T+A

Technische Mitteilungen

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DAC 8 DSD – Betrieb an LINUX PCs

Linux is not officially supported by **T+A** for the use with our D/A converter **DAC 8 DSD**. Nevertheless it is possible to use the **DAC 8 DSD** as a USB D/A converter with Linux PCs.

For the operation a UAC2 compliant kernel is necessary. No additional drivers required.

The following system was succesfully tested with the DAC 8 DSD:

- **Ubuntu 16.04 LTS**
- **ALSA** sound archtecture
- ***MPD 0.19.12-1*** (MusicPlayer Demon)
- ***Cantata*** as MPD client

The following formats can be played back:

- **PCM Files** up to 384 ks/s
- **DSD Files** up to DSD 128

Installation Hints:

MPD and Cantata can be installed from the standard Ubuntu (universe) repository.

After connecting the DAC8DSD to the PC the command ***lsusb*** should show a device with the T+A USB VID *(2ab6)*:

```
lsusb

Bus 002 Device 001: ID 1d6b:0003 Linux Foundation 3.0 root hub
Bus 001 Device 007: ID 2ab6:0001
Bus 001 Device 001: ID 1d6b:0002 Linux Foundation 2.0 root hub
```

If this was successful the command ***sudo aplay -l*** will deliver the USB device number for the DAC8DSD:

```
sudo aplay -l

**** List of PLAYBACK Hardware Devices ****
card 0: PCH [HDA Intel PCH], device 0: ALC3227 Analog [ALC3227 Analog]
 Subdevices: 1/1
 Subdevice #0: subdevice #0
card 0: PCH [HDA Intel PCH], device 3: HDMI 0 [HDMI 0]
 Subdevices: 1/1
 Subdevice #0: subdevice #0
card 1: HDAudio [DAC 8 USB HD-Audio], device 0: USB Audio [USB Audio]
 Subdevices: 0/1
 Subdevice #0: subdevice #0
```

In this case the DAC8DSD is device ***hw:1,0*** (card 1, device 0).

MPD Configuration:

With this device information the audio_output section of the mpd configuration (/etc/mpd.conf) can be adjusted for the DAC8DSD:

```
### AUDIO section start ##############################
audio_output {
 type               "alsa"
 name               "T+A DAC8DSD"
 device             "hw:1,0"
 mixer_type         "none"
 dsd_usb            "yes"
 buffer_time        "200000"
 period_time        "256000000"
 use_mmap           "yes"
 auto_resample      "no"
 auto_channels      "no"
 auto_format        "no"
}
### AUDIO section end ################################
```