WEISS DAC501 Network Renderer User Guide

Contents

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The DAC501/DAC502

Congratulations on purchasing the DAC501 or DAC502 D/A Converter!

The front panel of the DAC502
The DAC501/DAC502 are our new state-of-the-art D/A Converters with an unprecedented level of sophistication and versatility. With the DAC50x we are creating a new paradigm for what used to be a black box device.
A typical D/A Converter is a ”set and forgets” device. Not so with the DAC50x. It adds a number of interesting signal processing features and sports a variety of digital inputs. Balanced, unbalanced, and headphone outputs are provided.
Weiss Engineering has a 30-year history in D/A Converter design. In that time span, we have learned a thing or two about converter design. The DAC50x is the essence of our experiences.

Figure 2: The front panel of the DAC501

The front panel of the DAC501
The DAC502 uses a larger frame but else sports the same features as the DAC501. Except for an additional 4 pin headphone socket at the back of the unit. The front of the DAC502 is displayed at the top and the DAC501 in the middle of this page. The term DAC50x refers to both models.
The basic operation of the DAC50x is outlined in this Quick Start Guide. For all the powerful features of the DAC50x refer to the DAC50x User Manual and White Papers mentioned below.

Quick Start Guide

This Quick Start Guide presents the first steps to set up the DAC50x unit. Further and more detailed information about the DAC50x and its features can be found in the DAC501/DAC502 User Manual and White Papers.
Setting up the DAC50x hardware
Carefully unpack the DAC50x unit. The following items should be included:

- The DAC50x unit
- This quick start guide with a warranty card
- An IR remote control unit

Figure 3: The back panel of the DAC501

The back panel of the DAC501
After unpacking the DAC50x connect the necessary input/output cables at the back of the unit.
Also, connect the main cable. The mains voltage is automatically sensed by the DAC50x. Mains voltages between 90V and 240V are allowed. No manual mains voltage selection is necessary.
To switch on the unit press on the rotary knob on the faceplate or press the power on/off button on the IR remote (upper/left corner). Wait for about half a minute for the unit to boot.
Note: Most of the parameters mentioned below can also be set via the DAC50x's web interface. If you have connected your DAC50x with an Ethernet cable to a router unit you may access the DAC50x via a web browser. Enter this URL into your browser:

- dac501-in.local (for a DAC501 unit) or dac502-nnnn.local (for a DAC502 unit)
- "nnnn" is the serial number of your DAC50x unit. You see that number on the back of the unit.
- Note, for serial numbers 0139 or lower enter dac50x-nnnn.local to access the web interface.

Figure 4: The back panel of the DAC502

The back panel of the DAC502
Selecting the output
The DAC50x has two outputs, the line output (XLR and RCA connectors at the back) and the headphone output (jack connector on the faceplate). In the case of the DAC502, an additional 4 pin headphone socket is available at the back. Only one of the two outputs (line/headphone) can be active at any time. Select the active output either with the remote control (two top/middle keys) or via the touch screen by pressing on the red speaker/headphone icon to toggle between line and headphone outputs. Most of the parameters in the DAC50x can be set differently between line and headphone outputs (e.g. output volume, equalizer settings, etc.) and will be consistently saved when switching between outputs.
Selecting the output level

Be careful with the output level upon the first operation. The best is to lower the level to a very low value with the rotary knob or via the remote control. The DAC50x has 4 coarse level settings (analog domain) to match the basic output level with the amplifier and headphone at hand. The line and headphone outputs can be set to different levels. Proceed as follows:

Figure 5: *Main Level* menu section on the LCD

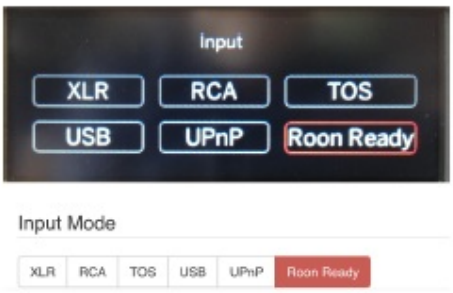
- Select the output you would like to set (line or headphone)
- Tap on the Setup pad on the touch screen
- With the knob scroll the display such that you can see the Output Level entry
- Tap on the Output level pad in order to select one of the settings. 0dB is the highest level while -30dB is the lowest level.

Now you may want to repeat that with the other output selected as the active output.

Selecting the input

The input source can be selected by either tapping on the input pad on the touch screen or via the remote control. The following inputs can be selected:

- XLR (XLR socket)
- RCA (RCA socket)
- TOS (optical socket)
- USB (USB type B socket (quadratic shape), the type A socket is used for other purposes)
- UPnP (Ethernet socket)
- Roon Ready (Ethernet socket)



The XLR, RCA, and TOS inputs are self-explanatory. For the USB input, when used with:

- a MacOS system, no driver is required
- a Windows based system needs a driver which can be downloaded from here https://www.weiss.ch/files/downloads/dac501-dac502/WeissEngineering_USBAudio_v4.67.0_2019-07-04_setup.exe

  For the UPnP input an application running on a tablet can be used to transfer files from a NAS unit to the DAC50x or to stream from e.g. Tidal directly to the DAC50x or to listen to web-based radio stations. Suitable apps are:
- for iPad: connected or Creation 5
- for Android: BubbleUPnP

Roon Ready
The Roon Core will acquire the Roon Ready Certified DAC501/DAC502 when required and automatically select its Roon Ready input. No further user input is required.

IR Remote Control
Most of the keys on the IR remote control are self-explanatory. Here are some additional remarks:

- The ”polarity” key changes the absolute polarity of the output signal. If this is engaged (i.e. signal is inverted), the level figure on the LCD display turns yellow.
- The ”mute” key when engaged mutes the output signal completely and the level figure on the LCD turns red.
- The DSP presets keys select one of the presets stored in the DSP. Currently we do not have yet assembled any factory DSP presets, but you are welcome to do your own. More information on the DSP presets is given in the web interface chapter.

Figure 7: IR remote control

The Web Interface
As mentioned above you may access the DAC50x via a web browser provided you have connected your DAC50x with an Ethernet cable to a Router unit. Enter this URL into your browser:

- dac501-nnnn.local (for a DAC501 unit) or dac502-nnnn.local (for a DAC502 unit)
- nnnn is the serial number of your DAC50x unit. You see that number on the back of the unit.
- **Note,** for serial numbers 0139 or lower enter dac50x-nnnn.local to access the web interface.

The web interface is described in more detail in the User Manual and White Papers.

Renaming your Weiss DAC50x
You may rename your Weiss D/A Converter via the web interface, specifically to either DAC501 or DAC502. This is particularly useful in case your device is still subject to the old naming convention DAC50x and thereby is not recognized as a Roon Ready Certified device by the Roon Core. Click the Rename button in the Device section of the web interface and select one of the two options DAC501 or DAC502. Confirm your selection and restart your device in order for the rename to take effect. You may repeat this procedure several times.

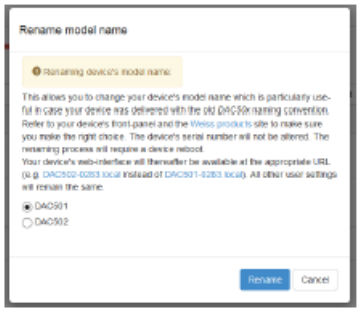
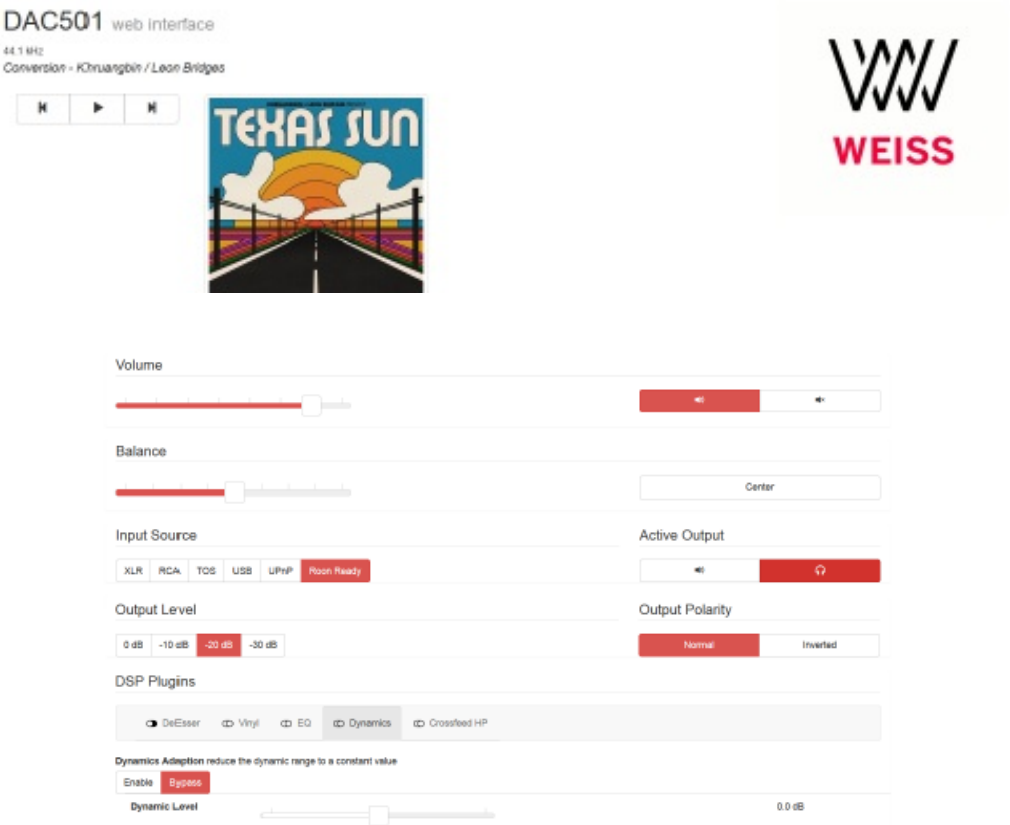


Figure 8: Pop-up window for renaming your device via the web interface

In the figure below you see a screenshot of the web interface. At the bottom, there is a pad named Check for Update. If you tap on that the DAC50x checks whether there is any new firmware available to be downloaded. If this is the case the new firmware is listed and the pad changes to Download Update. If you tap on the pad the update will be downloaded. This may take some time depending on the speed of your Internet connection. Once the download has finished, the pad changes to Install Update. Again tap on the pad to install the downloaded firmware. This again takes a minute or two, just wait until the pad changes to Reboot with Update. Again tap on the pad to start rebooting the DAC50x unit. Files to download (drivers, manuals) for the DAC50x can be found here:

- **https://www.weiss.ch/download/dac501-dac502**
- Manual: **https://www.weiss.ch/files/downloads/dac501-dac502/dac501-dac502-manual.pdf**
- USB driver for Windows: **https://www.weiss.ch/files/downloads/dac501-dac502/WeissEngineering_USBAudio_v4.67.0_2019-07-04_setup.exe**



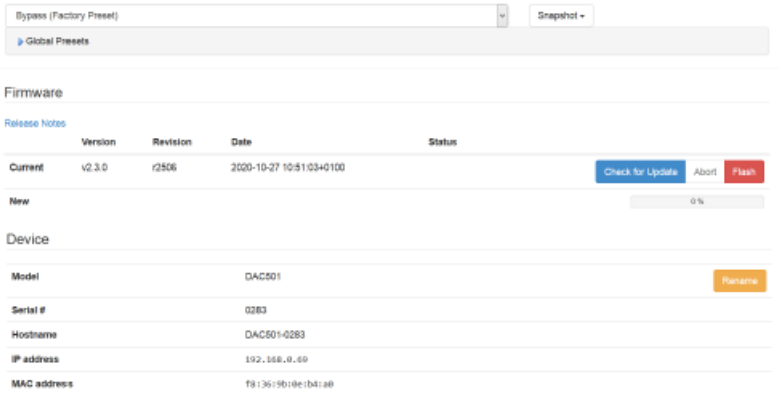


Figure 9: Screenshot of the **DAC50x** web interface

Documents / Resources

	[WEISS DAC501 Network Renderer] [pdf] User Guide DAC501, DAC502, Network Renderer