

# THE NEW MANHATTAN II

DAC • HEADPHONE • PREAMPLIFIER



**MYTEK**

## Owner's Manual



**DSD**  
Direct Stream Digital  
**256**



**MQA**

**DXD**  
Digital eXtreme Definition

**VINYL**  
M/C M/M

Owner's Manual Ver. 2.1 / March 2021

© Mytek Europe 2021

The Manhattan II DAC 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](http://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 Europe website.

# hem

Aleje Jerozolimskie 475  
05-800 Pruszków, Poland

Phone: +48 22 823 72 38

# Contents

<b>1. Introduction .....</b>	<b>4</b>
<b>2. Package Content.....</b>	<b>5</b>
<b>3. Features .....</b>	<b>5</b>
<b>4. Quick Start.....</b>	<b>6</b>
4.1 Front Panel .....	6
4.2 Rear Panel .....	7
<b>5. Windows installation and configuration .....</b>	<b>8</b>
5.1 Windows – USB 2.0 driver installation .....	8
5.2 Windows – Mytek Control Panel installation process.....	10
5.3 Windows – setting the Manhattan II DAC as default system playback device.....	11
<b>6. Manhattan II DAC OSX installation .....</b>	<b>11</b>
6.1 OSX – USB 2.0 driver installation.....	11
6.2 OSX – Mytek Control Panel installation. ....	11
<b>7. Firmware update Windows and OS X .....</b>	<b>12</b>
<b>8. Menu .....</b>	<b>13</b>
8.1 Menu Navigation .....	13
8.2 Menu Operation.....	14
<b>9. MQA - Master Quality Authenticated .....</b>	<b>18</b>
<b>10. Remote .....</b>	<b>18</b>
10.1 The Manhattan II DAC Apple Remote Setup.....	18
10.2 The Manhattan II DAC Standard Remote (RC5) Setup.....	19
<b>11. Technical Specification .....</b>	<b>19</b>
<b>12. Warranty.....</b>	<b>20</b>
<b>Important Safety Information .....</b>	<b>20</b>

# 1. Introduction

Thank you for choosing the Manhattan II DAC from Mytek Europe 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.

The Manhattan II DAC will play:

- PCM up to 32 bit / 384 kHz.
- DSD64, DSD128, DSD256
- MQA master quality files of 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 Manhattan II DAC 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 Manhattan II DAC 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 Manhattan II DAC!

All the best,  
The HEM Team

## 2. Package Content

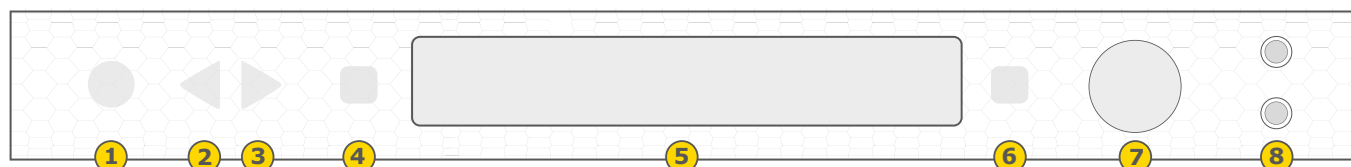
- The Manhattan II DAC (gold-silver, silver or black)
- USB 2.0 Cable
- Aluminum remote (Apple)
- Power cord
- Owner's manual
- Spike feet

## 3. Features

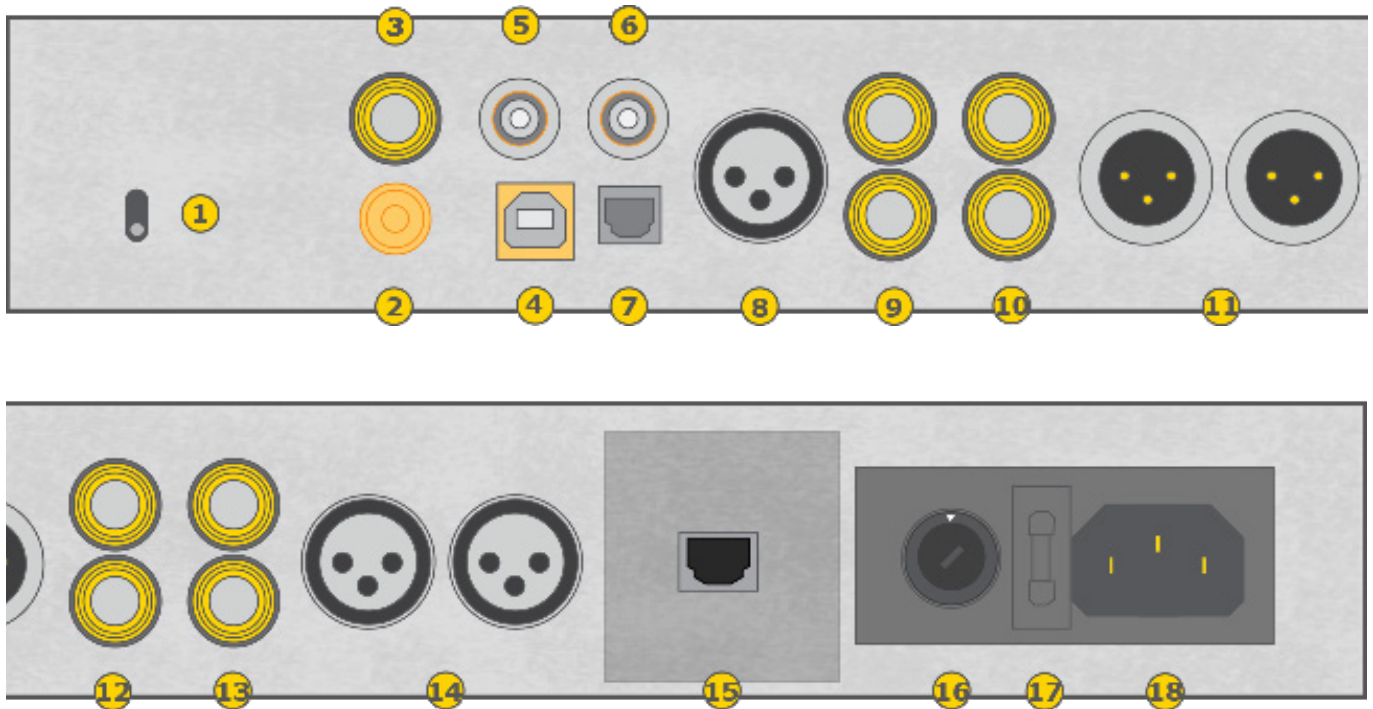
- Conversion: up to 384k, 32bit PCM, native DSD up to DSD256, DXD, 130dB Dynamic Range
- Analog outputs: RCA, balanced XLR, simultaneous
- Headphone outputs: Reference High Current, High transient balanced Headphone Amp, 500mA, 6 Watts, dual headphone jacks, designed to drive hard to drive headphones. To connect balanced headphones special adapter is required - available separately.
- 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.
- Mytek proprietary USB Audio 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. All digital inputs are available in DAW software simultaneously.
- AES/EBU Input: PCM up to 24bit / 44.1kHz, 48.0kHz, 88.2kHz, 96.0kHz, 176.4kHz, 192.0kHz, 352.8kHz, 384.0kHz, DSD64 DSD128 (DoP)
- 3x S/PDIF Coaxial Input: PCM up to 24bit / 44.1kHz, 48.0kHz, 88.2kHz, 96.0kHz, 176.4kHz, 192.0kHz, 352.8kHz, 384.0kHz, DSD64 DSD128 (DoP)
- Toslink (S/PDIF Optical Input): PCM up to 24bit / 44.1kHz, 48.0kHz, 88.2kHz, 96.0kHz, 176.4kHz, DSD64 (DoP)
- SDIF3 DSD Input: DSD64, DSD128, DSD256 (natively)
- 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
- Five digital inputs are fitted (1x USB, 1x AES/EBU, 3x S/PDIF coaxial and 1x TOSLINK) which allow a wide range of digital sources to be connected.

## 4. Quick Start

### 4.1 Front Panel



1. On / Off Switch. Powers the unit on or off
2. Left navigation button - use the button to navigate in the menu (knob changes the settings)
3. Right navigation button - use the button to navigate in the menu (knob changes the settings)
4. Functional button enables the user to quickly choose an option, change and configure the device's settings.
5. LED display
6. Functional button enables the user to quickly choose an option, change and configure the device's settings.
7. 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. When device is in Menu mode press the knob once to go back to the main, default playback screen. When the main screen is shown press this knob once to switch between headphones and speaker volume control mode. Depending on your choice speaker or headphones icon is displayed and indicates which output's level signal can be adjusted. These icons are visible in Analog Volume Control mode only. When Digital Volume Control mode is activated the icons disappear and outputs level can not be controlled independently.
8. Headphone Output Section, Dual Mono, with Balanced Operation mode. Top jack connects unbalanced phones in absolute phase. Bottom 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.



1. Headphone Gain Switch. User should arbitrarily set this switch for an optimum loudness of a particular headphone type. Some headphones are louder than other, this switch will compensate for differences.
2. Phono ground connector
3. S/PDIF Coaxial Input 1. This is digital input which accepts up to 384.0kHz/24bit. It also accepts 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.
4. 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.
5. 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 Manhattan II 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.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.
6. 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).
7. Optical Input (Toslink / ADAT). 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. AES/EBU Input. Professional digital input that accepts up to 192kHz. Accepts DSD DOP standard input. This input can also be used to transmit digital data to computer via USB connection.

9. S/PDIF Coaxial Input 2,3. These are digital inputs which accept up to 384.0kHz/24bit. They also accept DSD DOP standard input up to DSD64. These inputs 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).**

10. Analog outputs, unbalanced, RCA

11. Analog outputs, balanced, XLR

12. Analog inputs, unbalanced RCA

13. Analog inputs, unbalanced RCA

14. Analog inputs, balanced, XLR

15. Optional „ROON READY“ NETWORK CARD. Turns the Manhattan II into network streamer with 24/192k and DSD64 maximum throughput. Compatible w/ Roon, DLNA/UpnP.

16. Power switch: Linear power supply 115 and 230V AC 50/60 Hz. There is a special Japanese version of 100V/230V available through distributor in Japan.

17. Fuse, 20mm 2 Amp T (slow blow) can be replaced here. There is a spare inside fuse assembly.

18. IEC Power socket. Standard 115/230V receptacle. (100V/230V for Japanese Models)

### **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 Manhattan II DAC. 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 until all connections have been made**

## **5. Windows installation and configuration**

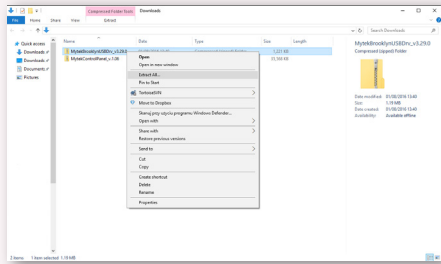
- Turn off your amplifier then connect the Manhattan II DAC Analog Outputs to your amplifier's analog inputs. Balanced connections (XLR) are typically for professional audio equipment while unbalanced connections (RCA) are typically for consumer audio equipment.
- Note that for proper operation it is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



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”.

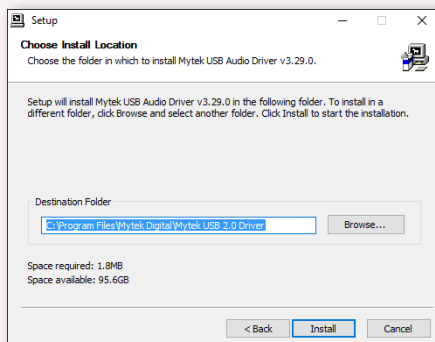


2. Installation works automatically by a double-click on MytekUSB2Drv.v3.xx.x.exe file.

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

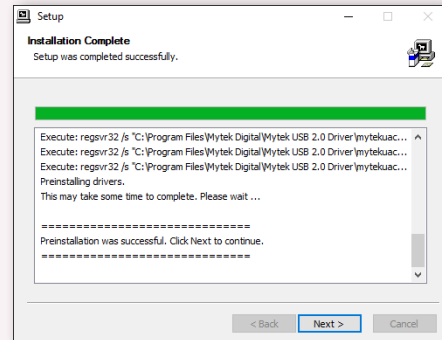


4. Choose the location of installation. Default location is „C:\Program Files\Mytek Digital\Mytek USB 2.0 Driver”. We recommend leaving this as it is. If you wish to customize the install choose the location by selecting browse. Click „Install”.

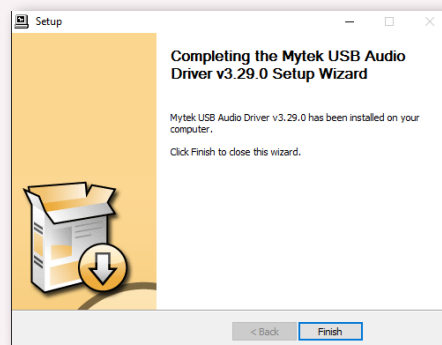


5. Setup.exe will now install the Mytek Driver. This process may take a few minutes.

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



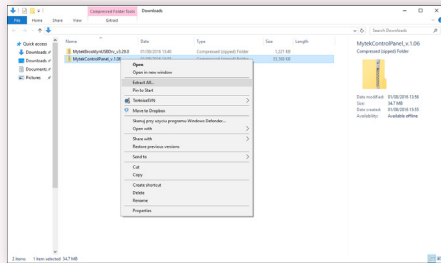
7. To complete installation of the driver simply click the „Finish” button.



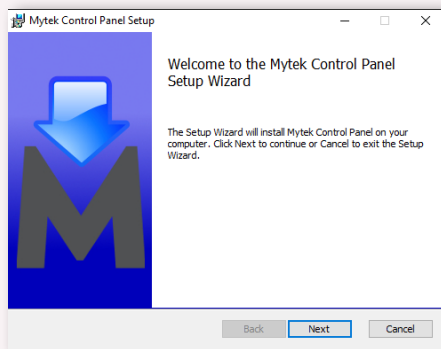
8. Connect the Manhattan II DAC to USB2 port in your computer.

## 5.2 Windows – Mytek Control Panel installation process

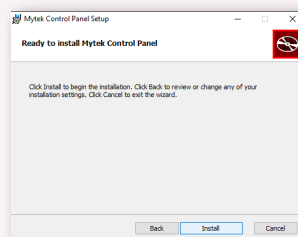
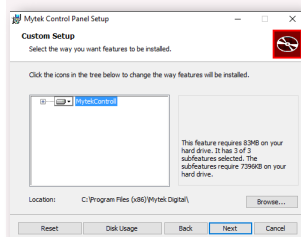
1. Locate the MytekControl.zip file and extract the content by right clicking on the zip archive icon and selecting "Extract Here".



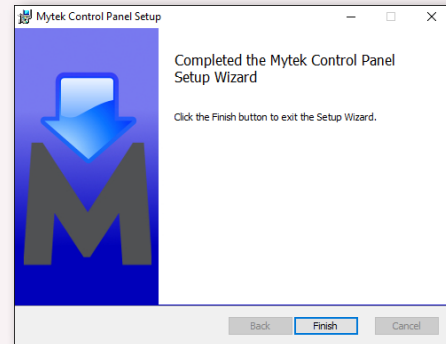
2. To install The Mytek Control double click the extracted Windows Installer Package file. When MytekControl Setup Wizard appears click „Next“ then accept license and click „Next“ again.



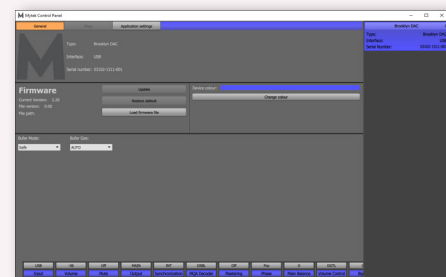
3. All options should be chosen in „Custom Setup“ menu. To confirm the installation of each option select „Will be installed on local hard drive“ then click „Next“ and „Install“ to begin the installation.



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

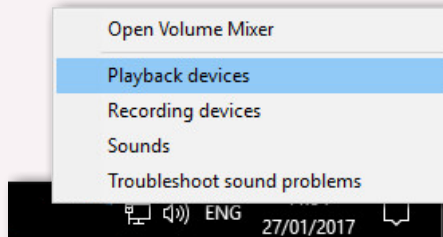


5. Confirm the installation by launching the Mytek Control application. Installation was successful if the MytekControl application shows the Manhattan II DAC with serial number and permits access to all options.

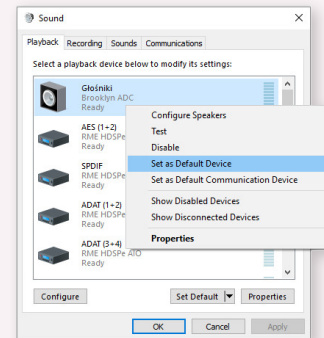


## 5.3 Windows – setting the Manhattan II DAC as default system playback device.

1. To set the Manhattan II 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.



2. Right-click „Speakers Manhattan II DAC” 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 a different way. Please check our „[Software Setup Guide](#)” shown on our web site:**

**[mytekdigital.com](http://mytekdigital.com)**

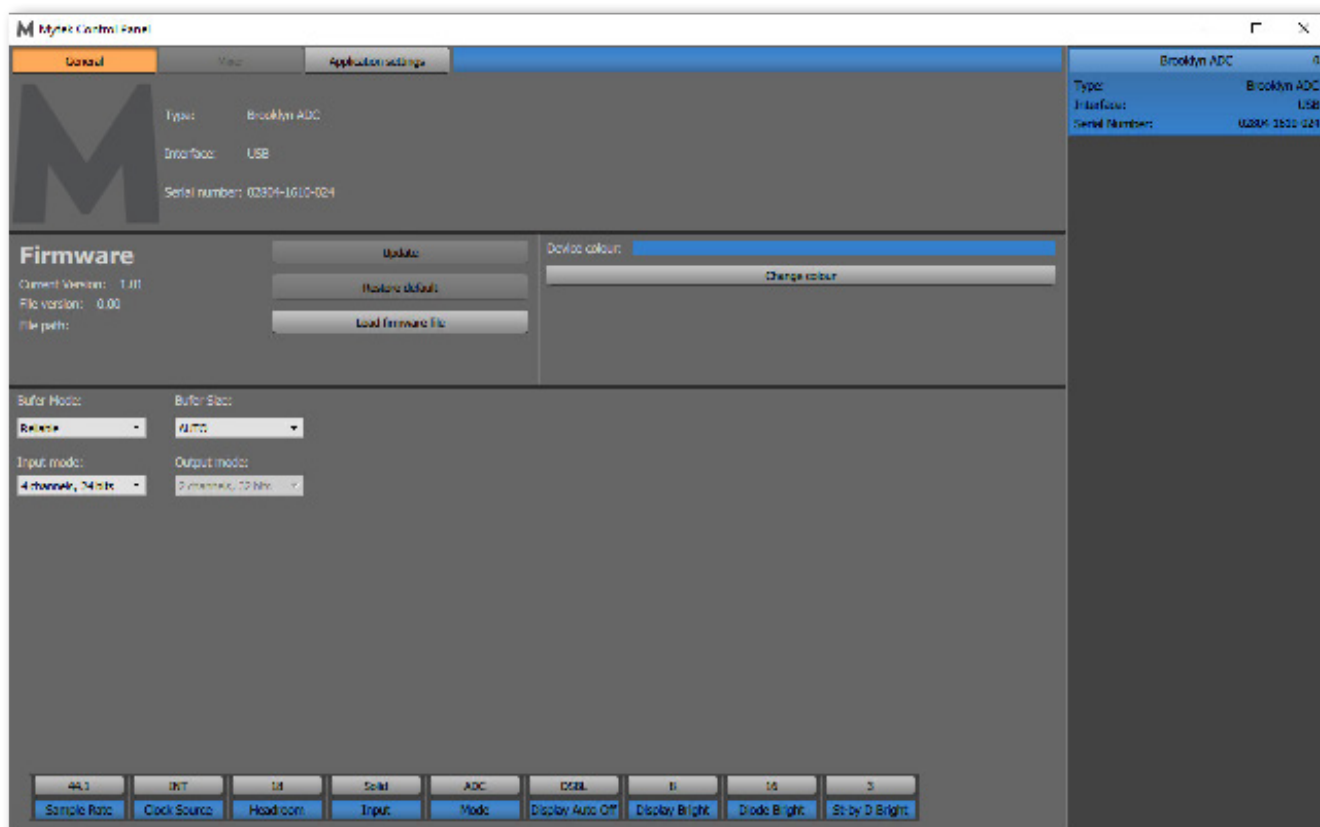
## 6. Manhattan II DAC OSX installation

### 6.1 OSX – USB 2.0 driver installation

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

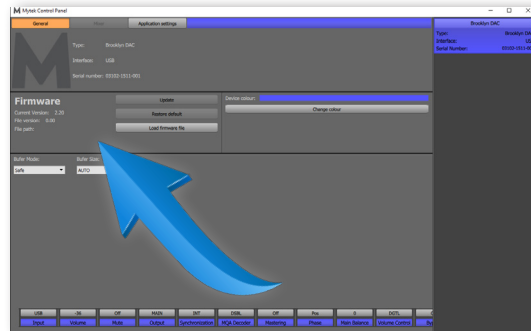
### 6.2 OSX – Mytek Control Panel installation.

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.



## 7. Firmware update Windows and OS X

The current revision of the Manhattan II DAC 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](http://mytekdigital.com)
- It is recommended to turn off any powered speakers / power amps connected to the Manhattan II 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 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. Power off the Manhattan II DAC
2. Press and hold the first from the left (triangle) button and then power the DAC on again.
3. The DAC runs in Bootloader mode. „MYTEK“ logo is shown on the display.
4. The update process should then be tried again.

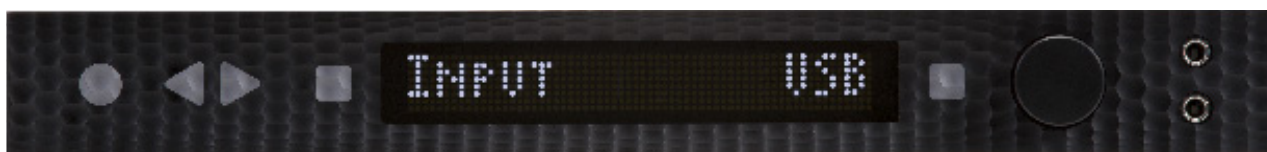
## 8. Menu

### 8.1 Menu Navigation

The four buttons, one encoder and the display enable the user to quickly change and configure the device's settings.



Use triangle buttons (left <-> right) to navigate in the menu. When you select an option turn the knob round to change available settings. You do not need to confirm your choices. When the setting is chosen it is also automatically activated.



Two square buttons (FB1 and FB2) located next to the display are user assignable. Press and hold one of them to assign a function you need to enable quickly. Following parameters can be assigned:

- MUTE
- MONO
- L-R
- MS
- PHASE
- INPUT
- MQA decoder

## 8.2 Menu Operation

### 8.2.1 INPUT

- **USB** - Hi-speed, custom designed, Class 2 compliant computer USB2 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.
- **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.
- **SPDIF1, 2, 3** (S/PDIF1&2) – these are coaxial S/PDIF inputs 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 the computer via USB2 connection.
- **AES** - digital input capable of receiving PCM data up to 192kHz and DSDx64 (DoP). This input can also be used to record digital signal to computer (DAW) via USB2 connection.
- **SDIF L-R** - professional DSD input capable of receiving DSD format (up to x256).
- **ANLG 1** - analog inputs, unbalanced (RCA), line level, it can bypass the volume control or be routed through it.
- **ANLG 2** - analog inputs, unbalanced (RCA), line level, it can bypass the volume control or be routed through it or optional phono preamp (MM, MC)
- **ANLG 3** - analog inputs, balanced XLR

### 8.2.2 MAIN OUTS

- **OFF** - Disables putting signal through all analog outputs
- **ON** - Enables putting signal through all analog outputs

### 8.2.3 BALANCE – (L15/C/R15 ) audio balance control

### 8.2.4 VOL TRIM - (-12/OFF/+12)

It adjusts output signal level for all inputs independently.

It is also possible to set positive values (gain) for analog inputs.

### 8.2.5 VOL CTRL (Volume control mode)

- **DGTL** (Digital) - the output level is controlled digitally with ultra precision digital attenuator.
- **ANLG** (Analog) - the output level is controlled by the analog fader.
- **BYP (Bypass)** - 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. Option becomes available after switching BYPASS to ENBL in menu.

**Attention! To prevent damage to your speakers reduce the output level of your preamp BEFORE activating "Bypass" mode.**

### 8.2.6 BYPASS

- **DSBL** (Disabled) - Disables selecting Bypass option in Volume control mode
- **ENBL** (Enabled) - Enables selecting Bypass option in Volume control mode

### 8.2.7 THEATER

- **OFF** – Bypass mode is not activated
- **ANLG 1/ANLG 2/ANLG 3** (Analog 1,2,3) – signal from chosen analog input is directly passed to analog outputs. In this mode volume control and headphones outputs are not accessible.

### 8.2.8 MQA

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

**8.2.9 MASTERING** – these are additional functions intended for proaudio applications. Available only when the MQA is disabled.

- **Off** – default
- **Mono** – sums left and right channel to mono.
- **L-R** - Subtracts one channel from the other, canceling out the mono information while leaving the stereo information.
- **MS** - A combination of Mono (L+R) and L-R, the mid signal is the sum of L and R (mono) and the side signal is the stereo information from the L-R operation.

### 8.2.10 PHASE – phase switch

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

### 8.2.11 PCM FILTER shapes

- **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

### 8.2.12 DSD FILTER (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

### 8.2.13 Coax Function

RCA digital inputs can operate in two modes:

- **SPDIF** - S/PDIF digital mode.
- **DSD** - SDIF digital mode, RCA - BNC adapters are required, these are not included in the bundle.



### 8.2.14 SYNC

There is only one master device in digital world. The others have to operate as a slave. That is why external digital devices such as CD players, digital recorders etc. have to be also configured properly. Otherwise clicks, drops, distortions might appear in the final signal. Following sync options are available:

- **INT** (Internal) / USB / Incoming signal is synced to the converter's ultra-low jitter internal crystal oscillator. This choice assures the best DAC performance and is superior to any (even Atomic) clock supplied from outside because of its close proximity to DAC clocking chipset. The DAC operates as a master device. WordClock OUT transmits master clock signal
- **IN** (Input) /available for AES, SPDIF1 &2, Toslink / the DAC operates as a slave device.
- **WCK** (Word Clock) / available for USB, AES, SPDIF1,2,3 Toslink, SDIF / the DAC can operate as a slave device.

*The Manhattan II DAC is a master and the external device is a slave: Manhattan II DAC WCK OUT -> external device WCK IN*  
*The Manhattan II DAC is a slave and the external device is a master: Manhattan II DAC WCK IN -> external device WCK OUT*

- **44,1 – 192 kHz** (Internal) /available for AES, SPDIF1 &2, Toslink / the DAC operates as a master device, WordClock OUT transmits master clock signal.
- **x64 – x256** (Internal) /available for SDIF / the DAC operates as a master device

**8.2.15 BRIGHTNESS** – (1 - 16) this allows to adjust the brightness of the display.

### 8.2.16 METERS

- **OFF** - Meters are disabled
- **ON** - Meters are enabled

### 8.2.17 DISP RATE

- **OFF** - Information about rate or analog input are not shown on the display
- **ON** - Information about rate or analog input are shown on the display

**8.2.18 AUTO OFF** (Display Auto Off) - DSBL / 3s / 5s / 10s / 15s / 30s / 45s / 60s / 90s / - 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).

**8.2.19 AUTO RET** (Auto Return) - DSBL / 3s / 5s / 10s / 15s / 30s / 45s / 60s / 90s / - determines the time of returning to the main screen.

### 8.2.20 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)

### 8.2.21 Remote Addr (Remote Address)

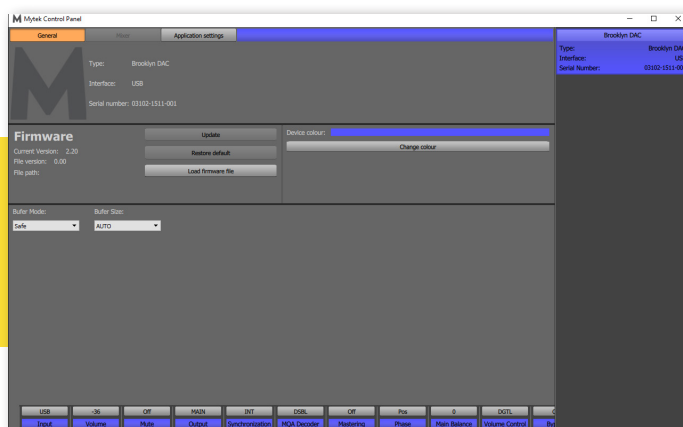
Available only when „Remote“ is activated. It is found automatically when you press the remote controller button.

**8.2.22 SERIAL NO.** - shows unique serial number of the unit. To view serial number press right square button.

**8.2.23 FIRMWARE** - shows the firmware version installed in the DAC. To view firmware version press right square button.

**8.2.24 RESTORE ALL** - Restores the DAC to default factory settings. Press right square button to reset the unit. Confirmation is required by pressing the right square button again.

**Note! All of the above settings can also be changed by using the Mytek Control Panel application.**



## 9. MQA - Master Quality Authenticated



The Manhattan II DAC is capable to decode MQA files. The option can be activated in the Manhattan II DAC menu. when MQA streaming is detected in place of PCM there is one of the below options shown:

- **MQA** – MQA – indicates decoding and playing an MQA stream or file
- **MQA.** – indicates 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

### What is MQA?

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.

MQA is audio recording and compression format created by Meridian Audio. It is also a new sophisticated method of digitally storing recorded music as a file that is small and convenient to download or even stream. There are no sonic sacrifices that are usually associated with compressed files. What this basically means is that high resolution audio streaming could finally be a reality, with songs being able to be delivered exactly how they were recorded in the studio, without requiring huge amounts of bandwidth to deliver.

### How does MQA work?

The Mytek products with a full decoder will unfold the MQA file to the original resolution of what was created in the studio - with precise file and platform specific DAC compensation and management.

MQA can pack up the information from a lossless 24-bit 192kHz PCM file into the sort of space needed for a 24-bit / 44.1KHz stream. In practice, MQA is delivered to listeners as a typical lossless file, such as FLAC or Apple Lossless at 44kHz or 48kHz at 24 bits.

## 10. Remote

The Mytek Manhattan II 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
- Apple

### 10.1 The Manhattan II DAC Apple Remote Setup

1. Use triangle buttons to find „REMOTE” function.
2. Turn the knob round until you see APPLE setting
3. Press right triangle button once to go to the next menu: „REMOTE ADDR”
4. On Apple remote press Enter button once to pair the remote with the Manhattan II DAC. It finds the address automatically.
5. Done! - the Apple remote is paired now.

### 10.2 The Manhattan II DAC Standard Remote (RC5) Setup.

1. Turn the knob around until you see „Remote” menu then press the third button to activate the menu.
2. Choose „RC5” option. „Remote Addr” appears on the left.
3. Activate „Remote Addr” menu by pressing the fourth button. The menu should be backlit with blue colour.
4. Press any button on the RC5 compatible remote. The Manhattan II DAC will find the address automatically
5. Done! - the remote is paired.

# 11. 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. Fully compatible with balanced headphones.
- 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, PCM up to 24Bits / 384.0kHz, DSD up to x128 (DoP)
- S/PDIF Optical Input: up to 176.4kHz, DSD x64, single wire
- S/PDIF Coaxial Input 1, 2, 3: PCM up to 24Bits / 384.0kHz, DSD up to x128 (DoP), single wire
- SDIF DSD Input: DSD up to x256 (natively)
- WordClock I/O: BNC, 75 Ohm
- 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: Two separate (one for analog, one for digital circuits) low emission high transient, double shielded linear power transformers. External voltage switch for 110 and 230V.
- Dimensions [W x H x D]: 218 x 44 x 206 mm / 1U half rack
- Weight: 1,6 kg
- Manhattan II DAC power consumption: no load: 15VA at 230VAC, 150hm load per channel, full scale sine: 32VA at 230VAC

## 12. Warranty

Each individual Manhattan II DAC undergoes comprehensive quality control and a complete test before shipping. This Manhattan II DAC is warranted by Mytek Europe 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 Europe 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 in 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.



