

Owner's Manual Ver. 1.1 / January 2016

© Mytek 2016

*The Brooklyn DAC firmware can be easily updated via Mytek USB Control Panel. 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:*

**mytekdigital.com**

*Technical support issues are handled via our online support ticketing system. Please enter details of the ticket in the support/download section on Mytek website.*

**Mytek**

148 India St.  
Brooklyn, NY 11222

tel. +1 (347) 384-2687

## Contents

### General

1.	<b>Introduction</b> .....	3
2.	<b>Package Contents</b> .....	4
3.	<b>Brief Description</b> .....	4
4.	<b>Quick Start</b> .....	5
4.1	Front Panel .....	5
4.2	Rear Panel .....	6
5.	<b>Brooklyn DAC Windows installation and configuration</b> .....	7
5.1	Windows – USB 2.0 driver installation .....	7
5.2	Windows – Mytek Control driver and application installation.....	10
5.3	Windows – Brooklyn DAC as default system playback device...	11
6.	<b>Mac OSX installation</b> .....	
6.1	OSX – USB 2.0 driver installation.....	12
7.	<b>Firmware update</b> .....	12
8.	<b>User Adjustments</b> .....	13
8.1	Reduction the output level.....	13
9.	<b>Menu Navigation</b> .....	13
10.	<b>Remote</b> .....	14
11.	<b>Technical Specifications</b> .....	15
12.	<b>Warranty</b> .....	16
13.	<b>Important Safety Information</b> .....	16

## 1. Introduction

Thank you for choosing the Brooklyn DAC from Mytek Digital and welcome to the Mytek users' community.

Over 20 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. Brooklyn will play:

- PCM up to 32 bit integer/ 384 kHz.
- DSD up to DSD256.
- MQA master quality files off online streaming services.
- Vinyl records utilizing its precision M/C, M/M phono preamplifier.
- Any other digital source equipped with Toslink, SPDIF, AES or DSD SDIF out.
- Any other analog source plugged into analog input.

The Brooklyn DAC has been optimized for highest performance under Windows, Mac OS and Linux. Based on a newly developed Mytek Hi-Speed USB2 Class2 32bit/384k Integer Interface, the Brooklyn DAC provides very low latencies as well as extreme stability.

Mytek provides Windows (up to Win10) 32 bit drivers, both WASAPI and ASIO (with native DSD) developed by Thesycon.com. Mac OSX and Linux computers as well as the Linux audio streaming devices do not require a driver.

Enjoy your new Brooklyn DAC!

All the best,  
The Mytek Digital Team

## 2. Package Content

- The Brooklyn DAC (silver or black)
- USB 2.0 Cable
- Aluminum remote (Apple)
- Power cord
- Owner's manual

## 3. Features

- Conversion: up to 384k, 32bit PCM, native DSD up to DSD256, DXD, 130dB Dynamic Range
- Analog outputs: RCA, balanced XLR, simultaneous
- Headphone outputs: Reference High Current, High transient balanced Headphone Amp, 500mA, 6 Watts, dual headphone jacks, designed to drive hard to drive headphones.
- Built-in Attenuator: Choice of 1dB step analog attenuator, separate for main out and headphones, 1dB step digital 32 bit attenuator and purist relay bypass.
- AES/EBU Input (PCM up to 192k, up to DSD64 DOP)
- 2x S/PDIF Input (PCM up to 192k, up to DSD64 DOP)
- Toslink / ADAT Input (PCM up to 192k, up to DSD64 DOP)
- SDIF3 DSD Input up to DSD256
- Mytek proprietary USB 2.0 Class 2, up to 32bit/384k, DSD256, also accepts digital AES, SPDIF and Toslink inputs. This USB interface also allows stacking of multiple Mytek units for multichannel operation.
- Mytek Femtoclock 0.82ps internal jitter, Wordclock Input and Output (allows stacking multiple units for multichannel operation, includes mch DSD)
- Built-in Analog Preamp: Line level input or Precision Phono M/M, M/C input, relay controlled.
- Choice of Transparent Analog or Digital stepped volume control with "Bypass" option for the purest signal path.
- Built in certified hardware Hi-Res MQA decoder
- High definition metering with simultaneous RMS and peak indication
- Four digital inputs are fitted (1x AES/EBU, 2x S/P DIF and 1x TOSLINK / ADAT) which allow a wide range of digital sources to be connected.

## 4. Quick Start

### 4.1 Front Panel



1. Mytek backlit logo with its color and brightness user adjustable. Color follows the color of the Mytek Control Panel software and may indicate specific functionality.
2. Headphone Output Section, Dual Mono, with Balanced Operation mode [500mA, 6 Watts]. Left jack connects unbalanced phones in absolute phase. Right jack connects unbalanced phones in absolute out of phase. A special 2x 1/4" jack to 4 pin FXLR allows for connection of single balanced headphones. Balanced headphones will play twice as loud (+6dB) as unbalanced headphones with output voltage swing of +/-12V and output impedance below 0.5 Ohm
3. Functional button enables the user to quickly choose an option, change and configure the device's settings. At the picture shown above it activates "Sample Rate" menu.
4. Functional button enables the user to quickly choose an option, change and configure the device's settings. At the picture above it activates "Volume".
5. OLED display
6. Functional button enables the user to quickly choose an option, change and configure the device's settings. At the picture above it activates "Input" menu.
7. Functional button enables the user to quickly choose an option, change and configure the device's settings. At the picture above it activates "Mode" menu.
8. Rotary Encoder Knob. This encoder is both a knob and a button. It's primary function is to control the volume level. It also functions as MENU navigation for configuring device's options.

**Press and hold the main knob to turn the Brooklyn DAC on or off.**

## 4.2 Rear Panel



1. Balanced XLR Stereo Analog Output
2. RCA Stereo Analog Output
3. RCA Stereo Analog Input
4. AES/EBU Input. Professional digital input which accepts up to 192kHz/24bit. Accepts DSD DOP standard input up to DSD64. This input can also be used to transmit digital audio into computer via USB2 connection.
5. 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. This input can also be used to transmit digital audio into computer via USB2 connection.  
To obtain best results, use a high quality 75 ohm digital RCA interconnect cable.  
Note – these two inputs can also operate as stereo SDIF2/3 DSD input with 2 BNC>RCA adapters for use with professional DSD recording equipment (such as Tascam Master Recorders)
6. Mytek proprietary USB 2.0 Class 2, up to 32bit/384k, DSD256, also accepts digital AES, SPDIF and Toslink inputs. This USB interface also allows stacking of multiple Mytek units for multichannel operation.
7. Optical Input (Toslink). Digital input which accepts up to 192kHz/24bit. Accepts DSD DOP standard input up to DSD64. This input can also be used to transmit digital audio into computer via USB2 connection. 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.
8. Wordclock BNC input. Can be used for professional clock distribution and for syncing multiple units and as DSD reference clock. Can also be used for connecting the Brooklyn to external clock. However, we recommend running Mytek on Internal Clock, using the built in Mytek FemtoClock which is by far superior (<1ps jitter) to any clock source connected from outside.
9. Wordclock BNC output. Used for professional clock distribution. 192KHz and DSD reference clock. Mytek Femtoclock Generator (tm) 0.82ps internal jitter, Wordclock Input and Output (allows stacking multiple units for multichannel operation, includes multichannel DSD)
10. Phono ground
11. Optional external DC / Battery Power input; 12VDC. Connecting a large external battery or large power supply may have positive impact on sound quality.
12. The build in automatic power supply operates in the range of 100V to 240V AC

## Quick Start – Immediate Playback AES/EBU, SPDIF and Toslink

Connect the analog outputs to your powered speakers, power amplifier or preamplifier. Alternatively use headphones. Connect the digital source (CD player) to the DAC. Power up the player, power amplifier and the Brooklyn DAC. Upon power up, the DAC will default to its default settings hand picked by our team to produces the optimal sound quality. The active digital input will be automatically detected.



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

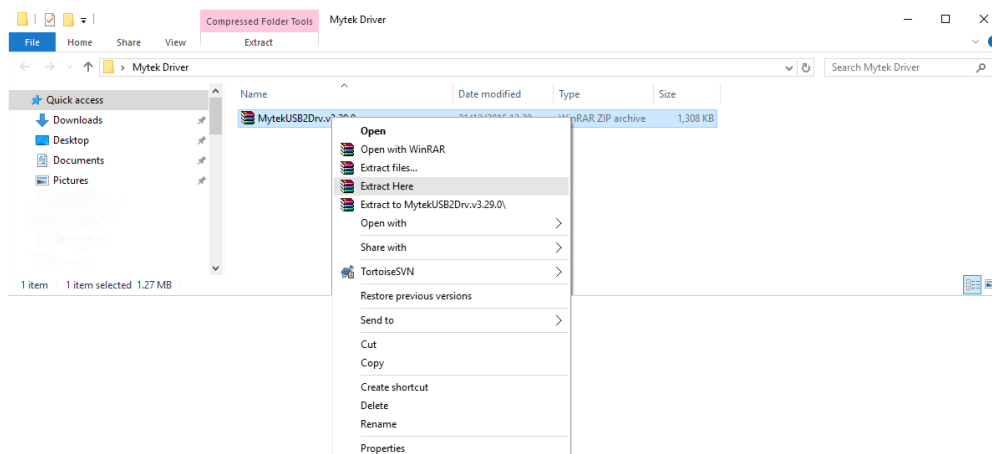
## 5. Brooklyn DAC Windows installation and configuration

- Turn off your amplifier then connect the Brooklyn DAC Analog Outputs to your amplifier's analog inputs. Balanced connections (XLR) are typically for professional audio equipment while unbalanced connections (RCA) are typically for consumer audio equipment.
- Note that for proper operation it is necessary to install the USB2 driver (Windows only) and Mytek Control application. Both these have separate installers.

### 5.1 Windows – USB 2.0 driver installation

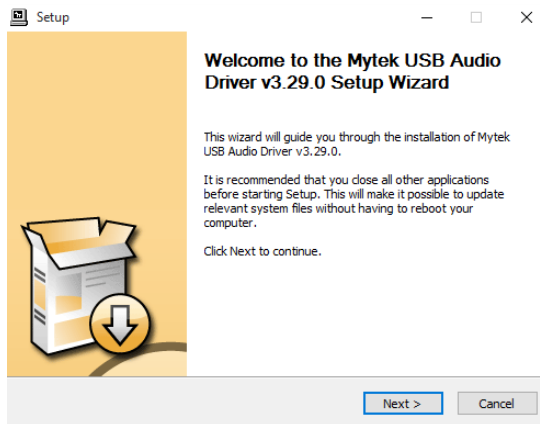
To simplify installation it is recommended to first install the drivers before the unit is connected to the computer. The latest drivers are available at [mytekdigital.com](http://mytekdigital.com)

1. Locate the MytekUSB2Drv.v3.xx.x.zip file and extract the contents of the archive by right clicking on the zip archive icon and selecting "Extract Here".

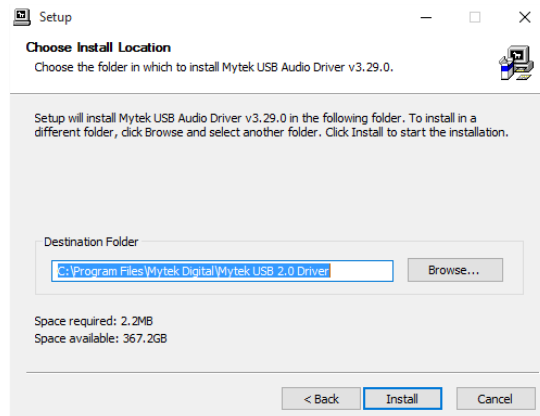


2. Installation works automatically by a double-click on MytekUSB2Drv.v3.xx.x.exe file.

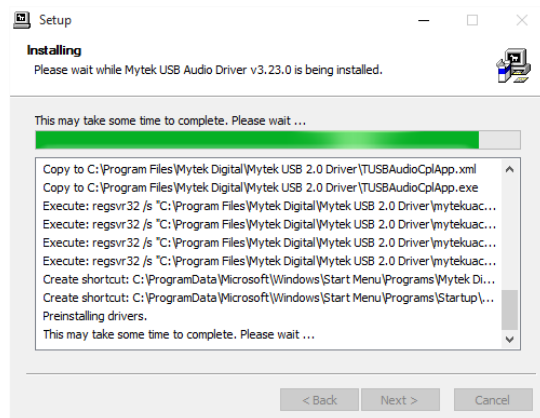
3. Once the Setup.exe opens click "Next"



4. Choose the location of installation. By default it will install in "C:\Program Files\Mytek Digital\Mytek USB 2.0 Driver" We recommend leaving this as is. If you wish to customize the install choose the location by selecting browse. Click "Install".

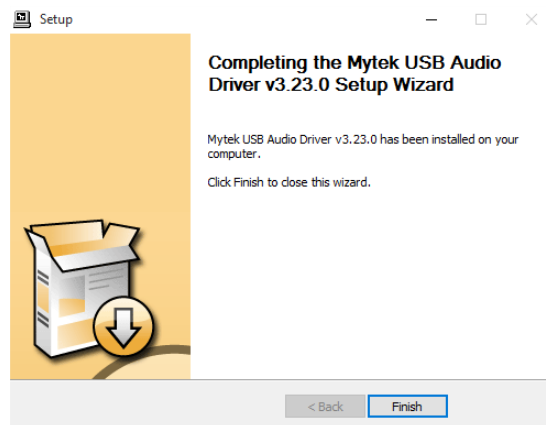
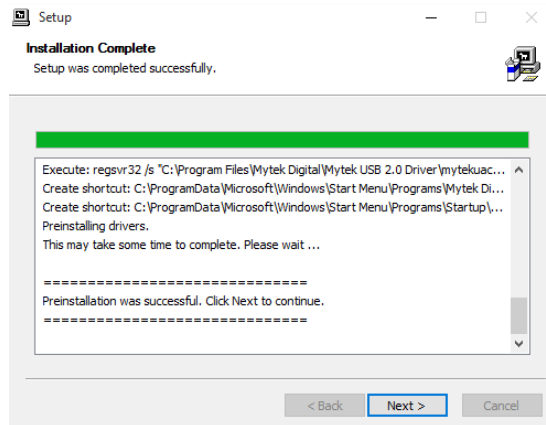


5. Setup.exe will now install the Mytek Driver. This process may take a few minutes.





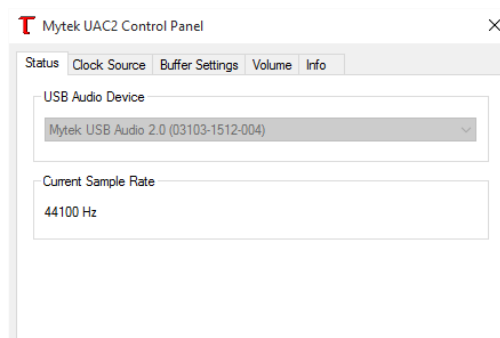
6. Upon completion of "Setup.exe" press the "Next" button.



7. To complete installation of the driver simply click the "Finish" button.

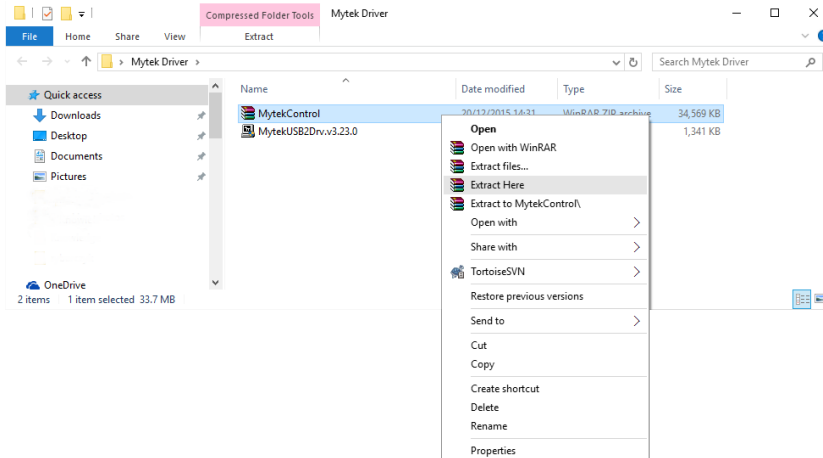
8. Connect the Brooklyn DAC to USB2 port in your computer.

9. Confirm installation by launching the Mytek UAC Control Panel. Installation was successful if the Mytek UAC Control Panel shows a device and permits access to playback options.

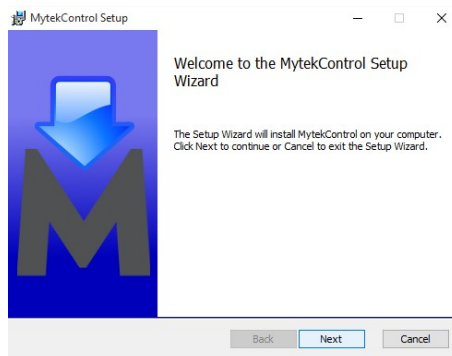


## 5.2 Windows – Mytek Control driver and application installation process

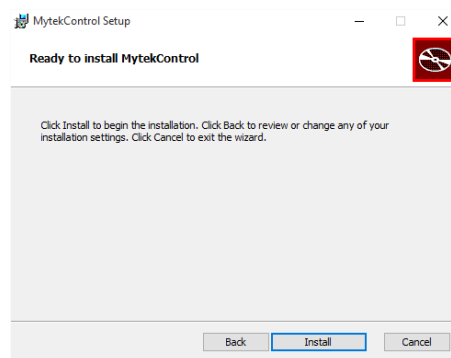
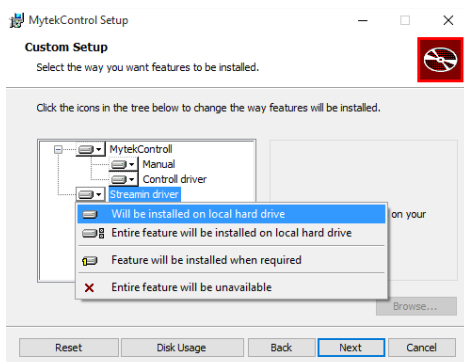
1. Locate the MytekControl.zip file and extract the content by right clicking on the zip archive icon and selecting "Extract Here".



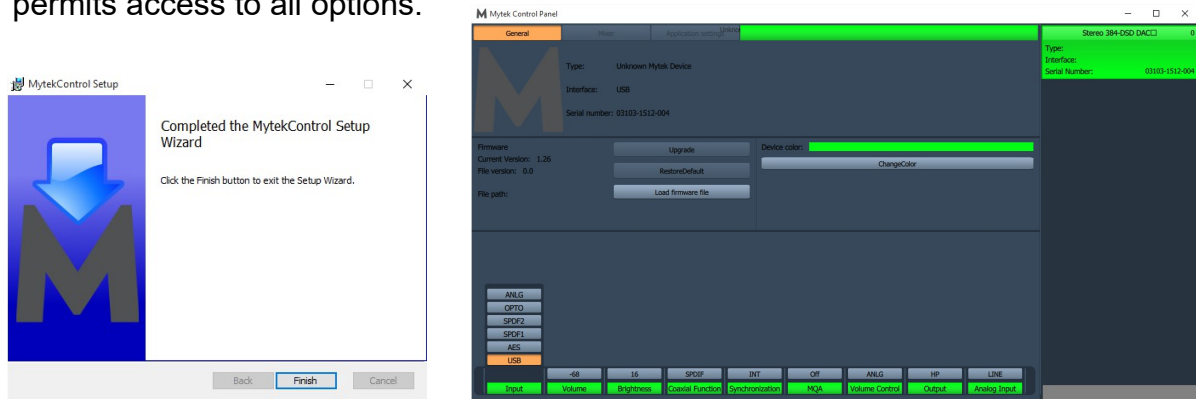
2. To install The Mytek Control double click the extracted Windows Installer Package file. When MytekControl Setup Wizard appears click "Next" then accept license and click "Next" again.



3. All options should be chosen in "Custom Setup" menu. To confirm the installation of each option choose "Will be installed on local hard drive" then click "Next" and "Install" to begin the installation.



- To complete installation of the driver simply click the "Finish" button. Confirm installation by launching the MytekControl application. Installation was successful if the MytekControl application shows the Brooklyn DAC with serial number and permits access to all options.

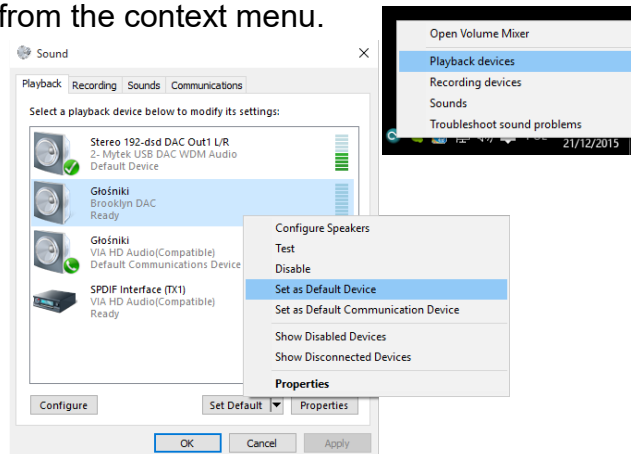


### 5.3 Windows – setting the Brooklyn DAC as default system playback device

- To set the Brooklyn DAC as your default Windows playback device find the speaker icon (Sound Settings) in the notification area (lower right corner of your screen) and right-click. Choose "Playback devices" from the context menu.

- Right-click "Speakers Brooklyn DAC" and choose "Set as Default Device".

Your Mytek DAC is default Windows playback device now. All applications such as web browsers, media players use it as default playback device.



- Note! – pro audio (DAW) applications (Cubase, Samplitude, Reaper etc.) or professional media players use ASIO drivers and need to be configured different way. Please check our "Software Setup Guide" shown on our web site: [mytekdigital.com](http://mytekdigital.com)

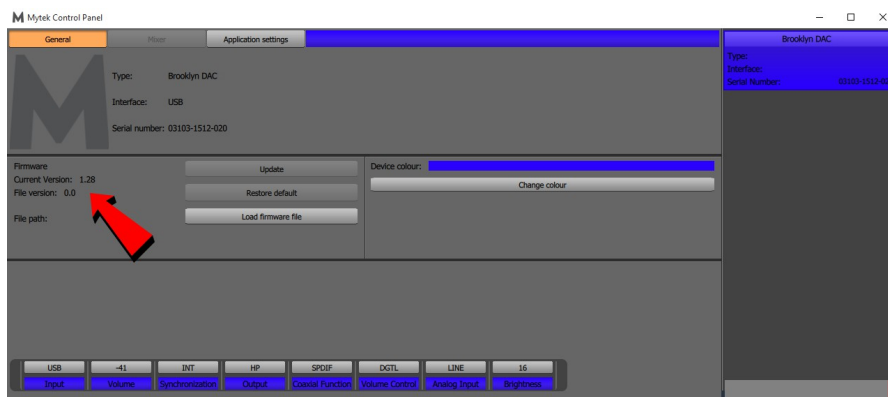
## 6. Brooklyn DAC OSX installation

### 6.1 OSX – USB 2.0 driver installation

The Brooklyn DAC custom designed USB2 controller supports driverless operation on MAC. It means that no extra drivers are required. Driverless operation basically means "plug and play". The Brooklyn DAC will automatically show up in your computer's list of supported audio devices as "Brooklyn DAC". Simply choose that as your default audio playback device and the system will work.

## 7. Firmware update Windows and OS X

The current revision of the Brooklyn DAC firmware is displayed in the MytekControl „General” tab.



- The firmware can be updated by using USB2 port and Mytek Control application. It requires already installed USB2 driver and Mytek Control application. To download the current firmware as well as drivers please visit [mytekdigital.com](http://mytekdigital.com)
- It is recommended to turn off any powered speakers / power amps connected to the Brooklyn DAC before proceeding with the firmware update.

### Follow the steps below to update the firmware:

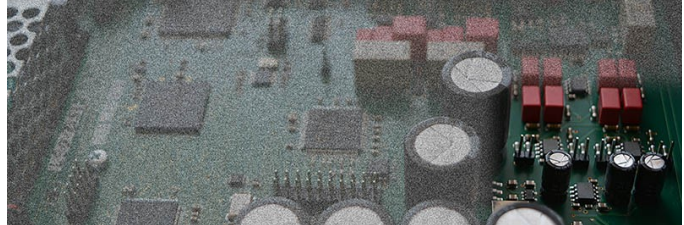
1. Download the latest firmware \*.mfb file from [mytekdigital.com](http://mytekdigital.com)
2. Click „Load firmware file” button and browse to the new firmware file then click „Open”.
3. Press the „Update” button to confirm uploading the firmware file to device's memory.
4. Confirm your choice by clicking „Yes” when warning dialog appears. A progress bar will indicate when the flash process is finished.
5. When the update is finished the unit needs to be reset. This is done by powering down the unit for a few seconds. A reboot of the computer is not necessary. Once the DAC has been restarted the firmware update is complete.

## 8. User Adjustments

### 8.1 Reduction the output level

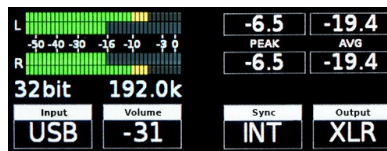
Internal -6db Gain Jumpers: these 4 jumpers allow the user to reduce the output level of the Brooklyn DAC by 6 db without affecting sound quality. All 4 jumpers must be engaged to ensure proper operation and should only be used when the DAC is clearly overloading the following amplifier stage in the chain.

**⚠ Note!** - the power cable must be disconnected during the jumpers adjustment.

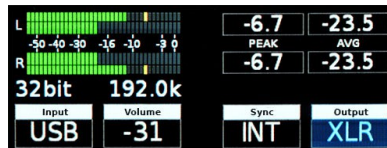


## 9. Menu Navigation

The four buttons, one encoder and the high-resolution display enable the user to quickly change and configure the device's settings. There are always four parameters shown at the bottom of the display.



To enter the one of four parameters menu shown on the display, press one of the four buttons located on the left and right side of LCD display. When the value is ready to change it is back-lit with blue colour. To change the value rotate the knob until you see the option / value you need. Press the knob (or the same button) again to leave the menu.



Turn the knob round to navigate between all available parameters.



Press the knob once to activate screensaver



Press and hold the knob to switch the Brooklyn DAC off / on.

## 10. Remote

The Mytek Brooklyn DAC is infrared remote ready and will work with any Aluminum Apple Remote or any Universal Remote Control using the Philips RC5 standard.

- OFF
- RC5
- NEC (Apple)



### 10.1 The Brooklyn DAC Apple Remote Setup

1. Turn the knob round until you see "Remote" menu then press third button to activate the menu.
2. Choose "NEC" option. "Remote Addr" appears on the left.
3. Activate "Remote Addr" menu by pressing fourth button. The menu should be backlit with blue colour.
4. Press the center (Enter) button on the Apple Remote.
5. Done! - the Apple remote is paired.

## Technical Specification

### ANALOG

- Analog Outputs Connectors: 2 XLR balanced outputs, 2 RCA unbalanced outputs
- Resolution DA: PCM 32bit / DSD up to 256 (11.2 Mhz)
- PCM Sample Rate: 44,1 / 48 / 88,2 / 96 / 176,4 / 192 / 384 Khz
- Dynamic Range: 130dB
- Output Impedance: 75 Ohm
- Headphone Amp: more than 500mA, 6 Watts  
High Current, High Slew Rate ultra low distortion, balanced
- Built-in Analog Preamp: Line level input or Phono M/M, M/C input, relay controlled

### DIGITAL

- Computer Audio I/O: 2.0 Hi-Speed, data stream up to 480Mbits/384kHz, Type B, driverless.
- AES/EBU Input: XLR, 24Bits / 192 kHz
- TOSLINK Optical Input: up to 192kHz single wire
- S/PDIF Coaxial Input 1 & 2: up to 192kHz single wire
- SDIF DSD Input: DSD up to 256
- ADAT Input: up to 192kHz single wire
- WordClock I/O: BNC
- Clock: Mytek Femtoclock Generator (tm) 0.82ps internal jitter, Wordclock Input and Output (allows stacking multiple units for multichannel operation, includes mch DSD).

### GENERAL

- Firmware: upgradable via USB Control panel, updates available online, periodic feature upgrades
- Power Supply: Internal switching PSU, 100 - 240 V AC
- Dimensions [W x H x D]: 218 x 44 x 206 mm / 1U half rack
- Weight: 1,6 kg

## Warranty

Each individual Brooklyn DAC undergoes comprehensive quality control and a complete test before shipping. This Brooklyn DAC 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 Distribution 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 Digital.
- 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.

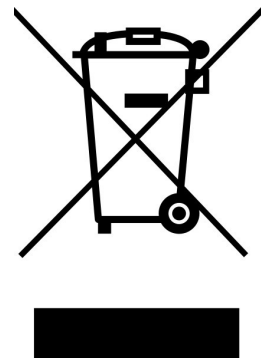
This product with the CE marking complies with the EMC Directive issued by the Commission of the European Community. Compliance with this directive implies conformity to the following European standards:

- 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.