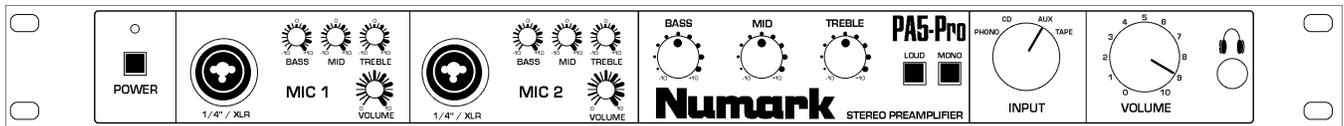


Numark

Professional Disc Jockey Products

PA5Pro Preamplifier

OWNER'S MANUAL



Safety Information and Product Registration

	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
<p>CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE ANY COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL ONLY.</p> <p>The lightning flash with arrowhead symbol within the equilateral triangle is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.</p> <p>The exclamation point within the equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying this appliance.</p>		

CAUTION
FOR USA & CANADIAN MODELS ONLY
TO PREVENT ELECTRIC SHOCK DO NOT USE THIS (POLARIZED) PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE.

SAFETY INSTRUCTIONS

1. Read Instructions - All the safety and operating instructions should be read before this product is connected and used.
2. Retain Instructions - The safety and operating instructions should be kept for future reference.
3. Heed Warnings - All warnings on this product and in these operating instructions should be followed.
4. Follow Instructions - All operating and other instructions should be followed.
5. Water and Moisture - This product should be kept away from direct contact with liquids.

6. Heat - Avoid placing this product too close to any high heat sources such as radiators.

7. Power Sources - This product should be connected to a power supply only of the type described in these operating instructions, or as marked on the unit.

8. Power Cord Protection - Power supply cords should be routed so that they are not likely to be walked upon or pinched by items placed on or against them. When removing the cord from a power outlet be sure to remove it by holding the plug attachment and not by pulling on the cord.

9. Object and Liquid Entry - Take care that objects do not fall into and that liquids are not spilled into the inside of the mixer.

10. Damage Requiring Service - This product should be serviced only by qualified personnel. If you have any questions about service please contact **Numark** at the number(s) shown on the back cover of this manual.

11. Grounding or Polarization - Precautions should be taken so that the grounding or polarization means built into the mixer is not defeated.

12. Internal/External Voltage Selectors - Internal or external voltage selector switches, if any, should only be reset and re-equipped with a proper plug for alternative voltage by a qualified service technician. Do not attempt to alter this yourself.

NOTE: This apparatus does not exceed the Class A/Class B (whichever is applicable) limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications.

WARNING: To reduce the risk of fire or electric shock, do not expose this appliance to rain or moisture. Electrical equipment should NEVER be kept or stored in damp environments.

Please record the serial number of your unit as shown on the back of the chassis as well as the name of the dealer from whom you purchased the unit. Retain this information for your records. Please return the warranty card enclosed to register your preamplifier with us.

MODEL: PA5Pro	PURCHASED FROM: _____
SERIAL NUMBER: _____	DATE OF PURCHASE: _____

Numark - The Proven Leader in DJ Technology

NUMARK PA5Pro Preamplifier

INDEX

Safety Information Product Registration	Page 2
Introduction Features	Page 4
Precautions	Page 5
Front Panel Diagram and Features	Page 6
Rear Panel Diagram and Features	Page 7
Connection Diagram	Page 9
Specifications	Page 10
Block Diagram	Page 11
Warranty and Service	Page 12

CONGRATULATIONS!

You have purchased the **PA5Pro** Preamplifier by **Numark**. The Numark PA5-Pro is a high-quality stereo preamplification unit. Perfect for a variety of applications such as aerobics clubs, karaoke, restaurants, office music, bars, churches, or even nightclub off peak time. This simple to operate unit allows you to select from 4 different input sources such as a CD player or a tape deck and still page someone with the 2 microphones using our integrated auto-muting feature.

Thank you for buying Numark products!

FEATURES...

- RCA,Balanced XLR Outputs
- Binding Post Outputs
- Record Output
- 2 Neutrik™ Mic inputs with
separate 3-band equalizers
- Auto mute with defeat switch
- Master 3-band Equalizer
- Input Selector Switch
- Loudness switch
- Stereo/Mono switch
- Headphone output

Numark - The Proven Leader in DJ Technology

IMPORTANT INFORMATION...

Please read this entire manual before connecting the PA5PRO to your system.

For optimum performance:

- Always make sure that AC power is OFF while making any connections.
- Do not use excessively long cables (i.e. over 50ft/14m) Be sure plugs and jacks are tightly mated. Loose connections can cause hum, noise or intermittents that could easily damage your speakers.
- Never use spray cleaners on the slide controls. Residues cause excessive dirt build-up and this will void your warranty. In normal use slide controls can last for many years. If they malfunction (usually because of a dirty or dusty environment) consult a professional technician.
- Never attempt to make any adjustments or repairs other than those described in this manual. Take the **PA5PRO** to your dealer or to an authorized **Numark** Service Center.

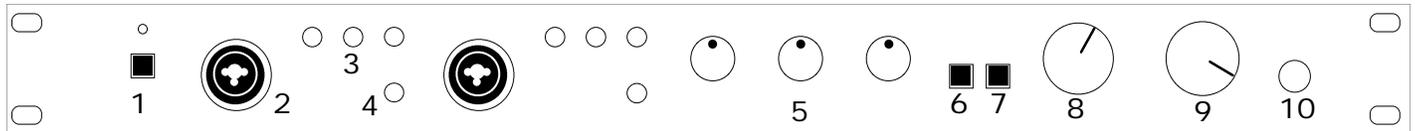
A NOTE ON CABLES:

Make the input and output connections with readily available *low-capacitance* stereo cables. Quality cable makes a *big* difference in audio fidelity and punch. See your **Numark** dealer or an electronics or audio specialist store if you are not sure which cables to get.

SYSTEM PRECAUTIONS

- Use appropriate cables throughout your system: Quality shielded audio cables and terminated shielded video cables, low-capacitance preferred. Speaker cables must be 14-gauge minimum; 12- or 10-gauge is better.
- Reliability will be enhanced through the use of banana connectors on the speaker wires. Observe correct speaker wire polarity. If in doubt, consult your **Numark** dealer or a qualified technician.
- Take care to connect only one cable at a time. Pay attention to the color-coded, labelled Input and Output jacks.
- ALWAYS remember: "**TURN AMPS ON LAST AND OFF FIRST**". Begin with master faders or volume controls on minimum and the amplifier gain/input control(s) down. Wait 8 to 10 seconds before turning up the volume. This prevents transients which may cause severe speaker damage.
- Use restraint when operating controls. Try to move them slowly. Rapid adjustments could damage speakers due to amplifier clipping.
- **Avoid amplifier "clipping" at all costs:** this occurs when the red LEDs (usually on the front panel of most professional power amplifiers) start flashing. "**Clipping**" is when the power amplifier is distorting and working beyond it's limits. Amplifier distortion is THE major cause of speaker failure.
- To prevent fire or shock hazard, do not expose the unit to rain or moisture. **Never place cans of beer, soda, glasses of water or anything wet on top of the mixer!**

PA5PRO FRONT PANEL DIAGRAM AND FEATURES...



If the **PA5PRO** is your first preamplifier, please read this entire manual before you begin operation.

The **PA5PRO** can be rack-mounted or used as a free-standing unit (1-19" rack unit space).

1. Power Switch and Power-On LED.

MIC SECTION

The **PA5PRO** has 2 extremely controllable **DJ Mic** channels. The **mute switch** on the rear panel (2) automatically reduces the level of the music when the **DJ Mic** is spoken into.

2. **Neutrik™** "Combo" connector allows connection of either a 1/4" jack or an XLR jack. This is ideal for connecting an XLR gooseneck directly into the mixer.

3. **Treble, Mid, and Bass Controls** fine tune the tone of your voice on both mics through the sound system. The controls are detented for setting tone "flat". For best results, use a dynamic cardioid microphone.

4. The **DJ Mic volume** controls the **DJ Mic** volume for the **Neutrik™** "Combo" connector.

5. **3-Band Master Equalizer (EQ)**. The EQ compensates for differences in source material sound quality. The EQ can be used to tailor the sound to the acoustical requirements of the room. The knobs have a center detent for an accurate "flat" response. Start with this position if you've never used a graphic EQ before and then slowly adjust the bass, middle, or treble to a desirable position.

6. The **Loud** button boosts the bass frequencies to add more presence to the audio signal.

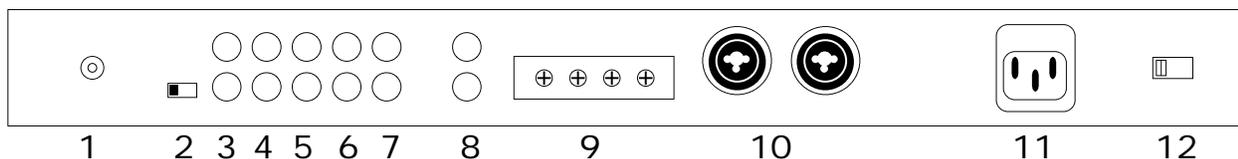
7. The **Mono** button is pressed to merge the left and right channels of input to become the same output.

8. The **Input Selector** determines which source will be live to the outputs based on what you have connected to the rear panel input section.

9. The **Master Volume** controls the overall output level and the headphone output level.

10. The **Headphone jack** is supplied so you may monitor the output of the preamp directly.

PA5PRO REAR PANEL DIAGRAM AND FEATURES..



1. **GND** is the grounding lug for turntables 1, 2 and 3 (phono inputs on Channels 1, 2 and 3). Always use this connection (your turntable cable should have a grounding wire).

2. The **Automute Switch** should be set to the on position if you want inputs 3-6 to lower volume automatically when the microphones are spoken through. Set it to the off position if you don't want the inputs affected.

3. **Phono Inputs** use unbalanced RCA jacks. Your input signal is fed directly to the **PA5PRO's** high-quality RIAA phono pre-amplifiers so use this position only for moving magnet cartridges. Line level sources will overload the sensitive phono pre-amps and will sound very bad, so always be sure to toggle the line/phono switch over to line before connection of line sources.

4,5,6. **CD, Tape, and Aux Line Inputs** are unbalanced RCA jacks. You can connect stereo audio from HiFi VCRs, cassette and reel-to-reel tape decks, DAT machines, CD players, laser discs, tuners, even synthesizers or other mixing consoles. **NOTE:** Plug mono audio sources into both Left and Right inputs using a "Y" cable connector.

7. The **Tape Outputs** are low-impedance unbalanced RCA jacks which output the program mix and allow you to connect any recording device.

8. The **Stereo Main RCA Outputs** are low-impedance RCA connectors controlled by the **Master** fader.

9. The **Stereo Binding Post Outputs** are low-impedance hard-wire connectors controlled by the **Master** fader

10. The **Stereo XLR Balanced Outputs** are balanced low-impedance outputs for connecting to other balanced amplifiers or devices. Use these outputs whenever possible for the best sound.

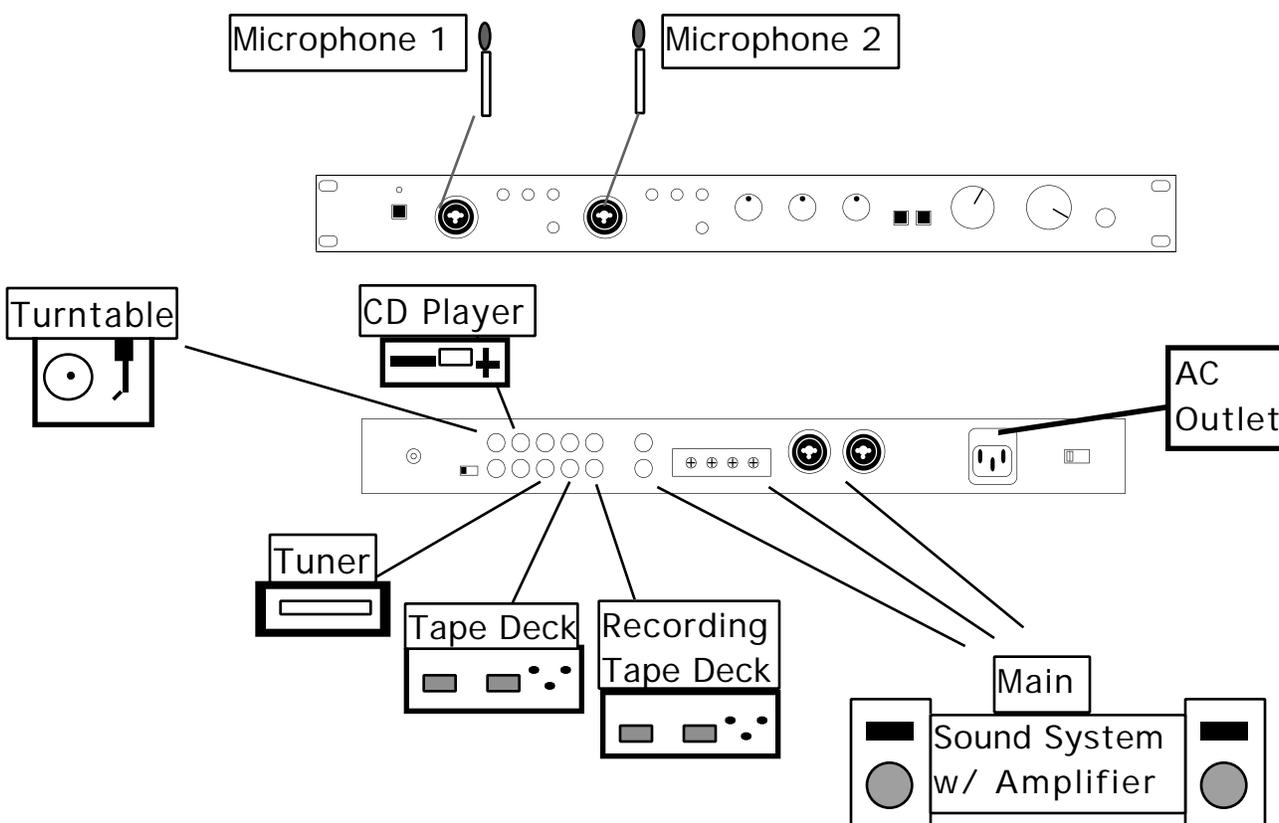
11. **AC Cord.** See safety precautions on page 3 for proper treatment of the power cord.

12. **Voltage Selector** should be set before you plug the unit in to the correct voltage for your location.

PA5Pro CONNECTION DIAGRAM...

INSTALLATION AND OPERATION

Study the **Connections Diagram**. First, connect all stereo input sources. Next connect your microphone(s) and monitor headphones. Make sure all volumes are at "zero" and the unit is off. Finally, connect the stereo outputs to the power amplifier(s) and/or audio sources. Plug the **PA5Pro** into AC power. Now you are ready to switch it on.



Numark - The Proven Leader in DJ Technology

SPECIFICATIONS...

INPUTS:

Line: 150 mV rms sensitivity
Mic: 2.5 mV rms sensitivity
Phono: 2.5 mV rms sensitivity

OUTPUTS:

Line: 2V rms

EQUALIZER:

Bass/Mid/Treble control ± 8 dB

SIGNAL TO NOISE RATIOS (vs. maximum output):

Line: Better than 95 dB
Mic: Better than 75 dB
Phono: Better than 75 dB

DISTORTION:

T.H.D. 0.05%

CROSSTALK:

Channel 60dB
Function 60dB

FREQUENCY RESPONSE:

Mic: 20Hz-20kHz $\pm .3$ dB
Line: 20Hz-20kHz $\pm .5$ dB
Phono: 20Hz-20kHz ± 1 dB

WEIGHT:

(net) 3.5Kg

DIMENSIONS:

WxHxD 483x45x280mm 19"x 1 3/4"x11 1/4"

POWER CONSUMPTION:

20 Watt

BLOCK DIAGRAM...

Numark

Professional Disc Jockey Products

Warranty and Service Information

Numark Industries, LLC and Numark International, Inc. (hereafter "Numark") warrants each new product manufactured and/or supplied by it to be free from defects in material or workmanship under conditions of normal use and service for 360 days, beginning on the date of purchase from an authorized Numark Dealer, but not to exceed 2 years from date of shipment by Numark.

The Numark obligation under this warranty is limited to repairing or replacing, at its option, the product or part(s) therein; which upon examination by Numark shall appear to be defective or not up to factory specifications; providing the Numark product is returned (transportation prepaid) to Numark.

Numark shall not be liable for any damages, consequential or otherwise, resulting from the use and operation of this product and makes no other warranty(s) either express or implied on this product, including any warranty of merchantability.

This warranty does not extend to any of our products which have been subjected to misuse, neglect, accident, incorrect wiring not our own, improper installation, or use in violation of instructions furnished by us, nor extended to units which have been repaired or altered outside of our factory, nor to cases where the serial number thereof has been removed, defaced, or changed, nor to accessories used therewith not of our own manufacture. Numark reserves the right to make changes or improvements in its products, during subsequent production, without incurring the obligation to install such changes or improvements on previously manufactured equipment.

To place this warranty into effect, the enclosed WARRANTY REGISTRATION CARD must be returned to Numark Industries, LLC within thirty (30) days after date of purchase.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

Some states do not allow the exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you.

EQUIPMENT TRANSPORT

A Return Authorization number should be obtained from Numark through the addresses or phone numbers below.

It is the customer's obligation, when returning faulty equipment, to properly pack the Numark equipment in its original packaging. Failure to do so may inadequately protect the equipment in transit and, therefore, jeopardize the customer's warranty. The defective Numark equipment should be sent, FREIGHT PREPAID with Return Authorization number to:

NUMARK INDUSTRIES
111 Dupont Drive
Providence, RI 02907. U.S.A.
Attention: Service Department

Telephone: +1 (401) 946-4700
Fax: +1 (401) 946-5350
E-mail: numark@numark.com