# Release note

for the dac8 PRO v1.6 firmware





## Introduction

This document provides comprehensive information related to the v1.6 firmware update package for the dac8 PRO, including a changelog and step-by-step installation guide.

If you are coming from a firmware version prior to v1.5, please update to v1.5 first by following steps in the Release note for the dac8 PRO v1.5 firmware.

# Changelog

### Bugfixes

- removed clicks during transitions between PCM, DSD and DoP
- fixed compatibility issues with Linux and some Linux-based devices (streamers, Raspberry Pi) that manifested as a flashing playback indicator
- fixed a bug causing distortion of 192 kHz playback from AES/EBU
- resolved firmware hang-ups when switching from USB/AES to PureUSB mode

### New functions

- AES/EBU inputs are now compatible with DSD over PCM. That means dac8 PRO is able to receive signals from SACD players and other hardware that transmits DoP.
- the AES/EBU output is also able to transmit DoP signal

#### Known limitations

direct playback of 6-channel DSD (e.g., 5.1) is not supported in Linux (including hardware running Linux such as many streamers, Raspberry Pi, and other single-board computers). This limitation exists because the Linux audio driver cannot extend the number of channels to match the DAC, as drivers for other operating systems can. The player must change the number of channels to 8.



# Update installation

Before starting, please ensure the dac8 PRO is powered on, set to Pure USB mode, and securely connected to your computer via USB. Please note that all settings, including remote control codes, will be lost during the update process, and you will need to pair your remote again.

#### Windows

- 1) Download and install the <u>v5.68.0 Okto Research ASIO driver</u> if you haven't already
- 2) Download the update package from the following link: <u>dac8pro\_fw\_16</u> and extract the ZIP archive file
- 3) Open folder "dac8pro\_fw\_16" and Run the Okto Research DFU utility
- 4) Press "Browse" and select the file "dac8pro\_fw\_16\_windows.bin".
- 5) Press "Start" and wait until the process finishes. After that, please wait one more minute for the front panel microcontroller to update. Once completed, you will be able to turn the unit on with the center dial.

Okto Research USB Audio Device Fi	rmware Update	×
Device Manufacturer: Product: VID/PID: Serial number:	OKTO RESEARCH DAC8PRO 0x152A/0x88C4 000174	
Current Firmware:	v1.60	
Firmware C:\Users\pk\dac8fw\dac8pro.bin		Browse
Upgrade		
Device opened. Ready for firmware update. Entering upgrade mode Upgrading firmware 288256 of 288256 bytes transferred. Starting firmware Firmware upgrade finished successfully		~
		~
Exit		Start

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### MacOS

- 1) Download the update package from the following link: <u>dac8pro\_fw\_16</u>
- 2) Extract the ZIP archive file and open folder "dac8pro\_fw\_16"
- 3) Right click on the folder called "MacOS" and select "New Terminal at Folder"
- Add permission to execute the update file by running command "chmod 755 ./dac8pro\_fw\_16\_macos\_version", where "version" corresponds to your system architecture (x86\_64 for older Intel-based hardware, arm64 for the new Apple silicon)
- 5) Close the terminal window, right-click on the file dac8pro\_fw\_16\_macos\_version inside the MacOS folder, select "Open" and authorize the operation
- 6) Wait for the update process to finish. After that, please wait more minute for the front panel microcontroller to update. Once completed, you will be able to turn the unit on with the center dial.

	📄 pk — dac8pro_fw_16 — dac8pro_fw_16 — 202×60
Last login: Fri Jul 26 11:22:27 on ttys000 /Users/pk/Downloads/dac8pro_fw_16/MacOS/dac8pro_fw_16 ; exit; pk@pk-mac ~ % /Users/pk/Downloads/dac8pro_fw_16/MacOS/dac8pro_fw_16	; exit;
Firmware upgrade tool for DACB products.	
Searching OKTO Research product on the USB ports [0] > VID 152A, PID 88C4, BCD 0150 : OKTO RESEARCH DAC8PRO 000174	
found DACSPRO v1.50 Upgrading USB firmware, do not disconnect Device is restarting, waiting usb re-enumeration (10seconds max) ## [0] > VID 152A, PID 88C4, 8CD 0150 : OKTO RESEARCH DAC8PRO	
Davice restinted, naw OFL interface = 0 Verifying image 3288 Preparing flash memory (up to 10 seconds) for DFU interface 0 Downloading data Transfered 28265 bytes completed. USB firmware upgrade dome. Restarting davice DACBHOD, wiling usb enumeration	***
[0] > VID 152A, PID 88C4, BCD 0160 : OKTO RESEARCH DAC8PRO 000174	



#### Linux

The update package is available for arm32, arm64 and x86-64 architecture.

- 1) Download the firmware update package from <u>dac8pro fw 16</u>
- 2) Extract file "dac8 pro\_fw\_16\_linux\_version" to your home folder, where "version" will correspond one of the three variants available for different platforms
- 3) Open terminal and install a generic USB library by running command "sudo apt-get install libusb-1.0-0-dev"
- 4) Run command "chmod 777 ./dac8pro\_fw\_16\_linux\_*version*" into the terminal and run it to change permissions for the file
- 5) Run command "sudo ./dac8pro\_fw\_16\_linux\_version"
- 6) Verify the successful completion by turning on the unit with a rotary control press, which should bring you to the updated main screen
- 7) Press and hold the rotary control to turn the unit off and then unplug it from mains for 5 or more seconds. After power cycling, the unit is ready for use.

### Footnote

Please note that all settings, including remote control codes, will be lost during the update process, and you will need to pair your remote again.

We have made every effort to ensure the v1.6 firmware is free of bugs. If you encounter any issues, please contact us at <u>info@oktoresearch.com</u>.

Warning: If there is a loss of power or USB connection during the update process, your unit will revert to the original factory version of the firmware. If your unit came with a pre-1.5 version, you will need to update to v1.5 first in order to access newer firmware releases.