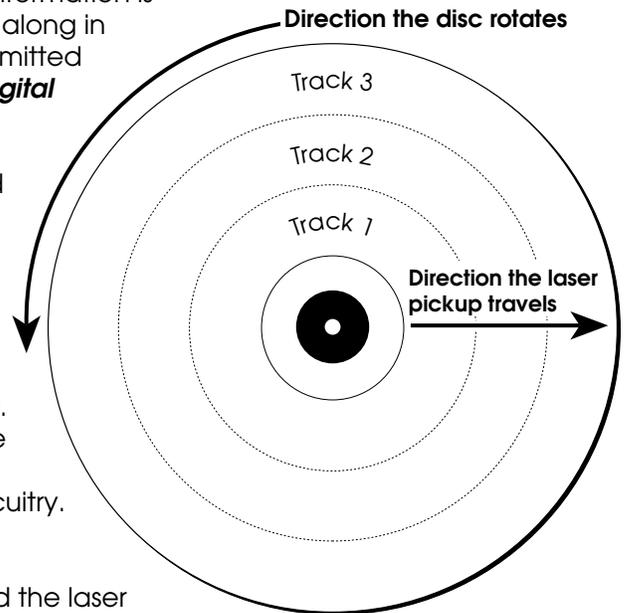


About Compact Disc Digital Audio...

To most people, a Compact Disc (CD) looks like a small, silver phonograph record. In fact, there are some important differences between records and CDs.

Phonograph records vs. compact discs

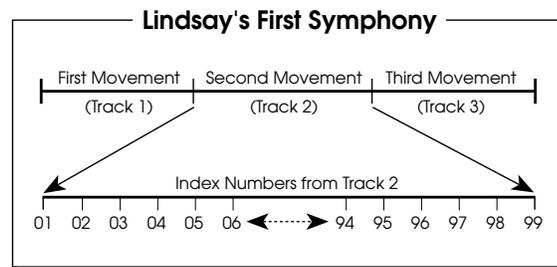
The information on a phonograph record is contained within its grooves. This **analog** information is read by a stylus riding along in the grooves and transmitted via a cartridge. The **digital** information on a CD, though arranged in similar grooves, is read by a laser mechanism (called a **pickup**). A phonograph's stylus must be in contact with the record, but a CD player's pickup never touches the CD. The information on the CD is transmitted via complex decoder circuitry.



The CD rotates counterclockwise, and the laser pickup reads the underside of the CD (the side opposite the label) beginning at the center and travelling toward the outer edge. As the pickup moves away from the center, the speed of rotation gradually decreases from 500 to 200 revolutions per minute.

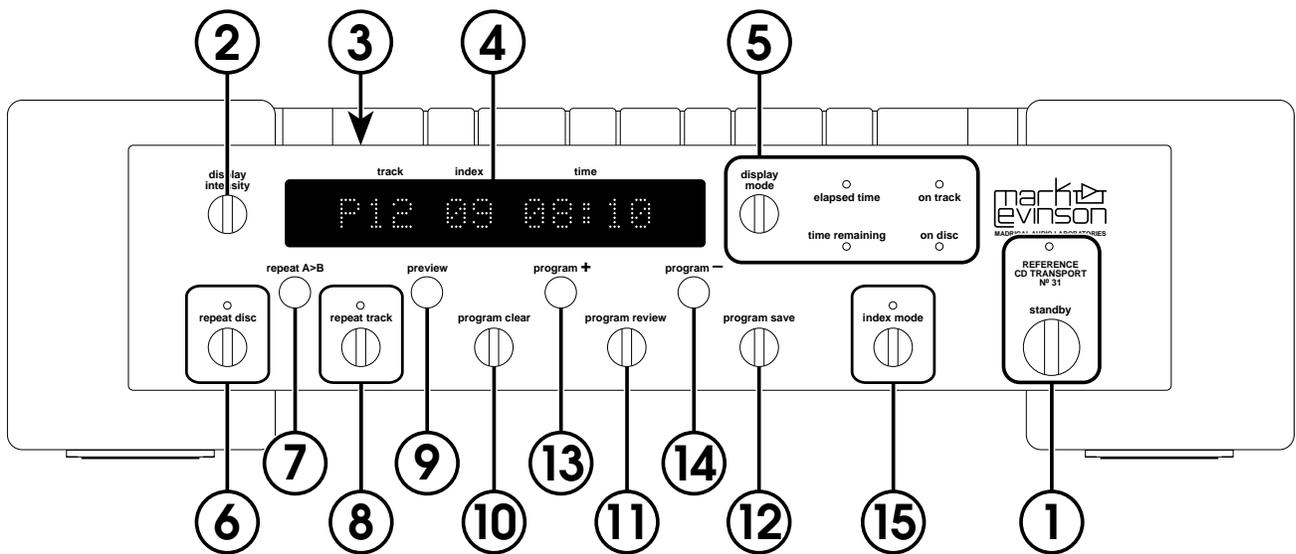
Tracks and indexes

Programs on CDs are organized into **tracks**, usually corresponding to songs or movements. This allows you to select a part of a program easily and precisely, with virtually no wear and tear on the CD. There may be as many as 99 tracks on a CD.



On some CDs, tracks are further broken down into **indexes**. These "tracks within tracks"

allow even more precise selection and programming. A single track may have up to 99 indexes.



Front panel

1 standby

When the N°31 is connected to AC power and the **main power** switch on the rear panel is in the "I" position (see "Rear panel"), pressing this button takes the N°31 out of "standby" mode and enables the front-panel controls.

When the N°31's **main power** switch is first turned on (or when power is restored after an interruption), the N°31 will be ready to operate (that is, it won't be in standby mode).

Pressing **standby** again places the N°31 into standby mode and disables the front-panel controls.

While the N°31 is in standby mode, the Display is dark and the **standby** LED flashes slowly. When the N°31 is ready to operate (not in standby mode), the **standby** LED remains lighted.

Note: When going into standby, the N°31 deactivates its digital outputs. With some digital processors, this may result in a low-level "pop" on the audio outputs (*linked* Mark Levinson digital processors aren't subject to this effect).

To prevent this low-level "pop" from coming through your system's speakers or headphones, adjust the volume to its lowest level before placing the N°31 into standby.

2 display intensity

Pressing this button varies the brightness of the Display. Four brightness levels are available.

When the N°31's **main power** switch is first turned on (or when power is restored after an interruption), the Display is automatically set to its second-brightest level.

Pressing **display intensity** once dims the Display one level; pressing it again dims it further; pressing it again turns the Display off. Pressing **display intensity** once more returns the Display to its brightest level.

display intensity also affects the N°31's front-panel LEDs. When the Display is turned off, however, the LEDs still glow dimly.

3 Top-panel controls

See "Top panel."

4 Display

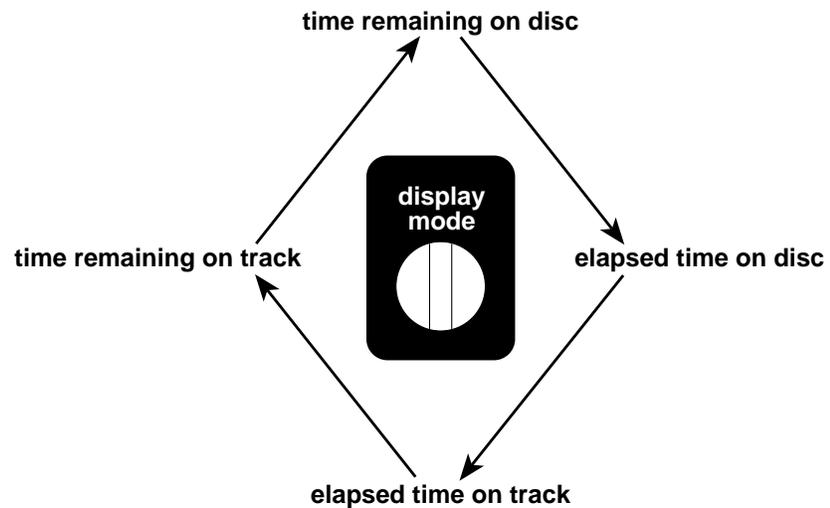
See "Display."

5 display mode

This button allows you to change the type of information shown in the **time** part of the Display. (See "Display.")

When a CD is loaded and ready for play, the **time** part of the Display shows the time remaining on the CD; the **time remaining** and **on disc** LEDs are lighted.

Press **display mode** to change the **time** part of the Display:



The information in the **time** part of the Display corresponds to the lighted LEDs to the right of the **display mode** button. After play begins, the Display will reflect the last display mode you selected.

Along with **program +** (13) and **program -** (14), the **display mode** button is also used to change the link settings. (See "Linked functions.")

6 repeat disc

To repeat (continuously) all tracks on a CD (or all tracks in a program), press this button.

While **repeat disc** is active, the LED above the button is lighted.

To return to normal play, press **repeat disc** again or press **Stop**.

7 repeat A>B

This function allows you to repeat (continuously) a particular phrase or passage on a CD.

While a CD is playing, press **repeat A>B** at the beginning of the passage you'd like to repeat. At the end of the passage, press **repeat A>B** again. The passage you selected will repeat continuously.

While **repeat A>B** is active, **A** then **B** will alternate appearing in the space preceding the track number on the Display. (See "Display.")

To return to normal play, press **repeat A>B** again.

8 repeat track

To repeat (continuously) the track in play, press this button.

While **repeat track** is active, the LED above the button is lighted.

To return to normal play, press **repeat track** again.

9 preview

This function allows you to play only the introduction of each track on a CD or in a program.

Once a CD is loaded and ready for play, press **preview**. Beginning with the first track on the CD (or the first track in the program), the N°31 will play the first ten seconds of the track, skip to the second track and play the first ten seconds of that track, and so on.

While **preview** is active, the **track** part of the Display flashes. (See "Display.")

To return to normal play, press **preview** again, or press **Play**. (See "Top panel.")

10 program clear

Pressing this button erases any temporary program, and also temporarily overrides a previously saved program. (See "Programming.")

Pressing **program clear**, followed by pressing **program save** (12), permanently erases a program from the N°31's memory.

After pressing **program clear**, the Display will show **PROG CLEARED**.

If you press **program clear** when there is no program in the N°31's memory, the Display will show **NO PROGRAM**.

11 **program review**

This function allows you to review the selections in the current program. (See "Programming.")

Press this button once to view the first selection in your program. To view the next selection, press **program review** again, and so on.

After you view the last selection in the program, the Display will show **PROGRAM END**.

If you press **program review** when there is no program in the N°31's memory, the Display will show **NO PROGRAM**.

12 **program save**

Pressing this button records a program in the N°31's memory. (See "Programming.")

After pressing **program save**, the Display will show **NEW PROGRAM**, **PROG CHANGED**, or **PROG DELETED**.

13 **program +**

Pressing this button adds a selection to a program. (See "Programming.")

Along with **display mode (5)**, the **program +** button is used to change the link settings. (See "Linked functions.")

14 **program -**

Used along with **program review (11)**, pressing this button erases a selection from a previously saved program without erasing the entire program. (See "Programming.")

Along with **display mode (5)**, the **program -** button is used to change the link settings. (See "Linked functions.")

15 **index mode**

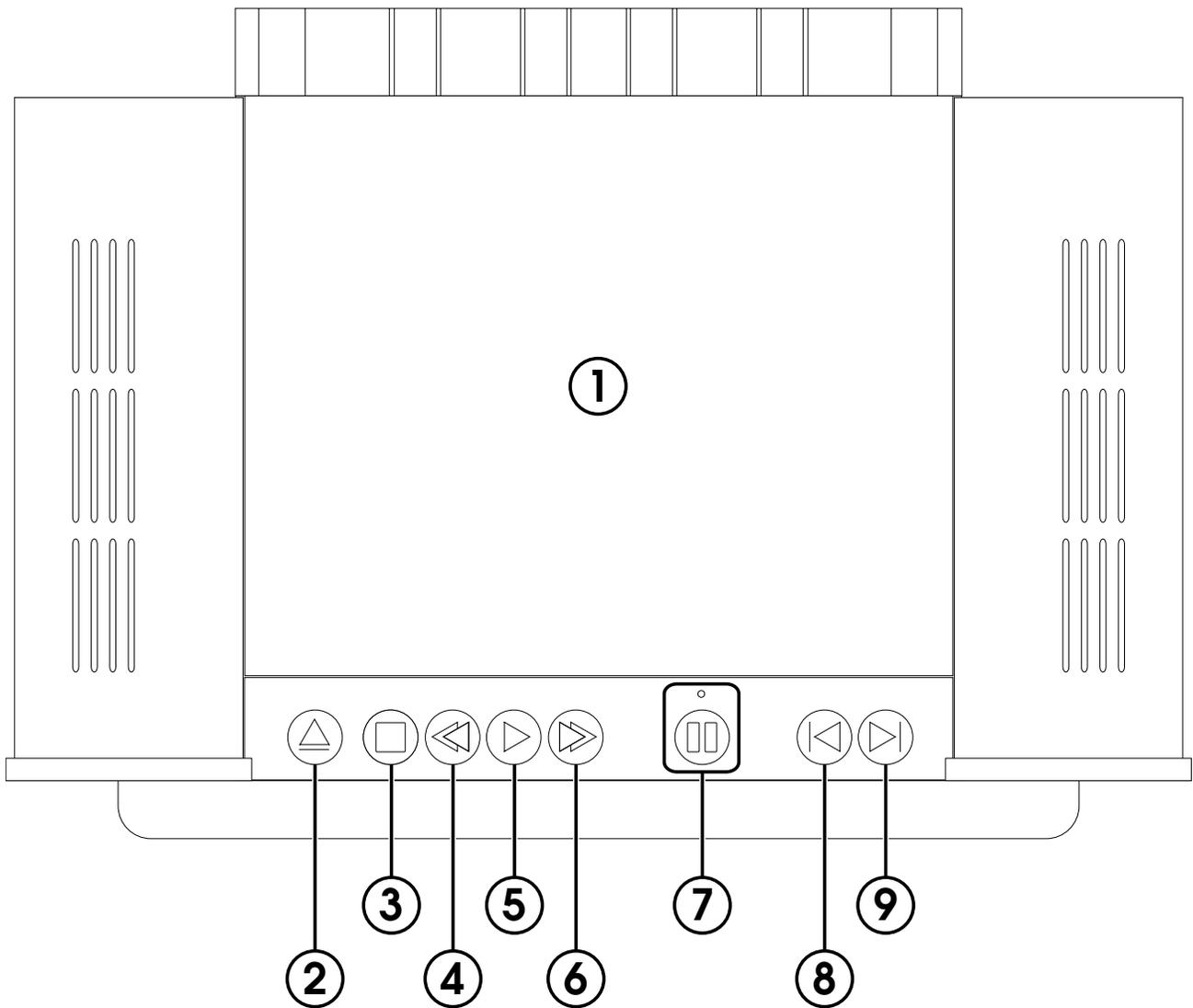
When you're playing a CD recorded with indexes, the N°31's index mode allows you to use those indexes to select more precisely the music you want to play. (See "About Compact Disc Digital Audio" and "Basic operation.")

After pressing **index mode** before playing the CD, the Display will show **INDEX SEARCH**.

While the index mode function is active, the LED above the button flashes.

While the N°31 is in index mode, pressing **Next** or **Previous** skips the laser pickup to the next or previous index on the CD (see "Top panel"), and you may use the Remote Control's numbered buttons to select indexes (see "Remote Control").

To cancel this function, press **index mode** again, press **Play**, or press **Stop**.



Top panel

1 Laser Isolation Device (LID)

The LID covers the CD transport assembly, the mechanism that holds the CD during play. Its operation is controlled by the **LID Open/Close** button (2).

Never hold onto the LID while it's opening or closing.

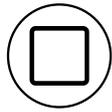
PRECAUTION



2 LID Open/Close

Pressing this button opens the LID (1); pressing it again closes the LID.

Pressing **LID Open/Close** while a CD is playing stops play and opens the LID.



3 Stop

Pressing this button while a CD is playing stops play. Pressing Stop also cancels **repeat disc** and **repeat track**, if they're active.

Pressing **Play (5)** after pressing **Stop** begins play again with the first track on the CD (or the first track in a program).



4 Search Reverse

Holding this button down during play moves the laser pickup rapidly toward the beginning of the CD.

During search, the pickup moves at two different speeds, increasing the longer you hold down **Search Reverse**, and the volume is reduced.

Note: If your N°31 is connected to a compatible Mark Levinson digital processor (via the **communication ports**), you may mute the volume completely during search. (See "Linked functions.")

When you release **Search Reverse**, play normally resumes. If you have reached the beginning of the disc, the N°31 will **Stop** and wait for your next command.



5 Play

After a CD is loaded and the Disc Damper is in place, pressing this button begins play with the first track on the CD (or the first track in a program).

If you press **Play** while the LID is open, the LID closes and play starts beginning with the first track on the CD (or the first track in a previously saved program).

Pressing **Play** while a CD is playing suspends play, returns to the beginning of the current track, and replays that track.



6 Search Forward

This button works in the same way as **Search Reverse (4)**, except that it moves the laser pickup rapidly toward the end of the CD.



7 Pause

While a CD is playing, pressing this button suspends play; pressing it again resumes play at the point where **Pause** was first pressed.

While **Pause** is active, the LED above the button is lighted and **II** appears preceding the track number on the Display. (See "Display.")

If left in **Pause** for several minutes, the transport will stop spinning and the laser will turn off (thereby enhancing the longevity of both). This will be indicated by the **Pause** indicator in the display ("**II**") flashing on and off. Alternatively, this **Long Term Pause** feature may be engaged by pressing and holding the **Pause** button until the indicator begins to flash in the display. Pressing **Pause** again will resume play at the point where **Pause** was first pressed, (after a short delay to allow the disc to get up to speed).

To "cue up" the beginning of a CD or track, press **Pause** before pressing **Play (5)**. To begin play, press **Pause** again. (You may also select another track or index while play is suspended.)



8 Previous

This button's function depends on whether or not the N°31 is in index mode. (See "Front panel.")

While the N°31 is in index mode, pressing **Previous** "skips" the laser pickup to the previous **index**. If index mode is inactive, pressing **Previous** skips the laser pickup to the previous **track**.

Pressing **Previous** while a CD is playing suspends play, skips the laser pickup to the previous track or index on the CD (or in a program), and begins play there.

Note: If you press **Previous** while the first track on the CD (or in a program) is playing, the Display will show **FIRST TRACK**, and play will resume with that track.

Pressing **Previous** before play begins skips the laser pickup to the beginning of the last track or index on the CD; pressing **Play (5)** begins play there (temporarily overriding any existing program).



9 Next

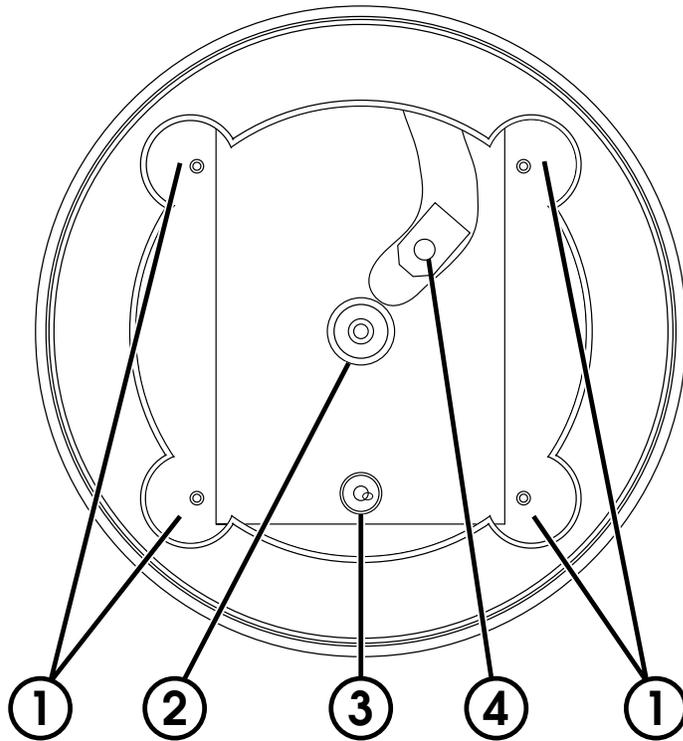
This button works in the same way as **Previous (8)**, except that it skips to the **next** track or index.

While the N°31 is in index mode, pressing **Next** skips the laser pickup to the next **index**. If index mode is inactive, pressing **Next** skips the laser pickup to the next **track**.

Pressing **Next** while a CD is playing suspends play, skips the laser pickup to the next track or index on the CD (or in a program), and begins play there.

Note: If you press **Next** while the last track on the CD (or in a program) is playing, the Display will show **LAST TRACK**, and play will resume with that track.

Pressing **Next** before play begins skips the laser pickup to the beginning of the next track or index on the CD; pressing **Play (5)** begins play there (temporarily overriding any existing program).



CD transport assembly

1 Finger wells

These cutouts make it easy to grasp a CD by its edges when placing it on or removing it from the spindle.

Levelling screws

For the best performance, the N°31's transport assembly should be level. Four levelling screws (one inside each finger well) allow you to adjust the transport assembly.

With the supplied 3/32" hex driver, and using the N°31's bubble level (3) as a gauge, adjust one or more of these screws to bring the transport assembly to level. To lower a corner, turn the corresponding screw clockwise; to raise a corner, turn the screw counterclockwise.

2 Spindle

This is the device that spins the CD, and on which the CD rests during play. The CD must be centered on the spindle, and it must be clamped to the spindle by the Disc Damper.

3 Bubble level

Use this bubble level, along with the four levelling screws (1), to make sure that the N°31's transport assembly is level.

PRECAUTION

4 Laser assembly

This assembly contains the N°31's laser pickup, the device that reads the underside of the CD.

Never touch or attempt to clean the laser assembly.

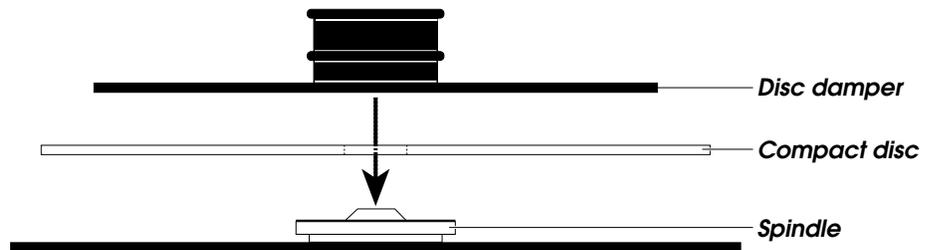
Disc Damper

To clamp a CD onto its spindle, the N°31 uses a Disc Damper held in place by a strong magnet.

Always make sure that the Disc Damper is in place before closing the LID. If you close the LID without the Damper in place, the display will show **NO DAMPER** and you'll be unable to play the CD.

Installing the Disc Damper

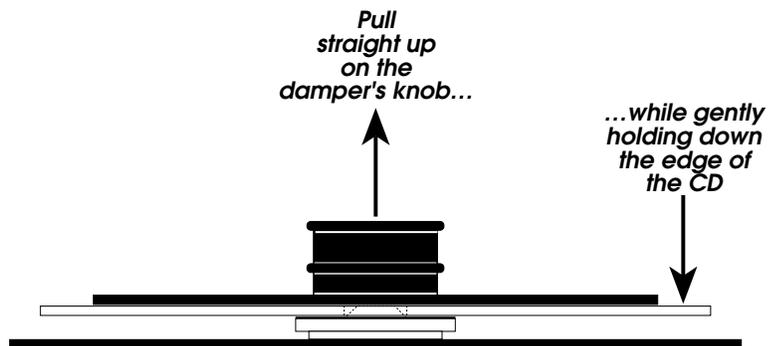
When loading a CD for play, install the CD on the spindle, then place the Disc Damper on top of the CD.



The CD and the Damper must be centered on the spindle. You'll feel the Damper's magnet "catch" when they're centered.

Removing the Disc Damper

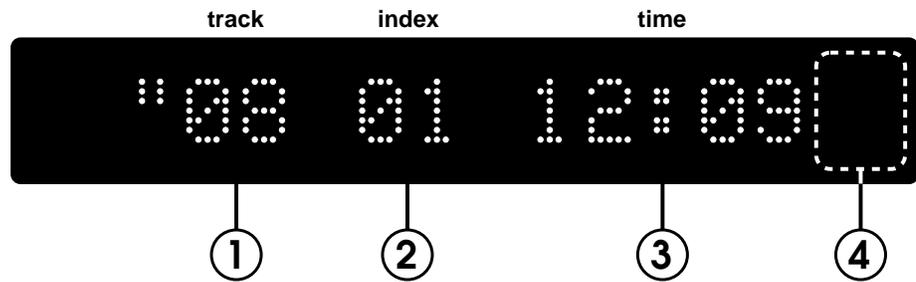
When removing a CD from the spindle, first remove the Disc Damper. To prevent damage to the CD, gently hold it down by the edge while pulling **straight up** on the Damper's knob.



To overcome the magnet, you'll need to give it a firm pull.

Note: When the Disc Damper clamps the CD onto the spindle, its strong magnet forces the air from between the Damper and the CD. If you don't follow the removal procedure outlined above, the CD may stick briefly to the Damper's energy-absorbing surface after the magnet is released.

If the CD is stuck to the Damper when you remove them from the spindle, take care not to let it fall.



Display

1 track

Before play begins, this part of the Display shows the total number of tracks on the CD.

During play, this part of the Display shows the number of the track in play.

While a program is in the N°31's memory, the letter **P** will appear preceding the track number. A small **P** indicates a saved polarity setting (possible only when the N°31 is linked to a compatible Mark Levinson digital processor).

While random play is active, the letter **R** will appear preceding the track number.

While **repeat A>B** is active, the letters **A** then **B** will alternate appearing in the space preceding the track number.

While **Pause** is active, " will appear preceding the track number (as pictured above).

While **preview** is active, the **track** part of the Display will flash.

2 index

If a CD includes indices, this part of the Display shows the index in play, beginning with **01** and increasing as the CD plays. If the CD in play doesn't include indexes, this part of the Display shows **01** throughout play. For information on how to use indexes, see "Basic operation."

Tracks may also be played from **Index 00**. (See "Linked functions.")

3 time

Before play, this part of the Display shows the total playing time for all tracks on the CD. When play begins, this part of the Display shows time-related information about the CD or the track.

You may vary the information in this part of the Display using the **display mode** button. (See "Front panel.")

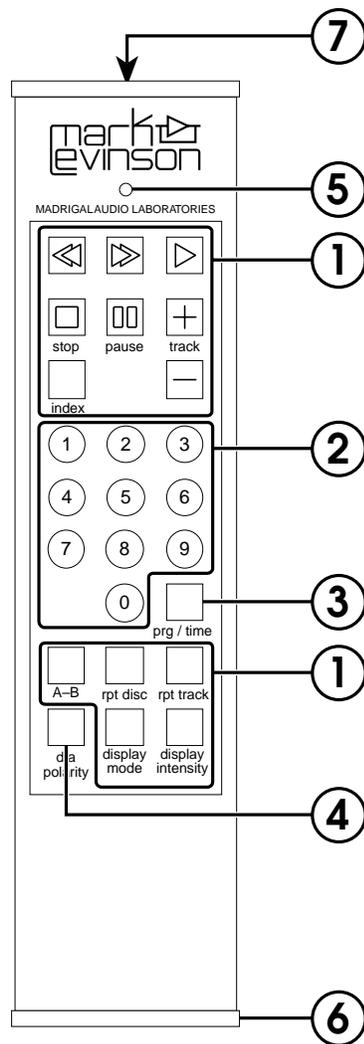
4 Remote sensor

This part of the Display accepts commands from the N°31's Remote Control. (See "Remote Control.") Always keep this window clean and unobstructed.

Display messages

The Display also shows messages about the N°31's status and operation. Here are some of the messages you'll see, and what they mean.

- **CLOSING:** The LID is in motion (closing); appears after the **LID Open/Close** button is pressed.
- **FIRST TRACK:** The **Previous** button was pressed while the first track on the CD (or in a program or a random sequence) was playing.
- **INDEX SEARCH:** The N°31 is scanning the CD for indexes; appears after **index mode** is pressed.
- **INSERT DISC:** The LID is open; appears after the LID has stopped opening.
- **LAST TRACK:** The **Next** button was pressed while the last track on the CD (or in a program) was playing.
- **NEW PROGRAM:** A new program was recorded in the N°31's memory; appears after **program save** is pressed.
- **NO DAMPER:** The LID is closed and the Disc Damper isn't installed on the spindle; appears after the LID has closed.
- **NO PROGRAM:** There's no program in the N°31's memory; appears after **program review** or **program clear** is pressed.
- **OPENING:** The LID is in motion (opening); appears after the **LID Open/Close** button is pressed.
- **P01 IS 1st:** Indicates a track's place in a program; appears after **program review** is pressed.
- **P02 02 IS 2:** Indicates an index's place in a program; appears after **program review** is pressed.
- **PROG CHANGED:** Changes to a program were recorded in the N°31's memory; appears after **program save** is pressed.
- **POLARITY PRG:** A program including only the **polarity invert** function was saved; appears after **program save** is pressed.
- **PROG DELETED:** A previously saved program was erased from the N°31's memory; appears after **program clear** is pressed, followed by pressing **program save**.
- **PROG CLEARED:** The temporary program was erased, or the previously saved program was temporarily overridden; appears after **program clear** is pressed.
- **PROGRAM END:** There are no more selections in the program being reviewed; appears after **program review** is pressed.
- **READING:** The N°31 is reading track and time information from the CD; appears after the LID has closed.



Remote Control

- Each of these buttons performs the same function as its counterpart on the N°31. (See "Top panel" and "Front panel").

Note: Used alone, the **+** and **-** buttons perform the **Next** and **Previous** functions, respectively. When pressed after **prg/time** (3), the **+** and **-** buttons perform the **program +** and **program -** functions, respectively.

The **index** button performs the **index mode** function.

When no CD is playing, pressing **stop** opens the LID.

- Numbered buttons**

These buttons may be used to select tracks or indexes (instead of using **Next** or **Previous**) or, along with **prg/time** (3), to begin play at a specific time in a track.

Note: If the N°31 is in index mode, the numbered buttons select indexes. If the index mode is inactive, the numbered buttons select tracks.

To select a one-digit track or index number, you may press either one or two buttons. For example, for track 1, you may enter either **1** or **01**. To select a two-digit track number, enter both digits. Track numbers you select will appear in the **track** part of the Display; index numbers you select will appear in the **index** part of the Display.

Entering a number before play begins play with that track or index and plays the remaining tracks as ordered on the CD.

Entering a number during play skips to that track or index and begins play, then plays the remaining tracks as ordered on the CD.

The numbered buttons may also be used to begin play at a specific time; see **prg/time (3)**. In this case, the numbers you select will appear in the **time** part of the Display.

3 prg/time

This function, used with the numbered buttons (**2**), allows you to begin play at a specific **time** — whether or not it corresponds to an index. Used with the **+** and **-** buttons, **prg/time** allows you to add or erase selections from a program via the Remote Control.

To begin play at a specific time, use **Next** or **Previous** (or the numbered buttons) to select a track. Press **prg/time**, then press the numbered buttons corresponding to when you'd like play to begin. (The numbers you select will appear in the **time** part of the Display.) To begin play at that point, press **Play**.

Note: The time you select depends on the selection you've made with the **display mode** button: elapsed or remaining, CD or track.

For example, if you want to begin play one minute and thirty seconds into track 2, first press **display mode** until the **elapsed time** and **on track** LEDs light. Then select track 2 by pressing **Next** or **Previous** (or by entering **02**). Press **prg/time**, enter **130**, then press **Play**.

To add or erase selections from a program, first select a track. Press **prg/time**, then press **+** to add a selection or **-** to erase a selection. (See "Programming.")

4 d/a polarity

Some recordings simply "sound better" when polarity is inverted. When the N°31 is linked to a compatible Mark Levinson digital processor (via their **communication ports**), pressing this button inverts polarity on the digital processor. (See "Rear panel" and "Linked functions.")

5 Transmit LED

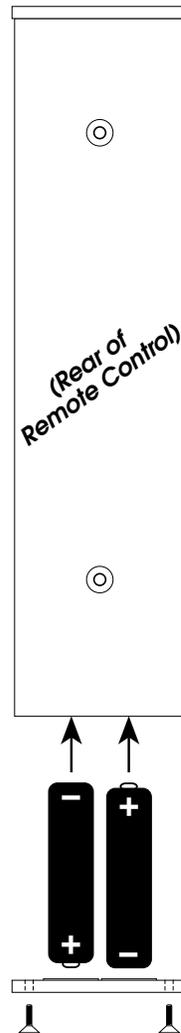
This LED indicates when a command is transmitted by the Remote Control. It lights when you press any button on the Remote Control.

Note: This LED indicates when the Remote Control sends a command, not necessarily that the N°31 received it.

If this LED fails to light when a button is pressed, replace the Remote Control's batteries. (See "Set-up and installation.")

6 Battery compartment cover

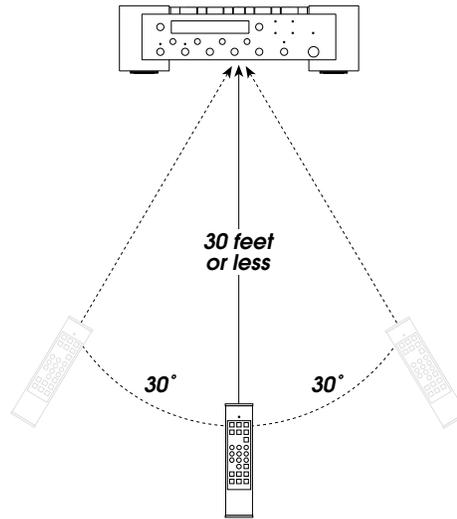
This cap covers the compartment that holds the Remote Control's batteries.



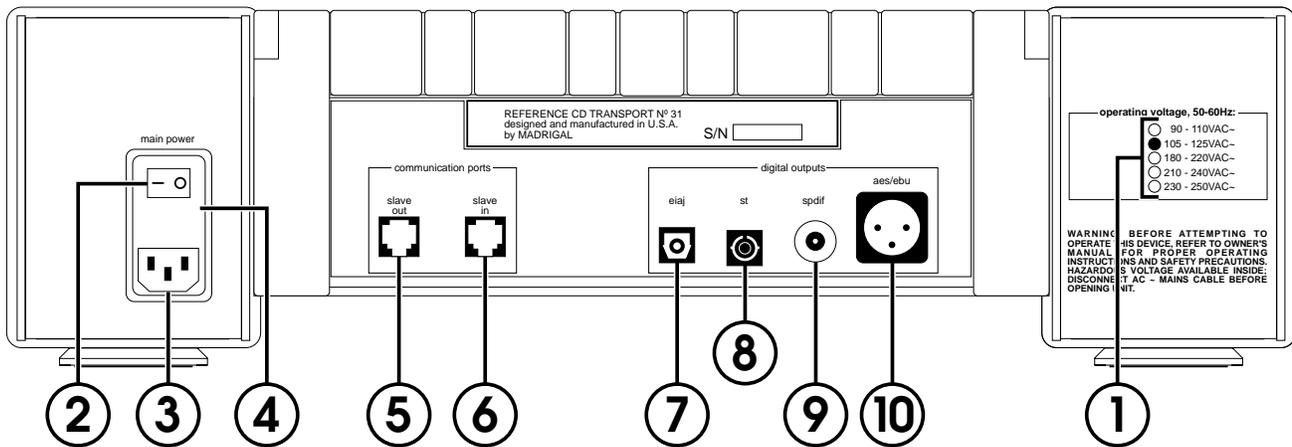
Using the supplied 1/16" hex key, remove the two screws securing the cover. Insert two AA batteries according to the symbols on the inside of the battery compartment cover. Replace the battery compartment cover.

7 Projection lens

Infrared (IR) commands from the Remote Control to the N°31 are transmitted through this lens. (See "Set-up and installation.")



Always keep the projection lens clean.



Rear panel

PRECAUTION

Disconnect all associated equipment from the AC mains BEFORE making any signal connections and applying power to the N°31.

1 Operating voltage indication

The N°31 is set internally for 100, 120, 200, 220, or 240VAC mains operation @ 50 or 60Hz. Make sure that this label indicates the correct AC operating voltage for your location. (See "Set-up and installation").

2 main power

This switch turns the N°31 on and off. The switch must be in the "I" (on) position for the N°31 to function. (See "Set-up and installation.")

PRECAUTION

Never operate the main power switch without first making sure that power is turned off to your receiver, integrated amplifier, or preamplifier/power amplifier.

3 AC power cord socket

This socket accepts AC mains power via the supplied AC power cord.

4 Fuse compartment

The panel surrounding the **main power** switch is also a hinged cover for the N°31's fuse compartment. The N°31 uses two 1.0-ampere slow-blow fuses.

PRECAUTION

Never open the fuse compartment without first disconnecting the N°31 from AC power. If you need to replace the fuses, always use the same type of fuse.

To open the fuse compartment, insert the tip of a small, flat-bladed screwdriver into the slot at the top edge of this panel. Gently pry open the top edge of the compartment cover.

5 slave out

6 slave in

These **communication ports** allow the N°31 to "link" to certain compatible Mark Levinson components. (See "Linked functions.")

Using the Link cable, connect the N°31's **slave in** port to the **master** port on the Mark Levinson digital processor.

Make sure that the Link cable's locking tabs engage securely in the components' **communication ports**.

If linking a second N°31, connect the second N°31's **slave in** port to the first N°31's **slave out** port.

PRECAUTION

Connecting the communication ports other than as described in this manual will damage the N°31 and the digital processor, and will void the products' warranties.

7 digital output, EIAJ optical

This output provides digital audio (DAS, via a cable equipped with TOSLINK-type optical connectors) to a digital processor, digital audio tape recorder, preamplifier, integrated amplifier, or receiver equipped with EIAJ optical digital inputs.

8 digital output, ST optical

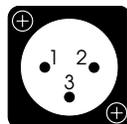
This output provides digital audio (DAS, via a cable equipped with ST-type optical connectors) to a digital processor, digital audio tape recorder, preamplifier, integrated amplifier, or receiver equipped with ST optical digital inputs.

9 digital output, SPDIF electrical

This output provides digital audio (DAS, via a cable equipped with RCA-type connectors) to a digital processor, digital audio tape recorder, preamplifier, integrated amplifier, or receiver.

10 digital output, AES/EBU electrical

This output provides digital audio (DAS, via a cable equipped with XLR-type connectors) to a digital processor, digital audio tape recorder, preamplifier, integrated amplifier, or receiver equipped with XLR-type digital inputs.



Pin 1: System Ground

Pin 2: DAS + (Non-inverting)

Pin 3: DAS - (Inverting)

Connector Ground Lug: Chassis Ground

Note: The quality of the cables and connectors that you use with your N°31 can noticeably affect sound quality. For electrical interconnection, we recommend Madrigal MDC cable.

MDC-1 Pro is designed for AES/EBU interconnection; **MDC-2 FatBoy** is designed for SPDIF interconnection. MDC is available in various lengths, pre-terminated with RCA and XLR connectors. See your Mark Levinson dealer for more information.

Set-up and installation

PRECAUTION

For your protection, review "Important Safety Instructions" before you install your N°31.

Unpacking

Carefully open the shipping carton and remove the contents. You should have:

- Mark Levinson N°31 Reference Digital Transport
- Remote control
- Two AA batteries
- Disc damper
- Four spikes
- AC power cord
- Link cable (2m)
- Two spare 1.0-ampere slow-blow fuses
- One 1/16" hex key
- One 1/8" hex key
- One 3/32" hex driver
- Owner's manual

Save the shipping carton and all packing material. Though it may be inconvenient to store, it'll come in handy for shipping if you move, or if the N°31 needs to be shipped for service.

To set up your N°31, you'll need:

- A soft cloth or towel (step 2)
- A digital-audio cable (step 9)

1. Make sure that the N°31 is unplugged from the AC power supply and disconnected from your digital processor.
2. Place the N°31 upright on a flat, stable surface. Carefully tip it so it rests **on its side**; protect its finish with a soft cloth.

PRECAUTION

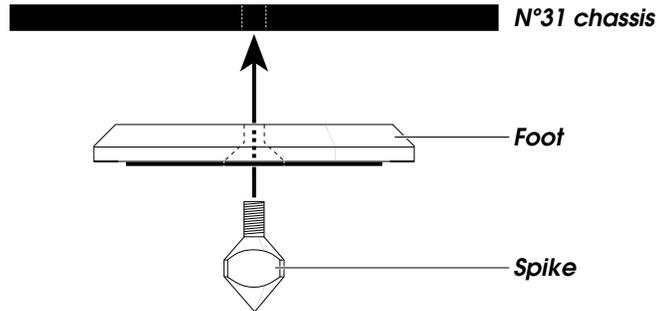
Never turn the N°31 upside-down (onto its top). Doing so will damage the transport mechanism and will void the warranty.

Installing the spikes (optional)

3. The N°31 is shipped so that it rests solidly on its four feet, one under each corner of the unit.

You may want to explore the potential sonic advantages of installing the specially designed "spikes" supplied with the N°31.

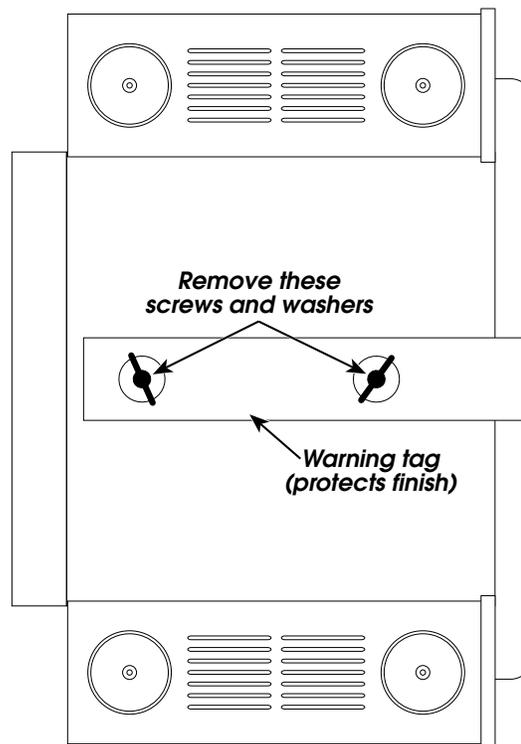
Install the spikes one at a time. Using the supplied 1/8" hex key, remove the screw securing the foot to the N°31's chassis. Insert the threaded end of the spike through the hole in the foot into the threaded hole in the chassis, then turn the spike clockwise until it's hand-tight. (Be careful not to over-tighten it.)



Repeat this procedure for the other three spikes.

Removing the transport screws

4. Locate the two transport screws on the bottom of the N°31.



5. Remove both transport screws by turning them counterclockwise (no tools are necessary).
6. **Save the transport screws, washers, and warning tag with the packing material. If you ever need to ship the N°31, you must replace them.** This is easiest when the N°31 is level and upright, with its feet supported on raised blocks and the transport screws inserted from underneath.

Placement

7. Turn the N°31 upright.

To keep interconnect cabling as short as possible, place the N°31 as close as possible to your digital processor. You may place it on a shelf or in a cabinet where it's convenient to operate.

The N°31 should rest on a level, stable surface. Avoid placing it where it'll be exposed to shocks or vibration (such as on an unstable table or near large loudspeakers). In general, place it as you would a turntable.

You should also place other associated equipment so that it doesn't induce hum in the N°31 and other sensitive components.

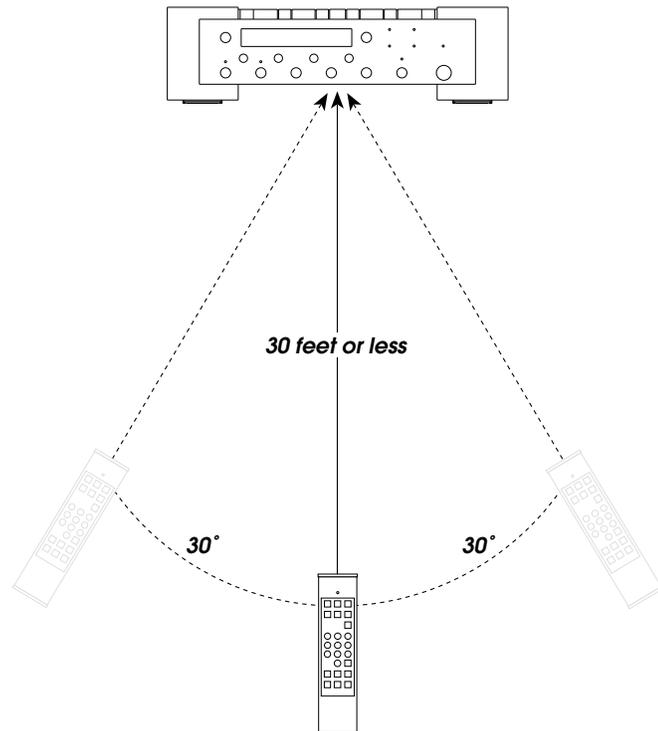
PRECAUTION

Interfering with the N°31's ventilation or that of another component could cause either to overheat, resulting in damage to your system. To allow heat dissipation through air circulation, allow 3 to 4 inches of clearance above the vents on the top of the N°31. Never block the vents on the bottom of the N°31.

To help with special installations and custom cabinetry, drawings are included in this manual. (See "Dimensions").

About IR communication

The Remote Control sends infrared (IR) commands through its projection lens, and the N°31 receives IR commands through its Remote sensor window. (See "Display").



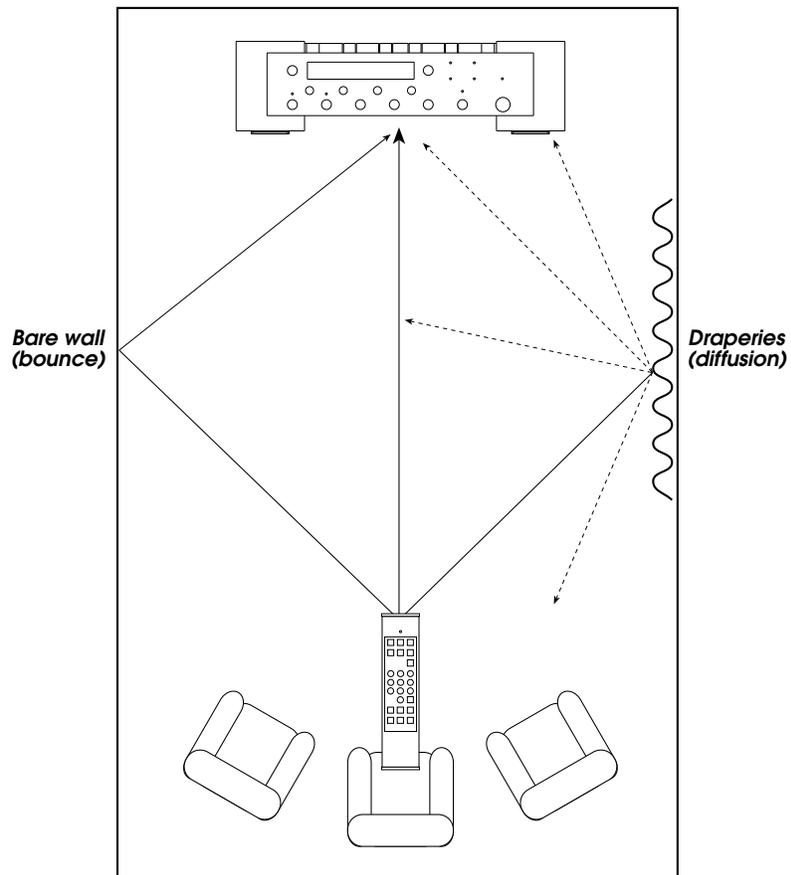
IR communication between the Remote Control and the N°31 will be affected by:

- Direct sunlight
- Interior lighting
- Wall, window, ceiling, and floor treatments
- The angle of the Remote Control relative to the N°31

If the N°31 will be subject to direct sunlight, place it no more than 10 feet from where you'll normally operate the Remote Control. Where bright sunlight virtually floods the room, IR communication may not be possible.

In a room lighted primarily with incandescent fixtures, place the N°31 no more than 25 feet from where you'll normally operate the Remote Control. In a room with fluorescent fixtures, this range will be reduced. Where bright fluorescent lighting virtually floods the room, IR communication may not be possible.

IR, like visible light, reacts differently when it meets different surfaces. Carpeting and draperies, for example, tend to diffuse (scatter) IR and interfere with its transmission. Glossy or reflective surfaces, such as mirrors and smooth walls, "bounce" (reflect) IR and won't interfere with its transmission. When placing the N°31, it's important to account for potential IR bounce and diffusion.



(For example, in a room with thick carpeting, heavy draperies, and many pieces of furniture, you'd place the N°31 closer to where you'll normally operate the Remote Control than you would in a sparsely furnished room with bare walls and hardwood flooring.)

If possible, install the N°31 directly opposite where you'll normally operate the Remote Control. In practice, the Remote Control will operate the N°31 at up to 30 degrees to either side of this direct line. To either side of this line, successful IR communication will depend on bounce and ambient lighting.

Connectors and cable

8. **Before making any audio connections, make sure that power is turned off to both the N°31 and your receiver, integrated amplifier, or preamplifier/power amplifier.**

The N°31 incorporates RCA-type and XLR-type electrical connectors, and EIAJ-type and ST-type optical connectors for digital-audio signal output.

The quality of the cables and connectors that you use with your N°31 can noticeably affect the quality of the sound that you hear from your speakers or headphones. For electrical interconnection, we recommend Madrigal Audio Laboratories **MDC** cable.

MDC-1 Pro is designed for AES/EBU interconnection (via XLR-type connectors); **MDC-2 FatBoy** is designed for SPDIF interconnection (via RCA-type connectors). MDC is available in various lengths, pre-terminated with RCA and XLR connectors. See your Mark Levinson dealer for more information.

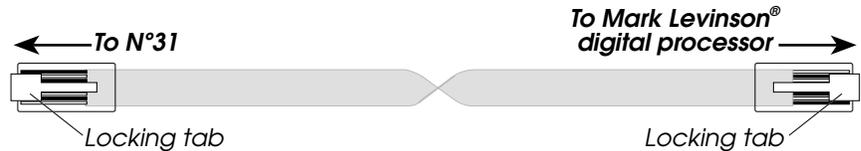
Audio connection

9. Using a high-quality digital-audio cable, connect the **digital output** of the N°31 to the digital input of your digital processor.

Connecting the communication ports (optional)

10. If connecting your N°31 to a compatible Mark Levinson digital processor, you'll want to take advantage of certain "linked" functions. (See "Linked functions.")

Using the Link cable, connect the N°31's **slave in** port to the **master** port on the Mark Levinson digital processor.



Make sure that the Link cable's locking tabs engage securely in the components' **communication ports**.

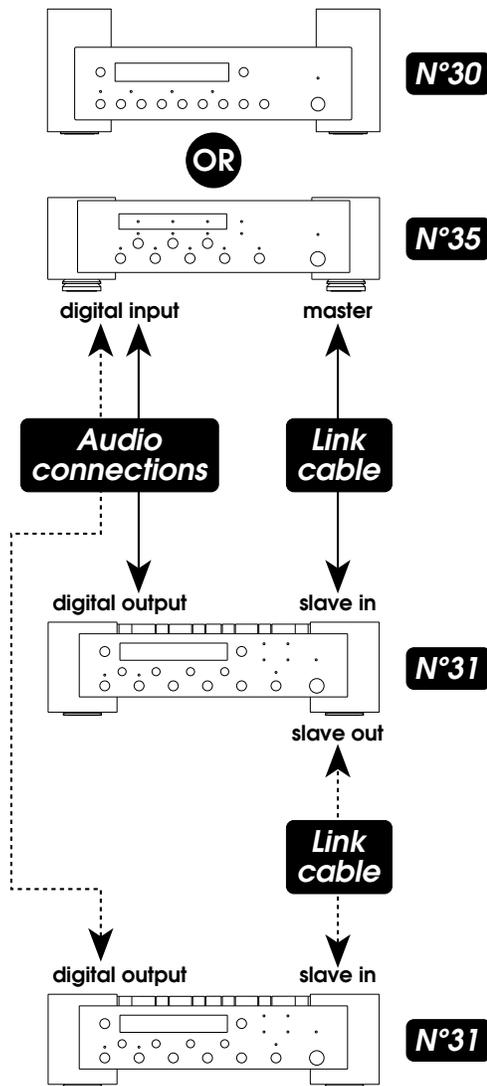
If linking a second N°31, connect the second N°31's **slave in** port to the first N°31's **slave out** port.

PRECAUTION

Connecting the communication ports other than as described in this manual will damage the N°31 and the digital processor, and will void the products' warranties.

**Quick-reference:
Connecting the N°31 to a
Mark Levinson
digital processor**

In summary, then, this diagram shows the connections you need to make to link your N°31 to a Mark Levinson digital processor.



Voltage setting

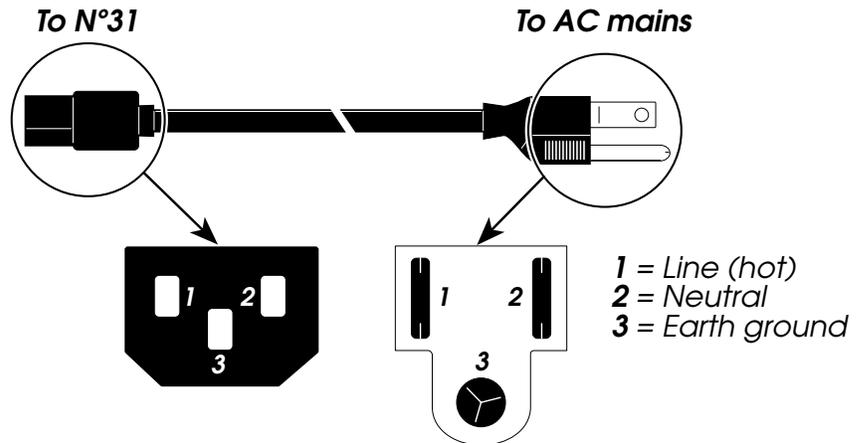
11. The N°31 is set internally for 100V, 120V, 200V, 220V, or 240V AC mains operation @ 50 or 60Hz. Make sure that the label on the rear panel of your N°31 indicates the correct AC operating voltage for your location. (See "Rear panel.")

If the voltage indicated is incorrect, or if you wish to change the AC operating voltage of the N°31, see your Mark Levinson dealer.

The N°31 can be powered by a normal 15-ampere AC mains line. If other devices are also powered from the same AC line, their additional power consumption must be taken into account.

Connecting the AC power cord

Connect the AC cord to the AC power cord socket on the rear panel of the N°31 (see "Rear panel"), then connect the AC cord to the AC mains.



Main power switch

12. Set the **main power** switch to the "I" (on) position; the **standby** LED on the N°31 will light. Allow the N°31's circuitry to stabilize for several minutes, then connect all associated equipment to the AC mains and activate it.

PRECAUTION

Never operate the main power switch without first making sure that power is turned off to your receiver, integrated amplifier, or preamplifier/power amplifier.

Note: The N°31 won't achieve its sonic potential right away — sonic performance is close to the optimum after 350 hours (or about two weeks of normal use). For the best performance, you may leave the **main power** switch on at all times, except when you won't be using your N°31 for a long period. (See "Important Safety Instructions").

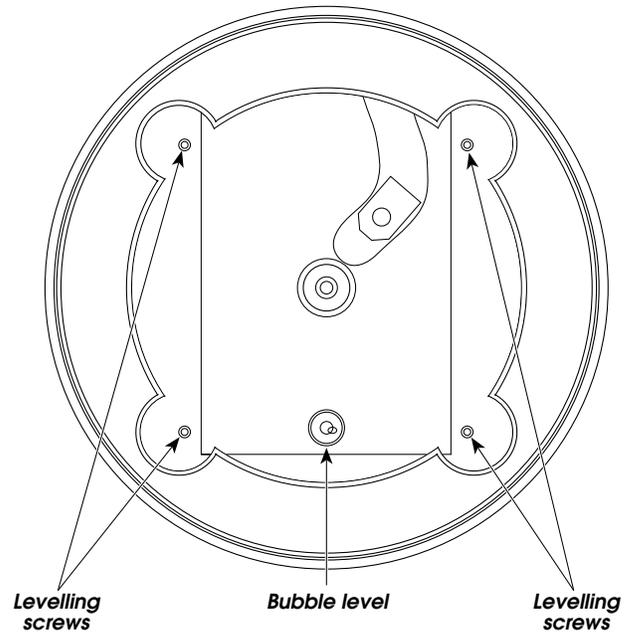
The N°31 may be turned on and off without significantly affecting its longevity. When it is turned on after being left turned off, allow about one hour before expecting optimal sonic performance.

Levelling the transport assembly

13. Press the **LID Open/Close** button on the top panel.

For the best performance, the N°31's transport assembly should be level. Four levelling screws (one inside each finger well) allow you to adjust this.

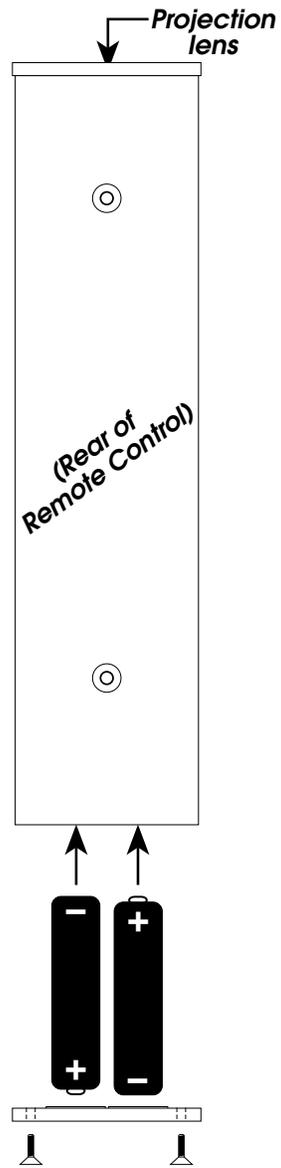
With the supplied 3/32" hex driver, and using the N°31's bubble level as a gauge, adjust one or more of these screws to bring the transport assembly to level. To lower a corner, turn the corresponding screw clockwise; to raise a corner, turn the screw counterclockwise.



14. Place the Disc Damper on the spindle, then press **LID Open/Close** again to close the LID.

Installing batteries in the Remote Control

15. Using the supplied 1/16" hex key, remove the two screws securing the cover of the Remote Control's battery compartment (the end opposite the projection lens).



16. Insert two AA batteries according to the symbols on the inside of the battery compartment cover. Replace the battery compartment cover and screws.

Basic operation

Before operating your N°31, become familiar with its controls and their locations. (See "Front panel," "Top panel," "CD transport assembly," and "Remote Control.")

Loading a CD

To load a CD for play:

1. Make sure that the **main power** switch is set to the "I" position.
2. Enable the N°31's controls by pressing **standby**.
3. Press **LID Open/Close** to open the LID.
4. Remove the Disc Damper from the spindle.
5. Place a CD onto the spindle, label side up. Handle the CD by the outer edges only.
6. Place the Damper on top of the CD. Make sure that it's centered and seated securely.
7. Close the LID by pressing **LID Open/Close** again.

In a few seconds, the Display will show the total number of tracks and their total playing time. The CD is now ready for play.

Temporarily overriding a previously saved program

Note: If you'd previously saved a program for the CD, the letter **P** will appear preceding the track number on the Display. (See "Programming.")

To override a previously saved program, press **program clear**; or on the Remote Control, press the **0** (zero) numbered key, then press **prg/time**. All of the CD's tracks will be accessible for basic operation, but the program will still be retained in the N°31's memory.

Playing all tracks in order

To play all tracks on the CD, press the **Play** button. All tracks will play in order. Play will stop automatically at the end of the CD.

Beginning play with other than the first track

To begin play with a track other than the first track:

1. Before pressing **Play**, press **Next** until the number of the desired track shows on the Display. If you pass the track you want to play, you can "back up" by pressing **Previous**. (You may also select the track using the numbered buttons on the Remote Control.)
2. Press **Play** to begin playing that track. The remaining tracks will play in order. Play will stop automatically at the end of the CD.

Replaying a track

To return to the beginning of a track while it's playing, press **Play**. Play will be suspended briefly, then that track will replay followed by the remaining tracks on the CD.

Playing tracks at random

Using the Remote Control, you may have the N°31 play tracks totally at random. To do this, press the **0** (zero) numbered key, then press **Play**.

While random play is active, the letter **R** will appear preceding the track number on the Display.

To cancel random play, press **Stop**.

Skipping to another track

You may skip to another track any time while a CD is playing. To move to another track, press **Next** (to go forward) or **Previous** (to go backward) until the number of the track you want to play shows on the Display. (You may also select the track using the numbered buttons on the Remote Control.) Play will resume as soon as the pickup reaches that track.

Searching for a specific passage

You may search for a particular passage on the CD using **Search Forward** and **Search Reverse**. Scan the CD until the laser pickup reaches the passage you want to hear. The search speed increases when you hold down **Search Forward** or **Search Reverse**, and the volume is reduced.

Note: If your N°31 is linked to a compatible Mark Levinson digital processor (via the **communication ports**), you have the option of muting the volume completely during search. (See "Linked functions.")

As soon as you release the button, play resumes.

If you search past the beginning or end of a track, the laser pickup will move on to the previous (or next) track.

If you try to search forward past the end of a CD or program, the laser pickup will stop at the end of the last track.

If you try to search backward past the beginning of a CD or program, the laser pickup will stop at the beginning of the first track. When you release **Search Reverse**, play will resume beginning with the first track.

Previewing a CD

Using the N°31's preview function, you may play only the introduction of each track on a CD, then resume normal play when you hear the track you like.

Once a CD is loaded and ready for play, press **preview**. Beginning with the first track, the N°31 will play the first ten seconds of the track, skip to the second track and play the first ten seconds of that track, and so on. While the **preview** function is active, the **track** part of the Display will flash.

To resume normal play, press **preview** again or press **Play**.

Using indexes	<p>If a CD has indexes, you may use them to begin play in the middle of a track.</p> <ol style="list-style-type: none"> 1. Press index mode. (If there was no CD in play, the Display will show INDEX SEARCH.) In a few seconds, the LED above the button will flash. 2. Using Next and Previous (or the numbered buttons on the Remote Control), select an index. 3. Press Play to begin play at the index you selected.
Beginning play in the middle of a track	<p>You may use prg/time on the Remote Control to begin play at a specific time — whether or not it corresponds to an index.</p> <ol style="list-style-type: none"> 1. Using Next and Previous (or the numbered buttons on the Remote Control), select a track. 2. Press prg/time, then press the numbered buttons corresponding to when you'd like play to begin. (The numbers you select will appear in the time part of the Display.) 3. To begin play at that point, press Play. <p>Note: The time you select depends on the selection you've made with the display mode button: elapsed or remaining, CD or track.</p> <p>For example, if you want to begin play one minute and thirty seconds into track 2, first press display mode until the elapsed time and on track LEDs light. Then select track 2 by pressing Next or Previous (or by entering 02). Press prg/time, enter 130, then press Play.</p>
The Pause function	<p>To suspend play while a CD is playing, press Pause. To resume play at the same point, press Pause again.</p> <p>If left in Pause for several minutes, the transport will stop spinning and the laser will turn off (thereby enhancing the longevity of both). This will be indicated by the Pause indicator in the display ("yy") flashing on and off. Alternatively, this Long Term Pause feature may be engaged by pressing and holding the Pause button until the indicator begins to flash in the display. Pressing Pause again will resume play at the point where Pause was first pressed, (after a short delay to allow the disc to get up to speed).</p> <p>To "cue up" the beginning of a CD or track, press Pause <i>before</i> pressing Play (5). To begin play, press Pause again. (You may also select another track or index while play is suspended.)</p>
Repeating the entire CD	<p>To repeat (continuously) all tracks on a CD, press repeat disc. While the repeat disc function is active, the LED above the button is lighted. To return to normal play, press repeat disc again.</p>
Repeating the current track	<p>To repeat (continuously) the track in play, press repeat track. While the repeat track function is active, the LED above the button is lighted. To return to normal play, press repeat track again.</p>

Repeating a specific passage

To repeat (continuously) a specific phrase or passage on a CD, press **repeat A>B** at the beginning of the passage you'd like to repeat. At the end of the passage, press **repeat A>B** again. The passage you selected will repeat continuously.

While the **repeat A>B** function is active, **A** then **B** will appear preceding the track number on the Display. To return to normal play, press the **repeat A>B** button again, or press **Play**.

Inverting playback polarity

If your N°31 is linked to a compatible Mark Levinson digital processor via the **communication ports**, you may change the playback polarity. (See "Linked functions.")

After loading a CD, press the **polarity invert** button on the digital processor's front panel, or press **d/a polarity** on the N°31's Remote Control, then press **Play**. The CD will play with inverted polarity.

If you want this CD to always play with inverted polarity, press **program save** before pressing **Play**. The Display will show **POLARITY PRG**, a small **P** will appear preceding the track number on the Display, and inverted polarity will be saved as a "program" for that CD. (See "Programming.")

Stopping play

To stop play before the end of the CD, press **Stop**. The Display will show the total number of tracks and their total playing time.

You may also stop play by pressing **LID Open/Close**. In this case, play will stop and the LID will open.

Programming

Rather than playing an entire CD, you may choose to play only certain selections. To do this, you create a "program" and store it in the N°31's memory.

Before using your N°31's programming features, become familiar with its controls and their locations (see "Front panel," "Top panel," "CD transport assembly," and "Remote Control"), as well as their basic functions (see "Basic operation").

Note: The N°31's basic functions operate as described in "Basic operation," except that they affect only the program, not the entire CD.

For instance, pressing **Next** during play skips to the next track or index in the sequence, whether or not it's the next track or index on the CD.

In the same way, pressing **repeat disc** will repeat the entire program, not the entire CD.

The N°31 allows up to 99 selections (tracks and indexes) per program. A program may include both tracks and indexes.

Assembling a program is possible only before play begins.

Note: The only programming functions that operate while a CD is playing are **program clear** and **program save**.

How the N°31 "remembers" programs

When you load a CD, the N°31 assigns it a unique identification code. If you assemble a program for a particular CD **and** save it into the N°31's memory, the N°31 "remembers" that CD's program.

The next time you load that CD, the N°31 will recognize the CD's identification code and automatically loads the previously saved program. (The letter **P** will appear preceding the track number on the Display.)

Note: Even if you'd previously saved a program for a CD, the N°31 allows you to override it (and have access to all tracks on the CD) without erasing it from the memory.

To override a previously saved program, press **program clear**; or on the Remote Control, press the **0** (zero) numbered key, then press **prg/time**. All of the CD's tracks will be accessible for basic operation, but the program will still be retained in the N°31's memory. (See "Basic operation.")

The N°31's memory can store programs for up to 1,300 different CDs. Saved programs remain in memory when you place the N°31 into **standby**, when you turn off the **main power** switch — even if AC power is interrupted.

Assembling a new program

To assemble a new program:

1. Load a CD, close the LID, and wait for the Display to show the number of tracks and their total playing time.
2. Using the **Next** and **Previous** (or the numbered buttons on the Remote Control), select the first track in your program.

You may also include indexes in your program. Press **index mode**, then use **Next** and **Previous** (or the numbered buttons on the Remote Control) to select an index.

Note: If your N°31 is linked to a compatible Mark Levinson digital processor via the **communication ports**, you may set the playback polarity independently for each track. (See "Linked functions.") Before continuing to step 3, press the **polarity invert** button on the digital processor's front panel, or press **d/a polarity** on the N°31's Remote Control.

3. Add the first selection to your program by pressing **program +** (on the Remote Control, press **prg/time**, then press **+**). The letter **P** will appear preceding the track number on the Display, along with **PRG +**.

Note: You must press **program +** within five seconds after making a selection, or the selection won't be recorded.

4. Assemble the rest of your program (up to 99 selections) by repeating steps 2 and 3. Make sure to press **program +** (or **prg/time** and **+**) after each selection.
5. When you've finished adding selections:
 - a. If you want to play your program without recording it in the N°31's memory, go on to step 6.
 - b. If you want to record your program in the N°31's memory, press **program save**; the Display will show **NEW PROGRAM**.
6. To play the program, press **Play**.

Shortcut: Ignoring tracks

If you want to play **most** of a CD, and just "ignore" a few tracks, you may want to use this shortcut:

1. Load a CD, close the LID, and wait for the Display to show the number of tracks and their total playing time. (See "Basic operation.")
2. Using the **Next** and **Previous** (or the numbered buttons on the Remote Control), select the first track you want to **eliminate** from your program.
3. "Ignore" the track by pressing **program -** (on the Remote Control, press **prg/time**, then press **-**). The letter **P** will appear preceding the track number on the Display, along with **PRG -**.
4. Repeat steps 2 and 3 for each track you want to ignore, making sure to press **program -** (or **prg/time** and **-**) each time.

5. When you've finished eliminating tracks:
 - a. If you want to play your program without recording it in the N°31's memory, go on to step 6.
 - b. If you want to record your program in the N°31's memory, press **program save**; the Display will show **NEW PROGRAM**.
6. To play the program, press **Play**.

Reviewing a program

To review your program before playing it:

1. Load a CD for which you've already saved a program (the letter **P** will appear preceding the track number on the Display); or load an unprogrammed CD, then assemble and save a program.
2. Press **program review**. The Display will show the first selection in your program.

For example, if track 3 is the first selection in your program, the Display would show **P03 IS 1st**. If index 2 on track 5 is the first selection, the Display would show **P05 02 IS 1**.

Note: If you press **program review** when there is no program in the N°31's memory, the Display will show **NO PROGRAM**.

3. To view the next selection, press **program review** again, and so on.

Press **program review** for each selection in your program. After you view the last selection, the Display will show **PROGRAM END**.

Erasing a selection from a program

You may erase any selection from a previously saved program. To erase a selection:

1. Load a CD for which you've already saved a program (the letter **P** will appear preceding the track number on the Display); or load an unprogrammed CD, then assemble and save a program.
2. Press **program review**. The Display will show the first selection in your program.
3. Press **program review** until the selection you want to erase appears on the Display.
4. Press **program -** (on the Remote Control, press **prg/time**, then press **-**); the Display will show the track you erased, along with **PRG -**.
5. Repeat steps 3 and 4 for each selection you want to erase from your program.

When you finish erasing selections from your program, press **program save**; the Display will show **PROG CHANGED**.

Adding a selection to a program

You also may add a selection to the end of a previously saved program. To add a selection:

1. Load a CD for which you've already saved a program (the letter **P** will appear preceding the track number on the Display); or load an unprogrammed CD, then assemble and save a program.
2. Using the **Next** and **Previous** (or the numbered buttons on the Remote Control), select the track you want to add to your program.

You may also include indexes in your program. Press **index mode**, then use **Next** and **Previous** (or the numbered buttons on the Remote Control) to select an index.

Note: If your N°31 is linked to a compatible Mark Levinson digital processor via the **communication ports**, you may set the playback polarity independently for each track. (See "Linked functions.")

Before continuing to step 3, press the **polarity invert** button on the digital processor's front panel, or press **d/a polarity** on the N°31's Remote Control.

3. Add the selection to your program by pressing **program +** (on the Remote Control, press **prg/time**, then press **+**).

Note: You must press **program +** (or **prg/time** and **+**) within five seconds after making a selection, or the selection won't be recorded.

4. Repeat steps 2 and 3 for each selection you want to add to your program. Make sure to press **program +** (or **prg/time** and **+**) after each selection.
5. When you've finished adding selections, press **program save**; the Display will show **PROG CHANGED**.

Temporarily overriding a previously saved program

To override a previously saved program (temporarily), press **program clear** (on the Remote Control, press the **0** numbered key, then press **prg/time**); the Display will show **PROG CLEARED**.

All of the CD's tracks will be accessible for basic operation, but the program will still be retained in the N°31's memory. (See "Basic operation.")

Note: If you press **program save** after pressing **program clear**, the Display will show **PROG DELETED** and the program will be erased from the N°31's memory.

Erasing a program

To erase a previously saved program **permanently** from the N°31's memory:

1. Press **program clear**; the Display will show **PROG CLEARED**.
2. Press **program save**; the Display will show **PROG DELETED**.

Linked functions

The N°31 has the ability to "link" seven of its functions to certain compatible Mark Levinson digital processors (like the N°30 Reference Digital Processor and the N°35 Digital Processor).

Note: To take advantage of linked functions, you must connect the N°31 to the digital processor via their **communication ports**. (See "Rear panel" and "Set-up and installation.")

There are seven linked functions.

Record link

■ **Record link (N°30 only):** While the N°31 is selected as the N°30's recording source (a CD must be in play), this link helps prevent you from inadvertently disrupting the recording process.

If you attempt to use any of the N°31's functions that might disrupt the recording process (**Stop**, **LID Open/Close**, etc.), the N°31 will block that function and its Display will show **RECORDING**.

Likewise, if you attempt to place the N°30 into **standby**, the N°31 will block that function and N°30's Display will show **RECORDING**.

To override the record link, press the function button **twice**. (For example, if you **do** want to stop the CD that's playing, even though it's being recorded, press the **Stop** button twice in succession.)

When the N°31 is first turned on, the record link setting is **off**.

Mute link

■ **Mute link:** This link automatically mutes the volume during search (that is, whenever you press **Search Forward** or **Search Reverse**).

When the N°31 is first turned on, the mute link setting is **off**.

Standby link

■ **Standby link:** This feature links the standby modes of the N°31 and the digital processor.

If both the N°31 and the digital processor are in standby mode, pressing the N°31's **standby** button will take both components out of standby mode (making them ready to operate).

If both the N°31 and the digital processor are "on" (not in standby mode), pressing the digital processor's **standby** button will place both components into standby mode.

When the N°31 is first turned on, the standby link setting is **on**.

Alias link

- **Alias link (N°30 only):** The N°30 allows you to set an "input alias" for each of its sources; this alias appears on the N°30's Display.

The N°31's alias link automatically overrides the alias setting for its input. When you select the N°31's input, the N°30 will show **No31** on its Display.

When the N°31 is first turned on, the alias link setting is **on**.

Play link

- **Play link:** When you press the N°31's **Play** button, this link automatically selects the N°31's input on the digital processor.

Note: If you've connected the N°31 to two or more of the digital processor's inputs, the play link will look first for AES/EBU interconnection, then SPDIF, then ST, and finally EIAJ.

When the N°31 is first turned on, the play link setting is **on**.

Display link

- **Display link:** This links the **display intensity** functions of the N°31 and the digital processor.

When the components are linked, both Displays will be set to the same brightness. Pressing **display intensity** on either component will affect both Displays.

Note: Though the N°35 has no **display intensity** button or alphanumeric Display, its LEDs will be linked to the N°31's LEDs.

When the N°31 is first turned on, the display link setting is **on**.

Polarity link

- **Polarity link:** This links the **d/a polarity** button on the N°31's Remote Control to the **polarity invert** function of the digital processor.

The polarity link also allows inverted polarity to be saved with a program. When inverted polarity is part of a saved program, this link turns on the digital processor's **polarity invert** function. (See "Programming.")

The polarity link setting is always **on**, and can't be changed.

In addition to the Linked Functions, the N°31 has the ability to play "Index 0," the CD equivalent of the "lead-in grooves" on an LP.

Index 0

- **Index 0:** When this option has been selected, pressing **Play** will begin each track at **Index 0** rather than at the usual Index 1, resulting in a brief "count-down" to the beginning of the music.

If you prefer all track and index operations to use Index 0 as the effective beginning of a given track (to hear the applause before a song on a live recording, for example), you may select **Index 0** in the **Set Options** menu, described on the next page.

Changing link settings

The N°31 allows you to change the Index 0 option and six of its link settings to suit your own preferences.

Note: The polarity link setting is always **on**, and can't be changed.

1. Make sure that the **main power** switch is set to the "on" ("I") position.
2. Enable the N°31's controls by pressing **standby**.

Note: To change your N°31's link settings, your Mark Levinson digital processor also must be connected (linked) and turned on.

3. Press the front-panel **display mode** button and hold it until **SET OPTIONS** appears on the Display.

If you continue holding the **display mode** button, the Display will show each of your N°31's options, in this order:

INDEX 0 –
RECORD LINK –
MUTE LINK –
STANDBYLINK +
ALIAS LINK +
PLAY LINK +
DISPLAYLINK +

+ indicates that the option is turned **on**
– indicates that the option is turned **off**

If you continue holding **display mode** after the Display shows **DISPLAYLINK+**, the links are shown again beginning with **INDEX 0 –**, then **RECORD LINK–**, then **MUTE LINK–**, and so on.

4. When the Display shows the link setting you want to change, release the **display mode** button.

If you release **display mode** too soon, simply press **display mode** once to move to the next link.

Note: In several seconds, if you make no changes to the link settings, the Display will go back into its standard mode. To return to **SET OPTIONS**, repeat step 3.

5. To turn the link **on**, press the **program +** button; to turn the link **off**, press the **program –** button.
6. Repeat steps 4 and 5 for each link setting you want to change.

When you've finished, wait several seconds for the Display to return to its standard mode.

Your link settings remain in memory when you place the N°31 into **standby**, when you turn off the **main power** switch — even if AC power is interrupted.

Troubleshooting

In general, refer any service problems to your Mark Levinson dealer. Before contacting your dealer, however, check to see if the problem is listed here. If it is, try the suggested solutions. If none of these solves the problem, contact your Mark Levinson dealer.

PRECAUTION

1. The N°31 won't function, and the Display is dark.

- The **main power** switch on the rear panel isn't turned on.

Never operate the main power switch without first making sure that power is turned off to your receiver, integrated amplifier, or preamplifier/power amplifier.

- The **standby** button on the front panel isn't turned on.
- The N°31 isn't plugged into the AC mains.
- The wall socket, adapter, or extension cord is faulty.
- There's a tripped circuit breaker or blown fuse in the wall outlet's circuit.
- The N°31's fuse is blown (contact your Mark Levinson dealer).

2. The N°31's LID won't close.

- The Disc Damper is misaligned.
- The Disc Damper or another object is blocking the LID.

3. The N°31 won't play a CD inserted in the player.

- The CD is inserted upside down.
- The Disc Damper is missing or misaligned.
- The transport screws weren't removed during set-up.
- There may be condensation (moisture) on the laser pickup. This can happen if the N°31 is moved from a cold environment to a warm one. Set the **main power** switch to its "I" position, and leave it on for an hour before playing a CD.

4. No sound comes out of the speakers or headphones.

- The proper source isn't selected on your digital processor.
- The audio cables are connected incorrectly.

5. When a CD is playing, the sound "skips."

- The CD is scratched or dirty.
- The N°31 is on an unstable surface or is too close to your speakers.
- The transport screws weren't removed during set-up.

6. The sound from the speakers or headphones is distorted.

- The N°31 is connected to the wrong inputs of your digital processor. Check all connections.

7. The Remote Control doesn't operate the N°31.

- The Remote Control is at the wrong angle relative to the N°31, and the N°31 can't receive the signal.
- The sensor window on the front panel of the N°31 is dirty or blocked.
- The Remote Control's projection lens is dirty.
- Fluorescent lighting or sunlight is interfering with the operation of the Remote Control.
- The Remote Control's batteries are weak and need to be replaced.
- The Remote Control's batteries are installed incorrectly.

8. The linked functions don't work.

- The N°31 isn't connected to a compatible Mark Levinson digital processor.
- The Link cable is disconnected, or is connected incorrectly.
- The digital audio cable is disconnected, or is connected incorrectly.
- Try turning off/disconnecting AC power from both the N°31 and the Mark Levinson digital processor. After several seconds, restore AC power to the digital processor, **then** turn on the N°31's **main power** switch.

PRECAUTION

Never operate the main power switch without first making sure that power is turned off to your receiver, integrated amplifier, or preamplifier/power amplifier.

9. The Display shows BAD PROGRAMS.

- Contact your Mark Levinson dealer immediately.

Care and maintenance

Nº31 To remove dust from the cabinet of the Nº31, use a feather duster. To remove dirt and fingerprints, we recommend isopropyl alcohol applied to a soft cloth. **Don't** apply water, dusting sprays, solvents, abrasives, or cleaning fluids directly to the cabinet.

Remote Control Make sure that the Remote sensor window on the front panel and the Remote Control's projection lens are kept clean and dust-free.

Fluorescent lighting and sunlight may interfere with the operation of the Remote Control. Avoid placing the Nº31 near fluorescent lamps or in direct sunlight.

When the Remote Control's batteries need to be replaced, use only AA batteries; always replace both batteries at the same time. If you don't plan to use the Remote Control often, remove the batteries. When not used for an extended period, even "leak-proof" batteries can leak corrosive acids that will damage the Remote Control (and will void the warranty).

Compact discs A CD, handled carefully, will last indefinitely. A warped, dusty, or scratched CD can cause playback problems or may sound noisy.

Handle a CD by the outer edges only; if necessary, support it with your index finger at the center hole. **Don't** touch the bottom (unprinted) side of the CD, and **never** apply stickers, labels, or adhesive-backed rings to either side of the CD.

If a CD becomes dirty, use a silicone-treated cloth (like those made for cleaning camera lenses) or a special CD cleaning kit. **Don't** use solvents, anti-static fluids, or cleaners made for cleaning phonograph records.

When you're finished playing a CD, always return it to its plastic case. Store your CDs where they won't be exposed to direct sunlight, high humidity, or extremely high or low temperatures.

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°31 yield excellent results by any standards. However, only those specifications that apply to its actual operation are included here.

- Direct digital output, RCA: SPDIF 75Ω
- Direct digital output, XLR: AES/EBU 110Ω
- Direct digital output, ST: AT&T optical standard
- Direct digital output, EIAJ: TOSLINK™ optical standard
- Mains voltage: 100V, 120V, 200V, 220V, 240V
- Mains frequency: 50/60 Hz

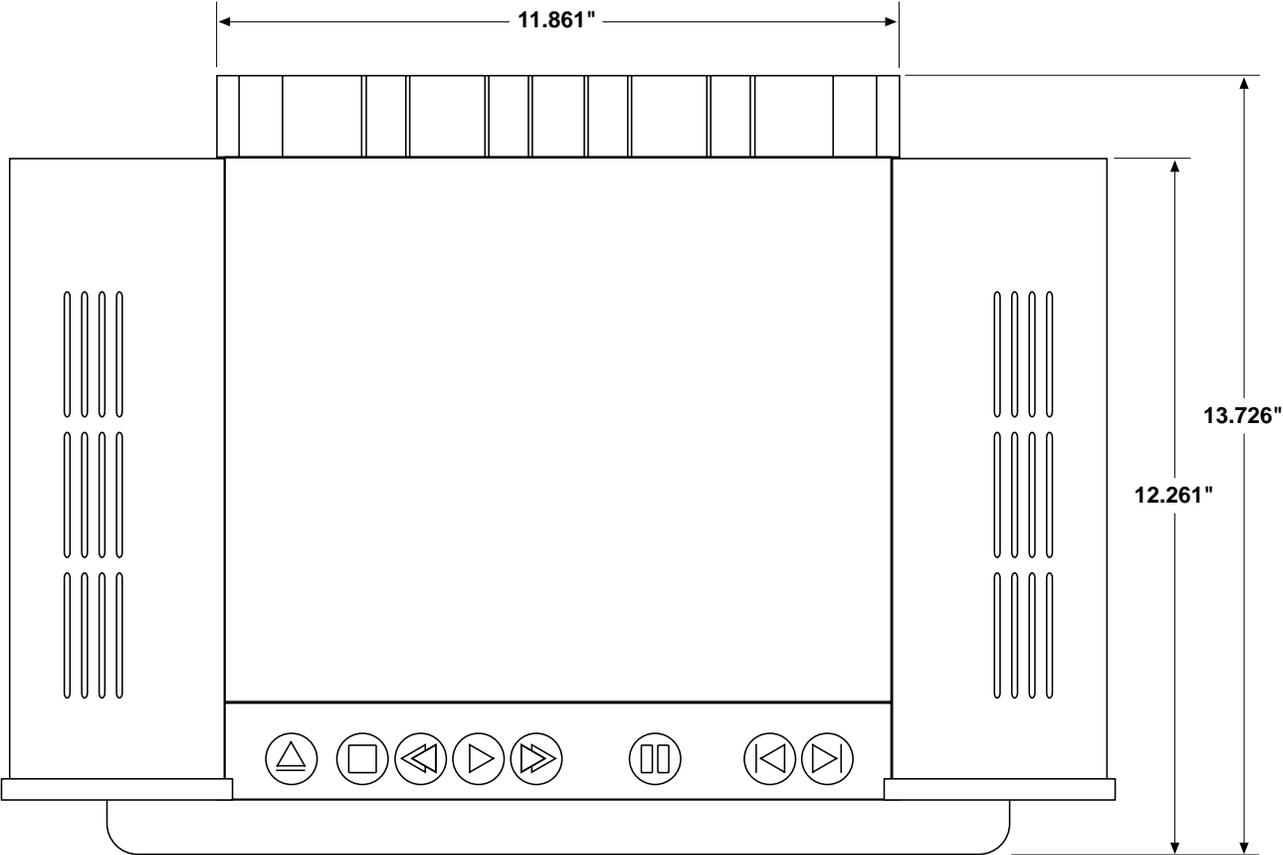
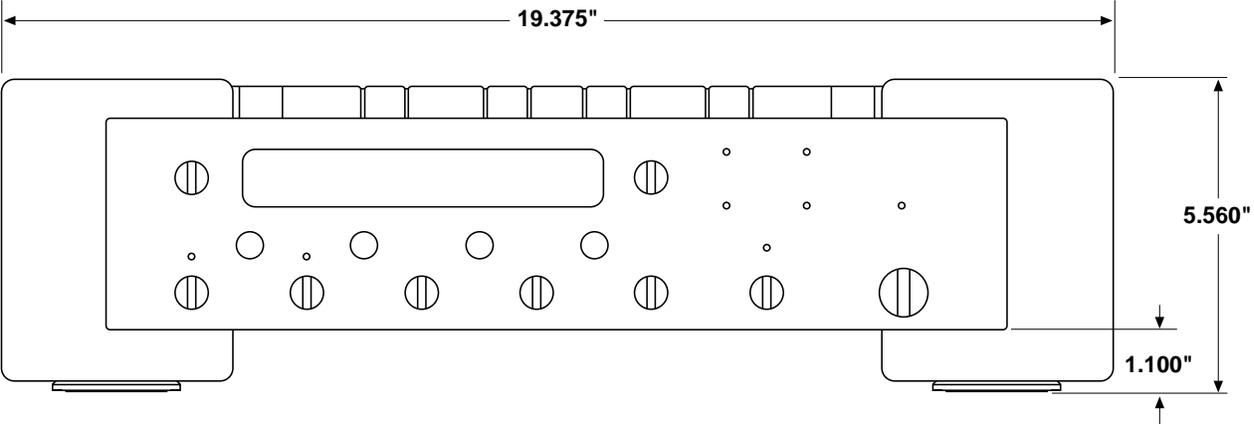
- Overall dimensions: See "Dimensions"
- Shipping weight: 62 lbs. (28.2kg)

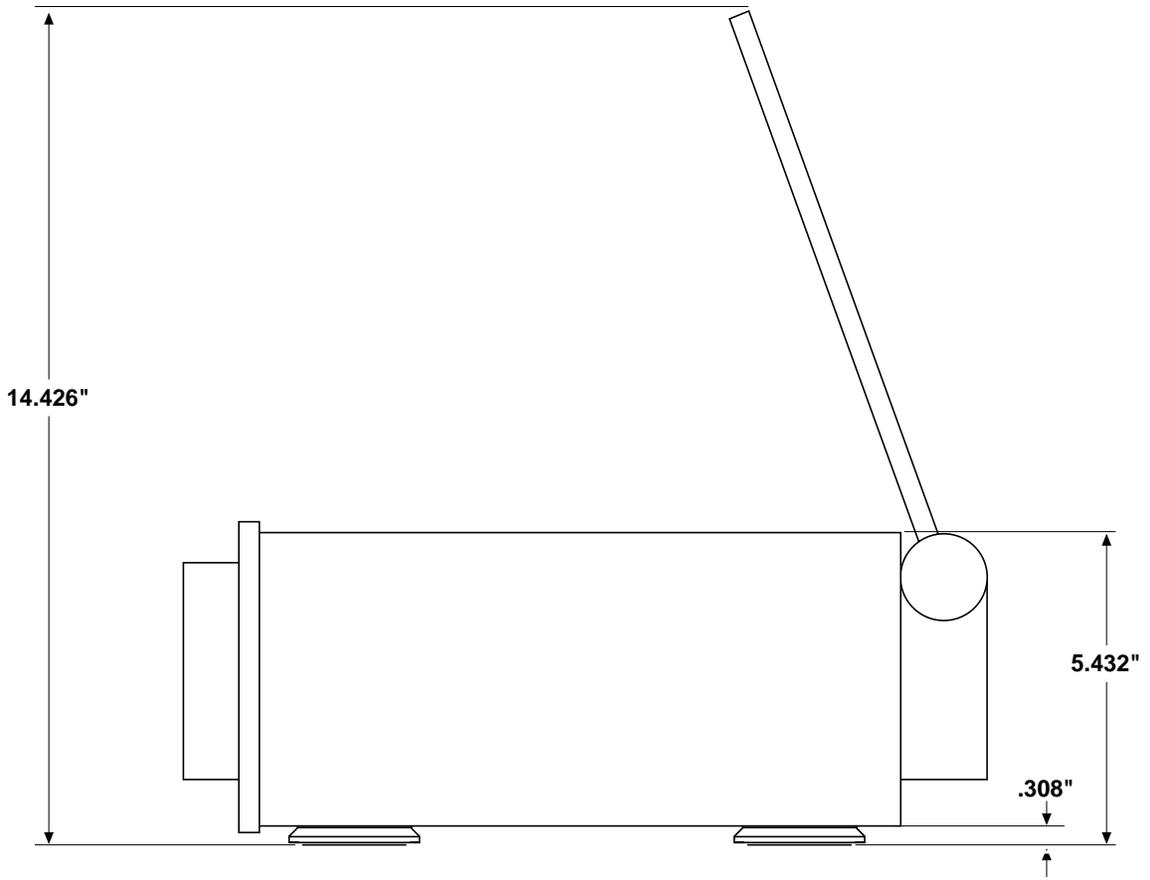
- Connector complement:
 - 1 female RCA-type connector
 - 1 male XLR-type connector
 - 1 EIAJ-type optical connector
 - 1 ST-type optical connector
 - 2 RJ45 connectors
 - 1 IEC mains connector

If purchased in North America, this Mark Levinson product's warranty is owner-transferable. Warranty conditions are valid only in the country where the product was originally purchased.

For warranty information and conditions on products purchased outside of North America, contact your local dealer or regional distributor.

Dimensions





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