

## nanoAVR HD to nanoAVR DL upgrade path Step by Step Procedure

The following steps are to be followed to update a nanoAVR HD to a nanoAVR DL. It involves sending files to us so we can generate a unit Dirac License for your hardware. The whole process may appear complex but hopefully this detailed application note will highlight how simple it is thanks to the infield firmware upgrade!

### STEP1 Converting the nanoAVR HD firmware to nanoAVR DL firmware

1. Open nanoAVR\_Upgrade\_tool.exe.

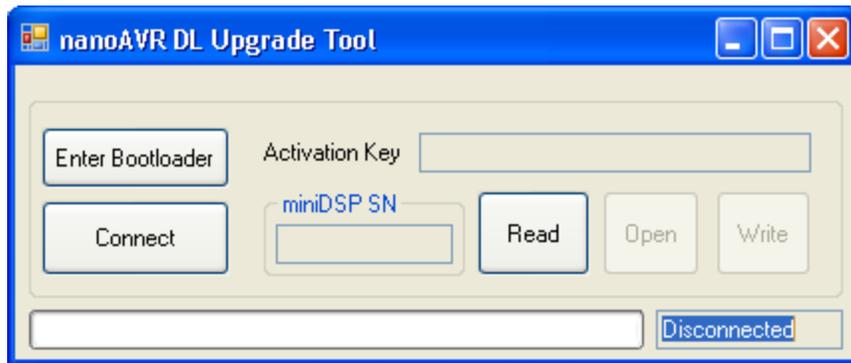


Fig 1. nanoAVR Upgrade Tool interface

2. Connect the Power and USB cable to the nanoAVR.
3. Click "Enter Bootloader".
4. A second tools will pop-up, please follow the document "nanoAVR\_firmware\_update\_procedure2.pdf" that is found in this ZIP file. Please follow page 2 ~ 5, and choose the downloaded hex firmware file for example "nanoAVR\_DL\_v1\_21.hex" (included in ZIP file).
5. You will need to wait for about 2 minutes after clicking "Run Application", until only 1 LED on the Preset, and 1~3 on the Source, Mute, Bypass.

### STEP2: Read out the pre-loaded hardware key from the nanoAVR

1. Open nanoAVR\_Upgrade\_tool.exe.
2. Connect the Power and USB cable to the nanoAVR.
3. Click "Connect", the message box in the bottom right will say "Connected".
4. Click "Read", wait for a message pop-up as Fig 2.
5. Send the file "Read\_<miniDSP\_ID>.bin" to [info@minidsp.com](mailto:info@minidsp.com) with the order number of your order.

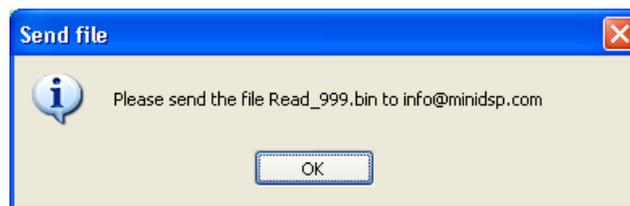


Fig 2.

The following email format is preferred:

SUBJECT: nanoAVR HD to DL update – Order xxxxx

EMAIL BODY: Please find attached the Read\_999.bin file to update my nanoAVR unit.

**STEP3: Programing the Dirac license key**

1. miniDSP will typically reply within 48h (Mon-Fri 9-6pm HK time zone) with attached a file "Write\_<miniDSP\_ID>.lic".
2. Save the license file to your disk drive.
3. Open nanoAVR\_Upgrade\_tool.exe.
4. Connect the Power and USB cable to the nanoAVR.
5. Click "Connect", the message box in the bottom right will say "Connected".
6. Click "Read" and click "OK" in the message box.
7. Click "Open" and select the license file.
8. If the process is successful the activation key will appear as per figure 3.
9. Click "Write" to program the license into the unit.
10. Highlights the Activation Key and Press "Ctrl+C" to copy the key.
11. Close both the nanoAVR DL Upgrade tool and Bridge program.

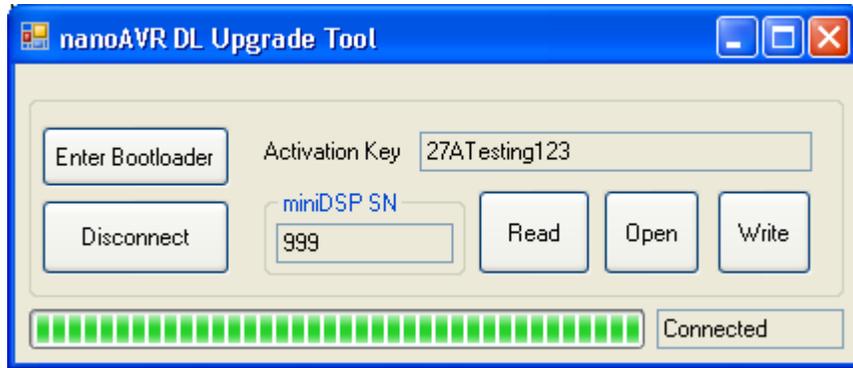


Fig 3. Success – you now have a nanoAVR DL!

**STEP4: Activate the nanoAVR DL**

1. Go to following link <http://www.minidsp.com/dirac-series/activate/#activate>
2. If you have a DIRAC account in the past please select "Existing User".
3. Paste the Activation key and fill in the information and click "Submit".

**STEP5: Reflash the DSP firmware to the nanoAVR DL**

1. Download under the "User downloads" after login with miniDSP account <http://www.minidsp.com/support/userdownloads>
2. Install the nanoAVR DL Plug-in utility.
3. Click "Connect" then "Restore all to default".
4. Wait until the finish.
5. Close the Plug-in.
6. Power cycle the nanoAVR DL.



2. Install and Run the DLCT tools

1. Download under the "User downloads" after login with miniDSP account: <http://www.minidsp.com/support/userdownloads>
2. After installation, run the Dirac Live calibration as described in section 3 and 4 of the user manual: <http://www.minidsp.com/images/documents/nanoAVR%20DL%20User%20Manual.pdf>

**THE END!**