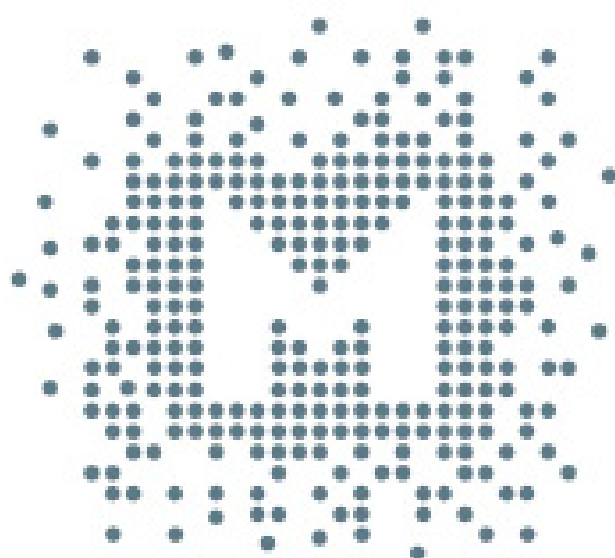


PHONO PREAMP EXTENSION CARD



MYTEK Owner's Manual



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1. Introduction

This extension card enables the Manhattan II DAC owners to playback vinyl records by connecting the gramophone to the DAC directly. There are electronically controlled precision MC, MM solid, and MM transformer phono preamplifier circuits onboard . Among the multitude of input impedances the board offers two different RIAA filters and two MC input stages – all settings available from the Manhattan front panel. The Phono Preamp card is compatible with the Manhattan II DAC only.

All the best,
The HEM Team

2. Package Content

- The Phono Preamp expansion card
- Two 2-wire cables for connecting the card audio output to the Manhattan II DAC mainboard
- Ribbon for connecting the power and control signals
- Spare 4 x M3 screws for mounting the card on the spacers
- Jumper connecting the ground post wire net to virtual input ground or common analog ground (default)

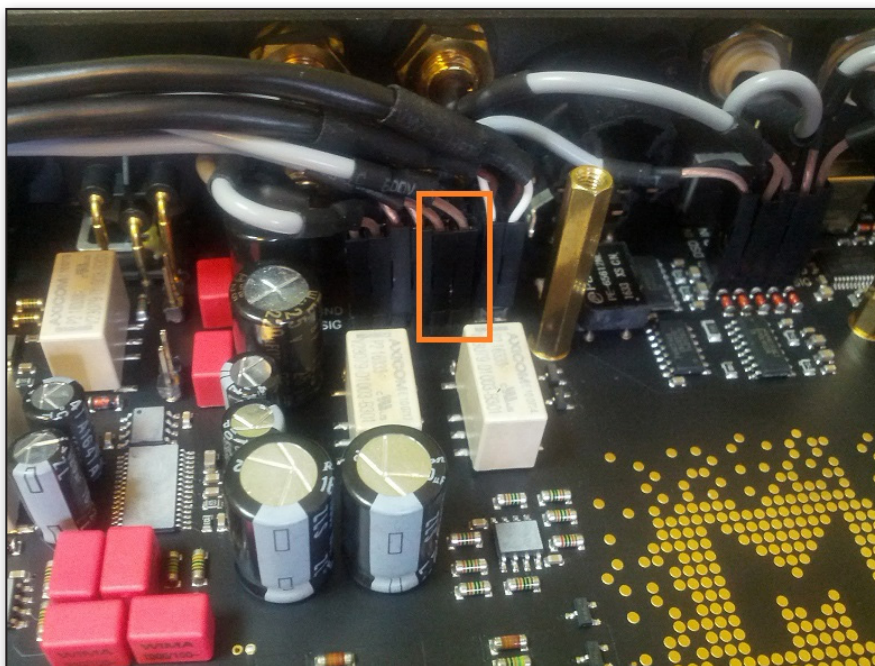
3. Features

The extension card offers:

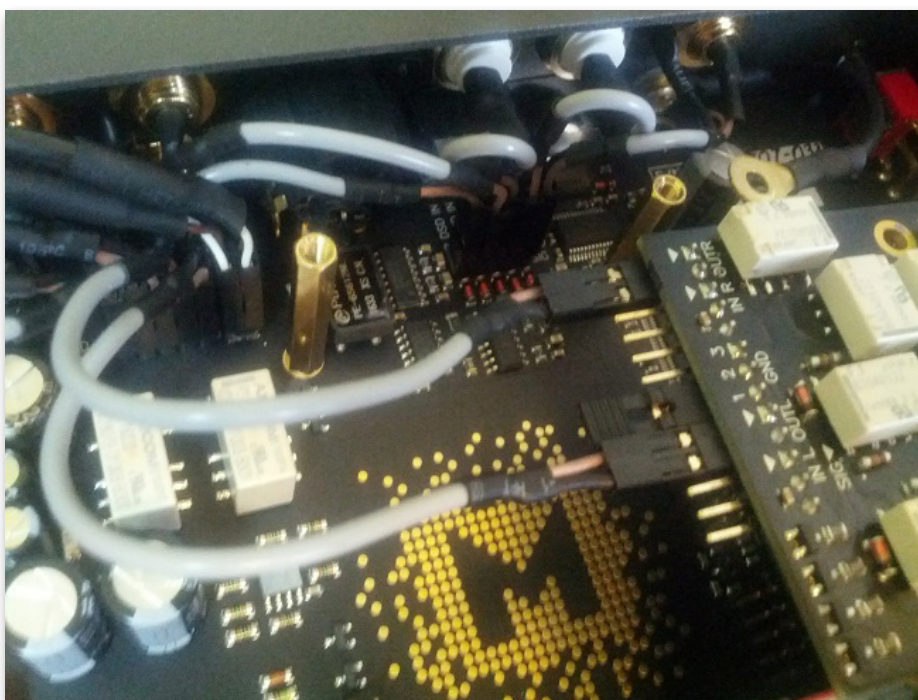
- Compatibility with typical moving magnet (MM) cartridges.
- Compatibility with various moving coil (MC) cartridges.
- Two types of first stage MC preamplifier – solid state and transformer.
- RIAA / RIAA+ analog filters.

4. Quick Start

1. Start the installation with turning off the Manhattan II DAC and disconnecting it from mains.
2. Unscrew the screws securing the top lid of the converter and remove the top lid.
3. Unscrew four M3 screws that were inserted in the brass spacers in the center of the Manhattan main PCB (If there was no screws please use attached spares in the next steps).
4. Unplug the ANALOG IN2 L and ANALOG IN2 R wires from the header on the mainboard.



5. Connect two attached wires to this header and the other end to the headers on the Phono card described OUTL, OUTR.



6. Plug the other end of ribbon attached to card to the header on the mainboard. Be careful as there is a capacitor and clock generator very close to the header! Be sure to plug the ribbon fully into the header.



7. Screw the board to the brass spacers with four M3 screws, remembering to attach the ground post wire under the upper-right screw (where it was before inserting the card). The board goes the transformers upside down – descriptions and mytek logo facing up.
8. Plug the cables running from Manhattan RCAs (ANALOG IN2 L, ANALOG IN2 R) to the phono card headers described INL, INR.



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9. The attached jumper should be plugged into the header described as GND. The recommended default is position 1 2. If you will experience mains hum after connecting the gramophone one of the possible solutions is to replug the jumper into 2 3 position.
10. You are ready to go.

5. Menu

5.1 Menu Navigation

Navigation in the DAC menu is exact same as without the Phono Pre card installed.

5.2 Menu Operation

When the Phono extension card is correctly installed the Manhattan II menu is extended by few additional settings. These settings are present in the menu after the THEATER and before the MQA setting:

Attention! To prevent damage to your speakers reduce the output level of your preamp BEFORE switching the ANLG2 Function or MC MODE options.

5.2.1 ANLG2 Function

If Optional Phono Preamp Board is present analog input number 2 can operate in three modes:

- **LINE IN** – normal operation.
- **PHONO MM** – solid state preamp for moving magnet cartridges ; fixed input impedance of ~ 47k Ohm.
- **PHONO MC** – preamp for moving coil cartridges ; input impedance and the type of first stage of the preamp can be selected.

Note – When PHONO MM or PHONO MC are selected the ANLG 2 input change its name to PHONO and goes to the last position in the INPUT menu.

5.2.2 MC MODE - This is the setting that matters only for MC cartridges

- **SLD 1k** – Solid state 1st stage with 1k Ohm input impedance.
- **SLD 500** – Solid state 1st stage with 500 Ohm input impedance.
- **SLD 100** – Solid state 1st stage with 100 Ohm input impedance.
- **X 1k** - Transformer 1st stage with 1k Ohm input impedance.
- **X 500** - Transformer 1st stage with 500 Ohm input impedance.
- **X 100** - Transformer 1st stage with 100 Ohm input impedance.

5.2.3 PHONO FLT – Phono filter setting

- **RIAA** - default
- **RIAA+** - modified RIAA

Note - Normally the analog inputs of the Manhattan II are DC separated. If you will use only the phono pre input or you are sure that your other analog sources are DC free you can minimise the extent of the thump by enabling the jumpers on Manhattan PCB.

6. Technical Specification

Input	Gain (f = 1kHz, RIAA) [dB]	Input impedance [Ω]
MM Gain	49,1dB \pm 1	47k
MC Solid	68,2dB \pm 1	1k, 500, 100
MC Transformer	69dB \pm 1	1k, 500, 100

7. Warranty

Each individual Phono Preamp undergoes comprehensive quality control and a complete test before shipping. This Phono Preamp 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 Europe repair center is located in Pruszków / 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.



