

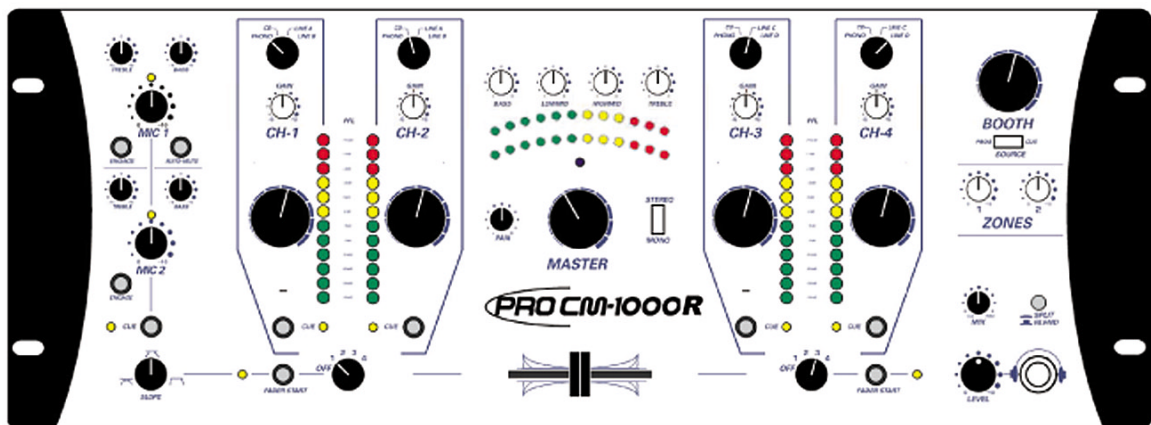
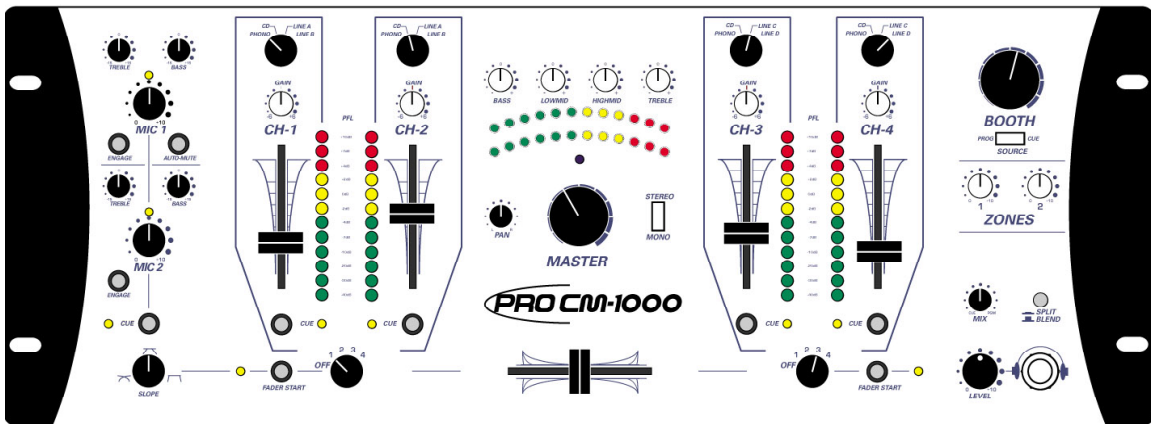
Numark®

Professional Disc Jockey Products

CM1000


CM1000R

PROFESSIONAL CLUB MIXER




Owner's Manual

Safety Information



CAUTION
RISK OF ELECTRIC SHOCK
DO NOT OPEN



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.


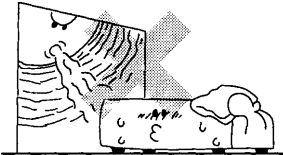
The lightning flash with arrowhead symbol within the equilateral triangle is intended to alert the user to the presence of un-insulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.


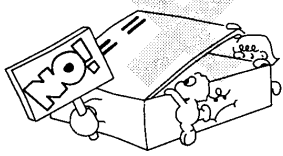
The exclamation point within the equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying this appliance.

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

- a) Read Instructions - All the safety and operating instructions should be read before this product is connected and used.
- b) Retain Instructions - The safety and operating instructions should be kept for future reference.
- c) Heed Warnings - All warnings on this product and in these operating instructions should be followed.
- d) Follow Instructions - All operating and other instructions should be followed.
- e) Water and Moisture - This product should be kept away from direct contact with liquids. 
- f) Heat - Avoid placing this product too close to any high heat sources such as radiators.
- g) Ventilation - The appliance should be situated so that its location or position does not interfere with its proper ventilation. For example, the appliance should not be situated on a bed, sofa, rug, or similar surface that may block the ventilation opening; or, placed in a built-installation, such as bookcase or cabinet that may impede the flow of air through the ventilation openings. 
- h) 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.

- i) 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. 
- j) Object and Liquid Entry - Take care that objects do not fall into and that liquids are not spilled into the inside of the mixer.
- k) Cleaning - The appliance should be cleaned only as recommended by the manufacturer.
- l) Non-use Periods - The power cord of the appliance should be unplugged from the outlet when left unused for long periods of time.
- m) Damage Requiring Service - Only qualified personnel should service this product. If you have any questions about service please contact Numark at the number(s) shown on the back cover of this manual. 
- n) Grounding or Polarization - Precautions should be taken so that the grounding or polarization means built into the CD player is not defeated.
- o) 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.

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

SERVICE INSTRUCTIONS

- Disconnect power cord before servicing
- Replace critical components  only with factory parts or recommended equivalents
- For AC line powered units - Before returning repaired unit to user, use an ohmmeter to measure from both AC plug blades to all exposed metallic parts. The resistance should be no more than 100,000ohms.

VERY IMPORTANT**Please read this entire manual before connecting this unit to your system**

For optimum performance:

- The crossfader is a user replaceable item and subject to wear. Excessive force can wear out the fader quickly. This is not a warranted item.
- 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.
- Always make sure that AC power is OFF while making any connections.
- Use appropriate cables throughout your system. 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. 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.
- Never attempt to make any adjustments or repairs other than those described in this manual. Take the unit to your dealer or to an authorized Numark Service Center.
- 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 unit!

Product Registration

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 and your original purchase receipt for your records. Please return the enclosed warranty card to register your unit with us.

MODEL: _____
SERIAL NUMBER: _____

PURCHASED FROM: _____
DATE OF PURCHASE: _____

Numark- The Leader in DJ Technology

Numark®

CM1000/CM1000R

PROFESSIONAL CLUB MIXER

CONGRATULATIONS!

You have just purchased the most versatile professional club mixer available today, **Numark's** CM1000. This mixer is designed to accommodate both the professional installation market and club DJs alike. Its unique and comprehensive set of features makes it a desired choice for professional audio needs. The CM1000 is manufactured utilizing the highest quality audio components and advanced audio circuitry. Featuring inputs for 12 line, 4 phono, and 2 mics with EQ and auto ducking, fader start, along with a complete compliment of balanced outputs, the CM1000 provides users with total control. This mixer also boasts special contractor features such as EQ defeat, master gain reduction, VU adjustment, phantom power, and a ground lift. **Numark's** CM1000 and CM1000R model with rotary controls, will prove to be the mixer of choice in professional club settings.

Thank you for purchasing NUMARK products!

FEATURES:

Inputs:

- 12 line, 4 phono, 2 mic
- Individual channel PFL meter and gain controls
- 2 Mic inputs with individual EQ
- Mic 1 contains auto-mute, process control, and phantom power switch option
- 4 individual phono ground lugs

Crossfader:

- High quality ALPs™ VCA replaceable crossfader
- Selectable 4 channel fader crossfader start
- Slope adjustment

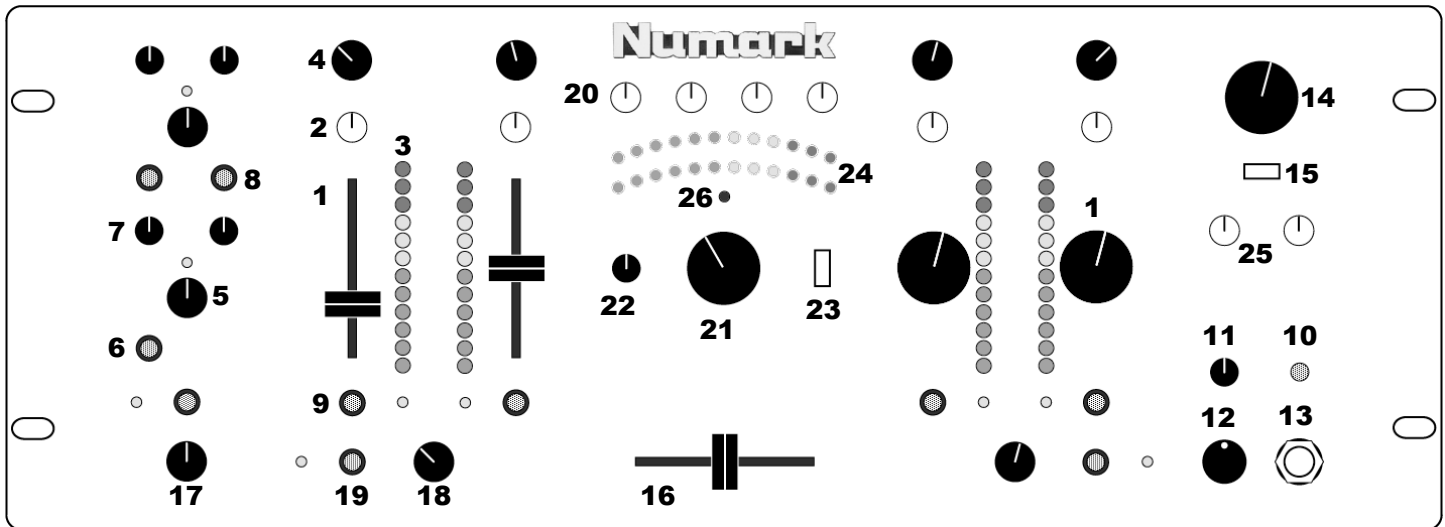
Outputs:

- Master balanced/unbalanced with Panning, Stereo/mono switch, and rear panel Master Gain reduction control
- Zone 1 balanced/unbalanced, Zone 2
- Light/Mono with rear panel level control
- Record with and without mic
- Booth balanced/unbalanced with cue or program output select
- Headphone with Split/blend, program mix, and volume control
- 4 – band master EQ with +/-6 or 12dB range adjustment and defeat
- Latching RJ11 connector and ground lift

Numark- The Leader in DJ Technology

TABLE OF CONTENTS

Safety Measures	2
Important Information	3
Registration	3
Introduction	4
Description of the Features	6
Quick Setup Diagram	9
Block Diagram	10
Specifications	11
Warranty	12

FRONT PANEL FEATURES**INPUTS**

1. **Input faders** - control individual source levels in the mix.
2. **Pre-fader Gain Controls** – adjust the pre-fader volume for cleaner sound.
3. **PFL Meter** - used to adjust the PFL levels, accurately match channel levels with the Pre-fader gain controls before mixing them together. The idea is to properly match PFL inputs. You should not attempt to match the input with the stereo output meter!
4. **Channel Input Selector** – determines what input source is controlled by the channel.

MICROPHONE

5. **Mic Gain Controls** – Controls the volume of the microphones
6. **Mic Activation Switch** – turns microphone input on and off.
7. **Treble and Bass Controls** – for fine-tuning the tone of your voice on both mics through the sound system. The controls are detented for setting tone "flat".
8. **Auto-Talkover Switch**- reduces the input level of Channels 1-4. This works with the **auto talk-over sensitivity** adjustment on the rear panel. Talkover is very useful for making announcements without adjusting any levels.

HEADPHONE CUEING

9. **Channel Cue Assign** - are used to route Pre Fader Level (PFL) channel audio to the **Monitor Section**. The channel faders do not control the **Cue** volume.
10. **Split/Blend Cue** – controls how PFL and Program audio are sent to your headphones. In **split** mode, the PFL audio can be heard in your left ear and PGM audio can be heard in your right ear. In **blend** mode, both PFL and PGM can be heard in both ears.
11. **Headphone Mix** - controls the mix of PFL and PGM signals to your headphones. When the slider is moved to the left, all you will hear is the cue source. When the slider is all the way to the right, you will hear what is playing through the master output. By blending, beats can be matched exactly and segues can be smooth when a song is cued.
12. **Headphone Level** – adjusts cue volume.
13. **Headphone output** – ¼" jack for your headphones.
14. **Booth Output** – controls the volume of booth monitor speaker if attached. Can also be used as an additional zone or lighting control
15. **Booth source switch** – routes either program audio or cue selected audio to the booth output. In "CUE" mode the output audio matches selections made for the headphones. For instance, in split cue mode you would here cued audio in the left booth speaker and program audio in the right booth speaker. Balance would be controlled by the blend control. In this way mixing can be done without headphones.

CROSSFADER

16. **Replaceable Crossfader** - achieves clean segues between the two input channels selected by the Crossfader Assign.



In this example "Hard left" selects Channel 1 and "Hard right" selects Channel 4. With the crossfader centered, both assigned channels are live. Use the crossfader for fast and seamless segues from one selected channel to the other.

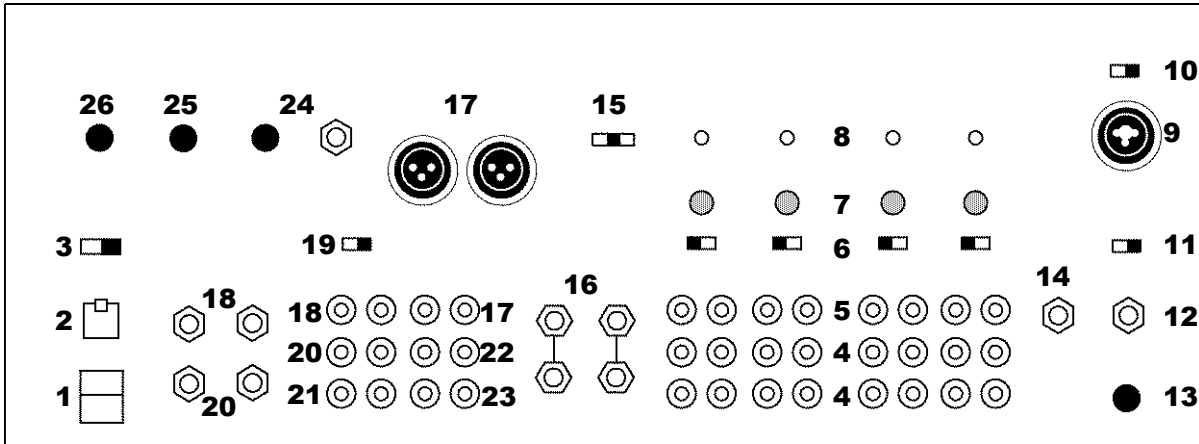
Note: The crossfader is replaceable in case of failure. Simply remove all knobs from the facepanel and unscrew the 5 screws that hold it in place. Then remove the 2 fader screws that hold the crossfader to the subchassis, lift it out and disconnect its cable. Re-attach the new crossfader and replace the faceplate and knobs back onto the unit - you're back in business!

17. **Crossfader Slope** – determines how quickly the audio from the opposing side of the crossfader activates. A tight curve (hard right) turns on the opposing audio signal with very little crossfader movement. A loose curve (hard left) makes very long and smooth segues in transition.
18. **Crossfader Assign Knob** - determines which input channel will be heard when the crossfader is moved towards the knob and which channel is fader start.
- Note: All channels not assigned will remain active.*
19. **Fader Start** – activates the crossfader to send play and cue commands to your auto-start **Numark** CD player or other popular brand using pulse technology. For fader start, attach your mixer to a remote start CD player using industry standard 1/8"(3.5mm) cables. When you move the crossfader toward the active channel, the attached CD player will start. When it is moved away, that side will cue (similar to pressing the cue button).

OUTPUTS

20. **4-Band EQ control** – adjusts the master output according to the setting on the rear panel. When the unit is set for +/- 6 or 12dB the unit will increase or decrease the frequency area adjusted.
21. **Master Fader** – to control the overall output level.
22. **Panning** – adjusts the balance of right and left audio.
23. **Stereo/Mono toggle** - adjusts the **Master** output for stereo or mono operation.
24. **Stereo Auto Peak Hold Level Indicator**- quickly and accurately tracks level of audio sent to it by the meter assign. The red LEDs for +3dB, +5dB and +8dB hold program peaks for a second or two. With peak metering, it's OK to be "in the red" as long as +5dB or +8dB aren't constantly lit. **When using as a master output meter**, set the crossover, equalizer and power amp inputs to avoid distortion at each step in the audio chain. Proper attention to the peak meter results in the punchiest possible sound without audible distortion. **When used to adjust the PFL levels**, accurately match channel levels with the Pre-fader gain controls before mixing them together. The idea is to properly match PFL inputs, not the input with the stereo output meter!
25. **Zone Faders** - controls speaker volume for a remote zone or booth monitors.
- NOTE: This can also be used to supply line level audio to a lighting controller or to lights that are sound activated.*
26. **Power Indication LED** – indicates when power is applied to the unit and the rear panel power switch is on.

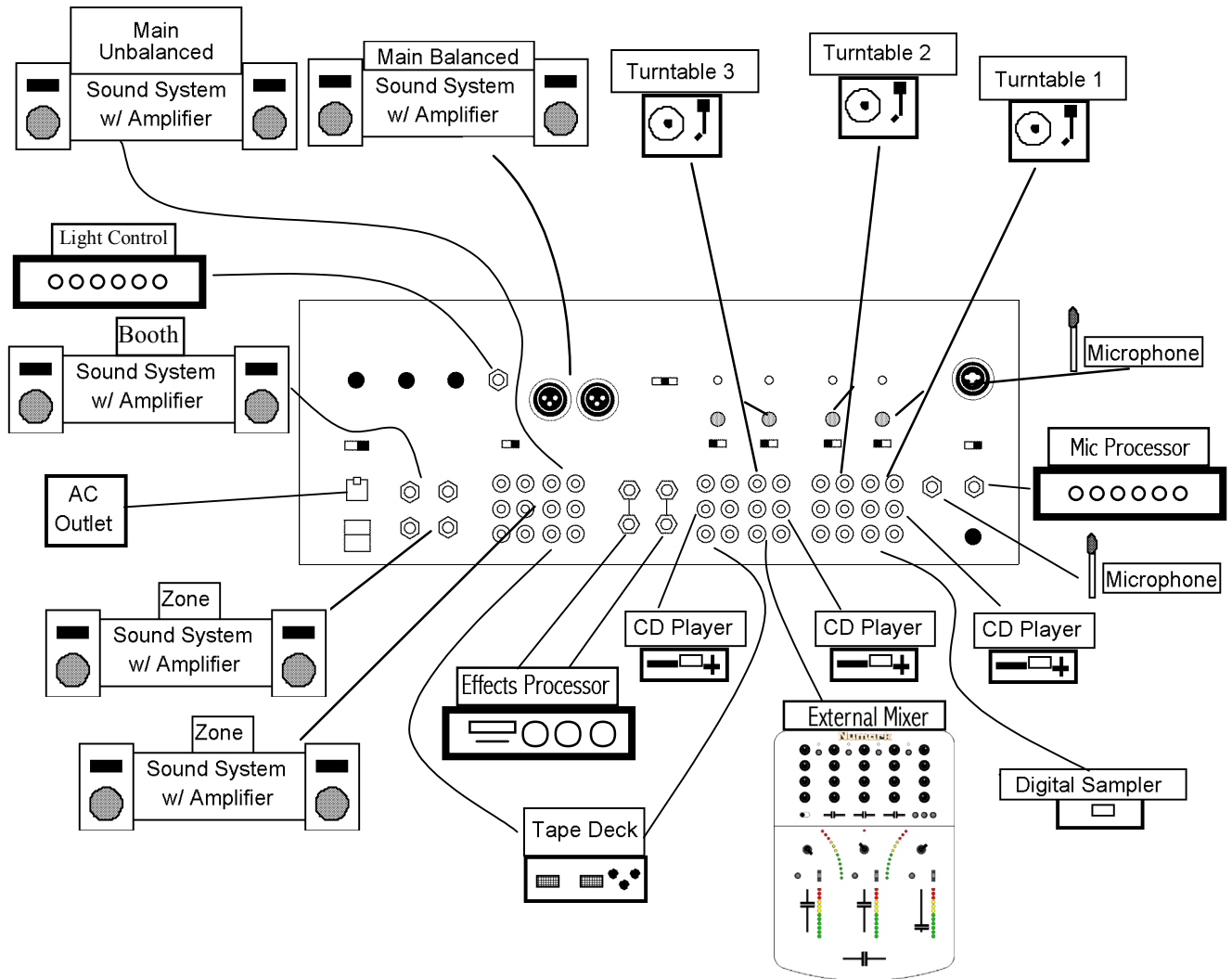
REAR PANEL FEATURES



- Power Switch** – to turn unit on *after* you have turned on all input devices and *before* you turn on any devices attached to the output.
- Power Supply Input** - to plug your power adapter in before switching on power. See safety precautions on page 3 for proper treatment of power.
- Ground Lift** – to separate chassis and power grounding in case of signal hum. Move this to the ungrounded position if system hum occurs to try and resolve any problems.
- Line Inputs** - to 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.
- Phono/Auxiliary Inputs** – to plug your turntables or line device. Select the AUX/PHONO switch (6) to the desired input.
- Phono/Auxiliary switch** – select the appropriate position for your input device. With phono selected the input signal is fed directly to the PRO SM-1's high-quality RIAA phono pre-amplifiers so use this input only for turntables. Line level sources will overload the sensitive phono pre-amps. Switch this over to the AUX position for line devices such as CD players and Tape decks.
- Ground lug** - use these connections with your turntables' grounding cable to avoid signal hum.
- Fader Start Jacks** – for connecting fader start devices such as CD players.
- Mic 1 input** – for connecting either XLR or 1/4" balanced microphone cables
- Phantom power switch** – to add 15V power for some specialized microphones. Leave this in the off position unless needed. The on position could potentially damage microphones not designed to be powered.
- Mic Process Send/Return Loop**– attach this to any devices you would like to process the microphone with. The jack is wired TRS where tip is neutral, ring is send, and sleeve is return.
- Auto mute level** – to set the level of audio reduction with the auto-talk over is activated on the front panel.
- Auto mute sensitivity**- determines the mic loudness at which auto muting is activated.
- Mic 2 input** – for 1/4" mic cables.
- EQ sensitivity** – for determining how much the front panel EQ can adjust the sound. The off position will disable the EQ from modifying the sound.
- Process Send/Return** – for processing the program material external processors such as EQs and effects units.
- House/Master Outputs** – controlled by the master fader. The XLR Balanced Outputs are the best choice to use in large systems. Power transformers and other devices which cause magnetic fields can induce hum in audio cables. This can be best resolved by using balanced lines where inputs and outputs permit. Balanced lines are also the most effective means of reducing or eliminating RF or radio frequency" interference.
- Booth Outputs** – controlled by the booth fader
- Booth Stereo/Mono switch**- for use in single monitor speaker situations
- Zone 1 output** - controlled by Zone 1 level control for additional rooms or systems
- Zone 2 output** – controlled by Zone 2 level control for additional rooms or systems
- Record output with mic** – to attached your tape deck and record music with mic announcements
- Record output without mic** – to record just the music without mic activity.
- Light output** – separately gain adjusted mono program output to drive lighting system or sub woofers
- Master Gain Reduction** – adjusts the final output level voltage for the balanced main outputs. This is factory preset to current standards.
- VU Meter adjust** – should be adjusted so the front panel output display indicates the optimum audio level to be sent to the main sound system. This is factory preset to typical levels.

QUICK SETUP DIAGRAM

Study this setup diagram. Make sure all faders are at "zero" and all devices are off. First, connect all input sources and processors. Next, connect your microphone and monitor headphones. Finally, connect the stereo outputs to the power amplifier(s) and/or audio receivers such as tape decks. Plug your mixer into AC power. Now you are ready to switch everything on. **IMPORTANT:** Always switch on your audio input sources such as turntables or CD players first, then your mixer, and finally any amplifiers. When turning off, always reverse this operation by turning off amplifiers, then your mixer, and then input devices.



SPECIFICATIONS**INPUTS:**

Line: 10kohm input impedance
 175mV rms sensitivity (for 1.22V output)
 Mic: 10kohm input impedance unbalanced
 3mV rms sensitivity (for 1.22V output)
 85mV rms max input
 Phantom power: +15V
 Phono: 47kohm input impedance
 1.4mV rms sensitivity @ 1 KHz (for 1.22V output)

OUTPUTS:

Line: 9V rms max
 Headphone Amp: 0.5 watt into 47ohm
 Distortion: less than 0.01%

SIGNAL TO NOISE RATIOS* (vs. maximum output):

Line: Better than 96 dB
 Mic: Better than 78 dB
 Phono: Better than 87 dB

*JIS - weighted

FREQUENCY RESPONSE:

Line: 20 Hz- 22k Hz ± 0.5 dB
 Line: 20 Hz- 20k Hz ± 0.5 dB
 Phono: ± 1 dB except for controlled attenuation of -3 dB
 @ 20 Hz to reduce rumble and feedback

EQUALIZER:

Bass: $\pm 6, 12$ dB @
 Low Middle: $\pm 6, 12$ dB @
 Middle: $\pm 6, 12$ dB @
 Treble: $\pm 6, 12$ dB @

POWER CONSUMPTION:

21.6 Watt typical
 28.8 Watt with full headphone output

DIMENSIONS:**WEIGHT:**

kgs, lbs

Numark®

Professional Disc Jockey Products

LIMITED PRODUCT WARRANTY

What is covered and for how long?

1. NUMARK INDUSTRIES LCC ("NUMARK") warrants to the original purchaser that NUMARK products; including but not limited to DJ mixers, amplifiers, CD players, CD Mix Stations, turntables, preamplifiers, beatkeepers, equalizers, microphones, headphones, cartridges, and all other accessories; are to be free from defects in material and workmanship under normal use and service for the period commencing upon the date of purchase from an authorized NUMARK dealer for a period of (1) Year.

What is not covered? This Limited Warranty is conditioned upon proper use of the product by the purchaser.

2. This Limited Warranty does not cover: (a) defects or damage resulting from accident, misuse, abuse, neglect, unusual physical or electrical stress, modification of any part of the product, or cosmetic damage; (b) equipment that has the serial number removed or made illegible; (c) all plastic surfaces and other externally exposed parts that are scratched or damaged due to normal use; (d) defects or damage from improper testing, operation, maintenance, installation, adjustment, or service of the mixers; (e) crossfaders.
3. What are NUMARK'S obligations? During the applicable warranty period, NUMARK will repair or replace, at NUMARK'S sole discretion, without charge to the purchaser, any defective component part of the mixer. To obtain service under this Limited Warranty, purchaser must first contact NUMARK and obtain a return authorization number ("RA#"). Purchaser must then return the mixer to NUMARK in an adequate container for shipping, accompanied by purchaser's sales receipt or comparable proof of sale showing the date of purchase, the serial number of the product, and the seller's name and address. To obtain an RA# and assistance on where to return the mixer, contact NUMARK customer service at 401-295 9000. Upon receipt, NUMARK will repair or replace the defective products. NUMARK may, at NUMARK'S sole discretion, use rebuilt, reconditioned, or new parts or components when repairing any product or replace a product with a rebuilt, reconditioned or new product. Repaired mixers will be warranted for a period equal to the remainder of the original Limited Warranty on the original mixer or for (90) days, whichever is longer. All replaced parts, components, boards and equipment become the property of NUMARK. If NUMARK determines that any mixer is not covered by this Limited Warranty, purchaser must pay all parts, shipping, and labor charges for the repair or return of such mixer.
4. What are the limits on NUMARK'S liabilities? THE WARRANTIES GIVEN IN THIS LIMITED WARRANTY, TOGETHER WITH ANY IMPLIED WARRANTIES COVERING NUMARK MIXERS, INCLUDING WITHOUT LIMITATION ANY WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED TO THE DURATION OF THIS LIMITED WARRANTY. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, NUMARK SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL, CONSEQUENTIAL, INDIRECT OR SIMILAR DAMAGES, LOSS OF PROFITS, DAMAGES TO PURCHASER'S PROPERTY, OR INJURY TO PURCHASER OR OTHERS ARISING OUT OF THE USE, MISUSE OR INABILITY TO USE ANY NUMARK MIXER, BREACH OF WARRANTY, OR NEGLIGENCE, INCLUDING BUT NOT LIMITED TO NUMARK'S OWN NEGLIGENCE, EVEN IF NUMARK OR ITS AGENT HAS BEEN ADVISED OF SUCH DAMAGES, OR FOR ANY CLAIM BROUGHT AGAINST PURCHASER BY ANY OTHER PARTY. THIS LIMITED WARRANTY IS THE COMPLETE WARRANTY FOR NUMARK'S MIXERS, AND IS GIVEN IN LIEU OF ALL OTHER EXPRESS WARRANTIES. THIS LIMITED WARRANTY SHALL NOT EXTEND TO ANYONE OTHER THAN THE ORIGINAL PURCHASER OF THIS PRODUCT AND STATES PURCHASER'S EXCLUSIVE REMEDY. IF ANY PORTION OF THIS LIMITED WARRANTY IS ILLEGAL OR UNENFORCEABLE BY REASON OF ANY LAW, SUCH PARTIAL ILLEGALITY OR UNENFORCEABILITY SHALL NOT AFFECT THE ENFORCEABILITY OF THE REMAINDER OF THIS LIMITED WARRANTY WHICH PURCHASER ACKNOWLEDGES IS AND WILL ALWAYS BE CONSTRUED TO BE LIMITED BY ITS TERMS OR AS LIMITED AS THE LAW PERMITS.
5. This Limited Warranty allocates risk of product failure between purchaser and NUMARK, and NUMARK'S product pricing reflects this allocation of risk and the limitations of liability contained in this Limited Warranty. The agents, employees, distributors, and dealers of NUMARK are not authorized to make modifications to this Limited Warranty, or make additional warranties binding on NUMARK. Accordingly, additional statements such as dealer advertising or presentation, whether oral or written, do not constitute warranties by NUMARK and should not be relied upon.
6. How does state law apply to this warranty? SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATIONS OF INCIDENTAL OR CONSEQUENTIAL DAMAGES OR HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATIONS OR EXCLUSIONS MAY NOT APPLY TO PURCHASER.
7. This Limited Warranty gives you specific legal rights. You may also have other rights, which vary from one jurisdiction to another.

RETURN INFORMATION

- a) A Return Authorization number must be obtained from Numark through the address or phone numbers below.
- b) A copy of the original sales receipt must also be included for the equipment to be repaired under warranty.
- c) The faulty equipment must be packed in its original packaging.
- d) One additional outer layer of packaging must be included to ensure product safety. Failure to do so may inadequately protect the equipment in transit and, therefore, jeopardize the customer's warranty.
- e) Numark will not accept COD shipments and no call tags will be issued for merchandise return.
- f) Numark will not return repaired merchandise to customers by priority service, unless by written request at the customer's cost. Requests must be submitted in writing with merchandise returned.
- g) The defective Numark equipment should be sent, FREIGHT PREPAID with Return Authorization number clearly printed on the outer packaging and original sales receipt enclosed to:

Numark INDUSTRIES
Attention: Service Department
11 Helmsman Avenue
North Kingstown, RI 02852 USA

Phone: +1 (401) 295-9000
Fax: +1 (401) 295-5200
Web: www.numark.com