



Home Theater Subwoofer Owner's Manual

Models: MS10, MS12

Got a Question or Need Help?

Email our technical support team at: [**support@miccatron.com**](mailto:support@miccatron.com) for personalized assistance with the setup and use of this product. Please visit our product information website [**www.miccatron.com**](http://www.miccatron.com) for the following:

- Product Updates
- User's Manuals
- Troubleshooting Wizard
- Technical Support Request

Warranty: 1 Year

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1 IMPORTANT

1.1 IMPORTANT SAFETY INSTRUCTIONS

Read these instructions – All the safety and operating instructions should be read before this product is operated.

Keep these instructions – The safety and operating instructions should be retained for future reference.

Heed all warnings – All warnings on the appliance and in the operating instructions should be adhered to.

Follow all instructions – All operating and use instructions should be followed.

Do not use this apparatus near water – The apparatus should not be used near water or moisture – for example, in a wet basement or near a swimming pool, and the like. To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture. Unplug the apparatus during lightning storms or when unused for long periods of time.

Clean only with dry cloth.

Do not use on a cart, stand, tripod, bracket, or table. Install in accordance with the instructions in this manual. Only use attachments/accessories specified in this manual.

Do not defeat the safety purpose of the polarized or grounding plug. A polarized plug has two blades with one wider than the other. A grounding plug has two blades and a third grounding prong. The wide blade or the third prong is provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

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

Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat. Do not install this equipment in a confined or building-in space such as a book case or similar unit, and remain a well ventilation conditions at open site.

Minimum 3-Inch (75mm) distances around the apparatus for sufficient ventilation;	Distance 75mm minimale autour de l'appareil pour une aération suffisante;
The ventilation should not be impeded by covering the ventilation openings with items, such as newspapers, table-cloths, curtains, etc.	Il convient que l'aération ne soit pas gênée par l'obstruction des ouvertures d'aération par des objets tels que journaux, nappes, rideaux, etc.
No naked flame sources, such as lighted candles, should be placed on the apparatus;	Il convient de ne pas placer sur l'appareil de sources de flammes nues, telles que des bougies allumées;

The use of apparatus in moderate climates.	Si l'appareil est destiné à être utilisé sous un climat tempéré.
The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.	L'appareil ne doit pas être exposé à des égouttements d'eau ou des éclaboussures et de plus qu'aucun objet rempli de liquide tel que des vases ne doit être placé sur l'appareil.
Where the MAINS plug or an appliance coupler is used as the disconnect device, the disconnect device shall remain readily operable;	Lorsque la prise du RESEAU D'ALIMENTATION ou une prise placée sur l'appareil est utilisée comme appareil de déconnexion, cet appareil doit demeurer aisément accessible;



This equipment is a Class II or double insulated electrical appliance. It has been designed in such a way that it does not require a safety connection to electrical earth.



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

- Warning: To reduce the risk of electric shock, do not remove back cover as there are no user-serviceable parts inside. Refer servicing to qualified personnel.
- The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance instructions in the literature accompanying the appliance.

1.2 Hearing Damage – IMPORTANT!

Please exercise caution and avoid listening to music at excessive volume. The following excerpt is from the CDC website:

“Hearing loss can result from damage to structures or nerve fibers in the inner ear that respond to sound. This type of hearing loss, termed “noise-induced hearing loss,” is usually caused by exposure to excessively loud sounds and cannot be medically or surgically corrected.

Sound intensity is measured in decibels with a sound level meter. Noise-induced hearing loss can result from a one-time exposure to a very loud sound (at or above 120 decibels), blast,

impulse, or by listening to loud sounds (at or above 85 decibels) over an extended period. The louder the sound, the shorter the time period before hearing damage occurs.”

Listen smart, protect your hearing!

1.3 FCC 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.
- (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.

FCC 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 20cm between the radiator & your body.

2 Introduction

Thank you for your purchase! The Micca Media Series subwoofers have been designed to deliver impactful performance that belies their modest price, resulting from a combination of high excursion subwoofer driver, well-tuned enclosure, and an efficient class-D topology that provides 80 watts of RMS power and 120 watts of Peak power. Add one or more Micca Media Series subwoofers to your home theater or stereo system and explore the true depth of sound.

2.1 Feature Highlights

2.1.1 Driver

- MS10: 10-Inch (nominal) long throw driver with treated pulp cone and rubber surround.
- MS12: 12-Inch (nominal) long throw driver with treated pulp cone and rubber surround.

2.1.2 Enclosure

- MS10: Front-firing, ported, 36Hz tuning.
- MS12: Front-firing, ported, 29Hz tuning.

2.1.3 Amplifier

- Power: 80W RMS, 120W Peak.
- Low-Pass Crossover: 40Hz to 150Hz, adjustable.
- Phase: 0 and 180 degrees selectable.
- Power: On, or Auto trigger on
- Inputs: RCA and speaker-level input.
- Outputs: Speaker-level signal pass-through, no crossover applied.

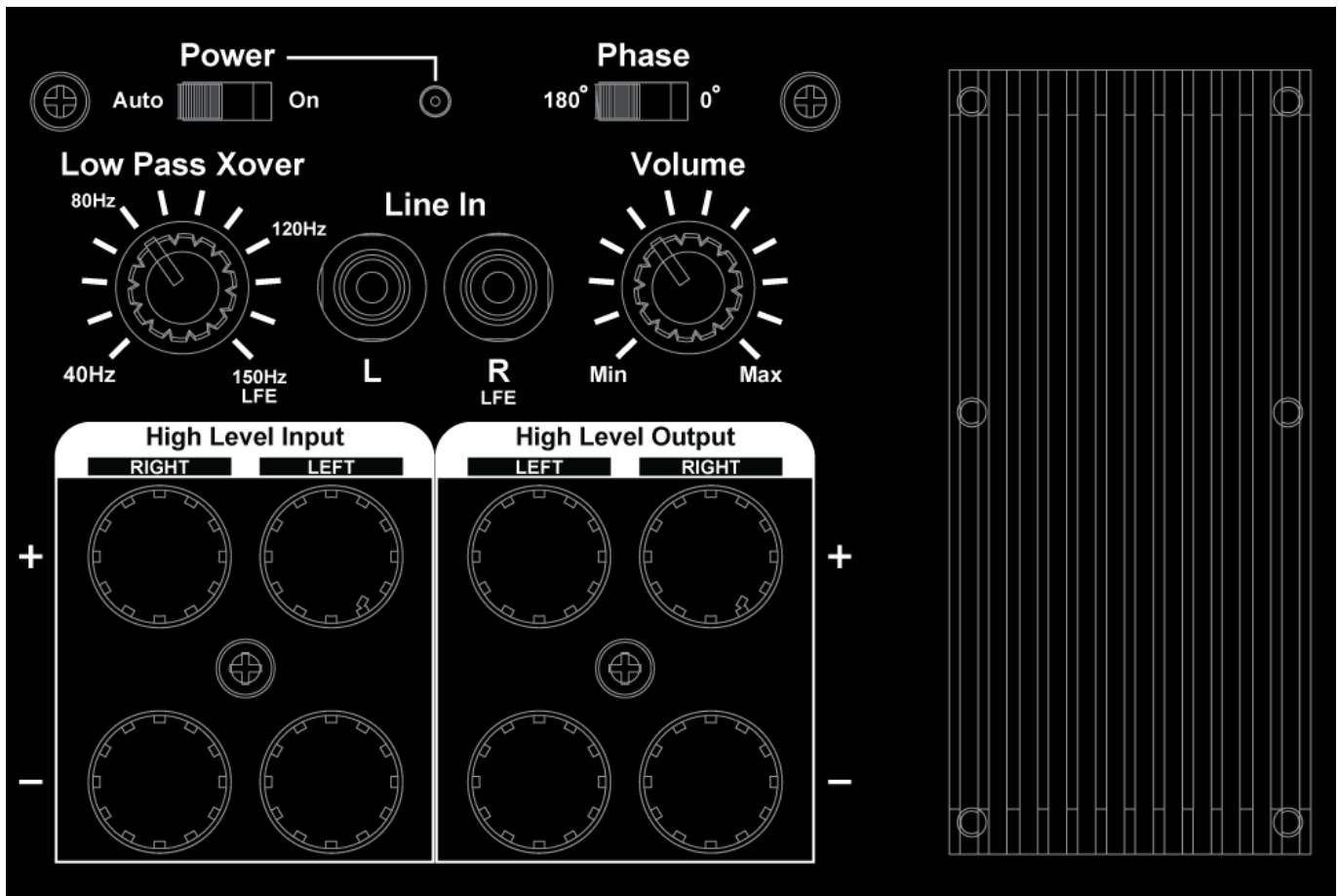
2.1.4 What's Included

- Micca Subwoofer
- User's Manual

Note: All information contained in this manual was correct at the time of publication. However, as our engineers are always updating and improving the product, your device may have a slightly different appearance or modified functionality than presented in this manual. These changes will be reflected in future revisions of this manual.

3 Product Overview

3.1 Connections and Controls



	Name	Description
1	Power	Sets power to always-on or automatically turn on when input sound signal is detected. Power indicator light will turn blue when on, or red in stand-by.
2	Phase	Sets the output phase to 0 or 180 degrees.
3	Volume	Sets the gain of the subwoofer amplifier.
4	Line In	Line-level input RCA jacks. Use the LFE jack for mono signal.
5	Low Pass Xover	Sets low-pass crossover frequency for the subwoofer.
6	High Level Input	Speaker-level input for connecting from a power amplifier.
7	High Level Output	Speaker-level signal pass-through to speakers – must be used in conjunction with High Level Input.

4 Placement Recommendations

Before connecting and setting up the Micca Media Series subwoofer, it is important to identify the best location for placing the subwoofer to minimize the effect of room modes. Room modes are frequencies at which a room acts as a reverberation chamber. The frequency and location of these room modes are dependent on the size and shape of the room, but suffice to say all rooms have room modes. Here are some general guidelines and best practices for placing subwoofers within a listening environment to minimize the effect of room modes.

Near the Listening Position – The most predictable location to place a subwoofer is close by the listener, which minimizes the effect of potential room modes. Popular locations include behind the sofa or under a side table. Difficulties associated with this position are the length of the subwoofer cable required, and access to a power plug.

Near the Front Main Speakers – The second best location is usually to place the subwoofer near the front main speakers and pointed towards the listener. This location is more susceptible to the effects of room modes, but the subwoofer can be moved left or right to identify a spot that minimizes the modes at the listener's position. One benefit of this location is that the connections are much easier to make due to close proximity to other electronics and power source.

Corner Near the Listener – The third best location is to place the subwoofer at a corner near the listener. While corners are usually a bad location since it triggers the most room modes, the corner that is closer to the listener has fewer potential issues. One positive with a corner placement is that the output level is boosted due to reinforcement effect by the walls.

Far Corner Away From the Listener – The worst place to put a subwoofer is in a corner far away from the listener. Unfortunately, this is often the most popular place to put a subwoofer, since it is usually along the same wall with the main speakers, and is tucked away in a corner. If being visually hidden away is the most important consideration, this may be the only option available.

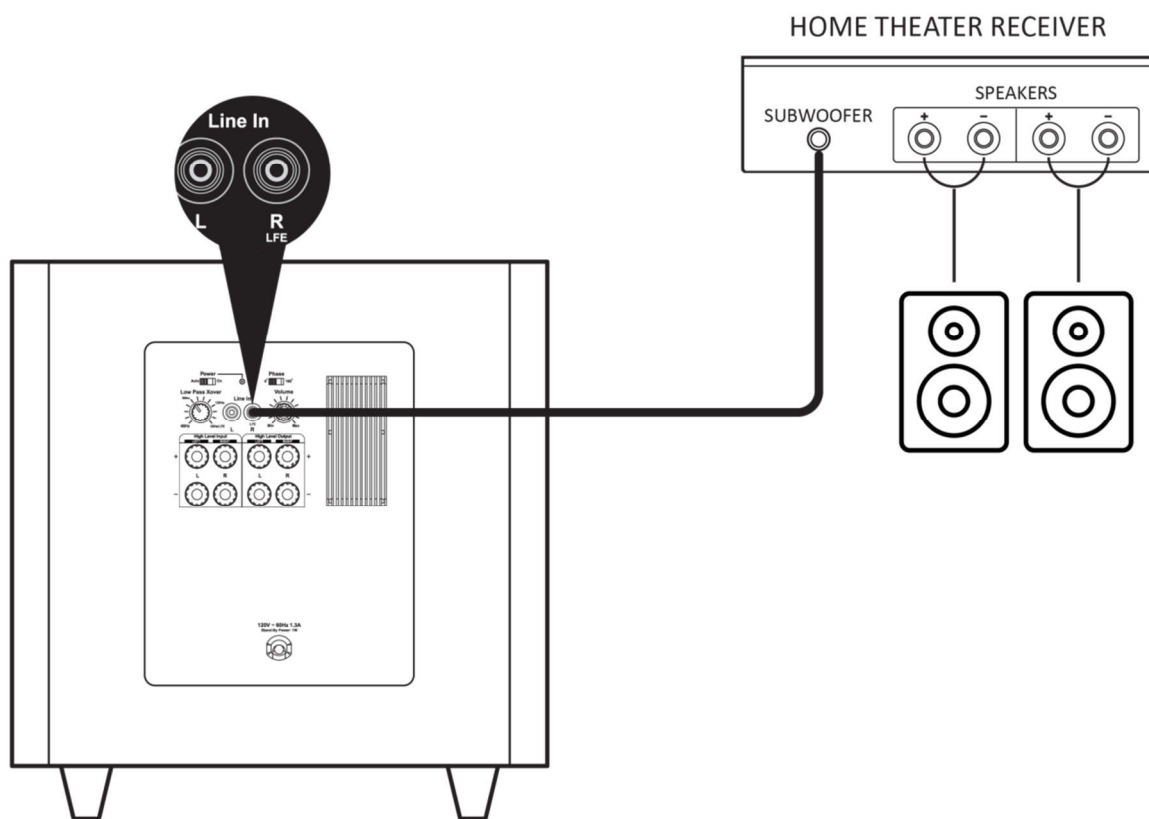
Notwithstanding the above, due to the unpredictable nature of room modes, the best location for a particular application may in fact be in a far corner away from the listener. Therefore, use the above recommendations only as a general guideline and always let your ears make the final decision as to the ideal location for a subwoofer.

5 Connection and Setup

Micca Media Series subwoofer can be used in a variety of configurations, such as in a home theater, or as bass augmentation for a pair of speakers. This chapter explains the various ways in which the connections and settings should be used.

5.1 Use With a Home Theater Receiver

This section explains how to use the Micca Media Series subwoofer with a home theater receiver that is equipped with a subwoofer/LFE channel output. If your receiver or amplifier does not have this output, please follow the directions in section 5.2. Refer to the diagram below for making connections:



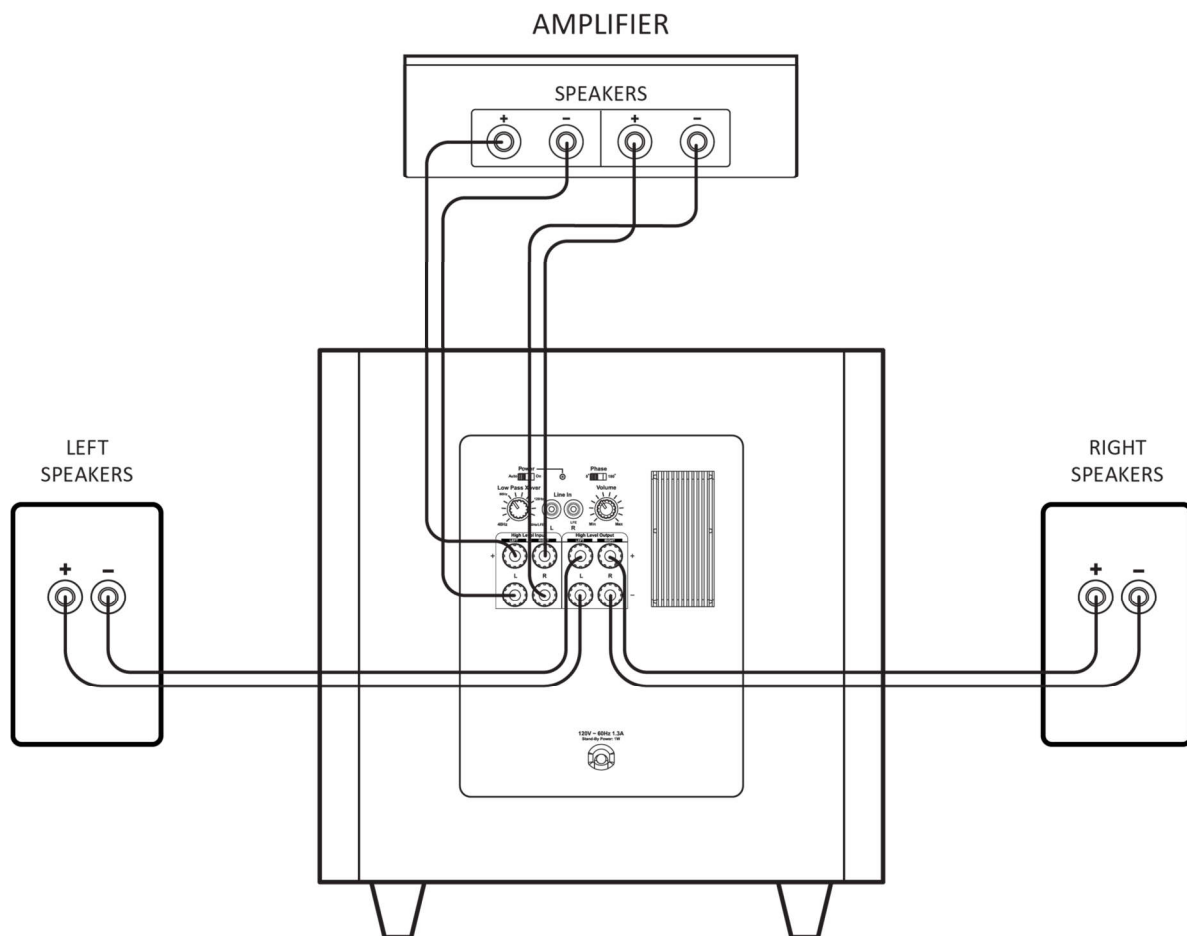
Locate the subwoofer/LFE output jack on the back of the home theater receiver, and use a subwoofer cable of suitable length (not included) to connect to the subwoofer's "Line In" jack marked "R/LFE". Leave the left input jack disconnected. Next, make the following settings on the subwoofer's back panel:

- Set power switch to "Auto"
- Set phase switch to "0"
- Set volume to the center position
- Set the low-pass crossover knob to 150Hz/LFE position

Next, you must configure your receiver to use the subwoofer. Most modern home theater receivers have auto calibration capabilities and can automatically set the subwoofer channel volume, delay, and crossover frequency. If your home theater receiver does not have auto calibration capabilities, these settings must be configured manually and are explained in the receiver's user manual. Please follow the instructions in your receiver's manual for optimal results.

5.2 Use With a Stereo Amplifier

This section explains how to use the Micca Media Series subwoofer with a stereo amplifier or receiver that does not have a subwoofer/LFE channel output. In this case, the subwoofer must make use of the speaker level signals from the amplifier. Refer to the diagram below for making connections:



First, make the following settings on the subwoofer's back panel:

- Set power switch to “Auto”
- Set phase switch to “0”
- Set volume to the lowest position
- Set the low-pass crossover knob to 120Hz

Next, using speaker wire (not included), connect the speaker outputs from the back of the amplifier to the “High Level Input” on the subwoofer, making sure to match left-to-left, and right-to-right. The connection between the amplifier and speakers can remain as is; if it is difficult to connect two sets of wires to the back of the amplifier, the speakers can be connected to the “High Level Output” on the subwoofer instead. When speakers are connected to the “High Level Output” on the subwoofer, the signal is passed through as-is without any crossover filtering. Please select speaker wire thickness based on the following minimum recommendations:

- 50 feet or less - 16 Gauge 2 Conductor
- 50 to 80 feet - 14 Gauge 2 Conductor
- 80 to 120 feet - 12 Gauge 2 Conductor (must use banana plug)
- 120 to 200 feet - 10 Gauge 2 Conductor (must use banana plug)

Note: When working with speaker wire, it is important to make sure that wire strands are not touching each other. Micca recommends using speaker wires with banana plugs for a clean and reliable connection.

Next it is important to adjust the operating parameters of the subwoofer, which is best done with a familiar piece of music with prominent bass. Follow the directions below:

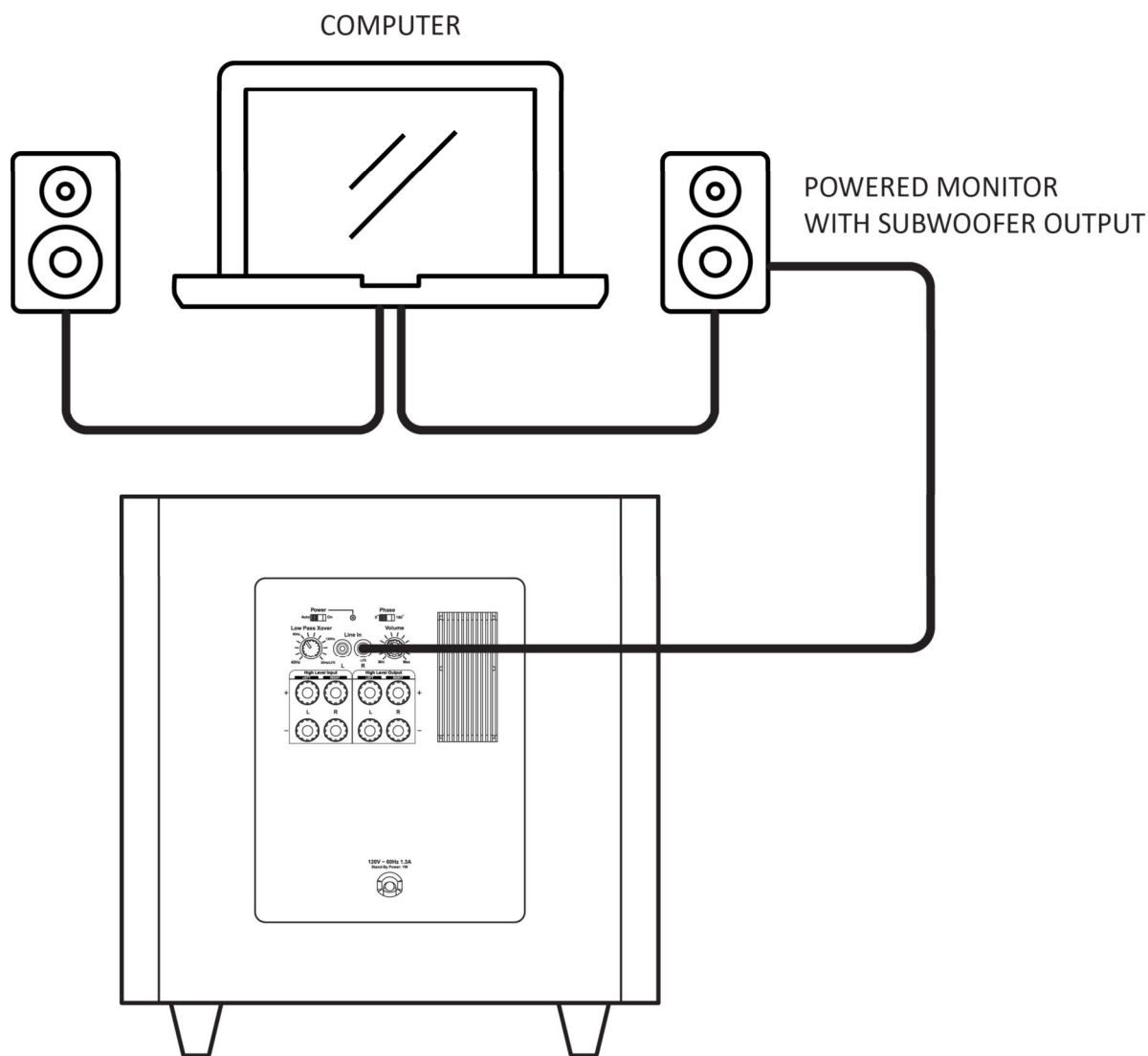
- Play a familiar piece of music and set the playback volume to a comfortable level.
- Gradually increase the subwoofer volume until desired bass level is reached. There is a natural tendency to add too much bass, so be patient in adding volume in small amounts.
- Try listening to the music with the phase switch in either the 0 or 180 degree position. Keep it in the position that sounds the best. If they sound the same or similar, keep the switch at the 0 position.
- For the low-pass crossover, most bookshelf speakers with a 4 to 6.5” woofer benefit from a crossover setting between 80 to 120Hz. Adjust the knob within this range for the most natural transition sound.

5.3 Use With Self-Powered Speakers

This section explains how to use the Micca Media Series subwoofer with a self-powered speakers such as powered bookshelf speakers or studio monitors. The steps are different depending on whether the self-powered speakers have a subwoofer output.

5.3.1 Self-Powered Speaker With Subwoofer Output

For self-powered speakers that have a subwoofer output, the connection is usually a 3.5mm jack or standard RCA jack, use an appropriate cable (not included) to connect the output to the “Line In” input jacks on the subwoofer. If the subwoofer output signal from the speakers is stereo, connect it to both “L” and “R” jacks on the subwoofer. If the signal is mono, connect it to the “R/LFE” input only; leave the left input jack disconnected. Refer to the diagram below for making connections:



5.3.2 Self-Powered Speaker Without Subwoofer Output

To use a subwoofer with self-powered speakers not equipped with a subwoofer output, it is necessary to use the music source as the volume control, and split the audio signal between the speakers and the subwoofer. The most common way to do this is with a stereo Y-splitter (not included).

With the source signal split using a stereo Y-splitter, connect one set of the split signal to the self-powered speakers, and the other set to the “L” and “R” jacks on the subwoofer.

5.3.3 Settings and Adjustments

With the connections complete, make the following settings on the subwoofer’s back panel:

- Set power switch to “Auto”
- Set phase switch to “0”
- Set volume to the lowest position
- Set the low-pass crossover knob to 120Hz

Next it is important to adjust the operating parameters of the subwoofer, which is best done with a familiar piece of music with prominent bass. Follow the directions below:

- Play a familiar piece of music and set the playback volume to a comfortable level.
- Gradually increase the subwoofer volume until desired bass level is reached. There is a natural tendency to add too much bass, so be patient in adding volume in small amounts.
- Try listening to the music with the phase switch in either the 0 or 180 degree position. Keep it in the position that sounds the best. If they sound the same or similar, keep the switch at the 0 position.
- For the low-pass crossover, most bookshelf speakers with a 4 to 6.5” woofer benefit from a crossover setting between 80 to 120Hz. Adjust the knob within this range for the most natural transition sound.

6 Specification

6.1 General

Power Source Voltage:	110-120VAC 60Hz
Maximum Current:	1.3A
Stand-by Power:	1W
Dimensions (MS10):	14.2" (W) x 15.1" (H) x 16.6" (D) 360mm (W) x 384mm (H) x 421mm (D)
Weight (MS10):	27.6lb (12.53kg)
Dimensions (MS12):	16.1" (W) x 17.1" (H) x 18.5" (D) 410mm (W) x 435mm (H) x 471mm (D)
Weight (MS12):	31.9lb (14.46kg)

6.2 Audio

RMS Power:	80 Watts
Peak Power:	120 Watts
Frequency Response (MS10):	36Hz ~ 150Hz (in-room)
Frequency Response (MS12):	29Hz ~ 150Hz (in-room)
Crossover Range:	40Hz ~ 150Hz
Phase:	0 or 180 Degrees
Input Sensitivity:	0.085 to 1.9Vrms
Auto-On Trigger:	0.006Vrms

7 Micca Limited Warranty

Except where indicated differently, the following standard limited warranty is valid for Micca Branded products. Where differences and contradictions occur, warranty terms in product-specific description, listing, invoices, and receipts, those terms shall take precedence over the following standard terms.

The manufacturer warrants all Micca Branded products against defects in materials and workmanship for a limited period of 1 year, unless otherwise superseded by product-specific description, listing, invoices, or receipts. During the limited period, the manufacturer will repair or replace defective products at the manufacturer's sole option. Customer must pay for all return shipping costs during the limited period. The limited warranty period starts at the date of original purchase. This limited warranty applies only to purchases from authorized Micca retailers. This limited warranty is extended only to the original purchaser and is valid only to consumers in the same country as the authorized retailer from which the original purchase was made.

This limited warranty only covers failures due to defects in materials or workmanship that occur during normal use. It does not cover failures resulting from accident, fire, flood, misuse, abuse, neglect, mishandling, misapplication, alteration, faulty installation, modification, service by anyone other than the manufacturer, or damage that is attributable to Acts of God. It does not cover costs of transportation to the manufacturer or damage in transit. Customers should return defective products, freight prepaid and insured, to the manufacturer or authorized warranty service center only after receiving a Return Merchandise Authorization (RMA). Customers are required to provide a copy of the original sales invoice from an authorized retailer when making a claim against this limited warranty.

Within the term of this warranty, defective products sent to the manufacturer or authorized warranty center for warranty service will be assessed a fee to cover shipping and handling of the repaired or replacement product back to the customer. The fee amount depends on the product and covers labor/handling, packaging materials, and standard shipping.

Repair or replacement under the terms of this warranty does not extend the term of this warranty. Should a product prove to be defective in workmanship or material, the customer's sole remedies will be repair or replacement as provided under the terms of this warranty. If the defective product is discontinued the manufacturer may replace the product with an equivalent or superior product at its option. The limit of liability under this warranty is the original purchase price of the product. Any cost of re-installation is the sole responsibility of the customer and that cost shall not be the responsibility of the manufacturer. Under no circumstances shall the manufacturer or its retailers be liable for loss or damage, direct, consequential or incidental, arising out of the use of or inability to use the product. There are no express warranties other than described above.

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