EMOTIVA®

BASX MR1

11.2 Channel Cinema Receiver

User Manual

Important Safety Precautions and Explanation of Symbols

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important installation, operation, and service instructions in this manual.

The lightning flash with arrowhead symbol within an equilateral triangle is intended to alert the user to the presence of uninsulated dangerous voltages within the enclosure that may be of sufficient magnitude to constitute a risk of electrical shock to the user.

Please read this manual thoroughly before attempting to install, configure, or operate the BasX MR1 Cinema Receiver. After successful installation and configuration of the MR1, be sure to retain this manual in a safe place for future reference.

Safety is a key component to a long lasting and trouble free installation. Please read and follow all instructions and heed all warnings on the MR1 and in this manual. The vast majority of the subsequent safety precautions are common sense. If you are not comfortable with the installation of audio/video entertainment equipment, you should seek the services of a qualified installation professional or call us for help.

WARNING: TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT USE THE MR1 NEAR WATER OR IN WET LOCATIONS, DO NOT EXPOSE IT TO RAIN OR MOISTURE, DO NOT EXPOSE IT TO DRIPPING OR SPLASHING FROM OTHER SOURCES, AND ENSURE THAT NO OBJECTS FILLED WITH LIQUIDS (SUCH AS VASES) ARE PLACED ON IT. DOING SO MAY RESULT IN DAMAGE TO THE UNIT AND THE RISK OF ELECTRIC SHOCK, WHICH MAY RESULT IN BODILY INJURY OR DEATH.

WARNING: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE THE COVER FROM THE MR1. THERE ARE NO USER-SERVICEABLE PARTS INSIDE THE UNIT. REFER ALL SERVICE TO QUALIFIED SERVICE PERSONNEL.

Do not install the MR1 near or above any heat sources such as radiators, heating vents, or other apparatus' that produce heat. Do not block any ventilation openings or heat sinks. Avoid installing the unit directly above other heat-producing equipment unless sufficient ventilation or forced-air cooling is provided.

Do not install the MR1 in locations without proper ventilation. The MR1 should not be operated on a bed, sofa, rug, or similar surface that may block vents. The unit should not be installed in an enclosed location such as a bookcase, cabinet, or closed equipment rack unless sufficient forced-air ventilation is provided.

Always install your MR1 according to the manufacturer's instructions and only use attachments or accessories specified by the manufacturer.

Do not install the MR1 on any stand, shelf, or other piece of furniture that is unable to support its weight. If a cart is used to move the unit, use caution to avoid injury from tip-over.

Connect the MR1 only to power sources of the correct voltage (as shown in this manual and on the MR1 unit).

Protect power supply cables from being pinched, walked on, or otherwise damaged. Be especially careful where the power cable enters the power outlet and the unit.

Only connect the MR1 to an electrical outlet or extension cord of appropriate type and rating.

DO NOT defeat the safety purpose of a grounding or polarized plug by removing ground pins or using unsafe adapters. A polarized plug has two blades - one wider than the other. A grounding plug has a third ground prong in addition to the two main conductors. The wide blade or third groundling prong is provided for your safety. If the provided plug does not fit your outlet, consult an electrician to replace your obsolete outlet. If you replace the power cord, only use one of similar type and equal or greater current rating.

The power cable for the MR1 should be unplugged from the outlet during severe electrical storms, or when unused for a long period of time.

Only replace the fuse(s) in the MR1 with fuse(s) of proper value and voltage rating.

The MR1 should only be cleaned as directed in the manual. Avoid spraying liquids directly onto the unit and NEVER spray liquids into the vents. Care should be taken so that small objects do not fall into the inside of the unit.

You should seek service for your MR1 by qualified service personnel if any of the following occur:

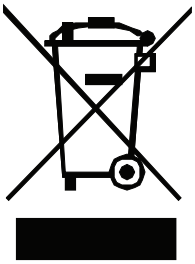
1. The power-supply cord or the plug has been damaged.
2. Objects or liquid have fallen or spilled into the vents.
3. The unit has been exposed to rain.
4. The unit exhibits a marked change in performance.
5. The unit has been dropped, or its enclosure or chassis is damaged.

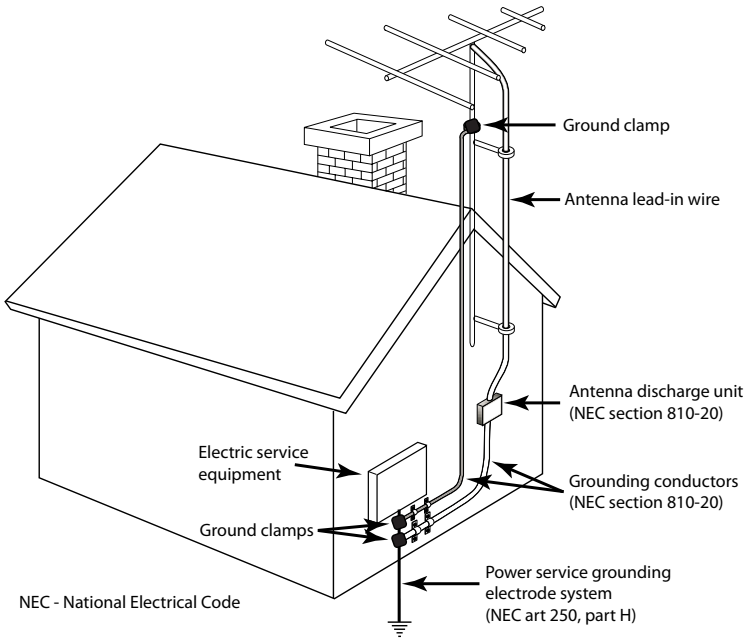
NOTE: TO COMPLETELY DISCONNECT THE MR1 FROM THE AC POWER MAINS, DISCONNECT THE AC POWER CORD FROM THE AC RECEPTACLE.

NOTE: THE POWER CORD ON THE MR1 MUST REMAIN READILY ACCESSIBLE AT ALL TIMES.

CAUTION

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





FCC Interference Statement

1. 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.

2. Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a 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.

Radiation Exposure Statement

This equipment complies with FCC radiation exposure limits set forth for an uncontrolled environment. This equipment should be installed and operated with minimum distance of 20 cm between the radiator & your body.

BasX MR1 11.2 Channel Cinema Receiver

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Introduction

Thank you for purchasing our new BasX MR1 Cinema Receiver.

Our BasX product line is dedicated to the philosophy that high-quality products that deliver true audiophile sound quality do not need to be expensive to buy or complicated to configure and enjoy. Every model in the BasX line offers all of the essential features you need to maximize your listening enjoyment.

The BasX MR1 receiver combines a high performance 13.2 channel immersive surround sound processor, and an audiophile quality 11 channel amplifier, in a single chassis. The processor section of the MR1 supports 4k UHD video, including HDR and Dolby Vision, enhanced ARC (eARC), and the latest Dolby Atmos® and DTS:X™ immersive surround sound formats. The MR1 features six HDMI 2.0b video inputs, all of which support 4k UHD HDR video, and includes support for enhanced ARC (eARC). The MR1 also offers multiple analog and digital audio inputs, including an internal high performance Bluetooth input, where you can attach all of your other audio sources.

The amplifier section of the BasX MR1 combines an audiophile-grade Class A/B output stage, which delivers impressive amounts of power, with advanced Class H power supply topology, for high efficiency and cool reliable operation. The BasX MR1 also includes a full set of line level 13.2 channel preamp outputs, and the amplifier section can be totally disabled if you wish to use the MR1 as a surround sound processor.

The intuitive menu system makes the MR1 simple to configure and operate using either the front panel controls, and the large bright blue front panel VFD display, or the included illuminated infrared remote control, and the clear concise on-screen display. The MR1 can also be controlled by most programmable universal remote controls and whole home automation systems via either infrared commands or wired commands received by its RS-232 interface.

Like every product in the BasX series, the MR1 includes two critical features that you will not find in most other components in its price range: really great audio and video performance and excellent build quality. The BasX MR1 is a true audiophile component, designed and built by professionals to deliver the outstanding performance that both audiophiles and casual listeners can appreciate. The MR1 also features precision high-speed video switches that route video directly from the selected input to the output without any extraneous processing, ensuring that you'll continue to get the absolute best possible picture quality from your HD and 4k UHD video sources, and supports both ARC and Enhanced eARC.

The MR1 delivers a truly stellar audio and video experience.

Enjoy!

The Emotiva Team

About This Manual

This manual will provide you with the information you need to get started enjoying your BasX MR1 Cinema Processor.

We suggest that you read through the entire manual; we kept things as short and direct as possible. Even if you are an expert user, you will probably find some interesting information and useful suggestions.

If you are really in a hurry to get started, please read the Getting Started section (on page 8); you may then read the remainder of the manual at your leisure.

You may wish to keep a copy of this manual with your records, and record serial numbers or other purchase information on the Notes page at the back.

Features

The BasX MR1 is a high performance 11.2 channel surround sound receiver with a built-in 11 channel audiophile quality amplifier, which features a Class A/B output stage, and an efficient Class H power supply topology. The processor section of the BasX MR1 includes support for 4k UHD video with HDR, enhanced ARC (eARC), and the latest Dolby Atmos® and DTS:X™ immersive surround sound formats. It features six HDMI 2.0b video inputs, all of which support 4k UHD HDR video, as well as HDR10, HDR10+, and Dolby Vision. The MR1 also includes support for enhanced ARC (eARC), which allows you to enjoy the full range of sound features and formats offered by the apps on your smart TV. The MR1 also offers multiple analog and digital audio inputs, including an internal high performance Bluetooth input, and advanced EMO-Q Automatic Room Correction. The BasX MR1 offers both a full set of 13.2 channel line level audio outputs and amplifier outputs for up to seven main and surround speakers and up to two pairs of height speakers.

Features Of The New BasX MR1:

The Emotiva BasX MR1 cinema receiver combines simplicity of operation, outstanding video and audio performance, and incredible value. Here are just some of the exciting features offered by the MR1:

- Support for current surround sound and immersive audio formats, including Dolby TrueHD, DTS HD Master Audio, Dolby Atmos®, and DTS:X™.
- Support for both standard ARC (Audio Return Channel) and eARC (Enhanced ARC).
- Superb sound quality delivered by advanced surround sound decoders and highly optimized analog audio circuitry.
- The line level audio outputs on the MR1 support up to thirteen main and surround sound channels plus up to two subwoofers.
- The speaker outputs on the MR1 can power up to 11 channels of speakers in various configurations, including up to seven main and surround speakers, and up to two pairs of height speakers.
- Exceptional video quality, with fast error free switching for up to six HDMI inputs, all of which support HDMI 2.0b and HDCP 2.2, 4k UHD video, and HDR (including HDR10, HDR10+, and Dolby Vision).
- An internal AptX Bluetooth receiver for streaming audio from your smart phone and other mobile audio sources.
- Emo-Q™ Advanced Automatic Room Correction System automatically calibrates the MR1 for optimal sound quality with *your* system in *your* listening room (calibrated measurement microphone with internal buffer amplifier included).
- Real time status information provided by a front panel VFD display and a convenient on-screen display.
- Convenient control options, including a full function illuminated infrared remote control, front panel menu navigation buttons, and a real front panel Volume knob.

- A heavy-duty linear power supply powered by a massive toroidal transformer.
- Operation from either 115 VAC or 230 VAC power with automatic line voltage detection and switching.
- Included infrared remote control provides direct one-button selection of audio and video sources, access to the MR1 Menu System, and features illuminated soft touch buttons.
- Multiple remote control options - including RS-232.
- Firmware update via USB stick - no computer connection required.
- Compact form factor and modern aesthetics make it easy to find a home for the MR1 in virtually any room or audio rack.
- Full Emotiva Three Year warranty.

Unpacking

Your Emotiva BasX MR1 11.2 Channel Cinema Receiver was carefully packed and should reach you in perfect condition. If you notice any shipping damage or other issues when you unpack it, please contact Emotiva immediately.

Gently remove your MR1 from the packing carton and remove all wrappings and shipping material.

It is important to save the box and all packing materials in case your MR1 ever needs to be moved or shipped back to the factory for service.

We truly value customer feedback and would like to hear from you.

Getting Started

To get the most from your MR1 we urge you to read the entire manual.

If you cannot wait to listen to some music or watch a few movies, there are only a few things you really need to do in order to get started, but we do suggest that you at least read all of this Getting Started section so you don't miss anything important.

1. Find a secure location for your BasX MR1.
2. Connect your MR1 to your speakers. (If you choose to do so, you may connect one or more external amplifiers to the 13.2 Channel Analog Outputs on the MR1, or use a combination of internal and external amplifiers. The 13.2 Channel Analog Outputs on the MR1 are always active. The Speaker Outputs on the MR1 can be Enabled and Disabled in the Speaker Setup Menu.)
3. Connect your MR1 to your powered subwoofer if you have one. The MR1 will normally handle Bass Management so, if you have a choice, use the LFE or line level input on your sub, and bypass your sub's crossover, or set it to its highest frequency.
   Note: The MR1 has a Subsonic Filter that, by default, will block all frequencies below approximately 20 Hz from reaching your subwoofer. If you wish to disable this you will find it under Crossover settings in the Speaker Setup menu.
4. Connect your MR1 to your projector or TV set. The MR1 has two HDMI outputs, both of which deliver the same HDMI signal, but only HDMI Output #1 supports eARC.
5. Connect some high quality video and / or audio sources to inputs on your MR1.
6. Make sure to have your TV or projector set to the correct HDMI input.
7. Configure your MR1 for the speakers you have connected. You will find these settings in the Menu under Setup | Speaker Setup.

   - Select your speaker setup and how many speakers you have under Speaker Layout.
     Note: If you have a two channel system, select 3.1 as your Speaker Layout, and set Center to None. If you don't have a subwoofer, select the appropriate Speaker Layout for your other speakers, then set Subwoofer to None.
   - Select whether your height speakers are Reflective or Ceiling mounted speakers under Height SPKR Type. Select Ceiling if you have direct radiating height speakers mounted high on the wall.
   - Configure the Distance to each speaker from your primary listening position. If you have a large seating area then set the distance from each speaker to the center of your listening area. If your room is more or less symmetrical then it's best to also arrange your speakers symmetrically.
     Note: The distance value will move by one inch each time you press the button; if you hold the button down the value will jump by feet.

- Configure the Level for each speaker - as measured from your primary listening position. These will be set by the EMO-Q Automatic Room Correction if you run it later. For now, you want to set the levels so each speaker is heard at the same level from your primary listening position. Levels can be set by ear but you will achieve more accurate results if you use a sound level meter or sound level measurement app on your phone. If you are setting this by ear, and your room is symmetrical, you should end up with the left and right speakers in each pair set to about the same level.
  Note: When setting speaker levels the goal is to configure the system so that each speaker plays at the same level. The actual level at which the test tones play will vary depending on the gain of your amplifiers and the efficiency of your speakers. The level of the test tones is controlled by the system's Volume control. If the test tones seem to be playing too quietly or too loudly, you may simply exit the Setup Menu, adjust the Volume control, and reenter the Level Test/Adjust Menu.
- The default Bass Management settings on the MR1 will work well for most systems so there is no need to adjust them at this time.
  Note: By default, if you have one or more subwoofers, then all of your other speakers are configured with a Bass Management crossover of 80 Hz, and a 12 dB/octave crossover slope. By default, if you have no subwoofer, then your Front Left and Front Right speakers are assumed to be full range, and their crossover frequency is set to Bypass, while the Bass Management crossover on all of your other speakers is set to 80 Hz.
  Note: The MR1 does not designate speakers as "large" or "small". To configure one or more sets of speakers as "large" or "full range", go into the Speaker Setup | Crossover menu, and set the Crossover Frequency for those speakers to Bypass.
  Note: While these settings will work well in most systems you may of course change them to suit your system and your personal listening preferences. For example, many people with a pair of large front speakers choose a lower Bass Management Crossover setting for that pair.

While your BasX MR1 has many features and settings you can use to customize it to your particular preferences, and advanced EMO-Q Automatic Room Correction, all of that can wait until later. At this point you have made all of the basic configuration settings you need to play a movie or listen to some music and have it sound great.

Enjoy!

Special Features

The BasX MR1 is highly configurable. However there are a few important features that are especially noteworthy.

1. Enhanced ARC Support (eARC)

The MR1 provides full support for standard ARC (Audio Return Channel) for devices that don't have eARC support. For devices that support the new eARC (Enhanced ARC) standard the MR1 will detect this and enable eARC support.

Note: Only HDMI Output #1 on the MR1 supports ARC and eARC.

Note: On most TV sets only one HDMI Input supports eARC, so be sure and connect the MR1 to that input. In addition to this, on many TV sets, eARC must specifically be enabled, so be sure that eARC is enabled in your TV's configuration menu.

2. Active HDMI Output Switching

As defined in the HDMI standard, if you have two devices with different video capabilities connected to the two outputs on the MR1, and both are on, your video source will negotiate a video format supported by both, and the MR1 will send that same video signal to both devices. So, for example, if you have a 4k TV, and a 1080p TV, and only the 4k TV is turned on, it will receive a 4k signal; however, if both TVs are turned on, then both will receive a 1080p video signal (because that is the highest resolution format that both TVs support). The same requirement is also true for some other features - like HDR.

Unfortunately, many modern TVs and projectors do not report their status correctly to the processor and source device. As a result of this, for example, you may find that you don't get 4k video on your 4k TV set unless the 1080p TV set is physically disconnected (unplugged).

The MR1 has a special feature that enables you to avoid this sort of problem. On the MR1 you have the option to temporarily disable each HDMI Output individually. So, in the example above, by disabling the HDMI Output connected to the 1080p TV set when that set isn't in use, you can prevent it from limiting the 4k video signal being sent to your 4k set.

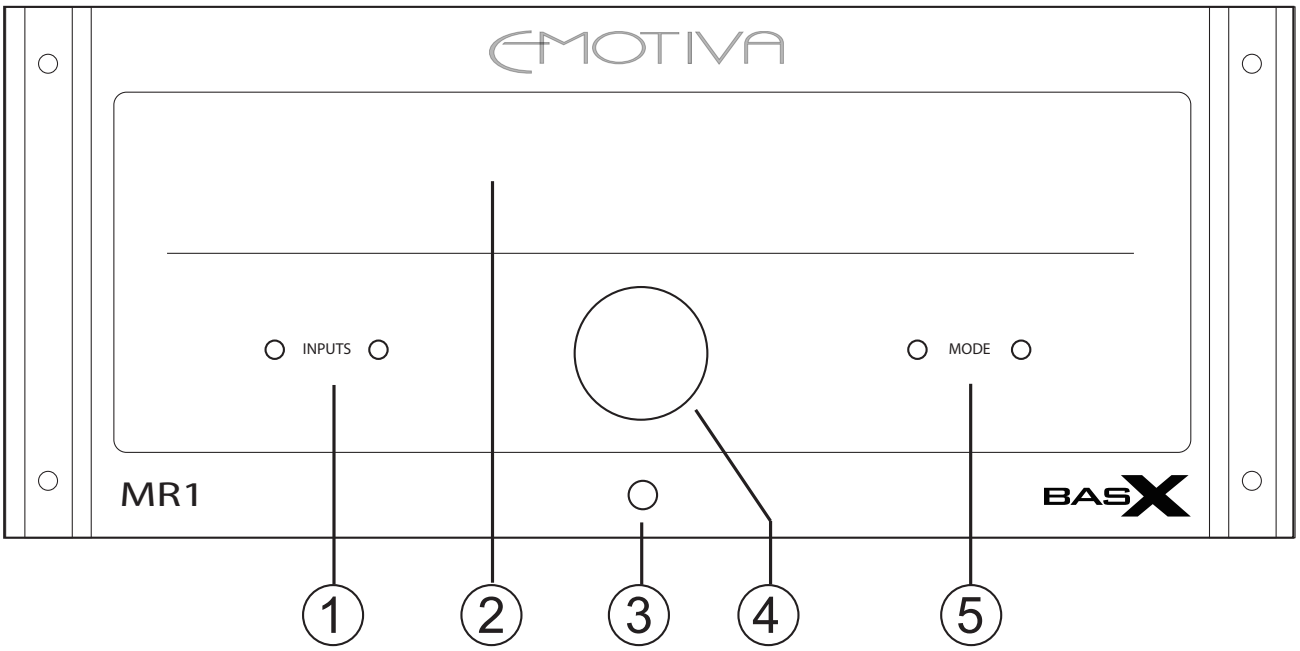
3. Advanced EMO-Q Automatic Room Correction

The MR1 includes the latest and most advanced version of our EMO-Q Automatic Room Correction System. EMO-Q now displays a visual interface which includes graphs of both the measured and corrected room response. Channels can now also be tested individually and the results adjusted individually.

4. Audiophile Quality Class A/B Amplifiers

The MR1 includes both audiophile quality Class A/B amplifiers, which feature advanced Class H power supply topology for optimum efficiency, and line level analog preamp outputs. This enables the MR1 to be used with a combination of passive loudspeakers and external amplifiers.

BasX MR1 Front Panel



1. Input Select Buttons

Use these buttons to select between inputs on the MR1.

2. Front Panel VFD Display

The front panel display shows the current status of the MR1.

Note: By default this display shows the selected audio source, the Volume setting, and the status of the incoming audio and video signals. The information that is shown, and the brightness of the display itself, can be configured in the Setup Menu.

3. Power / Standby Button

This button is used to toggle the MR1 between Standby and On modes.

Note: In order for the MR1 to be turned On the rear panel AC Power Switch must be On.

4. Volume Knob

This knob is used to control the Volume on the MR1.
Pressing the knob also toggles the Mute function On and Off.

5. Mode Select Buttons

Use these buttons to select the audio Playback Mode.

Note: By default the MR1 will automatically choose the best playback mode to use based on the incoming audio content.

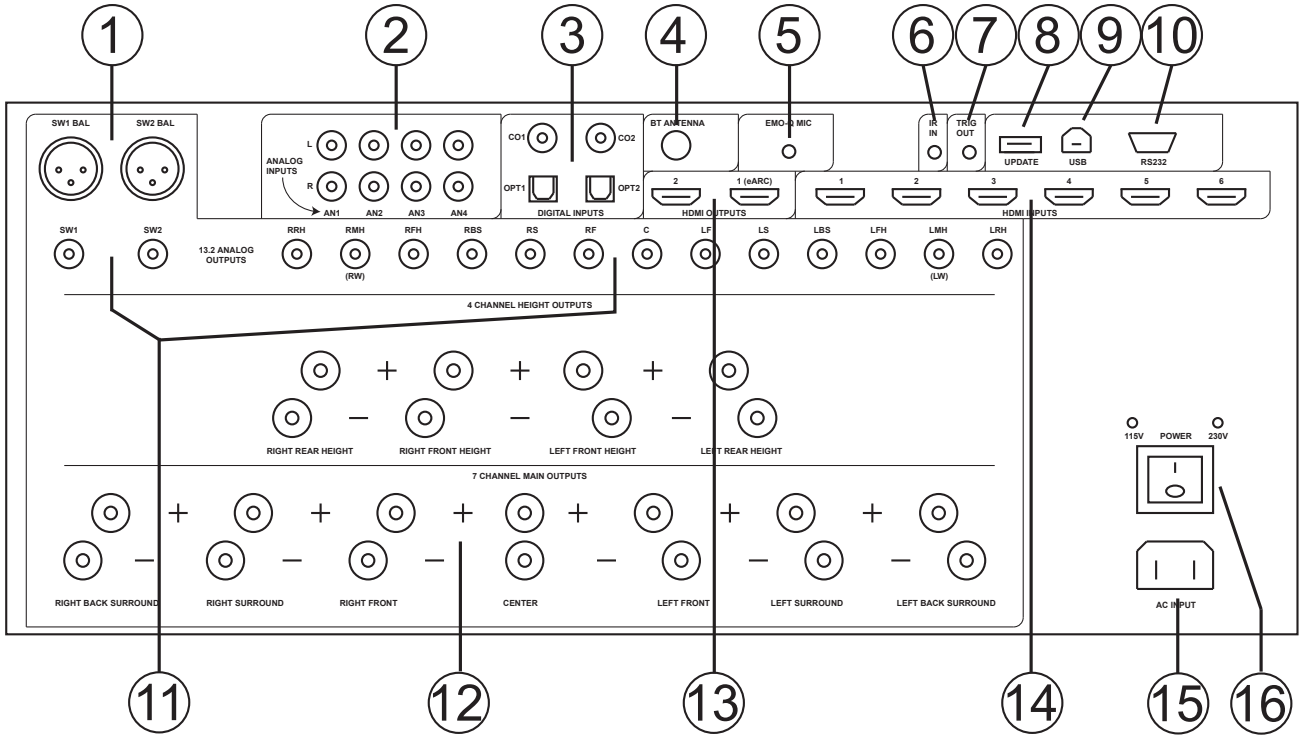
SETUP MENU

Although most users will find it more convenient to navigate the Setup Menu using the remote control, the front panel Input Select Buttons, Mode Select Buttons, and Volume Control can also be used to enter and navigate the Setup Menu.

In order to do so:

- Press and HOLD the Volume Knob for several seconds to enter the Setup Menu.
- Use the Input Select Buttons to move Up and Down in the Setup Menu.
- Use the Mode Select Buttons to move Left and Right in the Setup Menu.
- Pressing the Volume Knob momentarily is equal to the OK Button.
- Press and HOLD the Volume Knob for several seconds to exit the Setup Menu.

BasX MR1 Rear Panel



1. Subwoofer Outputs

The MR1 has two Balanced Subwoofer Outputs and two Unbalanced Subwoofer Outputs.
All four subwoofer outputs deliver the same audio information.
However there are independent Level Trim and Distance settings for SW1 and SW2.

Note: For either SW1 or SW2 both the Balanced and Unbalanced Subwoofer Outputs are active at the same time.

Note: If you configure the MR1 to have Two Subwoofers then both the SW1 and SW2 Outputs will be active. If you configure the MR1 to have One Subwoofer then ONLY the SW1 Outputs will be active.

2. Stereo Analog Inputs

Use these inputs to connect your analog stereo sources. They might be used to connect the output of a phono preamp or tuner, or you could connect the analog output of a phone or music player to one of these inputs with the appropriate adapter cable.

3. Digital Audio Inputs

Use these inputs to connect a digital audio source. The MR1 includes two electrical S/PDIF (Coax) inputs and two optical S/PDIF (Toslink) inputs. These inputs accept stereo audio at sample rates up to 24/192k and low bandwidth digital surround sound formats like Dolby Digital and DTS Digital Surround.

4. Bluetooth Antenna

This is the antenna for the internal Bluetooth receiver in the MR1, which supports the latest Bluetooth and AptX audio standards.

5. Microphone Input (For EmoQ Automatic Room Correction)

Connect the provided calibrated microphone to this input when you are preparing to run the EmoQ Automatic Room Correction feature in the MR1. You should always use the calibrated microphone provided with the MR1. If you use a different microphone it may produce unusual results, or even damage your microphone or the MR1.

Note: You should connect the microphone before starting EmoQ. You do not need to leave the microphone connected except when you're planning to run EmoQ.

6. IR Remote Input

Use the IR Remote Input to connect the signal from an external IR remote control repeater or hub.

Note: This input requires an active signal from an IR repeater or hub.

7. Trigger Output

A 12 VDC signal is sent from the Trigger Output of the MR1 to turn on other devices when the MR1 is turned on. This signal can be used to turn on other trigger-enabled audio equipment - such as a power amplifier.

Note: We recommend using the Trigger Output on the MR1 to turn on your amplifiers automatically when you power on the MR1. This will prevent any noises from being sent to your speakers as the circuitry in the MR1 starts up. (If the MR1 is left in Standby Mode, rather than fully powered Off, the muting circuitry in the MR1 will ensure that it starts up silently.)

Note: The Trigger Output can be reconfigured to only become active when specific Inputs are selected. The setting required to enable this feature is located in the Setup | Options Menu. Once this feature has been selected you may then configure how the Trigger Output will respond to each Input in the setup menu for each of the Inputs.

8. USB Update Input

This input is used to update the firmware on the MR1 from a firmware update file on a USB stick.

Note: This USB port CANNOT be used to play audio or video files from a USB stick.

9. USB Audio (DAC) Input

This input can accept a stereo PCM USB audio input, at sample rates of either 16/44k or 16/48k, from any device that can be connected to "an external USB DAC". Most Windows and Apple computers, some tablets and phones, and some USB streamers, can be connected directly to this input. Some other devices, including some iPhones and IPads, may require the use of a special adapter.

Note: The MR1 has a standard USB Audio Class 1 (UAC1) input and will not require you to install any extra drivers on your player device. When you connect the MR1 to a compatible device, it will appear on that device's list as a USB audio output device. The exact name under which the MR1 appears will vary depending on the device you're using.

Note: On some devices, the MR1 may appear as "a USB headset", and may add that option to its list of "input devices". This feature is not enabled on the MR1 and should be ignored.

Note: Most computers and streaming devices will automatically detect the USB audio capabilities of the MR1 and set themselves appropriately. This will enable you to seamlessly play files and other audio sources at sample rates above those directly supported by the USB Audio Input on the MR1. If you receive an error message when attempting to play high-resolution files on the MR1 via USB you may need to adjust the audio output settings on your source device.

Note: In order to ensure that the USB Audio Input on the MR1 initializes properly, and is recognized by your computer, make sure that your computer is connected and powered On before turning on your MR1.

10. RS-232 Serial Remote Control Input

This input accepts control signals from an RS-232 Serial remote control device.

11. Main 13.2 Channel Unbalanced Analog Audio Outputs

This is the main 13.2 channel audio output on the MR1. The main, surround, and height channels should be connected to the inputs on the appropriate power amplifiers driving your speakers using high quality unbalanced audio interconnect cables. The subwoofer outputs should be connected to the LFE or line level input on your subwoofer(s).

Note: If your power amplifier only offers balanced inputs, then you may connect the outputs of the MR1 to those inputs using passive unbalanced-to-balanced adapters or adapter cables, with no loss of audio quality.

Note: The SW1 and SW2 Unbalanced Subwoofer Outputs carry the same signals as the SW1 Bal and SW2 Bal Subwoofer Outputs. Both sets of subwoofer outputs are active at the same time. If you select One Sub in the Setup Menu then only the SW1 and Bal SW1 Outputs will be active.

Note: The Main 13.2 Channel Analog Outputs are always active and remain active if you enable the Speaker Outputs.

Note: In system configurations with Front Wide speakers, the LMH and RMH Analog Outputs are reassigned to the Front Wide channels (as indicated on the rear panel).

12. Speaker Outputs

These are the Speaker outputs on the MR1.

Note: The Speaker Outputs on the MR1 are Enabled and Disabled using the Amplifier Enable option on the Setup | Speaker Setup Menu. The Main 13.2 Channel Analog Outputs are always active and remain active if you enable the Speaker Outputs. You MAY use both outputs if you wish to connect a combination of regular loudspeakers and external amplifiers to the MR1.

13. Main HDMI Outputs

These are the main HDMI Outputs on the MR1 and should be connected to your TV and/or projector. Both HDMI outputs carry the same video signal, and the On-Screen Display Menu will be visible on both, but HDMI #1 is considered to be the primary output, and only HDMI #1 supports ARC and eARC.

Note: ONLY HDMI OUTPUT #1 SUPPORTS ARC AND ENHANCED ARC (eARC). Therefore, if you plan to use ARC or eARC with a certain TV, then that TV MUST be connected to HDMI Output #1.

Note: ARC / eARC is a separate AUDIO input on the MR1. If you wish to listen to audio from an App on your TV via ARC or eARC then you MUST select the ARC / eARC Input on the MR1. (The MR1 will NOT switch to playing the ARC or eARC signal automatically when it is present.)

NOTE: The MR1 has a special feature that enables you to select which HDMI Outputs are active. This feature is provided to prevent compatibility issues that sometimes arise with certain TV sets and projectors. Refer to the Special Features section for more details.

14. Main HDMI Inputs

These are the main HDMI Inputs on the MR1. Use these to connect your HDMI sources. All six HDMI Inputs on the MR1 support HDMI 2.0b and HDCP 2.2, with full support for 4k UHD video up to 4k/60, including HDR, HDR+, and Dolby Vision.

15. Power Cable Receptacle

The MR1 uses a standard removable power cable. A high quality commercial power cable is provided with your MR1.

16. AC Power Switch And Line Voltage Indicators

The AC Power Switch turns the main AC power to the MR1 On and Off. When this switch is Off, no controls operate, and the MR1 cannot be turned On from the front panel or with the remote control. The MR1 automatically detects and switches to the proper line voltage and the Line Voltage Indicators show you which voltage the MR1 has configured itself for.

BasX MR1 Amplifiers

The BasX MR1 features audiophile quality internal amplifiers, with Class A/B output stages, and a high efficiency Class H dual-rail power supply topology. The amplifier section of the MR1 can be configured in a variety of ways to power up to seven channels of main and surround speakers and up to two pairs of height speakers. The amplifiers powering the front three channels feature a special high-current output stage for exceptional sound stage coherence and clarity.

The speaker outputs on the MR1 may be used by themselves, or in combination with the 13.2 Channel Analog Outputs, and may be disabled if you wish to use the MR1 as a preamp/processor.

Note: The 13.2 Channel Analog Outputs on the BasX MR1 remain active at all times.

Note: When the Speaker Outputs on the MR1 are Disabled the signal being sent to the amplifiers is muted on all channels. While the amplifiers remain connected to the speakers, they are then idling, and will only produce slight warmth.

Note: Although no damage will result if you run one or more amplifier channels without speakers connected, we do recommend disabling the amplifiers if you have speakers connected to none of the Speaker Outputs.

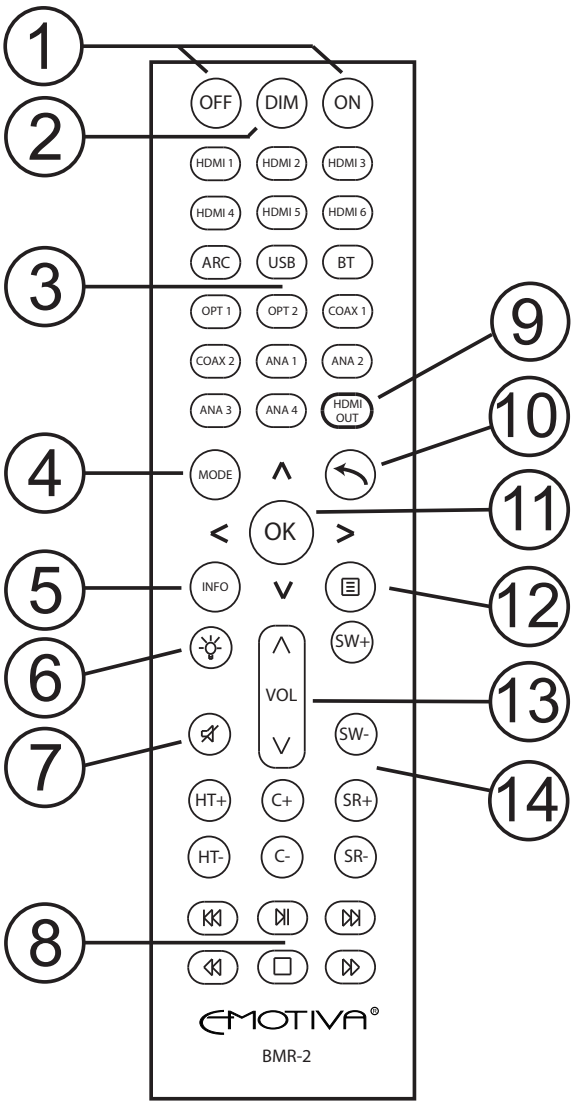
Note: WE STRONGLY RECOMMEND POWERING THE MR1 FULLY OFF BEFORE CONNECTING AND DISCONNECTING SPEAKERS. Even if the speakers are disabled, connecting or disconnecting speaker cables while the unit is powered on may trigger the protection circuitry, and cause the unit to go into protect mode.

PROTECT MODE

IMPORTANT: The amplifiers in the BasX MR1 feature an audiophile-grade protection circuit that is totally transparent in normal operation but will disconnect the main power to the MR1 if it detects a fault. The most common reason for this to occur is a loose or shorted speaker cable or a faulty loudspeaker. A fault may also be triggered by excess high frequency noise or DC offset voltage on an incoming audio signal.

If the MR1 detects a fault, the Standby Button on the front panel will flash, and the word PROTECT will flash in the front panel display. If this happens, reset the protection circuit in the MR1 by switching off the MAIN POWER using the rear panel AC Power Switch, leaving it off for a few minutes, then turning it back on. While the power is off you should check your speaker cables for obvious short circuits or loose connections. If the fault persists when you turn the power back on, please call Emotiva Technical Support for further assistance.

BasX MR1 Remote Control



1. Power On / Off Buttons

These buttons turn the MR1 On and Off.

Note: The Remote Control will only operate when the AC Power Switch on the rear panel of the MR1 is On.

2. Dim Button

This button controls the brightness of the front panel display, cycling through ten different brightness levels.

Note: When the Dim level is set to 0, the front panel display will remain totally dark, but will light briefly when you press a button or make a selection.

3. Direct Input Select Buttons

These buttons provide direct access to each of the HDMI video and audio inputs on the MR1. These buttons can be configured in the Setup menu.

4. Mode Button

The Mode Button allows you to cycle through the available surround sound modes for a particular source or movie.

Note: Only certain surround sound modes are valid with each specific type of input signal. The Mode Button will only allow you to select modes that are valid for the input signal that is currently selected.

5. Info Button

Pressing the Info Button causes the on-screen display to appear, showing information about the current source, and current playback mode. Pressing this button a second time may also cause additional information to be displayed in some situations. (For example, if the front panel display is entirely dimmed, pressing this button a second time will cause it to display information briefly.)

6. Remote Control Light Button

Pressing this button will cause the back light on the remote control to light.
(The back light on the remote control will also illuminate when any other button is pressed.)

7. Mute Button

Press this button to mute the audio output on the MR1; press it again to return the audio to its previous level.

8. Transport Buttons

These buttons will enable you to control transport functions like Play, Rewind, and Fast Forward on some CEC-enabled disc players and possibly on some other CEC-enabled devices. The Navigation Buttons on the MR1 remote control may also enable you to operate the Disc Menu on certain CEC-enabled disc players.

9. HDMI Output Button

This button enables you to choose whether one or both of the HDMI outputs on the MR1 is active. This can help resolve certain conflicts that may arise when you have two different HDMI devices with different capabilities connected to the two HDMI outputs on the MR1.

Pressing this button once will display the current status; pressing it repeatedly will cycle through the available options.

Note: When one of the HDMI outputs on the MR1 is disabled using this option it will act as if it is physically disconnected. THE TV OR DISPLAY CONNECTED TO THE DISABLED OUTPUT WILL SHOW A BLANK SCREEN OR NO SIGNAL and its capabilities will not be considered when negotiating the best video mode between your source device and the TV or projector connected to the active output.

10. and 11. Return Button and Menu Navigation Buttons

These buttons are used to navigate the Setup Menu on the MR1.

12. Menu Button

Press this button once to enter the Menu System on the MR1; press it again to exit the Menu.

Note: While the Setup Menu on the MR1 can be navigated using the front panel controls and display, the information shown on the Front Panel Display is limited, and the operation of the front panel buttons is less intuitive than the remote control. Therefore we STRONGLY recommend using the remote control, and the on-screen display, when making configuration changes to the MR1.

13. Volume Control

The Up and Down arrows on the ends of the Volume Control enable you to turn the Volume on the MR1 up and down from the remote control.

14. Trim Buttons

The Trim Buttons enable you to temporarily adjust the Volume on various sets of speakers. These adjustments, which are intended to allow you to customize the audio content from a particular movie or audio program to your personal listening taste, will not be retained after you switch to a different source. (Use the Setup Menu to make adjustments that will be retained.)

NOTE: The remote control keyboard will illuminate when any button is pressed. The illumination will shut off a few seconds after the last button is pressed to preserve battery life. If you wish to light the remote control without entering a command, you can do so by pressing the Light Button.

Basic Operation

Once you've configured a few things on your MR1 (refer to the Getting Started section) basic operations like selecting sources and making trim adjustments are very simple.

Turning the MR1 On and Off

Once the rear panel AC Power Switch is turned on, and the MR1 has had a few seconds to boot up, you can use the front panel Standby Button to toggle between On and Standby, or you can use the On and Off buttons on the remote control to switch between On and Standby modes.

Raising and Lowering Volume / Muting Audio

To raise or lower the Volume using the front panel controls:
Simply turn the front panel Volume knob up or down.

To Mute the Volume using the front panel controls: press the Volume knob briefly.
Pressing the Volume knob a second time will toggle Mute off.
Mute will be displayed on the front panel display when muting is engaged.

To raise or lower the Volume using the remote control:
Use the Up and Down arrows on the Volume button on the remote control.

To Mute the Volume using the remote control:
Press the Mute button on the remote control to toggle muting on and off.

Selecting an Input

To select an Input using the front panel controls:
Use the two front panel Input Buttons to step through the available inputs to the one you want.

To select an Input using the remote control:
Press the appropriate button on the remote control to directly select your input.

Note: By default, if you select an audio-only input on the MR1, the video output will display a blank screen. You can configure the MR1 to display video from a video source when an audio-only input is selected in the Source Setup Menu.

Changing Audio Modes

To change audio modes using the front panel controls:
Use the two front panel Mode Buttons to step through the available modes to the one you want.

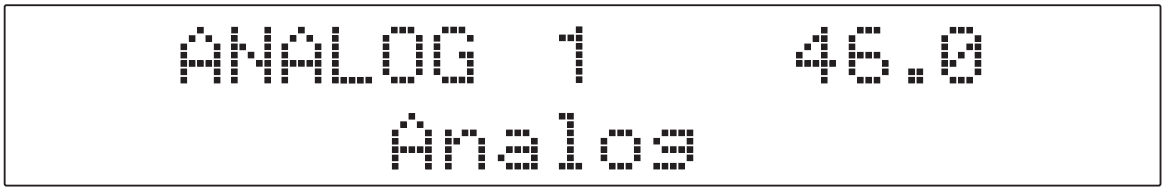
To change audio modes using the remote control:
Use the Mode Button to step through the available modes.

Note: When cycling through the list of available audio modes the MR1 will only offer modes that are valid for the particular type of input signal you are currently listening to.

Level Trims

The Level Trim Buttons on the remote control allow you to make direct *temporary* adjustments to the levels of individual sets of speakers.

BasX MR1 Front Panel Display And Menu System



The BasX MR1 has several ways of presenting you with information:

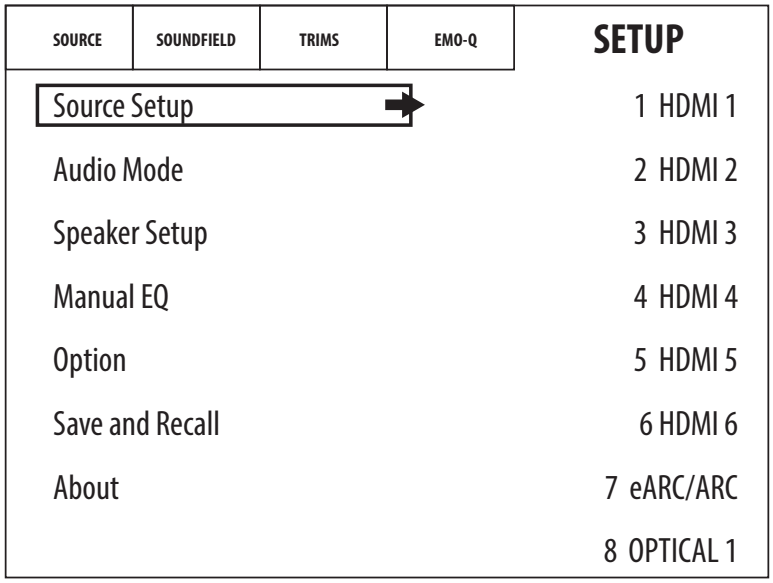
- A large bright front panel VFD display that displays basic information like what Input you have selected, what audio Mode is selected, and the current Volume level.
- A simple on-screen information panel which pops up momentarily on your TV screen to display information like the current Volume setting and the current audio Mode when something changes. (By default it pops up when you change the Volume, or change the Input selection, or when something like the audio mode or video resolution of your source content changes.)
- An in-depth Setup Menu which is displayed on your TV screen when you activate the Setup Menu.

NOTE: Most parts of the Setup Menu can be navigated using the front panel display and controls. However, the amount and type of information that can be shown on the front panel display is limited, and the front panel controls offer limited control capability, so we STRONGLY suggest that you use the on-screen display and the remote control when using the Setup Menu.

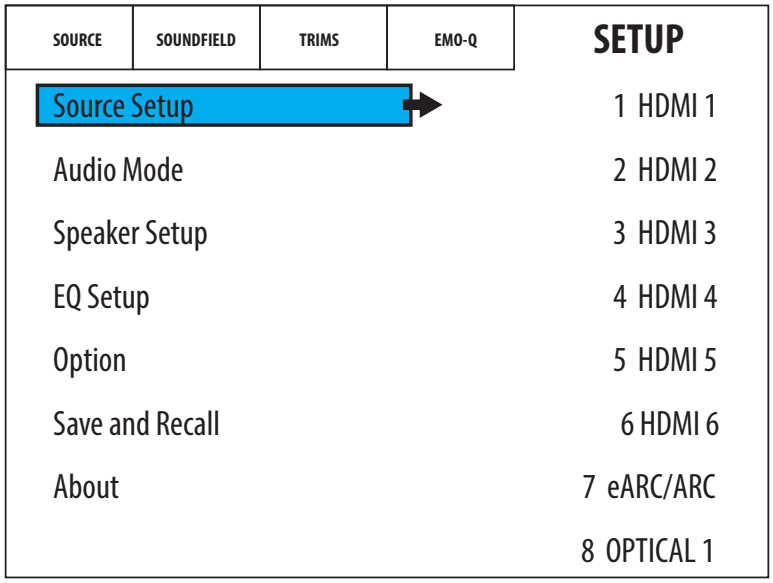
When you first enter the Menu System on the MR1 you will be presented with the Top Menu screen which consists of five main sections: Source, SoundField, Trims, EMO-Q, and Setup. When you first enter the Menu System the text in one of the tabs will be displayed double-size and the tab will be highlighted. This is the currently selected tab.

Note: On most diplays highlighted text will be shown as bold white text on a blue background. However, on some displays, especially in various HDR formats, other colors may be used. We have changed some of the colors in the manual for better viewing clarity in the printed illustrations.

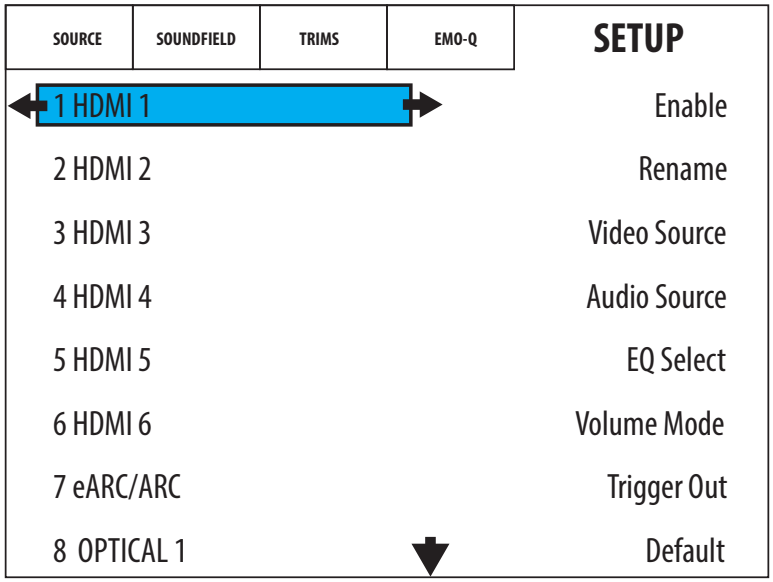
In the first illustration we have pressed the Menu Button to enter the Main Menu.
The Setup tab is highlighted, with larger text, showing that we are in the Setup Menu.



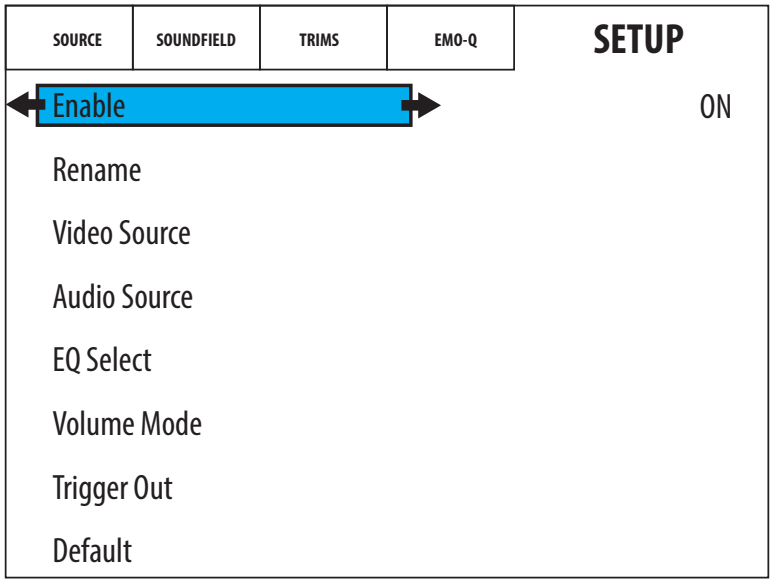
From there we're going to press the Down Arrow to enter the Setup Menu.
The Source Setup option is now highlighted.
The Right Arrow indicates that there are configuration options for this choice.
We're going to enter the Source Setup sub-menu by pressing the OK or Right Arrow buttons.



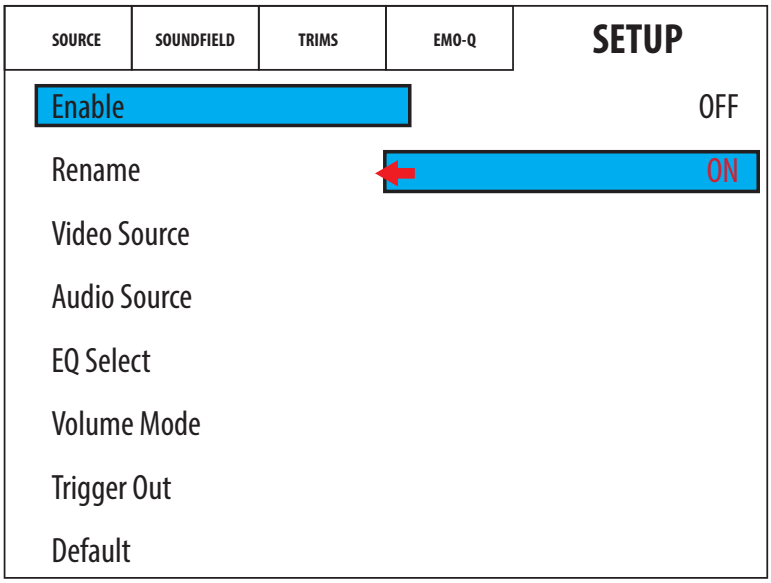
We are now in the Source Setup sub-menu of the Setup Menu.
The first item in that menu is currently highlighted by default (HDMI 1).
The Right Arrow indicates that there are further configuration options for this choice.
The Left Arrow indicates that we can go up a menu level by pressing the Left Arrow button.
The Down Arrow at the bottom indicates that the list of items continues...
(If you scroll down past the bottom the list will scroll upwards to display more items.)



We're going to enter the HDMI 1 sub-menu by pressing the OK or Right Arrow buttons.
We are now in the Source Setup for HDMI 1 sub-menu.
The first item in that menu is currently highlighted by default (Enable).
The Right Arrow indicates that there are further configuration options for this choice.
The Left Arrow indicates that we can go up a menu level by pressing the Left Arrow button.



We're going to enter the Enable sub-menu by pressing the OK or Right Arrow buttons.
We are now in the Enable option of the Source Setup for HDMI 1 sub-menu.
ON is highlighted in RED indicating that it is the currently selected option.
The Left Arrow indicates that we can go up a menu level by pressing the Left Arrow button.



IF WE EXIT THE MENU AT THIS POINT NO CHANGES WILL BE MADE.

To make a change:
Move the highlight to your desired choice using the Up and Down arrows.
When you move the highlight the new selection will be displayed in bright white text.
IN ORDER TO ACCEPT THIS NEW SETTING YOU MUST PRESS THE OK BUTTON.
Once you press the OK button the new selection will become highlighted in RED.
This indicates that the change has been committed to the configuration of the MR1.
At this point you may use the Menu Button to exit the menu.
You may also use the Left Arrow button to navigate up one level in the menu.

In general, when you are in the Menu System, the navigation arrow buttons will move you around in the menu, arrows will be displayed to indicate directions in which you can move, and the currently selected option will be highlighted in RED.

On some screens, like the Trims and EMO-Q menu screens, there will be options that include increasing or decreasing values. In these cases arrows will be displayed to indicate which Navigation Buttons should be used to change the indicated value.

Note: It is possible to navigate the Menu System using the front panel controls. If you do so then pressing the Volume knob while in the Menu System acts as the OK button, and the other pairs of buttons on the front panel act as the Up, Down, Left, and Right buttons.

WHEN YOU ARE DONE USING THE SETUP MENU PRESS THE MENU BUTTON TO EXIT THE MENU SYSTEM.

THE SOURCE MENU

You can use the Source Menu to select your Input Source.

Use the Up and Down arrows to move the highlight to the input you wish to select.
Press OK to accept your choice.
(After you accept your choice your new selection will be highlighted in RED.)

THE SOUNDFIELD MENU

By default the MR1 will choose what Sound Field to use to play each source based on the number of channels and audio format of the incoming audio signal. This menu enables you to temporarily override the default choice for your current audio content.

Remember - When this option is Off the option you choose is considered to be temporary. When this is set to On the MR1 will attempt to use the option you choose the next time it receives a similar source signal.

THE TRIMS MENU

The Trims Menu enables you to set individual trim levels for each speaker channel and configure Dolby Range Control and Lipsynch Delay options.

Channel Levels - The Trims Menu allows you to individually set the level of each speaker.

Remember Channel Volume - When this is set to OFF Channel Level settings are temporary. When this is set to On the Trim Level settings are retained when the MR1 is powered off.

DRC - Allows you to set Dolby Range Control to On, Off, or Auto.

Lipsynch - Allows you to manually enter a value for Lip Synch Delay. The default setting is Auto, which is the best choice for most systems.

THE EMO-Q MENU

The EMO-Q Menu gives you access to the EMO-Q Advanced Automatic Room Correction System in the MR1.

EMO-Q Calibration - This option engages the EMO-Q Automatic Room Correction System, which will automatically measure your room, and your system, and configure the MR1 to deliver the best possible sound quality.

Individual Test - This option allows you to use the measurement capabilities of the EMO-Q Automatic Room Correction System to take test measurements on individual channels.

REFER TO THE EMO-Q ADVANCED AUTOMATIC ROOM CORRECTION SECTION FOR MORE DETAILS ABOUT RUNNING EMO-Q.

THE SETUP MENU

The Setup Menu is where you access most of the advanced configuration options on the MR1. The Setup Menu is divided into several sections, each of which have several options:

- **SETUP - SOURCE SETUP**
- **SETUP - AUDIO MODE**
- **SETUP - SPEAKER SETUP**
- **SETUP - MANUAL EQ**
- **SETUP - OPTION**
- **SETUP - SAVE AND RECALL**
- **SETUP - ABOUT**

SETUP - SOURCE

This menu enables you to configure several options individually for each input on the MR1.

Enable - This option allows you to disable inputs which are not being used.

Rename - This option allows you to change the name associated with the Input.

Video Source - With HDMI Inputs the video that is displayed always comes from the selected HDMI input. With Audio Inputs, you may choose to display a blank video screen, or video from a different Video Input.

Note: In this Menu the "Input Name" refers to the INPUT (button) DESIGNATION. On the MR1 you MAY assign the same PHYSICAL HDMI SOURCE to multiple "HDMI Inputs". For example, you MAY configure "HDMI 1" to have Video Source = HDMI 1 and Audio Source = HDMI (also HDMI 1), and ALSO configure "HDMI 2" to have its Video Source = HDMI 1, but with a different Audio Source.

Audio Source - This option allows you to associate audio from a different audio source with a specific HDMI Input. The default setting for HDMI sources is "HDMI", which assigns the current HDMI signal as the Audio Source. Options include audio from the selected HDMI signal or from any other valid Audio Input. (You cannot select to associate audio from a different HDMI input.)

EQ Select - This option allows you to select which set of EQ settings are associated with the input. Options include EMO-Q EQ settings, three Manual EQ settings, and Bypass, which allows you to listen to the original audio signal with no EQ applied.

Volume Mode - When you turn the MR1 Off it remembers the current Volume setting and returns to that setting when the MR1 is turned back on. However, there are several more advanced options that modify how the MR1 treats the Volume setting when individual inputs are selected. The default setting is Unified. The Volume is simply treated as being the same for all inputs; and the Volume doesn't specifically change when you change inputs. If you set this to Individual, the MR1 remembers the Volume setting for each input separately, and when you select an input the MR1 returns to the Volume setting that was last used FOR THAT INPUT. If you set this to Additional, the MR1 returns to the individual Volume last used for that input, BUT THAT SETTING IS MODIFIED BY THE SPECIFIC AMOUNTS YOU SPECIFY.

Note: For example, if you set the Volume Mode for HDMI 1 to Additional -10 dB, the next time you select the HDMI 1 input, the MR1 will determine the Volume setting that was in effect the last time that input was used, adjust it according to the value specified in the Additional field, and automatically set the system Volume to that setting. (So, with the values in this example, the next time you select HDMI 1, the MR1 will automatically set the Volume to 10 dB lower than it was set to the last time you used the HDMI 1 Input.)

Trigger Out - This option allows you to decide whether the Trigger Output on the MR1 will be active when this Input is selected.

Default - Selecting this option will reset the configuration options FOR THE CHOSEN INPUT to their factory default values.

Note: This Default option only affects the Input you are currently configuring.

Note: The Default option takes effect when you press the OK or Right Arrow button. (You will NOT be asked to confirm your decision.)

SETUP - AUDIO MODE

By default the MR1 will automatically select the best Audio Mode (Sound Field) to use based on the format of the incoming audio signal. The SoundField Menu, and the Mode Button on the remote control, allow you to temporarily select different modes to use with the content you are currently playing.

This menu enables you to change the default SoundField modes that the MR1 will use with various types of input signals.

SETUP - SPEAKER SETUP

This menu enables you to configure the MR1 to work with the specific number and type of speakers you have, set speaker distances and levels, and adjust several other options.

Speaker Layout - Use this option to inform the MR1 about how many speakers you have.

Note: The first and last digits in each system choice describe the total number of main, surround, and height speakers you have. The left hand digit shows the total of your main and surround speakers; the middle digit shows how many subwoofers you have; the right hand digit shows how many height speakers you have. Some of the values shown here will change when you later change the settings in the Center and Subwoofer options.

Note: How certain system configurations are displayed and configured depends on settings in both this option and others. If you have a 2.1 channel system, you should select a 3.1 channel system here, and set Center to None. If you have a 2.0 channel system, you should select a 3.1 channel system here, set Center to None, and set Subwoofer to None.

Center - Set this to Yes if you have a center channel speaker.

Subwoofer - Set this to how many subwoofers you have (one or two). Select None if you have no subwoofer connected.

Note: The MR1 has two subwoofer outputs - SW1 and SW2. Both the balanced and unbalanced outputs carry the same audio signal and are active at the same time. When you select One Sub both SW1 and SW1 Bal will be active. When you select Two Subs, all four outputs will be active, SW1 and SW1 Bal will carry the same signal, and SW2 and SW2 Bal will carry the same signal.

Height SPKR Type - If you have height speakers this option will allow you to configure whether they are Ceiling or Reflective speakers. If you have direct radiating height speakers mounted high on the walls you should select Ceiling here.

Level Test / Adjust - When you select this option you will be able to manually set the relative levels of your speakers using an internal test tone generated by the MR1. As each speaker is selected the test tone will play from that speaker and you will be able to adjust its level.

Note: When setting speaker levels the goal is to configure the system so that each speaker plays at the same level as heard from your primary listening position. The actual level at which the test tones play will vary depending on the gain of your amplifiers and the efficiency of your speakers. The level of the test tones is controlled by the system's Volume control. If the test tones seem to be playing too quietly or too loudly, you may simply exit the Setup menu, adjust the Volume control, and reenter the menu.

Distance - Use this option to set the distance from each speaker to your listening position.

Note: Configure the Distance to each speaker from your primary listening position. If you have a large seating area then set the distance from each speaker to the center of your listening area. If your room is more or less symmetrical then it's best to also arrange your speakers symmetrically.
Note: The distance value will move by one inch each time you press the button; if you hold the button down the value will move in one foot increments.

Crossover - This option enables you to set the Bass Management options on the MR1. The default Bass Management settings on the MR1 will work well in most surround sound situations so there is no need to adjust them.

Note: By default, if you have one or more subwoofers, then all of your other speakers are configured with a Bass Management crossover of 80 Hz, and a 12 dB/octave crossover slope. By default, if you have no no subwoofer, then your Front Left and Front Right speakers are assumed to be full range, while the Bass Management crossover on all of your other speakers is set to 80 Hz.
Note: The MR1 does not designate speakers as "large" or "small". To configure one or more sets of speakers as "large" or "full range", go into the Crossover menu, and set the Crossover Frequency for those speakers to Bypass.
Note: While these settings will work well in most systems you may of course change them to suit your system and your personal listening preferences.

Filter Slope - This option allows you to set the filter slopes on the Bass Management crossovers for each set of speakers and the subwoofer. The default setting is 24 dB/octave for the subwoofers, and 12 dB/octave for all your other speakers, and should work well for most systems.

Amplifier Enable - This option allows you to Enable and Disable the signal to the internal amplifiers in the BasX MR1. (The line level 13.2 Channel Analog Audio Outputs remain active.)

SETUP - EQ SETUP

This menu enables you to configure the overall EQ settings for the MR1.

EQ 1, EQ 2, EQ 3, EmoQ, EQ Bypass - These options determine the EQ settings which will be used on the MR1. The selected option will be shown highlighted in red.

Note: This option configures the DEFAULT choice for which set of EQ parameters will be applied to each input on the MR1. The option you select here will be used for each input UNLESS YOU HAVE CONFIGURED THAT PARTICULAR INPUT TO USE A DIFFERENT EQ OPTION.

The MR1 has three sets of manual EQ settings (**EQ 1, EQ 2, and EQ 3**.)
Each of these sets offers several parametric equalizer filters for each set of speakers.
And each of those parametric EQ filters has a configurable center frequency, bandwidth, and gain.

Once you have highlighted one of the EQ filter sets, you can either select it by pressing OK, or you can enter into the settings for the individual PEQ filters inside that filter set by pressing the Right Arrow button. You can then navigate further into the EQ Setup menu to make changes to the individual filter settings. You will also have the option to engage the test signal generator built into the MR1, view a visual result of the resulting measurements on a graph, enter your choices into the filter settings, and Save and Load some of your settings.

NOTE: You DO NOT have to connect the calibrated microphone included with your MR1 in order to manually enter values here. However, if you wish to take measurements, you must make sure that the microphone is connected before doing so.

NOTE: The microphone included with the MR1 is calibrated for "zero degree orientation". This means that, in order to obtain the most accurate results, the front of the microphone should be faced towards the speaker you are measuring. Hold the microphone as steadily as you can, WITH THE POINT OF THE CONE TOWARDS THE SPEAKER YOU ARE MEASURING, and ensure that there are no obstructions between the microphone and the speaker you are measuring.

Prompts on the measurement screen will guide you through the process of taking measurements, viewing the results, and saving those results in the manual EQ set you are calibrating.

Selecting the **EMO-Q** option here will enable you to view and edit the EQ settings created and stored by the EMO-Q Automatic Room Correction System the last time it was run.

You can also select **EQ Bypass** here to set the system default to not apply ANY EQ to the selected input.

Note: If you select the Bypass option, the system default will be NO EQ, and EQ will only be applied to each selected input if an EQ option other than Default was configured for that input in the Setup Input options.

NOTE: When you receive your MR1, and after resetting the unit to Factory Defaults, the Default EQ option will be set to Bypass. After running EMO-Q this default will be set to point to the EMO-Q EQ settings.

SETUP - OPTION

This menu gives you access to several configuration options for various features on the MR1.

Startup State - This option allows you to configure how the MR1 starts up when AC power is applied to the unit. The MR1 can be configured to start up On, or in Standby, or to start in whatever state it was in when it was powered Off.

Volume Options - This is where you can configure the Power On Volume, Maximum Volume, and Volume Step settings for the MR1. You can also configure whether the MR1 displays Volume as a number from 0-80 (with 80 the highest volume) or as Real Gain (expressed in -dB).

HDMI Options - This menu offers several options related to HDMI operation. Options include which HDMI Outputs are enabled, whether the MR1 will continue to pass video to the TV when in Standby, some detailed choices about how the MR1 responds to HDMI-CEC commands from other devices, and allows you to configure whether specific HDMI inputs support Enhanced HDMI or not. (Most users will not need to use these options unless instructed to by Emotiva Technical Support.)

Information Display - This is where you can configure how the on-screen display (OSD) appears and set the default brightness for the front panel display.

No Signal Standby - This is where you can configure how long the MR1 will wait before switching into Standby when it sees no input signal on the selected input.

Trigger Output - This is where you can configure the default operation of the Trigger Output on the MR1. You may configure the Trigger Output to remain Off, to remain On when the MR1 is turned On, or to be controlled according to the Trigger option settings for each individual input.

Unit - This is where you configure your MR1 to display various values in Metric or Standard notation. The default is Standard.

U Driver Log - This options turns on special system diagnostic logs. (You should NOT enable this option unless instructed to do so by Emotiva Technical Support.)

SETUP - SAVE AND RECALL

This menu enables you to save the current configuration settings on your MR1, restore previously saved settings, and reset the unit to its factory default configuration.

Save to Backup - Saves the current configuration of the MR1. Settings are saved to internal memory inside the MR1.

Load From Backup - Loads settings that have previously been saved in the MR1.

Factory Reset - Resets your MR1 to its factory default settings.

Note: Configuration settings are saved to an internal memory location inside the MR1. Saved settings are retained when you turn off the MR1 or do a Factory Reset.

SETUP - ABOUT

This menu gives you access to a variety of information about the various firmware modules currently installed on your MR1 and some of the devices connected to your MR1.

Software Update - This option is used to update the firmware on your MR1.

Note: Firmware is updated by placing the firmware update file on a USB stick, formatted with a standard FAT32 format, and inserting the stick into the rear panel Update USB port.

Firmware update may be initiated by either:

1. Inserting the USB stick containing the firmware update file into the rear panel Update port while the MR1 is powered Off, then turning the MR1 On. At this point the MR1 will detect the firmware file automatically and install it.

2. Inserting the USB stick containing the firmware file while the MR1 is powered On and then selecting Software Update from this menu.

NOTE: The firmware update will take several minutes and will display a progress indicator. DO NOT DISCONNECT POWER TO THE MR1 OR REMOVE THE STICK DURING THE UPDATE. You will see a message when the update is completed, and your MR1 may return to either On or Standby mode - depending on how the update was initiated. You will NOT be required to update your MR1 to factory defaults after most updates.

DO NOT remove the USB stick until the firmware update is complete. Once the update is complete the MR1 will shut down, reboot, and display the new firmware version. At that point you can remove the USB stick.

MCU Version, DSP Version, OSD Version - These items display useful information about the firmware modules installed on the MR1.

Bluetooth Name - Displays the Bluetooth Name that will be associated with the MR1 when other devices are paired with it. You MAY change the name that the MR1 displays to other Bluetooth enabled devices.

Bluetooth MAC - This item displays the network hardware address of the Bluetooth network receiver inside the MR1.

TV Connect 1, TV Connect 2 - This item displays some useful information about the HDMI devices currently connected to the HDMI outputs of the MR1.

EMO-Q Advanced Automatic Room Correction

The EMO-Q Advanced Automatic Room Correction System in the MR1 calibrates the MR1 to produce the best possible sound, in *your* listening room, with *your* speakers and the rest of *your* system.

Calibration is initiated via the Setup Menu by selecting EMO-Q Calibration. Once you have initiated the EMO-Q calibration, the MR1 will play a series of test tones, measure the results, calculate the necessary corrections, display both the results of the measurements and its corrections on your TV screen in visual form, and save those corrections into the EMO-Q EQ settings on your MR1.

After this, the MR1 will set the EMO-Q EQ set to be the default EQ for your MR1. This will then be used for all of your inputs except those for which for which you have specified a different EQ set.

NOTE: THE EMO-Q TEST SEQUENCE WILL START AS SOON AS YOU ENTER THE EMO-Q CALIBRATION OPTION. THEREFORE YOU SHOULD MAKE SURE THAT YOU HAVE ATTACHED YOUR CALIBRATED MICROPHONE TO YOUR MR1 *BEFORE* SELECTING THIS MENU ITEM.

WARNING: THE EMO-Q ROOM CORRECTION SYSTEM ON THE MR1 IS DESIGNED TO BE USED WITH THE PROVIDED CALIBRATED MICROPHONE. ATTEMPTNG TO CONNECT A DIFFERENT MICROPHONE TO YOUR MR1 MAY RESULT IN DAMAGE TO THE MR1 OR YOUR MICROPHONE.

NOTE: THE CALIBRATED MICROPHONE PROVIDED WITH YOUR MR1 WILL DELIVER THE MOST ACCURATE RESULTS IF THE FRONT OF THE MICROPHONE IS FACING TOWARDS EACH SPEAKER AS IT IS BEING TESTED. The front of the microphone is the tip of the cone. Therefore, as each speaker is tested, your should hold the microphone as steadily as you can, and point the tip of the cone towards the speaker that is playing the test tone. You also need to be careful to ensure that the microphone has an unobstructed line of sight to each speaker as it is tested. (You may hold the microphone over your head, or turn your body while holding the microphone in front of you, but be sure that neither your body, nor any furniture, blocks the path between the microphone and each speaker as it is being tested.

Sound Fields

The SoundField options in the MR1 were chosen to offer the best combination of sound quality and flexibility with the widest variety of audio sources. By default the MR1 will select the best SoundField to use, based on the format of the incoming audio signal, and the number and type of speakers you have.

Pure - applies the least possible processing to both analog and digital sources.
Bass Management and distance correction are still applied with digital sources, but not with analog sources, and EQ is bypassed.

Direct - delivers the source signal with minimum modification, while still applying system equalization, and room correction, to both analog and digital sources.

Stereo - converts all incoming signals into a stereo signal. Bass management and system equalization are applied in Stereo mode.

All Stereo - convertes all incoming signals into stereo, then plays the resulting stereo signal from all speakers. Bass management and system equalization are applied in Stereo mode. This mode is sometimes called "party mode" because it plays the source through all of your speakers and so does a good job of filling a large room with sound.

Care and Maintenance

Periodic Maintenance

Your BasX MR1 requires no periodic maintenance or calibration.

Cleaning your MR1

- If necessary, the MR1 should be cleaned gently with a soft rag.
- If something sticky gets on the front panel or case of the MR1, it should be cleaned with a mild cleaning solution applied to a soft cloth, followed by wiping with a clean cloth dampened with plain water and drying with a soft dry rag or cloth.

Note: DO NOT spray water or cleaning solution directly onto the front or rear panel of the MR1.

Installing Firmware Updates

From time to time Emotiva may issue firmware updates for your MR1. We strongly recommend that you only install firmware that was downloaded from the official Emotiva website, or that you received from Emotiva Technical Support staff.

To install a firmware update on your MR1:

1) Download the firmware file from our website or the link or e-mail attachment provided by our Technical Support representative.

2) Place the firmware update file on a USB stick formatted with the Fat32 operating system (any commercial USB stick formatted to work on both Apple and Windows computers should work fine). Place the file into the main or root directory of the stick.

Note: If the firmware update is provided in the form of an archive, such as a Zip file, extract the firmware update file from the archive onto the stick.

3) Plug the USB stick into the rear panel USB connector labelled Update.

Note: There are two different ways to initiate the firmware update. With both, once the update starts, the front panel will display the status of the update. Depending on which method you use, after the update completes, the MR1 may turn On or return to Standby.

4a) While the USB stick remains inserted, power the MR1 Off, allow it to remain off for twenty seconds, then power it back On. The MR1 will recongize that a firmware update is available and will proceed to perform the update.

4b) With the MR1 On, go into the Setup Menu, and select Setup | About | Software Update. Select Yes when prompted whether you want to do a software update.

4c) Once the update is complete the MR1 will restart and display the new firmware version.

4d) Remove the USB stick when the update is complete.

WARNING: *DO NOT* unplug the USB stick or turn the MR1 Off during the firmware update.

Specifications

Audio Performance - Analog Audio Outputs

Rated Output Voltage:
+6 dBV (2 VRMS)

Frequency Response:
20 Hz to 20 kHz +/- 0.05 dB

Total Harmonic Distortion:
< 0.0025% @ 1 kHz
< 0.05% from 20 Hz to 20 kHz

Signal to Noise Ratio:
> 100 dB @ 1 kHz

Crosstalk:
< 85 dB @ 10 kHz

Audio Performance - Speaker Outputs (Internal Amplifiers)

Power Output Per Channel; ONE channel driven:
160 watts RMS / channel @ 8 Ohms; 290 watts RMS / channel @ 4 Ohms; < 0.1% THD
Power Output Per Channel; TWO channels driven:
160 watts RMS / channel @ 8 Ohms; 260 watts RMS / channel @ 4 Ohms; < 0.1% THD
Power Output Per Channel; FIVE channels driven:
135 watts RMS / channel @ 8 Ohms; 190 watts RMS / channel @ 4 Ohms; < 0.1% THD
Power Output Per Channel; ELEVEN channels driven:
100 watts RMS / channel @ 8 Ohms; 130 watts RMS / channel @ 4 Ohms; < 0.1% THD

Power Bandwidth (at rated power; 8 Ohm load):
20 Hz to 20 kHz (+ 0 / - 0.15 dB) or better.

Broad Band Frequency Response:
5 Hz to 80 kHz (+ 0 / - 3 dB).

THD + noise:
< 0.005% (A-weighted); at rated power; 1 kHz; 8 Ohms.

Signal to Noise Ratio (8 Ohm load):
> 115 dB or better; referenced to rated power (A-weighted).

Minimum Load Impedance: 4 Ohms (one 8 Ohm or two paralleled 4 Ohm speakers.)

Damping Factor: > 500.

Connectivity

Video Inputs and Outputs:
(6) HDMI 2.0b compliant HDMI video inputs
(all with full support for 4k UHD video, HDCP 2.2, HDR10, HDR10+, and Dolby Vision).
(2) HDMI 2.0b compliant HDMI video outputs
(primary output supports both ARC and eARC).

Audio Inputs:
(4) stereo unbalanced analog audio inputs.
(2) S/PDIF coaxial digital audio inputs.
(2) Toslink (optical) digital audio inputs.
(1) USB Audio (DAC) input.
(1) Bluetooth audio input (AptX; internal with rear panel antenna).

Audio Outputs:
(1) set of 13.2 channel unbalanced audio main outputs.
(2) balanced subwoofer outputs (same as main sub outputs).
(1) set of 11 speaker outputs powered by internal amplifiers.

Other Inputs and Outputs:
(1) IR remote control signal input.
(1) RS-232 serial remote control input.
(1) Trigger output (programmable).
(1) USB data input (reserved for firmware updates).

Audio Formats and Modes Supported

Surround Sound Audio Formats:
Dolby Atmos
Dolby TrueHD
Dolby Surround
DTS:X
DTS HD Master Audio
DTS

Surround Sound Upmixers:
Dolby Surround Upmixer (DSU)
DTS Neural:X

Sound Field and Processing Options:
Pure
Direct
Stereo
Multi-Channel
Dolby Upmix
DTS Neural:X

Room Correction

Automatic Room Correction:
EmoQ Second Generation Automatic Room Correction (with graphical interface).

Manual Room Correction (EQ):
Three Separate Manual Speaker Presets - Each Of Which Offers...
11 Bands of Full Parametric EQ: Left Front and Right Front.
11 Bands of Full Parametric EQ: Center Channel.
7 Bands of Full Parametric EQ: Surround Channels.
7 Bands of Full Parametric EQ: Top Channels.
5 Bands of Full Parametric EQ: Subwoofers.

Environmental

Power Requirements:
115 VAC / 230 VAC @ 50 / 60 Hz (automatically detected).

Dimensions:
17" wide x 7-3/4" high x 15-1/2" deep (without connectors).

Weight:
50 lbs (net).
58 lbs (boxed).

Emotiva Audio Corporation Three-Year Limited Warranty

What does this warranty cover?

Emotiva Audio Corporation (Emotiva) warrants its products against defects in materials and workmanship. This warranty, and all rights provided hereunder, is granted to the original owner, and may be transferred to a single new owner once during the initial one year of ownership. In the event the original owner transfers ownership of the Product during the first year of ownership, this Warranty shall terminate at the end of the original applicable term. In the event the original owner transfers ownership of the Product AFTER the end of the first year of ownership, but prior to the expiration of the applicable term described below, this Warranty shall terminate immediately upon transfer of ownership.

This Warranty only applies to Products purchased directly from Emotiva or any of its Authorized Dealers or International Distributors.

Emotiva warrants any replacement product or part furnished hereunder against defects in materials and workmanship for the longer of the following: (i) the amount of time remaining under the original warranty, or (ii) 120 days from your receipt of the repaired or replaced product. The duration described in this paragraph is hereinafter referred to as the "Term".

TO THE FULLEST EXTENT PERMITTED BY LAW, ALL IMPLIED WARRANTIES RELATED TO THE ORIGINAL PRODUCT AND ANY REPLACEMENT PRODUCT OR PARTS (INCLUDING IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE) ARE EXPRESSLY LIMITED TO THE TERM OF THIS LIMITED WARRANTY. SOME STATES DO NOT ALLOW LIMITATIONS ON HOW LONG AN IMPLIED WARRANTY LASTS, SO THE ABOVE LIMITATION MAY NOT APPLY TO YOU.

The original owner must make a claim within the Term of the Warranty. A claim shall not be valid (and Emotiva has no obligation related to the claim) if it is not made within the Term and if it is not made in strict compliance with the requirements of the "How do you get service?" section.

How long does this coverage last?

This warranty commences on the date of retail purchase by the original retail purchaser and runs for a period of three years thereafter, with the exception of accessories, cables, and remote controls*. In the event the original owner transfers ownership of the Product during the first year of ownership, this Warranty shall terminate at the end of the original applicable term. In the event the original owner transfers ownership of the Product AFTER the end of the first year of ownership, but prior to the expiration of the applicable term, or ownership is transferred a second time, this Warranty shall terminate immediately upon transfer of ownership.

Emotiva warrants any replacement product or part furnished hereunder against defects in materials and workmanship for the longer of the following: (i) the amount of time remaining under the original warranty, or (ii) 120 days from your receipt of the repaired or replaced product. The duration described in this paragraph is hereinafter referred to as the "Term".

*Accessories, cables, and remote controls have a one-year warranty to the original owner.

What will Emotiva do?

Emotiva will, at its option, either: (i) repair the product, or (ii) replace the product with a new consumer product which is identical or reasonably equivalent (in Warrantor's sole discretion) to the product. In the event Warrantor, in its sole discretion, is unable to replace or repair the Product or it is not commercially practicable to do so, then: (i) if the claim was submitted during the first 365 days of the Term, Warrantor shall refund to you the purchase price that you paid for the Product; and (ii) if the claim was submitted after the first 365 days of the Term, Emotiva shall issue you a credit equal to the purchase price that you paid for the product. The credit may only be used for the purchase of merchandise from Emotiva, and cannot be used for freight charges.

When a Product or part is repaired or replaced, any replacement item becomes your property and the replaced item becomes Emotiva's property. When a refund or credit is given, the Product for which the refund or credit is provided must be returned to Emotiva and becomes Emotiva's property.

What is not covered by this warranty?

This warranty does not apply: (i) to damage caused by use with products not manufactured by Emotiva, where the non-Emotiva product is the cause of the damage; (ii) to damage caused by service or maintenance performed by anyone who is not a representative of Emotiva; (iii) to damage caused by accident, abuse, misuse, flood, fire, earthquake or other external causes; (iv) to a product or part that has been modified after its retail purchase, where the modification caused or contributed to the damage; (v) to consumable parts, such as batteries or failure of or damage to the Product caused by batteries; (vi) if any Emotiva serial number has been removed or defaced on the product; (vii) glass or plastic panels, cabinetry, trim or other appearance items; (viii) cosmetic wear or damage to remote controls by user.

EMOTIVA SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING FROM OR RELATED TO ANY DEFECTS IN OR DAMAGES TO ITS PRODUCTS. SOME STATES DO NOT ALLOW THE EXCLUSION OR LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

How do you get service?

In order to make a claim under the Warranty, you must:

1. Call or e-mail a customer service representative at 1-877-EMO-TECH (1-877-366-8324) or support@emotiva.com. You must provide a description of your problem, the serial number of the Product for which the warranty claim is being made, and the original purchase date.

2. Then, you will be provided with a warranty service authorization number ("WS").

3. Next, you must ship the Product to the following address, with the WS written in large, bold numbers on the outside of the box, and with the letters "WS" written before the number, for example: WS1234. Parcels arriving without a WS number on the outside of the box will be refused. The customer pays for the shipping to Warrantor. Warrantor pays for the shipping back to the customer within the continental United States only. Customer is responsible for shipping charges on all other warranty claims.

Emotiva Audio Corporation
Attn: Repair Department
139 Southeast Parkway Court
Franklin, TN 37064

Units will be refused by Emotiva for the following:

Product was sent without the WS#
Product was sent with inadequate packaging.
Product was damaged in transit.
Product was shipped collect for shipping charges.

How does state law apply?

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

What if my product is damaged on the way to you?

Emotiva is not liable for damages that may incur while an item is in transport to us. Please purchase insurance when you ship your item. If your Product was not adequately packaged, we will refuse receipt and the damaged package will be returned to you at your cost. If you do not have the original Emotiva Audio packaging, please check with our sales department to purchase replacement-shipping cartons.

How does the Warranty and service apply to international orders?

The Product Warranty is only valid in the country where the Emotiva product was originally shipped via an authorized dealer, distributor, or direct from the Emotiva factory. The Warranty is subject to change at any time depending on the laws and regulations within your specific country. Please check with your distributor for a complete understanding of the warranty in your county.

If you purchased your Emotiva Product outside of the USA and wish to have it serviced at the factory, all freight charges are your responsibility. If you do not have an authorized distributor or repair center in your country, your Product must come back to the Emotiva USA factory for warranty service.

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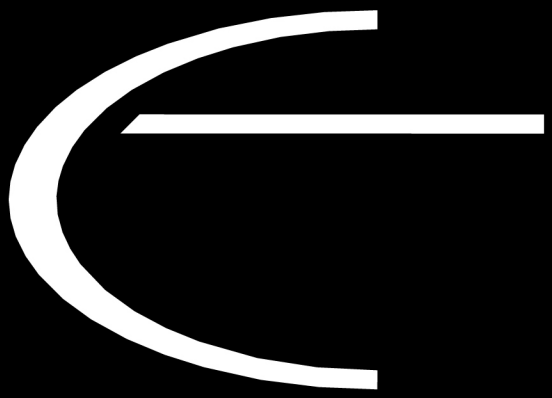
Notes

All information contained in this manual is accurate to the best of our knowledge at the time of publication. In keeping with our policy of ongoing product improvement, we reserve the right to make changes to the design and features of our products without prior notice.

MR1 User Manual Revision 1.0 October 2022



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