DIGITAL / ANALOG CONVERTER (DAC)

USER GUIDE: D-180 / D-280 / D-580
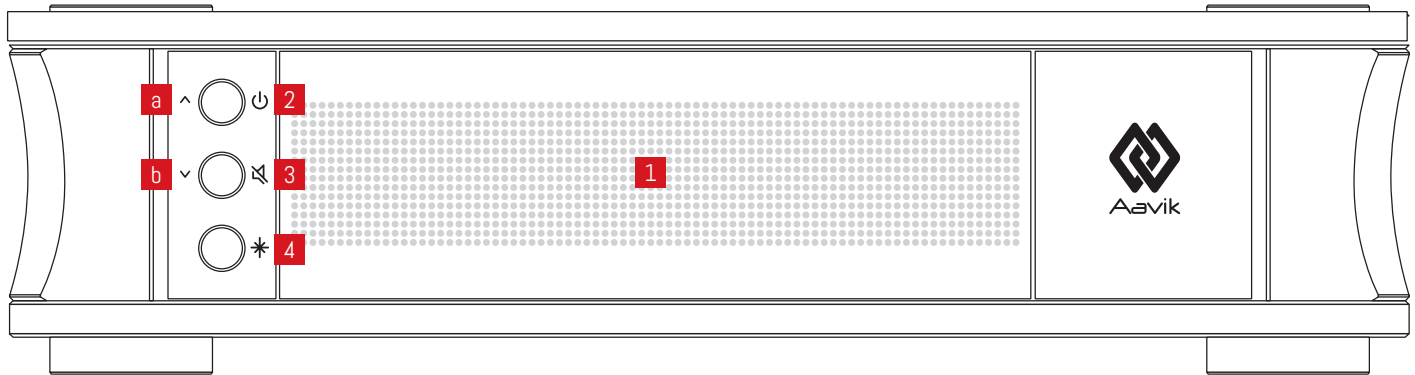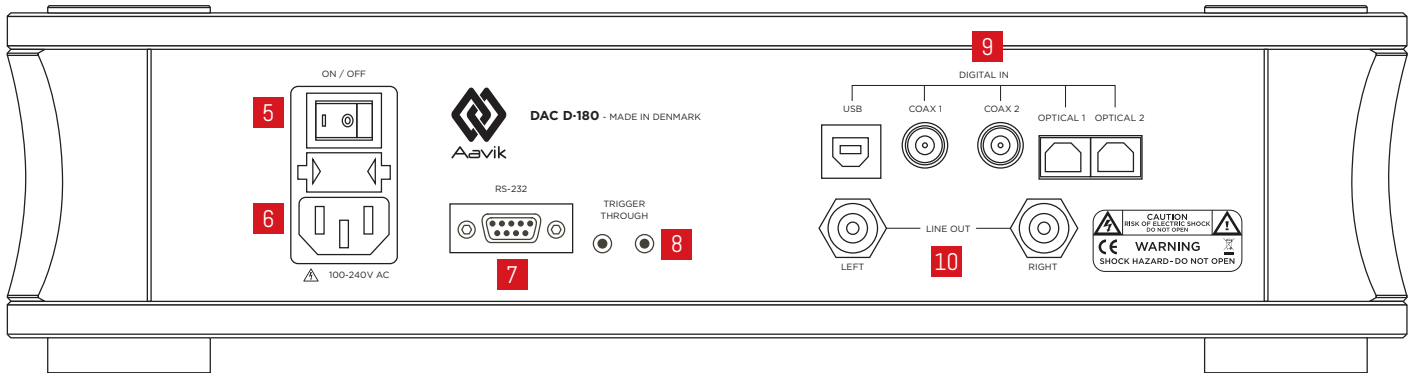
THE EQUIPMENT SHOULD BE SERVICED BY QUALIFIED SERVICE PERSONNEL

1. Read these instructions.

2. Keep these instructions.

3. Heed all warnings.

4. Follow all instructions.

5. Clean the amplifier only with a dry, lint-free cloth. For more thorough cleaning, unplug the amplifier from the mains supply and go over it lightly with a damp, lint-free cloth. Do not use any type of chemical solvents or other cleaning products for cleaning.

6. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.

7. Protect the power cord from being walked on or pinched particularly at plugs, conve-nience receptacles, and the point where they exit from the apparatus.

8. Unplug this apparatus during lightning storms or when unused for long periods of time.

9. Do not defeat the safety purpose of the polarized or grounding-type plug.

10. Only place apparatus horizontally and on a suitable table or rack. If more components are stacked. Make sure to place the hottest unit - usually the amplifier, at the top

11. Refer all servicing to qualified service personnel.

12. Servicing is required when the apparatus has been damaged in any way, such as when the power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

1. WARNING – Take care that objects do not fall and liquids are not spilled into the enclosure through any openings. The equipment shall not be exposed to dripping or splashing. Liquid-filled objects such as vases should not be placed on the equipment.

2. The equipment has been designed for use in moderate climates and in domestic situations.

3. Only connect the equipment to a power supply of the type described in the operating instructions or as marked on the equipment. The primary method of isolating the equipment from the mains supply is to remove the mains plug. The equipment must be installed in a manner that makes dis-connection possible.

4. If an abnormal smell or smoke is detected from the equipment, turn the power off immediately and unplug the equipment from the wall outlet. Contact your dealer and do not reconnect the equipment.

BUTTONS ON THE FRONT OF THE DAC

a

2

b

3

4

1

Aavik

CONNECTORS ON THE BACK OF THE DAC

9

DIGITAL IN

ON / OFF

5

USB   COAX 1   COAX 2   OPTICAL 1   OPTICAL 2

Aavik   **DAC D·180** - MADE IN DENMARK

6

RS-232

TRIGGER
THROUGH

7

8

LINE OUT

10

LEFT   RIGHT

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

⚠   ⚠

C€   **WARNING**

SHOCK HAZARD–DO NOT OPEN

⚠ 100-240V AC

FRONT PANEL FUNCTIONS

1 DISPLAY

During normal operation the left side of the display shows the selected source.

It is possible to change the source with the up/down buttons when navigation mode is activated. When changing settings (see "MENU FUNCTIONS" page 7), the display will show the setting being changed.

2 STANDBY

Press the standby button **2** to place the DAC in standby mode, or to switch on the DAC from standby mode. When the DAC is in standby mode, the only light showing on the DAC will be a dim LED light in the lower left corner. When you switch on the DAC, the outputs will be muted, and a line will illuminate at the bottom of the displays, starting in the lower left corner.

3 MUTE / REMOTE CONTROL PAIRING BUTTON

The mute button has multiple functions. When you press this button briefly, it will mute the outputs of the DAC. The display will show "Mute" instead of the selected source.

If you are using an Apple remote, you can pair the DAC with one specific remote. In order to pair your remote control with the DAC, press and hold the front panel mute button **3** for more than one second. When the DAC is ready to pair, the display will flash slowly.

To pair, press a button on your remote control facing it toward the DAC. The display will show "Paired". Press the front panel mute button **3** again briefly to go back to normal operation.

You can remove the pairing, so that the DAC will stop responding to the remote again, by pressing the front panel mute button for more than five seconds. When the five seconds have passed, the displays will flash fast. Press a button on the remote, to complete the procedure. The display will show "Unpaired". Press the front panel mute button **3** again briefly to go back to normal operation.

4 NAVIGATION/MENU BUTTON

The navigation button lets you select the desired source. Pressing the navigation button **4** briefly will activate input selection. The display will flash, while still showing the selected input. Pressing the up/down buttons **a** / **b** lets you select the desired source. Press the navigation button again to deactivate input selection mode.

The navigation button is also used for accessing the menu. See "MENU FUNCTIONS" page 7.

REAR PANEL FEATURES

5 POWER ON/OFF SWITCH
Toggle the switch to switch between fully off and standby mode. When the DAC is in standby mode, the power consumption is less than 1W. When the DAC is on, the power consumption is less than 20W.

6 POWER INLET (CAUTION!)
The DAC accepts mains voltages from 100 to 240VAC 50-60Hz. The power inlet accepts power cables with an IEC 60320-C13 female connector. To ensure the best performance, please consult your Aavik Acoustics dealer for a suitable mains cable.

7 RS-232, FIRMWARE UPDATE
Only for the use by qualified service personnel.

8 TRIGGER OUTPUTS
The DAC is equipped with two DC trigger connectors. These can be used to power-on the DAC, when the amplifier is switched on. Connect one of the connectors to the amplifier. The second connector can be used to switch on a further piece of equipment. The DAC will switch on when 5-15VDC is applied to a trigger input.

9 DIGITAL INPUTS
The DAC is equipped with the following digital inputs:

USB input, TOSLINK optical S/P-DIF inputs, and BNC electrical S/P-DIF inputs.

TOSLINK OPTICAL INPUT
The DAC comes equipped with two optical S/P-DIF (32-192kHz, 16-24 bit) TOSLINK inputs.

BNC DIGITAL INPUTS
The DAC comes equipped with two electrical S/P-DIF (32-192kHz, 16-24 bit) digital inputs.

USB INPUT
The DAC comes equipped with one fully isolated, UAC 2, asynchronous USB input. It supports 32-192kHz, 16-24 bit PCM and DSD64/DSD128 using DoP encoding.

When connecting a computer running Mac OS X or Linux, no drivers are needed.

For Windows a driver can be downloaded from the Aavik Acoustics website.

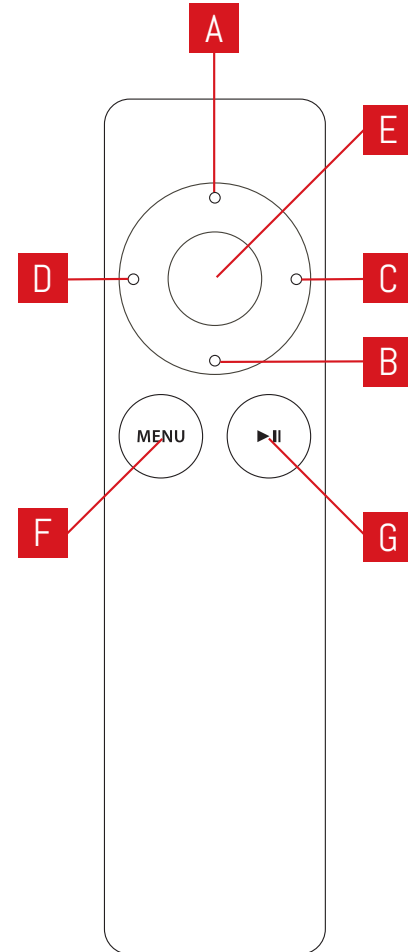Note: When playing music in PCM format from a computer, the DAC supports sample rates up to 192kHz.

CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN

CE WARNING

SHOCK HAZARD - DO NOT OPEN

WARNING: To reduce the risk of fire or electric shock, do not expose the aperatus to rain or moisture.

The lightning flash with an arrowhead symbol within an equilateral triangle, is intended to alert the user to the
presence of uninsulated 'dangerous voltage' within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

APPLE REMOTE

A UP - used for changing menu settings.

B DOWN - used for changing menu settings.

C INPUT +, Press this button, to move to the next input. From Line 1 to Line 2 etc.

D INPUT -, Press this button, to move to the previous input. From Line 2 to Line 1 etc.

E STANDBY, Press this button to place the DAC in standby mode, or to switch the DAC on from standby mode.

F MENU, Use this button to enter the menu, or switch back to normal operation. Use the INPUT + and INPUT - buttons to cycle through the menu, and the VOLUME UP and VOLUME DOWN buttons to change a setting. See "MENU FUNCTIONS" for details.

G MUTE
Press the button to mute the outputs of the DAC. Pressing the button again will reactivate the outputs of the DAC.

FACTORY RESET

You can reset all settings back to factory defaults. This will erase all settings. To do this, proceed as follows:

- Switch off the DAC at the main power switch **9**
- Wait 30 seconds
- Press and hold the three front panel buttons **2** **3** **4**
- Switch on the main power using **9** , while still holding the front panel buttons
- All LED indicators on the front panel will switch on, and stay on
- After approx. 8 seconds the LED indicators will switch off again.
- Release the front panel buttons, and switch off the DAC using the main power switch **9**

MENU FUNCTIONS

Using the front panel or remote control, you can change many settings of the DAC.
Using the remote, you press the "Menu" button `F` to enter or exit the menu.
Using the front panel, you press and hold the navigation button `4` for 3 seconds.
When you enter the menu, the DAC mode of the current input will be shown on the display. The top line of the display shows the current option ("DAC mode" when you enter the menu), and the bottom line shows the current setting.
Using the remote, you can cycle through the options using the INPUT + `C` and INPUT - `D` buttons.
Using the front panel, press the navigation button `4` to cycle through the options.
Use the UP `A` and DOWN `B` buttons of the remote, or the up and down front panel buttons (`a` / `b`).
Once in the menu, using the remote, you can cycle through all options in the order shown in the diagram below.
Using the front panel, the DAC will return to normal operation once you have cycled through all the options.

SETTINGS FOR INDIVIDUAL INPUTS	DISPLAY SHOWS

DAC mode
You can switch the DAC between four settings. The default setting is "Upsampled, Slow". You can switch upsampling on and off, and switch between a slow (soft high-frequency roll-off) and a fast (steep high-frequency roll-off) filter.
Which setting provides the best performance, depends on the signal source connected to the input.

DAC mode
Non-upsampled,Fa

SETTINGS COMMON TO ALL INPUTS	

Display brightness
You can change the display brightness in four steps: 10, 40, 70 and 100%

Display brightnes
100%

Display dim
Using this setting, you can set the display to switch off automatically after 1-5 seconds. The standard setting is off.
When the display is off, a single dim LED will be lit in the lower right corner.

Display dim
Off

Software version
This menu option shows the current firmware version of the DAC.

Software version
1.0.7

SPECIFICATIONS

	Aavik D-180	Aavik D-280	Aavik D-580
Digital:	2 x BNC S/P-DIF (32 - 192 k-samples, 24-bit 2 x TOSLINK optical (32 – 192 k-samples, 24-bit USB fully isolated, UAC 2, asynchronous USB: PCM 32 - 192 k-samples, 24-bit, DSD 64 - DSD 128 Distortion: <0,005% (THD at 1kHz at 0dB)	2 x BNC S/P-DIF (32 - 192 k-samples, 24-bit 2 x TOSLINK optical (32 – 192 k-samples, 24-bit USB fully isolated, UAC 2, asynchronous USB: PCM 32 - 192 k-samples, 24-bit, DSD 64 - DSD 128 Distortion: <0,005% (THD at 1kHz at 0dB)	2 x BNC S/P-DIF (32 - 192 k-samples, 24-bit 2 x TOSLINK optical (32 – 192 k-samples, 24-bit USB fully isolated, UAC 2, asynchronous USB: PCM 32 - 192 k-samples, 24-bit, DSD 64 - DSD 128 Distortion: <0,005% (THD at 1kHz at 0dB)
Output:	1 pair of RCA outputs Output: 4.5Vrms at 0dB Output impedance: 100 ohms	1 pair of RCA outputs Output: 4.5Vrms at 0dB Output impedance: 100 ohms	1 pair of RCA outputs Output: 4.5Vrms at 0dB Output impedance: 100 ohms
Aavik noise reduction	Active Tesla Coils: 36 Active Square Tesla Coils: 104 Dither circuitry: 5	Active Tesla Coils: 72 Active Square Tesla Coils: 176 Dither circuitry: 8	Active Tesla Coils: 108 Active Square Tesla Coils: 248 Dither circuitry: 11
Power consumption:	Standby: <0.5W Operating: <20W	Standby: <0.5W Operating: <20W	Standby: <0.5W Operating: <20W
Dimensions:	102 x 384 x 380 mm	102 x 384 x 380 mm	102 x 384 x 380 mm
Weight:	5,4 kg	5,6 kg	7,3 kg

Aavik Acoustics
Rebslagervej 4
9000 Aalborg
Denmark

http://www.aavik-acoustics.com