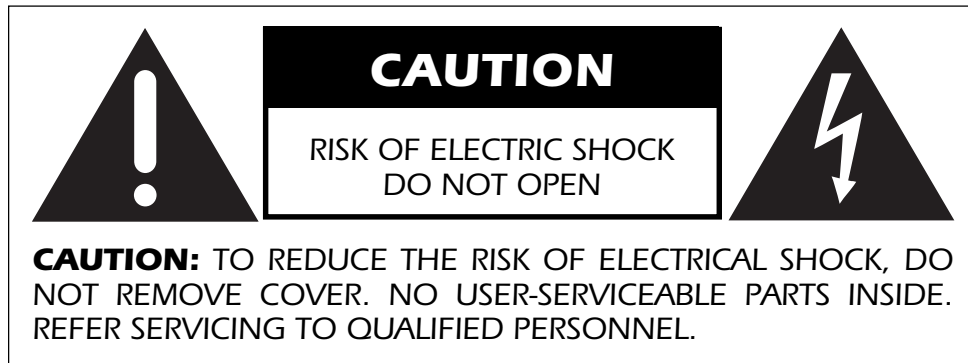


Owner's Manual

N°383
Integrated
Amplifier

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.



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



Marking by the “CE” symbol (shown left) indicates compliance of this device with the EMC (Electromagnetic Compatibility) and LVD (Low Voltage Directive) standards of the European Community.

NOTICE

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio or television reception, which can be determined by turning the equipment on and off, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna;
- Increase the separation between the equipment and the receiver;
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected;
- Consult the dealer or an experienced radio/TV technician for help.

CAUTION: Changes or modifications to this equipment not expressly approved by the manufacturer could void the user’s authority to operate the equipment.

The information contained in the manual is subject to change without notice. The most current version of this manual will be posted on our web site at <http://www.madrigal.com/MLOM.htm>

Important Safety Instructions

Please read all instructions and precautions carefully and completely before operating your Mark Levinson® integrated amplifier.

1. **ALWAYS** disconnect your entire system from the AC mains before connecting or disconnecting any cables, or when cleaning any component.
2. This product must be terminated with a three-conductor AC mains power cord which includes an earth ground connection. To prevent shock hazard, all three connections must **ALWAYS** be used.
3. AC extension cords are *not* recommended for use with this product.
4. **NEVER** use flammable or combustible chemicals for cleaning audio components.
5. **NEVER** operate this product with any covers removed.
6. **NEVER** wet the inside of this product with any liquid.
7. **NEVER** pour or spill liquids directly onto this unit.
8. **NEVER** block air flow through ventilation slots or heatsinks.
9. **NEVER** bypass any fuse.
10. **NEVER** replace any fuse with a value or type other than those specified.
11. **NEVER** attempt to repair this product. If a problem occurs, contact your Mark Levinson® retailer.
12. **NEVER** expose this product to extremely high or low temperatures.
13. **NEVER** operate this product in an explosive atmosphere.
14. **ALWAYS** keep electrical equipment out of the reach of children.
15. **ALWAYS** unplug sensitive electronic equipment during lightning storms.

From all of us at Madrigal Audio Laboratories, thank you for choosing the Mark Levinson N°383 Integrated Amplifier.

A great deal of effort went into the design and construction of this precision device. Used properly, it will give you many years of enjoyment.

Table of Contents

Special Design Features of the N°383 Integrated Amplifier	7
why an integrated?	7
the power supplies	7
the preamplifier	8
the volume control	8
the power amplifier	8
protection	8
the remote control & user experience	9
communication	9
construction	10
Unpacking and Placement	11
unpacking	11
installing the batteries in the remote control	11
placement	11
continuous operation	11
ventilation	12
Operating Voltage	13
Warm up & break-in period	13
A Quick Start.....	14
Front Panel	15
sleep timer	18
Rear Panel	19
a note about the inputs and outputs	19
tip polarity for external IR input	21
building a link cable	22
Remote Control	25
Customizing Your N°383	28
setup overview	28
the menu system	28
configuring line level inputs	29
available input names	29
changing input names	30
input programming tip	30
factory default input names	30
using custom input names	31
naming an input "SSP"	31
setting input gain	31
setting input offsets	32
setting record out	33
teach ir	33
setting a mute level	33
setting a maximum level	34
configuring the DC trigger	34
checking the software version	34

Using the N°383 with Learning Remote Controls	35
using the teach ir menu	35
available ir commands	36
Modes of Operation	37
normal operation	37
the balance mode	37
balance control tip	38
polarity	38
reset defaults	38
Using Surround Sound Processors	40
the SSP must not come after the preamp	40
the SSP must not come before the preamp	40
the SSP must not be in a tape loop	41
the SSP & the N°383	41
noise in a/v systems	41
Linked Functions	43
display intensity	43
standby link	43
volume link	43
select link	43
play link	44
record link	44
HDCD™ link	44
Care and Maintenance	45
U.S. and Canadian Warranty	46
90-day limited warranty	46
five year extended warranty	46
Obtaining Service	47
Specifications	48
Dimensions, N°383 Integrated Amplifier	49

Special Design Features of the N°383 Integrated Amplifier

why an integrated?

For over 25 years, the Mark Levinson brand has been associated with the world finest separate components. So why, after all this time, do we introduce an integrated amplifier?

Actually, we have been thinking of creating an integrated amplifier that we would want to put the Mark Levinson name on for years. But creating such a product, one that does not compromise or tarnish the reputation of the Mark Levinson brand, required a great deal of thought and work. Sonic performance, construction details and sophisticated operation all help define what is a Mark Levinson – and what is not. We had no desire to simply put our name on a product that many would not consider a “real” Levinson.

Thus the challenge was clear: we needed to create an integrated amplifier that would do justice to Mark Levinson’s reputation. Some of the strategies necessary to achieve this goal include:

the power supplies

Three power supplies divide the task of providing clean and stable DC power to the various circuit elements. Common mode and differential filtering capacitors are used on the AC mains input to pre-filter high frequency noise. Both AC mains fuses and an AC mains relay are used in the overall protection scheme.

All communications and control circuitry are powered from a separate, low-voltage DC supply. This approach also prevents noise generated by control and communications circuitry from finding its way into the audio circuits.

As one would expect in a Mark Levinson amplifier, left and right channel audio circuits are powered by two independent power supplies. Large custom-designed toroidal transformers are used to reduce the AC mains voltage to the $\pm 60V_{rms}$ required for the audio supplies. Independent rectification and filtering is followed by active regulation for voltage gain and volume control circuits.

Separate power supplies for left and right channels ensure that demand from one channel cannot modulate the power supply of the adjacent channel. This dual-mono approach results in the most effortless reproduction of dynamic contrast as well as stable and detailed stereo imaging.

the preamplifier

Five analog input pairs are provided for use with balanced (2 pr. XLR) and single-ended (3 pr. RCA) sources. The inputs are independently buffered. As with other Mark Levinson preamplifiers, un-selected inputs have both their signal *and* ground connections lifted, eliminating a possible path where noise may enter the chassis.

The overall gain for the preamplifier section may be adjusted to optimize performance with each input, easily accommodating unusually high- and low- line level source components within the same system. This degree of optimization was first offered in the N°32 Reference Preamplifier.

All single-ended source signals are converted to balanced at the input and remain balanced up to the final current gain stage of the amplifier. In this respect as in so many others, the N°383 emulates the topology of Mark Levinson separate components. The result is low noise, highly dynamic and detailed resolution of the music signal.

the volume control

Precision electronic control of analog volume has been a standard feature of Mark Levinson preamplifiers for nearly a decade. Dual solid-state stepped attenuators offer precision attenuation of balanced analog signals. Local supply regulation and passive bypass components are used to assure optimum results. As with so many of the individual component parts used in Mark Levinson products, selections were based on extensive listening tests. As it has always been, carefully controlled listening tests are crucial to the design process at Madrigal.

the power amplifier

The N°383 output stage uses the same devices (12 per channel) as the Mark Levinson 300-series and N°33H amplifiers. All output devices are sorted by Madrigal technicians, allowing us to construct each channel using transistors of closely matched gain. In this way, we ensure that no one device works harder or runs hotter than any of its neighbors. The result is a better sounding, longer lasting amplifier.

The large output capability of this amplifier required that proper cooling be a consideration in the design. Output transistors are widely spaced along the current gain circuit board in order to facilitate heat dissipation. Ventilation is provided by custom heatsink extrusions mounted on the sides of the chassis.

protection

Protection from internal or external component failure is an integral feature of the Mark Levinson design philosophy. The N°383 employs several forms of protection, both for its own self-preservation as well as the protection of loudspeakers and other components to which it is

connected. Pre-filtering the AC line using capacitors and thermistors helps prevent damage from an occasional or prolonged influx of surges and spikes. An AC mains relay can be switched off when called upon by one of the N°383's other protection systems.

Thermal protection is controlled by four sensors mounted on each rail of the left and right channel output stages. If a sensor detects excessive heat, it instructs the amplifier to switch itself off. Thermal switches located inside each transformer housing will disconnect power if the transformer overheats.

Soft-clip circuits are used to prevent high-energy, high-frequency ringing artifacts from reaching and damaging loudspeakers if the amplifier is over-driven.

When the amplifier is over-driven for prolonged periods, or if a loudspeaker cable or output device has shorted, **over-current protection** switches the amplifier off.

DC servos are used to correct for potentially damaging DC-offset from a source component. As with other Mark Levinson components, the correction range is $\pm 1V$. If the problem exceeds the servo's range, the amplifier will be switched off.

the remote control & user experience

A newly designed remote offers complete control in a small and elegant package. External control by IR is also offered via an eighth-inch mini-jack on the rear panel, should the N°383 be inside a cabinet where the IR commands cannot reach.

The user interface of the N°383 is rooted in the advanced design of the N°32 Reference Preamplifier. Large knobs for volume and input select help the unit retain the tactile benefits and functionality of traditional preamplifier designs. Of particular interest, inputs may be named appropriately, and the selector knob cycles only between those inputs that are actually used. In other words, the N°383 can operate as if it were custom-designed for each source component.

communication

The N°383 features a software-controlled operating system that can be updated via its RS-232 port, located on the rear panel. Full compatibility with older Mark Levinson Linking communications buses makes the N°383 ideal for customers who use Mark Levinson source components.

Two eighth-inch mini-jacks are provided to facilitate DC-trigger control. Triggers are set for level input and output.

construction

Regardless of the technology used, numerous details must be executed to fully realize the potential of a Mark Levinson design. The quality of individual components, the care and craftsmanship with which they are assembled and the exhaustive inspection and testing we employ help raise the value of Mark Levinson products. The N°383 is built to the same high construction standards as all other Mark Levinson products.

In addition to yielding the best performance, careful attention to details is the secret of achieving both reliability and longevity.

Unpacking and Placement

unpacking

Unpack your N°383 Integrated Amplifier and keep all packing materials for future transport. Locate and remove all accessory items from the Accessory Box within the Controller shipping carton. Accessories include:

- 1 detachable AC power cord
- 1 N°383 remote control
- 2 AAA alkaline batteries

Also included with your new Mark Levinson component is a pair of knit, white gloves to assist you in the initial unpacking and placement of your new purchase. Please accept them as a token of our appreciation for having purchased one of our products.

installing the batteries in the remote control

Using a #3 (small) Philips head screwdriver, remove the three screws in the bottom plate of the remote control. Insert the two alkaline batteries found in the Accessories box, being careful to follow the polarity indications given on the inside of the battery compartment. Replace the end cap and the screws.

11

If at some point you notice that your remote control seems not to be performing as well as it once did, its batteries are probably running low. Check the batteries periodically, and replace batteries before they are “dead.” (Fully discharged batteries are prone to leaking corrosive chemicals—the greenish “gunk” you may have seen around battery terminals of other remote controls.)

placement

The N°383 should generally be placed close to your source equipment, thus keeping interconnect cabling short. We strongly recommend mounting the N°383 on its own shelf to allow for proper ventilation.

continuous operation

The N°383 is designed for continuous operation—it is designed to be connected to the AC mains at all times for the best performance. While we also include a front-panel power switch that actually disconnects the N°383 from the AC mains, we recommend you use the **standby** button instead, which leaves the voltage gain stages of the N°383 warmed up and sounding their best at all times.

(The exception to this suggestion is if you are going to be away for a prolonged period of time, perhaps on vacation.)

ventilation

Be sure to allow 3 to 4 inches (8-10 cm) of clearance above the N°383 to allow heat dissipation through air circulation. Drawings are included in this manual to facilitate special installations and custom cabinetry (see “*Dimensions*”).



Caution!

It is extremely important that all components in your system be properly grounded. Do not defeat a three-prong AC cords with “ground-lifter” or “cheater” adaptors, as doing so may allow dangerous voltages to build up between components. The presence of these voltages would pose a threat to both your person and your equipment.

Operating Voltage

The N°383 Integrated Amplifier is set at the factory (internally) for 100V, 120V, 230V, 220V, or 240V AC mains operation @ 50 or 60Hz. (230V/50Hz only in European Union countries, in compliance with CE regulations.) This voltage setting cannot be changed by the user.

Make sure that the label near the AC receptacle of the N°383 indicates the correct AC operating voltage for your location.

If the voltage indicated on your N°383 is incorrect, or if you wish to change the AC operating voltage of your N°383 as the result of moving to a different country than the one in which you purchased your preamplifier, see your Mark Levinson dealer.

The N°383 is powered by a normal 15-ampere AC mains line. If other devices are also powered from the same AC line, their additional power consumption should be taken into account.

Warm up & break-in period

Although your Mark Levinson N°383 Integrated Amplifier delivers outstanding performance straight out of the box, you should expect to hear it continue to improve as it reaches its normal operating temperatures and its various components “break-in.” It has been our experience that the greatest changes occur within the first 25-50 hours, but that the N°383 will continue to improve in sound quality for about 300 hours, after which time it remains quite constant.

The only exception to this rule is if power is removed from the unit, allowing it to cool down. In this case you should expect a brief warm-up period before its sound quality is at its best. (Fortunately, you do not have to repeat the full 300-hour break-in period.)

A Quick Start...

We recognize that many people are understandably eager to begin listening to their new components, and that reading the manual is often done (if at all) at a later time—perhaps while listening to music through the new product itself. We strongly recommend that you read this manual thoroughly, as the N°383 Integrated Amplifier incorporates many unusual features which enhance its operation.

Fortunately, we can help you get some music up and running on your system quickly, so that you may begin enjoying your new system while reading more about it. The goal here is simply to make some music quickly.

1 Turn off your associated components.

This minimizes the opportunity for a momentary electrical surge to disturb your system while making connections.

2 Connect a source to any input, noting which you use.

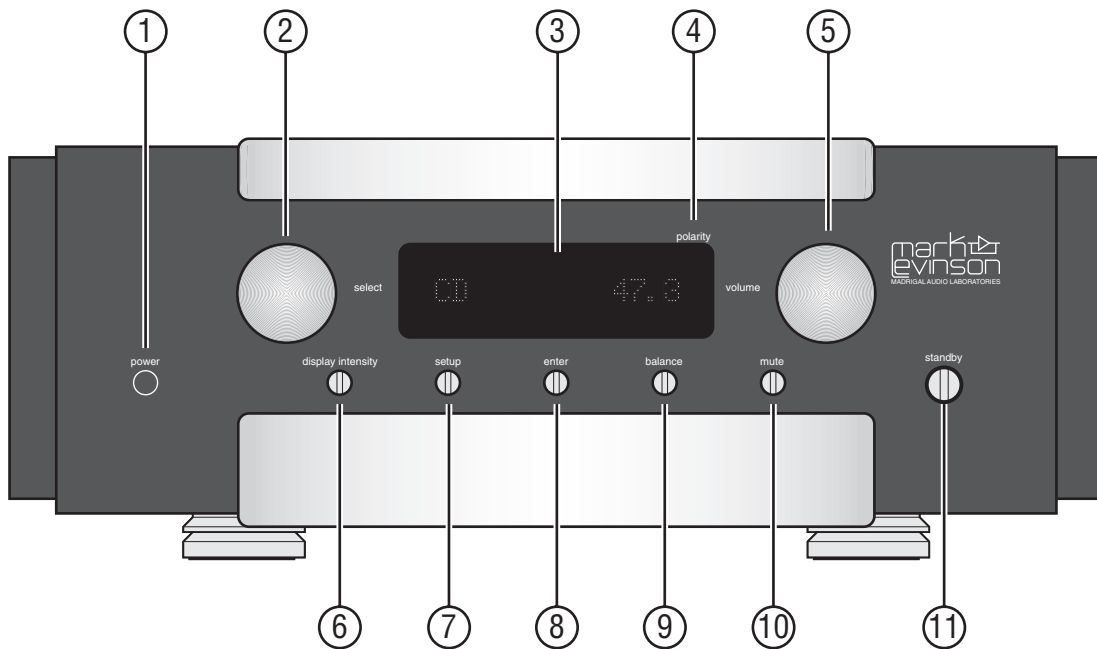
For example, connect the balanced outputs of your CD player to the Left and Right **Input 1** XLR jacks on the rear panel of your N°383. High quality interconnecting cables such as Madrigal CZ Gel will yield superior results, and are strongly recommended.

3 Connect your speaker cables to the appropriate speaker terminals on the rear of the N°383.

We recommend high quality spade lugs for your speaker cables, as they combine the largest surface area with the possibility of a good, tight mechanical connection. In fact, the Madrigal-designed speaker terminals were specifically designed to allow tight connections without having to resort to finger-busting effort, or special tools (that are never around when you need them).

4 Turn on your source component; turn on your N°383; select the appropriate input using the Select knob; slowly raise the volume on the N°383 to a comfortable level

Congratulations! You should now be able to enjoy your favorite music while reading the rest of this manual. (*You are going to read the rest of this manual, aren't you?*)



Front Panel

1 Power Button

This button connects and disconnects the N°383 from the AC mains power. It is normally intended to be left engaged at all times, unless you plan to be away from your home for an extended period. By using the **standby** button rather than **power** to turn the system on and off, the N°383 can remain warmed up and sounding its best at all times. It can also respond to commands from its remote control when in standby, something it obviously cannot do when disconnected from AC mains power.

Should you disconnect the N°383 from power for an extended period, either via this **power** button or by pulling its plug, it may require a few hours to return to thermal equilibrium and optimal sonic performance.

2 Select Knob

This knob is normally used to select among the various inputs of the N°383, with the resulting selections being shown in the display window, immediately to the right of the **select knob**.

The **select knob** is also used during setup to select among various menu items available (the **volume knob** is used to actually adjust those items).

For example, if you are using only two or three inputs on your N°383, you may disable the unused ones so that the **select knob** selects only among connectors you are actually using. For more information on customizing your integrated amplifier in this and other ways, please see “*Customizing Your N°383.*”

3 **Alphanumeric Display**

This twelve-character display provides a wide range of information concerning the operation of the N°383. The information displayed depends on what the N°383 is doing. The information displayed is summarized below:

normal operation	the selected input name and volume setting
balance	direction and magnitude of balance offset
setup	setup menus and settings

In addition, this display will indicate any known fault conditions. For example, it will also inform you if the amplifier section has shut down due to the presence of DC offset at the input or the output. For more detailed information on the preamplifier’s use of this display, please refer to the following section on the use of the **balance** button, as well as the section on “*Customizing Your N°383.*”

4 **Polarity Indicator**

The **polarity** (sometimes inaccurately called “absolute phase”) of the output of the N°383 may be inverted via the N°383 remote control, in which case the red LED under the word **polarity** (within the display window) will light as confirmation. A second press of the **polarity** button on the remote control will restore the polarity of the output to its original, non-inverted state.

5 **Volume Knob**

This control is normally used to adjust the listening volume, and does not effect the level of the signal being sent to the **record output**. When in **balance** mode, this knob is used to vary the relative output of the Left and Right channels. It is also used during setup for various adjustments; see “*Customization of your N°383.*”

6 **Display Intensity Button**

Cycles among four levels of brightness (including “off”) for the display, allowing adjustment for various ambient lighting conditions. When “off,” the display will turn on for a few seconds whenever a setting is changed. When used in conjunction with certain compatible Mark Levinson components, this button will control the display intensity of all linked components. (For more information, see “*Linked Functions.*”)

7 **Setup Button**

Pressing the **setup button** places the N°383 into setup mode, and lights the LED indicator immediately above the **setup button**. While in setup mode, the display is used to show a series of menu choices that allow you to customize the N°383 rather extensively, to better suit your system’s needs and personal preferences. The **selector knob** and the **volume knob** are used to select menu items and make adjustments, respectively. For more information on this customization, please see “*Customizing Your N°383.*”

8 **Enter Button**

Used in conjunction with the **setup button**, the **enter button** allows you to save changes made to the N°383 while in setup mode. For more information on this customization, please see “*Customizing Your N°383.*”

17

9 **Balance Button**

Pressing the **balance button** allows you to adjust the relative volumes of the left and right channels using the **volume knob**. While in balance mode, the display changes to show you the current relative balance of the left and right channels, displaying the magnitude of the offset in decibels. If you leave the balance mode with the balance “off-center,” the LED remains lit to remind you that the balance is not “even.”

10 **Mute Button**

Pressing the **mute button** will reduce the main output level of the preamplifier by a user-modifiable amount, ranging from -10 to -73.2 decibels. Pressing the **mute button** a second time without adjusting the volume will return it to its previous setting.

If you adjust the volume while **mute** is engaged, the preamplifier will adjust its volume *from the muted level*, and disengage the mute function. This approach prevents an unpleasant surprise when, having increased the volume while muted, someone un-mutes the system.

The factory default setting of the mute circuit is -20 dB. (See “*Customizing Your N°383*” for information on changing the factory default setting.)

11 Standby Button

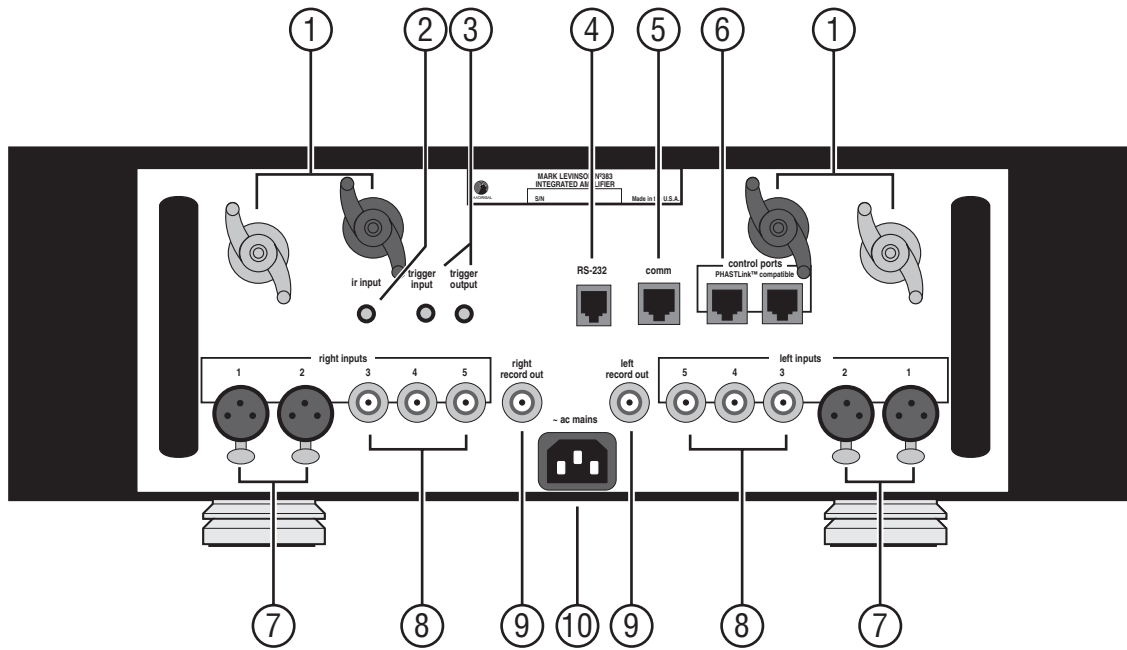
The **standby button** toggles the N°383 between normal operation and standby, wherein the display is turned off, the outputs are disconnected, and all controls are inoperable. All critical circuitry remains powered-up during standby to ensure immediate, optimal performance when you are ready to listen to music.

The LED above the **standby button** will blink slowly when the N°383 is in standby, indicating that power is still being provided to the unit.

sleep timer

The **standby button** includes a special function that allows you to use the N°383 as the heart of one of the world’s most exotic sleep timers. By pressing and holding the **standby button** for several seconds, you will see the display change to **SLEEP -OFF-**; subsequent clicks of **standby** will cycle through a list of sleep timer settings ranging from **OFF** through four hours, in 30 minute increments. Having selected the setting you want to use, simply allow the N°383 to “time out” for the display to return to normal.

Setting the sleep timer to **1hr 0min** for example, will cause the N°383 to enter standby after an hour, at which point it will also return the sleep timer’s status to **OFF** (so as to avoid unintentional interruptions of your music at a later time). You may use the sleep timer function as often as you like, but you will have to set it as you want it to behave each time. The default setting is **OFF**.



Rear Panel

a note about the inputs and outputs

All left-channel inputs and outputs are on the left of the rear panel as seen from the front, and all right-channel inputs and outputs are on the right of the rear panel as seen from the front. This design minimizes any possible confusion when changing connections once the unit is installed, while also maximizing channel separation in this dual monaural design.

19

1 Speaker Binding Posts

The Mark Levinson N°383 is equipped with custom made, gold-plated, high-current binding posts for output termination to a loudspeaker system. To take full advantage of the amplifier's sonic quality, we recommend using high-quality speaker cable; please see your Mark Levinson dealer.



Caution!

NEVER connect a power amplifier's output terminals to any device other than a loudspeaker.

NEVER short-circuit the amplifier's output terminals.

NEVER connect the output terminals of one amplifier to the output terminals of another amplifier.

There are two recommended methods for connecting speaker cables to your amplifier. A high-quality spade lug or hook lug, soldered to the cable (or crimped with extremely high pressure), is best.



Connect a + (positive or red) output post of the amplifier to the + (positive or red) input terminal of the appropriate loudspeaker. [If biwiring, repeat using the other + (positive or red) output post of the amplifier and the + (positive or red) input terminal of the loudspeaker.]

Connect a – (negative or black) output post of the amplifier to the – (negative or black) input terminal of the appropriate loudspeaker.

DO NOT OVERTIGHTEN the binding posts on your amplifier! The unique design of these posts gives far more leverage than traditional posts. You will achieve tight, high contact pressure connections with only modest finger-tightening, and without having to resort to special tools.

DO NOT FORCE the “wings” up and over a bent or oversized connector, as this may damage the binding post. If your connectors obstruct the turning of the “wings,” slide them into place when the binding post opening is a snug fit; then apply a final quarter-turn as needed to tighten the connection.

2 External IR Input

The N°383 incorporates an infrared repeater input to facilitate a wide range of installation options. If desired, the N°383 may be placed inside a cabinet or outside the normal line-of-sight in the listening area, with the controlling IR signal being relayed to the N°383 by any of a number of commercially-available IR repeaters.

The specifications for this **ir input** call for a triggering voltage of 5 volts at no more than 100 milliamps of current, with the tip of the 1/8" mini-plug having positive polarity, as below:



Caution!

tip polarity for
external IR input



If you would like more information on the possibility of using an infrared repeater with your N°383, please contact your Mark Levinson dealer.

3 DC trigger in and out

On a simpler level than PHAST, AMX, or Crestron, some systems control whether a given component is on or off (or more accurately, “operating” or “in standby”) by means of a simple control voltage.

If the appropriate 3-12V level “trigger” signal arrives at the **trigger input** of the N°383, it turns on. When the N°383 turns on, it passes along a trigger signal to another component. In this way, it is possible (if you like) to set up a “daisy chain” of components that can be controlled by one another (at least to some degree.)

The N°383 can produce and send from its **trigger output** either a **5V pulse** (such as a momentary contact switch might make) or a **12V level** signal (where the presence of 12V forces the unit out of standby, and its absence forces it into standby). This choice is made in the N°383’s menu system. (See *Customizing Your N°383* for more details.)

21

4 RS-232 port

This port is used both for downloading new operating software into your N°383 Reference Preamplifier (should new features ever be added, for example), and also for external control of the N°383 by systems such as AMX™ and Crestron™. For more information, please contact your dealer and ask about either AMX or Crestron home automation systems.

5 Comm Port

This communications port allows the N°383 to “link” to certain compatible Mark Levinson components. (See “*Linked Functions.*”) After making or changing Link connections, cycle power on all your Linked components to ensure that they “see” the change.

The Mark Levinson Linking system uses a Digital Audio Processor as the Master of (and central clearinghouse for) inter-component communications. Other components such as digital transports are connected to the Master as “Slaves,” and can be “daisy-chained” using their **slave in** and **slave out** jacks. As the ultimate destination of all source signals, the N°383 must be the final comm port in the chain. (In technical terms, it terminates the communications bus.)

Thus, if the only other Mark Levinson Link-compatible component you have is a digital audio processor, connect its **master** port to the N°383’s **comm** port using a “straight-through” RJ-45 cable. If there are additional Mark Levinson Link-compatible components in the system, place the N°383 at the end of the chain by connecting the last **slave out** port to the N°383’s **comm** port.

In short:

master (*processor*) → **slave in** (*transport*)
slave out (*transport*) → **slave in** (*next transport, as needed*)
slave out (*last transport*) → **comm** (N°383)

The RJ-45 cable needed for the Link connection between source components and the preamplifier may be purchased from your Mark Levinson dealer. It may also be made to length using two RJ-45 connectors and the appropriate length (up to 100 feet/30 meters) of RJ-45 (flat, eight conductor) cable.

RJ-45 cables and connectors are used throughout the world for both telecommunications and computers, and are widely available at low cost. The connectors are crimped on to the ends of the cable such that pin 1 at one end is connected to pin 1 at the other end. Such a “straight-through” connection requires that one connector be “tab side up” and the other “tab side down” when the cable itself is lying flat. (Flipping the connector over compensates for the fact that it is pointed in the other direction.)

building a link cable



Warning!

Connecting the communication ports other than as described in this manual can damage the N°383 and the associated Mark Levinson components, and will void those products’ warranties.

6 Control Ports (PHAST™ compatible)

These ports are reserved for future use as PHASTLink™ communications ports. This future functionality is not available at this time. For more information, please contact your dealer and ask about PHAST™ home automation systems.

7 Balanced Inputs 1 & 2

Accepts right-channel and left-channel balanced signals from source equipment with balanced outputs.

The pin assignments of these XLR-type female input connectors are in conformance with AES standards, specifically:



Pin 1: Signal ground

Pin 2: Signal + (non-inverting)

Pin 3: Signal – (inverting)

Connector ground lug: chassis ground

Refer to the operating manuals of your balanced-output line-level sources to verify that the pin assignments of their output connectors correspond to the N°383. If not, wire the cables so that the appropriate output pin connects to the equivalent input pin.

To achieve the best possible results, we suggest using high quality interconnecting cables such as Madrigal's own CZ Gel-1 balanced cables.

23

8 Single-ended Inputs 3–5

Accepts right-channel and left-channel (single-ended) inputs from line-level source equipment such as tuners, CD players, and tape decks.

To achieve the best possible results, we suggest using high quality interconnecting cables such as Madrigal's own CZ Gel-2 single-ended cables.

9 Single-ended (RCA) Record Output

Connect these outputs to the right-channel and left-channel tape inputs of your recorder. These outputs are unaffected by the **volume control** on the front panel of the N°383. They track the selected input, reflecting to the recorder the same signal to which you are listening.

The record output may be turned off (see *Customizing Your N°383* for more information.) The record outputs will also be shut off when the preamplifier is placed into standby.

10 AC mains receptacle

This IEC-standard AC mains receptacle is used with the removable AC power cord to supply the N°383 with power.



Warning!

Prior to connection to the AC mains, please check the voltage label on the rear panel of the N°383 to ensure that your unit conforms to the power supply in your area.

Following the guidelines in the Quick Start section of this manual, connect the power cord to this receptacle and the AC mains outlet in the wall.

When power is first applied to the N°383, it will run through an automatic initialization sequence which displays a software identification code, and then enter standby.

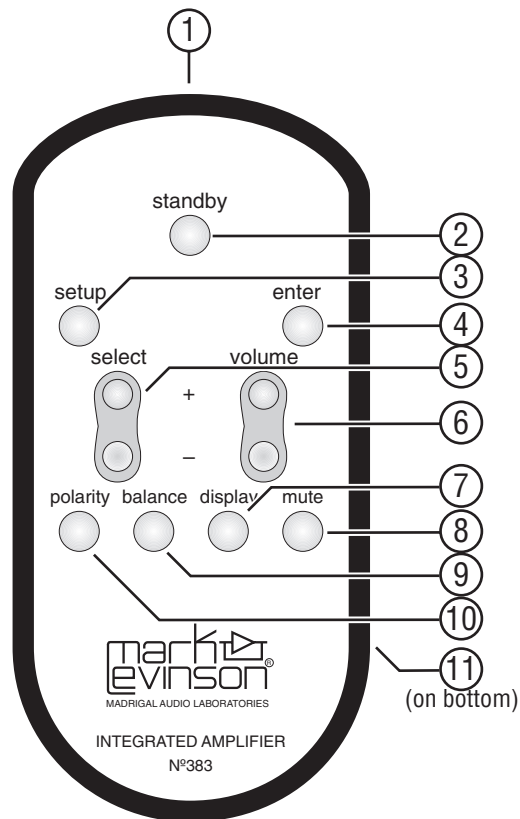
For optimal sonic performance and longevity, the N°383 is designed to remain powered at all times (the **standby** button merely mutes the preamplifier's outputs and turns off the display). There is an initial break-in period of at least 25-50 hours before the N°383 achieves optimum performance.

Note:

If AC mains power to the N°383 is interrupted, the main output will be muted. When power is restored, the initialization sequence described above will restore the preamplifier to standby.

We recommend you allow the circuitry within your various system components to stabilize by leaving it in **standby** for 1 to 2 minutes before use after a power outage.

Remote Control



25

1 IR transmission window

Infrared (IR) control signals are sent through this window. Aim the **remote control** toward the N°383 when using the remote. For the best results, the remote should be within $\pm 45^\circ$ of a line that is perpendicular to the faceplate of the N°383.

At more severe angles (nearly parallel with the faceplate), try bouncing the remote's signal off a wall or other surface instead so as to have it enter the display window of the N°383 at a reasonable angle.

Alternatively, use an external infrared receiver, placed in a more convenient location, to route the signal to the rear panel **ir input** jack.

2 **Standby Button**

As you might expect, pressing this button toggles the N°383 between standby mode and normal operation. The N°383 disables its outputs and controls when in standby, but its circuitry remains active so as to be warmed up and sounding its best at a moment's notice.

3 **Setup Button**

Duplicates the function of the **setup** button on the front panel, allowing you to access menu functions of the N°383 from your listening position.

4 **Enter Button**

Duplicates the function of the **enter** button on the front panel, allowing you to save changes to menu items in the N°383 from your listening position.

5 **Select Up and Down Buttons**

These buttons provide remote selection of the various inputs of the N°383.

The **select buttons** are also used when accessing the setup menu system in the N°383. For more information on what you can do with these menus, please see “*Customizing Your N°383*” later in the manual.

6 **Volume Up and Down Buttons**

Raises the volume at either low speed for fine adjustments or higher speeds for larger changes. The N°383 will slowly raise its output for the first 1.5 seconds this button is depressed, then move to higher rates of change.

Note that all volume and balance functions are disabled if a surround sound processor “**SSP**” input is selected. For more information on this special feature of the N°383's design, see “*Using Surround Sound Processors*.”

7 **Display Button**

Duplicates the function of the **display intensity** button on the front panel, cycling among four levels of brightness (including “off”) for the display, allowing adjustment for various ambient lighting conditions.

8 Mute Button

Toggles between normal output level and the user-programmable **mute** function, reducing the level by -10 to -73.2 decibels (depending on the user's programming). The factory default setting gives a 20 decibel reduction in output.

If the volume is adjusted while mute is engaged, the volume will begin changing from the muted level, and mute will be automatically disengaged. This approach avoids the problem of turning the volume up, only to then "unmute" the system without thinking and suddenly find it dangerously loud.

9 Balance Button

Duplicates the function of the **balance** button on the front panel of the N°383 Controller, allowing you to then fine-tune the relative balance of the Left and Right channels from your listening position using the **volume buttons**, in 0.1 dB increments.

10 Polarity Button

Inverts the **polarity** (sometimes inaccurately called "absolute phase") of the outputs of the N°383, indicated by the LED on the front panel. A second press of this button will restore the outputs to their original, non-inverting polarity.

27

11 Battery Compartment (on bottom of remote control)

Using a #3 (small) Philips screwdriver, remove the bottom plate to access the battery compartment when it becomes necessary to replace batteries. The N°383 remote control uses two alkaline AAA batteries.

Customizing Your N°383

setup overview

The N°383 Integrated Amplifier has many provisions for custom-tailoring the system's operation to match your preferences. The method for modifying any of these settings is to:

- press the **setup** button on either the front panel or the remote control to enter the setup mode, accessing the N°383's menu system;
- navigate among different *menu items* using the **select knob** or the remote control's **select buttons**;
- change the *value* of the selected menu item using either the **volume knob** or **volume +/-** buttons on the remote.
- move down a level within a menu, or save the change by pressing **enter** on either the front panel or the remote control. (*You can avoid saving an unwanted change by leaving the menu without pressing **enter**, by pressing **setup** instead. Within the menu system, **setup** acts like a "cancel" button.*)

This four-step process gives you extensive control over a wide variety of setup options, and provides positive feedback that your changes have been accepted and saved for future use.

the menu system

The complete N°383 Setup menu is shown below for your reference:

```
No383 Setup
  Set Inputs
    Set Input 1
      Name=INPUT 1
      Gain= +6 dB
      Offset= 0.0
      Rec.Out=NONE
    Set Input 2      (repeats previous menu)
    Set Input 3      (repeats previous menu, with +12 dB gain)
    Set Input 4      (repeats previous menu)
    Set Input 5      (repeats previous menu)
  Teach IR
  Mute = -20.0
  MaxVol= 80.0
  Trig.= 12v,L
  Sw 1.05 1.02 (the software version numbers)
```

The N°383's menu system allows you to customize the way the integrated amplifier operates, to better suit the needs of your system and your personal preferences. We will review the following information in more detail in the coming pages, on an item-by-item basis. (*Don't worry, it isn't really as complicated as it seems when you take it one step at a time.*)

configuring line level inputs

Each line-level input may be customized in four ways:

- **Name**— the name of the input shown in the front panel's display when the input is selected; this may be one of a list of predetermined names, or a custom name created by you.
- **Gain**— the amount of gain available for that particular input, 0 dB (attenuation only), +6 dB, +12 dB, or +18 dB; used to optimize the match between the output level of any given source and the preamplifier's gain structure.
- **Offset**— automatic volume adjustments implemented whenever switching to this particular input, used to ensure that all sources play back at the same volume, even when their outputs may be quite different; the range is ± 20.0 dB in 0.1 dB increments.
- **Record Output**— used to assign a record output to this particular input; options are **On** and **Off**.

29

To facilitate operation in complex multisource systems, the N°383 is capable of displaying a wide variety of names for each of its five inputs. The available names are listed below.

available input names

INPUT	(custom name, may be edited letter by letter)
UNUSED	(any unused input, removes from the rotation)
SSP	Surround Sound Processor mode of operation
DAT	Digital Audio Tape
VCR	Video Cassette Recorder
CASS	Cassette
RtoR	Reel-To-Reel
MD	Mini-Disc
CD-R	Compact Disc-Recordable
SAT	Satellite
LD	LaserDisc
CD	Compact Disc
TUNER	Tuner
AUX	Auxiliary
DAC	Digital to Analog Converter
TAPE	Tape Player/Recorder
DVD	DVD player

No30	Mark Levinson Reference Digital Audio Processor
No30.5	Mark Levinson Reference Digital Audio Processor
No30.6	Mark Levinson Reference Digital Audio Processor
No35	Mark Levinson N°35 Digital Audio Processor
No36	Mark Levinson N°36 Digital Audio Processor
No36S	Mark Levinson N°36S Digital Audio Processor
No360	Mark Levinson N°360 Digital Audio Processor
No360S	Mark Levinson N°360S Digital Audio Processor
No39	Mark Levinson N°39 CD Processor

changing input names

To change an input name, use the **setup** menu:

- press **setup** to enter the setup menu
- press **enter** or turn the **select knob** to move to **Inputs**
- press **enter** to move to **Input 1**
- turn the **select knob** (or use the **select buttons** on the remote) to move to whatever input you want to edit
- press **enter** (Note that **enter** will either take you down to the next “lower” level in the menu, or if you are at the bottom level of the “branch” of the menu you are on, it will allow you to edit that item. Having changed the item, you can then save the change by pressing enter again.)
- choose the name you want from the list, using the **volume knob** (or use the **volume buttons** on the remote)

If this seems a little complicated when you read about it, just try it on the N°383 itself, referring to the menu system on page 29. It really becomes intuitive quite quickly.

input programming tip

You can take advantage of a shortcut to the settings of the specific input to which you are currently listening. By *pressing and holding* the **setup** button on either the remote control or the front panel for a few seconds, you will be taken directly to the first menu item for that particular input (its name). You may change anything pertaining to that input, and when you leave that level of the menu (by pressing **setup** again), you will leave the menu system entirely.

factory default input names

The factory default names for the inputs are the somewhat generic **INPUT 1** through **INPUT 5**. This makes it easy to tell what connectors correspond to what input, but you may find the system easier to use once you have customized the names to reflect the actual components you have connected.

using custom input names

If none of the default names seems quite right for a given source, you may create a name of your own choosing, up to seven characters long. To do so,

- navigate to the **NAME=** level of the menu system, and
- if necessary, use the **volume knob** (or use the **volume buttons** on the remote) to choose the name **INPUT** (or whatever other custom name might have been entered);
- press **enter** to enter the single-character editing mode;
- use the **volume knob** to select each character in turn, pressing **enter** each time to move to the next character;
- when you **enter** the seventh character, you are done. (Blank spaces count as characters.)

naming an input "SSP"

Introduced in 1993, the Mark Levinson **SSP** mode provides a clean solution to the problem of integrating a state of the art two-channel system with a multichannel system. By routing the front Left and Right outputs of the surround sound processor through the N°383, and naming that input "**SSP**," you can enjoy both systems without compromise.

If this scenario is important to you, please see the section entitled "*Using Surround Sound Processors*" later in this manual for more detail. In brief, when the N°383 accesses an input named **SSP**, it defeats the normal function of the volume control, going to a fixed gain for that input. In so doing, it allows the multichannel volume control to control the relative volumes of all the speakers in the system, without having to be concerned about a now-redundant volume control in the N°383. When you wish to listen to your two-channel system, simply choose any other input on the N°383 and place your surround sound processor in standby.

31

Important note:

Make sure that the volume on your surround processor is turned down before changing the input name on your N°383 to SSP. When the preamp effects this change, it abdicates its control over the volume of your front left and right speakers, allowing the surround processor to handle it instead.

setting input gain

Each input in the N°383 can be set for one of four preamplifier gain settings: 0 dB, 6 dB, 12 dB, or 18 dB. The concept is to use as much gain as an individual source may require in order to drive the power amplifier section to adequate levels, without introducing unnecessary gain that might result in a distorted signal.

In the past, the Mark Levinson N°26 and N°26S preamplifiers offered a single gain adjustment to effect this change globally; now this setting can be optimized for each individual input. This helps to make the N°383 behave as though each input had the preamplifier section of the integrated amplifier “all to itself.”

With some non-standard sources having outputs as high as 9 volts, the last thing you need is gain in the line stages of the preamplifier. On the other hand, an unusually low output source might need as much as eighteen decibels of gain in order to drive the power amplifier section to full power. Being able to customize this setting by input gives you the flexibility you need to fully optimize your system.

The factory settings for gain are usually fine, at +6 dB for balanced and +12 dB for single-ended inputs. However, should you hear distortion (indicating an overly high input signal), you may want to reduce the gain on that input by 6 dB or more.

To do so, navigate to the **Gain=** item under the input in question. (See the menu system on page 29.) Then press **enter** to edit the item, and adjust it using the **volume knob** (or use the **volume buttons** on the remote). You will hear the changes of 6 decibels per step. Save the change by pressing **enter**. (For more detailed information on how to navigate to this item, see the point-by-point description under **changing input names**.)

Similarly, if you have an unusually quiet source, try adding additional gain before trimming the volume with the **input offset** adjustment. Otherwise, you may find that you cannot turn up the quiet source as far as it needs to go.

setting input offsets

Once you are satisfied that the gain settings are appropriate to your source components (and remember, the factory defaults are usually fine), you may also adjust for any small differences between the volumes of various sources by programming in a volume offset. For example, if you notice that your tuner seems several decibels louder than all your other source components, you can have the N°383 automatically turn the volume down by a certain amount when you switch to the tuner. (It will also turn the volume back up by the same amount when leaving that input.)

To set the input offset, navigate to the **Offset=** item in the menu (see page 29), press **enter** to edit the item, and make the change with the **volume knob** (or use the **volume buttons** on the remote). You can listen to the changes as they are being made, making it easier to get the setting you want. For more detailed information on how to navigate to

this item, see the point-by-point description under **changing input names**.

setting record out

The N°383 gives you the ability to associate any *one* of the five inputs with the **record output**. This allows you to organize your sources in whatever order you deem most convenient, while using the record output with whatever might need them.

Thus, if you want to set up a source component as recording device, navigate to the source in question within the setup menu, press **enter**, and then turn the **select knob** until the display reads **Rec.Out=Off**. Then turn the **volume knob** to change the setting from **Off** to **On**. Press **enter** to save the change. Now the currently-selected source will be fed to your chosen recordable device for possible recording, except of course when you are listening to the recordable device itself. (We do not want to set up feedback loops.)

(For more detailed information on how to navigate to this item, see the point-by-point description under “*changing input names*.”)

Note that the record outputs are muted when the N°383 is in standby.

teach ir

Next in the top level of the menu system is the rather extensive “teach IR” section, which has its own major section in this manual immediately following this one. Please see that section for additional details. For now, it is enough to know that the N°383 can teach any of its infrared commands to a learning remote control by broadcasting the appropriate code from its display window. Even if you were to lose the N°383 remote, you could teach everything you need to another remote control (or order a replacement remote from us, of course).

33

setting a mute level

The N°383 Integrated Amplifier also allows you to customize the magnitude of the change in volume caused by pressing the **mute** button. The factory default setting is -20.0 dB, but you may select a value of anything from -10.0 to -70.0 dB, in 0.1 dB increments. For example, you may prefer to reduce the volume by 35 dB when **mute** is pressed, so as to take a symphony orchestra playing at a realistic level down to a level that allows comfortable conversation when someone enters the room.

To change the mute level, press **setup** to enter the setup menu, turn the **select knob** until **Mute = -20.0** shows in the display, and then use the **volume knob** to alter the mute level setting as you see fit. When finished, press **enter** to save your change. Pressing **setup** one last time will return you to normal operation (leaving the setup menu).

setting a maximum level

You may also set a maximum volume level for the N°383, a particularly useful feature if the system is sometimes used by people who may not be as careful as you yourself would be. (*Teenaged children come to mind.*)

To change the maximum level, press **setup** to enter the setup menu, turn the **select knob** until **MaxVol = 73.2** shows in the display, and then use the **volume knob** to alter the maximum volume setting as you see fit. When finished, press **enter** to save your change. Pressing **setup** one last time will return you to normal operation (leaving the setup menu).

configuring the DC trigger

You may wish to use the DC trigger output on the rear panel of the N°383 to turn on some other component automatically when the N°383 itself is on. If so, you have two trigger options: either a **12V level** (constant) voltage that is present whenever the N°383 is operational, and absent when the N°383 is in standby; or a **5V pulse** whenever the N°383's state is changed from one to the other (similar to the output of a momentary contact switch). This menu item allows you to choose which of these two options you want, given the needs of your particular system.

If you are not sure what the receiving component needs for a trigger signal, please ask your Mark Levinson dealer for assistance.

checking the software version

The last item in the setup menu is a software version number that identifies what version of the N°383 control software is running in the preamplifier. Your dealer can inform you of the most current version of this software, and you can compare that number to the one shown in your display.

Although we do not anticipate frequent software updates for the N°383 (after all, it does not have to contend with the ever-changing standards for digital audio decoding), it has been designed to readily accept new software should it become available. For example, if we were to add some new convenience feature to the N°383 at a future date, your dealer could easily download the new software from our web site to his computer, and from there to your unit, all without having to open the product up. In fact, if the rear panel **RS-232** port is accessible, you do not even have to disconnect the preamplifier from the rest of the system for such an update.

Using the N°383 with Learning Remote Controls

using the teach ir menu

The **teach ir** menu within the **setup** menu lists all of the custom infrared commands available for the various functions of the N°383 Integrated Amplifier.

In every case where a “toggle” command exists, both the normal toggle function and positive control commands for the multiple states are provided. Thus, the **mute** key functions as a toggle between **mute** and **unmute**; but we also provide **go mute** and **go unmute**, since these positive controls increase the reliability of macros in learning remote controls, such as Madrigal’s own IRIQ.

To access these commands,

- 1 **press setup once to enter the setup menu**
- 2 **turn the select knob until “Teach IR” is displayed**
- 3 **press enter once to toggle into the edit mode (where you can choose which “teach ir” command you want**
- 4 **move the volume knob to select the command you want to learn**
- 5 **press enter to transmit that command from the left side of the display window**

The display window will change to <- **-SENDING** to indicate where the infrared codes are being emitted.

35

technical note:

The frequency of the infrared carrier upon which the command are transmitted is 40kHz. This is the most common carrier frequency of any used in remote controls today, and should present no problem for any learning remote control.

If your remote has difficulty learning the command from the front panel of the N°383 Integrated Amplifier, try varying the distance, and shielding the remote control from any fluorescent lights in the area (which can interfere with the learning process).

A complete list of the available IR codes may be found below.

available ir commands

The complete list of available IR commands is:

```
Teach IR
VOLUME UP
VOLUME DOWN
SELECT NEXT
SELECT PREV
INTENSITY
MUTE KEY
POLARITY KEY
STANDBY KEY
ENTER KEY
SETUP KEY
BALANCE KEY
RECORD KEY
EXIT STANDBY
GO STANDBY
GO INPUT 1
GO INPUT 2
GO INPUT 3
GO INPUT 4
GO INPUT 5
GO MUTE
GO UNMUTE
GO BALANCE
EXIT BALANCE
DISPLAY OFF
DISPLAY DIM
DISPLAY HALF
DISPLAY FULL
```

Using these commands in conjunction with a macro-capable learning remote control, you should be able to automate almost anything that the N°383 is capable of doing.

Modes of Operation

normal operation

The majority of time you spend with your N°383 will be spent in normal operation. During normal operation, the display indicates the name of the input you have selected and the listening volume (in decibels). The **volume knob** increases or decreases the volume in 0.1 dB increments above 38.5. The **select knob** selects the source to be listened to at any point in time. In short, in normal operation, the N°383 acts precisely as you would expect an integrated amplifier to act.

There are several refinements which may not be immediately apparent to the casual user, however. When turned quickly by hand, the effect of the **volume knob** will accelerate (i.e., yield a greater change per revolution of the knob) so as to reach your preferred volume more quickly. Conversely, when the knob is turned slowly, the volume changes at maximum resolution to facilitate fine adjustments and precise level control (0.1 dB through most of the range).

However, if the **volume knob** is spun too quickly (as though it were a flywheel), the rate of change will decrease again. This design helps avoid accidental bumps of the preamplifier's **volume knob** sending potentially dangerous signal levels to your loudspeakers.

Lastly, the corresponding buttons on the **remote control** behave in a similar fashion when in normal operation. If the **volume +/-** buttons are held for more than approximately 1.5 seconds, the N°383 infers that you would like to make a larger change in volume, and accelerates the volume change accordingly.

the balance mode

The **balance** mode gives you extremely fine control over the relative volumes of the Left and Right channels, by changing the volume of one relative to the other in increments of 0.1 dB, up to 20.0 dB. (Beyond this point, the **balance** control will mute the output of the reduced channel entirely.) Once set, this inter-channel difference in volume remains the same regardless of output level and selected input, until it is changed again in the **balance** mode.

To enter the **balance** mode from normal operation, press the **balance** button. The balance indicator LED will light and the display will change. When the balance is set to a neutral position, favoring neither channel over the other, the display will show a double-headed arrow and "0.0" decibels—that is, that the channels are balanced with respect to one another.

Turning the **volume knob** (which serves as a balance control in **balance** mode) in either direction will change the balance in that direction. The display will reflect this by changing to the appropriate single-headed arrow to indicate the direction of change and by showing the number of decibels by which that channel has been increased (in tenths of a decibel) relative to the other. (*In point of fact, it is the opposite channel's volume that is reduced, a much safer and more sensible thing to do that increasing the volume of the channel toward which you wish to shift the image.*)

If **balance** is left in a non-centered position, the display will revert to its normal operation after a few seconds, but the **balance indicator LED** will remain lit as a reminder that the balance is not centered. Restoring the balance to its centered, 0.0 setting and leaving the balance mode of operation will extinguish the **balance LED indicator**.

balance control tip

Precise **balance** control is essential for obtaining accurate sound-staging. Output imbalances due to differences in speaker sensitivity and asymmetrical placement of the loudspeakers in the room are common, and degrade imaging accuracy.

To correct this problem, play a mono recording (or use a “Y-adaptor” to send the same signal to both the left and right connectors of the active input). Center the resulting image (which should be quite small) directly between the loudspeakers, using the **balance** control. Differences as small as 0.1 or 0.2 decibels have been found to be significant. Try it.

Note that this “mono trick” can correct only for differences that occur *after* the preamplifier in the signal chain, things like asymmetrical placement of loudspeakers or slight mismatches in sensitivity between speakers. If a particular *recording* is out of balance, you will have to adjust the balance more subjectively, in stereo, as you normally have done.

polarity

The N°383 allows you to invert the polarity of the music to which you are listening with the press of a button. People vary in their sensitivity to this aspect of the sound, and the difference frequently ranges from subtle to inaudible, depending on microphone technique and other factors in the recording itself. However, some recordings simply sound correct in one position, and irretrievably wrong in the other.

We encourage you to experiment with the polarity feature to see what you think works best for any given recording, understanding that the recordings themselves are anything but consistent.

reset defaults

If necessary, it is possible to reset all of the factory default settings for the N°383 Integrated Amplifier so as to start again with a “clean slate.”

Important Note:

Resetting factory default settings causes any customization of the unit to be lost, including custom names, gain settings, offsets, etc.

To reset all settings of the N°383 to the original factory settings,

1. Turn off power

You may either unplug it from the ac mains or use the front panel power button; standby will not do. Wait for a few seconds for the power supply to drain.,

2. Restore power while holding the setup button.

This process takes a few seconds, as a guard against accidental restoration of factory defaults.

3. Continue holding the setup button for about ten seconds after the display reads “CLEAR SETUP?”

If you take your fingers off the buttons within these first ten seconds or so, the operation will be cancelled, leaving your current settings unchanged. If you persist in holding the setup button, the display will show “**FACTORY**” “**SETUP**” “**RESTORED**” in sequence.

Using Surround Sound Processors

The N°383 Reference Preamplifier incorporates a special surround sound processor mode which makes it uniquely capable of integrating the highest performance audio with surround sound—that is, a dual-purpose music and movie system. In order to better understand the value of this design, it is essential to understand a bit about the nature of a surround sound processor.

One obvious and fundamental difference between stereo listening and multichannel listening is the number of channels that must be controlled. When listening to two-channel stereo, one must have a two channel volume control so both speakers increase or decrease in volume in concert with one another. Similarly, when listening to six- or eight-channel surround sound recordings (whether movies or music), one must have a corresponding six- or eight-channel volume control.

Over the years, this simple fact has made combining a high quality two-channel preamp with an outboard surround sound processor extremely difficult. In fact, until the Mark Levinson N°38 was introduced in 1993, it was virtually impossible to combine the two and have the system work reliably well.

Dolby Pro Logic decoders incorporate a form of Dolby noise reduction similar to the Dolby B one finds in cassette decks. This form of noise reduction is level-sensitive. That is, Dolby noise reduction intentionally treats strong signals differently than weak signals. In order to operate correctly, the signal strength of the source must be “calibrated” to the expectations of the Dolby noise reduction circuitry. (It is for this reason that one finds “Record Calibration” features on better-quality cassette decks.) It is therefore inappropriate to feed a surround sound decoder with the variable output of a preamplifier. Were you to do so, every change of the volume control on the preamplifier would cause the Dolby circuitry to mistrack. In extreme cases, severe distortion can result as the Dolby circuitry overloads.

The next logical alternative might be to use the surround sound processor ahead of the preamplifier, sending its Left and Right outputs through the preamplifier as a selectable Source. Sending the Right and Left Outputs from a surround sound decoder to a pair of inputs on a conventional preamplifier is also inappropriate, since any change of the preamp’s volume control would then throw the carefully calibrated output levels of the decoder out of adjustment, changing the volume of

the SSP must not come after the preamp

the SSP must not come before the preamp

the Left and Right speakers while leaving the Center, Subwoofer and Surround speakers unaffected.

One could attempt to restore the proper balance by marking a “calibrated” point on the preamplifier’s volume control and then using only the surround decoder to adjust the volume of the system, but this method is both crude and imprecise, yielding inconsistent performance at best.

the SSP must not be in a tape loop

The last remaining alternative would seem to be to insert the decoder “within” a preamplifier by hooking it up in a tape loop. Unfortunately, this setup returns the Left and Right outputs of the decoder to the preamplifier, where they can be inappropriately changed without changing the Center and Surround outputs. It is therefore inappropriate to place surround sound decoders in a tape loop.

It would seem that there is no way to properly integrate a surround sound processor with a preamplifier for a high quality, dual-purpose system.

the SSP & the N°383

The N°383 solves this dilemma by virtue of a specially-designed surround sound processor interface. When you select the **SSP** name for a particular input on the N°383, the output level and balance controls are defeated and the preamplifier operates in a “unity gain” mode, passing whatever signal enters that input through the preamplifier section of the N°383 without changing its volume in any way. In fact, the display indicates that a line-level signal is being “passed through” unchanged by showing “**LINE**” in the display where the volume would normally be displayed. The power amplifier section then behaves as always, providing the power required to drive the loudspeakers.

41

Thanks to this design innovation, it is possible for the first time to correctly integrate a surround sound processor with an integrated amplifier, sending the processor’s Left and Right outputs through the N°383. Since the output level of these channels cannot be changed by the N°383 while in **SSP** mode, the preamplifier section cannot corrupt the careful calibration of the processor’s output levels. And since multi-channel sources are fed directly to the processor’s audio input(s) at a line level, input calibration cannot be disturbed by the preamplifier.

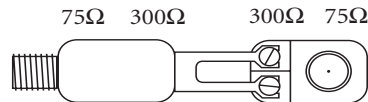
noise in a/v systems

In some cases, connecting your audio and video systems together can result in noise, typically a 50/60 Hz or 100/120 Hz hum. The most common cause for this noise is a “ground loop” caused by the presence of two ground references in the system: one from the power company and another from the cable-television company, or the satellite dish.

The simplest way of solving this problem is to break the video ground by using an isolation transformer on the incoming cable line, before it reaches your television or VCR.

If you cannot find a 75Ω-75Ω baluns (isolation) transformer, you can easily construct one from the adaptors which probably came with your VCR and television, as shown below.

Ground Isolation Adaptor



place in-line with your cable feed, prior to the system connection

The assembly shown above may cause some loss of video signal strength and/or bandwidth, and should be used only as a temporary fix. It is useful in determining the cause of some video-related noise problems, however, and costs only a few dollars. If it seems to correct a problem, consult with your dealer regarding a long-term solution which does not degrade video performance.

Linked Functions

The N°383 has the ability to “link” several of its functions to certain compatible Mark Levinson components (such as the N°39 CD Processor, the N°30.6 or N°360/360S digital processors, and the N°31.5 and N°37 CD transports).

Note:

To take advantage of linked functions, you must connect the N°383 to the other, compatible Mark Levinson components via their communication ports. (See “Rear Panel” and “Setup and Installation.”) You must also cycle power on all Linked components after making or changing any of the connections, to ensure reliable Linked operation.

There are several linked functions in the N°383:

display intensity

Adjusting the **display intensity** on any Linked component will adjust the displays in the other Linked components as well, keeping them all at a consistent brightness level.

standby link

Placing the N°383 into **standby** will also place the compatible Mark Levinson digital processor, and transport(s) into **standby**, except during a digital recording session (see **record link** section, below). Placing either digital component into **standby** will have no effect on the N°383, since you might well wish to continue listening to a different source component, such as a tuner.

Taking a Linked Mark Levinson source component out of **standby** will also cause the N°383 to come out of **standby**.

volume link

A remote control for a linked Mark Levinson transport can (when that transport is properly Linked) control the **volume** and **mute** status of the N°383 via the Linking system, allowing the use of a single remote for both transport and (basic) preamp functions.

select link

Similarly, a remote control for a linked Mark Levinson transport can (when that transport is properly Linked) select inputs on the N°383 via the Linking system, allowing the use of a single remote for both transport and (basic) preamp functions. Pressing and holding the **select**

button will toggle between switching digital inputs vs. switching analog inputs; simply clicking the button moves you to the next input in the bank of inputs currently being controlled.

Note that for Select Linking to work, you must have named the associated digital processor properly to match the appropriate name from the Name List. Thus a N°30.6 should be named **No30.6**; a N°360S should be named **No360S**, and so forth.

play link Placing your Mark Levinson transport in **play** will activate both the corresponding Mark Levinson digital processor and the N°383 if either or both is in **standby**. In addition, the appropriate inputs will be selected on the digital processor and on the N°383 (specifically, the input which has an name of a Mark Levinson digital processor, such as **N°30.6**, **No360S** or **No39**).

Similarly, activating a Linked Mark Levinson digital processor will select the appropriate input on the N°383 (should you be using the processor with an unlinked DAT machine, for example).

record link Placing the N°383 into **standby** while your Mark Levinson digital audio processor is in **record** mode and a Mark Levinson transport is in Record Link mode will cause a warning to be displayed on the digital component. Both digital components will be prevented from going into **standby** without explicit confirmation at those components that this is what you desire. In this way, inadvertent interruption of a digital recording in process can be avoided.

After changing any of the Linked functions, cycle power on the N°383 and the other components to ensure that they take effect.

HDCD™ link Linked Mark Levinson digital processors will implement the required six decibel change in volume for HDCD recordings in the N°383 automatically if they are both properly Linked and if their name has been set to match the appropriate name from the Name List. Thus a N°30.6 should be named **No30.6**; a N°360S should be named **No360S**, and so forth.

In fact, as long as the first four characters are correct, even custom names will be recognized and operate properly. For example, you could refer to a **No30xyz** and it would still be recognized as a member of the N°30 family. (*Though why you would want to do so remains a mystery.*)

Care and Maintenance

To remove dust from the cabinet of the N°383, use a feather duster. To remove dirt and fingerprints, we recommend isopropyl alcohol and a soft cloth. Apply the alcohol to the cloth first and then lightly clean the surface of the N°383, going with the grain of the brushed aluminum.

Warning!

At no time should liquid cleaners be applied directly to the N°383, as direct application of liquids may result in damage to electronic components within the unit.

U.S. and Canadian Warranty

90-day limited warranty

This Mark Levinson[®] product is warranted to be free from defects in material and workmanship under normal use for a period of ninety (90) days from the date of purchase. To extend the warranty of this Mark Levinson product, return the warranty registration card along with a copy of the original receipt of purchase to Madrigal Audio Laboratories, Inc., P. O. Box 781, Middletown, CT 06457.

five year extended warranty

The extended warranty for this Mark Levinson product is five (5) years from the date of purchase. During the warranty period, any Mark Levinson component exhibiting defects in materials and/or workmanship will be repaired or replaced, at our option, without charge for either parts or labor, at our factory. The warranty will not apply to any Mark Levinson component that has been misused, abused or altered.

Any Mark Levinson component not performing satisfactorily may be returned to the factory for evaluation. Return authorization must first be obtained by either calling or writing the factory prior to shipping the component. The factory will pay for return shipping charges only in the event that the component is found to be defective as above mentioned. There are other stipulations that may apply to shipping charges.

There is no other express warranty on this component. Neither this warranty nor any other warranty, express or implied, including any implied warranties of merchantability or fitness, shall extend beyond the warranty period. No responsibility is assumed for any incidental or consequential damages. Some states do not allow limitations on how long an implied warranty lasts and other states do not allow the exclusion or limitation of incidental or consequential damages, so that the above limitation or exclusion may not apply to you.

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

This warranty is applicable in the United States and Canada only. Outside of the U.S. and Canada, please contact your local, authorized Mark Levinson distributor for warranty and service information.

Obtaining Service

We take great pride in our dealers. Experience, dedication, and integrity make these professionals ideally suited to assist with our customers' service needs.

If your Mark Levinson component must be serviced, please contact your dealer. Your dealer will then decide whether the problem can be remedied locally, or whether to contact Madrigal for further service information or parts, or to obtain a Return Authorization. The Madrigal Technical Services Department works closely with your dealer to solve your service needs expediently.

Important!

Return authorization must be obtained from Madrigal's Technical Services Department BEFORE a unit is shipped for service.

It is extremely important that information about a problem be explicit and complete. A specific, comprehensive description of the problem helps your dealer and the Madrigal Technical Services Department locate and repair the difficulty as quickly as possible.

47

A copy of the original bill of sale will serve to verify warranty status. Please include it with the unit when it is brought in for warranty service.

Warning!

All returned units must be properly packaged (preferably in their original packing material), and the proper return authorization numbers must be marked on the outer carton for identification. If the packaging to protect the unit is, in our opinion or that of our dealer, inadequate to protect the unit, we reserve the right to repackage it for return shipment at the owner's expense. Neither Madrigal nor your dealer can be responsible for shipping damage due to improper (that is, non-original) packaging.

Your dealer can order a new set of shipping materials for you if you need to ship your component and no longer have the original materials. There will be a charge for this service. We strongly recommend saving all packing materials in case you need to ship your unit.

Specifications

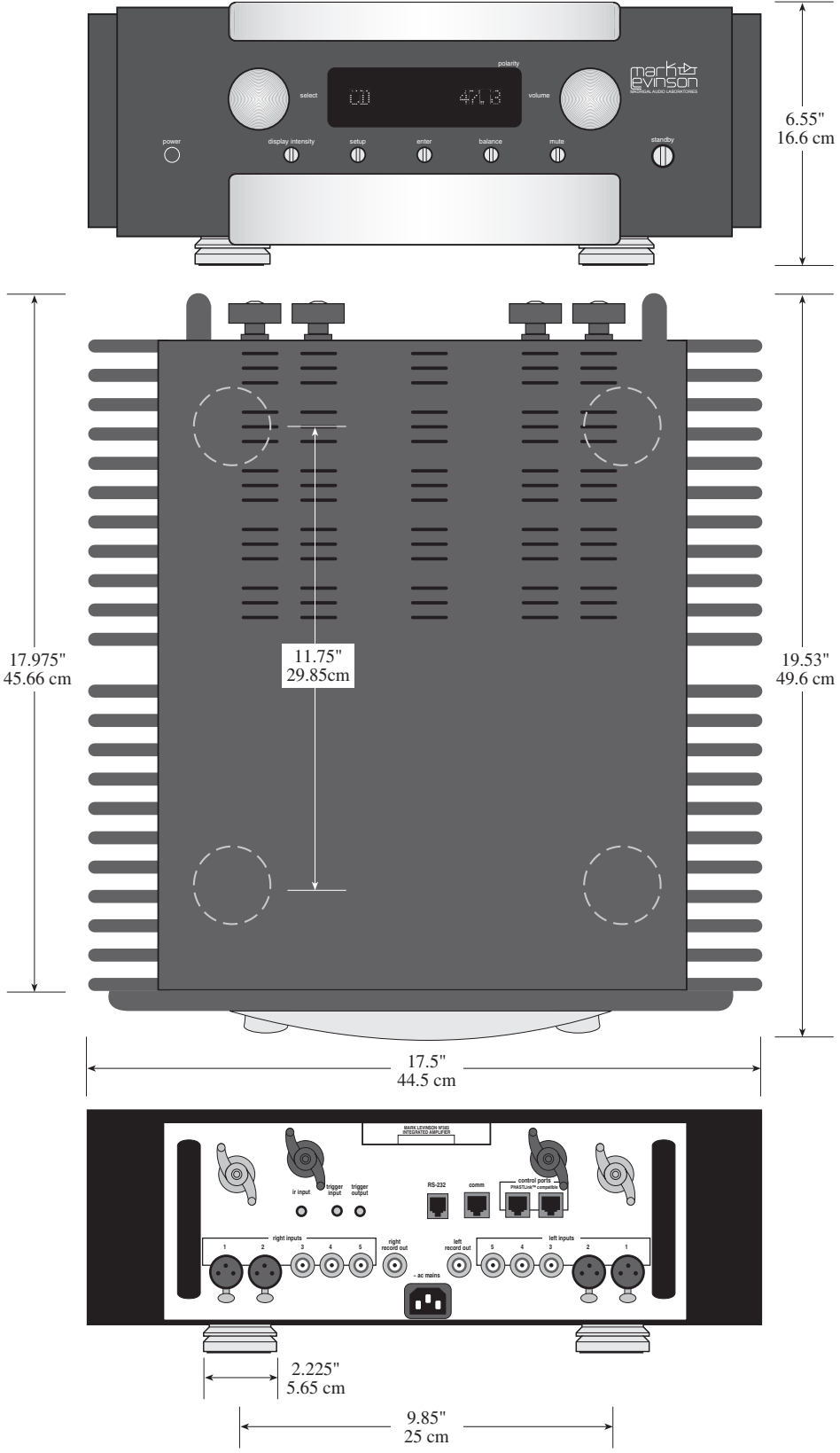
The correlation between published specifications and sonic quality is unreliable. A list of numbers reveals virtually nothing. All technical measurements must be subject to qualitative as well as quantitative interpretation. Measurements of the N°383 yield excellent results by any standards. However, only those specifications that apply to its actual operation are included here.

- **Power output:** 100 watts per channel at 8Ω
200 watts per channel at 4Ω
*the above power ratings measured from
20 Hz–20 kHz with no more than 0.3% THD*
- **Frequency response:** within 0.1 dB from 20 Hz to 20 kHz
- **Audio Inputs:** two pairs balanced on XLR
three pairs single-ended on Madrigal RCA
- **Audio Outputs:** one pair Madrigal-designed speaker binding posts
one pair record outputs on Madrigal RCA
- **Other Connectors:** one IEC AC mains receptacle
one earth ground terminal
one 3.5mm “mini” jack for IR input
one 3.5mm “mini” jack for DC trigger in
one 3.5mm “mini” jack for DC trigger out
one Mark Levinson Link communications connector
one 6-pin RJ-11 RS-232 port
two 8-pin RJ-45 control ports (PHASTLink™ compatible)
- **Gain:** 0, 6, 12, or 18 dB in the line stage
26.9 dB in the amplifier section
- **Volume control range:** 72.2 dB
- **Gain resolution:** 0.1 dB steps above 38.5 in display (-34.7 dB)
(with slowly increasing step size at progressively lower levels)
- **Input overload:**
 - when gain is set to +18 dB: 2V on XLR, 1V on RCA
 - when gain is set to +12 dB: 4V on XLR, 2V on RCA
 - when gain is set to +6 dB: 8V on XLR, 4V on RCA
 - when gain is set to 0 dB: 16V on XLR, 8V on RCA
- **Input impedance:** 100kΩ
- **Output impedance:** less than 0.05Ω, 20–20,000 Hz
- **THD + N:** less than 0.3%
- **Power consumption:** 100 W in standby
200 W at idle
1200 W maximum at 4Ω, rated output
- **Mains voltage:** 100V, 120V, 220V, 230V or 240VAC
at either 50 or 60Hz (set at the factory)
- **Overall dimensions:** See “Dimensions”
- **Shipping weight:** 80 lbs. (36.6 kg)

For more information, see your Mark Levinson dealer, or contact:

Madrigal Audio Laboratories, Inc. phone (860) 346-0896
P. O. Box 781, 2081 South Main Street fax (860) 346-1540
Middletown, Connecticut 06457 USA internet www.madrigal.com

Dimensions, N°383 Integrated Amplifier





MADRIGAL

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