

# Owner's Manual

*Nēo* Series


340i

*Integrated Amplifier*

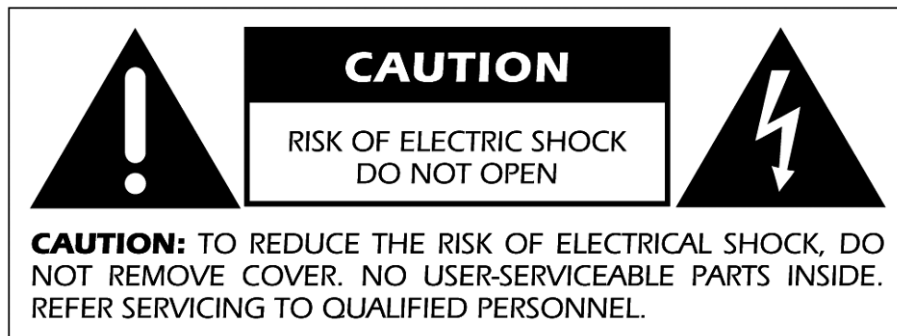


M O O N

## Important Safety Instructions

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves or another apparatus that produces heat.
9. Do not defeat the safety purpose of the polarized or grounding type plug. A polarized plug has two blades with one wider than the other. A grounding-type plug has two blades and a third grounding prong. The wide blade or the third prong is provided for safety. If the provided plug does not fit into the outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus. Unplug mains cord during transportation.
11. Only use attachments and accessories specified by the manufacturer.
12.  Use only with the cart, stand, tripod, bracket, or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/apparatus combination to avoid injury from tip over.
13. Unplug this apparatus during lightning storms or when unused for long periods of time.
14. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as when the power cord or plug has been damaged; liquid has been spilled or objects have fallen into the apparatus; or the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
15. No naked flame sources, such as candles, should be placed on the apparatus.

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



## Important Safety Instructions (cont'd)



The lightning flash with the 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

***Please read all instructions and precautions carefully and completely before operating your Simaudio MOON Nêo 340i Integrated Amplifier.***

1. **ALWAYS** disconnect your entire system from the AC mains before connecting or disconnecting any cables, or when cleaning any component. To completely disconnect this apparatus from the AC mains, disconnect the power supply cord plug from the AC receptacle.
2. The MOON 340i must be terminated with a three-conductor AC mains power cord which includes a protective earthing connection. To prevent shock hazard, all three connections must **ALWAYS** be used. Connect the MOON 340i only to an AC source of the proper voltage; Both the shipping box and rear panel serial number label will indicate the correct voltage. Use of any other voltage will likely damage the unit and void the warranty
3. AC extension cords are **NOT** recommended for use with this product. The mains plug of the power supply cord shall remain readily accessible.
4. **NEVER** use flammable or combustible chemicals for cleaning audio components.
5. **NEVER** operate the MOON 340i with any covers removed. There are no user-serviceable parts inside. An open unit, especially if it is still connected to an AC source, presents a potentially lethal shock hazard. Refer all questions to authorized service personnel only.
6. **NEVER** wet the inside of the MOON 340i with any liquid. If a liquid substance does enter your MOON 340i, immediately disconnect it from AC mains and take it to your MOON dealer for a complete check-up.
7. **NEVER** expose the MOON 340i to dripping or splashing of liquids and no objects filled with liquids, such as vases, shall be placed on top.
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 the MOON 340i. If a problem occurs contact your MOON dealer.
12. **NEVER** expose the MOON 340i to extremely high or low temperatures.
13. **NEVER** operate the MOON 340i in an explosive atmosphere.
14. **ALWAYS** keep electrical equipment out of reach of children.
15. **ALWAYS** unplug sensitive electronic equipment during lightning storms.
16. **WARNING:** Do not expose batteries or battery pack to excessive heat such as sunshine, or fire or the like.



## Table of Contents

Introduction .....	5
Unpacking .....	6
Installation & Placement .....	6
Front Panel Controls .....	7
Optional Digital Inputs .....	7
Optional Phono Section .....	9
Optional Balanced Inputs .....	11
Rear Panel Connections .....	11
SimLink™ .....	12
Operating the 340i .....	13
Remote Operation .....	14
Specifications .....	15

[www.simaudio.com](http://www.simaudio.com)

Simaudio Ltd., 1345 Newton Road  
Boucherville, Quebec J4B 5H2 CANADA

Date Code: 20130822

## Introduction

Thank you for selecting the **Nēo 340i** Integrated Amplifier as a part of your hi-fi reproduction system. This Integrated amplifier has been designed to offer state-of-the-art high-end performance in an elegant package, while retaining all the sonic hallmarks on which Simaudio has made its reputation. We have spared no effort to ensure that it is among the finest integrated amplifiers available. We have been building high-performance audio equipment for over 30 years, and the know-how gained through our cumulative experience is an important reason why **MOON** Integrated amplifiers are so musically satisfying.

The performance of your **340i** will continue to improve during the first 300 hours of listening. This is the result of a "break-in" period required for the numerous high quality electronic parts used throughout this amplifier.

Before setting up your new **Nēo 340i**, we encourage you to please read this manual thoroughly to properly acquaint yourself with its features. We hope you enjoy listening to the **Nēo 340i** Integrated Amplifier as much as the pride we have taken in creating this fine audio product. We understand the power and emotion of music and build our products with the goal of faithfully capturing these elusive qualities.

*The information contained in this manual is subject to change without notice. The most current version of this manual is available on our official website at <http://www.simaudio.com/manuals.htm>*

Your **Nēo 340i** Integrated Amplifier incorporates many significant design features to achieve its "world-class" level of performance. This is an abbreviated list of the more important features:

**Five line-level inputs** including one front-mounted 1/8" mini-jack for personal media players

One single-ended audio input which functions as a "**pass-through**", bypassing the gain stage to accommodate a component such as a home-theater processor, whose own volume control is used instead

*Optional* internal **digital-to-analog converter** circuit for use with a PC, digital music server or external transport, etc

*Optional* internal **phono preamp** is available with adjustments for gain level as well as capacitance and resistance loading

*Optional* line-level **balanced XLR input**

**Headphone output** on 1/4" TRS jack located on the front panel

**Proprietary MOON Bipolar Output transistors** with unprecedented gain linearity resulting in improved bass response and even more accurate sonic reproduction

**Class A output** to 5 watts for greater efficiency

**IR input** for external control

**SimLink™** controller port allows for 2-way communications between other compatible MOON components

**RS-232 port** for i) full unsolicited bidirectional feedback in custom installation setups and ii) firmware updates

**12 Volt Trigger** output

**Rigid chassis construction** to minimize the effects of external vibrations

Designed to be **powered up at all times** for optimal performance

**Low operating temperature** for an ultra-long life expectancy.

## Unpacking

The **Nēo 340i** Integrated Amplifier is heavy component and should be removed from its box with care. We strongly advise that you seek another person to help lift the amplifier out of its box, and place it in its final location.

The following accessories should be included inside the box with your amplifier:

- ✓ *AC power cable*
- ✓ *'CRM-2' remote control with two 'AA' batteries*
- ✓ *This owner's manual*
- ✓ *Warranty and product registration information (USA and Canada only)*

Once the **Nēo 340i** is unpacked, inspect it thoroughly and report any damage to your dealer immediately. We suggest that you keep all of the original packaging, storing it in a safe, dry place in case you're required to transport this product. The customized packaging is specially designed to protect the **340i** from any potential damage during transit.

Please write the serial number of your new Simaudio **Nēo 340i** in the space provided below for future reference.

**Serial No.:** \_\_\_\_\_

## Installation & Placement

The **Nēo 340i** Integrated Amplifier is both powerful and heavy. It requires reasonable ventilation to maintain an optimum and consistent operating temperature, especially since it will radiate heat when driven hard. Consequently, it should be placed in a location with empty space around it for proper heat dissipation. You should never place another component on top of this integrated amplifier. As well, it should be placed on a solid level surface. You should avoid placing it near a heat source or inside a closed cabinet that is not well ventilated as this could compromise the amplifier's performance and reliability. The **340i** uses a large toroidal transformer in its power supply; even though it is well shielded, you should not place this integrated amplifier too close to source components sensitive to EMI, such as turntables, phono preamplifiers and CD Players. Finally, *you should never place another component directly on top of this integrated amplifier.*

***If you intend to use the Nēo 340i's USB input connection with a Windows-based computer, you will need to install our USB HD driver, which can be downloaded from our website:***

<http://www.simaudio.com/downloads.htm>

***Note: Apple-based computers don't require this driver.***

## Front Panel Controls

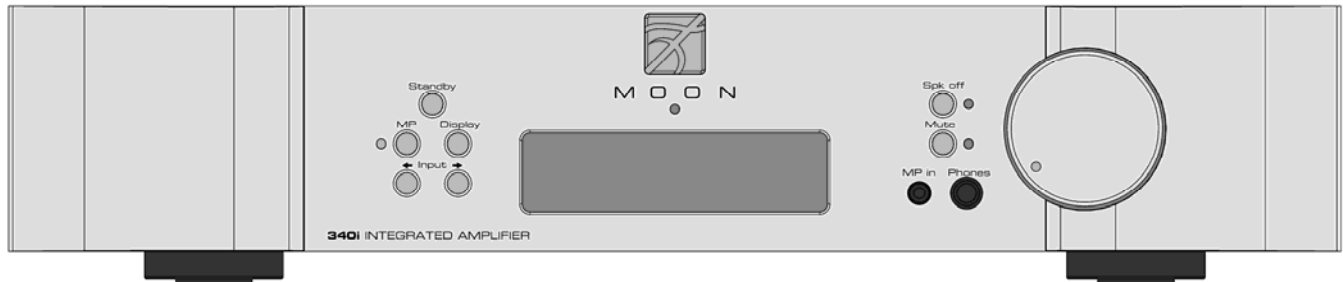


Figure 1: Nēo 340i Front panel

The front panel will look similar to Figure 1 (above). The large display window indicates the selected input source. If your **Nēo 340i** includes the digital input option, additional information will appear in the display window. Refer to the section entitled "Optional Digital Inputs" on page 8 for further details.

The "Standby" button disengages the input section from the rest of the **340i's** circuitry. When in "Standby" mode all audio circuitry remains powered up to help maintain optimal performance. When switching back from "Standby" to the "on" mode, the blue LED directly above the display window will illuminate. As well, the current 'input' will be memorized from the previous listening session. The blue indicator LED turns off when the **340i** is in "Standby" mode.

The "MP" button (for Media Player) has its corresponding input connection located on the right side of the front panel for easy access. It uses a 1/8" mini-jack connector which is the most common type of connection found on portable media players. When selected, the corresponding red LED, located to the left of the button, will illuminate. When the "MP" input is in use the display window automatically turns off.

The "Display" button allows you to turn the digital display on and off.

The two (2) buttons labeled ◀ **INPUT** ▶ allow you to sequentially scroll, either forward (▶) or backward (◀) through all of the available inputs. Depending on the installed options, the order of the inputs is as follows going forward (▶):

Basic Unit: "CD", "A1", "A2" and "A3"

All options installed: "CD", "A1", "A2", "PH", "B1", "D1", "D2", "D3" and "D4"

The above abbreviations correspond directly to the labeling of the rear panel inputs. By default the "CD" input is intended for use with a CD Player, however you can connect another type of source component to it. "A1", "A2" and "A3" are intended for use with any type of source component that outputs analog signal. If you have installed the optional phono section, the "A3" input is replaced by "PH". If you have installed the balanced input option, "B1" will appear after the "A3" / "PH" input. Finally, if you have installed the digital input option, "D1", "D2", "D3" and "D4" will appear after either "B1" (if you have the balanced option) or "A3" / "PH". The optional inputs only appear if they are installed.

The "Spk off" button turns off the output signal **only** to the loudspeakers connected to the **Nēo 340i**. This feature is very useful when using headphones. When this function is engaged, the red LED located to the right will illuminate.

The "Mute" button mutes the output signal to the loudspeaker terminals, headphone jack, as well as both the fixed and variable line output connectors (refer to the section entitled "Rear Panel Connections" for further details). Pressing the "Mute" button a second time will reinstate the volume back to its previous level. When the output signal is muted, the red LED to the right will repeatedly flash on and off.

## Front Panel Controls (Cont'd)

The "A2" input can be configured as a '*pass-through*' which bypasses the **340i**'s gain control section, allowing you to control the gain setting via the connected source component's own volume control – a home theater processor for example; In other words, this input operates like the input of a power amplifier. In '*pass-through* mode, adjusting the volume on the **340i** will have no effect whatsoever when the "A2" input is selected. To put the "A2" input into '*pass-through* mode, press and hold down the "Mute" button for approximately 2 seconds while on the "A2" input. The front panel display will change from "A2" to "HT". To reconfigure the "A2" input to function like the other inputs, repeat the this procedure. Powering down the **340i** via the rear panel rocker switch will automatically reset the the "A2" to the factory default 'normal' mode.

The rotary "Volume" control determines the output level. The volume control has an embedded red LED to indicate its actual position.

The "Phones" jack is used for connecting a pair of stereo headphones to the **Nëo 340i**. The input connector is a standard ¼" stereo TRS jack. When a pair of headphones are used with the **340i**, the loudspeakers will still receive an output signal. However, you should use the aforementioned "Spk off" button for private listening.

## Optional Digital Inputs

The Digital Input option includes four (4) separate inputs: "D1" uses an optical Toslink connector, "D2" and "D3" use S/PDIF on an female RCA connector and "D4" uses a type-B USB connector. The "D1" is intended for use with a source equipped with a TosLink digital output such as a satellite dish receiver; The "D2" and "D3" inputs are intended for use with a source equipped with a S/PDIF digital output such as a DVD player, music server or disc transport. The "D4" input is for use with a computer equipped with a USB connector and music player software such as iTunes or Winamp; you cannot connect a USB flash drive to the "D4" input.

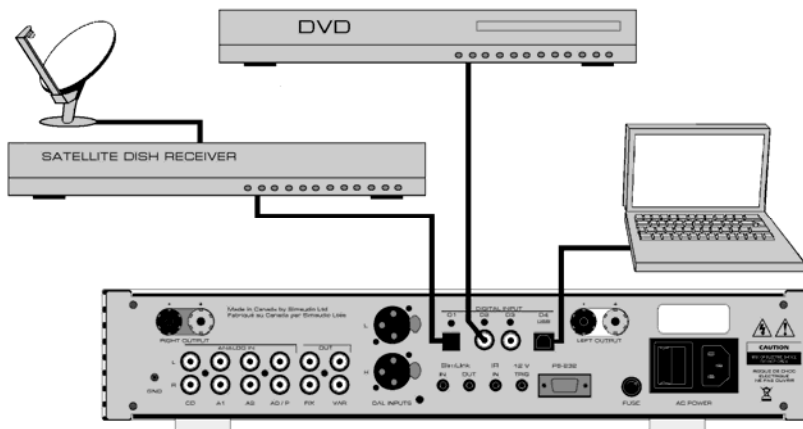


Figure 2: Nëo 340i Optional Digital Inputs – connection examples

When you select one of the digital inputs as described in the aforementioned section, the display window will show which of the four digital inputs is selected. At the same time, the right side of the display window will initially show four dashes as follows "----" which indicate that the **340i** is in the process of locking onto the external digital signal – this may take several seconds. When the **340i** successfully locks onto the digital signal, the four dashes will be replaced by the sampling rate of this digital signal. When the signal cannot be locked onto, "----" remains in the display window. The optional digital-to-analog circuit option inside the **Nëo 340i** is capable of processing the following sampling rates: 32.0kHz, 44.1kHz, 48.0 kHz, 88.2kHz, 96 kHz, 176.4kHz and 192kHz.



## Optional Phono Section

The **Nēo 340i** Integrated Amplifier features an optional MC/MM phono section that may be installed only by your MOON Authorized Dealer or at the Simaudio factory. This phono card is a very high quality design, providing adjustments for both capacitance and resistance loading, as well as gain level. This flexibility allows you to optimize the **340i** for a wide variety of MC and MM cartridges.

### Circuit Board Layout:

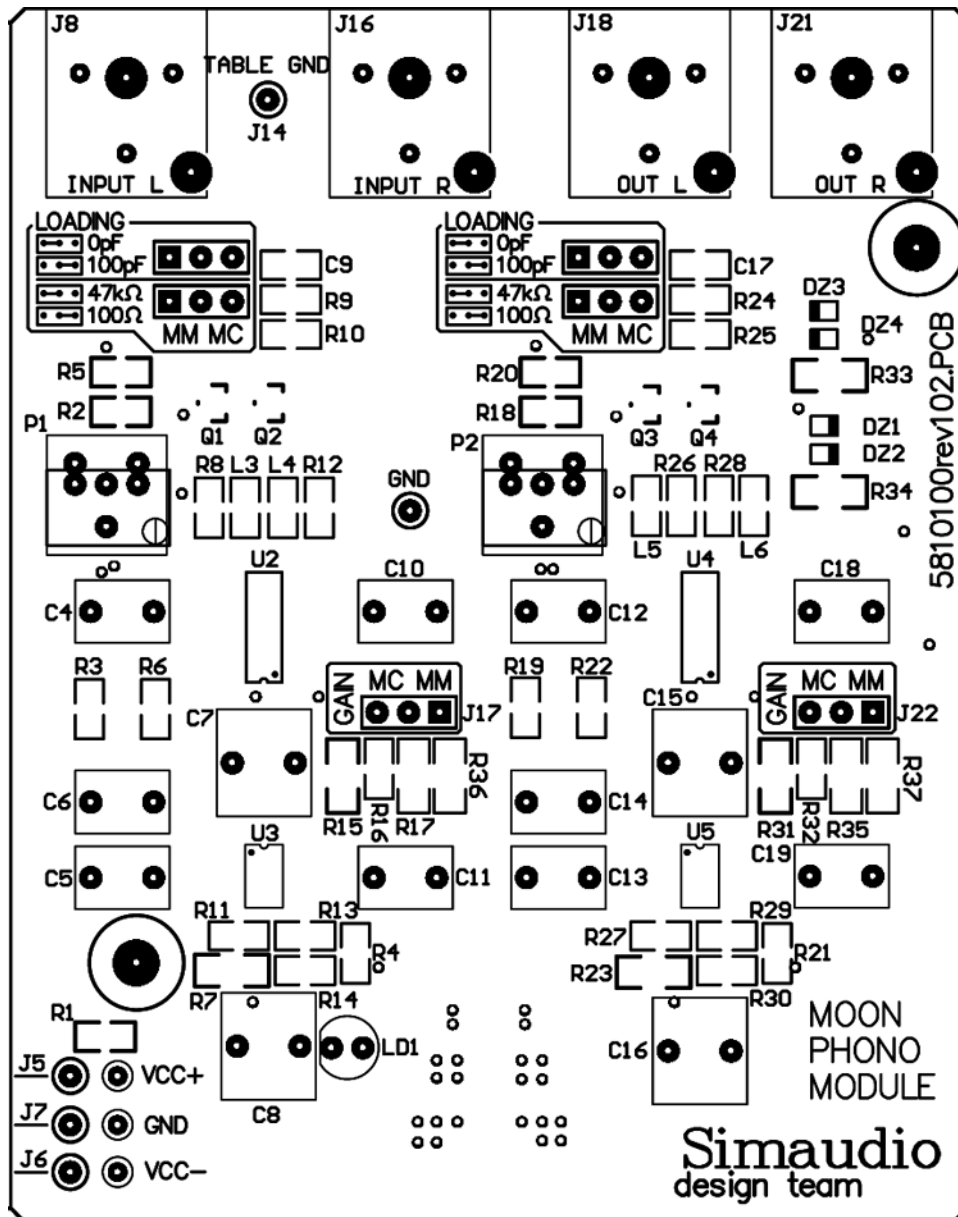


Figure 3: Nēo 340i Optional Phono Section Circuit Board Layout

## Optional Phono Section (Cont'd)

### Internal Settings

**We strongly recommend that you ask your MOON Authorized Dealer to make these adjustments. If you decide to do this on your own, any damage cause to this component, including from static discharge, will not be covered under warranty.**

There are three (3) types of settings available on the optional phono section of the **Nēo 340i**; Capacitance loading, Resistance loading, and Gain level. Each setting is adjustable through the use of jumpers. For each type of setting, there are 2 banks of jumpers – one each for the left and right channels. This is the result of the phono section's genuine mirror-image circuit design which yields exceptional stereo separation.

Always disconnect all audio connections and the AC power cord of your **Nēo 340i** prior to changing any of the following input settings.

There are six (6) screws, located on the top of the chassis, that you must remove using a phillips head screw driver. Once these screws are removed, carefully lift off the chassis cover. Once the cover is removed, you are ready to make all of the necessary internal adjustments to the **340i** phono module to achieve optimal sonic performance.

#### **Resistance Loading:**

There are two (2) different settings available for setting the resistive load; 100Ω and 47kΩ which are represented by jumper sockets R9 for the left channel and jumper socket R24 for the right channel (refer to figure 2 – section labeled "LOADING"). The factory default setting is 47kΩ, therefore both jumpers will be found in each of the two left most sockets.

For moving magnet (MM) cartridges, it is recommended that you leave the jumpers inserted in the factory default setting of 47kΩ. Conversely, if you're using a moving coil (MC) cartridge, you should use the 100Ω jumper settings by simply inserting the supplied jumpers into each of the two right-most sockets of jumpers R9 and R24.

#### **Capacitance Loading:**

There are two (2) different settings available for the capacitive load; 0pF and 100pF which are represented by jumper sockets C9 for the left channel and jumper sockets C17 for the right channel (refer to figure 2 – section labeled "LOADING"). The factory default setting is 100pF for a moving magnet cartridge, therefore both jumpers will be found in each of the two right most sockets.

For MM cartridges, it is recommended that you leave the jumpers inserted in the factory default setting of 100pF. Conversely, if you're using a MC cartridge, you should use the 0pF jumper settings by simply inserting the supplied jumpers into each of the two left-most sockets of jumpers C9 and C17.

#### **Gain Level:**

There are two (2) different settings available for gain level. They are 40dB for MM cartridges and 60dB for MC cartridges, which are represented by jumper socket J17 for the left channel and jumper socket J22 for the right channel (refer to figure 2 – section labeled "GAIN"). The factory default setting is for a MM cartridge, therefore both jumpers will be found in each of the two right most sockets labeled MM; ***It is highly recommended that you do not use the jumpers labeled MC for an MM cartridge as this will overload the 340i.*** When using a MC cartridge, you should insert the supplied jumpers into each of the two left-most sockets labeled MC.

## Optional Balanced Input

The balanced input option provides for one additional line-level input on an XLR connector. The “B1” input uses a fully balanced differential circuit and is intended for use with a source component that outputs a fully balanced differential signal. The **Nëo 340i** optional balanced input takes full advantage of the benefits of balanced circuitry:

When using an unbalanced interconnect, the audio signal runs through both the center wire and the shield/ground wire. Any noise picked up by this interconnect (ie. nearby magnetic fields such as an AC power cord) will be reproduced by both the preamplifier and amplifier, then heard through the loudspeakers. Conversely, a balanced interconnect has three separate conductors; one for the ground and two for the actual signal. These two signals are identical except that one is 180 degrees out of phase with the other. For example, when one conductor is carrying a signal of +10 Volts, the other will be carrying a signal of -10 Volts. When these two inverted signals on a balanced line are output from the **Nëo 340i**, any noise picked up by the interconnect will be eliminated since a differential circuit amplifies only the difference between these two signals: Noise on a balanced interconnect will be equal on both conductors and therefore cancel out.

## Rear Panel Connections

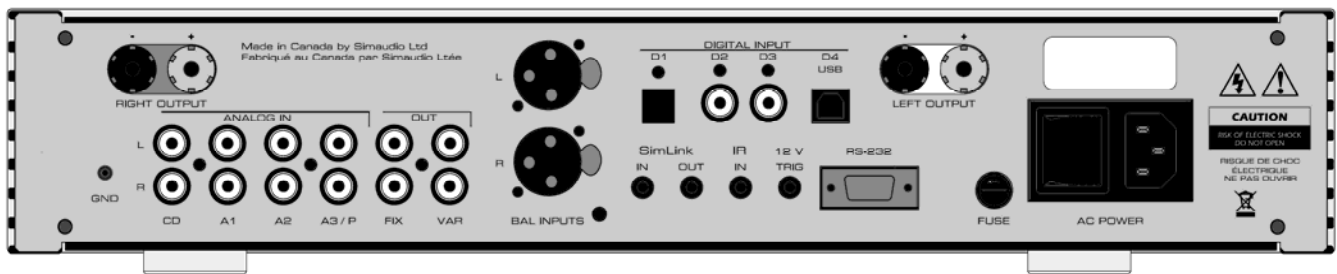


Figure 4: Nëo 340i Rear panel

The rear panel will look similar to Figure 2 (above). There are four (4) pairs of single-ended analog inputs on RCA connectors labeled CD, A1, A2 and A3/P. The RCA input and output connectors on the rear panel have been color coded: 'white' for the left channel and 'red' for the right channel. If your **Nëo 340i** is equipped with the *optional phono section*, the input labeled 'A3/P' must be used to connect your turntable interconnect leads to this integrated amplifier. If you don't have the optional phono section installed, then this input can be used in the same way as CD, A1 and A2 inputs.

The **Nëo 340i** integrated amplifier also has two pairs of non-amplified outputs labeled 'FIX' and 'VAR', located next to the A3/P input. The 'FIX' output is intended as an input to a recording device such as a cassette tape deck or CD-Recorder Player. Keep in mind that the output level is fixed and cannot be adjusted by the **340i's** volume control. The 'VAR' output is designated for output to a power amplifier with single-ended RCA inputs if you wish to use your **Nëo 340i** as a preamplifier only. Keep in mind that the output level is variable and adjusted by the **340i's** volume control.

For **Nëo 340i's** equipped with the *balanced input option*, you will find one pair of XLR balanced inputs to the right of these non-amplified outputs. These are intended to be used with a source component that outputs a balanced signal.

For **Nëo 340i's** equipped with the *digital input option*, you will find 4 digital inputs labeled D1, D2, D3 and D4. The D1 input is on an optical Toslink connector; both the D2 and D3 inputs are on a S/PDIF connector; the D4 input is on a USB type B connector.

### Rear Panel Connections (cont'd)

Below the area reserved for the optional digital inputs are a series of input/output connectors for custom type installations: From left to right there are two (2) "SimLink™" connectors labeled "in" and "out" on 1/8" mini jacks. Please refer to the next section entitled SimLink™ for more details. Next, there's a 1/8" mini-jack input for use with aftermarket infrared remote control receivers. Then there's a 12V trigger output on a 1/8" mini-jack that can power up a connected component (with a 12V trigger input) at the same time that the **340i** is powered up. Next, there's a full-function bi-directional RS-232 port for custom integration or automation on a DB9 connector. Finally on the far right side is the "AC Fuse" socket cover, the main power switch ("0"=off, "1"=on) and the IEC receptacle, labeled "AC Power" for the included AC power cord.

Don't hesitate to use high quality interconnect cables\*. Poor quality interconnect cables can degrade the overall sonic performance of your system.

The **Nēo 340i** is equipped with a pair of gold-plated binding posts. Connect your speakers, with the cables of your choice, to the **340i**'s speaker binding posts. Take care to respect the polarity ("+" , "-" ) of the outputs. Once again, don't hesitate to use high quality speaker cables\*. Poor quality speaker cables can degrade the overall sonic performance of your system.

Connect the supplied AC power cable to the IEC receptacle, located on the amplifier's rear panel. Ensure that the AC wall outlet you use has a functioning ground. For the best sonic performance, it is preferable that you plug your **340i** directly into a dedicated AC outlet and avoid using an extension cord. If you have the time and willingness, consider installing a superior quality AC wall outlet such as a hospital grade Hubbell\*.

\* Please speak with your MOON Authorized Retailer about the benefits of high quality cables for your system, and superior quality AC wall outlet.

### SimLink™

The SimLink™ provides communication features between various **MOON** components. For example, if you were to connect the **360D** to the **340i** via the SimLink™, pressing the ► (play) button on the **360D** will cause the **340i** to automatically switch to the input labeled 'CD'. You can change this default setting as follows: Select the input that you want as the new default for CD, then press and hold the ◀ **INPUT** (left) button until the front panel display begins to flash on and off. Another feature of SimLink™ involves the "Standby" function. By pressing down and holding the "Standby" button for 2 seconds on the either the **360D** or **340i**, both units will go into "Standby" mode. The same logic applies when switching from "Standby" to active mode.

If you are using the "MiND" Music Streamer and an external digital-to-analog converter (DAC), you must make a SimLink™ connection between the "MiND"s SimLink™ out and the **340i**'s SimLink™ in. The 'A1' input is the default input for your external DAC's analog outputs; When you press the ► (play) button on the "MiND" App, the **340i** will automatically switch to the input labeled 'A1'. If your **340i** includes the "DAC" option, then the default input for the MiND is the 'D2' input; When you press the ► (play) button on the "MiND" App, the **340i** will automatically switch to the input labeled 'D2'. You can change these default settings for the "MiND" as follows: Select the input that you want as the new default for "MiND", then press and hold the "MP" button until the front panel display begins to flash on and off.

The connection rules for the SimLink™ are very basic. You must always connect the supplied cable between one component's SimLink™ Out jack and another component's SimLink™ In jack. If you inadvertently connect the cable between either two SimLink™ In or two SimLink™ Out jacks, the SimLink™ communication feature may not function. Also, there is no master component in a SimLink™ chain; no one particular component operates as the main communications controller.

## Operating the 340i

We recommend leaving your **Nēo 340i** powered up at all times to maintain optimal performance. When you plan on being away for a few days, it may not be a bad idea to power off your amplifier. Please keep in mind that once fully "broken-in", your **340i** requires several hours of operation before reaching optimal performance after powering it up again.

### Turning on your MOON 340i for the first time

Prior to turning the amplifier on for the first time, make sure that every cable is properly connected to avoid any problems. Flick the main rocker switch, located on the rear panel, labeled "POWER" to the '1' (on) position. The blue LED on the front panel will blink for up to 10 seconds while it achieves standby mode. When it stops blinking and is not illuminated, your **340i** is in standby mode. Next, briefly press the push button labeled "Standby" located on the front panel. You will hear a very faint click sound confirming that everything is in order. The blue LED on the front panel will illuminate, indicating that the **340i** is now powered up and ready for use.

### On and Off Sequence

To avoid having any annoying noises (ie. "thumps" and "pops") emanate from your speakers when powering your **340i** on or off, you should always power up any source components prior to powering up your **340i**. As well, always power down your **340i** prior to powering down any source components.

## Remote Control Operation

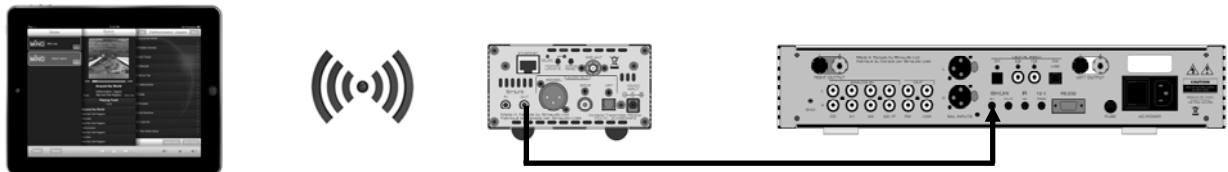


Figure 5: Remote Operation with SimLink™

In figure 5 we have a 180 "MiND" Music Streamer and a **Nēo 340i** Integrated Amplifier connected together via their respective SimLink™ ports. The SimLink™ output on the 180 "MiND" is connected to the SimLink™ input on the **340i** (using a 1/8" mini-jack cable). When you launch the MiND App on your smart device (iPad, iPhone, Android Device) and select this system's ZONE, both the 180 "MiND" and the **340i** will turn on, with the **340i** automatically switching to the MiND assigned input, as described previously in the SimLink™ section. To shut down the system, press "Off" for this ZONE in the "MiND" app.



Figure 6: Remote Operation with 12V Trigger

In figure 6 we have a **Nēo 340i** Integrated Amplifier (used either as ONLY a preamplifier or in a bi-amping configuration) and 330A Amplifier connected together via their respective 12V triggers; The 12V trigger output on the **340i** is connected to the 12V trigger input on the 330A (using a 1/8" mini-jack cable). When you turn on the **340i** via remote control (or its Standby button), the 330A will also turn on. The same rule applies when you put the **340i** into Standby mode.

## Remote Control Operation (cont'd)



Figure 7: CRM-2 Remote Control

The **Nêo 340i** Integrated Amplifier uses the '**CRM-2**' full-function remote control (figure 7). It operates on the Philips RC-5 communication protocol and is can be used with other Simaudio MOON components.

The '**CRM-2**' remote uses two AA batteries (included). To install them, simply slide the back plate off in the direction of the arrow; insert the batteries in the correct direction and then replace the back plate.

To engage the '**CRM-2**' remote for use with the **Nêo 340i** Integrated Amplifier, you must first press the button labeled **AMP**.

The **POWER** button located on the upper left will switch the integrated amplifier to either 'Standby' or 'On' mode.

The **DISPLAY** button turns the front panel display on and off

The 2 buttons labelled ◀ **INPUT** ▶ allow you to sequentially scroll, either backwards or forwards, through all six (6) available inputs. For example, to switch from the "CD" to the "VIDEO" input you may press either ◀ **INPUT** three (3) times or **INPUT** ▶ three (3) times. Pressing and holding down either of these buttons results in only a single change to the selected input.

The 2 buttons labelled ▼ **VOL** ▲ allow you to control the volume level. Pressing ▼ **VOL** results in a decrease in the volume level; Pressing **VOL** ▲ results in an increase in the volume level. You may either press and hold these buttons down or press them briefly to make volume adjustments.

The **MUTE** button turns off the output volume. Pressing the "Mute" button a second time will reinstate the output volume level back to its current setting.

**NOTE:** The 2 buttons labelled ◀ **BAL** ▶ don't affect the operation of the **340i**.

## Specifications

Configuration .....	Stereo
Power Supply Transformer .....	400VA
Power Supply Capacitance .....	40,000 $\mu$ F
Class Of Operation - Amplifier .....	Class A/B
Single-ended inputs .....	4 (RCA)
Mini-jack input .....	1 (1/8")
Optional Balanced inputs .....	1 (XLR)
Input Sensitivity .....	400mV – 3.0V RMS
Input Impedance .....	22,000 $\Omega$
Preamplifier output .....	1 (RCA)
Headphone output .....	1 ( 1/4" Stereo TRS)
Output Device Type - Amplifier .....	Bipolar
Output Power @ 8 $\Omega$ .....	100 Watts per channel
Output Power @ 4 $\Omega$ .....	200 Watts per channel
Output Impedance .....	0.04 $\Omega$
Damping Factor .....	> 200
Gain .....	37dB
Dynamic Headroom .....	3dB
Signal-to-noise Ratio .....	110dB @ full power
Maximum Output Voltage .....	30 Volts
Slew Rate .....	20V/ $\mu$ s
Maximum Current – Peak .....	22 amperes
Maximum Current – Continuous .....	12 amperes
Frequency Response .....	2Hz - 90kHz +0/-3dB
Crosstalk @ 1kHz .....	< -88dB
Intermodulation Distortion .....	< 0.03%
THD (20Hz - 20kHz @ 1 watt) .....	< 0.015%
THD (20Hz - 20kHz @ 100 watts) .....	< 0.05%
Remote Control .....	Full-Function (CRM-2)
AC Power Requirements .....	120V / 60Hz or 240V / 50Hz
Shipping Weight .....	28 lbs / 13 Kgs
Dimensions (W x H x D, inches) .....	16.9 x 3.5 x 14.8

### ***Optional Phono Section:***

Input Impedance .....	Adjustable - 100 ohms and 47K ohms
Input Capacitance .....	Adjustable - 0pF and 100pF
Gain .....	Adjustable 40dB and 60dB
Input overload @ 40dB gain .....	58mV RMS
Input overload @ 60dB gain .....	3mV RMS
Signal-to-noise Ratio (full scale @ 40dB gain) .....	107dB
Signal-to-noise Ratio (full scale @ 60dB gain) .....	85dB
Frequency Response .....	20Hz - 20kHz ( $\pm$ 0.5dB)
Crosstalk @ 1kHz .....	-97dB
IMD .....	< 0.009%
THD (20Hz - 20kHz) .....	< 0.001%

## Specifications (cont'd)

### **Optional Digital-to-Analog Converter:**

Digital Input Types .....	S/PDIF (RCA) x 2	USB x 1	TosLink x 1
Digital Input Impedance (S/PDIF) .....	75 ohms @ 0.5 Volts		
DAC / Digital Filter .....	BurrBrown PCM1793		
Bit-depth range .....	16 - 24 bits		
Sampling Frequency Rates .....	44.1, 48, 88.2, 96, 176.4 and 192kHz		
Frequency Response (audible) .....	20Hz - 20kHz +0/-0.2dB		
Frequency Response (full range) .....	2Hz - 72kHz +0/-3dB		
THD @ 1kHz, 0dBFS (A-weighted) .....	< 0.001 %		
IMD .....	< 0.004 %		
Dynamic Range .....	> 116dB		
Signal-to-noise ratio .....	> 115dB @ full output		
Slew Rate .....	50V/ $\mu$ s		
Channel Separation .....	> 115dB		
Low Level Linearity .....	$\pm$ 1.0dB to below 120dBFS		
Intrinsic Jitter .....	< 25 picoseconds <i>RMS</i>		

Balanced Pin Assignment:	Pin 1.....	Ground
	Pin 2.....	Positive
	Pin 3 .....	Negative

12 Volt Trigger:	Logic .....	Direct (0V off, 12V on)
	Jack.....	3.5mm microphone jack
	Input Impedance.....	1k $\Omega$
	Current Consumption.....	12mA

**NOTE:** If you require the RS-232 codes for your **N $\acute{e}$ o 340i**, please contact Simaudio Ltd. directly by either email ([service@simaudio.com](mailto:service@simaudio.com)) or by toll-free telephone (877-980-2400).



Fuse Replacement: For the 120V version use a 5A fast blow (3AG size).  
For the 220 - 240V version use a 3A fast blow (3AG size).