BROOKLYN AMP+

COMPACT • Hi-RES • DUAL MONO • POWER AMPLIFIER

Owner's Manual

MYTEK

Owner's Manual Ver. 1.1 / March 2021

© Mytek Audio 2021

Technical support issues are handled via website and , if necessary, telephone. Please visit: www.mytek.audio/support

The Brooklyn AMP+ firmware can be updated/reflashed via Mytek USB Control Panel. However, the firmware is now considered mature for this product and there is no need to update it. For news, technical support, tips and further product information please visit our website:

www.mytek.audio

Contents

MYTEK

1. Introduction

Thank you for choosing the Brooklyn AMP+ from Mytek Europe and welcome to the Mytek users' community.

Brooklyn AMP+ is a reference power amplifier with signature Mytek sound - musical, detailed and transparent. Its dual mono design breaks the sound quality spell associated with Class D and proves a well executed Class D circuits can challenge the best Class A and sound amazing. Amplifier is packaged in miniature 1/2 rack enclosure and it's small enough to fit in a briefcase, yet powerfull to drive the largest speaker systems. It's designed to be used as regular stand alone power amplifier or to complement Brooklyn DAC+ or Bridge for complete modern digital streaming and vinyl playback system.

Brooklyn AMP+ retains the same type of sound as original Brooklyn AMP with dynamic and precise transients and even and extended frequency response. The design modifications introduced in the new model result in way less low level distortion and cleaner natural, analog like character with deeper, larger soundstage.

Brooklyn AMP + features new faster transistors, cutting the so called „switching dead time" to low nanoseconds and faster and higher, 650kHz carrier clock. They both contribute to greatly improved low level detail and lower distortion. In addition the output filter frequency has been increased two fold for lighter highs and to better accommodate difficult loads.

Enjoy your new Brooklyn AMP+!

Sincerely, the Mytek Team

2. Package Content

- The Brooklyn AMP+ (silver or black)
- Power cord
- Owner's manual

3. Features

- With two types of input connectors (balanced XLR and unbalanced RCA) the Brooklyn AMP+ is suitable for a wide variety of applications and installed systemsAnalog outputs: RCA, balanced XLR, simultaneous

- The AMP+ offers three operating modes: STEREO (where channels left and right operate independently), BI-AMP (Parallel) (where the unit outputs a mono source signal through twin amplifier systems) and BRIDGE (operates as a single high-power amp =>600W monoblock)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.

- Short circuit protection, DC protection, under voltage protection, temperature protection, overload protection

- Mytek Software accessible via usb micro allows for possible future firmware update and unit identification

- LED logo power indicator

MYTEK   **MYTEK**

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.
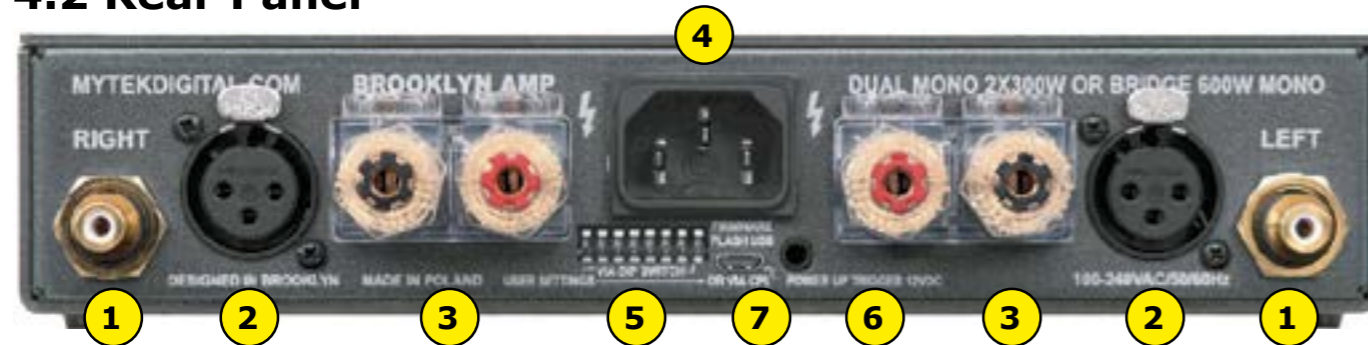
   Color and brightness changing sequence.

   Press and hold the power button for about 3 seconds. The "M" logo will start blinking. Short pressing on the power button will change the "M" logo color. After choosing desired color press again the power button for about 3 seconds. Now you can select logo brightness. There are 17 levels of brightness, where 0 functions as no light. Again press and hold power button for approximately 3 seconds. Now you can choose between 5 levels of standby light brightens level, where 0 functions as no light.
   After waiting around 20 seconds or pressing power button for another 3 seconds your choices will be saved.

2. On / Off button - press the button located at the front panel to switch the AMP+ on and off

4.2 Rear Panel

1. RCA unbalanced analog inputs (right & left)

2. XLR balanced analog inputs (right & left)

Note that if you are using BRIDGE or BI-AMP mode, only the left input channel is effective

3. Speaker output connectors

4. Mains power connector, 100-240VAC 50/60 Hz

5. Dipswitches enable different functions / operation modes

6. Trigger connector.

7. USB interface allows

4.3 DIP Switches Configuration

There are eight dipswitches on the rear panel of the Brooklyn AMP+. Each of them activates different function.

Upper position = off (default setting)
Lower position = on
- 1st off usb control, on=dipswitch controls functions
- 2nd on – power up trigger is on
- 3rd not used at the moment
- 4th not used at the moment
- 5th AMP+ gain (0 up, +6 dB down)
- 6th AMP+ mode (balanced = up, unbalanced = down)

Attention: User should switch the dipswitch to balanced mode when using XLR connections or to unbalanced when using RCA.

- Dipswitches 7th and 8th work together:
  - when 7 is up the AMP+ works in a regular stereo mode
  - when 7 is down the AMP+ mode depends on dipswitch #8 setting;
    - when 8 is up the AMP+ works in Bi-amp mode.
    - when 8 is down the AMP+ works in a Bridge mode.

4.4 Power button colour and brightens changing sequence

Press and hold power button for about 3 sec. The "M" logo will start to blink. Short pressing on power button will change "M" logo colour. When you choose desired colour press again power button for about 3 sec. Now you can select "M" logo brightens. There are 17 brightness levels, where the first level acts as no light. Again press and hold power button for around 3 sec. Now you can choose between 5 steps of standby light brightens level where There are 17 brightness levels, where the first level acts as no light.

Now you can wait around 20 sec. or you can press power button for another 3 sec and your choices will be saved.

5. OPERATING MODES and their settings

STEREO (default mode) - channels left and right operate independently as with a conventional stereo amplifier. The right input channel goes to the right output channel, and the left input channel goes to the left output channel.

BRIDGE (two units of Brooklyn AMP+ are required)– two amplifier channels are internally connected in such a way that twice the output power is available. **Settings:** dipswitches 1, 7, 8 in lower position. Input signal should be connected to left input either XLR or RCA. The speaker should be connected to plus, red inputs. In a bridge mode actually left plus is a plus indeed, right plus is a minus. Black connectors remain unused.

BI-AMP - the left input channel signal is output through both: the right and the left output. The right input channel does not function in this mode. **Settings:** dipswitches 1, 7 in lower position. Input signal should be connected to left input either XLR or RCA. The speakers should be connected to minus (black) and plus (red) outputs.
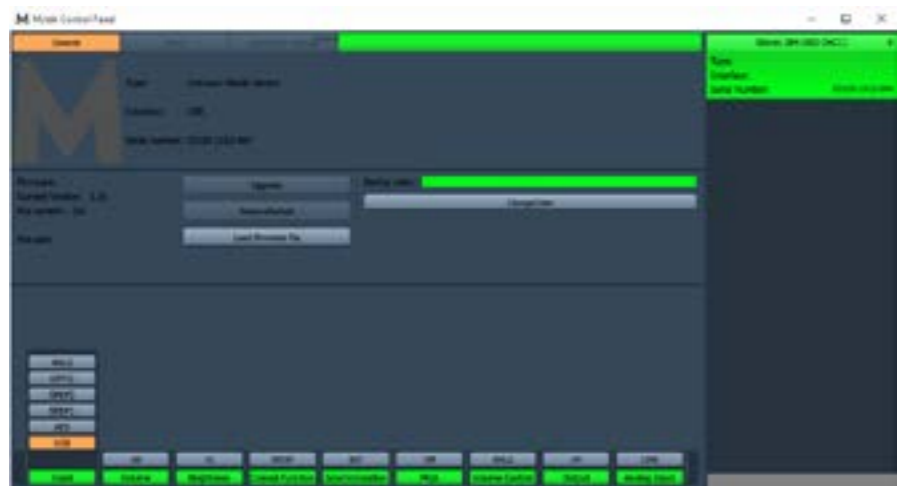
Attention: Do NOT connect cables to XLR and RCA inputs at the same time! It could cause a damage of your Mytek Brooklyn AMP.

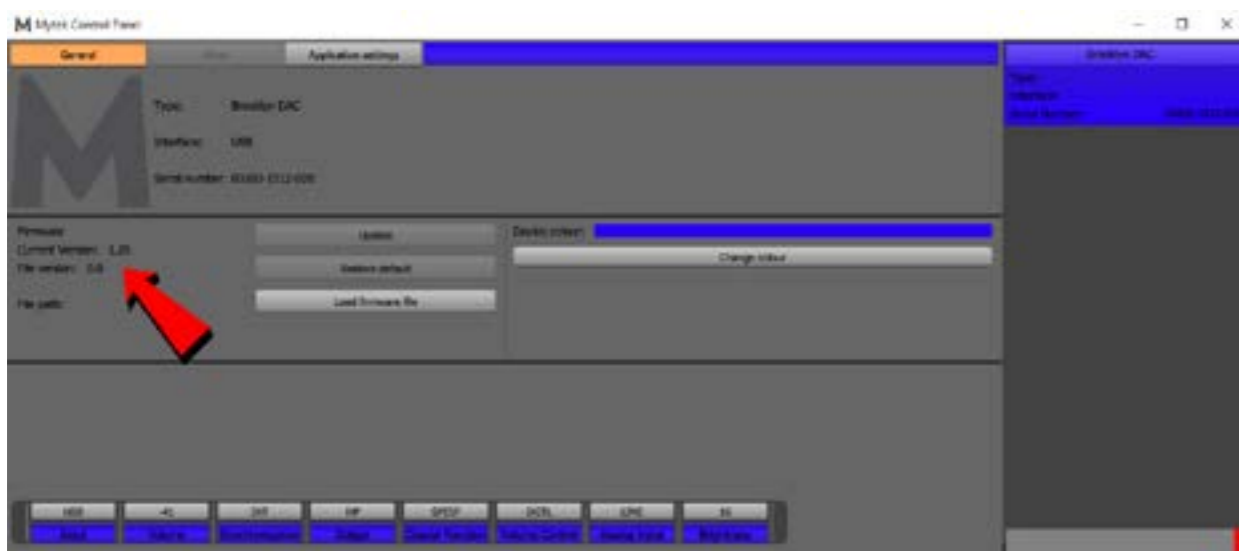**For best audio performance always use a high quality cables!**

MYTEK

MYTEK

6. USB

Brooklyn AMP+ can be controlled by using Mytek Control Panel application. To downlad and install the software please visit our support page: https://mytekdigital.com/hifi/support/

7. Firmware update Windows and OS X

The current revision of the Brooklyn AMP+ firmware is shown in the MytekControl „General" tab.

- The firmware can be updated by using USB2 port and Mytek Control Panel application. It does not require installed USB2 driver (PC). To download the current firmware please visit: www.mytek.audio

Follow the steps below to update the firmware:

1. Download the latest firmware (*.mfb) file from www.mytek.audio

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 AMP+ will be switched off. To switch it on press the button on the front panel once.

8. Technical Specification

Output Power in stereo and bi-amp mode,1kHz @ 8, 4, 2 Ohm: 2x 300W
Output Power in bridge mode, 1kHz @ 8, 4Ohm: 1x 600W
Burst Output Power in stereo and biamp, 1kHz @ 8, 4, 2 Ohm: 2x 500W
Burst Output Power in bridge mode, 1kHz @ 8, 4 Ohm: 1x 1000W

Output voltage in stereo and biamp mode: 70Vp/140Vpp unloaded
Output voltage in bridge mode: 140Vp/280Vpp unloaded

Frequency Response -3dB: 10 Hz - 30 kHz: +0/-0.25 dB

Upper bandwidth @ -3dB for RL = 8 Ohm: 85kHz
Upper bandwidth @ -3dB for RL = 4 Ohm: 65kHz
Upper bandwidth @ -3dB for RL = 2 Ohm: 44kHz

THD+N (1kHz @ 1W): 0.002 %
THD+N (typical): < 0.04 % (20 Hz - 20 kHz, 8 Ohm load, 3 dB below rated power)
Signal To Noise-Ratio: > 121 dB (A-weighted, 20 Hz - 20 kHz, 8 Ohm load)

Input gain control: 23dB (default), 29dB dip switch selectable
Input Impedance: 10 kOhm

Operation Voltage Universal Mains: 85-265V

Protection Circuits: short circuit protection, DC protection,
under voltage protection, temperature protection, overload protection

Dimensions: WxDxH:8.5x9.5x1.74" / 216x241x44mm
Weight: 6lbs / 3 kg
Warranty: 2 years

9. Warranty

Each individual Brooklyn AMP+ undergoes comprehensive quality control and a complete test before shipping. This Brooklyn AMP+ 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. Removal of serial number sticker voids warranty. No other warranty is expressed or implied.

If you suspect that your product is faulty, please contact the place of purchase or alternatively Mytek. Prior to shipping for warranty services the customer or dealer 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 less than 10 years old. Older equipment may or may not be repaired depending on the availability of parts.

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 forin 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 completly 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.