M33
BluOS Streaming DAC Amplifier

Owner’s Manual
1. Read instructions - All the safety and operating instructions should be read before the product is operated.

2. Retain instructions - The safety and operating instructions should be retained for future reference.

3. Heed Warnings - All warnings on the product and in the operating instructions should be adhered to.

4. Follow Instructions - All operating and use instructions should be followed.

5. Cleaning - Unplug this product from the wall outlet before cleaning. Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.

6. Attachments - Do not use attachments not recommended by the manufacturer as they may cause hazards.

7. Water and Moisture - Do not use this product near water-for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool; and the like.

8. Accessories - Do not place this product on an unstable cart, stand, tripod, bracket, or table. The product may fall, causing serious injury to a child or adult and serious damage to the product. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the product. Any mounting of the product should follow the manufacturer’s instructions, and should use a mounting accessory recommended by the manufacturer.

9. Cart - A product and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the product and cart combination to overturn.

10. Ventilation - Slots and openings in the cabinet are provided for ventilation to ensure reliable operation of the product and to protect it from overheating. These openings must not be blocked or covered. The openings should never be blocked by placing the product on a bed, sofa, rug, or other similar surface. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer’s instructions have been adhered to.

11. Power Sources - This product should be operated only from the type of power source indicated on the marking label and connected to a MAINS socket outlet with a protective earthing connection. If you are not sure of the type of power supply to your home, consult your product dealer or local power company.

12. Power–Cord Protection - Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the product.

13. Mains Plug - Where the mains plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable.

14. Outdoor Antenna Grounding - If an outside antenna or cable system is connected to the product, be sure the antenna or cable system is grounded so as to provide some protection against voltage surges and built-up static charges. Article 810 of the National Electrical Code, ANSI/NFPA 70, provides information with regard to proper grounding of the mast and supporting structure, grounding of the lead-in wire to an antenna discharge unit, size of grounding conductors, location of antenna discharge unit, connection to grounding electrodes, and requirements for the grounding electrode.

NOTE TO CATV SYSTEM INSTALLER
This reminder is provided to call the CATV system installer’s attention to Section 820-40 of the NEC, which provides guidelines for proper grounding and, in particular, specifies that the cable ground shall be connected to the grounding system of the building at a point nearest to the point of cable entry as practical.

15. Lightning - For added protection for this product during a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system. This will prevent damage to the product due to lightning and power-line surges.

16. Power Lines - An outside antenna system should not be located in the vicinity of overhead power lines or other electric light or power circuits, or where it can fall into such power lines or circuits. When installing an outside antenna system, extreme care should be taken to keep from touching such power lines or circuits as contact with them might be fatal.

17. Overloading - Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

18. Flame Sources - No naked flame sources, such as lighted candles, should be placed on the product.

19. Object and Liquid Entry - Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.

20. Headphones - Excessive sound pressure from earphones and headphones can cause hearing loss.

21. Damage Requiring Service - Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
   a. When the power-supply cord or plug is damaged.
   b. If liquid has been spilled, or objects have fallen into the product.
   c. If the product has been exposed to rain or water.
   d. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
   e. If the product has been dropped or damaged in any way.
   f. When the product exhibits a distinct change in performance—this indicates a need for service.

22. Replacement Parts - When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
23. Battery Disposal - When disposing of used batteries, please comply with governmental regulations or environmental public instruction’s rules that apply in your country or area.

24. Safety Check - Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

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

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

THE EQUIPMENT MUST BE CONNECTED TO AN EARTHED MAINS SOCKET-OUTLET.

CAUTION REGARDING PLACEMENT
To maintain proper ventilation, be sure to leave a space around the unit (from the largest outer dimensions including projections) than is equal to, or greater than shown below:
- Left and Right Panels: 10 cm
- Rear Panel: 10 cm
- Top Panel: 10 cm

FCC STATEMENT
This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:
- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio TV technician for help.

CAUTION
- Changes or modifications to this equipment not expressly approved by NAD Electronics for compliance could void the user’s authority to operate this equipment.
- To prevent electric shock, match wide blade of plug to wide slot, fully insert.
- Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type.
- An appliance with a protective earth terminal should be connected to a mains outlet with a protective earth connection.

WARNING
- To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.
- The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on apparatus.
- Mains plug is used as disconnect device and it should remain readily operable during intended use. In order to disconnect the apparatus from the mains completely, the mains plug should be disconnected from the mains socket outlet completely.
- Battery shall not be exposed to excessive heat such as sunshine, fire or the like.

IF IN DOUBT CONSULT A COMPETENT ELECTRICIAN.

NOTES ON ENVIRONMENTAL PROTECTION
At the end of its useful life, this product must not be disposed of with regular household waste but must be returned to a collection point for the recycling of electrical and electronic equipment. The symbol on the product, user’s manual and packaging point this out.

The materials can be reused in accordance with their markings. Through re-use, recycling of raw materials, or other forms of recycling of old products, you are making an important contribution to the protection of our environment.

Your local administrative office can advise you of the responsible waste disposal point.

RECORD YOUR MODEL NUMBER (NOW, WHILE YOU CAN SEE IT)
The model and serial number of your new M33 are located on the back of the cabinet. For your future convenience, we suggest that you record these numbers here:

Model number ...........................................
Serial number .....................................
## INTRODUCTION

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WHAT’S IN THE BOX
Packed with your M33 you will find
- Two detachable mains power cord
- HTRM 2 remote control with 4 AA batteries
- Mic Assembly with Ferrite Base
- USB MIC Sound Adaptor
- USB flash drive
- Four pieces of magnetic feet
- Cleaning cloth
- Quick Setup Guide

NOTE
Follow supplied Quick Setup Guide to help you get started with your M33.

SAVE THE PACKAGING
Please save the box and the packaging that came with the M33. Should you move or need to transport your M33, this is the safest container to use. We’ve seen too many otherwise perfect components damaged in transit for lack of a proper shipping carton. So please, save that box!

FACTORY RESET
Factory Reset is recommended if your M33 is not functioning or internet firmware upgrade has failed. All customization including Wi-Fi network configuration, file shares and saved playlists or settings will be lost. They have to be re-created once factory reset is completed.

M33 can be factory reset or restored to factory default settings using any of the following methods:

1 Via Front Panel Display
Go to Settings - Other menu option and select Factory Reset to initiate restoring of the M33 to factory default settings. Follow the prompt commands.

2 Force Factory Reset
- Press and hold rear panel RESET tact switch and while doing so, turn ON the rear panel POWER switch. Do not release hold of the RESET tact switch.
- Hold down the RESET tact switch - STATUS INDICATOR (NAD logo) alternately blinks red and white.
- Release the RESET tact switch as soon as the front panel display shows “Factory Reset…”
- Successful Factory Reset is indicated by the unit rebooting.
  - For wireless connection, M33 returns to Hotspot mode and STATUS INDICATOR (NAD logo) indicator turns into solid white.
  - For wired connection, M33 will simply connect as if it was a new player and NAD logo indicator turns into solid white.

IMPORTANT
Releasing the Standby button switch at any time before the STATUS INDICATOR (NAD logo) begins flashing red will cancel the factory reset and leave the M33 at Upgrade Mode. Just start again the procedure for Factory Reset.
QUICK SETUP GUIDE

This simple guide will help you get started with your M33.

Your M33 can be connected to your home network via Wired or Wireless connection.

IMPORTANT!

- For wired and wireless connection to be established, ensure that a broadband router that supports Ethernet and/or Wi-Fi standards is setup and available.
- Tablets, smartphones and other applicable devices that support iOS (Apple) or Android operating system can be used as mobile device controller. These devices are not supplied with your M33.
- Download and install the corresponding “BluOS Controller” App for your device.
- The BluOS App is available as a Mobile App for Android, iOS, Kindle and Desktop App for Windows and OS X Computers. Mobile Apps are handled by the respective Application Store of the Mobile devices.
- Desktop Apps are available to download directly from the Bluesound homepage - www.bluesound.com

WIRED CONNECTION

Using an Ethernet cable (not supplied), connect one end to M33’s LAN port and the other end directly to your Wired network or router.

WIRELESS CONNECTION

The process is very easy but slightly differs between iOS (Apple) and Android devices. Follow below instructions for the smartphone or tablet that applies to you. Windows and Mac users please see the instructions under Wireless Manual Setup below.

NOTE

Ensure that there is no wired connection established.

ANDROID

   a. If you are not prompted, open the Player Drawer by pressing the Home icon in the top right corner of the App.
   b. Scroll to the bottom and select “Add a Player” to launch the Easy Setup Wizard.
   c. Select your M33’s unique network ID* from the Players detected Window.
   d. Select your Home Wi-Fi Network from the “Choose a Wi-Fi Network” drop down menu.
   e. If your Home Wi-Fi Network does not appear or is hidden, select “Manual SSID Entry”. Enter network or applicable wireless network name.
   f. Select the “Network Security” your network uses.
   g. Enter your home network’s Wi-Fi Password in the field provided and select “OK”.
   h. Select a “Player name” from the drop down list or use the on-screen keyboard to create a customized room name in the field “Custom name”.
   i. Select “Update” to save all your settings and complete the set up connection of your M33. Do not forget to go back to the Wi-Fi Settings section of your device to confirm that it is reconnected to the correct Wi-Fi network.

* The M33’s unique network ID is listed as the product name (i.e. M33) immediately followed by the last four digits in the MAC (Machine Access Control) address (example: C658-001A). The full 12-digit MAC address is printed on a sticker on the M33 rear panel.

iOS

2. Scroll to the bottom and select “Add a Player” to launch the Easy Setup Wizard.
3. As illustrated, press the Home button and open the iOS Settings App to select the Wi-Fi network you will connect.
4. From the same iOS Settings App, select your M33’s unique network ID*. Follow prompt instructions.
5. Return to BluOS App upon completion of the network setup connection.

If the above method does not work or if you are on a Windows PC or Apple Mac, Wireless Manual Setup can be undertaken.

WIRELESS MANUAL SETUP

1. Select your M33’s unique network ID* from the Wi-Fi Setup connection settings menu of your tablet, smart phone or computer and join it.
2. “…Control Panel” menu window should automatically open. If not, open the web browser of your device and visit http://10.1.2.3
3. Select “Configure Wi-Fi” from the “…Control Panel” menu. Select your network or applicable wireless network name (SSID) from the “Configure Wireless” drop down menu.
4. Enter your network’s Wireless Password (Passphrase, WEP/WAP key as applicable) in the field “Enter password or key (if protected)”.
5. Select a “Player name” from the drop down list or use the on-screen keyboard to create a customized room name in the field “Custom name”.
6. Select “Update” to save all your settings and complete the set up connection of your M33. Do not forget to go back to the Wi-Fi Settings section of your device to confirm that it is reconnected to the correct Wi-Fi network.

Your M33 is now connected to your Wi-Fi network and ready to be used with the BluOS controller App.

IMPORTANT!

Always ensure that your M33 is updated with the latest firmware. Go to the M33 product page at nadelectronics.com for firmware update information.
Press \( \odot \) (Standby) button for the M33 to be switched ON from standby mode. The STATUS INDICATOR (NAD logo) will turn from amber to white color.

Pressing \( \odot \) (Standby) button again switches back M33 to standby mode. The STATUS INDICATOR (NAD logo) will illuminate to amber color at standby mode.

The \( \odot \) (Standby) button cannot activate the M33 with the rear panel POWER switched off.

IMPORTANT NOTES
- Refer also to +12V TRIGGER IN (OFF/AUTO) of IDENTIFICATION OF CONTROLS - REAR PANEL.
- For the \( \odot \) (Standby) button to activate, two conditions must be completed.
  a. Plug-in the supplied mains power cord to mains power source. Connect corresponding end of the mains power cord to the AC mains input of M33 and the plug connected to mains power source.
  b. The rear panel POWER switch must be set to ON position.

2 STATUS INDICATOR (NAD LOGO)
- This indicator will be amber when M33 is in standby mode.
- When M33 is powered up from standby mode, this indicator will change from amber to solid white.

3 HEADPHONE
- A 1/4” stereo jack socket is supplied for headphone listening and will work with conventional headphones of any impedance.
- The volume, tone and balance controls are operative for headphone listening. Use a suitable adapter to connect headphones with other types of sockets, such as 3.5mm “personal stereo” jack plugs.

4 DISPLAY (TOUCH PANEL DISPLAY)
- Display visual information about current music or media source, settings or menu options.
- Touch control functions are also displayed depending upon menu option selected.

5 VOLUME
- The VOLUME control adjusts the overall loudness of the signal driving the speakers or headphones.
- Turn clockwise to increase the volume level, counter clockwise to lower it.
**1 LAN/USB**

**LAN**
- LAN connection must be setup for wired connection to be established. Set up a Wired Ethernet broadband router with broadband internet connection. Your router or home network should have a built-in DHCP server to consummate the connection.
- Using a standard straight-through Ethernet cable (not supplied), connect one end of the Ethernet cable to the LAN port of your wired Ethernet broadband router and the other end to M33’s LAN port.

**NOTES**
- NAD is not responsible for any malfunction of the M33 and/or the internet connection due to communication errors or malfunctions associated with your broadband internet connection or other connected equipment. Contact your Internet Service Provider (ISP) for assistance or the service bureau of your other equipment.
- Contact your ISP for policies, charges, content restrictions, service limitations, bandwidth, repair and other related issues pertinent to internet connectivity.

**USB**
- Connect to this USB port USB mass storage devices formatted as FAT32, NTFS or Linux ext4. The connected USB device appears as a Local Source (USB) in the BluOS App.
- Access and playback music stored in the connected USB device by selecting "USB" from the BluOS App.

**2 HDMI ARC**
- Connect to TV that supports HDMI Control (CEC) and Audio Return Channel (ARC) functions. Both functions are possible if external devices that also support both features are interconnected with M33 via HDMI connection.
- Use HDMI cable to connect HDMI ARC to corresponding HDMI ARC port of TV.
- With ARC connection established, M33 will output audio signal from TV.

**IMPORTANT**
- Ensure that the audio setting/format of ARC-connected devices to M33 is set to PCM only.
- Only audio output signal from TV is supported by HDMI ARC port. There is no video output at HDMI ARC port of M33.

**3 WI-FI AND BLUETOOTH ANTENA TERMINALS**
- Install supplied antennas to corresponding Wi-Fi and BT antenna terminals.

**4 SUB OUT 1, 2**
- Connect SUB OUT 1 and/or SUB OUT 2 to the low level input of corresponding powered subwoofer.
- Low frequency information up to 80 Hz is sent to the connected subwoofer.

**5 RESET**
- Use this tact switch in forcing the factory reset of the unit. Refer to item about FORCING FACTORY RESET under FACTORY RESET section.
6 BRIDGE MODE

The M33 amplifier can be configured to be MONO (Bridge Mode), more than doubling its output power. This way, the M33 can be used as part of a high power stereo or home-theatre system, by connecting additional power amplifiers.

- In BRIDGED MODE (switch at ON (MONO) setting), the M33 will produce approximately 640W into an 8 ohm loudspeaker. In this mode, the amplifier sections will react as though the speaker impedance has been halved. Low impedance speakers (under 8 ohms) are not recommended when using Bridge Mode as these may cause the amplifier’s thermal cut-out to operate if played at high levels.
- Set the BRIDGE MODE switch to the “ON (MONO)” position and connect the speaker to the terminals marked “L+” and “R-” ensuring that the “L+” is connected to the “+” terminal of your speaker and the “R-” is connected to the speaker’s “-” terminal.
- Connect the source to the Left input sockets only. Do not connect anything to the Right input socket when Bridge Mode is selected.

7 RS 232

- NAD is an integration partner with several smart control and automation systems like Control4, Crestron, LUTRON among others. Check out NAD website for a list of NAD’s integration partners. See your NAD audio specialist for more information.
- Connect this interface using RS-232 serial cable (not supplied) to any Windows compatible PC to allow remote control of M33 via compatible external controllers.
- Refer to NAD website for information about RS232 Protocol documents and PC interface program.

8 IR IN

- This input is connected to the output of an IR (infrared) repeater (Xantech or similar) or IR output of another compatible device to allow control of the M33 from a remote location.

9 +12V TRIGGER IN

- With this input triggered by a 12V DC supply, the M33 can be switched ON remotely by compatible devices such as amplifiers, preamplifiers, receivers, etc. If the 12V DC supply is cut off, the M33 will return to standby mode.
- Connect this +12V Trigger input to the remote device’s corresponding +12V DC output jack using a mono cable with 3.5mm male plug. The controlling device must be equipped with a +12V trigger output to use this feature.

10 SERVICE

- These USB port and tact switch are for servicing purposes only. Not for consumer use.

11 OPTICAL 1-2/COAXIAL 1-2

- Connect to corresponding optical and coaxial digital output of sources such as CD or BD/DVD players, digital cable box, digital tuners and other applicable components.
- The sources will appear as “Optical 1”, “Optical 2”, “Coaxial 1” and “Coaxial 2” in the navigation drawer of the BluOS App.

12 AES/EBU IN

- Digital audio stream from professional audio sources can be connected to this XLR connector. For high-end sources with higher sampling rates like 176kHz and 192kHz, it is highly recommended that such sources be interfaced with the AES/EBU IN connector.
- The AES/EBU IN is well suited to handle such sources with high sampling rate.
- The source will appear as “AES/EBU” in the navigation drawer of the BluOS App.

13 BALANCED IN

- Connect XLR audio source to these connectors. Ensure that proper pin configurations are followed – Pin 1: Ground, Pin 2: Positive (signal live) and Pin 3: Negative (signal return).
- The source will appear as “Balanced In” in the navigation drawer of the BluOS App.

14 PHONO

- Input for either MM or MC phono cartridge. Connect the twin RCA leads from your turntable to this input.
- If your turntable includes a ground/earth lead, it can be connected to the Ground Terminal (refer to item 20 below).
- The source will appear as “Phono” in the navigation drawer of the BluOS App.

15 LINE IN

- Input for line level sources such as CD player, tuner or any compatible devices. Use dual RCA-to-RCA cable to connect the source device’s left and right “Audio Output” to these line input ports.
- The source will appear as “Line In” in the navigation drawer of the BluOS App.

16 PRE OUT

- Use dual RCA-to-RCA cable to connect PRE-OUT to the corresponding analog audio input of compatible devices such as amplifiers, receivers or other applicable devices. This makes it possible to use the M33 as a pre-amplifier to such devices.

17 SPEAKERS

- The M33 has two sets of SPEAKER connections which are identical in function (parallel connection).
- Connect M33’s Right speaker terminals marked “+” and “-” to the corresponding “+” and “-” terminals of your designated right speaker. Repeat the same for M33’s Left speaker terminals and corresponding left speaker.
- Double check the speaker connections before powering up the M33.

IMPORTANT NOTES

- The blue terminals must never be connected to ground (earth).
- Never connect the blue terminals together or to any common ground device.
- Do not connect the output of this amplifier to any headphone adapter, speaker switch or any device that uses common ground for left and right channels.
IDENTIFICATION OF CONTROLS

REAR PANEL

18 POWER
- Supplies the AC mains power to the M33.
- When the POWER switch is set to ON position, the M33 goes to standby mode as shown by the amber status condition of STATUS INDICATOR (NAD logo) indicator.
- Press (Standby) button or HTRM 2’s remote control’s [ON] button to switch ON the M33 from standby mode.
- If you do not intend to use the M33 for long periods of time (such as when on vacation), switch off the POWER switch.
- With POWER switched off, neither the front panel Standby button nor HTRM 2 remote control’s [ON] button can activate the M33.

19 FUSE HOLDER
- Only qualified NAD service technicians can have access to this fuse holder. Opening this fuse holder may cause damage thus voiding the warranty of your M33.

20 GROUND TERMINAL
- Ensure that the M33 is plugged-in to a grounded AC wall outlet.
- If necessary, use this ground terminal to connect to ground a phono or turntable source for PHONO input.
- If a separate earth ground is necessary, use this terminal to ground your M33. The M33 can be connected to ground by connecting a ground lead wire or similar to this terminal. After insertion, tighten the terminal to secure the lead.

21 AC MAINS INPUT
- The M33 comes supplied with two separate mains power cords. Select the mains power cord appropriate for your region.
- Before connecting the power cord’s plug to the mains power outlet, ensure that the other end of the power cord is firmly connected to M33’s AC Mains input socket.
- Always unplug the power cord from the mains power outlet before disconnecting the other end of the power cord from M33’s AC Mains input socket.
The intuitive front panel display allows the user to perform and navigate through several functions, features and Sources of M33. Touch anywhere in the front panel display and below menu options will become available.

Navigating the Front Panel Display Items and Making Changes

Use your finger to touch, swipe and navigate through the front panel display items. Touch or swipe (left, right, upwards or downwards) to select or configure an item.

Note

Swipe – From above display setting, when you swipe your finger from left to right or vice-versa along the “Source” area of the display, current Source changes to the next or previous Source.

Sample Display Screen

Now Playing

1. New screen is opened showing Sources, Presets and Settings menu options.
2. Information about album title, song title and artist name
   Logo or icon for music service provider or media source input (analog, optical, coaxial, Bluetooth, HDMI ARC, etc.)
3. Album art cover
4. Source list is displayed where one can select desired Source to access or playback contents. Refer also to “Sources” item below.
5. Display “Play Queue” that was setup via the BluOS App. “Play Queue” is a list of songs or tracks that are populated and put on queue via the BluOS App.
6. Elapsed playback time of current media
7. Playback controls for applicable media (song, title, file, music station and others)
   ►► Skip to next media
   ►► Play or pause current media
   ◄◄ Skip back to previous media
   ◄► Repeat and random mode controls are also available for selection
8. Volume level

Front View

Now Playing display will switch to selected Front View default screen if there is no user interaction within 10 seconds. Front View display will remain until a user interface is made. Front View display can be configured via Settings-Source Setup-Sources menu.

Menu Options

Sources
Select preferred Source to access or playback contents

Presets
Use BluOS App to program into Presets your favourite radio stations, music streams, playlists or Sources
Settings
Configure or display M33 settings

Player
Configure or display M33 player settings

1 Sleep Timer: Stop playback after a set amount of time via gentle volume decline

2 Room Name: Create a customized room name for the M33 using the pop up keyboard

3 Tone Controls: Swipe to boost or reduce Bass and Treble response. Tone Control levels, Bass and Treble, can be turned ON/OFF or Reset.

4 Balance: Balance control adjusts the relative levels of the left and right speakers. Swive right to shift the balance to the right or swipe to the left to shift the balance to the left. “0 dB” level setting provides equal level to the left and right channels.

5 Select attached speakers: Select corresponding option depending upon the subwoofer connected - 1 Subwoofer (connect to SUBW OUT 1 only), 2 Subwoofers or No Subwoofer

6 Crossover: The subwoofer will reproduce only low frequency information below the selected crossover setting.

7 LCD Brightness: Set LCD brightness level from 0% to 100%

8 Indicator Brightness: Adjust NAD logo indicator brightness level from 0 to 2

9 Speaker Output: Turn On or Off speaker output

10 Bluetooth: Set Bluetooth connection to Manual, Automatic, Guest or Disable Bluetooth availability

11 LCD Temporary Display: Enabled mode will turn off display temporarily after 1 minute of non-user interface. Disabled mode will keep display shown.

12 Volume In Percent: Volume level is displayed in percent when enabled. At disabled mode, volume level is displayed in dB.

13 LAN/BluOS in Standby: Status of LAN and BluOS activity are indicated while the unit is at standby mode. LAN and BluOS connections continue to be active at enabled mode. At disabled mode, LAN and BluOS connections are idle or inactive

14 Auto Standby: M33 can be setup to automatically go to standby mode if the current Source has no active audio input for 30 minutes. At enabled mode, unit will go to standby mode automatically if the current Source has no active audio input for 30 minutes. At disabled mode, unit remains active even if the current Source has no active audio input.
15 IR Channel: The M33 has the capability to operate via alternate IR channel. This is useful if you have two NAD products that can be operated by similar remote control commands. With alternate IR Channel, two different NAD products can be controlled independently in the same zone by setting each one to a different IR channel.

IR Channel Assignment
The M33 and the HTRM 2 remote control must be set to the same channel.

To change the Main Zone IR Channel on the M33
- While at “IR Channel” option, select through IR Channel number options. The default IR Channel is “IR Channel 0”.

To change the IR Channel on the HTRM 2 remote control
- Include a channel number before the library code. For HTRM 2, library code “100”is the default library table for “AMP” device. To select this “AMP” library table for “IR Channel 0”, retain the library code “100”.
- If you want to load the “AMP” library table on “IR Channel 1”, prefix the library code with “1” to indicate association with “IR Channel 1”. Load then the “AMP” library table using the code “1100”.

Source Setup
Select and configure Source

1 Sources: Select Source to configure

2 Name: Customize the Source’s Name using the pop-up keyboard

3 Icon: Select and assign icon for the selected Source

4 Front View: Front display layout and contents can be configured by selecting the following options

- Album, Text and VU: display all the information indicated above for Cover Art and Meta Data plus VU meter*
- Source (Simple): display Source name only which is “BluOS” or name of Cloud or Radio Service
8 **Lip-sync delay:** With A/V Mode enabled, “Lip-sync delay” can be adjusted to ensure your audio is staying in sync over your network with the original video source. By varying “Lip-sync delay” from 50ms to 150ms, one can delay the audio output to synchronize it with the video image of the corresponding source.

9 **Hide Source:** Activate or deactivate selected Source

10 **ADC Sample Rate (applies to Analog Sources only):**
An analog audio input is converted to digital signal by making use of M33’s superb circuitry called analog-to-digital converter (ADC). Using this ADC Rate feature, the sampling rate of the resulting digital audio signal (available at the digital output ports) can be converted into three levels - 48K, 96K and 192K. Make sure that the associated equipment will be able to handle the applicable digital audio signal level.

11 **Analog Gain (applies to Analog Sources only):**
Gain adjustment allows all sources to play back at the same volume level so you don’t need to adjust the volume every time a new source is selected. It is generally preferable to reduce the level of the loudest source rather than making louder the softer sources.

12 **Phono Type (applies to Phono Sources only):**
Select either MM (moving magnet) or MC (moving coil) depending upon the connected turntable’s phono cartridge.
Music Library

1 Reindex Library: Scan for new files added to the Music Library

2 Factory Reset: Restore to factory default settings

3 BluOS Upgrade: Select “BluOS Upgrade” to initiate BluOS upgrade mode. When “BluOS Upgrade” prompt appears, select “Yes” to start BluOS upgrade process. Follow the display screen prompt to complete the upgrade procedure.

System Info

Display information about the following parameters:

- Show current or detected information about BluOS firmware version, IP Address, MAC Address Ethernet and MAC Address Wi-Fi.

- Temperature Left/Temperature Right: If the internal temperature of either left or right amplifier channel reaches 91 degrees centigrade, M33 will turn off automatically and a protect message will be shown in the display. Once the temperature falls below 80 degrees centigrade, M33 will turn on again and the protect message display will be cleared.

- Temperature Heat Sink Left/Temperature Heat Sink Right/Temperature MCU/Temperature PSU: Display temperature as measured over Temperature Heat Sink Left, Temperature Heat Sink Right, Temperature MCU or Temperature PSU.

- Bridge Mode: “On” or “Off” is shown depending upon the setting (ON/OFF) of the Bridge Mode switch at the rear panel.
The proprietary Dirac Live is integrated with your M33. Dirac Live® is a patented room correction technology that not only corrects the frequency response, but also the impulse response of a room’s loudspeakers. Dirac Live provides true impulse response correction over a large listening area, improving the depth, positioning and distinction of individual voices and instruments. Using multiple measurement and mixed phase correction, Dirac Live helps create a natural, realistic and transparent sound with tighter bass and reduced room modes, in a way previously not possible.

Initiate Dirac Live by following below Setup Requirements.

**M33**
- Update your M33 to the latest firmware.
- Speaker Configuration must match actual speaker setup – turn off speakers that are not available.
- Both your computer and M33 must be connected to the same network.

**MICROPHONE**
- The supplied measurement microphone can be connected to either the MIC or USB input of your computer or the USB input of the M33.
- If the measurement microphone will be connected to the USB input of your computer or the M33, ensure that the measurement microphone, phone jack adapter and USB MIC Sound adapter are all connected together. The USB MIC Sound adapter is not necessary if the measurement microphone will be connected to the MIC input of your computer.
- Minimize external noise such as talking, opening/closing of doors or windows and playback of sound during the measurement.
- Use a microphone stand to firmly place the microphone in the indicated measurement positions.

**COMPUTER (WINDOWS, macOS)**
- Both your computer and M33 must be connected to the same network.
- Any active firewalls should allow HTTP (normal WWW access).
- Turn off any computer programs that may make any noise.
- Download Dirac Live App for Windows, macOS and smartphone (iOS and Android) devices via M33 software download page at nadelectronics.com/dirac-live.

Launch Dirac Live App. Follow on-screen instructions. Refer also to the HELP window for more detailed instructions.

View and follow simulated Dirac Live Calibration at: nadelectronics.com/dirac-live

For further information about Dirac Live Room Correction technology, visit: www.dirac.com/live-home-professional-audio-info

**MASTER QUALITY AUTHENTICATED**

Master Quality Authenticated (MQA) is a revolutionary end-to-end technology built into M33 that captures and delivers master quality audio. M33 includes a powerful decoder and audio renderer for the MQA system. This ensures that MQA-encoded audio files sound exactly like the source.

In the BluOS app, the MQA indicator displays green or blue to indicate that the unit is decoding and playing an MQA file. It displays green to indicate decoding and playback of a MQA file and denotes provenance to ensure that the sound is identical to that of the source material. It displays blue to indicate playback of MQA Studio file that has either been approved in the studio by the artist/producer or has been verified by the copyright owner.

MQA® is a trademark of MQA Limited.

**MAKING THE MOST OUT OF YOUR M33**

Download the BluOS Controller App from the respective App stores of Apple iOS devices (iPad, iPhone and iPod), Android devices, Kindle Fire and Windows or Mac desktops.

Launch the BluOS Controller App and explore everything from your streaming music services, internet radio stations, networked music collections and favorites with quick and easy single-search discovery.

Visit support.bluesound.com for more information about setup and operation guidelines of your M33.
The NAD HTRM 2 is ready to operate the M33 right out of the box, but it is really eight remotes in one. Each of the 8 Device Selector keys at the top of the handset can call up a new "page" of remote control codes to be transmitted by the remaining keys. You may "teach" codes from any infrared-remote controlled component, regardless of brand, to any or all of these.

Obviously, the most logical system is that you teach the codes from your BD player to the [BD] Device Selector "page," your television's codes to the [TV] "page," and so on, but there is no required scheme: You may load any commands to any key on any page (see "Learning Codes From Other Remotes," below).

The HTRM 2 is already preprogrammed with a full complement of commands for the M33 on its [AMP] Device Selector page, and as well as with library commands to operate most NAD-brand CD, BD or DAC components on the corresponding Device Selector "pages." These default commands are permanent: Even if you teach the HTRM 2 new commands to take their place, the underlying library commands remain in place and can easily be recalled should you add an NAD component to your system later (see “Delete Mode”, below).

Note: For use with the M33, it should not be necessary to re-program any keys on the HTRM 2 [AMP] page. However, in order for the HTRM 2 to control your specific NAD-brand components you may need to load one or more different code-libraries (see “Loading Code Libraries,” below).

CONTROLLING THE M33

The HTRM 2 is divided into two main sections. Eight Device Selector keys at the top—[AMP], [MP], [TV], and so on—set the handset's remaining keys to a "page" of commands to control a particular component. A Device Select key determines only what component the HTRM 2 will command; it does not perform any function on the M33. All of the remaining keys are function keys that can "learn" control codes from virtually any infrared remote controller, allowing you to teach the codes of your equipment, regardless of brand, to the HTRM 2.

However, the HTRM 2 is already preprogrammed to operate the M33. All of the function keys on the [AMP] Device Selector "page" perform M33 functions. (The HTRM 2 can also command many other NAD components, from its [CD], [BD], [DAC] and [CUSTOM] pages.)

It is important to note that certain HTRM 2 keys perform different functions depending on the selected Device Selector "page."

LEARNING CODES FROM OTHER REMOTES

Begin by positioning the HTRM 2 "nose-to-nose" with the source remote so the two devices' infrared windows are about 2 inches apart.

1. Enter Learning Mode: On the HTRM 2, simultaneously press-and-hold for 3 seconds both a Device Selector key and the [RES] key until the Learn LED (located between HTRM 2's ON and OFF buttons) turns steady green.

2. Press the HTRM 2's function key you wish to teach a command; the Learn LED will turn amber.

3. Press-and-hold the function key on the source remote: The HTRM 2's Learn LED will flicker amber for a second or two, then turn solid green. The command is learned.

4. Press the HTRM 2's Device Selector key again to exit the learning mode.
If the Learn LED does not flicker amber you may need to vary the distance between the remotes. If the Learn LED turns red instead of green, the source remote command could not be learned on that attempt.

**Example:** Learning “BD Pause”
Position the HTRM 2 and your BD player’s remote as described above.

1. On the HTRM 2, simultaneously press-and-hold [BD] and [RES]; the Learn LED turns steady green.
2. Press the HTRM 2’s Pause [II] key; the Learn LED turns amber.
3. Press-and-hold the corresponding Pause key of your BD player’s remote control; the HTRM 2’s Learn LED flickers amber and then turns solid green. The command is learned.
4. Press [BD] again to exit the learning mode.

**NOTES**
- The DEVICE SELECTOR keys can themselves be configured to learn commands.
- Press and hold a configured DEVICE SELECTOR for at least 2 seconds to execute a function assigned to the particular DEVICE SELECTOR key.
- A short press of a configured DEVICE SELECTOR will just switch the active device.

**CANCEL OPERATION**
You can cancel configuring a key, by pressing the active Device Selector key before the learn process is complete; the Learn LED will turn red.

**PUNCH THROUGH**
The HTRM 2’s “punch-through” function allows you to retain a function key from one Device Select “page” to another, so that, for example, the AMP [SURR MODE] function might still control the M33 when the BD Device Selector page is active.

**NOTE**
The HTRM 2’s [VOL △/∇] keys are pre-programmed as “punched-through” for all Device Selector pages: [VOL △/∇] will operate the M33’s master-volume regardless of the currently selected device. The [SURR] (CENT) and [SUB] Channel Volume controls similarly are pre-programmed as punched-through.

**SET A PUNCH THROUGH**
1. Enter Learning Mode and press the desired button to be punched through.
2. Press twice the Device Selector button of the destination device. The status LED will turn green.
3. Press the Device Selector button again to exit Learning Mode.

**Example:** Punch-through AMP [SURR MODE] key to the BD “page”

1. On the HTRM 2, simultaneously press-and-hold [BD] and [RES]; the Learn LED turns steady green.
2. Press [SURR MODE], the Learn LED turns amber.
3. Press [AMP] twice; the Learn LED turns green.
4. Press [BD] again to exit the learning mode.

**COPY A COMMAND FROM ANOTHER KEY**
You may copy a command from any HTRM 2 key to any other key.

**COPY A KEY FUNCTION**
1. Enter Learning Mode.
2. Press the key that will contain the copied key. The Learn LED turns steady amber.
3. If the key to be copied resides on another “page”, press first the corresponding Device Selector key and then press the desired key to be copied. The Learn LED turns steady green.
4. Press the Device Selector key again to exit Learning Mode.

**Example:** Copy the Pause command from the CD page to the AMP [II] button.
1. On the HTRM 2, simultaneously press-and-hold [AMP] and [RES]; the Learn LED turns steady green.
2. Press Pause [II]; the Learn LED turns amber.
3. Press [CD]; press Pause [II]; the Learn LED turns green.
4. Press [AMP] again to exit the learning mode.

**NOTE**
The copy and punch-through functions are similar. However, if you copy a command and then subsequently delete, or over-write the original (source-key) command, the copied-to key’s command remains unchanged. If you punch-through to a command and then delete or over-write the original key, the punched-through functions also change accordingly.

**MACRO COMMANDS**
A “macro” command is a series of two or more remote codes issued automatically from a single keypress. You might use a macro to automate a simple command sequence, such as; “Turn on the BD player and then press PLAY”. Or you might compose an elaborate macro to power up an entire system, select a source, choose a Listening Mode, and begin playback—again, all from a single keypress. Each DEVICE SELECTOR and function keys of the HTRM 2 can be stored one macro.

**NOTE**
Macros are independent of the currently selected device.

**RECORDING MACROS**
1. Simultaneously press-and-hold the [MACRO] key and the HTRM 2 function key to be assigned the macro until the status LED turns green. The macro button will also light up.
2. Press the sequence of function keys to be recorded into the macro.
3. Be sure to press first the required Device Selector key for each function (you may switch devices while recording the macro as many times as necessary), allowing you to create macro containing commands from more than one Device Selector “page.”
4. After entering the desired command sequence, press [MACRO] again to store the macro, the Learn LED and [MACRO] key illumination will turn off.
Example: Record a Macro to the [0] key to Turn on the M33.
1. Select “Input 1” (Source 1), and commence playback of connected Source 1 device (as in BD player).
2. On the HTRM 2, simultaneously press-and-hold [MACRO] and [0] (numeric zero); the Learn LED turns steady green.
3. Press [AMP]; press [ON]; press [1] ("Input or Source 1"); press [BD]; press ► (Play) - the Learn LED blinks as each step is added.
4. Press [MACRO] again to exit the macro-record mode.

To clear a macro, perform the above steps without entering any functions.

NOTE
Each macro can store a maximum of 64 command steps. If you exceed this number, the macro will be stored automatically after the 64th command is added.

EXECUTING MACROS
1. Press and release [MACRO]; its key lights for 5 seconds. While it remains lit, press an HTRM 2 key where a macro has been stored.
2. The corresponding macro will run, as each step executes, its “parent” Device Selector’s key flashes briefly.
3. When finished, the [MACRO] key illumination goes out.

Pressing any other HTRM 2 key while a macro is executing will abort the macro. Remember that you must hold the HTRM 2 so that its infrared emitter can activate the target components.

NOTE
When a macro executes, a 1 second delay is automatically inserted between its commands. If you need more than a 1 second delay between particular commands—for example, to permit a component to power up completely—you can record “empty” steps into the macro by changing Device Selector “pages” without entering actual command functions.

KEY ILLUMINATION TIMEOUT
The HTRM 2’s key-illumination can be set to remain lit for 0-9 seconds. The default value is 2 seconds.

SET THE ILLUMINATION TIMEOUT
1. Simultaneously press and hold the HTRM 2’s [DISP] and the (0-9) key corresponding to the desired timeout duration.
2. The Learn LED will flash twice to confirm the new setting.
3. When set to zero, the illumination will not turn on at all.

NOTES
• Key illumination is activated when one presses any HTRM 2 key.
• If HTRM 2 senses movement, key illumination is activated without having to press a key. If HTRM 2 is shaken, key illumination is also activated.
• Key illumination is the biggest drain on the HTRM 2’s batteries. A short key illumination timeout will extend battery life appreciably; turning it off altogether (set it to 0 seconds) will lengthen it still further.

CONFIGURING KEY ILLUMINATION

<table>
<thead>
<tr>
<th>Keys to Press (for 3 seconds)</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>DISP + Digit Key (0-9)</td>
<td>Set key illumination timeout to number of seconds corresponding to digit key. Zero turns off the key illumination entirely.</td>
</tr>
<tr>
<td>DISP + OFF</td>
<td>Disable light sensor. Key illumination will turn on with any key press.</td>
</tr>
<tr>
<td>DISP + ON</td>
<td>Enable light sensor.</td>
</tr>
<tr>
<td>DISP + ENTER</td>
<td>Set the light sensor threshold to the current light level.</td>
</tr>
<tr>
<td>DISP + RTN</td>
<td>Restore all key illumination settings to the defaults.</td>
</tr>
</tbody>
</table>

FACTORY RESET
The HTRM 2 can be reset to its factory state, deleting all learned commands, copied and punched-through keys, macros, and other setup information, reverting all keys to their pre-programmed library commands.

PERFORM A FACTORY RESET
1. Simultaneously press-and-hold the HTRM 2’s [ON] and [RTN] keys for 10 seconds. The Learn LED will start to flash green.
2. Release [ON] and [RTN] before the second flash is complete; the Learn LED will turn red, indicating the remote has been reset.

NOTE
Release [ON] and [RTN] before the second flash goes out; otherwise, the unit will not reset. Should this occur, repeat the full procedure.

DELETE MODE
The HTRM 2 can store learned, copied, and “default library” commands on any single key. The default library commands are the pre-programmed NAD codes, such as the native M33 commands on the [AMP] page.

You can delete commands by layers back “down” to the default library command on any key, removing learned commands, punched-through functions, and copied keys.

NOTE
The default library commands cannot be deleted.

ENTER DELETE MODE
1. Simultaneously press-and-hold the desired key’s Device Selector key and the [RTN] key for 3 seconds, until the Learn LED turns green.
2. Press the function key whose command you wish to delete; the Learn LED flashes; the number of times indicates which type of function has become active—see the table below.
3. Press the active Device Selector key again to exit Delete Mode.

NOTE
You can delete multiple function-key commands on the same Device Selector “page”. To delete more than one Device Selector page, exit Delete mode and then re-enter the required page.

<table>
<thead>
<tr>
<th>Flashes</th>
<th>Command Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Default Library Command</td>
</tr>
<tr>
<td>2</td>
<td>Copied Library Command</td>
</tr>
<tr>
<td>3</td>
<td>Learned Command</td>
</tr>
</tbody>
</table>
LOADING CODE-LIBRARIES

The HTRM 2 can store a different library of default NAD codes for each of its Device Selector “pages.” If the original default library does not control your NAD CD player, BD player, or other component, follow the procedure below to change the code-library.

1. Begin by ensuring that the component you wish the HTRM 2 to control is plugged in and powered-up (“on,” not merely in standby).
2. To enter the HTRM 2’s Library Mode, simultaneously press-and-hold both the desired Device Selector key and the [A/V PSET] key for 3 seconds, until the Learn LED turns green.
3. While keeping the HTRM 2 pointed toward the component, enter the first appropriate three-digit code-library number from the table below.
4. Press [OFF]. If the component turns off, press [ENTER] to accept that code-library number and exit the Library Mode.
5. If the component does not turn off, enter the next three-digit code-library number from the table.
6. When you enter the correct number the component will turn off; press [ENTER] to accept that code library number and exit the Library Mode.

LIBRARY CODE | NAD PRODUCT DESCRIPTION | LIBRARY CODE | NAD PRODUCT DESCRIPTION
--- | --- | --- | ---
100 | Receiver/Processor (Discrete ON/OFF) | 300 | Tuner
101 | Receiver/Processor (Toggle ON/OFF) | 301 | L75, L76 Tuner
102 | S170 | 302 | L70 Tuner
103 | L75 | 303 | L53 Tuner
104 | Second Zone Commands (Zone 2) | 304 | L75 Tuner
3112 | Zone 3 | 305 | C425
4112 | Zone 4 | 306 | C445
105 | L70 | 307 | Txx5 Series Tuner
106 | L76 | 400 | Tape Deck B
107 | 118 | 401 | TAPE Deck A
108 | L53 | 500 | TV 280
109 | L73 | 501 | MR13
110 | Stereo Receiver / Amplifier | 502 | MR20
111 | Stereo Second Zone | 503 | PMR45
112 | Txx5 Series | 600 | TS35, TS62, TS85, M55
200 | CD Player | 601 | TS50, L55
201 | CD Player (old) | 602 | TS12, TS21, TS32, T71, T72
202 | S170, S240, S340 | 603 | L70, L73 BD
203 | S325 | 604 | L56
204 | 5060 | 605 | TS13, TS14, TS15, T517, T524, T533, T534
205 | M5 | 606 | L53 BD

SEARCH MODE

If none of the codes from the table work, turn on the component and try the “search” method as follows:
1. Enter Library Mode by simultaneously pressing-and-holding for 3 seconds the desired Device Selector key and the [A/V PSET] key, until the Learn LED turns green.
2. Press-and-hold the HTRM 2’s (△) or (▼) key. The remote will step through all the available codes at a rate of approximately 1 per second.
3. When the component turns off, release the cursor key.
4. Press [ENTER] to accept that code library and exit Library Mode.
5. Try a few commands. Should you prove to have stepped past the needed code-library, re-enter the Library Mode and use the cursor key to step back to it.

NOTE

It is possible that search mode will find code-libraries that operate, at least partially, some other brand (non-NAD) components. However, we cannot guarantee the completeness or accuracy of NAD code-libraries. We do not support the HTRM 2’s operation with other-brand components.

CHECKING CODE LIBRARY NUMBER

1. Enter Library Mode by simultaneously pressing-and-holding for 3 seconds the desired Device Selector key and the [A/V PSET] key, until the Learn LED turns green.
2. Press the [DISP] key.
3. The HTRM 2 indicates the current code-library by flashing its [DAC], [CUSTOM], and [MACRO] keys.

For example, to indicate code-library #501, the HTRM 2 will flash [DAC] 5 times, pause, and then flash [MACRO] once. You might wish to make a note of your components’ code-library numbers.

SUMMARY OF THE HTRM 2 MODES

<table>
<thead>
<tr>
<th>Mode</th>
<th>Keys To Press (for 3 seconds)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Learn/Copy/Punch Through</td>
<td>Device Key + RES Key</td>
</tr>
<tr>
<td>Delete Mode</td>
<td>Device Key + RTN Key</td>
</tr>
<tr>
<td>Macro Record</td>
<td>Macro Key + Function Key</td>
</tr>
<tr>
<td>Library Mode</td>
<td>Device Key + [A/V PSET] Key</td>
</tr>
<tr>
<td>Back Light Timeout</td>
<td>DISP Key + Digit Key</td>
</tr>
<tr>
<td>Factory Reset</td>
<td>See “Factory Reset” above</td>
</tr>
</tbody>
</table>
BATTERY INSTALLATION

1. Use the flat or rounded end of a pointed tool to push open the pin of the battery cover.

2. Open the battery hatch.

3. Insert the supplied four AA batteries.

4. Push the battery hatch until it clicks close.

5. Restore the battery cover.
## Specifications

All specs are measured according to IHF 202 CEA 490-AR-2008 standard. THD is measured using AP AUX 0025 passive filter and AES 17 active filter.

### Amplifier Section

#### Line In, Speaker Out

<table>
<thead>
<tr>
<th>Spec</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rated output power (ref. 20 Hz-20 kHz at rated THD, both channels driven)</td>
<td>&gt;200 W into 8 ohms</td>
</tr>
<tr>
<td>Rated output power, Bridge mode (ref. 20 Hz – 20 kHz at rated THD)</td>
<td>&gt;700 W into 8 ohms</td>
</tr>
<tr>
<td>Input sensitivity</td>
<td>865 mV (ref. 200W 8 ohms, Volume maximum)</td>
</tr>
<tr>
<td>THD (20 Hz – 20 kHz)</td>
<td>&lt;0.003 % (1W to 200W, 8 ohms and 4 ohms)</td>
</tr>
<tr>
<td>Signal-to-Noise ratio</td>
<td>&gt;98 dB (A-weighted, ref. 1W out in 8 ohms)</td>
</tr>
<tr>
<td>Clipping power</td>
<td>&gt;210 W (0.1 % THD 1kHz 8 ohms)</td>
</tr>
<tr>
<td>IHF dynamic power</td>
<td>8 ohms: 260 W</td>
</tr>
<tr>
<td>Peak output current</td>
<td>&gt;25 A (in 1 ohm, 1 ms)</td>
</tr>
<tr>
<td>Damping factor</td>
<td>&gt;800 (ref. 8 ohms, 20 Hz to 6.5 kHz)</td>
</tr>
<tr>
<td>Frequency response</td>
<td>±0.2 dB (20 Hz -20 kHz)</td>
</tr>
</tbody>
</table>

#### Preamp Section

**Line In**

<table>
<thead>
<tr>
<th>Spec</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input impedance (R and C)</td>
<td>47 kohms/180 pF</td>
</tr>
<tr>
<td>Input sensitivity</td>
<td>280 mV (ref. 500 mV out, Volume maximum)</td>
</tr>
<tr>
<td>Maximum input level</td>
<td>2 Vrms/2 Vrms (low sensitivity mode)</td>
</tr>
<tr>
<td>Tone controls</td>
<td>Treble: ±10 dB at 10 kHz</td>
</tr>
<tr>
<td>Bass: ±10 dB at 100 Hz</td>
<td></td>
</tr>
</tbody>
</table>

**Line Out**

<table>
<thead>
<tr>
<th>Spec</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum output level</td>
<td>3.9 Vrms (ref. 0.1% THD)</td>
</tr>
<tr>
<td>Signal-to-Noise ratio</td>
<td>&gt;120 dB (A-weighted, ref. 2 V out)</td>
</tr>
<tr>
<td>Output impedance</td>
<td>100 ohms</td>
</tr>
</tbody>
</table>

**Sub Out**

<table>
<thead>
<tr>
<th>Spec</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maximum output level</td>
<td>1.1 Vrms (ref. 0.1 % THD 100Hz)</td>
</tr>
<tr>
<td>Signal-to-Noise ratio</td>
<td>&gt;102 dB (20 Hz-20 kHz, ref. 1V out)</td>
</tr>
<tr>
<td>THD+N</td>
<td>&lt;0.005 % (ref 1.1 V 20 Hz-200 Hz)</td>
</tr>
<tr>
<td>Output impedance</td>
<td>680 ohms</td>
</tr>
</tbody>
</table>

**Phono**

<table>
<thead>
<tr>
<th>Spec</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Input sensitivity</td>
<td>MM: 1.2 mV</td>
</tr>
<tr>
<td>MC: 100 µV</td>
<td></td>
</tr>
<tr>
<td>Input impedance (R and C)</td>
<td>MM: 56 kohms/100 pF</td>
</tr>
<tr>
<td>MC: 100 ohms/280 pF</td>
<td></td>
</tr>
<tr>
<td>Signal to noise ratio (ref. 2 V Preout A-weighted)</td>
<td>MM: &gt;92 dB</td>
</tr>
<tr>
<td>MC: &gt;76 dB</td>
<td></td>
</tr>
<tr>
<td>THD+N (ref 2V Preout 1kHz)</td>
<td>MM: &lt;0.003 %</td>
</tr>
<tr>
<td>MC: &lt;0.02 %</td>
<td></td>
</tr>
<tr>
<td>RIAA response accuracy MM/MC</td>
<td>±0.2 dB 20 Hz -20 kHz</td>
</tr>
</tbody>
</table>

**Headphone**

<table>
<thead>
<tr>
<th>Spec</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output impedance</td>
<td>2.2 ohms</td>
</tr>
<tr>
<td>Output power</td>
<td>&gt;100 mW/32 ohms</td>
</tr>
</tbody>
</table>

### BluOS Section

**Audio**

<table>
<thead>
<tr>
<th>Spec</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supported audio file format*</td>
<td>MP3, AAC, WMA, OGG, WMA-L, ALAC, OPUS</td>
</tr>
<tr>
<td>Supported high-resolution audio file format*</td>
<td>FLAC, MQA, WAV, AIFF</td>
</tr>
<tr>
<td>Sampling rate</td>
<td>up to 192 kHz</td>
</tr>
<tr>
<td>Bit depths</td>
<td>16 – 24</td>
</tr>
</tbody>
</table>

**Connectivity**

<table>
<thead>
<tr>
<th>Spec</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Network connectivity</td>
<td>Gigabit Ethernet RJ45</td>
</tr>
<tr>
<td>Wi-Fi</td>
<td>5</td>
</tr>
<tr>
<td>Supported network file share protocol</td>
<td>Server Message Block (SMB)</td>
</tr>
<tr>
<td>USB</td>
<td>1 x Type-A port for connection to USB memory stick (FAT32 or NTFS formatted) and supported peripherals</td>
</tr>
<tr>
<td>Bluetooth quality</td>
<td>aptX HD 5.0</td>
</tr>
<tr>
<td>Bluetooth connectivity</td>
<td>Two-Way (Receive and Headphone modes)</td>
</tr>
</tbody>
</table>

**User Interface**

**Supported operating system**

- Music playback from network shares on the following desktop operating systems: Microsoft Windows XP, 2000, Vista, 7, 8 to current Windows Operating Systems and macOS versions**

**Mobile Application**

- Free BluOS Controller App available for download from the respective App stores of Apple iOS devices (iPad, iPhone and iPod), Android devices, Kindle Fire and Windows or macOS desktops

**Front panel**

- 7-inch full colour touch screen

**Remote control**

- HTRM 2 remote control

**Supported Services**

- Streaming cloud services*
  - Spotify, Amazon Music, WMAP, Google, IDAGIO, Deezer, Tidal, Napster, Bugs, KKBOX, Taihe Music ZONE, SOUNDMACHINE, RADIO.COM

- Free internet radio*
  - Tunein, HeartRadio, Calm Radio, Radio Paradise, LiveXLive

**Integration partners***

- Control4, RTI, Crestron, URC, push, iPort, ELAN, Lutron, Roon, AirPlay 2

**Voice Control Integration***

- Skills and support for Amazon Alexa, Google Assistant and Apple’s Siri with corresponding enabled devices and App

**Power Consumption**

<table>
<thead>
<tr>
<th>Spec</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standby power</td>
<td>&lt;0.5W (Auto standby ON)</td>
</tr>
<tr>
<td></td>
<td>&lt;40W (idle power)</td>
</tr>
</tbody>
</table>

**Dimension and Weight**

<table>
<thead>
<tr>
<th>Spec</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gross dimensions (W x H x D)****</td>
<td>415 x 133 x 395 mm</td>
</tr>
<tr>
<td></td>
<td>17 1/4 x 5 1/4 x 15 1/8 inches</td>
</tr>
<tr>
<td>Shipping weight</td>
<td>18.4 kg (40.6 lbs)</td>
</tr>
</tbody>
</table>

* - Supported audio file format, cloud services and free internet radio are subject to change without notice.

** - Compatibility to latest versions is subject to future software update.

*** - Some features will be available via future software update.

**** - Gross dimension includes feet and extended rear panel terminals

Specifications are subject to change without notice. Check out [www.NADelectronics.com](http://www.NADelectronics.com) for updated documentation or latest information about M33.