

THE BROOKLYN BRIDGE

DAC • HEADPHONE AMP • PREAMP

• NETWORK PLAYER •



Owner's Manual



DSD
Direct Stream Digital
256



MQA

DXD
Digital eXtreme Definition

roon **VINYL**

Owner's Manual Ver. 1.2 / March 2021

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The Brooklyn Bridge firmware can be easily updated via Mytek USB Control Panel. As the firmware is updated, Mytek Europe will be posting new firmware releases in the support/download section on Mytek Europe website. Firmware may alter details of the device 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:

mytek-europe.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.

hem

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1. Introduction

Thank you for choosing the Brooklyn Bridge from Mytek and welcome to the Mytek community. Over 25 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 Brooklyn Bridge will play:

- PCM up to 32 bit / 384 kHz and DSD64-256, DoP up to 128x48k (DSD64-128, DSD64-128x48k) over USB.
- PCM up to 24 bit / 192 kHz and DSD64 (DoP) over network.
- 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.
- Any other analog source plugged into analog input.

The Brooklyn Bridge has been optimized for highest performance under Windows, Mac OS and Linux. Based on a newly developed Mytek Hi-Speed USB (USB2) Audio Class 2, 32bit/384kHz Integer Interface, the Brooklyn Bridge provides very low latencies as well as extreme stability. Fast Windows drivers including ASIO & WASAPI are provided. Mac OSX and Linux computers as well as the Linux audio streaming devices do not require a driver.

Enjoy your new Brooklyn Bridge!

All the best,
The HEM Team

2. Package Content

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



3. About Brooklyn Bridge

Brooklyn Bridge continues technological thought of Brooklyn family. It has the same as in DAC+ Sabre 9028 Pro chipset and analog section – it still has pristine, transparent and musical sound! The main difference lays in network connection capability. It adds network streamer functionality to the Brooklyn Bridge. You can connect your Brooklyn Bridge via Ethernet (RJ-45) cable or Wi-Fi. We have also added a USB-A port to connect a flash drive.

The Brooklyn Bridge is a Universal Plug and Play (UPnP) rendering device. Typical UPnP environment consists of three necessary elements:

- Server enables transport of the music stored on the computer or NAS to some end-point (i.e. JRiver Media Center).
- Renderer converts the stream to format acceptable by the DAC.
- Controller offers a user interface for a convenient playback experience (typical these are mobile apps, i.e. mConnectControl, mConnectPlayer; JRiver also can act as a UPnP controller).

So you can use programs like JRiver Media Center both as a UPnP server and controller. While using NAS you need to have compatible controller app like mConnect to stream music from it. The Brooklyn Bridge will play the following formats through the network connection:

- PCM up to 24bit / 192kHz
- DSD64
- MQA master quality files

The files can come from various sources:

- USB Flash
- Roon, mcontrol by Conversdigital (TIDAL, Deezer, Qobuz, Spotify)
- NAS
- DLNA/UPnP source

4. Device Features

- Conversion: up to 384k, 32bit PCM, native DSD up to DSD256, DXD, 130dB Dynamic Range
- Analog outputs: simultaneous RCA and balanced XLR
- 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, 1dB-step digital 32 bit attenuator and purist relay bypass
- RJ-45 Ethernet/Wi-Fi Input: PCM up to 24 bit / 192 kHz and DSD64 (DoP) over network.
- 2x SPDIF Coaxial Input: PCM up to 24bit / 44.1 - 384kHz, DoP up to 128x48k (DSD64-128, DSD64-128x48k)
- Mytek proprietary USB Audio Class 2, up to 32bit/384k, DSD256x48k (DSD64-256, DSD64-256x48k)
- Toslink Input: up to 24 bit/ 192 kHz and DoP up to x64 (DSD64)
- Mytek Femtoclock 0.82ps internal jitter
- Built-in Analog Preamplifier: 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
- Six digital inputs are fitted (1x USB-B, 1x USB-A for flash drive, 2x SPDIF coaxial, LAN/Wi-Fi and 1x SPDIF Optical) which allow a wide range of digital sources to be connected
- Trigger control allows the Brooklyn Bridge easily to be integrated with other HiFi devices

5. Network Features and Setup Guide

Brooklyn Bridge uses CDMCM-2121 DLNA Complete Audiophile Receiver Module. This module provides Brooklyn Bridge network capabilities. The streamer module can be controlled via dedicated mconnect Control by Conversedigital app (available in Google Play and Apple app store on phone/tablet) or you can also playback from other applications like Roon (requires Roon Core), Spotify, Jriver, Audirvana, Foobar via UPnP protocol.

It also has its own firmware which is updatable via mconnect Control app or from Brooklyn Bridge menu. The streamer module needs more time to be turned on so you can see „Wait...“ on Brooklyn Bridge screen shortly after turning on the Brooklyn Bridge and switching the input to NET.

5.1 Network Features

- Connectivity Protocol Support: DLNA/UPnP, Spotify and Roon
- Audio Decoding: PCM up to 24/192kHz, DSD64
- File formats/codecs: FLAC, Apple Lossless, AAC, AIFF, MP3, WAV, WMA, OGG, Monkey's, DFF, DSF

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- MQA(Master Quality Authenticated) Support: MQA stream bit perfectly transported to the hardware decoder inside Brooklyn Bridge
- Integrated Internet Streaming Music: TIDAL, Qobuz, Deezer (via mconnect control app), TIDAL via Roon, Spotify (via Spotify dedicated app)
- Supports Gapless playback (via mconnect control app in music streaming services)
- Supports DSD64 input from network
- Digital Media Server (DMS) function for flash memory: memory connected to USB-A Brooklyn Bridge input will function as a DLNA server. There is possibility to play from USB via dedicated mconnect control app.
- Automatic stream detection - Brooklyn Bridge will change input to network module (NET) when stream is detected

5.2 Connection

Wired connection to LAN

For wired connection please plug Ethernet cable to Ethernet port. Brooklyn Bridge will automatically connect to your LAN. In „Network INFO“ menu (available under same-titled tile) assigned IP address will be displayed and wired connection icon will appear.

Ethernet connection has higher priority than Wi-Fi connection. It means that if your Brooklyn Bridge is connected to your local LAN network Wi-Fi functionality will not be available. Unplug Brooklyn Bridge from Ethernet cable to unlock Wi-Fi functionality.

Access Point (Wi-Fi)

Access Point mode is active when there is no password for Wi-Fi remembered in Brooklyn Bridge memory and there is no Ethernet connection - i.e. when Brooklyn Bridge is turned on for the first time or after restoring to defaults settings. You can connect your phone/tablet to the network created by Brooklyn Bridge and via mconnect Control you can conveniently connect Brooklyn Bridge to your LAN.

To connect Brooklyn Bridge directly to your phone/tablet please find in your device Wi-Fi called i.e. „Mytek Brooklyn Bridge HEM123456“ The word „password“ is a password. When connection is established open dedicated mobile application – mconnect Control – and choose setup „gear“ icon and then Device Setup. Select Brooklyn Bridge from the list. If you don't see any device use „refresh“ icon. Tap on „WiFi Network selection“ – you will see the list of available Wi-Fi connections. Choose your Wi-Fi and enter the password and confirm if needed. The Brooklyn Bridge will automatically connect to Wi-Fi of your choice and Access point will be turned off. Now make sure your phone/tablet is connected to the same network you've connected the Brooklyn Bridge.

WLAN (Wi-Fi)

Wi-Fi Connection is manageable via „**Network INFO**“ menu tile. When network module is fully turned on and BB is disconnected from network you will see list of available Wi-Fi networks, quality of signal and encryption type. Please remember that Ethernet cable must be disconnected to use Wi-Fi functions.

To connect the Bridge to your Wi-Fi simply select it (via rotary knob) from the list and use „Connect“ tile corresponding button. The list is periodically refreshed in 5 seconds interval.

On the next screen you can enter a password for your Wi-Fi. Use rotary encoder knob to select a letter/sign and use arrows corresponding buttons for going from one letter/sign to another. You can also delete last character by using far right button (closest to rotary knob).

First you can select minuscule then capital letters then digits and at last special characters.

The very last character functions as space. When you complete entering password choose "Connect". After a while (up to around 30 sec.) Brooklyn Bridge will connect to your Wi-Fi and will remember it as a default one. If wrong password was entered available Wi-Fi connections list will appear again.

WPS

If your router has Wi-Fi Protected Setup (WPS) function you can connect your DAC to Wi-Fi without entering password. Go to the **„Network INFO“ menu tile**. Find your Wi-Fi on a list via rotary knob. Then select WPS function via corresponding menu button. Now press WPS button on your router. When the connection will establish you will see „Connected to: (your Wi-Fi name)“.

5.3 Using Network Features

mconnect control – Dedicated Mobile Application

mconnect control is application available for free in Google Play and Apple App Store on mobile devices – phone and tablets. This is the application recommended by us because it gives the greatest possibilities of control over Brooklyn Bridge network module. There are two versions of mconnect control app: mconnect control and mconnect control HD. First one is dedicated for phone users and the second one is more suitable for tablet users.

Playing music

Make sure your Brooklyn Bridge is connected to your LAN via Ethernet or Wi-Fi. Your phone or tablet must be connected to the same LAN.

Open **mconnect control** app. Select „Play to“ icon located in right down corner of your screen. Now you will see the list of devices where you can start streaming music. Locate your Brooklyn Bridge on a list and select it.

Then you will see mconnect starting screen again but in this time on the top of the app bar your Brooklyn Bridge name will be displayed. You connected your phone/tablet to BB!

Now you can select Browser icon and there you can choose from what place or service you want to play music – Tidal, Qobuz, Deezer, Dropbox, OneDrive, your phone/tablet storage or any UPnP device (i.e. NAS, server) available in your local network.

If you have chosen i.e. Tidal you should have to log in into it. Now you can select track and enjoy your listening experience.

Playing music form USB-A input – 2,5"HDD and USB flash drive

For playback from HDD or pendrive mconnect Control app is required. Also your phone and Brooklyn Bridge must be connected to the same network.

Note! If you use storage connected to USB-A port please make sure you have only one partition on it.

Connect your HDD/USB stick to the USB port named „STORAGE“ and turn on the Brooklyn Bridge. When Brooklyn Bridge establish connection with your LAN open mconnect Control app. Make sure your Brooklyn Bridge is set as an output in „Play to“ tab. Now choose „Browser“ tab and you will see your Brooklyn Bridge on the list. Default name contains Brooklyn Bridge main board serial number so full name can look like this: „Server“

Now select your Brooklyn Bridge from the list and you will see files that your HDD or pen drive contains.

Note! Use FAT32 or NTFS file storage system for your HDD or USB flash drive! Other storage system files are not supported.

**Note! The USB-A port can deliver only 0,5A of power.
More power hungry HDD may require external power supply.**

**Note! For the best performance (speed of discovery and
browsing the files on the drive) we advise to use the drives
with 32GB capacity at maximum.**

Changing the name

You can change the name of your device visible in mconnect Control app. To do that connect your Brooklyn Bridge and phone/tablet to the same LAN. Open the mconnect Control app and select setup icon located in up left corner. Select „Device Setup” then choose your Brooklyn Bridge from the list. From this point you can select „Device Name Change” and change the name of the Brooklyn Bridge.

Cover Art

From firmware v1.30 or higher BB gain possibility to display Cover Art when simple screen is active. You can deactivate this in BB menu in „Cover Art” menu tile.

Other applications

Spotify

Streaming music from Spotify is available only for Spotify Premium members.

Connect your Brooklyn Bridge and phone/tablet to the same network. Open the Spotify app and select a track you want to play. Now Select „Devices Available” on the track bar. Select again „Devices Available” on the bottom of the screen. Choose Brooklyn Bridge from the list and enjoy your listening experience.

Roon

Brooklyn Bridge is a Roon Ready device which can act as an output in Roon architecture.

Roon Core and Roon Control apps are necessary for proper operation.

You can find more info about Roon at <https://www.roonlabs.com>

You can find Quick setup guide for Roon at „<https://www.mytekdigital.com/hifi/support>”

Universal Plug and Play (UPnP)

Brooklyn Bridge supports UPnP MediaRenderer DCP component so any music player with UPnP protocol implemented can use Brooklyn Bridge as an end point. Below you can find some examples of such applications:

Foobar2000

To enable UPnP in Foobar2000 download this component:

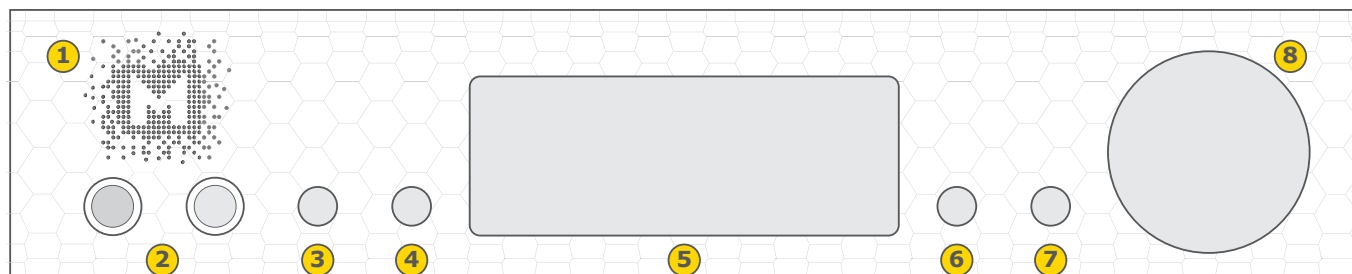
https://www.foobar2000.org/components/view/foo_out_upnp

Audirvana

JRiver

6. Device overview

6.1 Front Panel



1. Mytek backlit logo with its color and brightness user adjustable. Color follows the color of the Mytek Control Panel.

2. Headphone Output Section, Dual Mono, with Balanced Operation mode [500mA, 6 Watts]. Left jack connects unbalanced phones in absolute out of phase phase. Right jack connects unbalanced phones in absolute 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

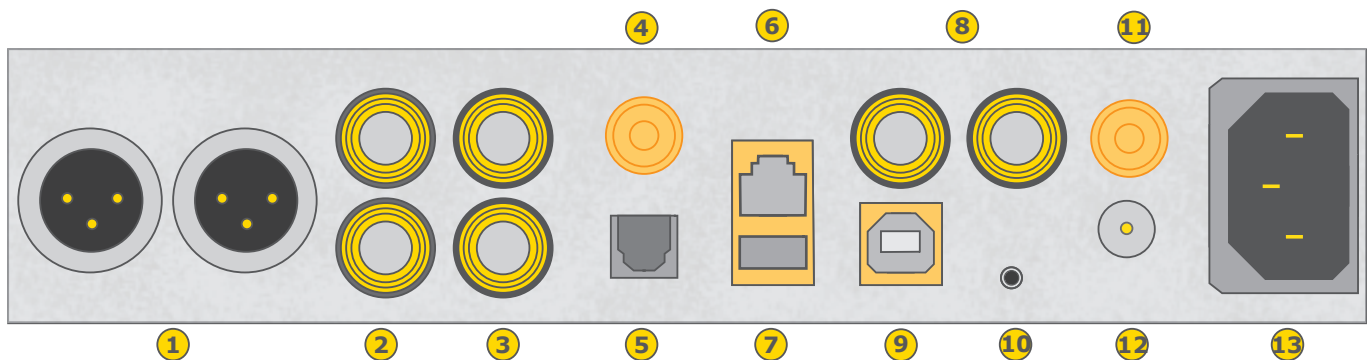
3,4,6,7. Functional button enables the user to quickly choose an option, change and configure the device's settings.

5. OLED display

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.

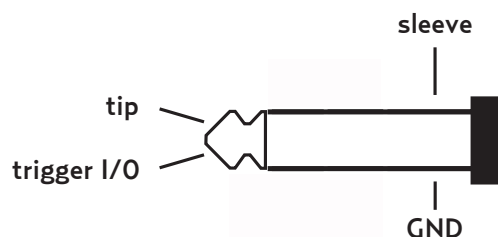
Press and hold the main knob to turn the Brooklyn Bridge on or off.

6.2 Rear Panel



1. Balanced XLR Stereo Analog Output
2. RCA Stereo Analog Output
3. RCA Stereo Analog Input
4. Phono ground connector when turntable is used.
5. Optical Input (Toslink). Digital input which accepts up to 192kHz/24bit. Accepts 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.
6. Ethernet port. Allows you connecting RJ-45 type cable (min. cat5 required).
7. USB-A 2.0 port. Accepts pen-drives and 2.5" HDD. Maximum load 500mA
8. 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.
9. Mytek proprietary USB 2.0 Audio Class 2, up to 32bit/384k, DSD256
10. Trigger I/O connector. The Brooklyn Bridge is fully compatible with popular trigger, HiFi control systems. When working as the input the voltage range of 3.3V – 24V is accepted. When working as the output it feeds 12V in this state. This connector is compatible with 3.5mm, 2 pole (tip and sleeve) jack plug only.

mono plug diagram



11. Wi-Fi antenna connector.
12. Optional external DC / Battery Power input; 12VDC. Connecting a large external battery or large power supply may have positive impact on sound quality.
13. The build in automatic power supply operates worldwide 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 Bridge. Upon power up, the DAC will default to its default settings hand picked by our team to produces the optimal sound quality. Choose the input you would like to use.

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 or rack mount the Brooklyn Bridge. It may result in overheating the device!

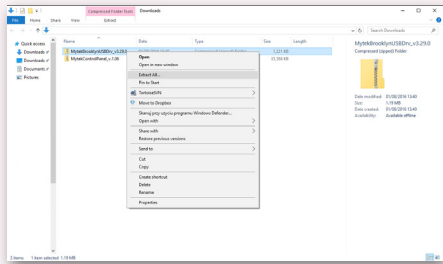
7. Windows installation and configuration

- Note that for proper operation it is necessary to install the USB2 driver (Windows only) and Mytek Control application. Both these have separate installers.

7.1 Windows – USB 2.0 driver installation

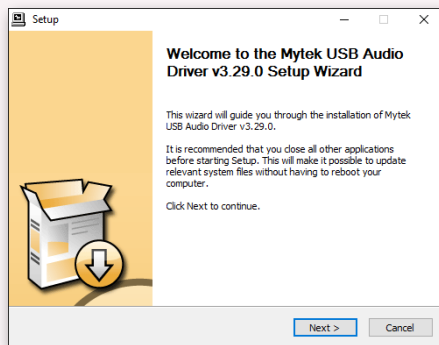
To simplify installation it is recommended to first install the drivers before the unit is connected to the computer. The latest drivers are available at mytekdigital.com

1. Locate the MytekUSB2Drv.v4.xx.x.zip file and extract the contents of the archive by right clicking on the zip archive icon and selecting „Extract Here”.

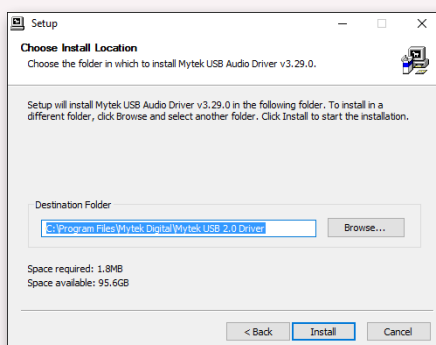


2. Installation works automatically by a double-click on MytekUSB2Drv.v4.xx.x.exe file.

3. Once the Setup.exe opens click „Next”.

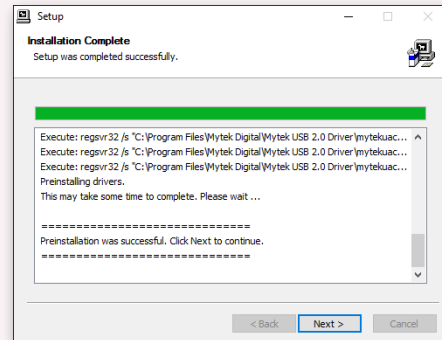


4. Choose the location of installation. Default location is „C:\Program Files\Mytek Digital\Mytek USB 2.0 Driver”. We recommend leaving this as it is. If you wish to customize the install choose the location by selecting browse. Click „Install”.

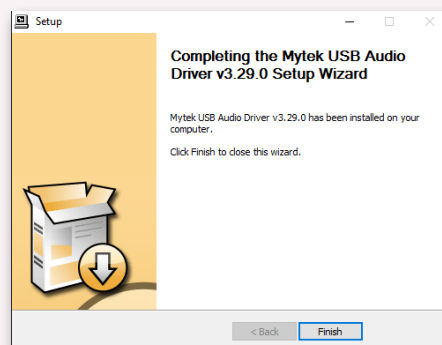


5. Setup.exe will now install the Mytek Driver. This process may take a few minutes.

6. Upon completion of „Setup.exe” press the „Next” button.



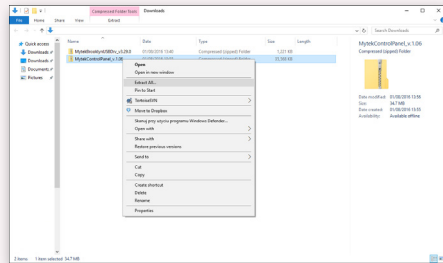
7. To complete installation of the driver simply click the „Finish” button.



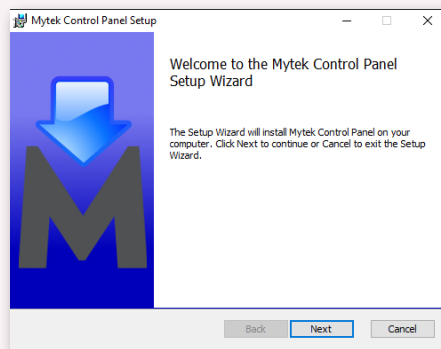
8. Connect the Brooklyn Bridge to USB 2.0 port in your computer.

7.2 Windows – Mytek Control Panel installation process

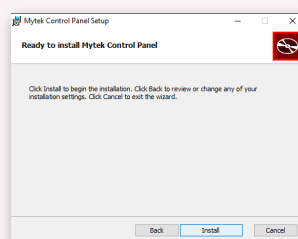
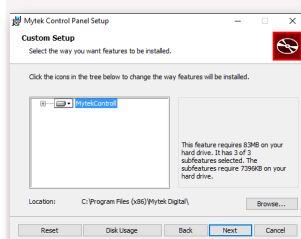
1. Locate the MytekControl.zip file and extract the content by right clicking on the zip archive icon and selecting "Extract Here".



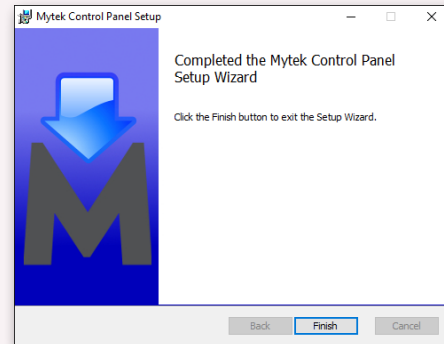
2. To install The Mytek Control double click the extracted Windows Installer Package file. When MytekControl Setup Wizard appears click „Next” then accept license and click „Next” again.



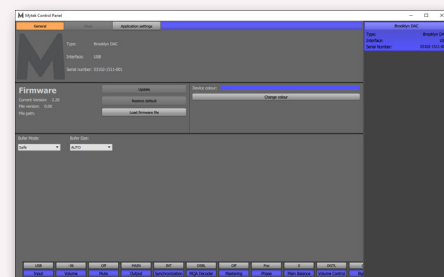
3. All options should be chosen in „Custom Setup” menu. To confirm the installation of each option select „Will be installed on local hard drive” then click „Next” and „Install” to begin the installation.



4. To complete installation of the driver simply click the „Finish” button.

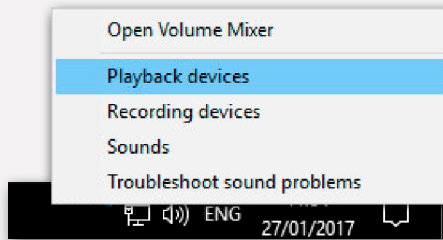


5. Confirm installation by launching the MytekControl application. Installation was successful if the MytekControl application shows the Brooklyn Bridge with serial number and permits access to all options.

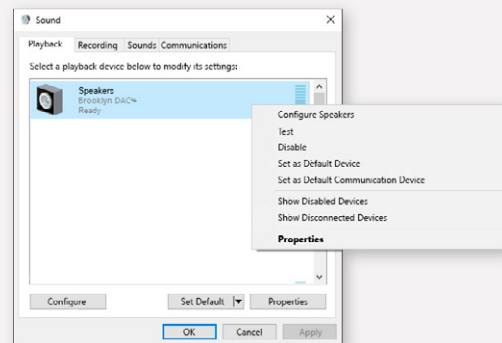


7.3 Windows – setting the Brooklyn Bridge as default system playback device.

1. To set the Brooklyn Bridge 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.



2. Right-click „Speakers Brooklyn Bridge” and choose „Set as Default Device”.



Note! – pro audio (DAW) applications (Cubase, Samplitude, Reaper etc.) or professional media players (Jriver etc.) use ASIO drivers and need to be configured different way. Please check our „Software Setup Guide” shown on our web site:

mytekdigital.com

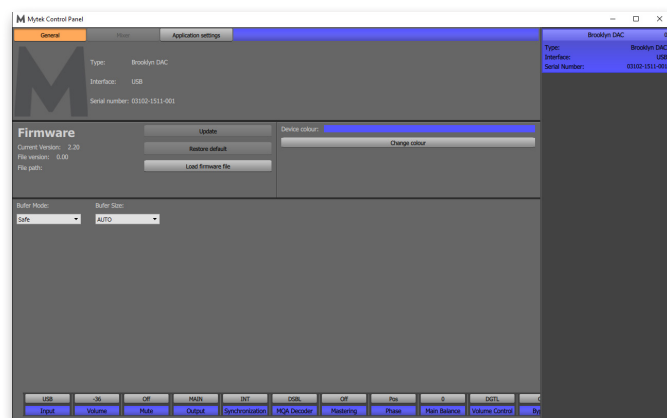
8. Brooklyn Bridge macOS installation

8.1 OSX – USB 2.0 driver installation

The Brooklyn Bridge 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 Bridge will automatically show up in your computer's list of supported audio devices as „Brooklyn Bridge”. Simply choose that as your default audio playback device and the system will work.

8.2 OSX – Mytek Control Panel installation.

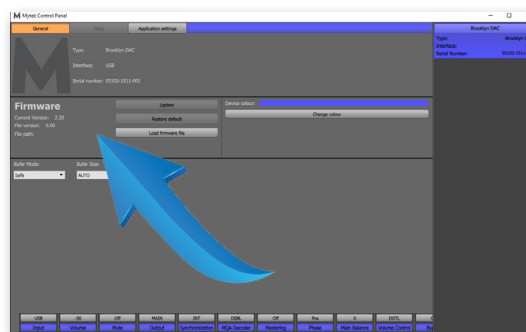
To install the Mytek Control Panel simply drag and drop Mytek application file (located in Mytek_ControlPanel_v.1.xx.dmg file) to „Applications” system folder. Follow the link to download the latest version of the Mytek Control Panel application.



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9. Firmware update Windows and macOS

The current revision of the Brooklyn Bridge firmware is shown in the MytekControl „General“ tab.



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

Follow the steps below to update the firmware:

1. Download the latest firmware (*.mfb) file from 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 the DAC will reset and start in sleep mode. To switch it on press the knob once. Once the DAC has been restarted the firmware update is complete. A reboot of the computer is not necessary.

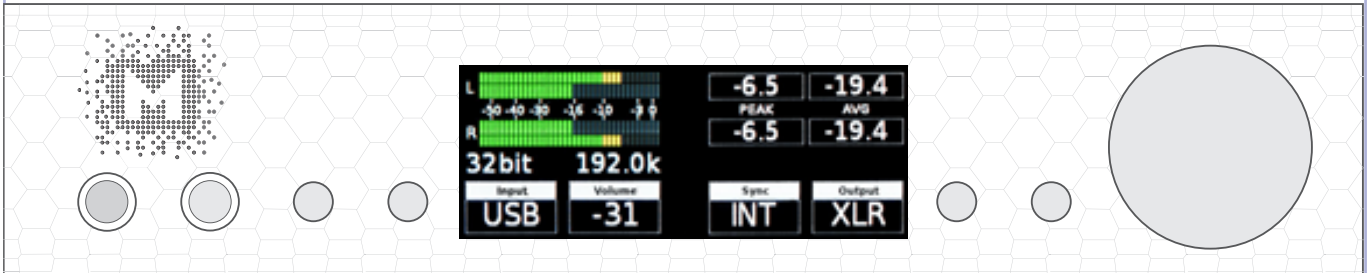
When the update fails:

1. Disconnect power cord.
2. Press and hold the first (from the left) button and connect the power cord again.
3. The DAC runs in Bootloader mode. The logo becomes white and blinks constantly.
4. The update process should then be tried again.

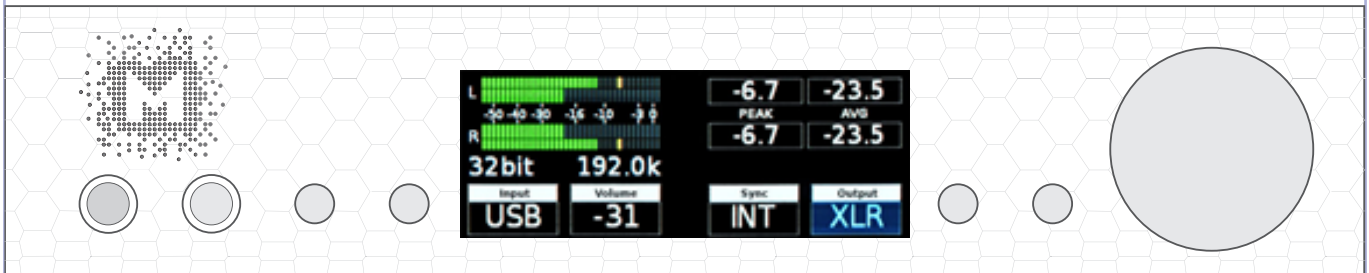
10. Menu

10.1 Menu Navigation

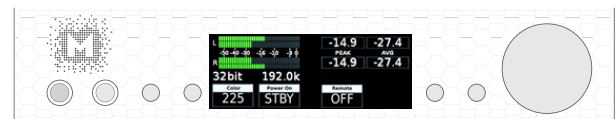
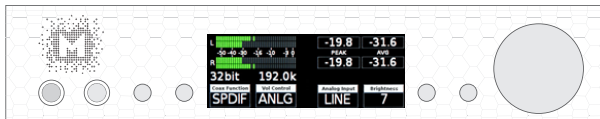
The four buttons, one encoder and the high-resolution display enable the user to quickly change and configure the device's settings. There are always four parameters shown at the bottom of the display.



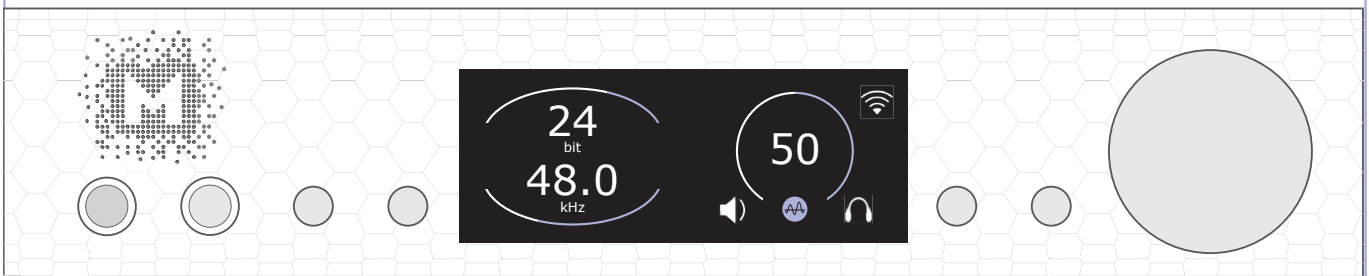
To enter the one of four parameters menu shown on the display, press one of the four buttons located on the left and right side of LCD display. When the value is ready to change it is back-lit with blue colour. To change the value rotate the knob until you see the option / value you need. Press the knob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



Turn the knob round to navigate between all available parameters.



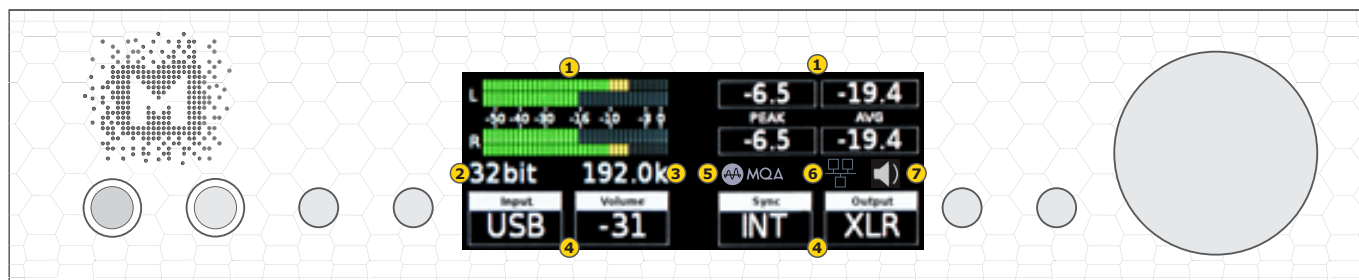
Press the knob once to activate the simple screen.







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

When Simple screen is activated you can use 4 buttons to make quick actions, counting from left button:

1. Change input (left)
2. Change input (right)
3. Mute on/off or Play/Pause (network only)
4. Change Output HP/Main. Hold to restore automatic selection.



- ① Meters – graphic and numeric representation of RMS (AVG) and peak level of currently played signal.
- ② Effective bit depth (number of significant bits in the sample measured over time).
- ③ Sample rate of currently played signal (assuming that the DAC is correctly synchronised). When MQA decoder is enabled and MQA stream is detected it's sample rate of the original master.
- ④ Menu tiles – you can select it via corresponding button on front panel and change it values via turning the knob.
- ⑤ MQA indicator – When MQA logo is grayed out MQA stream is not detected; when it's fully lit with blue, green or magenta dot nearby the MQA stream is detected and played.
- ⑥ Network connection status – When  icon is displayed Ethernet connection is detected.  means there is no network connection (both Ethernet and WiFi).  indicates Wi-Fi connection. This icon show also how strong Wi-Fi connection is. The  icon informs that there is new firmware for network module available from FTP server (update can be launched from „Device INFO“ tile at the end of the menu).
- ⑦ Active outputs indicators.

10.2 Menu Operation

10.2.1 Input

- **USB** – USB-B 2.0 Hi-speed, custom designed, Audio Class 2 compliant input that is capable of 384kHz (PCM) and up to 256DSD playback. Fast, reliable Windows drivers are provided. Plug and Play, driverless on MAC and Linux
- **NET** – Ethernet, Wi-Fi and USB-A (pen-drive/HDD via dedicated mcontrol app) connection capable of receiving PCM data up to 24bit/192kHz and DSDx64 (DoP).
- **SPDF1 & SPDF1** (S/PDIF1&2) – coaxial S/PDIF input capable of receiving PCM data up to 192kHz and DSDx64 (DoP). This input can also be used to record digital signal (DAW, sound editors) to computer via USB2 connection
- **OPTO** (TOSLINK) – optical S/PDIF input capable of receiving PCM data up to 192kHz and DSD DoP (64xDSD only). Also available as separate pair of digital inputs in recording software
- **ANLG** (Analog) – RCA analog input, line level or phono preamp (MM, MC), it can bypass the volume control or be routed through it

10.2.2 Volume - volume level.

10.2.3 Mute – all outputs are muted.

10.2.4 Output signal routing

- **AUTO** - Brooklyn Bridge detects if headphones has been connected. MAIN outputs are muted.
- **HP** - the signal is available on headphones output only
- **MAIN** - the signal is available on XLR and RCA outputs.
- **BOTH** - the signal is available simultaneously on MAIN (XLR & RCA) and HP outputs.

10.2.5 MQA Decoder

- **Enabled** (ENBL) – MQA decoder is activated. The filter is fixed at minimum phase.
- **Disabled** (DSBL) – to enable different PCM filter shapes the MQA must be switched off.

10.2.6 Phase – phase switch

- **Pos** - default
- **Neg** – the signal phase is inverted

10.2.7 Main Balance – audio balance control

10.2.8 Trim / Gain

Use this option to change DAC headroom. It can be set independently for each digital input.

- Digital Volume Control mode range: -12 to 0 dB
- Analog Volume Control mode range: -12 to 0 dB.
- For the analogue input an additional gain of up to +12 dB is available.

10.2.9 Vol Control

- **ANLG** (Analog) - the output level is controlled by the analog fader.
- **DGTL** (Digital) - the output level is controlled digitally with ultra precision digital attenuator.

10.2.10 Allow Bypass

- **No** – disable Bypass function.
- **Yes** – enables bypass unction

10.2.11 Bypass (ON/OFF)

Relay bypass of all faders for the cleanest output path possible. Only the main outputs are affected while the headphone output is still controlled by analog fader.

10.2.12 Theater Byp (ON/OFF)

Theater bypass function bypasses analog input of the DAC. It is for use in home theatre to control 5.1 setup with other volume control than Brooklyn's.

Attention! To prevent damage your speakers reduce the output level of your preamp BEFORE activating „Bypass“ mode.

10.2.13 USB Volume [HID]

When this option is enabled the DAC main outputs signal level can be controlled by OS volume fader. Click small speaker icon shown in Windows taskbar to see the fader. If the icon is not visible please go to your system settings „Notifications & actions” (Win10) and enable it.

Attention! When AES, SPDIF coaxial or SPDIF optical input is used and the DAC is still connected to a computer via USB port the USB Volume option must be disabled. Otherwise the DAC can damage your speakers as it can play too loud.

- **DSBL (default)** - Volume can be controlled by using Mytek Control Panel or volume knob at the front of the DAC.
This setting is recommended when AES, SPDIF coax, SPDIF optical inputs are used and the DAC is still connected to computer.
- **dB** - OSX or Linux recommended setting. Signal level can be controlled by using Mytek Control Panel, volume knob or main system fader.
- **Win** - Windows recommended setting. Signal level can be controlled by using Mytek Control Panel, volume knob or main system fader.

10.2.14 Analog Input

(Analog Input Mode) - A pair of unbalanced analog inputs can be selected in addition to all available digital inputs. As with other inputs, it can be routed via the analog stepped attenuator to both main outputs and headphones. One of three modes can be selected:

- **LINE** - line level input
- **P MM** - phono premap, for Moving Magnet cartridges
- **P MC** - phono preamp, for Moving Coil cartridges

10.2.15 PCM Filt Shape (PCM Filter Shape)

- **FRMP** - fast roll-off, minimum phase filter
- **SRMP** - slow roll-off, minimum phase filter
- **FRLP** - fast roll-off, linear phase filter
- **SRLP** - slow roll-off, linear phase filter
- **APDZ** - apodizing, fast roll-off, linear phase filter
- **HBRD** - hybrid, fast roll-off, minimum phase filter
- **BRCK** - brickwall filter

Note! When MQA is enabled the filter is fixed custom filter designed by MQA Ltd. and all above PCM Filters Shape settings are not available.

10.2.16 DSD Filt BW (DSD Filter Bandwidth)

- **AUTO** - the filter is selected automatically depending on DSD rate: for DSDx64 - LO, DSDx128 - MED, x256 - HI. It is highly recommended to leave this option enabled.
- **LO** - 47,44 kHz IIR Filter
- **MED** - 60kHz IIR Filter
- **HI** - 70 kHz IIR Filter

10.2.17 Disp Auto Off (Display Auto Off) - sets the interval when the display is turned off. It is still possible to listen to music while the display is off. To return to the main screen press any button on the frontpanel (including Vol knob).

10.2.18 Display Bright – this allows to adjust brightness of the display.

10.2.19 Auto Return – determines the time of activation of the simple screen.

10.2.20 Diode Bright (0 – 16 steps) - sets the brightness of the logo.

10.2.21 St-by D Bright – sets the brightness of the logo in Standby mode.

10.2.22 Colour – sets the colour of the logo, 16 colours are available.

10.2.23 Streamer pwr

- **Auto** – In this settings Network streamer is turned off when Brooklyn Bridge is in standby. This function lowers power consumption
- **On** – Network streamer is always on - even when device is in standby mode.
- **Off** – Network streamer is always off.

Note! The Analog Phono input always causes the network module to reset. Otherwise there would be audible noise coming from the network extension (This is due to high susceptance [high gain] of the phono pre input). Changing the input back from PHONO triggers power-up of the network module. After that when „NET“ input is selected there is „Wait...” displayed on main screen.

10.2.24 Cover Art

- **On** – Allows cover art to be displayed on a simple screen when the NET input is used.
- **Off** – Disables the cover art display.

10.2.25 Network INFO

Here you can connect your Brooklyn Bridge to your WiFi or you can check your IP address. For more info please read paragraph 5.

10.2.26 Power On – (when the power cord is attached to the DAC)

- **WORK** - the DAC activates itself in standard working mode
- **STBY** – the DAC activates itself in standby mode
- **AUTO** – the DAC remembers last mode

10.2.27 Remote (Remote Control mode)

- **OFF** - the „Remote” function is turned off
- **RC5** - the „Remote” is turned on, standard RC5 compatible r-controllers can be used
- **Apple** - the „Remote” is turned on, Apple remote can be used (included in the bundle)

10.2.28 Remote Addr (Remote Address)

Available only when „Remote” is activated. It is found automatically when you press a remote controller's button.

10.2.29 Device INFO

- **Network Module Update** – allows you to update firmware if new version is available
- **RESTORE** – restore the Brooklyn Bridge to the factory settings

You will also find your currently installed firmware version for both Brooklyn Bridge and network module.

Note! All above settings except „Network Setup“, „Power On“, „Remote“ and „Device Info“ can also be changed by using the Mytek Control Panel application.

11. 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](https://www.mqa.co.uk) for more information.

The Brooklyn Bridge 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 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.

It glows magenta when Brooklyn Bridge is receiving MQA signal which is unfolded by some upstream decoder or software where the media source is initially handled.

You can find more info about MQA on this website: <https://www.mqa.co.uk/customer/how-it-works>

12. Remote

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

12.1 The Brooklyn Bridge Apple Remote Setup

1. Turn the knob round until you see „Remote” menu then press third button to activate the menu.
2. Choose Apple option. „Remote Addr” appears on the right.
3. Activate „Remote Addr” menu by pressing corresponding button. The menu tile should be highlighted.
4. Press the center (Enter) button on the Apple Remote.
5. Done! - the Apple remote is paired.

12.2 The Brooklyn Bridge Standard Remote (RC5) Setup.

1. Turn the knob round until you see „Remote” menu then press third button to activate the menu.
2. Choose „RC5” option. „Remote Addr” appears on the right.
3. Activate „Remote Addr” menu by pressing corresponding button. The menu tile should be highlighted.
4. Press any button on the RC5 compatible remote. The Brooklyn Bridge will find the address automatically
5. Done! – the remote is paired.



13. Technical Specification

ANALOG

- Analog Outputs Connectors: 2 XLR balanced outputs, 2 RCA unbalanced outputs
- XLR signal output - 1,22V RMS @ -18 dBFS / 9,75V RMS @ 0 dBFS
- RCA signal output - 0,61V RMS @ -18 dBFS / 4,875V RMS @ 0 dBFS
- 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: 120dB A-weight
- Output Impedance: 75 Ohm
- Headphone Amp: more than 500mA, 6 Watts, 1,22V RMS @ -18 dBFS / 9,75V RMS @ 0 dBFS
- 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: USB 2.0 Hi-Speed, data stream up to 480Mbps/384kHz, Native DSD up to DSD256, Type B
- Network: RJ-45 connector, PCM up to 24Bits / 192.0kHz, DSD up to x64 (DoP)
- S/PDIF Optical Input (Toslink): up to 176.4kHz, DSD x64
- S/PDIF Coaxial Input 1 & 2: PCM up to 24Bits / 384.0kHz, DSD up to x128 (DoP)
- Clock: Mytek Femtoclock Generator (tm) 0.82ps internal jitter

GENERAL

- Firmware: upgradable via USB Control panel, updates available online, periodic feature upgrades
- Power Supply: Internal switching PSU, 100 - 240 V AC
- External power supply: 12V, 4 - 6A / connector dimensions: 5,5 mm / 2,5 mm (inner pin)



- Dimensions [W x H x D]: 218 x 44 x 206 mm / 1U half rack
- Weight: 1,6 kg
- Brooklyn Bridge power consumption:
 - 230V AC powered:
 - 23VA with no load,
 - 28VA with 150Ohm load per channel, full scale sine driven
 - 12V DC powered
 - 15W with no load
 - 21W with 150Ohm load per channel, full scale sine driven

14. Warranty

Each individual Brooklyn Bridge undergoes comprehensive quality control and a complete test before shipping. This Brooklyn Bridge 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 Europe extends affordable repair service for all units manufactured to date that are not covered by this

Warranty. Mytek repair center is located in HEM Office in Pruszkow/ Poland.

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.



