ReadMe.txt TA_DAC8_ServiceTool

The T+A DAC8 Service Tool is a little Software tool to control DAC8 and DAC8DSD via RS232 and to upgrade the firmware. The RS232 control is described in T+A documents „DAC8_RS232“ and „DAC8DSD_RS232“.

IMPORTANT
Before using the DAC8 Service Tool Please read carefully this document.

DAC8 firmware upgrade:
WARNING: Please be aware that re-programming a microprocessor is never without risk. If programming fails it could possibly lead to an incompletely flashed microprocessor. In this case the DAC will not function anymore. It might be necessary to send the DAC to a T+A service shop to properly re-program the microprocessor and to bring the DAC back to life…..

Considerations on updating the DAC8 firmware
In general there is no need to re-program or update the firmware of a DAC8 or DAC8 DSD.
Newer firmware versions do not improve the audio quality.
Newer firmware versions do not bring new features, except some small display modifications.
Newer firmware versions only bring improvements in the following fields:
1.) RS232 control
2.) Service and maintenance functions
3.) „Roon Ready“ feature (in combination with MP8)

So if you are not a T+A service workshop and if you do not intend to control the DAC8 via RS232, upgrading the firmware will bring no benefit and no advantage.

Note Firmware update for „roon ready“
If you use the DAC8DSD together with MP8 as a roon ready endpoint, please use the firmware update function provided via the MP8.

Linux Compatibility, native DSD playback

DAC8 (with Tenor USB receiver)
The DAC8 does not support DSD - neither native nor DoP. There is no possibility to upgrade DAC8 to DSD playback !
DAC8 is supported by Windows with the USB driver from the T+A website.
Since Windows 10 1709 DAC8 is supported natively by Windows – no driver installation needed any more.

DAC8DSD (with Amanero USB receiver)
DAC8DSD supports the following audio formats:
Windows (with installed T+A driver): PCM up to 384/32, DSD up to DSD512
Mac OS: PCM up to 192/32, DSD up to DSD128 (DoP)
Linux (*): PCM up to 192/32, DSD up to DSD128 (DoP) . Please note:
(*) Linux is not officially supported by T+A DAC8DSD but it will work with recent kernel versions (4.15)

Linux and high DSD sample rates (DSD256, DSD512):
Currently (July 2018) there are some efforts to bring support for native DSD mode and high sample rates to the Amanero USB receiver.
This is currently not supported by T+A as the operation of DAC8DSD with Linux sources is not 100% stable under all conditions.

From firmware version 2.60 onwards there is a possibility to re-flash the Amanero USB reveiver with experimantal Amanero firmware. Re-flashing the USB receiver is described in T+A Service Note 143.
For DAC8DSD with firmware < V 2.60 the DAC8_ServiceTool can be used to upgrade the firmware to the latest version.

IMPORTANT NOTICE

When installing original Amanero firmware on a DAC8, the USB PID/VID of the device will be replaced by the Amanero PID/VID.
Currently there is no way back to original T+A PID/VID.
This means that the DAC8DSD will be detected as an „Amanero Combo384“ device by the operating system of the PC.

Windows / T+A USB driver
After installing original Amanero firmware on a DAC8DSD it will be necessary to deinstall the T+A USB driver and to install the original Amanero driver instead.

Note:
Currently (August 2018) used Amanero firmware for DAC8DSD, MP2000R, MP2500R, MP1000E and PDP3000HV:

CPLD firmware: CPLD_for_1080
CPU firmware: DSD512x48x44