

MOON | 240i Integrated Amplifier

DSD
Direct Stream Digital

DXD
Digital eXtreme Definition



Owner's Manual

M O O N
by SIMAUDIO

WARNING

Do not ingest the battery, Chemical Burn Hazard

The remote control supplied with this product contains a coin/button cell battery.

If the coin/button cell battery is swallowed, it can cause severe internal burns in just 2 hours and can lead to death.

Keep new and used batteries away from children.

If the battery compartment does not close securely, stop using the remote control and keep it away from children.

If you think batteries might have been swallowed or placed inside any part of the body, seek immediate medical attention.

To prevent the risk of equipment damage or personal harm, use only Class 2 rated loudspeaker wire properly terminated and connected securely to the binding posts.

simaudio.com

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

Date Code: 10082017

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

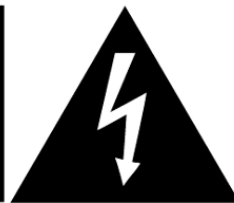
WARNING:

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



CAUTION

**RISK OF ELECTRIC SHOCK
DO NOT OPEN**



CAUTION: TO REDUCE THE RISK OF ELECTRICAL SHOCK, DO NOT REMOVE COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.

Important Safety Instructions (continued)



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 MOON 240i**

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 240i must be terminated with a three-conductor AC mains power cord which includes an earth ground connection. To prevent shock hazard, all three connections must ALWAYS be used. Connect the MOON 240i 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 240i 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 240i with any liquid. If a liquid substance does enter your MOON 240i, immediately disconnect it from the AC mains and take it to your MOON dealer for a complete check-up.
7. NEVER spill or pour liquids directly onto the MOON 240i.
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 240i. If a problem occurs contact your MOON dealer.
12. NEVER expose the MOON 240i to extremely high or low temperatures.
13. NEVER operate the MOON 240i 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.

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Introduction

Thank you for selecting the MOON 240i as a part of your music/cinema system. This component 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 amongst the finest in its class. We have been building high-performance audio equipment for over 35 years, and the know how gained through our cumulative experience is an important reason why MOON products are so musically satisfying.

The performance of your MOON 240i will continue to improve during the first 400 hours of listening. This is the result of a "break-in" period required for the numerous high quality electronic parts used throughout this component.

Before setting up your new 240i, we encourage you to please read this manual thoroughly to properly acquaint yourself with its features. We hope you enjoy listening to the MOON 240i 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. Your MOON 240i incorporates many significant design features to achieve its "world class" level of performance.

- Headphone output on 1/4" jack located on the front panel.
- OLED type screen (organic light-emitting diode)
- Analog inputs are configurable to "HT BYPASS" mode to accommodate components like a home-theater processor, whose own volume control is used. This is sometimes referred to as a "pass-through" input.
- Configurable "Standby" modes that will reduce your power consumption.
- RS-232 port for (i) full unsolicited bidirectional feedback and (ii) firmware updates; IR input for external control with aftermarket infrared remote control receivers and SimLink™ controller ports that allow for 2-way communications between other MOON components.
- Rigid chassis construction to minimize the effects of external vibrations.

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/>

Features

This is an abbreviated list of the more important features:

- Fully asynchronous DAC supports native DSD64, DSD128 and DSD256 (USB only) and PCM up to 32-bit/384kHz including DXD (USB only)
- 3 line-level inputs including a front-mounted 1/8" mini-jack for personal media players.
- Five(5) digital inputs includes USB (hi-res audio), SPDIF(2), Optical(2),
- Moving magnet phono input for a turntable.

Unpacking

The **MOON 240i** should be removed from its box with care.

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

This owner's manual

AC power cable

CRM-3 remote control with two CR-2032 batteries

1 spare fast-blow fuse

SimLink™ / 12V trigger cable

Warranty and product registration information (USA and Canada only)

 Once the 240i 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 packaging is specially designed to protect the 240i from any potential damage during transit.

Please write the serial number of your new MOON 240i in the space provided below for future reference.

Serial Number

Installation & Placement

The 240i requires reasonable ventilation to maintain an optimum and consistent operating temperature since it will radiate heat. Consequently, it should be placed in a location with empty space around it for proper heat dissipation. Maintain a minimum of 4 inches of free space on each side and back, and 9 inches on top. You should never place another component on top of this unit nor block the vents. Air must be permitted to pass freely through. 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 its performance and reliability. The 240i uses a toroidal transformer; even though it is well shielded, you should not place it too close to source components sensitive to EMI, such as turntables.

 If you intend to use the MOON 240i's USB input connection (PCM or DSD) with a **Windows-based** computer, you will need to install our USB HD DSD driver, which can be downloaded from the support section of our website.

MacOS-based computers don't require any drivers.

Front Panel Controls



Figure 1: Front panel of the MOON 240i

The front panel will look similar to Figure 1 (above). The “Standby” button places the unit into Standby mode; You can configure this to your own preferences– refer to the “Power Settings” section of the “Software Setup”. When switching from “Standby” to the “on” mode (i) Five (5) seconds of animation will appear in the display prior to the 240i being ready for use and (ii) The blue indicator LED will illuminate unless you have programmed it differently using the “SETUP” software

The “Mute” button mutes the output signal to all outputs. Pressing the “Mute” button a second time will reinstate the volume back to its previous level. Below are two (2) screen capture images that demonstrate what appears on the display during muting and immediately after unmuting the output signal:



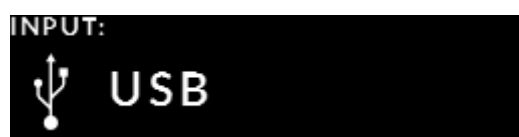
The “Display” button allows you to adjust the brightness of the large display window. It also provides you with the option of turning off the display. There are three (3) different levels of brightness; The default is high. Pressing the “Display” button once will decrease the level to the low setting. Pressing the button again will increase the brightness to the medium setting. Pressing the “Display” button a third time returns the display to its

default setting of high. To turn the display off, press and hold the “Display” button for 2 seconds. When the display is turned off, it will still come back on briefly whenever you press any of the buttons located on the front panel or the remote control, using the previously set brightness level; the display will automatically turn off again once you are done. To turn the display back on, simply press and hold the “Display” button for 2 seconds.

The two (2) buttons labeled “← Input →” allow you to sequentially scroll, either forward “→” or backward “←” through all nine (9) inputs. These inputs are ordered as follows going forward (→): “OPTICAL 1”, “OPTICAL 2”, “SPDIF 1”, “SPDIF 2”, “USB”, “ANALOG 1”, “ANALOG 2”, “PHONO” and “MP IN”.

The display window will show the currently selected input. Each type of input has a uniquely representative icon, located to the left of the input name, to help clearly identify it. Here are examples of these aforementioned inputs.

Note: The two (2) OPTICAL, two (2) SPDIF and two (2) ANALOG inputs each use the same type of icons:



✎ Unlike all other inputs, the “MP In” (for Media Players) has its corresponding input connection located on 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 and most smart devices.

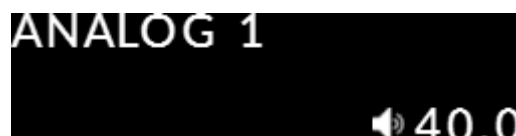
The “Setup” and “OK” buttons are used exclusively for programming the numerous software functions available on this integrated amplifier. The next section, entitled “Software Setup”, explains their usage in full detail.

The “Phones” jack is used for connecting a pair of stereo headphones to the 240i. The input connector is a standard 1/4” stereo TRS jack. When a pair of headphones are connected to the 240i, both the loudspeakers and the preamplifier/subwoofer outputs will stop receiving a signal.

The rotary “volume” control ranges from ‘0.0’ (no output) to ‘80.0dB’ (full output). Within the 0.0 to 30.0dB range the volume operates in 1.0dB steps. From the 30.0 to 80.0dB range the volume operates in 0.5dB steps. When you adjust the volume, only the volume level will appear on the center of the display in a larger format:



The two (2) ANALOG inputs, “MP in” and “PHONO” inputs will only display their input name and volume level when active:



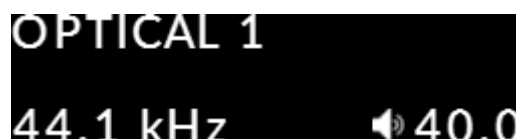
Phono Input

The MOON 240i is equipped with one analog “PHONO” input for use with turntables equipped with a moving magnet (MM) cartridge ONLY. You must remember to connect your turntable’s grounding cable to the grounding screw on the 240i’s rear panel; Refer to the section “Rear Panel Connections” for details.

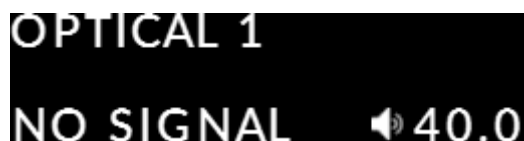
Digital Inputs

The 240i has a total of five (5) “Digital Inputs”: one (1) “USB”, two (2) optical and two (2) SPDIF.

The digital inputs – both “OPTICAL”, both “SPDIF”, and “USB” will show the input name, sampling rate and volume level in the display window:



When the 240i cannot lock onto selected digital input’s signal, “NO SIGNAL” will appear in the display instead of the sampling rate:



The 240i is capable of processing a PCM digital signal at any of the following eight (8) sampling rates:

44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz, 352.8kHz and 384kHz.

The MOON 240i is also capable of processing a DSD digital signal at any of the following three (3) data rates:

DSD64 (2.82MHz), DSD128 (5.64MHz) and DSD256 (11.28MHz).

- ✎ (i) DSD format signals can only be played through the USB input, (ii) PCM format signals with sample-rates of 352.8kHz and 384kHz can only be played through the USB input. (iii) DSD256 not supported on Mac (iv) you cannot connect a USB flash drive or external hard drive to the "USB" input.

The following chart summarizes which sample rates (from decoded PCM files & DSD files) will work on each digital input:

	OPTICAL 1 OPTICAL 2	SPDIF 1 SPDIF 2	USB
PCM 44.1	✓	✓	✓
PCM 48	✓	✓	✓
PCM 88.2	✓	✓	✓
PCM 96	✓	✓	✓
PCM 176.4		✓	✓
PCM 192		✓	✓
PCM 352.8			✓
PCM 384			✓
DSD 64			✓
DSD 128			✓
DSD 256			✓

Software Setup

The MOON 240i includes "Setup Software" that allows you to configure it to meet your specific needs. For each input you can assign a label to replace the factory assigned name (i.e. Optical 1, SPDIF1, USB etc.), create an offset volume level ranging from -10.0dB to +10.0dB, and disable the input when it's not in use. The "ANALOG 1" & "ANALOG 2" inputs have a facility to bypass the volume control (to exclusively use the source component's volume instead). Either the "SPDIF 1", "SPDIF 2", "ANALOG 1" or "ANALOG 2" can be configured to allow the 240i to automatically switch to that input when you press the play button on a MOON CD player or transport connected to the 240i.

Other "Setup Software" features include the ability to assign a maximum level (for all inputs); and the option to reset all software settings back to their factory defaults. These are just some of the features included in the "Setup Software" which will be described in complete detail here. Please refer to the appendix at the end of the manual for the "Quick Reference: MOON 240i Setup Menus" which is a snapshot of the entire Setup Menu structure.

When you are in Setup mode, there are five (5) front panel items used to program the 240i; The "Setup" button for navigating through the various menu levels; the rotary volume control for scrolling through the available choices within each programmable item; the "OK" button for selecting menu items and saving your selections; and the two (2) "← Input →" buttons for cursor movement when editing a text string.

- ✎ (i) If at any time in setup mode you want to abort whatever you are doing, simply press the "Setup" button to exit from wherever you are. (ii) After sixty (60) seconds of no activity, the 240i will exit from setup mode and "EXITING" will appear in the front panel display window.

Input Settings

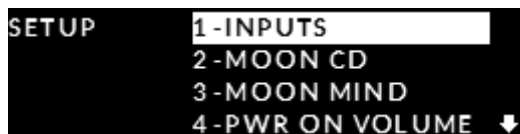
What follows are a series of step-by-step examples showing how to configure all the various "INPUTS" options, followed by all other system type options.

To enter the Setup mode, begin by pressing the "Setup" button; "SETUP" will briefly appear on the display window (actual screen may differ):

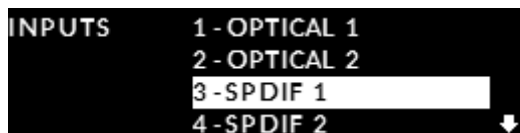


⚙ Renaming an input

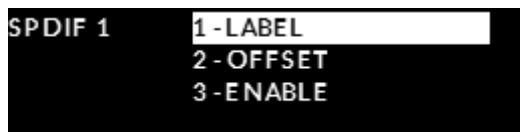
Rotate the volume control clockwise until "INPUTS" is highlighted on the display; then press "OK" to enter the Setup "INPUTS" menu:



Rotate the volume control clockwise until "SPDIF 1" is highlighted (for this example); then press "OK":

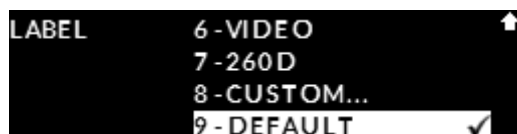
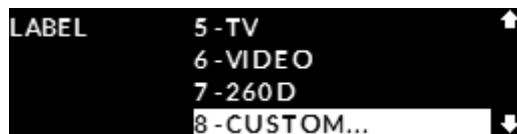


"LABEL" will appear highlighted on the display. Press "OK":



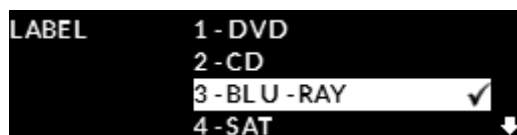
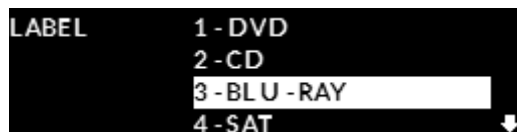
By rotating the volume control clockwise, you will scroll through a series of generic choices - DVD, CD, BLU-RAY, SAT, TV, VIDEO, 260D – an option named "CUSTOM" which allows you to create your own text label of up to 12 characters in length, and finally "DEFAULT" which represents the default input

name, in this case "SPDIF 1":



- ✎ (i) In the middle image, you will see two arrows located on the far right of the display, ↑ on top and ↓ on bottom. These indicate that there are more options (or information) available to be displayed; use volume control accordingly to scroll up or down to see them. (ii) The check-mark ✓ symbol located to the right of "DEFAULT" indicates that this is the currently selected option.

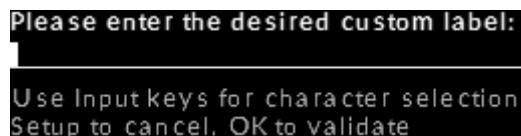
When the generic label name you wish to assign to the "SPDIF 1" input is highlighted on the display, press the "OK" button to select it, in this example "DVD". A small check-mark ✓ will appear beside this label to confirm that it has been selected:



- ✎ The "USB", "PHONO" and "MP IN" inputs do not provide the facility to assign a preset name (ie. DVD, CD, BLU-RAY, etc.) to the input label.

To assign a custom label to an input, rotate the volume knob until "CUSTOM" is highlighted then press the "OK" button. The display will show "Please enter the desired custom label:" followed by "_____ " on the next line.

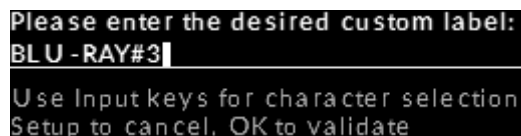
Rotate the volume control clockwise to scroll through the 26 letters of the English alphabet, first in uppercase and then lowercase, followed by the numbers 0 through 9, and finally a variety of symbols including the space character.



Please enter the desired custom label:

Use Input keys for character selection
Setup to cancel, OK to validate

When you see the character you wish to use, press the "Input →" button to select it and move to the input next character position; Repeat this step for up to a maximum of 12 characters for your custom label.



Please enter the desired custom label:
BLU-RAY#3
Use Input keys for character selection
Setup to cancel, OK to validate

If at any time you want to change a previously entered character, simply press the "← Input" button to go back one character at a time; This acts like the backspace character on a standard keyboard. Once you are finished entering your custom label, press "OK" and "SAVED" will briefly appear on the display followed by the SPDIF input options menu (refer to the display image in the previous step #3).

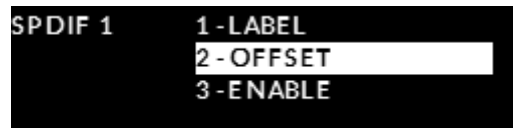
⚙ Adjusting an input's offset volume

Next we will adjust the volume "OFFSET" for the "BLU-RAY#3" labelled input (originally "SPDIF1").

The purpose of this setting is as follows: it ensures that all of devices that you connect to your 240i each perform at the same volume level. It allows you to compensate for the different output levels amongst the various devices that you will be connecting to the 240i. Therefore, each time you switch inputs,

you will not need to adjust the volume to compensate for volume level differences between these devices.

To adjust the volume "OFFSET" for this input, rotate the volume control until "OFFSET" is highlighted on the display, then press "OK" and "+6.0dB" will appear on the display.



SPDIF 1 1-LABEL
 2-OFFSET
 3-ENABLE

To increase the "OFFSET" value, rotate to the volume control clockwise; To decrease the "OFFSET" value, rotate the volume control counter clockwise.



OFFSET
Offset: + 6.0 dB



OFFSET
Offset: - 4.5 dB

The "OFFSET" adjustment occurs in 0.5dB increments and the range is from -"10dB" to +"10dB". Once you have decided on an offset value, in this case "-4.5dB", press the "OK" button.

"SAVED" will briefly appear on the display followed by returning to the "SPDIF 1" input options menu.

⚙ Disabling an unused input

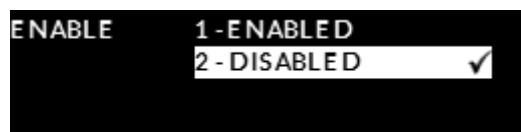
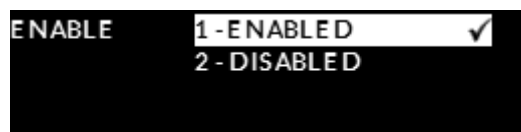
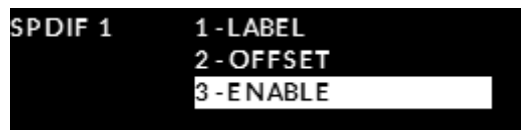
The third available option for this input is the ability to disable the input if you don't intend to use it.

The advantage of disabling inputs that you don't plan to use is as follows:

When scrolling through the inputs with either the included CRM-3 remote control or front panel input buttons, only the inputs that are set to "ENABLE" will be available – this is more efficient. The default

setting for all nine (9) inputs is "ENABLE".

To "disable the "SPDIF1" input, rotate the volume control until the "ENABLE" option is highlighted in the "SPDIF 1" input menu. Then press "OK" and use the volume control to alternate between "ENABLED" and "DISABLED".



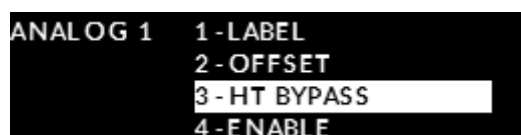
Then press "OK" to save this setting and you will return to the "SPDIF 1" input options menu.

⚙ Using the volume bypass feature

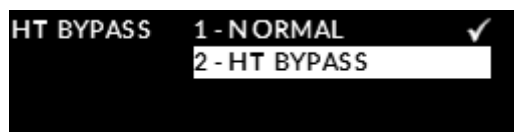
The fourth configurable option is the volume bypass feature for use with home-theater processors and source components that have their own volume control. When activated, the volume control of the 240i is bypassed and the volume is adjusted from the component connected to the input.

This option is only available for the "ANALOG 1" and "ANALOG 2" inputs

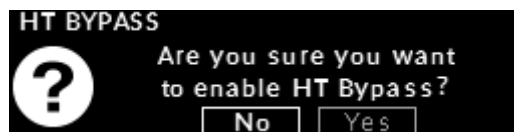
To enable this setting you must first go to either "ANALOG 1" or "ANALOG 2" in the "INPUTS" section of the SETUP menu. Then rotate the volume control until "HT BYPASS" is highlighted on the display:



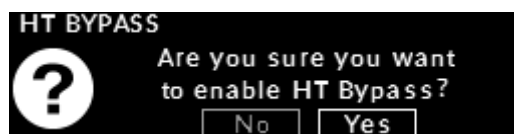
Press "OK" and "NORMAL" will appear highlighted on the display. Rotate the volume until "HT BYPASS" is highlighted, then press OK:



The message "Are you sure you want to enable HT Bypass?" followed on the next line by "NO" (highlighted) and "YES" on the display.



Rotate the volume control to highlight "YES", then press OK. The "HT BYPASS" option is now active for the "ANALOG 1" input:



✎ When you enable "HT BYPASS", the volume "OFFSET" you previously saved for this input will be set to 0.0dB; The "OFFSET" can then be adjusted if required. When this "HT BYPASS" is disabled, the "OFFSET" will be reset to its default value of 6.0dB.

At this point you can return to the "INPUTS" main menu and configure another input by pressing the "SETUP" button twice and then selecting another input; You can return to the main "SETUP" menu by pressing the "SETUP" button a third time; You can exit from "SETUP" by pressing the "SETUP" button a fourth time – "EXITING" will briefly appear on the display:

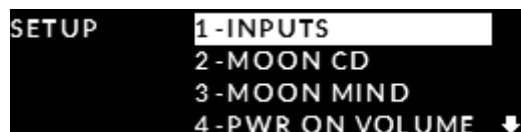
To summarize which options are available for each of the nine (9) inputs refer to the following chart.

	OPTICAL 1 OPTICAL 2	SPDIF 1 SPDIF 2	USB	ANALOG 1 ANALOG 2	PHONO	MP IN
LABEL → PRESET NAME	✓	✓				
LABEL → CUSTOM NAME	✓	✓	✓	✓	✓	✓
OFFSET	✓	✓	✓	✓	✓	✓
ENABLE / DISABLE	✓	✓	✓	✓	✓	✓
HT BYPASS				✓		

⚙️ Setting up an input for a MOON CD Player

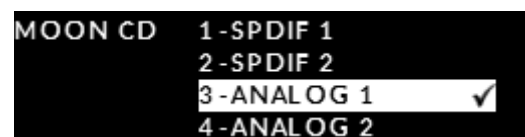
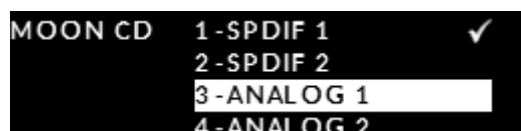
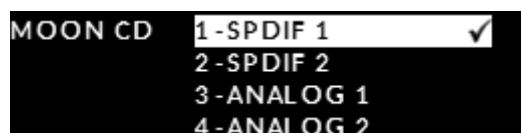
Your MOON 240i can automatically switch to the designated input for your SimLink™ connected MOON CD Player or CD transport when you press its play ► button; However, you must first assign a corresponding input – either the “SPDIF 1”, “SPDIF 2”, “ANALOG 1” or “ANALOG 2” input - on the 240i as follows:

Enter the Setup mode by pressing the “Setup” button; Rotate the volume control until “MOON CD” is highlighted on the display. Then press “OK”:



The default input for “MOON CD” is “SPDIF 1”. To change this input, rotate the volume control to highlight “SPDIF 2”, “ANALOG 1” or “ANALOG 2”.

In this example we have chosen “ANALOG 1”. Press “OK” and the check-mark ✓ symbol will appear to the right of “ANALOG 1” and flash briefly.

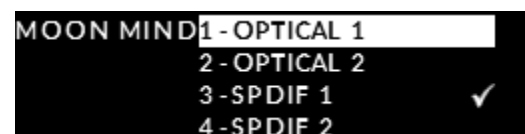
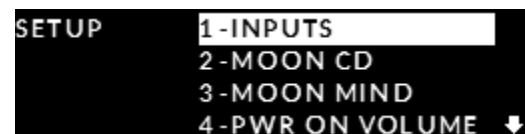


Press the “SETUP” button once to exit from the “MOON CD” menu and return to the main “SETUP” menu. Press the “SETUP” button again to exit from the “SETUP” menu.

⚙️ Setting up an input for a MiND Streamer

The MOON 240i can automatically switch to the designated input for your Simlink connected MOON MiND network player when you press its play button; However you must first assign a corresponding input.

Enter the Setup mode by pressing the Setup button; Rotate the volume control until MOON MiND is highlighted on the display. Then press OK.



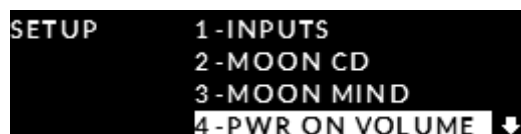
The default input is “SPDIF 2”. To change this input, rotate the volume control to highlight the input

of your choice. Press the SETUP button once to exit from the MOON MiND menu. Press the SETUP again to exit the SETUP menu.

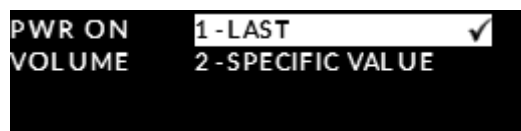
⚙️ Setting the power up volume level

You can specify the volume level for your 240i when you power it up.

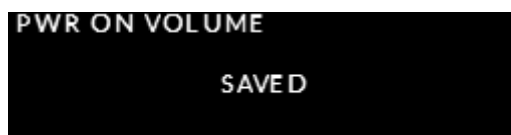
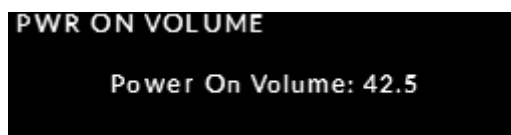
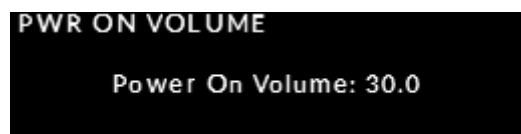
Enter the Setup mode by pressing the "Setup" button. Rotate the volume control until "PWR ON VOLUME" is highlighted on the display. Then press "OK":



Rotate the volume control to highlight either "LAST" or "SPECIFIC VALUE". The "LAST" option (default setting) will use the exact same volume level from the last time you used the 240i. To accept this option, press "OK".



The "SPECIFIC" options allows you to specify an exact volume level at power up. The default setting is 30.0dB. This adjustment occurs in 0.5dB increments and the range is from 0dB to 60dB; To increase the "SPECIFIC" volume level rotate the volume control clockwise. To decrease the "SPECIFIC" volume level rotate the volume control counter-clockwise. Once you find your desired volume level, 42.5dB in this example, press "OK" and "SAVED" will appear on the display:



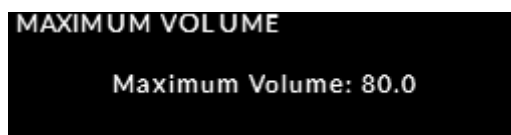
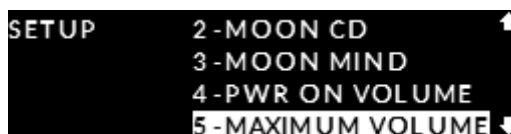
Press the "SETUP" button once to exit from the "PWR ON VOLUME" menu and return to the main "SETUP" menu. Press the "SETUP" button again to exit from the "SETUP" menu.

⚙️ Setting up a maximum volume (all inputs)

The "MAXIMUM VOLUME" setting applies to all nine (9) inputs on the 240i. It is an effective way to protect high sensitivity speakers from being damaged at an excessively loud volume setting.

✎ Another benefit of this feature is when you have young children who can inadvertently tamper with the volume control.

Enter the Setup mode by pressing the "Setup" button. Rotate the volume control clockwise until "MAXIMUM VOLUME" is highlighted on the display. Press "OK" and the factory default of "80.0dB" will appear on the display; this is also the 240i's maximum possible volume level.



To decrease the "MAXIMUM VOLUME" value, rotate the volume control counter clockwise. The "MAXIMUM VOLUME" adjustment occurs in 0.5dB

increments with a range from "20dB" to +"80dB". Conversely, rotating the volume control clockwise will increase the "MAXIMUM VOLUME" level in 0.5dB increments. Once you have decided on a volume level, in this example 72.0dB, press the OK button and "SAVED" will appear on the display:

MAXIMUM VOLUME
Maximum Volume: 72.0

MAXIMUM VOLUME
SAVED

Press the "SETUP" button once to exit from the "PWR ON VOLUME" menu and return to the main "SETUP" menu. Press the "SETUP" button again to exit from the "SETUP" menu.

✎ When the aforementioned "PWR ON VOLUME" level has been set higher than this "MAXIMUM VOLUME", the "PWR ON VOLUME" will be updated accordingly to this "MAXIMUM VOLUME" setting.

⚙ Setting up the display's screen saver

The 240i's front panel OLED display window has an optional screen saver that can be configured in several ways. The main purpose for a screen saver is to prevent burn-in on the OLED display; this will occur when the information on the display remains unchanged for a long period of time.

Enter the Setup mode by pressing the "Setup" button. Rotate the volume control until "SCREEN SAVER" is highlighted on the display and then press "OK":

SETUP 4-MOON CD ↑
5-PWR ON VOLUME
6-MAXIMUM VOLUME
7-SCREEN SAVER ↓

SCREEN SAVER 1-MODE
2-LOOK

Rotate the volume control until "MODE" is highlighted and press "OK". There are three (3) available options: "DISABLED" for the screensaver never being used; "SILENCE" (default setting) will activate the screen-saver after a period of twenty (20) minutes of no user interaction (i.e. changing inputs, volume adjustments, etc) and no music being played through the 240i; and "USER OPERATION" which activates the screensaver after a period of twenty (20) minutes of no user interaction, even if music is playing though the 240i. Use the volume control to highlight your desired "MODE" and then press "OK". The check-mark ✓ symbol will appear to the right of the option you selected and flash briefly. Then press "SETUP" to return to the main "SCREEN SAVER" menu.

MODE 1-DISABLED
2-SILENCE ✓
3-USER OPERATION

Once you have decided on a screensaver "MODE", you can select from two (2) different screensaver appearance options by rotating the volume control from the "MODE" option to the "LOOK" option; The "MOON LOGO" option (default setting) will have our MOON logo randomly floating on the display window and "DISPLAY OFF" will result in the screen being turned off. Use the volume control to highlight your choice of "LOOK" and then press "OK". The check-mark ✓ symbol will appear to the right of the option you selected and flash briefly. Then press "SETUP" to return to the main "SCREEN SAVER" menu.

SCREEN SAVER 1-MODE
2-LOOK

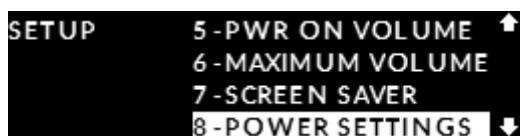


Press the "SETUP" button once to exit from the "SCREEN SAVER" menu and return to the main "SETUP" menu. Press the "SETUP" button again to exit from the "SETUP" menu.

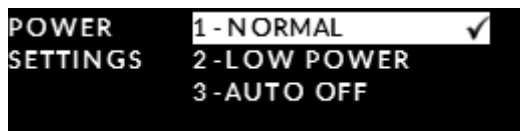
⚙️ Power settings

This set of options allows you to control how much AC power the 240i consumes under certain situations.

Enter the Setup mode by pressing the "Setup" button. Rotate the volume control until "POWER SETTINGS" is highlighted on the display and then press "OK":



There are three (3) available options: "NORMAL" (default setting) whereby the 240i's amplifier section is always powered on, even when in "Standby"; "LOW POWER" whereby the amplifier section is powered off when the 240i is in "Standby"; and "AUTO OFF" whereby after thirty (30) minutes of no user interaction and no music being played, the 240i automatically goes into "Standby" with the amplifier section powered off. Use the volume control to highlight your desired "POWER SETTING" and then press "OK". The check-mark ✓ symbol will appear to the right of the option you selected and flash briefly.

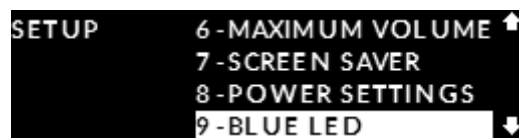


Press the "SETUP" button once to exit from the "POWER SETTINGS" menu and return to the main "SETUP" menu. Press the "SETUP" button again to exit from the "SETUP" menu.

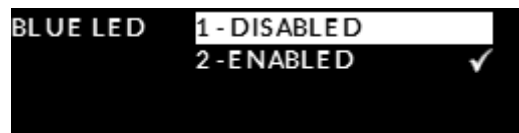
⚙️ Blue LED settings

This "SETUP" feature allows you to turn off the front panel blue LED located directly above the display window. The reason for this feature is simple; In a darkened room the 240i's blue LED might appear bright.

Enter the Setup mode by pressing the "Setup" button. Rotate the volume control until "BLUE LED" is highlighted on the display and then press "OK".



There are two (2) settings: The default "ENABLED" whereby the blue LED is on and "DISABLED" to turn off the blue LED; Use the volume control to highlight your desired setting and then press "OK". The check-mark ✓ symbol will appear to the right of the option you selected and flash briefly.



Press the "SETUP" button once to exit from the "BLUE LED" menu and return to the main "SETUP" menu. Press the "SETUP" button again to exit from the "SETUP" menu.

⚙️ Displaying firmware version

This option is for informational purposes ONLY and displays the firmware version for the 240i.

 This can be a major convenience in situations where troubleshooting a problem may arise.

Begin by pressing the "Setup" button and then rotating the volume control until "FIRMWARE" is

highlighted on the display and then press "OK".

The current 240i firmware version will appear on the display. This information will be displayed for five (5) seconds before automatically returning to the main "SETUP" menu.

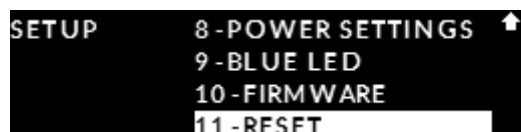


Press the "SETUP" button to exit from the "SETUP" menu.

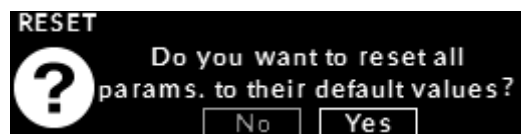
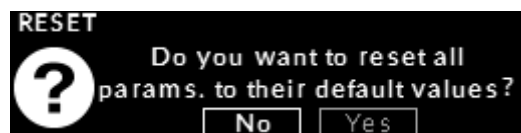
Reset to factory defaults

This "SETUP" feature allows you to reset all settings back to their original factory defaults.

Enter the Setup mode by pressing the "Setup" button. Rotate the volume control until "RESET" is highlighted on the display and then press "OK":



You will be prompted with "Do you want to reset all params. to their default values?" and "NO" will appear highlighted on the display. Rotate the volume control to highlight "YES" on the display and press "OK":



You will now be prompted a second time with "ARE YOU SURE?" and "NO" will appear highlighted on the display. This is to ensure that you really want to erase all of your current settings. Rotate the volume control to highlight "YES" on the display and press "OK":



"Unit has been reset to factory defaults." will be shown:

Press the "Setup" button to exit from the "SETUP" menu.

Rear Panel Connections

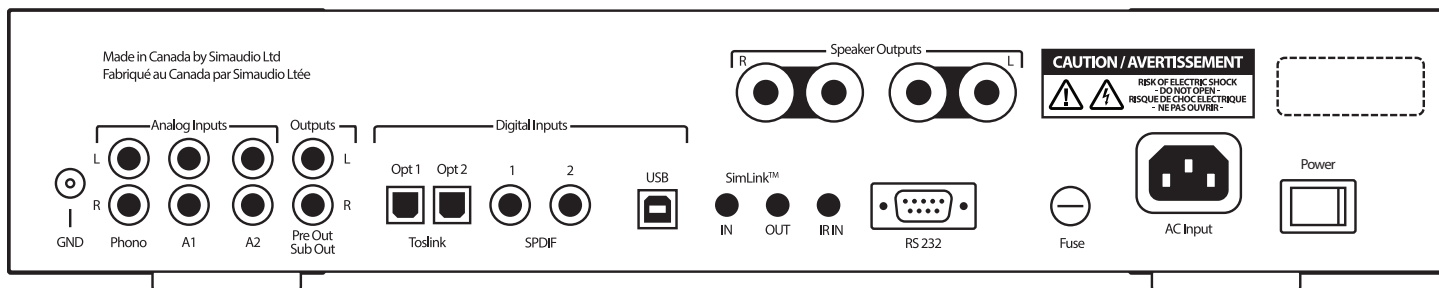


Figure 2: Back panel of the MOON 240i

The rear panel will look similar to Figure 2 (above). On the far left side is a screw labelled "GND" for use with a turntable's grounding wire followed by three pairs of "Analog Inputs" on RCA connectors, labelled "L" for Left (white) on the top row and "R" for Right (red) on the bottom row; The first input "PHONO" is for use with a turntable ONLY; The second and third inputs "A1" (Analog 1) and "A2" (Analog 2) are reserved for analog source components such as tuner or CD player with analog outputs. The fourth pair of RCA connectors labelled "OUTPUT" can be used if (i) you have a stand-alone power amplifier ("PRE OUT") as opposed to using the 240i's power amplifier section or (ii) you have a sub-woofer (SUB OUT); This variable output is controlled by the 240i's volume level setting.

Directly to the right of the aforementioned analog inputs and output you will see the digital inputs. Two (2) optical inputs using Toslink connectors labelled "OPT1" and "OPT2" ("OPTICAL 1" and "OPTICAL 2" in the SETUP); Two (2) SPDIF inputs on RCA connectors labelled "SPDIF 1" and "SPDIF 2" (same name in SETUP); These SPDIF inputs will benefit greatly from digital cables with an impedance of 75 ohm; Next is the "USB" input using a type-B USB connector (same in SETUP).

Moving further right, the MOON 240i is equipped with a pair of speaker binding posts, labelled "SPEAKER OUTPUTS" "R" and "L" for connection to your loudspeakers. Take care to respect the polarity ("+" is red, "-" is black) between the binding posts and the cable connectors on your loudspeakers.

Moving further right, the MOON 240i is equipped with a pair of speaker binding posts, labelled "SPEAKER OUTPUTS" "R" and "L" for connection to your loudspeakers. Take care to respect the polarity ("+" is red,

"-" is black) between the binding posts and the cable connectors on your loudspeakers.

On the far right side are the "AC Fuse" socket cover, the IEC receptacle, labeled "AC INPUT" for the included AC power cord and the main power switch ("0"=off, "1"=on). Connect the supplied AC power cable to the IEC receptacle. Ensure that the AC wall outlet you use has a functioning ground. For the best sonic performance, it is preferable that you plug your 240i directly into a dedicated AC outlet and avoid using an extension cord.

SimLink™

This in-house developed protocol provides for communication between MOON components, allowing you to control various functions of several components with the touch of one button.

✎ One feature of SimLink™ on the MOON 240i, involves the “Standby” function. By pressing down and holding the “Standby” button for 2 seconds on the 240i, all other MOON components connected via the SimLink™ will go into “Standby” mode along with the 240i. The same logic applies when switching from “Standby” to active mode.



This occurs every time you power up your 240i via “Standby”. Then you will hear a very faint single clicking sound confirming that everything is in order and that the 240i is now ready for use.

⚙ On and Off sequence

To avoid hearing any annoying noises (ie. “thumps” and “pops”) emanate from your speakers you should always first power up any devices connected to the 240i prior to powering up the 240i. When powering off your 240i always power down your 240i before powering down any components connected to the 240i.

If you are using a MOON CD Transport or CD Player such as the MOON 260D with your 240i you should make a SimLink™ connection between the “CD’s SimLink™ out and the 240i’s SimLink™ in. The default input is the “SPDIF 1” which means that when you press the ► (play) button on the CD, the 240i will automatically switch to the “SPDIF 1” input. You can change the default for the “MOON CD” using the previously described SETUP software.

The connection rules for the SimLink™ are very straightforward. You must always connect the supplied cable between one component’s “SimLink™ Out” jack and another component’s “SimLink™ In” jack.

There is no master component in a SimLink™ chain; no particular component operates as the main communications controller.

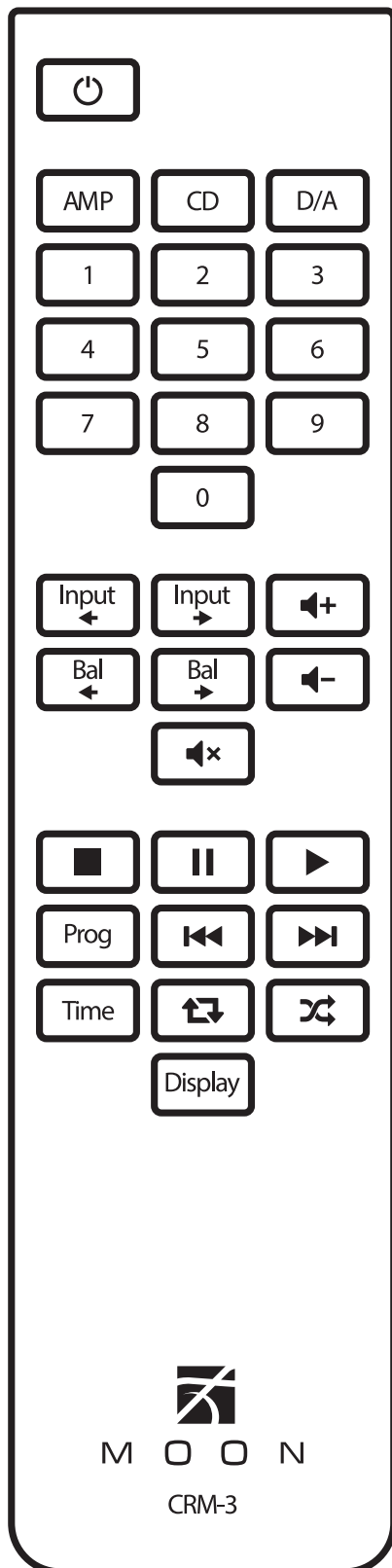
Operating the 240i

We recommend leaving your MOON 240i 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 integrated amplifier.

⚙ Turning on the MOON 240i for the first time

Prior to turning the 240i 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. Next, briefly press the push button labeled “Standby” located on the front panel. The blue LED on the front panel will illuminate and an animated screen will appear in the display for five (5) seconds while the 240i goes through its start-up procedure:

Remote Control



The MOON 240i uses the 'CRM-3' full-function remote control (figure 3). It operates on the Philips RC-5 communication protocol and can be used with other MOON components. The 'CRM-3' remote uses two CR-2032 batteries (included). To install them, simply slide the removeable lower section of the back plate downwards while applying slight pressure to the top of this removeable plate.

To engage the 'CRM-3' remote for use with the MOON 240i, you must first press the button labeled AMP.

The  (Power) button, at the top left switches the 240i to either 'Standby' or 'On' mode.

The 2 buttons labelled  INPUT  allow you to sequentially scroll, either backwards or forwards, through all available inputs. 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. You may either press and hold these buttons down or press them briefly to make volume adjustments.

The 2 buttons labelled  BAL  control channel balance; Pressing the left arrow button causes a decrease in the volume level of the right channel; pressing the right arrow button causes a decrease in the volume level of the left channel. When the balance is equal for both channels, "BALANCE Center" will appear in the front panel display. Whenever you make an adjustment to the balance, it will appear in the display for 3 seconds. The following 3 images show center balance, a balance adjustment of 50% to the right channel and a balance setting for the right channel only:



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.

Figure 3: CRM-3 Remote Control

Remote control operation with other MOON components

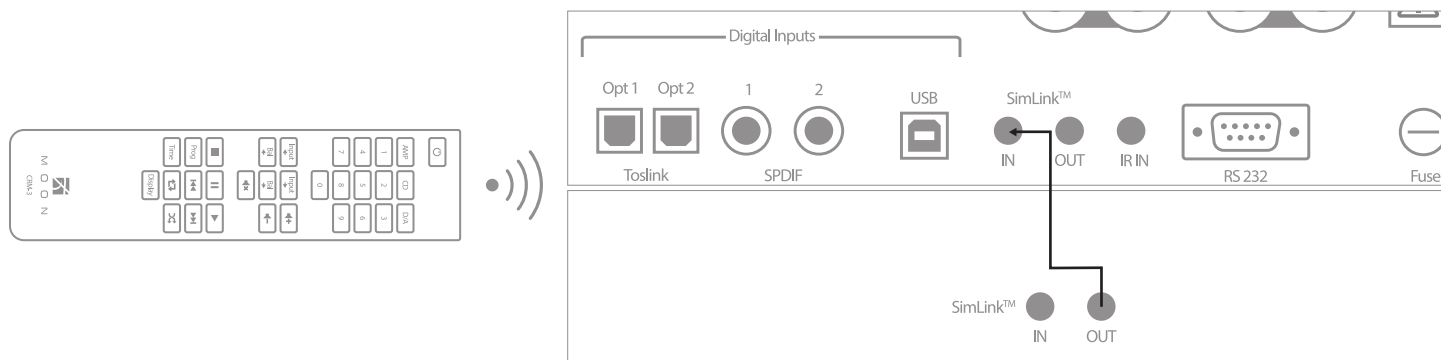


Figure 4: Remote operation with SimLink™

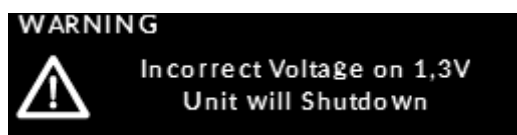
In figure 5 we have a Simlink™-enabled MOON component (example: the 260D CD Transport) connected to the MOON 240i via their respective SimLink™ ports (using a 1/8" mini-jack cable) When you turn on the 240i via remote control or by pressing & holding its Standby button, the 260D turn on automatically. The same rule applies when you put the 260D into Standby mode. SimLink™ also allows for the aforementioned "MOON CD" feature in the SETUP software.

Troubleshooting

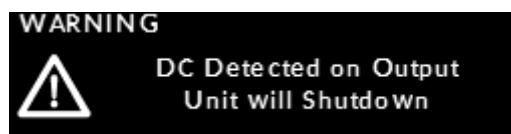
Your MOON 240i is a "smart" integrated amplifier that is equipped with a self-diagnostic system. An onscreen message will help determine the cause of the problem.

The blue LED will blink at the same time. Then the 240i will go into "Standby" mode. Here is a complete list of diagnostic messages, each with a brief explanation:

"Incorrect Voltage on x,xV Unit will Shutdown" is related to a power supply problem. Please contact your MOON dealer if you see this message:

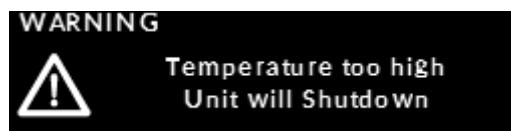


"DC Detected on Output Unit will Shutdown" is related to DC (direct current) coming from the source component that you are currently listening to through your 240i:



To confirm that there is DC present, first power down the 240i via the main power rocker switch on the rear panel; then disconnect the cables between the suspect source component and the 240i. Next power up the 240i via the main power rocker switch. Then attempt to turn on your 240i again via the "Standby" button: A successful power up will confirm that DC was coming from this source; If power up is unsuccessful and/or you still see the "DC Detected on Output Unit will Shutdown" message, then consult your MOON retailer for assistance.

"Temperature too high Unit will Shutdown" is related to the 240i's operating temperature:



If your 240i reaches a dangerously high operating temperature it will shutdown to avoid overheating which can lead to physical damage inside the unit. You will need to wait until the 240i cools down before powering it up again. If this occurs repeatedly then consult your MOON retailer for assistance.

If your 240i simply doesn't power up, turn off the main power switch and check the AC fuse on the rear panel. If the fuse appears good, put it back

into its socket and consult your dealer for assistance. If the fuse appears blown, replace it with a fuse of the same size and rating. Then turn on the main power switch. If your 240i still doesn't power up, consult your MOON retailer for assistance.

Specifications

Configuration	Stereo
Class Of Operation – Amplifier	Class A/B
Single-ended inputs	2 (RCA) pairs
Mini-jack input	1 (1/8")
Input Sensitivity	370mV – 3.0V RMS
Input Impedance	22,100Ω
Preamplifier / Subwoofer output	1 (RCA) pair
Headphone output	1 (1/4" Stereo TRS)
Output Power @ 8Ω	50 W per channel
Output Power @ 4Ω	85 W per channel
Gain	37dB
Signal-to-noise Ratio	100dB @ full power
Frequency Response	10Hz - 80kHz +0/-3.0dB
Crosstalk@ 1kHz	-100dB
Intermodulation Distortion	0.005%
Total Harmonic Distortion (20Hz-20kHz @ 1W)	0.02%
Total Harmonic Distortion (20Hz-20kHz @ 50W)	0.02%

Phono section

Input Impedance / Capacitance	47k Ω / 100pF
Gain	40dB
Input overload @ 40dB	58mV RMS
Signal-to-noise ratio (full scale @ 40dB)	104dBr
Frequency Response	20Hz - 20kHz (± 0.5 dB)
Crosstalk @ 1kHz	-95dB
IMD	0.01%
THD (20Hz - 20kHz)	0.001%

DAC section

Digital Input Impedance (S/PDIF)	75 ohms @ 0.5 Volts
DSD Data Rates	(2.8224MHz), Double (5.6448MHz) & Quadruple (11.2896)
DSD Sample Rates	DSD64, DSD128 & DSD256 (via USB only)
PCM Bit-depth range	16 - 32 bits (32-bit via USB only)
PCM Sampling Frequency Rates	44.1 - 384kHz (352.8 & 384kHz via USB only)
Remote Control	Full-Function (CRM-3)
Display Type	OLED
Power Consumption @ idle	44 W
Power Consumption @ Standby	11 W
AC Power Requirements	120V / 60Hz or 240V / 50Hz
Shipping Weight	24 lb / 11 kg
Dimensions (W x H x D, inches / cm)	16.9 x 3.5 x 14.4 / 42.9 x 8.9 x 36.6

If you require the RS-232 codes for your MOON 240i, please visit the "Contact Us" page and complete the "Information request" form on our website at www.simaudio.com

Fuse Replacement:



The **120V** version use a **4A fast blow fuse** (3AG size).

The **230V** version use a **2A fast blow fuse** (3AG size).

Quick reference: Setup Menu



Don't forget to reset to default settings