MOON

by SIMAUDIO

The performance of a lifetime

Owner's Manual
MOON 390
Network Player /
Preamplifier

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.

simaudio.com

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.

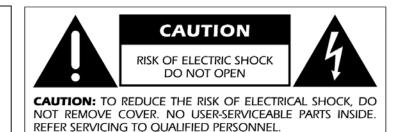10. Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus. Unplug mains cord during transportation.

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.

FCC information for MOON 390 equipped with the Qualcomm® aptXTM audio for Bluetooth module and MiND Music Streamer module:
This unit contains Transmitter Module FCC ID : SSSBC127-X and Transmitter Module FCC ID : 2AJYB-S810. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

The Spotify Software is subject to third party licenses found here: https://www.spotify.com/connect/third-party-licenses.

Apple, AirPlay, iPad, iPhone, and Siri are trademarks of Apple Inc., registered in the U.S. and other countries. Use of the Works with Apple badge means that an accessory has been designed to work specifically with the technology identified in the badge and has been certified by the developer to meet Apple performance standards.

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

Waste from Electrical and Electronic Equipment (WEEE)
This equipment must be sent to a separate collection facility for the recovery and recycling of electrical and electronic waste wherever dedicated facilities exist. WEEE regulations aim to contribute to sustainable production and consumption, addressing environmental and other issues caused by the growing number of discarded electronics. The symbol for the separate collection of electrical and electronic equipment indicates that this product should not be discarded as unsorted waste.

PLEASE READ ALL INSTRUCTIONS AND PRECAUTIONS CAREFULLY
AND COMPLETELY BEFORE OPERATING YOUR UNIT

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 unit 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 unit 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 unit 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 unit with any liquid. If a liquid substance does enter your unit, 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 unit.

8. NEVER block air flow through ventilation slots or heatsinks.

9. NEVER bypass any fuse.

10. NEVER replace any fuse with a value or type other than those specified

11. NEVER attempt to repair the unit. If a problem occurs contact your MOON dealer.

12. NEVER expose the unit to extremely high or low temperatures.

13. NEVER operate the unit 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.

Introduction

Thank you for having chosen the **MOON 390** Network Player / Preamplifier as a part of your music system. This component has been designed to offer state-of-the-art highend performance in an elegant package, hallmarks on which Simaudio has made its reputation. We have been building high-performance audio equipment for 40 years, and the know how gained through our cumulative experience is an important reason why MOON products are so musically satisfying.

The MOON 390 is a Roon Ready device, which means that it can also be used with Roon software. As soon as the network setup (Ethernet or WiFi) is completed, the Roon system can be used to control the unit. For more information or any questions concerning the Roon software usage and installation, please consult:

https://roonlabs.com/

MQA technology, manufactured under licence from MQA Limited, enables playback of MQA audio files and streams, delivering the sound of the original master recording. For more information on MQA, please consult:
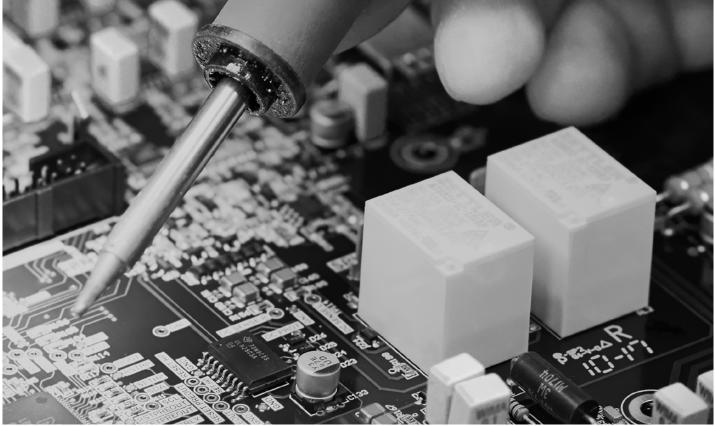
http://www.mqa.co.uk/

This MOON 390 supports AirPlay 2 and requires iOS 11.4 or later. AirPlay is an Apple technology to control audio systems and speakers anywhere on your network with the tap of an iPhone or iPad, or by asking Siri. For more information, please consult:

http://support.apple.com/

The performance of the MOON 390 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 unit. 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

Unpacking

The **MOON 390** should be removed from its box with care.

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

- AC power cable
- 'CRM-3' remote control with two 'CR-2032' batteries
- 'SimLink™' cable
- 2x Wi-Fi antenna
- Warranty and product registration information (USA and Canada only)

Once the unit 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 unit from any potential damage during transit.
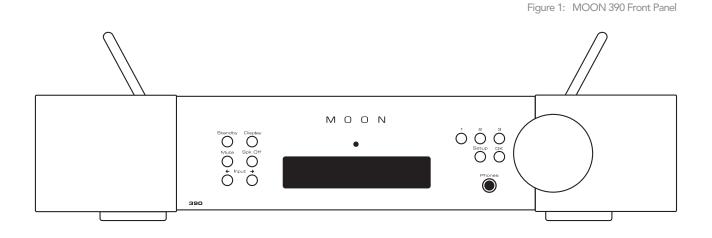
Please write the serial number of your unit in the space provided below for future reference.

Serial Number

Installation & Placement

The MOON 390 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 top. You should never place another component on top of this unit nor block the vents. Air must be permitted to pass freely through. 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.

Front Panel Controls

Standby: Toggles between ON and standby mode.

Mute: Mutes the sound. To unmute, press again or change the volume.

Display: Allows to change brightness of the display or turn it off. There are three (3) different levels of brightness; each press of the "Display" button scroll through the different brightness levels.

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, 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.

Input: The two (2) buttons labeled "← Input →" allow you to sequentially scroll, either forward "→" or backward "←" through all available inputs. The display will show the currently selected input.

Speaker Off: Turn off all audio outputs except the one of the headphone output jack for personal listening with headphones.

Setup: Enters the setup menu to program the numerous functions and settings available in this product. See next section, entitled "Software Setup", that explains their usage in detail.

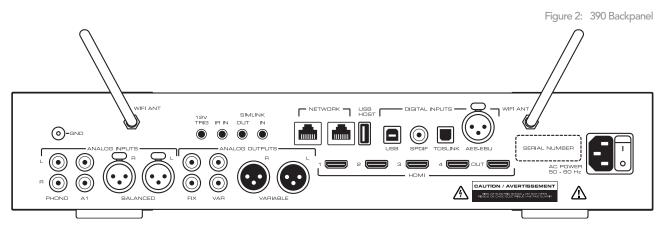**OK:** Confirms selection made within the software setup.

Main rotary knob: Volume control (1dB step from 0 to 30, 0.5dB steps above 30).

Once in setup mode, it allows to scroll through the various items of the menu.

1, 2, 3: Memory preset buttons. Each allows to memorize an internet radio station for quick retrieval, without having to use the mobile application. To set a preset, press and hold the memory button of your choice while the desired internet radio station is playing. Pressing briefly will recall the preset station and make it play. A delay of a few second before music starts playback is normal; it depends on the time required to connect to the music station's server.

Phones: Connect a pair of stereo headphones.

Rear Panel Connections

Figure 2: 390 Backpanel

Analog Inputs

Phono Input: The analog "PHONO" input is for exclusive use with turntables. Default setting is made for a typical moving magnet (MM) cartridge. To optimize the input for your specific cartridge see Phono setup in the section entitled "Software Setup". Multiples settings are available to fine tune the input for the cartridge of the connected turntable. Remember to connect the turntable's grounding cable to the grounding screw on the MOON 390's rear panel.

A1 Input: For use with any analog source with RCA output.

Balanced Input: For use with any analog source with balanced XLR output.

Analog Outputs

Balanced Variable Output: Connect to balanced XLR input of power amplifer, or powered active loudspeaker. This is the preferred or recommended connection to offer best sound quality.

Variable Output (RCA): To connect to RCA input of power amplifier, or powered active loudspeaker.

Fixed Output (RCA): To connect to input of an integrated amplifier (with its own volume control) or any device requiring fixed, line level signal.

IR input: To connect to a powered infrared repeater device. This is only useful if the MOON 390 is out of sight from where the infrared remote control is typically used.

Digital Inputs

Toslink Input: For use with source with Toslink output, such as TV set, set top box.

SPDIF Input: For use with source with SPDIF output, such as CD transport.

AES-EBU Input: For use with source with AES-EBU output, such as High End CD transport.

HDMI 1, 2, 3, 4 (optional): For use with any source with HDMI output, such as Blu-Ray player, SACD player, set top box, video games. Note that the MOON 390 is a 2-channel product and cannot process multi-channel audio.

In typical setup the source configure itself for 2-channel output. With some device it might be required to set it up specifically for PCM 2 channel audio.

HDMI Out (Optional): Connect to a HDMI display. Compatible with ARC (Audio Return Channel) and CEC device. It allows the use of the TV as the source for audio going into the MOON 390. See section entitled "Software Setup" for more detail.

USB Type B: For use with computer or music servers with player and USB output.

Windows-based computer require specific USB driver (USB HD DSD driver) which can be downloaded from the support section of our website : **www.simaudio.com.**

Mac computer do not requires any driver.

USB Host: For immediate playback of files on a temporary drive using MiND Controller mobile app. For the best performance and navigation experience, files should be served over the network using a UPnP server.
Note: Compatibility is not guaranteed with every brand and model of USB drive, nor with every file system.

WiFi Antennas: If you plan to use the wireless music streaming feature (between your wireless router and the MOON 390), you must install the included Wi-Fi antennas on the back panel by screwing them into the socket labelled "WIFI ANT".

Network: Ethernet connection (100Mbps) to connect to a router. Highly recommended for best music streaming performance (compared with WiFi connection). The second Ethernet connection is available to connect another device, such as NAS drive, intelligent TV, or any other device requiring Ethernet connection. Note: The MOON 390 do not bridge its wireless connection to the wired connection. The dual Ethernet connection acts as a wired LAN switch.

Communication Connections

12V Trigger: Connect to 12V trigger input of amplifier. It allows to turn connected amplifier on and off following the MOON 390 status.

Simlink™ : Connect to other MOON components to provide various functions such as automatic source selection and grouped Stanby mode. Always connect Simlink output to Simlink input. No need to close the loop, communication between components is bi-directionnal.

Audio Compatibility

The MOON 390 is capable of processing a PCM or MQA digital signal at the following sampling rates: 44.1kHz, 48kHz, 88.2kHz, 96kHz, 176.4kHz, 192kHz, 352.8kHz and 384kHz.

The MOON 390 is also capable of processing a DSD digital signal at any of the following data rates: DSD64 (2.82MHz), DSD128 (5.64MHz) and DSD256 (11.28MHz).

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

	OPTICAL	SPDIF	AES/EBU	USB	MiND via Ethernet	MiND via WiFi	Bluetooth	HDMI (Optional)
PCM 44.1kHz	✓	✓	✓	✓	✓	✓	✓	✓
48kHz	✓	✓	✓	✓	✓	✓	✓	✓
88.2kHz	✓	✓	✓	✓	✓	✓		✓
96kHz	✓	✓	✓	✓	✓	✓		✓
176.4kHz		✓	✓	✓	✓	✓		✓
192kHz		✓	✓	✓	✓	✓		✓
352.8kHz				✓	✓	#		
384kHz				✓	✓	#		
DSD 64 (2.8224MHz)				✓	✓	✓		
128 (5.6448MHz)				✓	✓	#		
256 (11.2896MHz)				✓	✓	#		

Notes: # signals that might work with MiND via WiFi input, depending on your router and conditions, but is NOT recommended as they may suffer from audible drop outs. / * ALAC file type limited to 96kHz / ** AIFF file type must be uncompressed ONLY. / MQA is the same as PCM in the table above, without Bluetooth support.

Software Setup

Setup Menu

The Setup menu on the MOON 390 display panel taylors the device to meet specific needs and preferences. Use the menu to assign a custom label to any input (eg, name the SPDIF input "CD") and disable unused inputs for convenient remote control scrolling. The Setup also serves to configure the phono input, volume control, screen saver, and other options, as well as to reset the unit to its factory default configuration. The following pages describe these settings in greater detail.

To navigate through the Software setup Menu:

Setup button enters the menu;

Rotating knob scroll through the various items in the menu;

OK button confirms selection of the highlighted item in the menu.

After making a selection, the indication 'saved' will appear briefly to confirm its validity. To abort setup mode, simply press the "Setup" button to exit.

Note: After sixty (60) seconds of no activity, the MOON 390 will automatically exit from setup mode and "EXITING" will appear in the front panel display window.

To edit a text string:

The two "← Input →" buttons allows for cursor movement; the rotating knob scroll through the available characters.

Settings

INPUTS

To change the label of an input for a predefined one:

SETUP > INPUT > 'Input you want to modify' > label > 'label of your choice'

Example to name the SPDIF input CD:
SETUP > INPUT > SPDIF > label > CD

To change the label of an input for a custom one:

SETUP > INPUT > 'Input you want to modify' > label >

CUSTOM… > then enter the characters you want

To make gain offset of a specific input:

SETUP > INPUT > 'Input you want to modify' > Offset > 'Select the offset you want'

Example to set the Optical input to have +8.0dB gain:

SETUP > INPUT > OPTICAL > Offset > +8.0dB

To make an input disabled so it does not appear when input scrolling via input buttons:

SETUP > INPUT > 'Input you want to modify' > Enable > Disabled

To set an analog input into a Home Theather bypass:

SETUP > INPUT > 'Input you want to convert to bypass' > HT BYPASS > HT BYPASS

Note 1: This mode remove volume control capability of the MOON 390 on the converted input; It is intented to be used to connect to a source that has its own volume control, such as a Home Theater processor variable output.

The system asks if you are sure before you proceed, to avoid any bad surprise.

Note 2: Only the input Analog and the input Balanced can be converted to Home Theater Bypass mode.

To disable the front panel blue LED:

SETUP > BLUE LED > DISABLED

To get the serial number and model info of the unit:

SETUP > INFO

Phono Settings

To setup the phono input for specific cartridge there is two different way to proceed. There is a basic setup and advanced setup.

If a basic setup is desired, simply choose between moving magnet or moving coil based on the real cartridge used:

SETUP > INPUT > PHONO > CONFIG > BASIC > MOVING MAG
or
SETUP > INPUT > PHONO > CONFIG > BASIC > MOVING COIL

If an advanced setup is desired, then the gain, impedance, capacitance and EQ curve can all be set manually, based on the desired characteristics to best fit with the cartridge.

To set the gain of the phono input:

SETUP > INPUT > PHONO > CONFIG > ADVANCED> GAIN > 'choose the desired gain from the list'

To set the input impedance of the phono input:

SETUP > INPUT > PHONO > CONFIG > ADVANCED> IMPEDANCE > 'choose the desired value from the list'

To set the input capacitance of the phono input:

SETUP > INPUT > PHONO > CONFIG > ADVANCED> CAPACITANCE > 'choose the desired value from the list'

To set the desired EQ Curve:

SETUP > INPUT > PHONO > CONFIG > ADVANCED> EQ CURVE > 'choose the desired curve'.

Note: RIAA is the standard EQ curve for the vast majority of LP records. IEC curve is the equivalent of RIAA with an added anti-rumble feature, useful when significant unmusical bass resonances appear within the system.

VARIABLE OUT

There are three pairs of analog outputs located on the rear panel of the 390. By default, there are two sets (XLR and RCA) of variable-volume outputs and one pair (RCA) of fixed-volume outputs. To convert all the outputs to fixed outputs:

SETUP > VARIABLE OUT > FIXED

Caution! The fixed volume level will be relatively high. Before setting the 390 analog outputs to 'fixed', lower the volume of the preamp or integrated amp to which the 390 is connected.
Selecting 'Spk Off' to use headphones will temporarily reenable volume control for the Phones output.

Note: Volume commands are transmitted to the 390 when its volume control is enabled. When its output volume is 'fixed', volume commands are relayed via SimLink to the next MOON device.

HDMI (Optional)

If your unit includes the optional HDMI module, you may configure its functionality to suit your requirements.

To associate a specific HDMI video signal with a different audio input:

SETUP > I NPUT > 'Input you want to modify' > HDMI In > 'Select the HDMI input you want to associate'
Default for this setting is called LAST. This means that the last selected HDMI video signal is still passed to the HDMI output.

To listen to a connected an HDMI source on the TV while MOON 390 is put in Standby mode:
SETUP > HDMI > HDMI STBY > 'Input you want to listen'

Note: 'LAST INPUT' means the last selected HDMI input would still be sent to TV while in standby. 'OFF' means no HDMI signal is sent to the output in Standby mode.

To enable HDMI CEC (Consumer Electronic Control) features (Allows automatic turn on/turn off, automatic input selection etc with other CEC-compatible component):

SETUP > HDMI > HDMI CEC > ON

Note 1: The default setting is ARC ONLY which means the CEC feature is disabled but allows HDMI ARC (Audio Return Channel) to function.

Note 2: The setting 'OFF' not only disable CEC features, it also disables HDMI ARC.

Network Settings

Please note it is not required to enter settings to use the wired (Ethernet) connection.

To change the friendly name* of the MiND zone.

SETUP > NETWORK > MiND name > 'type the desired name'

*name as it appears in the MOON MiND app.
We recommend giving a meaningful name based on the location (or zone) in which the unit is, such as living room, listening room, etc.

The system asks if you are sure before you proceed, to avoid any bad surprise.

To configure WiFi network without the use of the MOON MiND application:

SETUP > NETWORK > CONFIG > WiFi PARAMETERS > CONNECT

And then select which WiFi network from the list to connect to. If the desired WiFi network does not appear in the list, it can be entered manually:
SETUP > NETWORK > CONFIG > WiFi PARAMETERS > MANUAL

Then the Security mode (WEP, WPA, WPA2) and password (Security key) will be asked; select and enter appropriately. Make sure to have on hand the network credentials before starting the procedure.

How to configure for DHCP:

SETUP > NETWORK > CONFIG > NET PARAMETERS > AUTOMATIC
Note: It is the default setting and for 99.9% of situation, it is preferable to keep it automatic which use DHCP protocol.

How to configure Static IP:

This mode should be reserved for network savvy expert:

SETUP > NETWORK > CONFIG > NET PARAMETERS > MANUAL

Then the desired IP address will be asked. Enter appropriately.

Then the desired Net Mask will be asked. Enter appropriately.

Then the desired Gateway will be asked. Enter appropriately.

Then the DNS will be asked. Enter appropriately. Then the system asks if you are sure to apply these settings to avoid any bad surprise.

To get detailed information on the connected network:

SETUP > NETWORK > INFO

Multiroom Settings

Multiroom function allows to play the same music synchronously on other MOON device equipped with MiND 2 technology.

Using the MOON MiND Controller application, group can be formed or cancelled at any time using the logo ⌂ within the app.

The MOON 390 has the capacity to play in group zone not only the audio from the MiND 2 player, but also from any local source connected to the MOON 390.

There is a setting to let user choose between highest sound fidelity from the unit while playing in multi-zones (ORIGINAL), or for the best synchronization of the different zones playing the same signal (SYNCHRONIZED). To set this preference:

SETUP > MULTIROOM > SYNCHRONIZED
or
SETUP > MULTIROOM > ORIGINAL

The SYNCHRONIZED setting means that all grouped network players, including the master, are playing the same synchronized digital signal.

The ORIGINAL setting means that the master unit receiving the signal to be played in the group is actually playing the original signal (even analog if the original signal is analog) while the other in the group are playing a digitized and time encoded signal.

Bluetooth

To pair the unit to a new Bluetooth device:

SETUP > BLUETOOTH > START PAIRING

Note: The Bluetooth feature of your smart device must be enabled for pairing to work. Pairing mode is enabled for 30 seconds only or until pairing is completed. This procedure only needs to be performed once for each smart device.

To disconnect a Bluetooth device form the unit:

SETUP > BLUETOOTH > DISCONNECT

MOON CD Special Feature

If you connect a MOON CD player (or MOON CD transport) to the MOON 390 and connect the SimLink™ cable between the products, automatic input selection will take place each time you press play on the player. Input need to be set according to the real life connection to work properly.

To set an input for MOON CD:

SETUP > MOON CD > 'Select the desired input'

Volume

Volume level setting at the moment the MOON 390 is turned on, out of standby:

At turn on, the MOON 390 either start at the last volume level it was before it was put to Standby, or at specific value defined in the menu.

To set 'power on volume' preference :

SETUP > PWR ON VOLUME > LAST
or
SETUP > PWR ON VOLUME > SPECIFIC VALUE >
'set the desired value'

To set a maximum volume:

SETUP > MAXIMUM VOLUME > 'set the desired value'

This setting will limit the maximum volume the MOON 390 can be set via its volume control. This is useful for example if kids are present and there is fear they might make it play too loud and damage loudspeakers for example. Default is without limitation; maximum volume at 80.

Screen Saver

A screen saver is implemented in the MOON 390 software to extend the life of the OLED display beyond the life of the product. The following settings are available to tailor the screen saver behavior:

To disable entirely the screen saver:

SETUP > SCREEN SAVER > MODE > DISABLED

To set the activation of the screen saver after twenty minutes of silence and no user interaction:

SETUP > SCREEN SAVER > MODE > SILENCE

To set the activation of the screen saver after a period of twenty minutes of no user interaction, even if music is playing:

SETUP > SCREEN SAVER > MODE > USER OPERATION

To set the look of the screen saver as a MOON logo randomly floating on the display window:

SETUP > SCREEN SAVER > LOOK > MOON LOGO
To set the look of the screen saver to a black screen:

SETUP > SCREEN SAVER > LOOK > DISPLAY OFF

Standby Mode Setting

The following settings are available to tailor the Standby mode behavior of the unit.

To keep powered most electronics in the unit while in Standby mode:

SETUP > POWER SETTINGS > NORMAL
To put most electronics off while in standby to draw less mains current :

SETUP > POWER SETTINGS > LOW POWER

To automatically go in low power mode as described above after twenty minute of silence and no user activity:

SETUP > POWER SETTINGS > AUTO OFF

Firmware

To verify currently installed firmware version in the unit :

SETUP > FIRMWARE > VERSION

To update the unit to newer firmware version:

SETUP > FIRMWARE > UPDATE

If you activate firmware update, make sure not to unplug the mains or turn off the rocker switch of the unit while the update takes place. Once the firmware update has been completed, it is a good practice to make a power cycle with the rocker switch on the back panel.

To reset the unit to factory settings:

SETUP > RESET

The system asks if you are sure before proceeding, to avoid any bad surprise. Note that this will erase any particular settings saved (including friendly name, WiFi settings, etc) to replace with factory settings.

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™ involves the "Standby" function. By pressing down and holding the "Standby" button for 2 seconds on the MOON 390, all other MOON components connected via the SimLink will go into "Standby" mode. The same logic applies when switching from "Standby" to active mode.

IIf you are using a MOON CD Player such as the MOON 260D with the MOON 390, a SimLink™ connection between the units may be useful. When the ▶ (play) button is pressed on the CD player or via the remote, the MOON 390 will automatically switch to the "SPDIF 1" input (by default). Default can be changed to other input in the MOON CD setup using the previously described SETUP software.

The connection rules for the SimLink™ are 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.

Airplay

AirPlay enables compatible Apple devices to stream audio to the Network input of the 390—to pause, play, and skip forward or backward, and even to control volume—from within a wide range of apps like Apple Music, Spotify, and YouTube Music.
NB: AirPlay Volume is indicated on a scale to 100, while the 390 displays gain to 80dB. Setting the volume with AirPlay to 50 corresponds to 40dB on the 390.

To set up AirPlay with your 390:
1. Open the Home app on an iPhone or iPad
2. Tap the ⊕, then "Add Accessory".
3. Tap "Don't have a Code or Can't Scan".
4. Select "MOON 390" as your AirPlay speaker. The speaker will be added to your home.
5. Name your 390 and identify its room to make it easier to find.
6. Tap Done.

For more information regarding the Home app: http://support.apple.com/kb/HT208724

Spotify Connect

Use your phone, tablet or computer as a remote control for Spotify.
Go to spotify.com/connect to learn how.

Operating the Unit

We recommend leaving your unit 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 unit.

Turning on your unit for the first time

Prior to turning the unit 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 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 splash screen will appear in the display window for five (5) seconds while the unit goes through its start-up procedure.
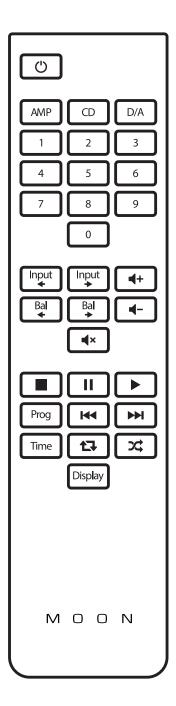
This occurs every time you power up your unit via "Standby". Then you will hear a very faint single clicking sound confirming that everything is in order and that the unit is now ready for use.

When powering up the unit via the rear panel main rocker switch, you must allow the MiND streaming module to go through its initialization process, which requires up to sixty (60) seconds, before you can begin using it to stream music. This is the result of this streaming module's complexity and required network connectivity.

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 unit prior to powering up the unit. When powering off your unit always power down your unit before powering down any components connected to the unit.

Remote Control

The MOON 390 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 remove the two screws from the slidable lower section of the back plate.

To engage the 'CRM-3' remote for use with the MOON 390, you must first press the button labeled **AMP**.

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

The 2 buttons labelled ← **INPUT** → allow you to sequentially scroll, through all available inputs.

The 2 buttons labelled **- VOL +** allow you to control the volume level.

The 2 buttons labelled ← **BAL** → control channel balance;

The ◀× button mutes the sound. Pressing again will reinstate the output .

When your selected input is "MiND" and the QUEUE contains at least one track, you can use the remote control to play music from the MiND's QUEUE. You can use the ❙❙ (pause), ▶ (play), ◀◀ (backward) and ▶▶ (forward) buttons. Pressing ⟳ once will repeat the QUEUE's current track; pressing ⟳ a second time will repeat the entire contents of the QUEUE; pressing ⟳ a third time will cancel the repeat mode. Pressing ⤭ will randomly play the entire contents of the QUEUE. Pressing ⤭ a second time will cancel the random mode.

When in repeat mode the ⟳ icon will appear in the screen display; when in random mode the ⤭ icon will appear in the screen display.

When your selected input is "BLUETOOTH" and you have a paired smart device (iPhone, iPad, Android, etc.) that is playing music, you may be able to use the pause, play, backward and forward buttons on the CRM-3 remote control to navigate the music stored on your smart device. This is dependant on both the App and the smart device compatibility and both needs to be compatible for this functionality to work.

Figure 3:   CRM-3 Remote Control

Specifications

Analog Input Impedance	22kΩ
Max Analog Input	5V RMS
Maximum Gain	10dB
Output Impedance	50 Ω
Crosstalk @ 1kHz	-116dB
Frequency Response	10Hz - 200kHz +0.5/-3.0dB
Signal-to-noise Ratio	125dB
Total Harmonic Distortion	0.0004%
Intermodulation Distortion	0.0003%
Headphone output power (600 Ω / 300 Ω / 50 Ω)	100 mW / 200 mW / 0.8 W
Headphone output THD	0.005%
Headphone output IMD	0.005%
Power Consumption @ Idle	25W
Power Consumption @ Standby	20W
Power Consumption @ low power Standby	4W
AC Power Requirements	100-240V / 50-60Hz
Shipping Weight	22 lb / 10 kg
Dimensions (W x H x D, inches / cm)	16.9 x 3.5 x 13.1 / 42.9 x 8.9 x 33.3

⚠ Fuse replacement: **2A slow blow 5x20mm fuse**.

USB Host

Interface	MiND Controller (Library > USB)
Supported File system	FAT
	NTFS
	EXT2/3/4
Maximum capacity	determined by file system
	NTFS: 256TB
Maximum file bitrate	200Mb/s
Support for HDD up to 7200RPM	Yes
Support for HDD requires power supply (Results may vary)	100 mW / 200 mW / 0.8 W
	2.5'' HDD: No
	3.5" HDD: Yes, 12V

If you require the IR or RS-232 codes for the MOON 390, please visit the "Contact Us" section in the support page on our website at www.simaudio.com.

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