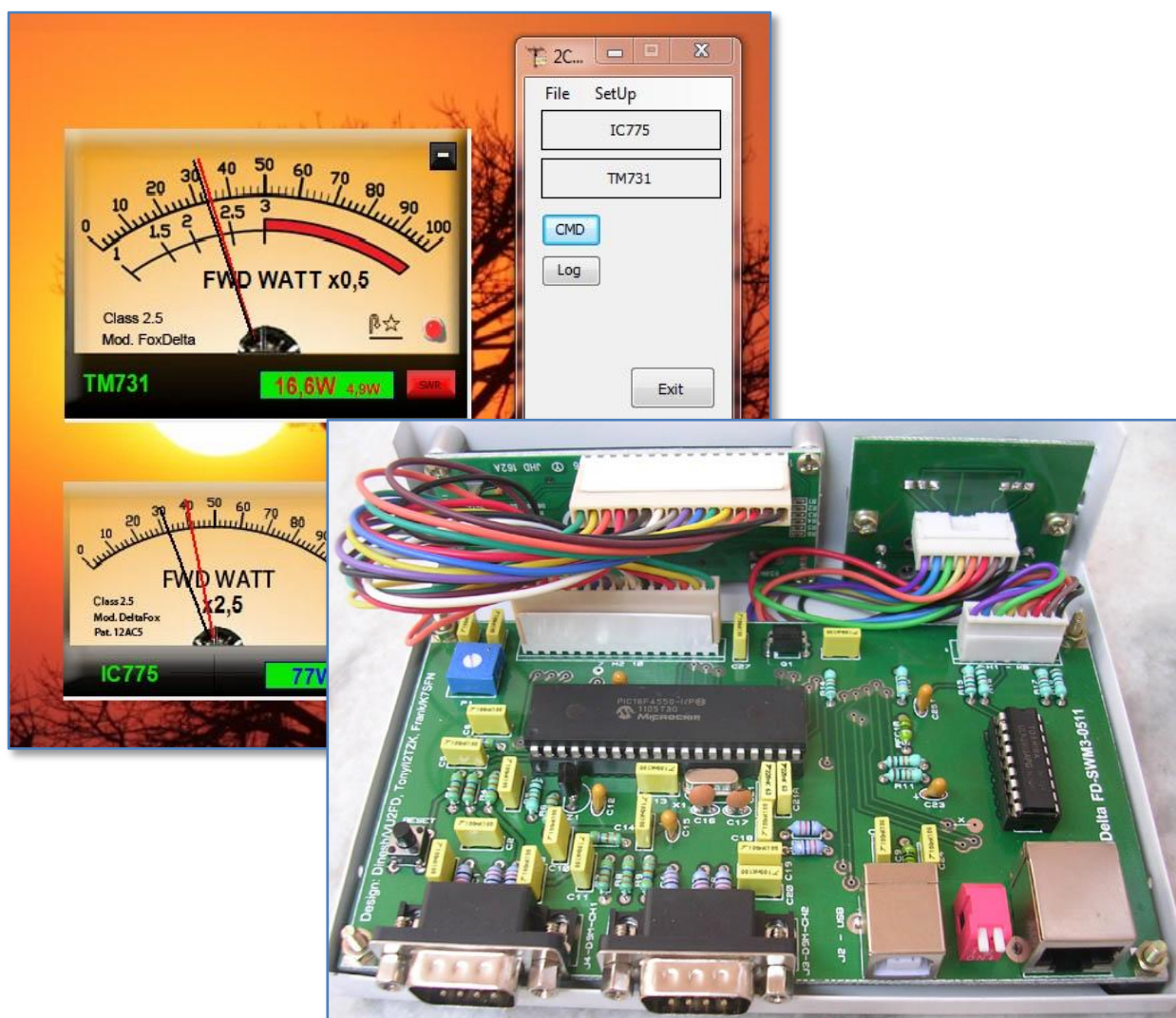




Fox Delta

Amateur Radio
Projects & Kits

SWM3 Firmware UPDATE



September, 2011

UPDATING THE SWM3 LCD UNIT – USER GUIDE

The SWM3 LCD unit is based on Microchip's PIC18F4550 40DIP chip, the component's kit provided by FoxDelta includes the microprocessor programmed and ready to work.

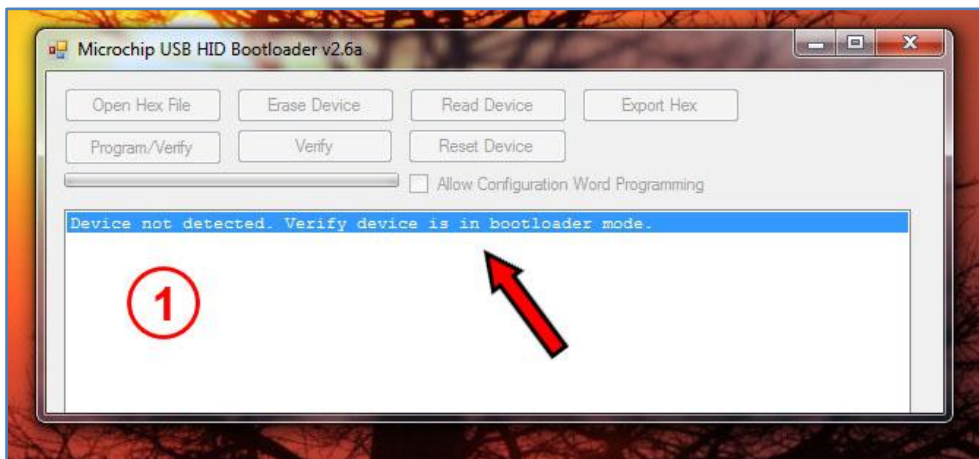
The firmware implements a special function (bootloader provided by Microchip) that allows to update the 18F4550 to a new firmware version via the USB port, **no external pic programmer is required**.

Please refer to : <http://www.microchip.com> for any detail about the hex code linked to the SWM3 firmware, any further information and copyright notice.

The program "HIDBootLoader.exe" (provided by Microchip) will be used, this is the Windows interface to access the bootloader function and flash the microprocessor memory.

To program from scratch the flash memory of the 18F4550 a **pic programmer is needed**, please burn the file: **SWM3 FW Vx.xx_FULL.hex** included in the new releases.
This file already includes a copy of the bootloader.

- Create a temporary folder and copy/unzip there the files:
 - HIDBootLoader.exe
 - **SWM3 FW Vx.xx_UPDATE.hex**
- Remove the USB cable SWM3 – PC
- Navigate to the folder where the program “HIDBootLoader.exe” has been unzipped and launch it.

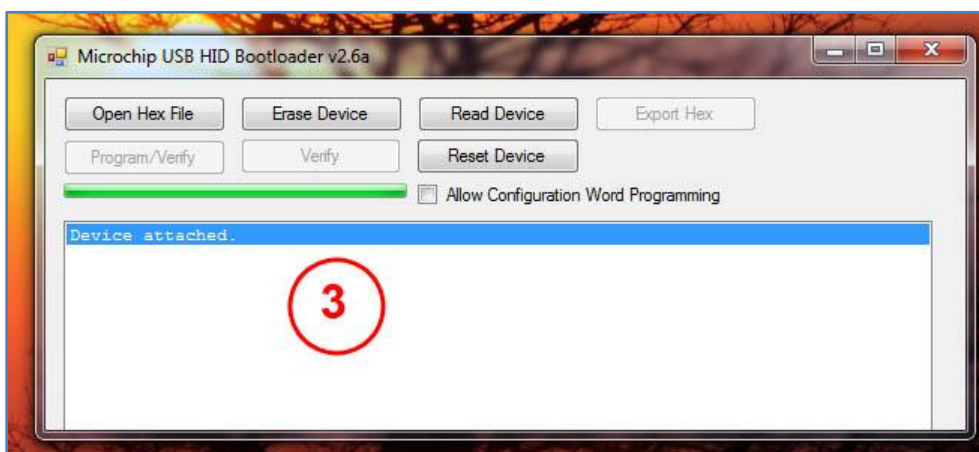
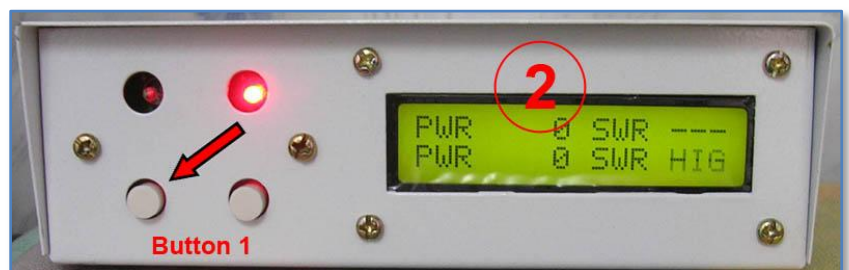


Notice:

All buttons are disabled.

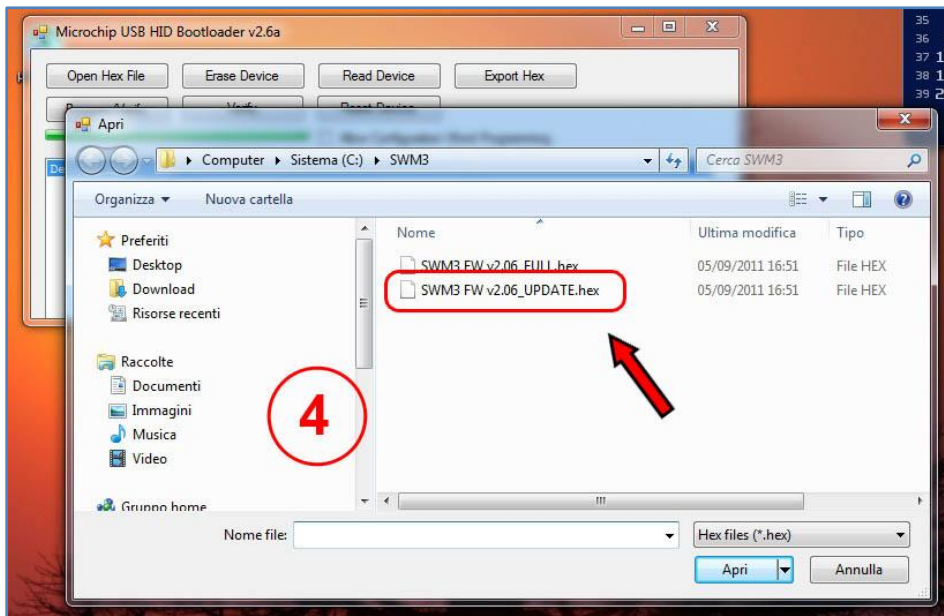
Message: “Device not detected.....” is presented.

- Press Button B1 on the LCD unit
- **While the Button B1 is pressed** plug in the USB cable (or press the Reset switch)



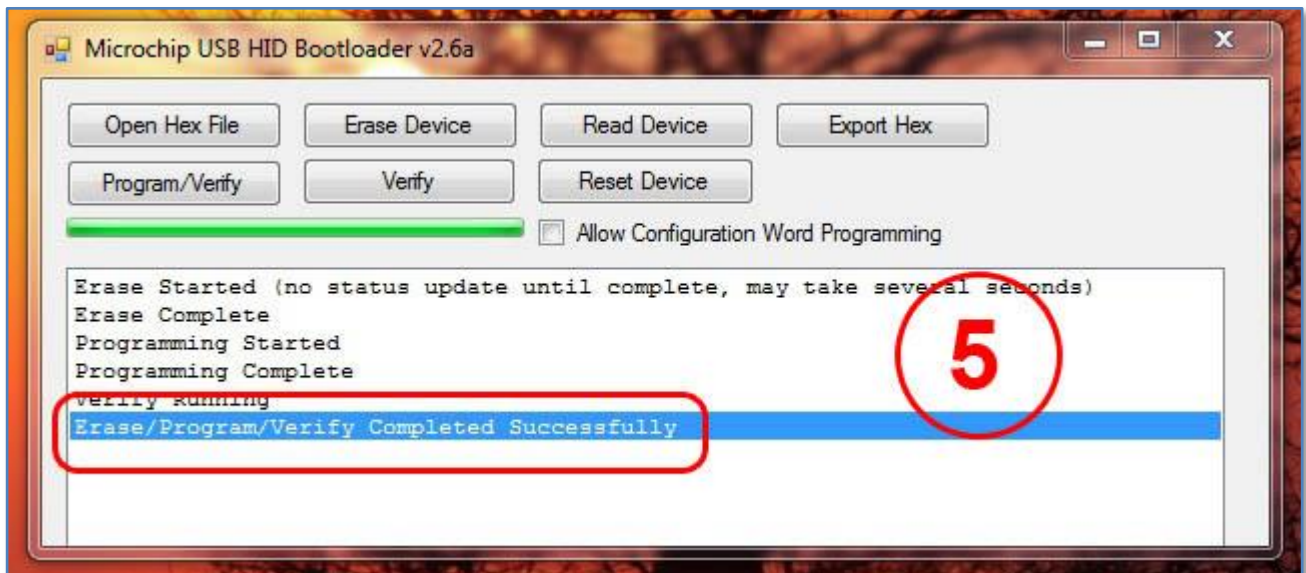
The green line starts, the SWM3 is recognized : “Device attached” and buttons are enabled.

- Click the button “**Open Hex File**”, navigate to the folder where the new firmware hex file has been unzipped and select it.



Be aware of the UPDATE file selection.

Click the button “**Program and Verify**”, **do not remove the USB cable or power off the LCD unit during this step, wait for the message: “Erase/Program/Verify Completed Successfully”**



Press the button “**Reset Device**” to restart the SWM3 then verify on the LCD the firmware version.