

VNWA 3 & 3E - Firmware 5.16 or 5.19 to Firmware 5.22 Upgrade procedures

This document shows a procedure how a VNWA 3 or 3E with current firmware 5.16 or 5.19 is upgraded to Firmware 5.22.

Firmware upgrades are either done when prompted by:

- i) **Automatic Firmware Upgrade – Wizard** - see below:
- ii) **Manual Firmware Upgrade procedure** - See Page 7 onwards

Both procedures are illustrated in this document.

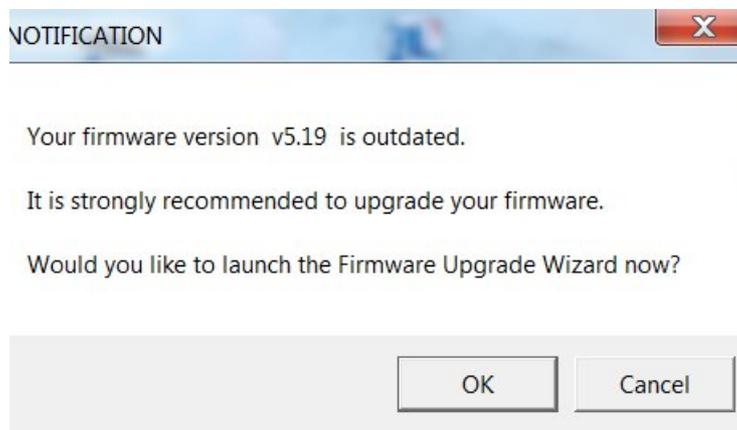
Use the Manual Firmware upgrade procedure to restart a failed 5.21 to 5.22 firmware upgrade.

Prior to performing Firmware upgrade ensure you have:

1. Plug-in charger when using battery powered Laptop
2. Reduce PC activity by exiting all other Windows Applications
3. Unplug USB leads from PC which are not required for VNWA upgrade.

A. AUTOMATIC FIRMWARE UPGRADE - THE WIZARD

From VNWA software version VNWA35.5 on the VNWA firmware version will be checked automatically upon every program start, If the firmware requires an update, the software offers to start the automatic firmware upgrade wizard:

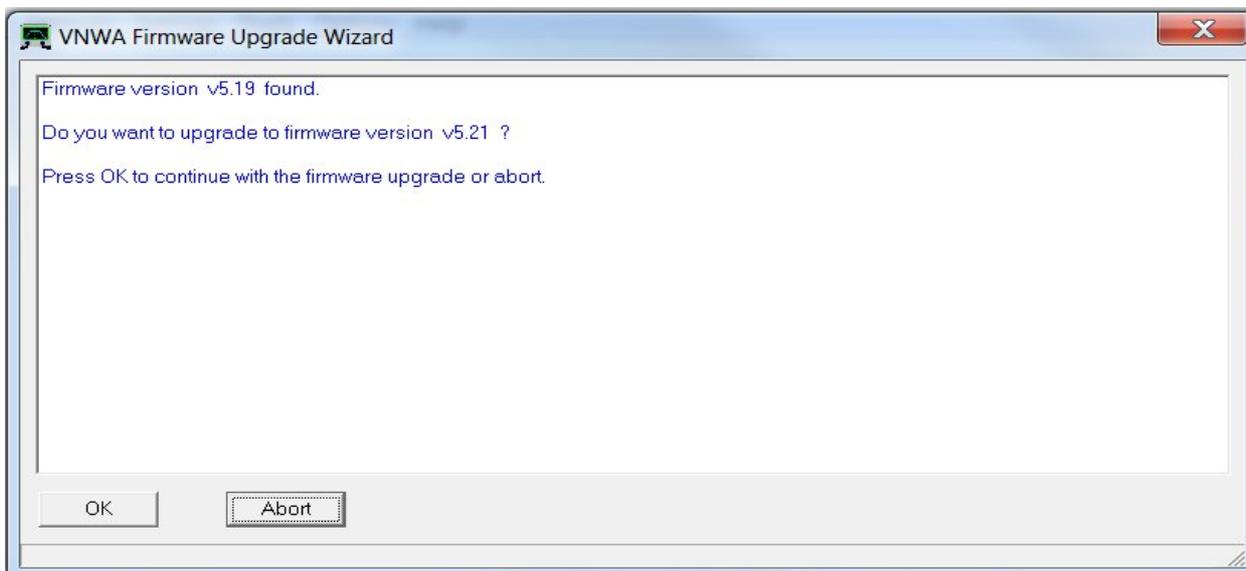


Note that the wizard automatically guides you through the required steps to upgrade your firmware. The wizard also supervises your actions by checking if you follow its instructions and by disabling inappropriate controls.

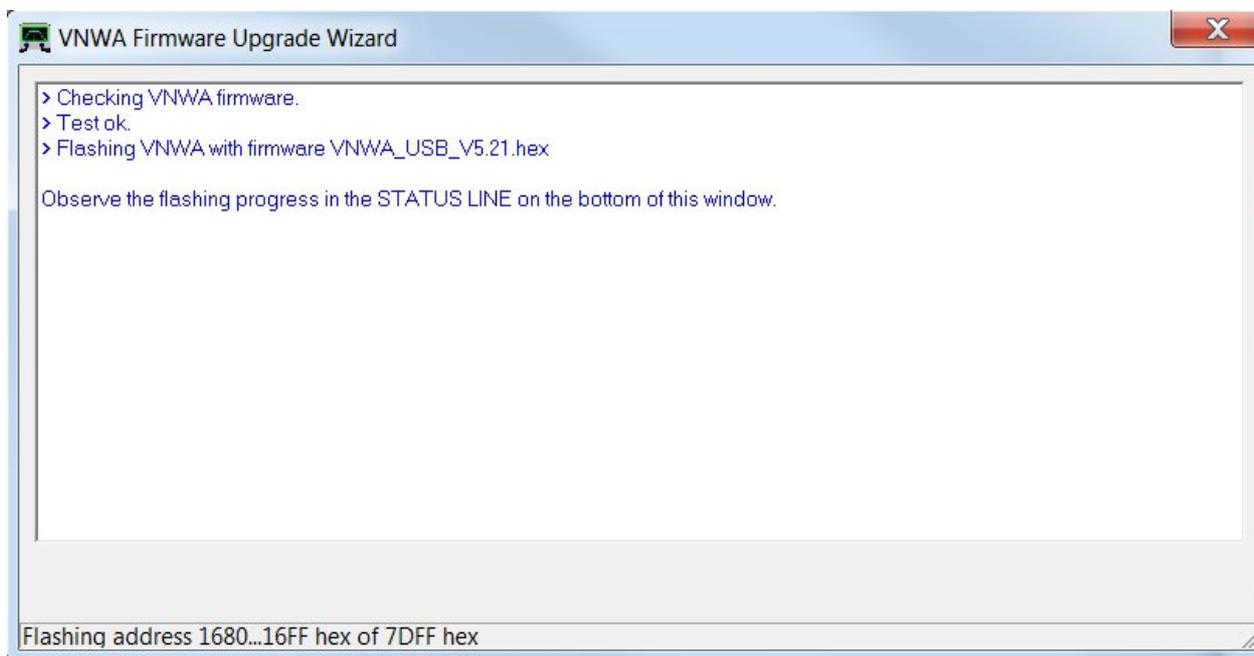
Summarizing, doing a firmware upgrade with the wizard should be self explaining and perfectly safe.

If you agree to start the upgrade process, the wizard automatically copies the correct firmware into your VNWA, provided you have installed VNWA with the automatic self installer. In this case the software knows where to look for the firmware files. If these are not found at the expected location, you are asked to manually locate the firmware hex-file.

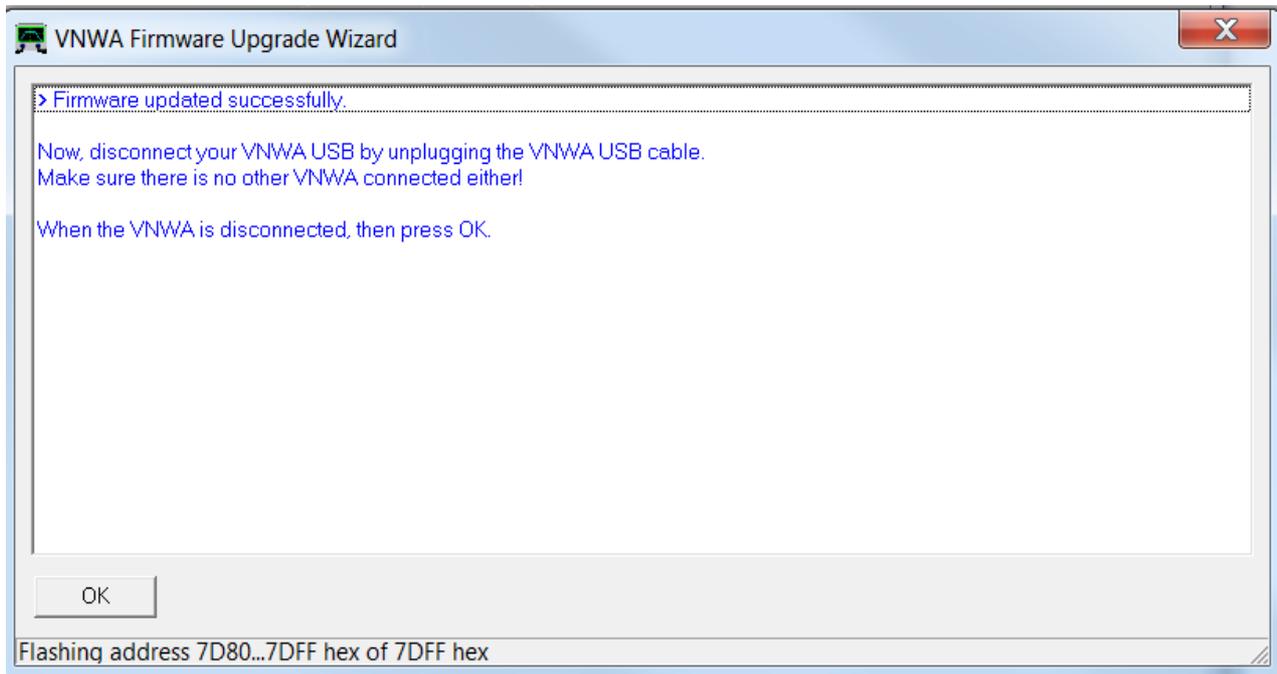
B. After pressing "OK", the wizard is started:



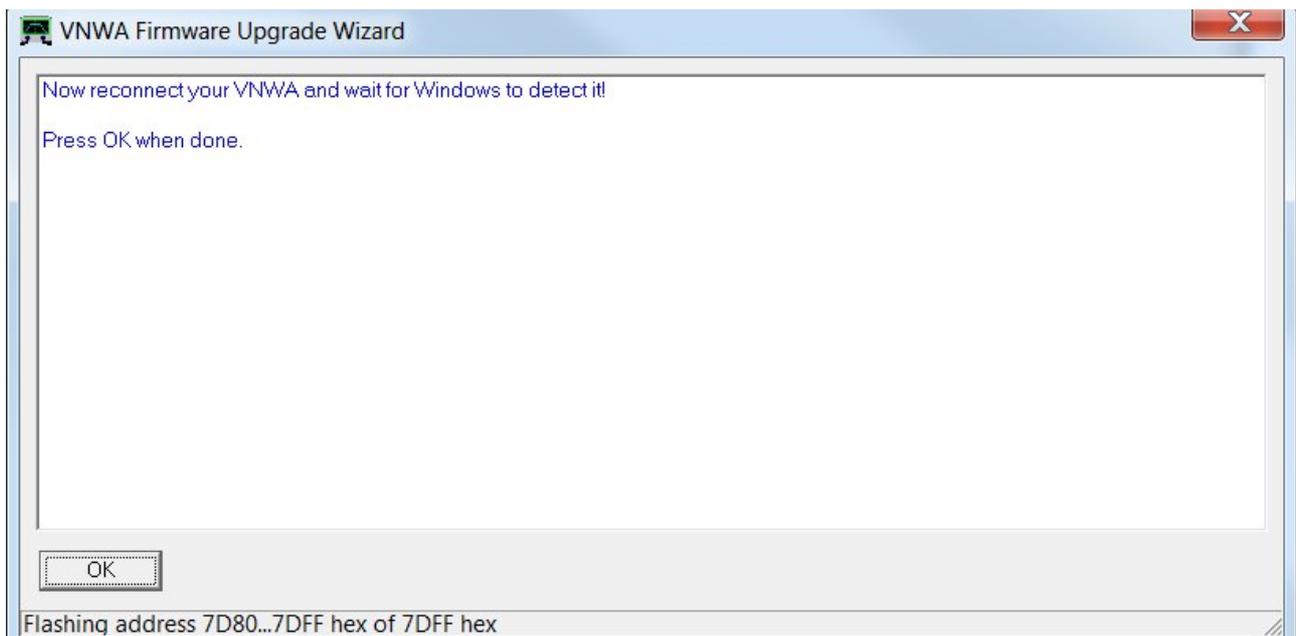
C. VNWA Flashing with 5.21 hex in progress – Monitor STATUS LINE on the bottom of this window



- D. Flashing Complete. Now POWERCYCLE the VNWA by unplugging the VNWA USB Cable. Wait 5-8 seconds and press “OK”



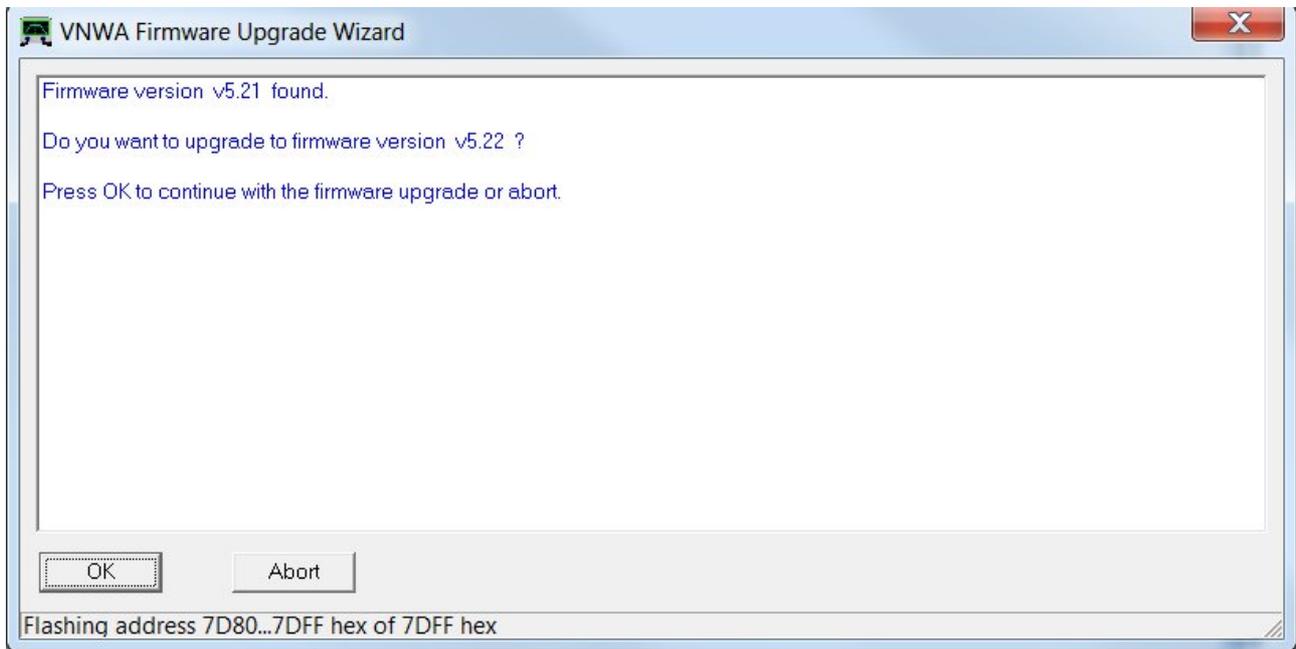
- E. Now reconnect your VNWA and wait for Windows to detect it! (wait about 5-20 seconds)
In event Windows does NOT detect this, then POWERCYCLE VNWA once more by removing the USB Lead, waiting 5-8 seconds and reconnecting the USB Lead again to the VNWA.
Press **OK** when VNWA is detected



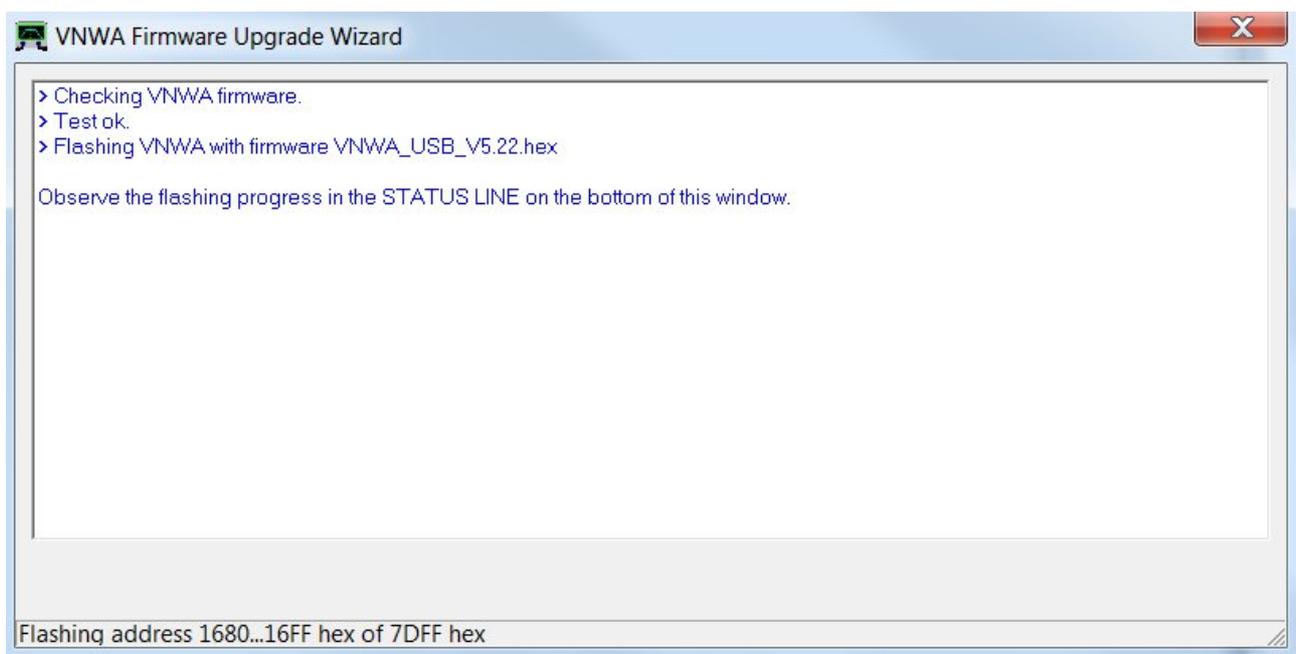
F. VNWA is now upgraded to v5.21.

Note: This is a **non-functional interim firmware** to enable upgrade to v5.22 firmware

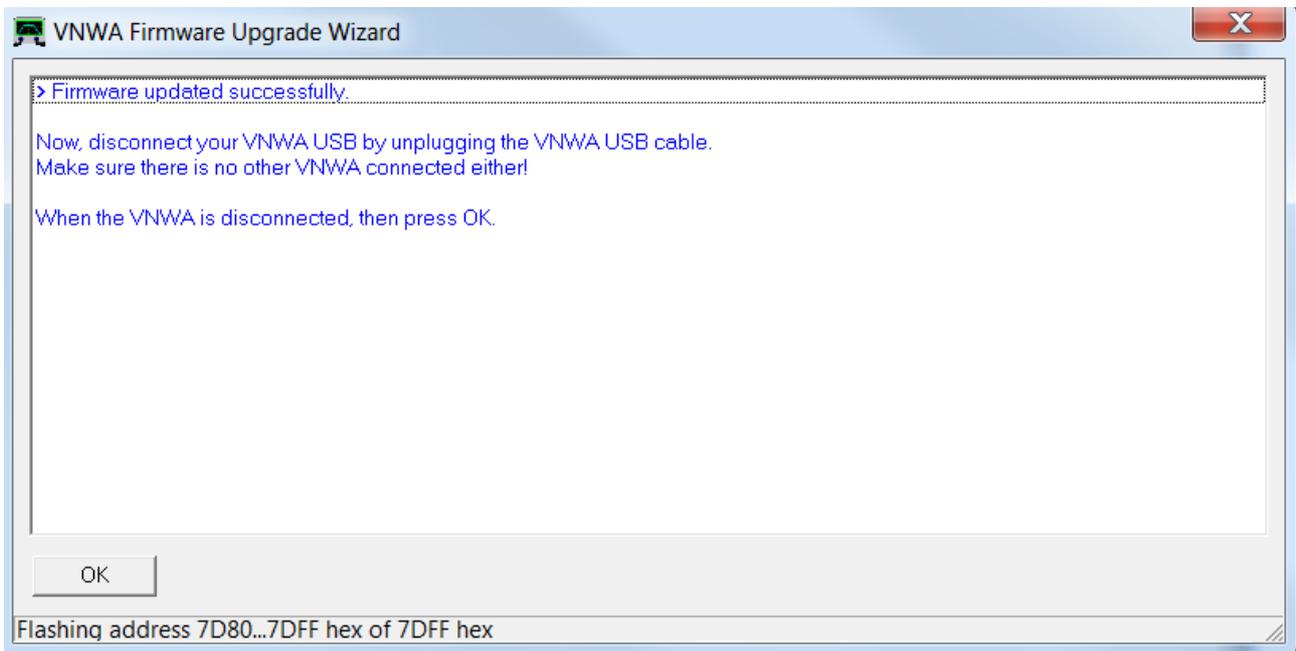
Press “**OK**” to proceed



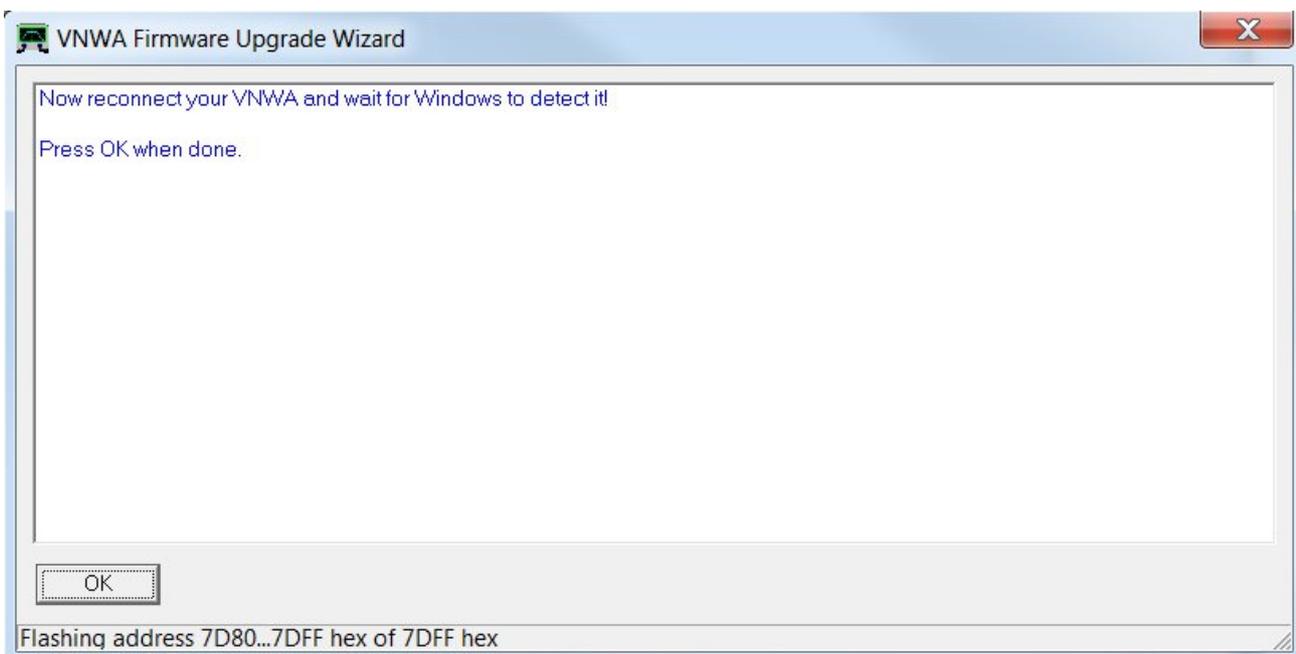
G. Flashing firmware 5.22 in progress, Monitor STATUS LINE on bottom of this window.



H. 5.22 Firmware updated successfully! Now unplug VNWA cable, wait 5-8 seconds and press “OK”

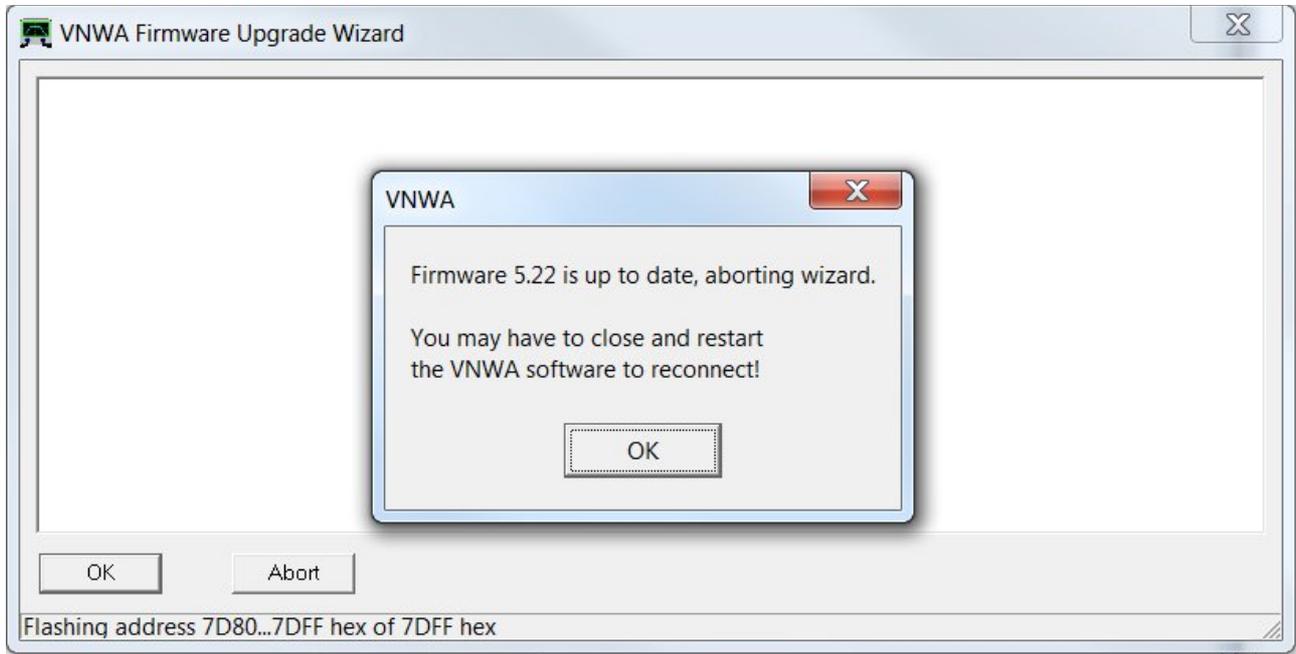


I. Reconnect VNWA USB Cable and wait 5-8 seconds and press “OK”



J. Firmware 5.22 up to date – Aborting Wizard.

Once the flashing process is completed, Once the flashing process is completed, you may need to close and restart the VNWA software"

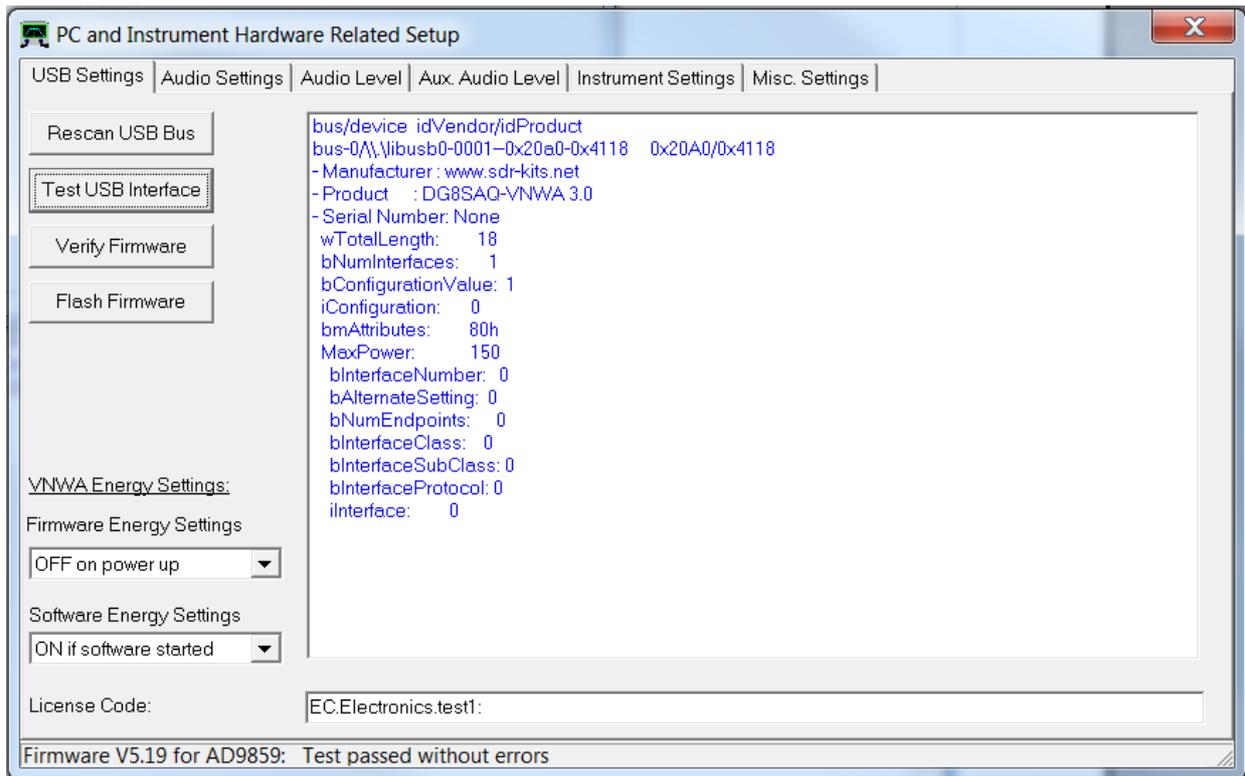


END OF AUTOMATIC FIRMWARE PROCEDU

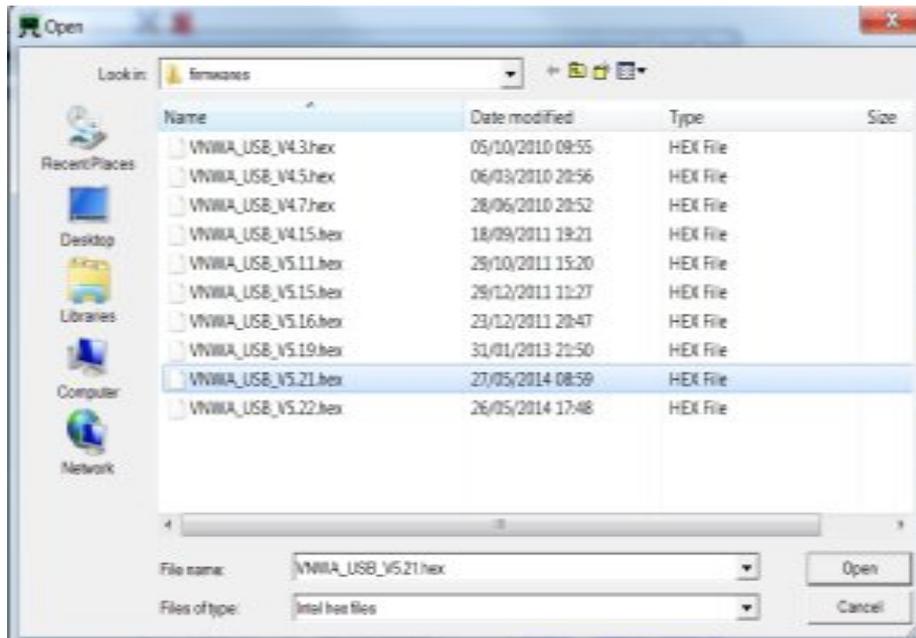
B. Manual Firmware upgrade procedure and recovery of firmware 5.21 to 5.22

This document shows the procedure how a VNWA 3 or 3E with current firmware 5.16 or 5.19 is upgraded to Firmware 5.22 using conventional method. It should also aid in the recovery of a VNWA which fails to connect after an upgrade to 5.21 but failed to upgrade to 5.22

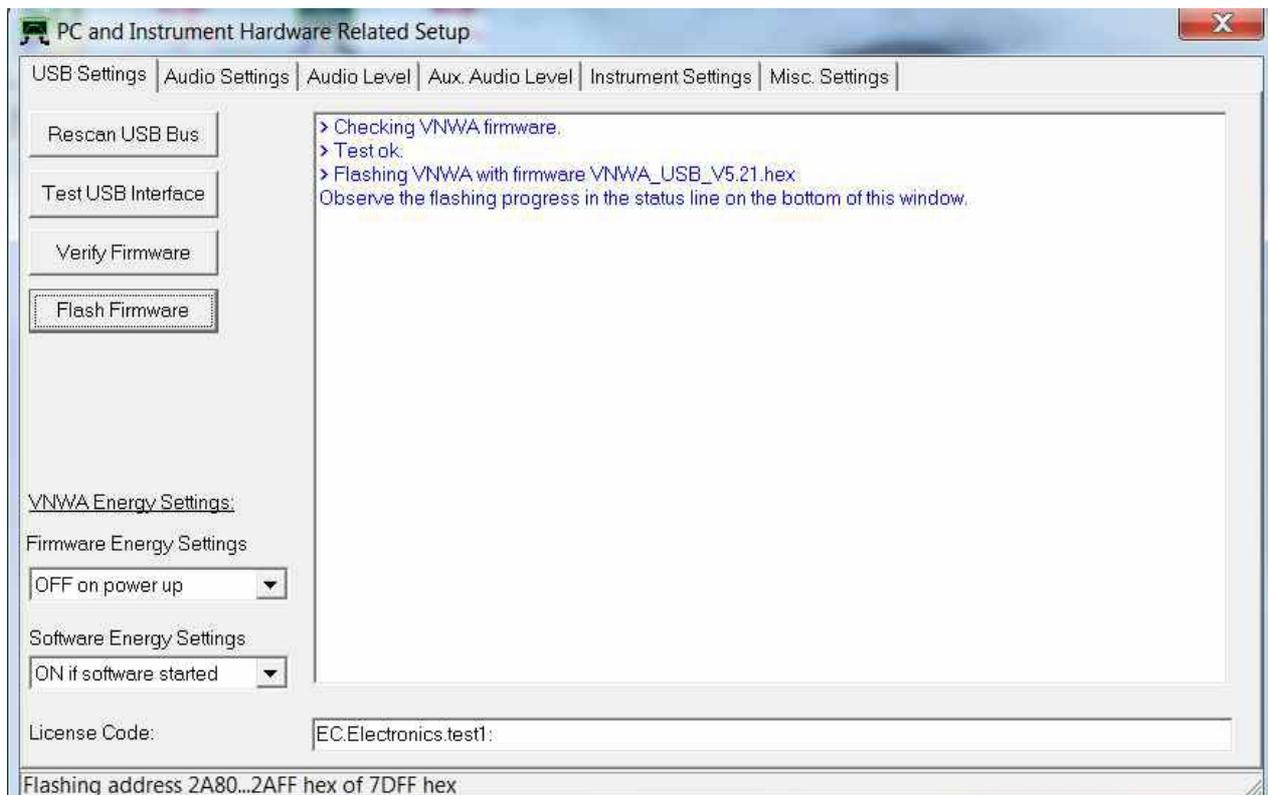
1. Plug in your VNWA and run up current VNWA Application which should be either version 36.4.0 or 36.3.0. Goto “Options”, select “Setup” and “USB Settings”
Press “Rescan USB Bus” and “Test USB Interface” and screen below is displayed.



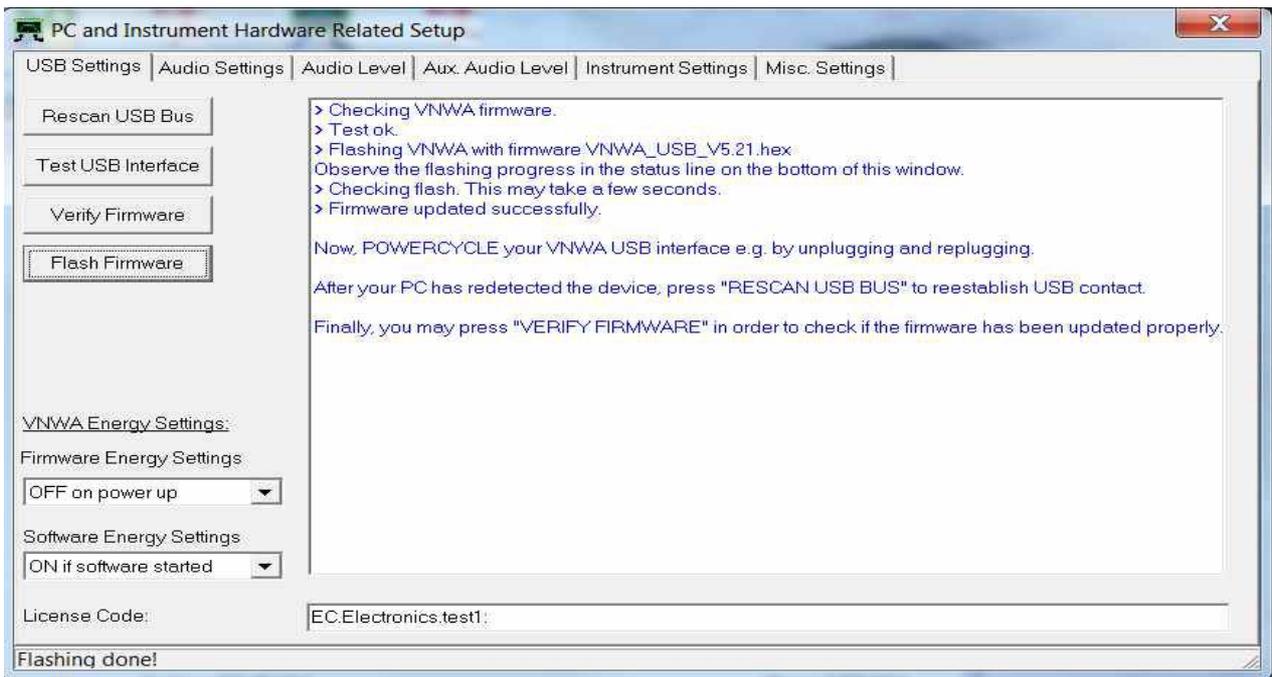
2. Next select “Flash Firmware” and select firmware **5.21** from the list displayed



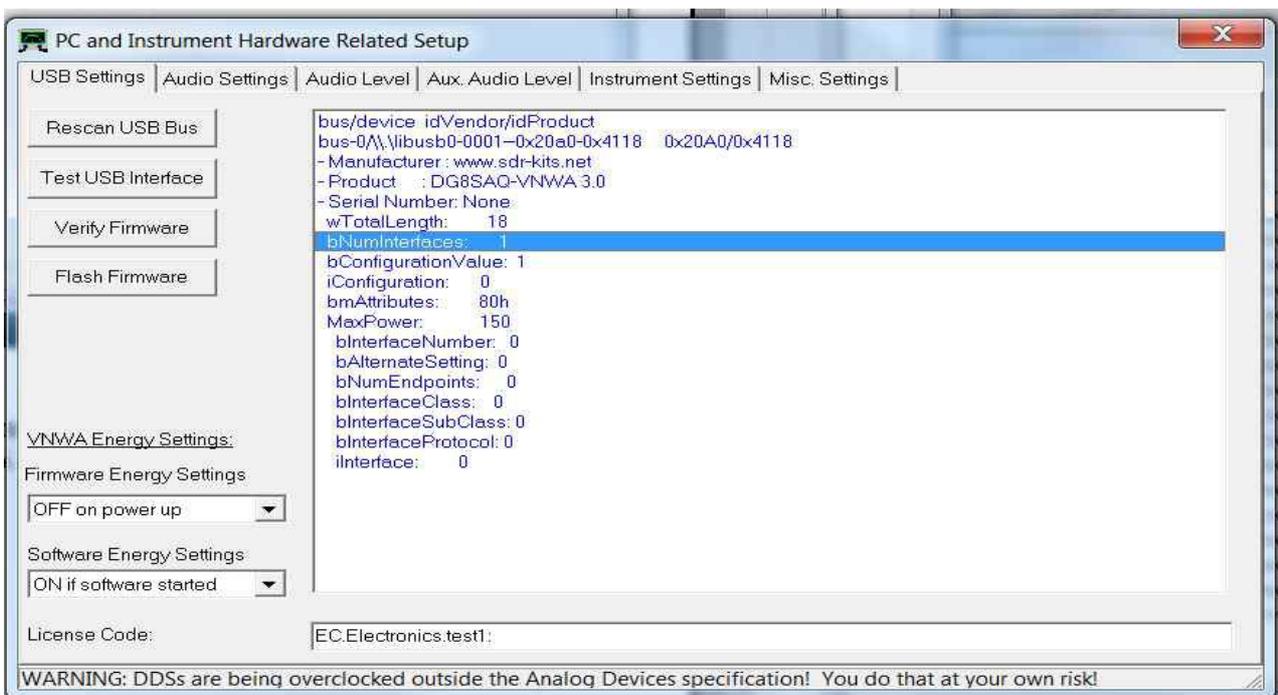
- Open and the 5.21 flash should now start as shown on STATUS LINE on the bottom of the screen below



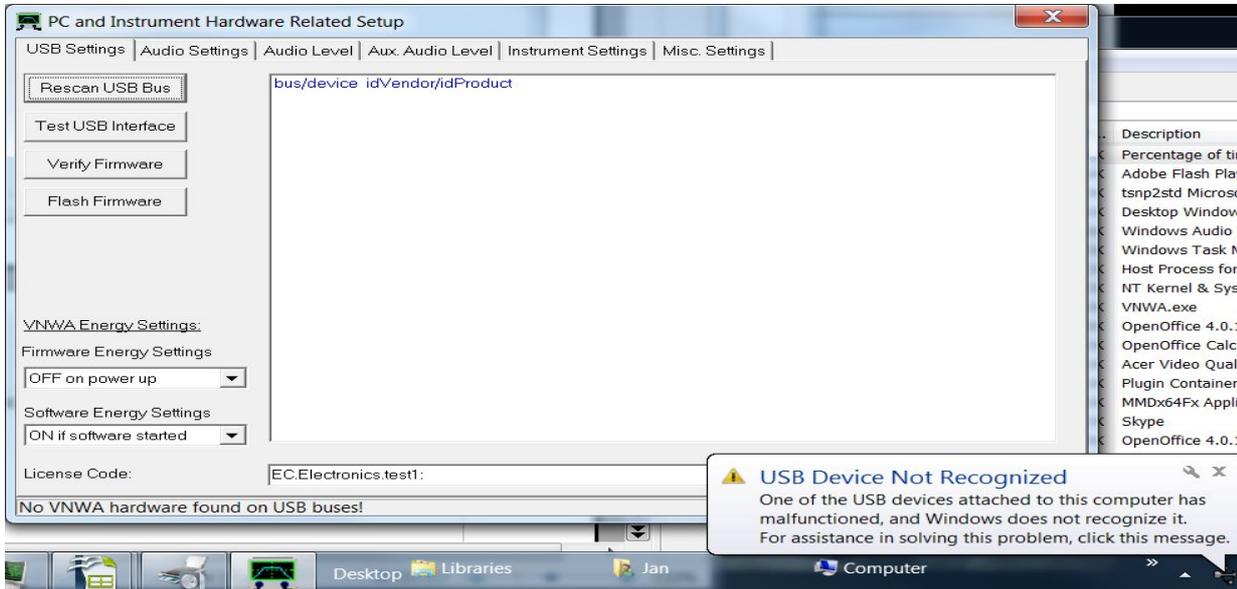
4. After a minute or so 5.21 flash is completed - Read the STATUS information on the screen below.



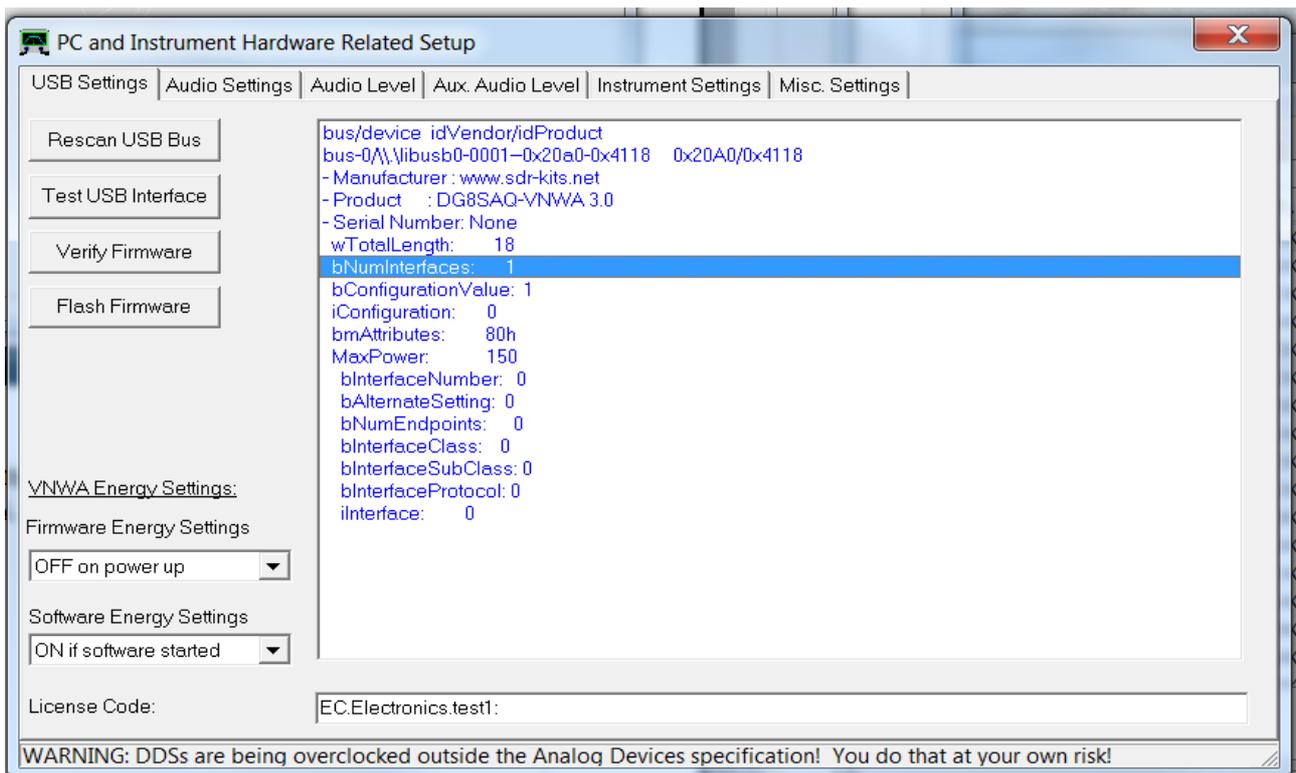
5. Now remove the USB Cable from the VNWA and wait **5 to 8 seconds** before plugging the USB cable back into the VNWA. **Wait again 5 seconds** and Press **“Rescan USB Bus”**
 - a) If the VNWA is recognized as shown in fig 5 below. then proceed to **Step 8**.
 - b) If the VNWA is **NOT** recognized but displays a window **“USB Device Not Recognized”** as in **fig 6**. then proceed to Step 6



- Once the flashing process is completed, you may need to close and restart the VNWA software" A **second VNWA reset** is needed. Remove the the USB Cable from the VNWA again and wait **5 to 8 seconds** before plugging in the USB Cable from the VNWA . Wait another **5-8 seconds** allowing the PC to reconnect to the VNWA and Press “**Rescan USB Bus**”

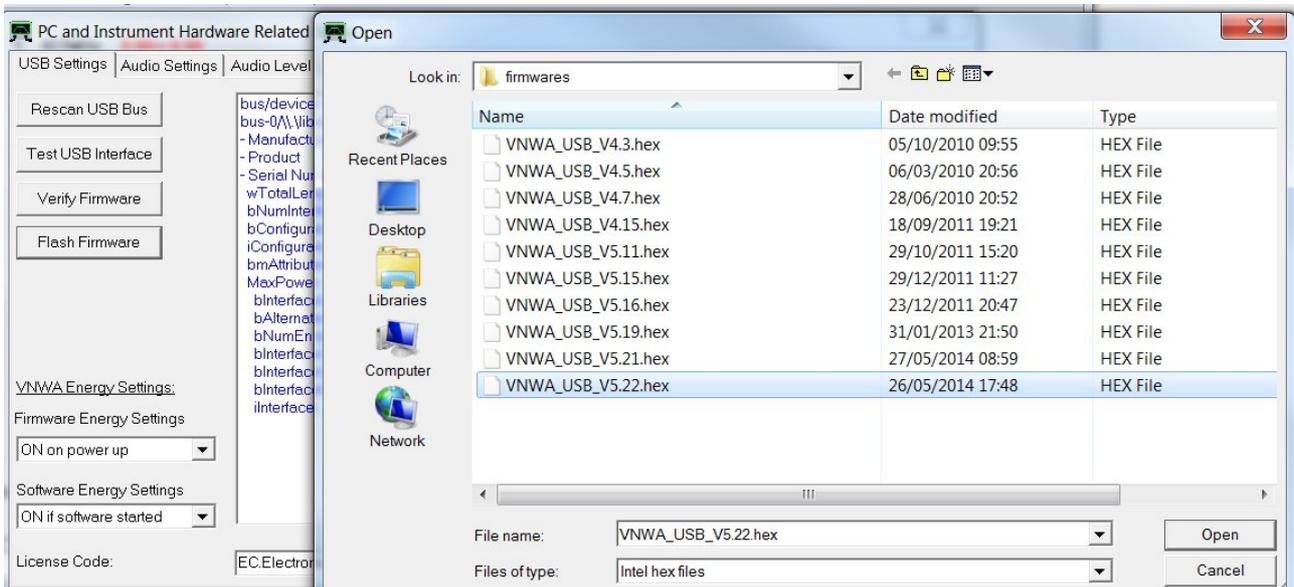


- Once the screen below is displayed the VNWA is now flashed to firmware 5.21. This is a **NON FUNCTIONING RELEASE**. It will **NOT recognize the VNWA license code** It's purpose is only to prepare for the subsequent upgrade to firmware 5.22. Proceed to Step 8 to upgrade from firmware 5.21 to 5.22

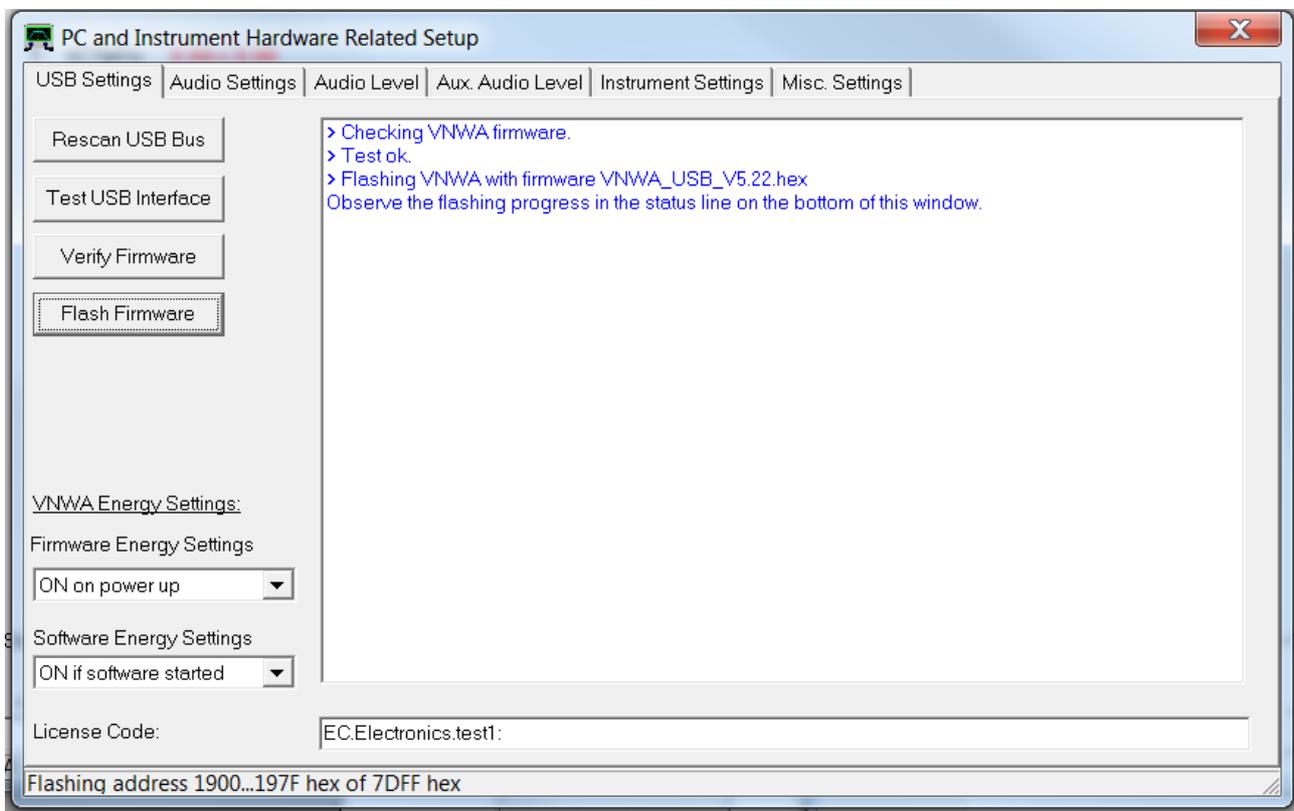


Flashing VNWA 3 3E firmware from 5.21 to 5.22

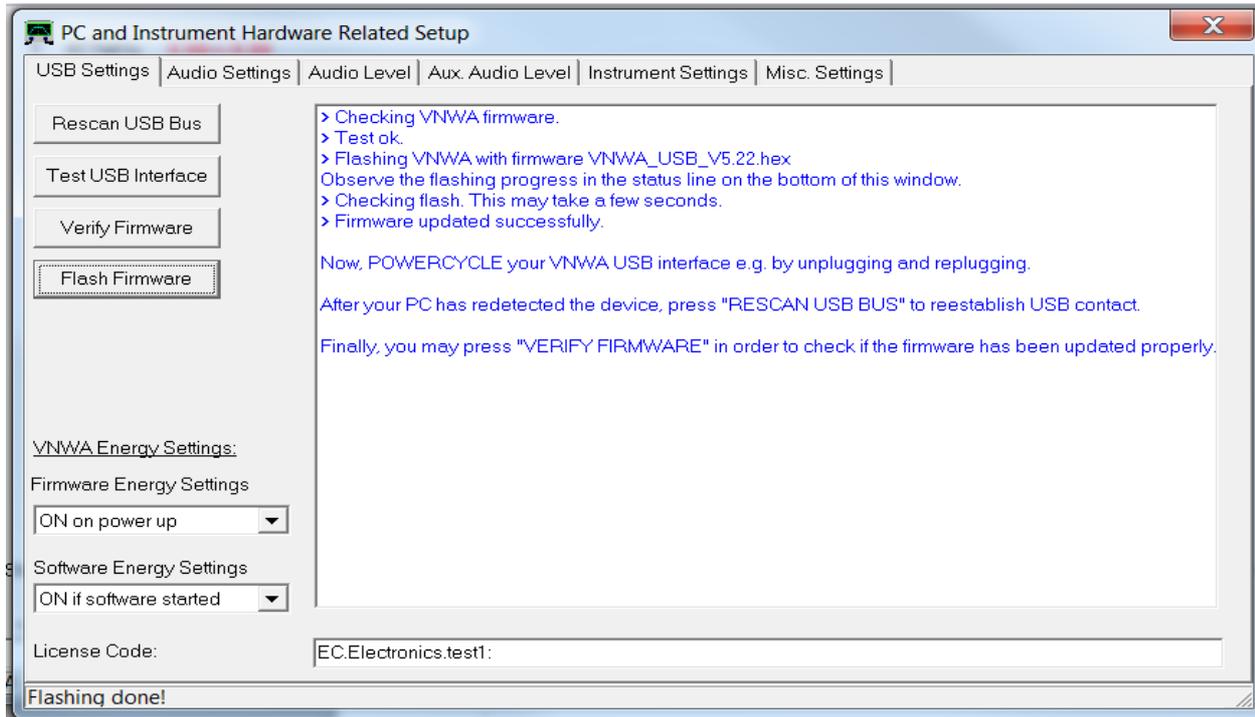
8. After 5.21 firmware is installed and VNWA is recognized on the PC press “Flash Firmware” and select VNWA_USB_V5.22.hex as shown. Press “Open” to select this file



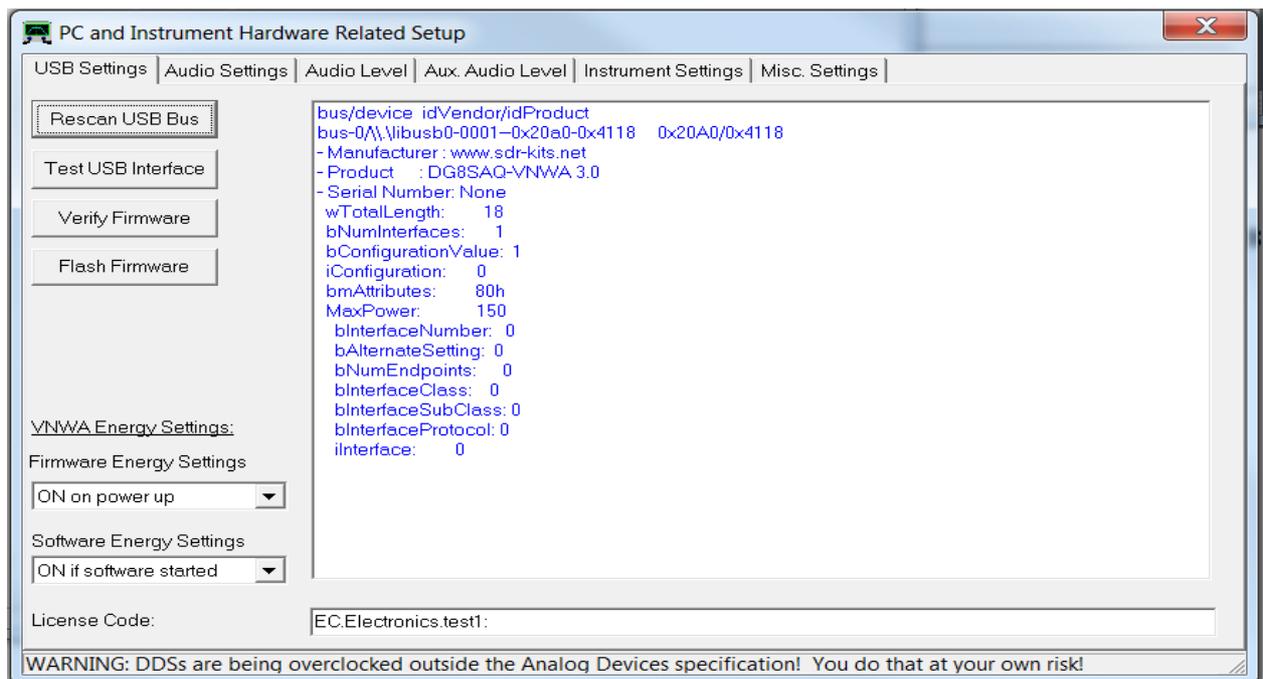
9. Flashing to 5.22 now in progress as shown on the status line on the bottom of the screen



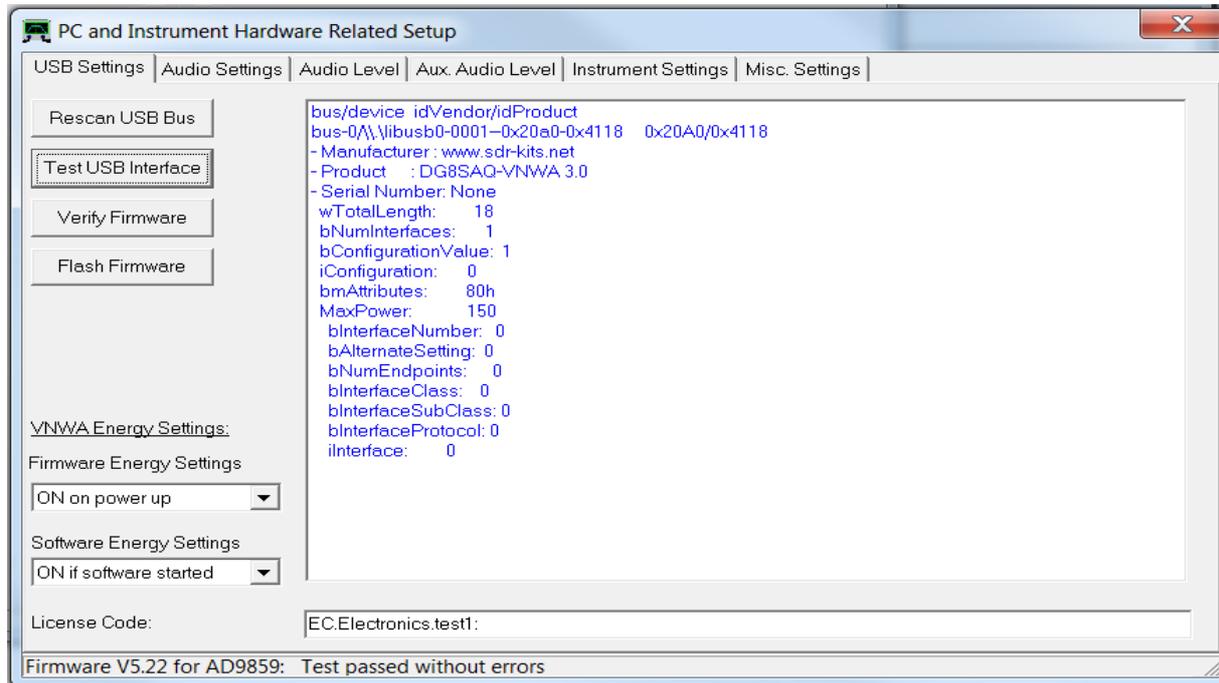
10. Flashing to 5.22 completed. VNWA needs to be POWERCYCLED



11. Now POWERCYCLE the VNWA - Remove the USB Cable from the VNWA and wait **5 to 8 seconds** before plugging the USB cable back into the VNWA. **Wait again 5 seconds** and Press "Rescan USB Bus" and the screen below should be displayed.
- If this screen is **NOT** displayed, then **POWERCYCLE** VNWA a second time until screen below is displayed



12. Now check VNWA – press “**Test USB Interface**” The VNWA License code should be recognized if properly entered and the bottom line of the screen displays ***Firmware 5.22 for AD9859: Test passed without errors.***



END of Manual Firmware upgrade procedure.