







# OTO MCA 200

USER GUIDE

Picture perfect sound.®

# SAFETY INSTRUCTIONS

	<b>CAUTION</b> RISK OF ELECTRIC SHOCK DO NOT OPEN	<b>ATTENTION</b> RISQUE DE CHOC ELECTRIQUE NE PAS OUVRIR	
<p align="center"><b>WARNING:</b></p> <p align="center"><b>To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.</b></p> <p>The apparatus shall not be exposed to dripping or splashing and no objects filled with liquids, such as vases, shall be placed on apparatus, receptacles, and the point where they exit from the apparatus.</p>			
<div data-bbox="142 591 226 667"></div> <p>The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated dangerous voltage; within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.</p>			
<div data-bbox="142 727 226 803"></div> <p>This symbol is intended to alert the user to the presence of important operation and maintenance (servicing) instructions in the literature accompanying the appliance.</p>			

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any ventilation openings. Install in accordance with the manufacturer's instructions.
8. Do not install near any heat sources such as radiators, stoves or any other apparatus (including amplifiers) that produce heat.
9. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
10. Only use attachments/accessories specified by the manufacturer.
11. Do not 'Hot Plug'. When changing inputs or outputs, switch the Leon OTO MCA 200 off before making changes. Once changes have been made, then switch the Leon OTO MCA 200 back.

12. Unplug this product during lightning storms or when unused for long periods of time.
13. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.
14. This apparatus shall not be exposed to dripping or splashing, and no object filled with liquids, such as vases or glasses, shall be placed on the apparatus.
15. Exposure to high sound pressure levels may lead to permanent hearing loss. Take every precaution to protect your hearing.
16. The remote control comes with a non-rechargeable Lithium battery installed. Take every precaution when handling and installing new Lithium batteries, and follow all local and state guidelines for safe disposal of old batteries. Keep all batteries away from children.

Caution: to reduce the risk of electric shock, do not disassemble the apparatus. There are no user-serviceable parts inside. Refer servicing to qualified personnel.



Recycling notice: Always properly dispose of or recycle your end-of-life electronic products. Contact your local or state recycling authorities for information on nearby recycling facilities.

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## INTRODUCTION

Congratulations on your purchase of a Leon OTO MCA 200. This was developed in collaboration with AudioControl®, 40-year veterans of the performance-audio amplifier industry. The features of the OTO MCA 200 allow it to shine in both analog and digital audio systems, whether in an audiophile stereo system, a home theater, or a commercial environment. The amplifier includes a high-performance Wolfson® DAC (digital to analog converter), and comfortably delivers 100 watts per channel at 8 ohms, 200 watts per channel at 4 ohms, or up to 400 watts bridged.

Additionally, the amplifier features options for control via IR remote, or via RS232 for easy integration with third-party control systems. With integrated switchable crossovers, multiple OTO MCA 200 amplifiers can be combined to drive passive 2.1 systems. The AccuBASS® function allows detailed control over bass response to help simplify speaker placement and tuning of the room.

This manual will take you step-by-step through the features and operation of the OTO MCA 200. Please read it thoroughly and carefully to ensure that you get maximum performance from the OTO MCA 200. Keep this manual in a safe place in case you need to refer to it in the future.

## UNPACKING

Remove the OTO MCA 200 from its packaging and inspect it for any shipping damage. If you discover damage, contact your Leon dealer or a customer service representative immediately.

If possible, save the carton and internal packaging. It is the best possible protection for your OTO MCA 200 if you need to move it or return it for service.

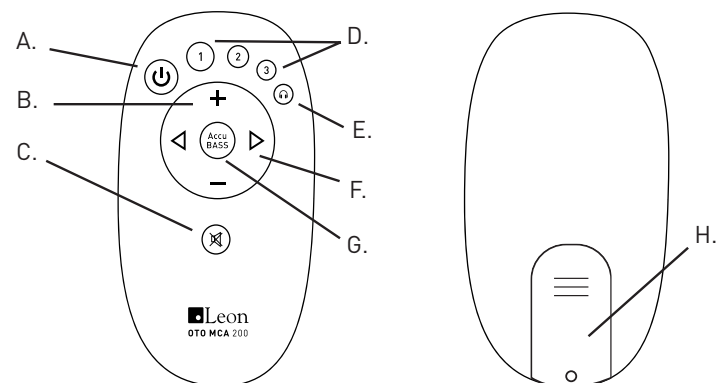
Keep your sales receipt in a secure place. It helps establish the duration of your warranty and is good for insurance purposes in case anything happens to your equipment.

### PACKAGE CONTENTS

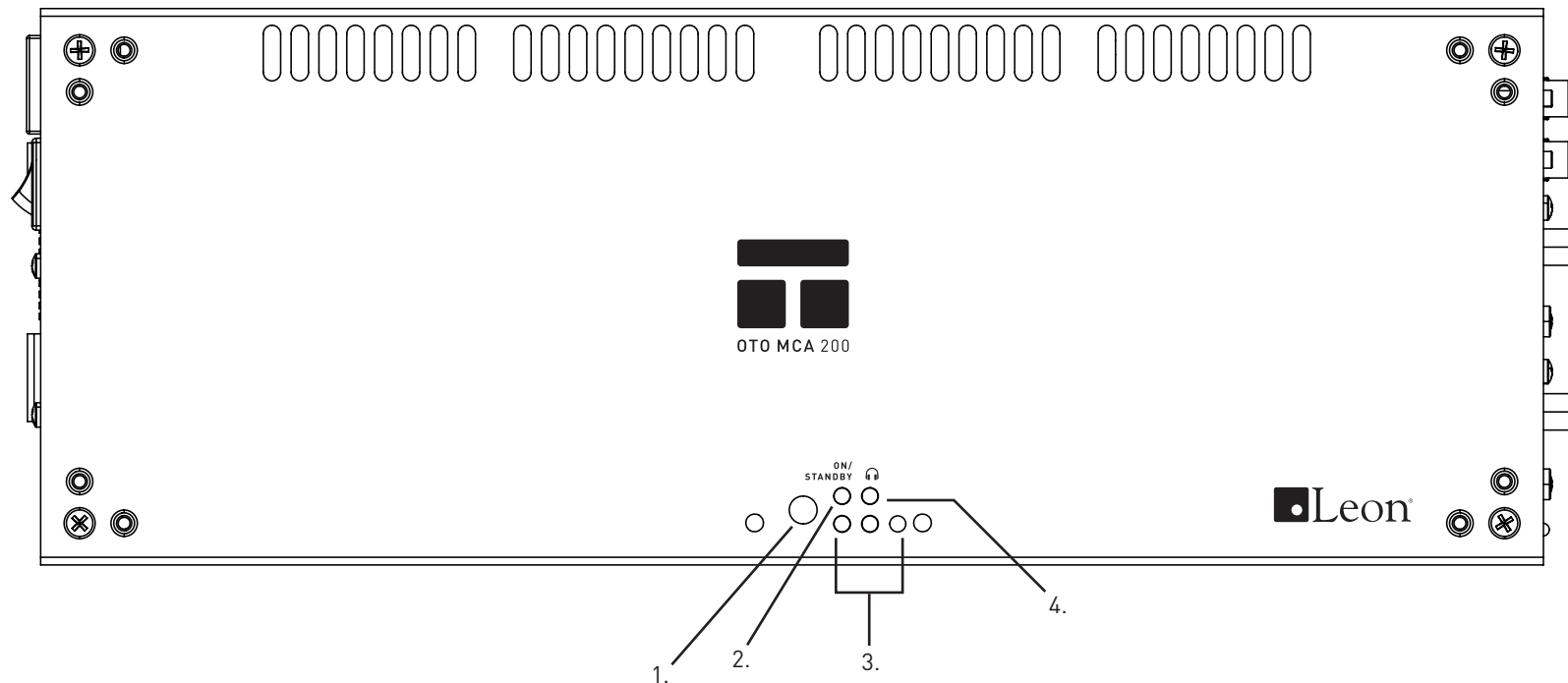
- Leon OTO MCA 200 Amplifier
- Optical Cable
- OTO MCA 200 IR Remote Control
- 4-pin and 3-pin Euroblock terminal blocks
- AC Power Cord
- Mounting Kits (optional)

## IR REMOTE CONTROL TOUR

- A. **Power On/Standby:** Press this to awake the OTO MCA 200, or put it into standby mode. In standby, the OTO MCA 200 will use minimal electricity. During normal operation, the OTO MCA 200 will enter standby if no input signal is sensed for about 8 minutes. This auto-standby mode can be disabled using the Sleep Defeat DIP switch (see Pages 11-12). If the Power On/Off switch is off, the amplifier will not turn on with the remote control.
- B. **Volume Up/Down:** Press the plus button to increase the volume, and the minus button to decrease the volume.
- C. **Mute:** Press this button to mute or unmute the amplifier output.
- D. **Input Selection 1, 2, 3:** Press these buttons to select the desired input. The OTO MCA 200 front panel LED will light to reflect the selected input.
- E. **Headphones On/Off:** Press this to turn on/off the OTO MCA 200 headphone output. All other outputs will be muted and the front panel headphone LED will light when the headphone output is engaged.
- F. **AccuBASS® Up/Down:** Press the arrows to increase or decrease the amount of AccuBASS® enhancement.
- G. **AccuBASS® On/Off:** Press this to turn on the AccuBASS® enhancement. The front panel input LED will glow brighter when AccuBASS® is enabled.
- H. **Battery Compartment:** The battery compartment on the back is opened by pressing and sliding off the small cover. Remove a small insulating strip from below the battery before first use. Always replace the battery with the exact same type (3V lithium CR2032), and with the positive (+) side facing outward.



## AMPLIFIER TOUR (FRONT PANEL)



**1. IR Remote Control Window:** This is the IR sensor for the included IR remote. Point the remote in this direction to control the amplifier. Do not block this port if the IR remote is to be used.

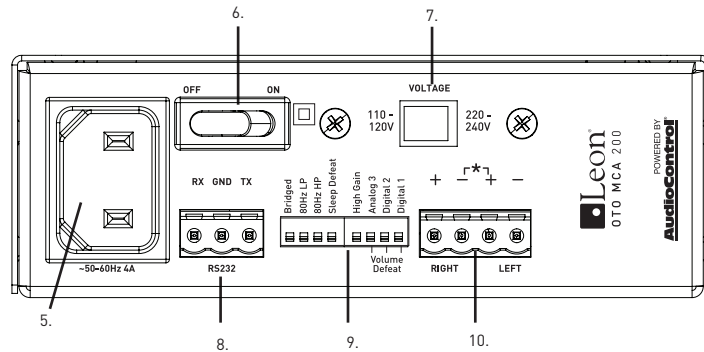
**2. On/Standby LED:** This LED indicates the power status of the OTO MCA 200.

- Blue – normal operation
- Dim Red – standby mode
- Bright Red – channel mute on power up
- Bright Red 2 – amplifier in protection (see TROUBLESHOOTING, Page 26)
- Flashing Red – speaker fault (see TROUBLESHOOTING, Page 26)

**3. Input Selection LEDs:** These three LEDs indicate which input is selected. Inputs 1 and 2 are digital inputs, and input 3 is analog. When the OTO MCA 200 is muted, all input LEDs will be off. When the OTO MCA 200 receives a command from the IR remote or via RS232, the input LED will flash. The selected input LED glows dimly under normal conditions, and brighter when the AccuBASS® setting is enabled.

**4. Headphone On/Off LED:** This LED indicates if the OTO MCA 200 headphone output is enabled. When the headphone output is turned on, all other outputs from the amplifier are muted. The headphone output is controlled via the IR Remote.

## AMPLIFIER TOUR (LEFT PANEL)



### 5. AC Input

**6. Power On/Off Switch:** This is the master power switch for the OTO MCA 200 amplifier. Keep the amplifier off while making connections or disconnections from the amplifier. Use this switch to turn the amplifier off if it will not be used for long periods of time.

**7. Voltage Selection Switch:** Ensure this is set to your region-specific line voltage before plugging in the OTO MCA 200.

**8. RS232 Control Input:** Use this terminal block to connect a third-party control system. The pins are as follows:

- Pin 1 – RX (RS232 receive)
- Pin 2 – Ground
- Pin 3 – TX (RS232 transmit)

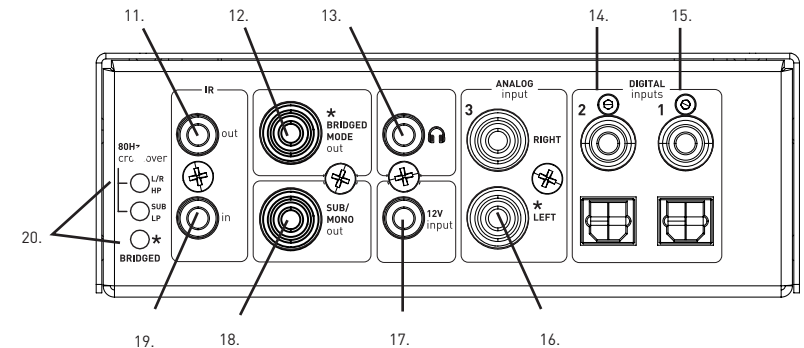
**9. Amplifier Control DIP Switches:** These DIP switches affect the operation of the amplifier. See Pages 11-12 for more details.

**10. Speaker Outputs:** Use this Euroblock terminal block for connections to your speakers. Make a note of the polarity markings and ensure they match those of your speakers (+ to +, - to -).

**11. IR Output:** This 1/8" jack allows a remote IR sender to be connected.

**12. Bridged Mono Output:** When the OTO MCA 200 is in bridged mode, this RCA connector outputs the signal from the active input's right channel only. It is affected by the volume level, AccuBASS® level, and the 80Hz low-pass crossover.

## AMPLIFIER TOUR (RIGHT PANEL)



**13. Headphone Output:** A pair of stereo headphones can be connected to this 1/8" jack. This output is normally off except when turned on remotely.

**14. Digital Input 2 Coax/Optical:** Digital Input 2 automatically switches between Coaxial and Optical depending on what is connected. Use either Coaxial or Optical, but not both.

**15. Digital Input 1 Coax/Optical:** Digital Input 1 automatically switches between Coaxial and Optical depending on what is connected. Use either Coaxial or Optical, but not both.

**16. Analog Input 3 L/R:** These RCAs are the left and right inputs for Analog Input 3. If the OTO MCA 200 is used in bridged-mono mode, use the left input only.

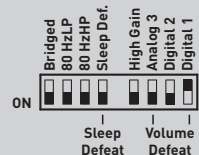
**17. +12V Trigger Input:** This 1/8" TS jack allows the amplifier to be triggered on by a 12VDC control system. The unit will remain on as long as the 12VDC is applied.

**18. Sub/Mono Out:** Under normal operation, this RCA provides a signal that is the sum of the active left and right inputs. It is affected by the volume level, AccuBASS® level, and the 80Hz low-pass crossover. When the OTO MCA 200 low-pass crossover has been enabled, this RCA connector provides 80Hz low-pass signal, summed from the active left and right inputs.

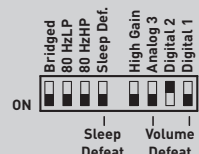
**19. IR Input:** This 1/8" jack allows a remote IR receiver to be connected.

**20. Crossover/Bridged LEDs:** These LEDs indicate the operation of the internal crossover and bridged-mode settings. They are on when the respective functions are enabled via the DIP switches (Pages 11-12).

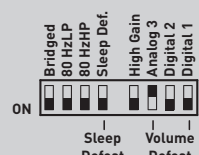
# AMPLIFIER DIP SWITCH CONTROL



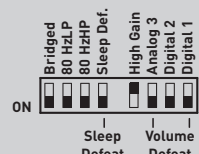
**DIGITAL 1 VOLUME DEFEAT** – This switch should be engaged when it is desirable to control the volume of channel 1 from an external source only, such as the volume control on an iPod, tablet, etc. Only the volume control is defeated.



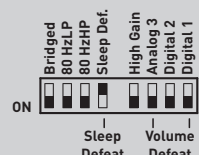
**DIGITAL 2 VOLUME DEFEAT** – This switch should be engaged when it is desirable to control the volume of channel 2 from an external source only, such as the volume control on an iPod, tablet, etc. Only the volume control is defeated.



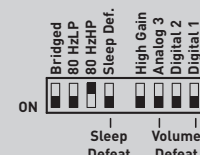
**ANALOG 3 VOLUME DEFEAT** – This switch should be engaged when it is desirable to control the volume of channel 3 from an external source only, such as the volume control on an iPod, tablet etc. Only the volume control is defeated.



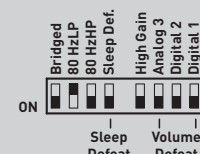
**HIGH GAIN** – When this is engaged, the OTO MCA 200 provides an additional 10dB of gain for use with Analog input 3. This helps analog sources with very low signal output to operate optimally when playing back music with quiet passages. This switch should not be engaged when the OTO MCA 200 is being used as a 'Link Amplifier'. (See Pages 17-18)



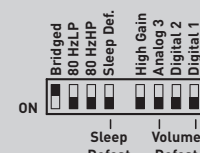
**SLEEP DEFEAT** – This prevents the OTO MCA 200 from automatically going into standby mode, and defeats signal-sensing. Obey's IR and RS232 commands, and the front panel blue LED will remain blue constantly indicating normal operation. For optimal energy savings, this switch should be left in the up (Off) position and the OTO MCA 200 will detect signal on any of the three inputs and turn on automatically. If no signal is present, the unit will go into standby after 8 minutes.



**80Hz HP** – Internally applies a 80 Hz high pass signal to the left and right speaker-level outputs. Normally used when employing a separate subwoofer where the OTO MCA 200 plays just the 80 Hz high-pass frequency range in the main speakers. Ideal for sound-bars and subwoofers. The green high pass LED on the rear panel will light when this switch is engaged.

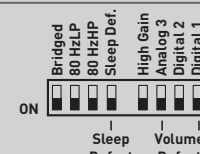


**80Hz LP** – Changes the sub/mono output from a full-range summed mono left/right signal to a summed mono 80 Hz, 18 dB per octave, low pass signal. Normally used if a subwoofer does not have a built in crossover. The green low pass LED on the rear panel will light when this switch is engaged.



**BRIDGED\*** – Internally routes the left signal of the selected channel to the speaker outputs, and the right signal of the selected channel to the bridged mono output. The green bridged LED on the rear panel will light when this switch is engaged.

**\*Note:** For an OTO MCA 200 to be used as a Link unit, set the 3 volume defeat switches and the bridged switch all ON. In this way, the Link unit is not affected by the remote control. It will only affect the Master unit.



**Default Settings** – The default state of the OTO MCA 200 is all switches "OFF"

## INSTALLATION

The Leon OTO MCA 200 is a compact, yet powerful amplifier and requires some consideration regarding installation to ensure the highest level of performance. The OTO MCA 200 uses efficient switching power supplies and Class D amplification, but it is an amplifier and does require ventilation. Intake and exhaust vents are supplied on the top and bottom of the unit, and the OTO MCA 200 should not be mounted in a way which blocks these vents. The OTO MCA 200 may run warm during operation; this is normal and does not represent a faulty unit.

- When mounting the OTO MCA 200, avoid areas where it will be exposed to direct sunlight or sources of heat or moisture.
- Do not mount the OTO MCA 200 directly above or below another power amplifier or source of heat – leave a gap for airflow.
- Do not mount the OTO MCA 200 in an enclosed space unless there are provisions for ventilation.

### CABLES

To ensure the highest performance from all components in your audio system, use high-quality analog and/or digital audio cables. Keep cables as short as possible. Power cables should be routed away from audio cables if possible.

## CONNECTIONS

### SPEAKERS AND CONNECTIONS

As a stereo amplifier, the Leon OTO MCA 200 is designed to work with 8 ohm and 4 ohm speakers, or combinations of speakers that appear as 8 ohms or 4 ohms to the amplifier. In bridged mode, the minimum impedance is 8 ohms.

When you wire two speakers in series (+ to -), impedances add. Two 4 ohm speakers wired in series will appear as an 8 ohm impedance to an amplifier.

When you wire two speakers in parallel (+ to +, - to -), the overall impedance drops. For two 8 ohm speakers, the parallel impedance is calculated as follows:

$$1/8 + 1/8 = 2/8$$

Now take the inverse of the result =  $8/2$

$$8/2 = 4/1 = 4 \text{ ohms}$$

In summary, make sure to calculate the impedance of speakers when you are hooking multiple together to ensure that the amplifier is not overloaded.

When wiring a speaker system, establish and follow a standard color code.

Speaker wire is marked on the jacket with a color, or perhaps the two conductors are different colors (silver vs. copper). Using your color code system, ensure that the speakers are wired with polarity matching the OTO MCA 200 output.

Speaker wire gauge and the length of the runs can affect the performance of your system, so choose the appropriate size wire for the application. Small wire gauges, even over short distances, can add significant resistance to the system and reduce the power reaching the speakers.

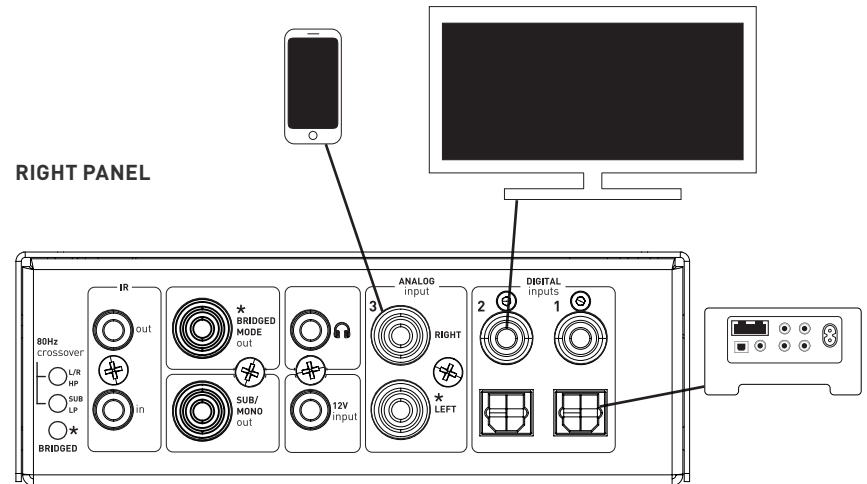


## QUICK START – 2.0/STEREO SETUP

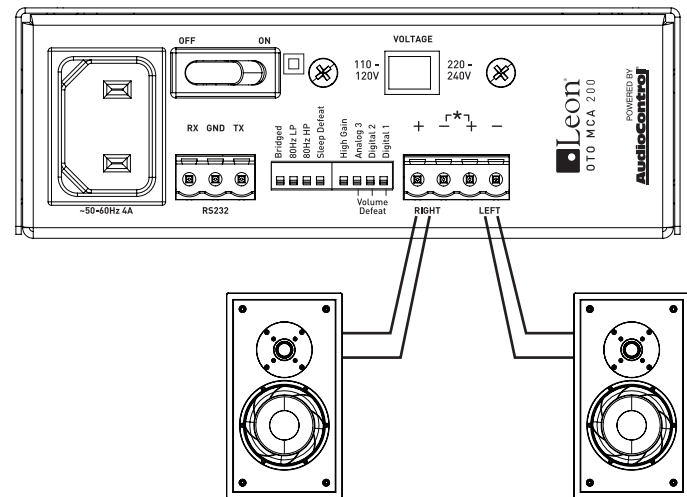
If you're listening with a pair of full range speakers only, connecting your OTO MCA 200 is simple. Follow the steps below to start listening right away. Refer to the AMPLIFIER PANEL TOUR, Pages 7-10, for location of connections.

1. Connect one or more sources to the analog or digital inputs of the OTO MCA 200. Each digital input can support either a Coaxial or Optical input, but not both simultaneously.
2. Using the provided terminal blocks, connect your speakers to the Speaker Outputs, noting correct polarity.
3. Plug the OTO MCA 200 into the AC outlet with the included AC power cord.
4. Turn on the OTO MCA 200 power switch.
5. Using the IR remote control, select the source you have connected to the OTO inputs.
6. Using the IR remote control, adjust the volume to the desired level.
7. If needed, activate the AccuBASS® by pressing its button on the IR remote control. Use the arrows on the remote to adjust the AccuBASS® level to your music.

RIGHT PANEL



LEFT PANEL



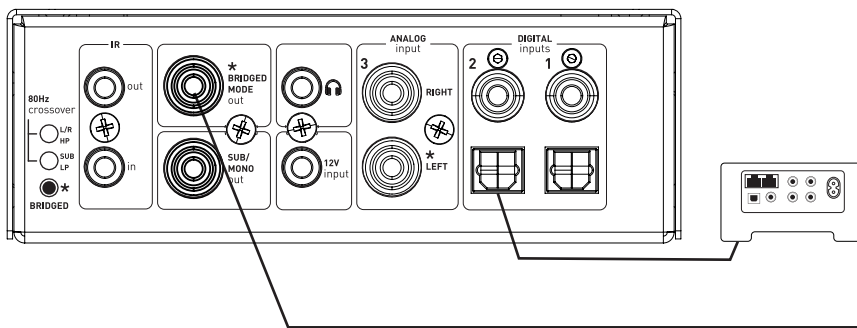
# BRIDGED MONO 2.0 LINKED SETUP

The Leon OTO MCA 200 can operate in bridged mono mode in which it can produce up to 400 watts into 8 ohms. A pair of OTO MCA 200 amplifiers used as monoblocks can therefore supply a total system power of 800 watts, enough to drive even the most power-hungry HIFI speakers.

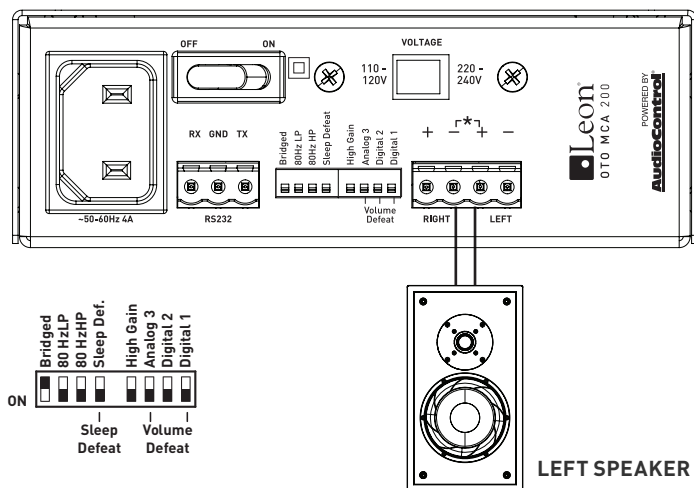
The first OTO MCA 200 operates as the 'master', where all source connections and volume adjustments are made. The 'master' powers the left channel speaker. The second OTO MCA 200 is the 'linked' unit, receiving the right channel audio from the 'master'.

## MASTER AMPLIFIER (LEFT)

### RIGHT PANEL

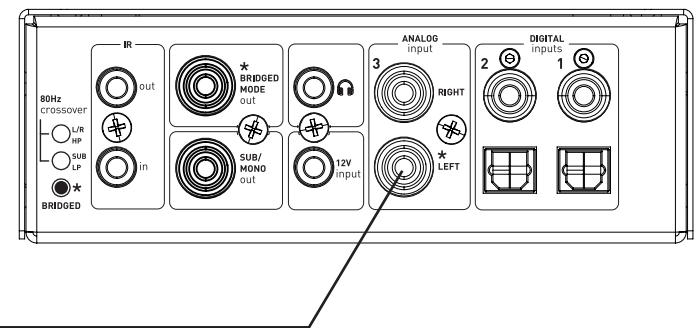


### LEFT PANEL

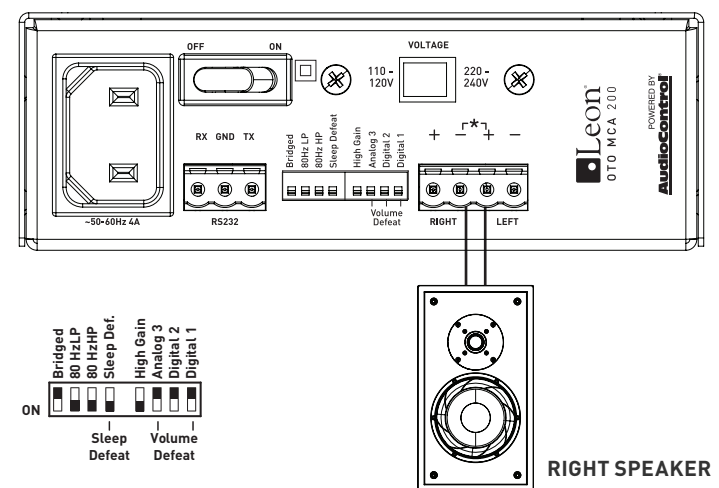


## LINKED AMPLIFIER (RIGHT)

### RIGHT PANEL



### LEFT PANEL

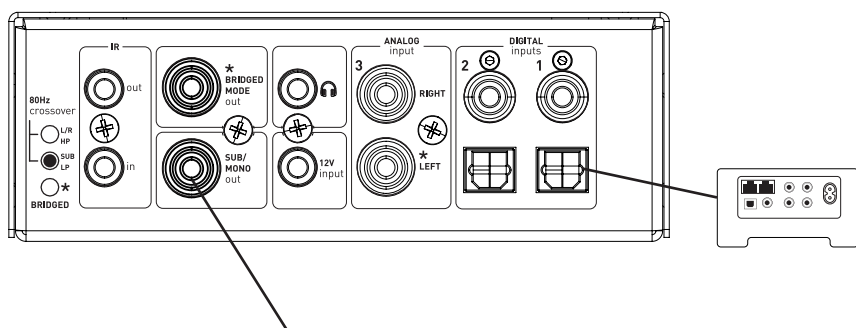


## STEREO SETUP WITH A PASSIVE SUBWOOFER

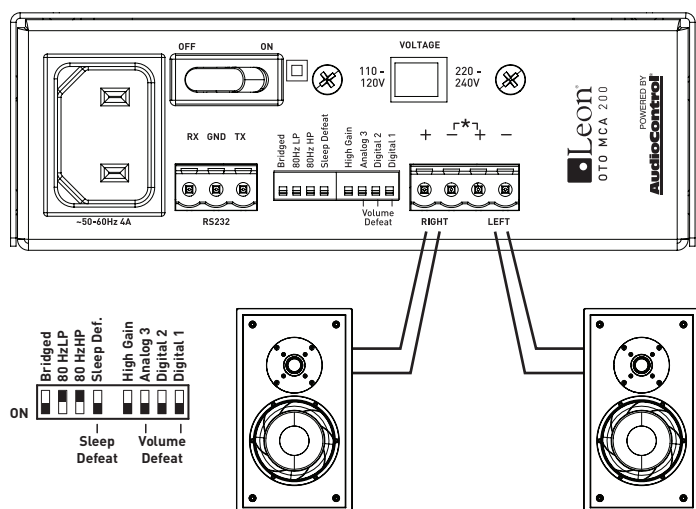
In bridged mode, the the Leon OTO MCA 200 can provide 400 watts at 8 ohms which is plenty of power to drive most passive subwoofers. Two OTO MCA 200 amplifiers can be utilized, one as a 'master', powering a stereo pair of speakers, and the other 'linked' and powering the subwoofer. The 'master' unit crossover is enabled, passing low frequency energy to the 'linked' unit. Adjust the level of the subwoofer with the AccuBASS® control on the 'master' OTO MCA 200.

### MASTER AMPLIFIER (LEFT)

#### RIGHT PANEL

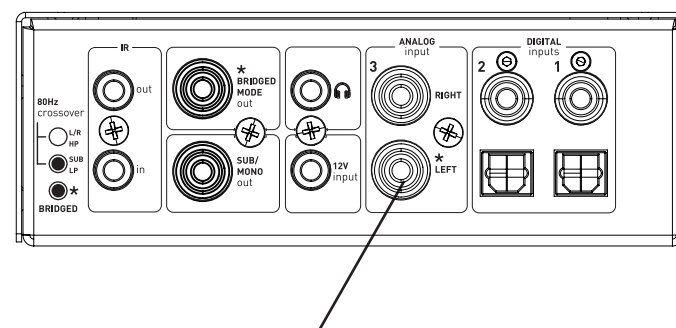


#### LEFT PANEL

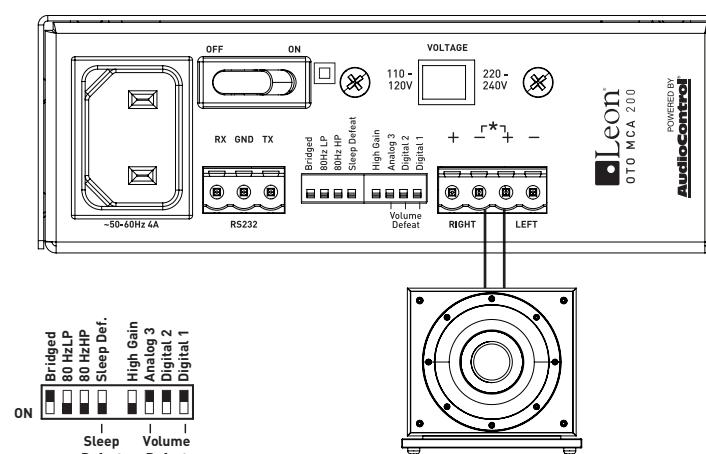


### LINKED AMPLIFIER (RIGHT)

#### RIGHT PANEL



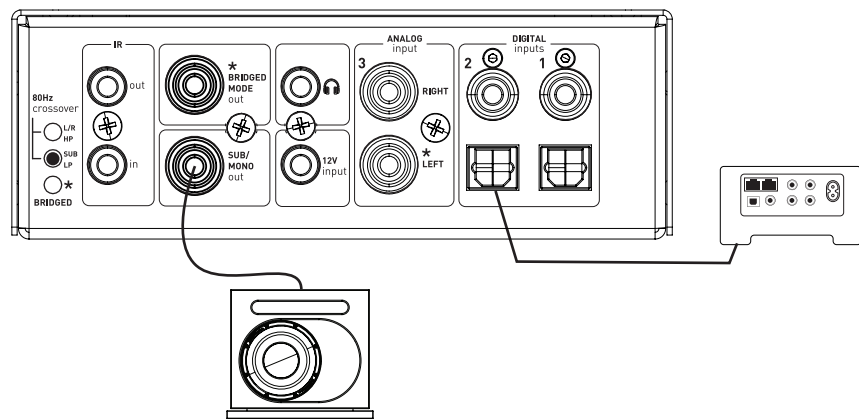
#### LEFT PANEL



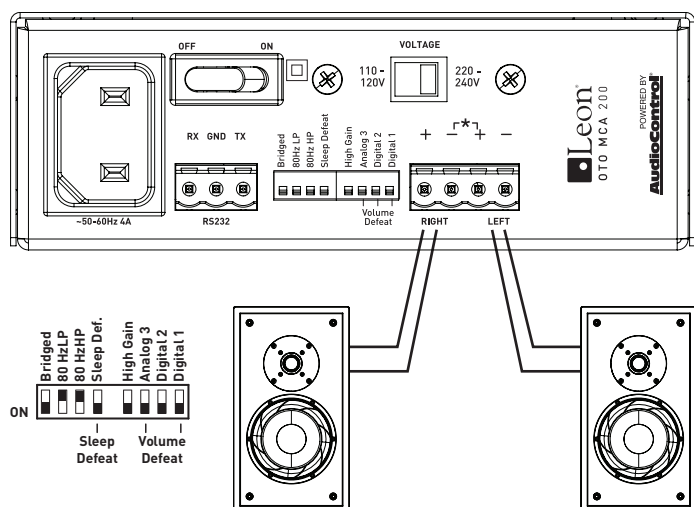
## STEREO SETUP WITH A POWERED SUBWOOFER

The Leon OTO MCA 200 can be set up to drive a subwoofer in many different configurations. If you are using a powered subwoofer, you can use the internal 80Hz crossover to pass bass below 80Hz to the subwoofer. This effectively takes strain off of your main speakers if they cannot handle or reproduce the low frequencies, and increases the overall fidelity of the system.

### RIGHT PANEL



### LEFT PANEL



## BRIDGED MONO 2.0 WITH POWERED SUB

A powered subwoofer can be added to the BRIDGED MONO Setup (Page 17) in order to alleviate the main speakers from playing frequency content below 80Hz. Follow the Bridged Mono setup, but enable the 80Hz LP and 80Hz HP on the 'master' OTO MCA 200 to send frequencies below 80Hz out the Sub/Mono Output.

## ADJUSTING THE ACCUBASS®

The AccuBASS® circuit is designed to help recover the bass that goes missing in compressed music files, when volume is increased and the bass frequencies roll away, or if speaker placement is not optimized. The AccuBASS® is adjusted using the IR Remote Control to give your system great bass at all volume levels and regardless of speaker placement within your room.

- Engage AccuBASS® by pressing the AccuBASS® button on the IR Remote Control. The currently selected input LED on the Leon OTO MCA 200 will glow brighter indicating that the enhancement is engaged.
- Start playing dynamic bass-rich music, and adjust the amount of AccuBASS® using the left and right arrows on the IR Remote Control.
- Continue to fine tune the AccuBASS® settings to your personal preferences. Changing genres of music may help you in getting a proper overall level.
- The AccuBASS® level for each input will be memorized and recalled each time that input is selected.

## DEFAULT VOLUME BYPASS PROCEDURE

1. Turn on the OTO MCA 200, and point the IR remote at the unit.
2. Enter the following number sequence using the remote's 1, 2, and 3 buttons: 2 3 1 2 2 3 3

While entering this sequence, please keep a steady slow pace that matches the front input LEDs, making sure they switch correctly with each button press.

3. Once the code has been entered, the input LEDs will flash 2 times to indicate that the default volume setting has been bypassed.
4. To turn the default volume feature back on, enter the same sequence again: 2 3 1 2 2 3 3

Once the code has been entered, the input LEDs will flash 4 times to indicate the default volume is engaged.

5. If you want to check if the volume is bypassed or not, enter the sequence: 1 1 2 2 3 1 1

The input LEDs will flash: 2 flashes means that the default volume setting is bypassed, 4 flashes means the default volume is engaged.

## IR LEARNING PROCEDURE

The new IR Learning feature allows the OTO MCA 200 to learn commands from your favorite remote control, such as volume up/down and source selection.

1. Turn the OTO MCA 200, and point the IR remote at the unit.
2. Enter the following number sequence using the remote's 1, 2, and 3 buttons: 3 1 2 1 3 2 3

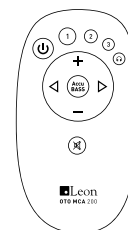
While entering this sequence, please keep a steady slow pace that matches the front input LEDs, making sure they switch correctly with each button press.

3. Once the code sequence has been entered successfully, all 3 input LEDs will flash 3 times in a rapid fashion to confirm it has entered the IR Learning mode. Once in this mode, the 3 input LEDs will remain lit until the amplifier is taken out of learning mode.

4. On the IR remote, press the desired function you wish to associate with the other remote. The OTO MCA 200 input LEDs will flash once to indicate it is ready to learn the IR command from the other remote. For example, you could press "1" on the IR remote.
5. Press the button on the other remote that you want to associate with the function previously defined on the IR remote. The LEDs will turn off, indicating it has received the command from the new remote. For example, you could press a "1" on the other remote.
6. Press the button on the other remote again to confirm the command selection. The OTO MCA 200 will flash twice to indicate that the command is understood.
7. Repeat steps 4 thru 6 for each button command you want the OTO MCA 200 to learn.
8. Once you are done, the amplifier will exit out of learning mode after 30 seconds of inactivity. Or, you can re-enter the number sequence again: 3 2 1 1 3 2 3 to exit the learning mode.

### Notes:

- If the OTO MCA 200 receives a command that it does not understand five times in a row, it will drop out of learning mode.
- Important: If you have a multi-device remote, you must only use IR codes for devices that are not in your current system. Otherwise there may be remote conflicts. For example, if you use the codes from your current TV, you will end up controlling both the TV and the OTO MCA 200 at the same time.
- Pro Tip: If you plan on using a universal remote that can control multiple devices by switching the remote's "Mode," then choose a mode on the remote that you are not using. For instance, if there is an Aux mode, or VCR mode that you are not using, make that the mode for the OTO MCA 200. You can then select any random code from a manufacturer you do not have, and this will ensure no remote conflicts.



CODE	DESCRIPTION
2312233	Change Default Volume Status
1122311	Check Default Volume Status
3121323	Enter or leave IR Learning Mode

### DESCRIPTION

## ADDITIONAL FEATURES & SUPPORT

## TROUBLESHOOTING

Many problems can be eliminated by checking the wiring and settings of the unit.

### No Sound

1. Check that the unit is plugged in and the front panel On/Standby LED is blue. When it is dim red, the unit is in standby mode and if it is bright red, it is in protection mode.
2. Check that all cables are securely connected.
3. Check that the source unit is on and playing.
4. Check that the speaker connections are secure, and not shorted together by loose wire strands.
5. Check that the correct source input has been selected.
6. Check that the front panel headphone LED is off (if it is on, all outputs except the headphones are muted).

### In Protection

The Leon OTO MCA 200 will protect itself if it experiences an unusually large power surge, overheats, or experiences a short in the speaker wires or the speakers. The protection circuit helps prevent damage to the OTO MCA 200 and speakers. Turn down the volume and the unit will normally resume playing after a short period of time to cool down. A flashing red LED on the front of the unit indicates the unit is operating at its current limit and in danger of going into protection. In this situation you may have too many speakers attached, you are driving the amplifier too hard, or the speaker impedance is below 4 ohms and you may need to reduce the load. Check the speaker wiring and speakers for any short circuits. Make sure there is plenty of ventilation available.

### Signal Sensing

If the OTO MCA 200 does not sense an input signal, it will switch to standby mode after approximately 8 minutes. It will turn back on again as soon as an input signal is detected. During quiet passages or lengthy silent spaces in music or TV content the OTO MCA 200 may believe that the audio signal has stopped and may go into standby mode.

### More Troubleshooting

For additional troubleshooting, support, or technical advice, please call Leon Speakers at 1 (888) 213-5015.

## SPECIFICATIONS

Digital Inputs	2 x Optical Toslink and 2 x Coax SPDIF
Analog Inputs	Stereo L/R RCA unbalanced
Speaker Level Outputs	4-Pin Euroblock connector
RS232	3-Pin Euroblock connector
Sub/Mono Output	Single RCA unbalanced
Bridged Mono Output	Single RCA unbalanced
Headphone Output	1/8" TRS stereo
Power Output	100 Watts per channel into 8 Ohms
	200 Watts per channel into 4 Ohms
	400 Watts into 8 Ohms (mono)
Minimum Speaker Load	4 Ohms (stereo), 8 Ohms (mono)
Power Consumption, Typical Listening	40 Watts
Power Consumption, Maximum	520 Watts
AC Line Voltage	100-120 VAC/200-240 VAC Switchable
Signal to Noise Ratio	>95dB
Total Harmonic Distortion	.009%
Minimum Voltage to Drive Max Power	
RCA Analog inputs:	310 mV (Hi Gain)
	1 Volt (Lo Gain)
Signal Sense Trigger Minimum	
RCA Analog Inputs	10 mV
Digital Inputs	Audio
Bass Adjustment	AudioControl AccuBASS®
	U.S. Patent # is 9,225,305
Digital Analog Converter (DAC)	Wolfson High Performance
	32-192 kHz, 16/24 Bit
Weight	4.5 lbs
Dimensions	14.25" W x 1.75" D x 5" H
Remote Control Battery	3V Lithium CR2032
Country of Origin	USA Engineered and Assembled
Limited Warranty	2 Years

Please note that technical specifications are subject to change without notice.



All trademarks (TM), registered trademarks (®), and copyrights (©), are the property of their respective owners. This amplifier was handcrafted in the USA by AudioControl for Leon Speakers. Additional copies of this installation manual are available on the Leon Speakers' website. For additional specifications, technical details, and downloads, please visit [www.leonspeakers.com](http://www.leonspeakers.com).

## WARRANTY

### LIMITED TWO (2) YEAR WARRANTY:

Leon Speakers ("Leon") warrants to the first end-user purchaser that this Leon product ("Product"), when purchased from an authorized Leon Dealer, will be free from defective workmanship and materials for the period stated herein. Leon will at its option and expense during the warranty period, either repair the defect or replace the Product with a new or remanufactured Product or a reasonable equivalent.

### EXCLUSIONS:

To the extent permitted by law, the warranty set forth above is in lieu of, and exclusive of, all other warranties, express or implied, and is the sole and exclusive warranty provided by Leon. All other express and implied warranties, including the implied warranties of merchantability, implied warranty of fitness for use, and implied warranty of fitness for a particular purpose are specifically excluded. No one is authorized to make or modify any warranties on behalf of Leon.

The warranty stated above is the sole and exclusive remedy and Leon's performance shall constitute full and final satisfaction of all obligations, liabilities and claims with respect to the Product. In any event, Leon shall not be liable for consequential, incidental, economic, property, bodily injury, or personal injury damages arising from the product, any breach of this warranty or otherwise. The right to recover damages within the limitations set forth is your exclusive alternative remedy if the limited remedy of repair or replacement fails its essential purpose.

This warranty statement gives you specific legal rights, and you may have other rights which vary from state to state. Some states do not allow the exclusion of implied warranties or limitations of remedies, so the above exclusions and limitations may not apply. If your state does not allow disclaimer of implied warranties, the duration of such implied warranties is limited to period of Leon's express warranty.

### WARRANTY PERIOD FOR THIS PRODUCT:

Two (2) years from the date on the original sales receipt or invoice or other satisfactory proof of purchase.

### ADDITIONAL LIMITATIONS AND EXCLUSIONS FROM WARRANTY COVERAGE:

The warranty described above is non-transferable, applies only to the initial installation of the Product, does not include installation of any repaired or replaced Product, does not include damage to allied or associated equipment which may result for any reason from use with this Product, and does not include labor or parts to repair damage caused by accident, mishandling, disaster, negligence, improper installation, misuse (including, but not necessarily limited to, overdriving the amplifier or speaker, exposing the Product to excessive heat or cold or humidity, direct water spray or immersion), commercial use, abuse, negligence, or normal wear and tear, or from service or repair which has not been authorized by Leon. This warranty also excludes products that have had their housings opened or tampered with, products that are missing or have altered serial numbers, problems caused by using third party accessories, parts or components, and normal cosmetic deterioration caused by environmental conditions.

### OBTAINING AUTHORIZED SERVICE:

To qualify for the warranty, you must contact your authorized Leon Dealer/ Installer or call Leon Customer Service at (888) 213-5015 within the warranty period, obtain a return merchandise number (RMA), and deliver the Product to Leon in suitable packaging, shipping prepaid during the warranty period, together with the original sales receipt, invoice or other satisfactory proof of purchase.





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