

# INTRODUCTION

## GETTING STARTED

### QUICK START

In case you simply cannot wait to experience the performance of your new NAD M2 Direct Digital Amplifier, we provide the following QUICKSTART instructions to get you underway.

**Please make all the connections to your M2 with the unit unplugged from the AC outlet.** It is also advisable to power-down or unplug all associated components while making or breaking any signal or AC power connections.

- 1 Connect your speakers to the LEFT and RIGHT speaker terminals and input sources to the applicable M2 rear panel input sockets.

### WARNING

*The M2 employs a "floating" ground design. External devices (such as speaker switching or headphone adaptors) that connect the left and right channels together must not be used with the M2. Left and right channels must never be connected to each other.*

- 2 Make sure that the OFF/AUTO trigger switch at the M2 rear panel is set to OFF. Connect the AC cord to M2's AC Mains input and then plug into an AC outlet.

### WARNING

*For optimal performance the M2 requires a grounded AC receptacle or a separate earth ground. Ensure the proper grounding of your system.*

- 3 Set the rear panel POWER switch to the "ON" position. The Standby LED will illuminate amber (standby mode).
- 4 Press the front panel STANDBY button to turn ON the M2. The Standby LED indicator will turn from amber to blue and illuminate the VFD.
- 5 Press the corresponding front panel input button of your preferred source input.

### SAVE THE PACKAGING

Please save the box and all of the packaging in which your M2 arrived. Should you move or otherwise need to transport your M2, this is by far the safest container in which to do so. We've seen too many otherwise perfect components damaged in transit for lack of a proper shipping carton, so please: Save that box!

### NOTES ON INSTALLATION

Your NAD M2 should be placed on a firm, level surface. Avoid placing the unit in direct sunlight or near sources of heat and damp. Allow adequate ventilation. Do not place the unit on a soft surface like a carpet. Do not place it in an enclosed position such a bookcase or cabinet that may impede the air-flow through the ventilation slots. Make sure the unit is switched off before making any connections.

Use high quality leads and sockets for optimum performance and reliability. Ensure that leads and sockets are not damaged in any way and all sockets are firmly pushed home. For best performance, use quality speaker leads of 16 gauge (1.5mm) thickness or more.

Should water get into your NAD M2, shut off the power to the unit and remove the plug from the AC socket. Have the unit inspected by a qualified service technician before attempting to use it again.

**DO NOT REMOVE THE COVER; THERE ARE NO USER-SERVICEABLE PARTS INSIDE.**

# IDENTIFICATION OF CONTROLS

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## FRONT PANEL

- 1 STANDBY LED:** This indicator will light up amber when M2 is in standby state. When M2 is at ON state, this indicator will illuminate blue.
- 2 STANDBY BUTTON:** Press this button to switch ON the M2. The Standby LED indicator will turn from amber to blue and illuminate the VFD. Pressing the STANDBY button again turns the unit back to standby mode.

### IMPORTANT NOTICE

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*The rear panel POWER switch must be set to ON position for the STANDBY button to activate. After pressing the STANDBY button, there will be a delay before the M2 will be completely enabled. Please wait until the initial "NAD M2" display in the VFD is extinguished before you select any of the source input or features of your M2.*

- 3 VACUUM FLUORESCENT DISPLAY (VFD):** Display visual information about the selected source input, menu options, volume level and other related information and settings.
- 4 VOLUME:** Use this control to adjust M2's overall amplification or volume level. Turn clockwise to increase the volume setting; counter clockwise to lower it. The M2 features a 'velocity sensing' volume control; rapid movement changes the volume in large steps, slow movement increments the volume in 0.5dB steps. The VOLUME knob is also used to select options or adjust settings when MENU button is activated.
- 5 COAX 1:** Select the source connected to the COAX 1 rear panel terminal as the active input.
- 6 COAX 2:** Select the source connected to the COAX 2 rear panel terminal as the active input.
- 7 OPTICAL 1:** Select the source connected to the OPTICAL 1 rear panel terminal as the active input.
- 8 OPTICAL 2:** Select source connected to the OPTICAL 2 rear panel terminal as the active input.
- 9 AES/EBU:** Select the source connected to the AES/EBU IN rear panel connector as the active input.
- 10 BALANCED:** Select the source connected to the BALANCED L and BALANCED R rear panel connectors as the active input.
- 11 SINGLE ENDED:** Select the source connected to the SINGLE ENDED L and SINGLE-ENDED R rear panel terminals as the active input.
- 12 LOOP (DIGITAL PROCESSOR LOOP):** Allow the insertion of external digital filters into the signal path. This is the digital equivalent of the analog "Tape Monitor Loop". An example on how to take advantage of this feature is illustrated below.
  - Connect a digital input to the rear panel's OPTICAL 1 TosLink optical terminal.
  - Connect the rear panel's OPTICAL LOOP OUT to a compatible OPTICAL IN of a Mac or any processor where the signal can be subjected to a wide library of crossover filters, equalization or room correction programs (Check if your Mac or processor has these feature capabilities).
  - Send out the processed signal from your Mac or processor's corresponding Optical Out port into M2's OPTICAL LOOP IN thereby completing the signal loop path.
  - Press front panel's "loop" button to select your OPTICAL 1's "processed" input signal. When "loop" feature is engaged, "LOOP" will be continuously displayed at the lower left corner of the VFD after a brief display of sample rate setting of the source.

### IMPORTANT NOTICE

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*With "loop" button enabled, there will be no audio output if any connection from the above "loop" setup example is "broken" (i.e., no connection to OPTICAL OUT, not looped to "OPTICAL LOOP IN", etc). Press "loop" button again to deactivate or turn off the "loop" feature ("LOOP" is extinguished in the VFD) thus returning to normal audio listening of a selected source input.*

### NOTES

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*This digital processor loop feature can be applied to all analog and digital audio input signal sources (Optical 1-2, Coax 1-2, AES/EBU, BALANCED and SINGLE-ENDED).*

- 13 MENU:** Toggle to view the available options such as LEVEL TRIM and SAMPLE RATE options for BALANCED and SINGLE-ENDED input signal as well as selections for SPEAKER COMPENSATION and POLARITY. These menu options are accessed by pressing

the MENU button and then rotating the VOLUME control knob clockwise or counterclockwise to select desired level or setting. Release the VOLUME knob when you reach your preferred level or setting. The change will take effect after a few seconds when the display returns to show the default information (selected input and volume setting). Press MENU button again to select another menu option.

**LEVEL TRIM:** Adjust the BALANCED or SINGLE-ENDED input signal level from -9dB to 0dB or FIXED.

**-9dB to 0dB:** Increase or decrease the input signal level from -9dB to 0dB. This attenuates the signal before the Analogue-to-Digital (A/D) Converter. If the analogue input signal sounds distorted, the input should be attenuated.

## NOTE

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*Attenuating too much can reduce the potential resolution of the A/D Converter.*

**FIXED:** This setting should be selected when M2 is connected to the output of a preamplifier and is used primarily as a power amplifier. Output level is fixed and the M2's Volume Control is bypassed. Adjust the level using the source signal's preamplifier volume or input level control.

**SAMPLE RATE (48 kHz, 96 kHz, 192 kHz):** Select the user's preference for sample rate of the A/D Converter. Higher sampling rates allow for anti-aliasing filters to take effect further outside the audible frequency range and are generally considered to sound better, especially in the high frequencies. You may need to reduce the sampling rate if you are using the Digital Processor Loop, as many external devices will not operate at 96 kHz or 192 kHz.

**SPEAKER COMPENSATION (2 Ohms, 4 Ohms, 5 Ohms, 6 Ohms, 7 Ohms, 8 Ohms, >8 Ohms):** Digital impedance compensation filter allows fine tuning of the top octave to match the speaker impedance. This will result in perfectly flat frequency response at 20 kHz. The effect of this filter may not be audible\* but it is measurable, and it compensates for the small effect of the digital reconstruction filter that eliminates the 288 kHz sampling frequency of the amplifier.

\*The exception may be some electrostatic speakers that have very low impedance at high frequency. The lower the HF impedance, the greater the deviation from flat response.

**POLARITY (POSITIVE, REVERSED):** Allow compensation for recordings that have reversed polarity.

**Positive:** A positive sine wave at the input remains positive at the output.

**Reversed:** A positive sine wave at the input is negative (inverted) or reversed at the output.

## IMPORTANT NOTICE

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For all of the above menu options, a chosen option or level setting will not immediately take effect upon selection. There will be a slight delay or pause before the corresponding action or response is realized.

## RENAMING A SOURCE INPUT

A particular source input can be renamed according to your preference. You can use up to 20 characters in renaming a source input. Below is the procedure on how to rename a source input.

Example: Rename "DIGITAL OPTICAL 1" to "BD PLAYER".

- 1 Press the front panel "optical 1" button to select "DIGITAL OPTICAL 1" input. Then, press and hold the front panel "optical 1" button until "DIGITAL OPTICAL 1" is shown in the lower section of the VFD and with "D" flashing (Note that "DIGITAL OPTICAL 1" is also shown at upper section of the VFD).
- 2 Within 5 seconds, rotate the VOLUME control knob clockwise or counterclockwise to select the first character ("B" from the alphabetical list). The ranges of characters available are 0-9, \_ (space) and A-Z.
- 3 Press the front panel "loop" button to select the character and at the same time move on to the next character. Repeat steps 2 and 3 for each character in sequence.
- 4 Complete the renaming process by pressing the front panel "menu" button to save the new source input name.

## NOTES

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- Renaming of a source input can only be done using the front panel buttons.
- If no change is made within 5 seconds or if the front panel button of the source input being renamed is pressed, the renaming process will be automatically terminated with any renamed characters made not saved.
- You can terminate the renaming process by pressing any other front panel buttons (except "loop", "menu" or the current source input being renamed). The renamed characters at the time of terminating the process will be saved.

# IDENTIFICATION OF CONTROLS

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## REAR PANEL

**ATTENTION!** Please make sure that the M2 is powered OFF or unplugged before making any connections. It is also advisable to power-down or unplug all associated components while making or breaking any signal or AC power connections.

- 1 BALANCED:** 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).
- 2 SINGLE-ENDED:** Use a twin RCA-to-RCA lead to connect to these sockets the left and right analog output of a CD player, preamplifier or processor.
- 3 DIGITAL AUDIO (COAX 1-2):** Connect to the corresponding coaxial S/PDIF-format digital output of sources such as SACD/CD players, HDTV or satellite tuners and other components.

**DIGITAL AUDIO OUT (COAXIAL OUT):** Connect COAXIAL OUT to the corresponding S/PDIF digital input of compatible devices such as CD recorders, receivers, computer soundcard or other digital processors.

- 4 DIGITAL AUDIO (OPTICAL 1-2):** Connect to the corresponding optical S/PDIF-format digital output of sources such as SACD/CD players, HDTV or satellite tuners and other components.

### IMPORTANT NOTICE

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*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 sources with ultra-high sampling rates.*

- 5 DIGITAL AUDIO OPTICAL LOOP (OPTICAL LOOP OUT, OPTICAL LOOP IN):** Connect OPTICAL LOOP OUT to the corresponding S/PDIF digital input of compatible devices such as CD recorders, receivers, computer soundcard or other digital processors. This OPTICAL LOOP OUT terminal is the same digital output that can be fed to a Mac or processor where the signal can be subjected to a wide library of third party crossover filters, equalization or room correction programs.

The processed signal from the Mac or processor is then sent out through their corresponding Optical Out port into M2's OPTICAL LOOP IN thereby completing the signal loop path.

Refer also to the item above about "LOOP (DIGITAL PROCESSOR LOOP)" under IDENTIFICATION OF CONTROLS – FRONT PANEL.

- 6 AES/EBU IN:** Digital audio stream from professional audio sources like SACD/CD Players or processors 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.
- 7 DIGITAL SOFT CLIPPING™:** Enables NAD's proprietary Soft Clipping circuitry on all channels. At ON position, Soft Clipping gently limits the output of the M2 to minimize audible distortion should the amplifier be over-driven. Soft Clipping may simply be left ON at all times to reduce the likelihood of audible distortion from excessive volume settings. However, for critical listening and to preserve optimum dynamics, you may wish to defeat it by setting this switch to "OFF" position.
- 8 OFF/AUTO TRIGGER SWITCH:** When at AUTO position, the front panel STANDBY button is disabled and M2 remote control's [ON/OFF] button non-functional. At this condition, the M2 can only be switched ON from standby mode or back to standby mode when +12V DC is applied or cut off at the +12V TRIGGER IN jack. Slide the OFF/AUTO switch to OFF setting for the M2 to be normally switched ON (or back to standby mode) using the front panel STANDBY button or M2 remote control's [ON/OFF] button.

### NOTE

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*The rear panel POWER switch must be set to ON position for the STANDBY button to activate. Switch the rear panel POWER switch to ON position in order to make use of the +12V TRIGGER IN and OFF/AUTO TRIGGER SWITCH features as well as the front panel STANDBY button.*

- 9 +12V TRIGGER IN:** This input allows the M2 to be switched remotely to standby mode or ON by ancillary equipment, such as an amplifier, preamp, AV processor, etc. The controlling device must be equipped with a 12 V trigger output to use this feature.

- 10 +12V TRIGGER OUT:** The +12V TRIGGER OUT is used for controlling external equipment that is equipped with a +12V trigger input. This output will be 12V when the M2 is ON and 0V when the unit is either OFF or in standby mode.
- 11 RIGHT SPEAKERS:** Connect the right speaker to the terminals marked "R +" and "R-" ensuring that the "R+" is connected to the "+" terminal on your loudspeaker and the "R-" is connected to the loudspeaker's "-" terminal. There are two sets of RIGHT SPEAKER outputs and these are identical in function (parallel connection) and are provided for ease of Bi-wiring with heavy audiophile cables. Double check speaker connections before powering up the amplifier.

Always use heavy duty (16 gauge; 1.5mm, or thicker) stranded wire to connect loudspeakers to your M2. The high-current binding post terminals can be used as a screw terminal for cables terminating in spade or pin sockets or for cables with bare wire ends.

#### **BI-WIRING**

Most modern high quality loudspeakers offer the option of Bi-wiring. This separates the HF crossover from the LF crossover and offers enhanced performance by preventing LF return currents from affecting the HF performance. If you decide to bi-wire, be sure to remove the "links" at the loudspeaker that connect the LF and HF sections (these are provided for convenience when single wire connection is used). Your loudspeaker instruction manual should cover this subject as well.

#### **WARNING**

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*The M2 employs a "floating" ground design. External devices (such as speaker switching or headphone adaptors) that connect the left and right channels together must not be used with the M2. Left and right channels must never be connected to each other.*

- 12 POWER SWITCH:** The POWER switch supplies the master AC mains power for the M2. When this switch is at ON position, the M2 is in standby mode as shown by the amber status condition of the standby LED. Toggle the front panel's STANDBY button to switch ON the M2 or back to standby mode. If you intend not to use the M2 for long periods of time (such as when on vacation), switch the POWER switch to the OFF position. When the POWER switch is at OFF position, the front panel STANDBY button or M2 remote control cannot activate the M2.
- 13 AC MAINS INPUT:** The M2 comes supplied with a separate AC Mains cable. Before connecting the cable to a live wall socket ensure that it is firmly connected to the M2's AC Mains input socket first. Always disconnect the AC Mains cable plug from the live wall socket first, before disconnecting the cable from the M2's Mains input socket.
- 14 FUSE HOLDER:** In the unlikely event a fuse may need to be replaced, unplug the AC cord from the wall. Then, remove all connections from the amplifier. Use a flathead screw driver or similar to open the fuse holder via the slot indicated. With the screw driver in place, push and turn counterclockwise to open the fuse holder. Only replace the fuse with the same type, size, and specification.

#### **IMPORTANT NOTICE**

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*Do not use any substitute fuses of different types, ratings or values. Failure to observe this precaution may cause damage to the amplifier circuits and may create a fire hazard and/or defeat the safety built into the M2 thus voiding the warranty.*

- 15 LEFT SPEAKERS:** Connect the right speaker to the terminals marked "L +" and "L-" ensuring that the "L+" is connected to the "+" terminal on your loudspeaker and the "L-" is connected to the loudspeaker's "-" terminal. There are two sets of LEFT SPEAKER output and these are identical in function (parallel connection) and are provided for ease of Bi-wiring with heavy audiophile cables. Refer also to "RIGHT SPEAKERS" above.
- 16 RS-232:** Connect this interface via RS-232 serial cable (not supplied) to any Windows® compatible PC to allow remote control of the M2 through NAD's proprietary PC software or other compatible external controllers. NAD is a certified partner of AMX, Control4, Crestron and Savant and fully supports these external devices. See your NAD audio specialist for more information.
- 17 IR IN:** This input is connected to the output of an IR (infrared) repeater (Xantech or similar) or the IR output of another component to allow control of M2 from a remote location.
- 18 GROUND TERMINAL:** The M2 requires a grounded AC receptacle or a separate earth ground. Use this terminal to properly ground your M2. A ground lead wire or similar can be used to connect the M2 to ground via this ground terminal. After insertion, tighten the terminal to secure the lead.

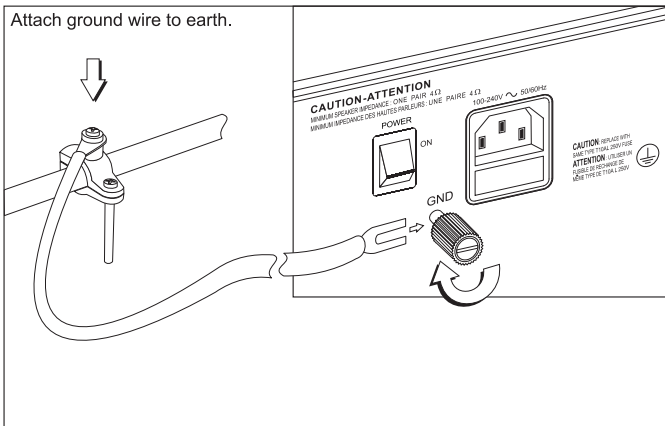
#### **BARE WIRES AND PIN CONNECTORS**

Bare wires and pin connectors should be inserted into the hole in the shaft of the terminal. Unscrew the terminal's bushing until the hole in the screw shaft is revealed. Insert the pin or bare cable end into the hole and secure the cable by tightening down the terminal's bushing. Avoid any danger of bare metal from the cables touching the rear panel or another connector.

## SPADE CONNECTORS

These should be slotted under the terminal's screw bushing, which is then fully tightened. Ensure the connector is tightly secured and there is no danger of bare metal from spade connectors touching the rear panel or another connector as this may cause damage.

### EXAMPLE ILLUSTRATION OF GROUNDING THE M2 VIA THE REAR PANEL GROUND TERMINAL



## NOTES

- The above illustration shows the M2 being connected to ground via a metal water pipe. There may be other grounding conductor points in your home. Consult with a licensed electrician to properly locate or correctly install a grounding conductor in your home. NAD is not responsible for any malfunction, damage or costs associated with the installation, connection or grounding of your M2.
- The grounding wire is not supplied with your M2.

## DIGITAL POWERDRIVE

The M2 uses NAD's proprietary Digital PowerDrive™ amplifier technology that allows substantial additional power for short periods of time. Research has shown that the peak to average power required to faithfully reproduce music can be a factor of ten for well recorded performances. Digital PowerDrive uniquely satisfies this requirement. Music sounds more dynamic and "open" with PowerDrive because the musical transients that are present in a live performance are not reduced in amplitude or "compressed".

# IDENTIFICATION OF CONTROLS

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## M2 REMOTE CONTROL

**COAX 1-2, OPT 1-2, AES/EBU:** Select Coaxial, Optical or AES/EBU digital source input.

**PRO LOOP:** Activate or deactivate "loop" feature.

**BALANCED:** Select BALANCED source input.

**SINGLE-ENDED:** Select SINGLE-ENDED source input.

**MUTE:** Temporarily shuts down audio output.

**DIM:** Reduce or restore VFD brightness.

**VOL ▲/▼:** Increase or decrease the loudness level.

**DEVICE SELECTOR 1-2:** Switch between DVD and CD control functions. Set to position "1" for applicable CD control button functions - compatible with NAD models like C 515BEE, C 545BEE, C 565BEE and M5. Set to position "2" for applicable DVD control button functions - compatible with NAD models like T 535, M55, T 585 and DVD section of L 54, VISO FIVE and VISO TWO.

**CD PLAYER CONTROL (for use with compatible NAD CD or SACD/CD Players):** Set the DEVICE SELECTOR to "1" in order to gain access to these buttons.

**REPEAT:** Repeat track, file or whole disc.

**RANDOM:** Play tracks or files in random mode.

▲ : Open or close disc tray.

■ : Stop playback.

||: Pause playback temporarily.

⏮: Go to beginning of current track/file or to previous track/file.

▶: Start playback.

⏭: Go to next track/file.

**DVD PLAYER CONTROL (for use with compatible NAD DVD Players):** Set the DEVICE SELECTOR to "2" in order to gain access to these buttons.

**TITLE:** Display DVD title menu.

**MENU:** Access menu on a DVD disc.

**DISP:** Access on-screen display.

**RTN:** Exit from a menu window.

▼/▲/◀/▶: Select an item in a menu.

**ENTER:** Acknowledge menu selection.

▲ : Open or close disc tray.

■ : Stop playback.

||: Pause playback temporarily.

⏮: Go to beginning of current chapter or to previous chapter.

▶: Start playback.

⏭: Go to next chapter.

# REFERENCE

## TROUBLESHOOTING

CONDITION	POSSIBLE CAUSES	POSSIBLE SOLUTIONS
The VFD displays "PROTECTION LEFT AMP SHORT".	Left output short circuit.	Shut down M2 by turning off the rear panel POWER switch. If there is no action undertaken, the M2 will shut down itself (go to standby mode) within 10 seconds the fault happened.
The VFD displays "PROTECTION RIGHT AMP SHORT".	Right output short circuit.	
The VFD displays "PROTECTION LEFT AND RIGHT SHORT".	Left and right output short circuit.	
The VFD displays "PROTECTION LEFT CHANNEL ERROR".	Left channel internal error.	Shut down M2 by turning off the rear panel POWER switch. If there is no action undertaken, the M2 will shut down itself (go to standby mode) within 10 seconds the fault happened.
The VFD displays "PROTECTION RIGHT CHANNEL ERROR".	Right channel internal error.	
The VFD displays "PROTECTION LEFT AND RIGHT ERROR".	Left and right channel internal error.	
The VFD displays "MAIN POWER ERROR".	Error with the internal power supply.	Restart again the M2 by switching ON the rear panel POWER switch (if you have shut down the M2 via the POWER switch) and then pressing the front panel STANDBY button or remote control's [ON] button.
The VFD displays "START UP ERROR POWER OFF".	Internal initialization error when powered on.	
The VFD displays "OVERHEAT".	The M2 is too hot due to insufficient ventilation.	Shut down M2 by turning off the rear panel POWER switch. Ensure that there is adequate space below, above and to the sides of the M2 to allow proper air flow. After the M2 has cooled down normal operation will be restored.
No power.	The power cord is disconnected.	Plug the power cord into the wall outlet securely.
	POWER switch shut down.	Set the POWER switch to ON position.
M2 always at standby mode; cannot be switched ON using the front panel STANDBY button or remote control.	OFF/AUTO TRIGGER switch set to "AUTO" position.	Slide the OFF/AUTO TRIGGER to "OFF" position.
No sound.	Power AC lead unplugged or power not switched ON.	Check if AC lead is plugged-in and POWER switched ON.
	The selected source input has no applied input signal at the corresponding rear panel input socket.	Check that there is active input signal applied at the corresponding rear panel input socket.
	Volume control set to minimum level.	Turn Volume control up to audible level.
	"LOOP" feature is enabled and a connection in "loop" setup is "broken" (i.e., no connection to OPTICAL OUT, not looped to "OPTICAL LOOP IN", etc).	Check your "loop" connection setup. Press "loop" button again to deactivate or turn off the "loop" feature ("LOOP" is extinguished in the VFD) thus returning to normal audio listening of a selected source input.
No sound one channel.	Speaker not properly connected or damaged.	Check connections and speakers.
	Input lead disconnected or damaged.	Check leads and connections.
M2 does not respond to remote control commands.	The remote control batteries are dead.	Replace the remote control batteries.
	Batteries incorrectly inserted.	Follow correct battery insertion setup.
	IR transmitter window on the remote control or IR receiver window on the front panel is obstructed.	Check IR windows and ensure clear line-of-sight from remote control to M2.
	M2 front panel is in very bright sunlight or ambient light.	Reduce sunlight/room lighting.

# REFERENCE

## SPECIFICATIONS

### ANALOG INPUT (BALANCED, SINGLE-ENDED)

Input impedance	36 k $\Omega$ //200 pF
Input sensitivity	316 mV (ref.100W) 670 mV (ref. rated power)
Maximum input level	5.6 Vrms (at -9dB level trim setting)
Frequency response (A/D Converter section)	$\pm$ 0.3dB (ref. 10 Hz - FS/2; FS = 48 kHz, 96 kHz, 192 kHz)

### DIGITAL INPUT (COAXIAL, OPTICAL, AES/EBU)

Input impedance	75 $\Omega$ (coaxial) 110 $\Omega$ (AES/EBU)
Sample rate	32 kHz to 192 kHz

### OVERALL SPECIFICATIONS

Continuous output power (ref. 20 Hz – 20 kHz, rated THD)	8 $\Omega$	$\geq$ 200W
	4 $\Omega$	$\geq$ 250W
	2 $\Omega$	$\geq$ 300W
Rated THD (SMPTE/CCIF IM, T.I.M distortion)		<0.003% (ref. 20 Hz – 20 kHz)
Clipping power		>250W (ref. 1 kHz, 8 $\Omega$ , 0.1% THD)
IHF Dynamic power	8 $\Omega$	300W
	4 $\Omega$	$\geq$ 450W
	2 $\Omega$	$\geq$ 600W
Maximum output current		>60A
Signal/Noise ratio		>115dB (A-weighted, ref. 1W)
		>120dB (A-weighted, ref. 200W)
Damping factor		>2000
Frequency response		$\pm$ 0.3dB (ref. 10 Hz - FS/2; FS = 32 kHz, 96 kHz, 192 kHz)
Channel separation		>90dB (ref. 10 kHz, 4 $\Omega$ , 1/3 rated power)
		>100dB (ref. 1 kHz, 4 $\Omega$ , 1/3 rated power)

### Power Consumption

Normal operation	500W (ref. 100 - 240V AC 50/60 Hz)
Standby power	1W
Idle power	100W

### DIMENSION AND WEIGHT

Dimensions (W x H x D)	Net	435 x 133 x 454 mm
	Gross*	435 x 148 x 502 mm
Net weight		20.2 kg
Shipping weight		25.6 kg

\* - Gross dimensions include feet, volume knob and extended speaker terminals.