

LIBERTY DAC II

DAC • HEADPHONE AMPLIFIER

Owner's Manual



Owner's Manual Ver. 1.0
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The Liberty DAC II firmware can be easily updated via Mytek Firmware Uploader app. As the firmware is updated, Mytek will be posting new firmware releases in the support/download section on Mytek website. Firmware may alter details of Mytek operation and consequently there will be periodic updates to this manual. For news, driver updates, technical support, tips and further product information please visit our website:

www.mytek.audio

To obtain the tech support please write or call the US office for all US and World support and EU office for the European support.

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1. Introduction

Thank you for choosing the Liberty DAC II from Mytek and welcome to the Mytek user's community. Over 30 years of experience in building mastering grade converters and other audio equipment has been utilized to create this digital to analog converter. Its sophisticated audio path is designed to deliver bit perfect, high quality, transparent sound to your speakers and headphones.

The Liberty DAC II will play:

- PCM up to 32 bit / 384 kHz
- Native DSD up to DSD256, DXD,
- MQA master quality files out of online streaming services
- Any other digital source equipped with USB, TOSLINK, SPDIF or AES

The Liberty DAC II has been optimized for highest performance and it is plug & play under Windows, Mac OS and Linux (doesn't require any additional drivers).

Enjoy your new Liberty DAC II!

— The Mytek Audio Team



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2. Package's Content

- The Mytek Liberty DAC II
- USB 2.0 Cable
- Aluminum remote (Apple)
- Power cord
- Owner's manual

3. About Liberty DAC II

Liberty DAC II is Mytek's most affordable, yet exceptional, PCM/MQA/DSD USB2 DAC designed for high-quality music playback and monitoring of all digital audio formats including all high-resolution formats. The DAC features several digital inputs, digital volume control and unbalanced as well as balanced audio outputs, and a high-performance headphone amplifier. Designed as a little brother of Brooklyn DAC, Liberty DAC II provides robust performance in a small portable 1/3 rack package.



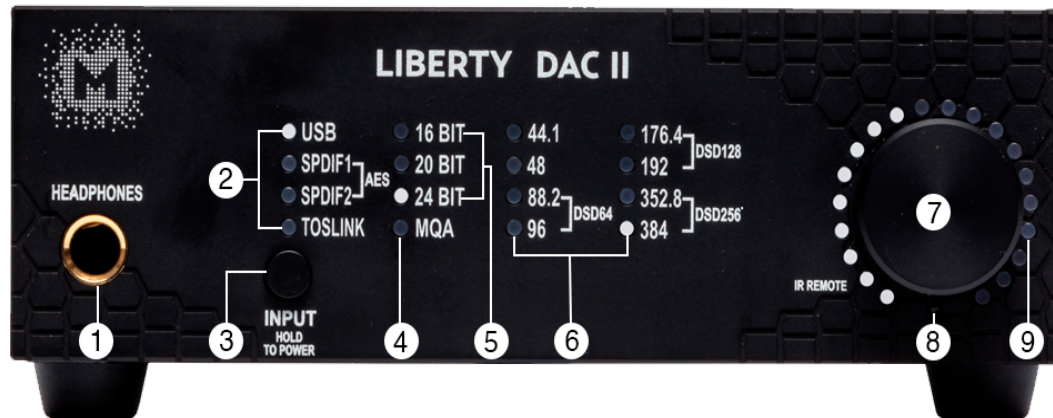
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4. Device Features

- Up to 384k, 32bit PCM, native DSD up to DSD256, DXD, ES9038 chipset, 127dB DR
- Analog outputs: 1 pair of unbalanced RCA, 1 pair of balanced XLR
- Headphone amplifier: Reference High Current, High transient Headphone Amp, 300mA, 3 Watts, designed for hard to drive headphones, 0.1 Ohm impedance
- Digital inputs: USB2 Class2 (driverless, all audio formats), AES/EBU (PCM up to 192k, up to DSD64 DOP), 2x S/PDIF (PCM up to 192k, up to DSD64 DOP), Toslink/ADAT 2x S/PDIF (PCM up to 192k, up to DSD64 DOP)
- Clock generator: Low noise with 10ps of jitter
- Firmware: Upgradable via USB
- Power supply: Built in oversized 60W linear toroid with automatic voltage switching
- Built-in certified hardware Hi-Res MQA decoder
- Dimensions: WxDxH=5.5x8.8x1.74"=140x225x44mm
- Weight: 4lbs, 2kg
- Warranty: 2 years

5. Quick Start

5.1 Front Panel



1. Headphone Output
2. Input Selection LEDs section
3. INPUT selection button
4. MQA LED
 - green color indicates that MQA signal is detected
 - blue color indicates that MQA signal is detected and it has either been approved in the studio by the artist / producer or has been verified by the copyright owner.
5. Bit resolution LEDs section
 - 16 BIT LED is on = 16 BIT bit rate is detected
 - 20 BIT LED is on = 20 BIT bit rate is detected
 - 24 BIT LED is on = 24 BIT bit rate is detected
 - 16/20/24 BIT LEDs are on = 32 BIT bit rate is detected
6. Sample rate LEDs section
7. Volume knob (press to mute)
8. IR receiver
9. Volume level LEDs - show current volume level

Press and hold the input button (3) to power on/off the Liberty DAC II

5.2 Rear Panel



1. Power Socket
2. S/PDIF Coaxial Input 1 and S/PDIF Coaxial Input 2. These are digital inputs which accept up to 192kHz/24bit. They also accept DSD DoP standard input up to DSD64.
3. Optical Input (TOSLINK). Accepts up to 192kHz/24bit and DSD DoP standard input up to DSD64. For best results use short high quality TOSLINK cable. Special glass fiber TOSLINK cable allows for longer cable runs and is less jittery than regular plastic fiber.
4. Mytek proprietary USB 2.0 Class 2, up to 32bit/384k, DSD256.
5. AES / EBU Digital Input
6. XLR Balanced Stereo Analog Output
7. RCA Stereo Analog Output

QUICK START

Immediate Playback SPDIF and TOSLINK

Connect the analog outputs to your powered speakers, power amplifier or preamplifier. Alternatively you can also use headphones. Connect the digital source (CD player) to the DAC. Power up the player, power amplifier and the Liberty DAC II. Choose the input you would like to use by pressing input button..

Immediate Playback USB

The Liberty DAC II custom designed USB2 controller supports **driverless** operation on all operating systems. It means that no extra drivers are required. Driverless operation basically means „**plug and play**“. The Liberty DAC II will automatically show up on your computer's list of supported audio devices as „Liberty DAC II“. Simply choose that as your default audio playback device and the system will work.

Attention! To prevent damage, do not turn on your speakers on until all connections have been made.

Do not cover ventilation holes! It's not recommended to stack Liberty DAC II. It may result in overheating the device!

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6. Firmware update for Windows

The current revision of the Liberty DAC II is shown in the Liberty DAC II Uploader App.

- The firmware can be updated by using USB2 port and Liberty DAC II Uploader app.
- It is recommended to turn off any powered speakers / power amps connected to Liberty DAC II before proceeding with the firmware update

Follow the steps below to update the firmware:

1. POWER OFF DEVICE

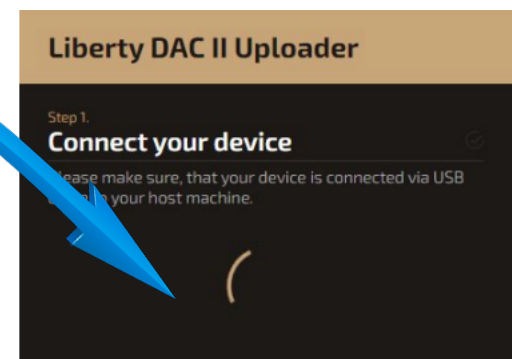
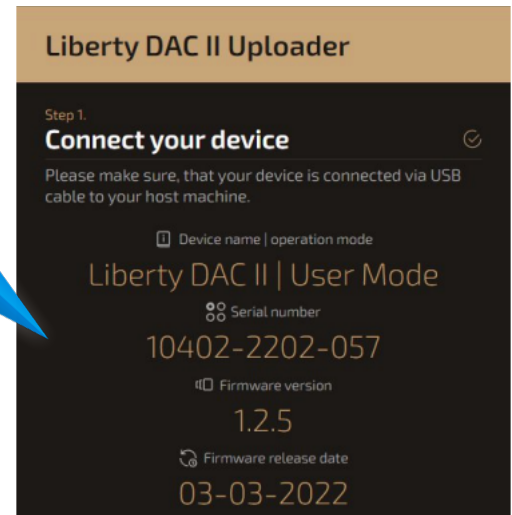
Please press and hold [Input] button to power off your device.

2. Run Liberty DAC II Uploader App

After installing Liberty DAC II Uploader application, a shortcut icon should appear on your Desktop. Double-click this shortcut to run it. From now, it will be searching for any Liberty DAC II device connected to your host machine. A searching process is indicated by a spinner.

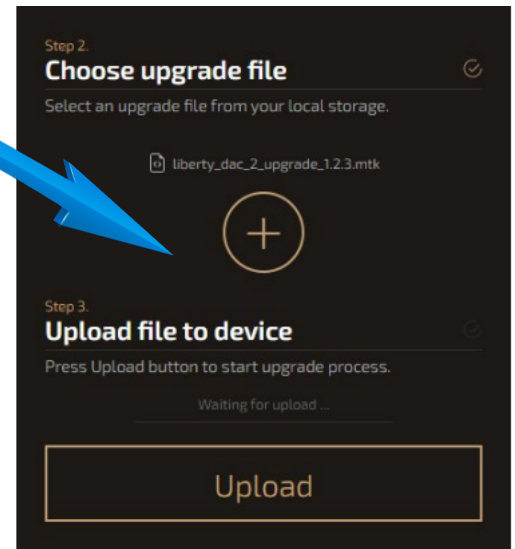
3. Power ON your device in Service Mode

To perform software update for the first time, it is recommended to turn-on your device in Service Mode. To do so, press and hold [Volume] knob button, than power-on your device by pressing and holding [Input] button (while still holding [Volume] knob button). After hearing a "click" from device, release [Input] button and than release [Volume] knob button. Your device should be discovered by Uploader App as Liberty DAC II device running Service Mode (which will be indicated by MQA diode Orange color).



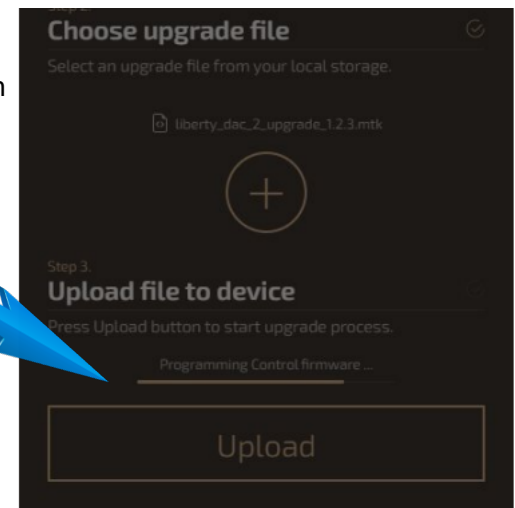
4. Choose upgrade file

Now, click on [Add] button to select upgrade file from your local machine. Your file will be loaded to Uploader App and displayed by its filename



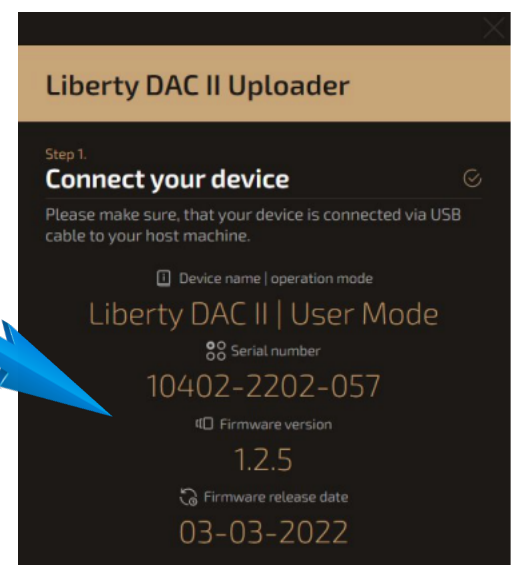
5. Start uploading process

When your file is chosen, an Upload button should appear at the bottom of Uploader App. Press this button to start upgrading procedure. Uploader App should gray out, and a progress bar should indicate uploading process completion.



6. Verify your update

After uploading completion, Liberty DAC II will perform a Software Reset to apply changes related to firmware update. Your device should be re-connected and re-discovered by Uploader App as Liberty DAC II running User Mode. Please verify if current firmware version matches desired one.



7. MQA - Master Quality Authenticated



MQA is an award-winning British technology that delivers the sound of the original master recording. The master MQA file is fully authenticated and is small enough to stream or download. Using pioneering scientific research into how people hear, MQA delivers master quality audio in a file that's small enough to stream or download – the days of sacrificing quality for convenience are over. Visit mqa.co.uk for more information.

The Liberty DAC II includes MQA technology, which enables you to play back MQA audio files and streams, delivering the sound of the original master recording.

Authentication Types

The color of the small spot next to MQA logo indicates if the MQA stream is detected.

The spot glows green or blue to indicate that the unit is decoding and playing an MQA stream or file, and denotes provenance to ensure that the sound is identical to that of the source material.

It glows blue to indicate it is playing an MQA Studio file, which has either been approved in the studio by the artist/producer or has been verified by the copyright owner.

8. Remote

The Liberty DAC II is infrared remote ready and comes with Aluminum Apple Remote. To pair it, please press and hold [Menu] + [Select] or [Menu] + [Next] buttons on Remote Controller for at least 5s (device will confirm pairing procedure by blinking Volume LED's).



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9. Warranty

Each individual Liberty DAC II undergoes comprehensive quality control and a complete test before shipping. This Liberty DAC II is warranted by Mytek to the original purchaser against defects in workmanship and materials used in manufacture for a period of two years from the date of purchase.

Faults due to customer misuse, unauthorized modifications or accidents are not covered by this warranty. No other warranty is expressed or implied.

If you suspect that your product is faulty, please contact your local retailer. Prior to shipping customer or retailer must obtain an RMA number from Mytek for warranty services. Units sent without RMA number will not be accepted.

Mytek extends affordable repair service for all units manufactured to date that are not covered by this Warranty. Mytek repair centers are located at Mytek Headquarters in Brooklyn / New York, and in Warsaw / Poland (at Mytek EU Branch Office).

Important Safety Information

- Read, keep and follow these instructions
- Connect all your devices before powering the unit
- Do not expose this device to moisture, rain and liquid of any kind
- Clean only with dry cloth
- If any form of liquid or a foreign object enter the device switch it off and unplug it from the power source. Do not operate device until the foreign object is removed or the liquid has completely dried. If doubt please contact Mytek Audio
- Do not block any ventilation openings. Install in accordance with the manufacturer's instructions
- Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat
- Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet
- Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus
- Only use attachments/accessories specified by the manufacturer
- When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip-over
- Unplug this apparatus during lightning storms or when unused for long periods of time
- Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as 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

Warning

Excessive sound pressure from speakers and headphones can cause hearing loss. In order to use this product safely, avoid prolonged listening at excessive sound pressure levels.

For the customers in the U.S.A.

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

All interface cables used to connect peripherals must be shielded in order to comply with the limits for a digital device pursuant to Subpart B of Part 15 of FCC Rules.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

This product with the CE marking complies with the EMC Directive issued by the Commission of the European Community. Compliance with this directive implies conformity to the following European standards:

- EN55103-1: Electromagnetic Interference (Emission)
- EN55103-2: Electromagnetic Susceptibility (Immunity)

This product is intended for use in the following Electromagnetic Environments: E1 (residential), E2 (commercial and light industrial), E3 (urban outdoors), E4 (controlled EMC environment, ex. TV studio).

Information on Disposal for Users of Waste Electrical & Electronic Equipment(private households)

The Wheelie Bin symbol on the products and/or accompanying documents means that used electrical and electronic products should not be mixed with general household waste. Disposing of this product correctly will help save valuable resources and prevent any potential negative effects on human health and the environment.

To properly dispose harmful substances and recycle the product, the user is obliged to return it at the point of collection of electrical and electronic equipment waste. For more information please contact your local authorities, waste disposal units or retailer.



