

## UPDATING THE LCD UNIT – USER GUIDE

If you are assembling a **new LCD Unit** or you want to program from scratch the flash memory of the 16F877A use the file **2ChWM-x.xx\_FULL.HEX** and an external **microcomputer programmer device**.

If you already have a working LCD Unit version **v1.06** or later and you want to update to a new version, you can use the **Serial link** between the pc and the LCD unit, no external programmer is needed.

The program “tinybldWin.exe” will be used, this is the windows interface to access the Pic Bootloader asm code linked to the LCD firmware.

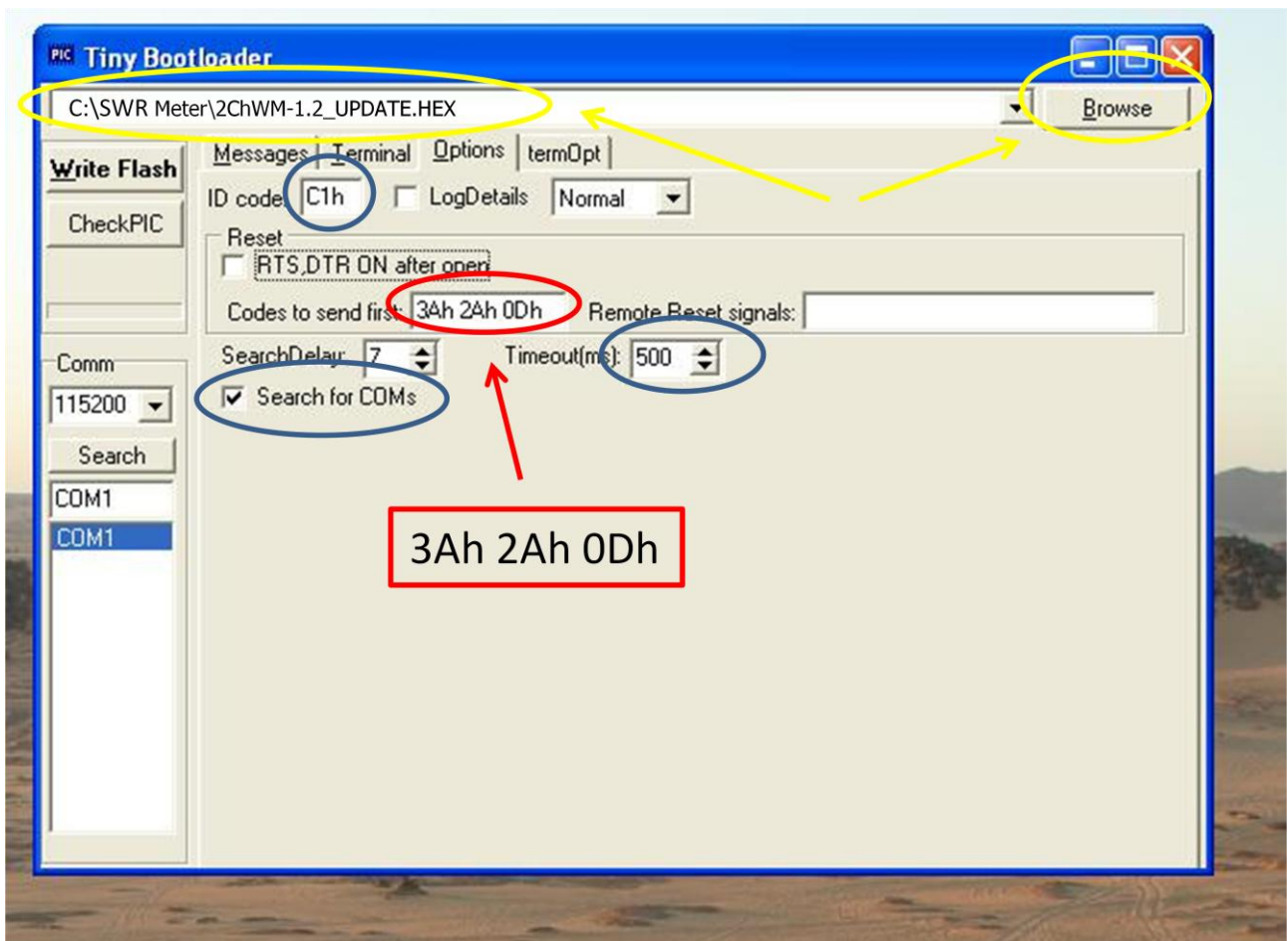
Please refer to: <http://www.etc.ugal.ro/cchiculita/software/picbootloader.htm> for any further information and copyright notice.

## 1. Create a temporary folder and copy/unzip there the files:

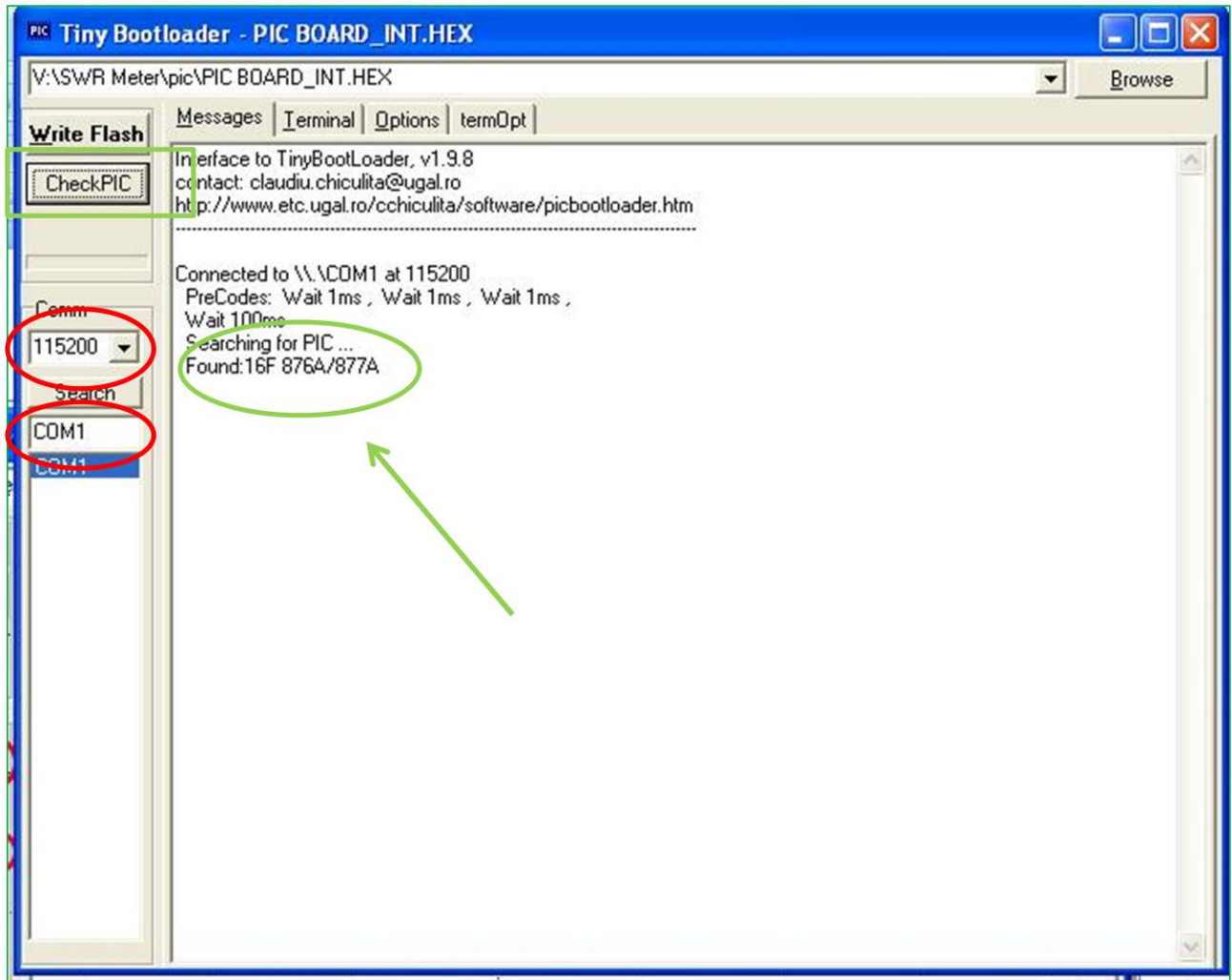
- tinybldWin.exe
- 2ChWM-x.xx\_UPDATE.HEX

## 2. Run and configure the program “tinybldWin.exe”:

- Select the tab “Options”.
- Enter “C1h” in the field “ID Code”.
- Enter “3Ah 2Ah 0Dh” in the field “Codes to send first”.
- Check “Search for COMs” and Timeout = 500.



- Click “Browse”, navigate the folder you create at step 1 and select the file 2ChWM-x.xx\_UPDATE.HEX
- Select “Baud Rate ” to 115200.
- Select the Com Port where your LCD Unit is connected.
- Select the tab “Messages”.
- Click “Check PIC” and verify that the 16F877A has been found.



### 3. Update the firmware

- **DO NOT power off** the LCD Unit, reset, disconnect the serial cable or terminate the PC program before the programming process ends. Aborting will leave the 16F877A in an unusable status and you must program it from scratch with a programmer device.
- Click “Write Flash” to start the programming process.
- When programming successfully finish you should read the message “**WRITE OK** at ...” and the LCD unit automatically restarts.
- Verify the new f/w version on the LCD Unit starting logo.

