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ACREATIVE Company

MicroWorks™ II

Powered 2.1 Speaker System
User Manual

WARNING

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT USE THIS PLUG WITH AN EXTENSION CORD, RECEPTACLE OR OTHER OUTLET UNLESS THE BLADES CAN BE FULLY INSERTED TO PREVENT BLADE EXPOSURE

TO PREVENT FIRE OR SHOCK HAZARD, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

 <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>	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.	 <p>The exclamation point within an equilateral triangle, is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.</p>
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IMPORTANT SAFETY INSTRUCTIONS

- 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 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, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
- 9) Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding plug-type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
- 10) Protect the power cord from being walked on or pinched, particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
- 11) Only use attachments/accessories specified by the manufacturer.
- 12) Unplug this apparatus 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 when the 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.

The appliance shall not be exposed to dripping or splashing water and that no object filled with liquid such as vases shall be placed on the apparatus.

810-0000S-190

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INTRODUCTION

Thanks for choosing the MicroWorks II Multimedia Speaker System. It features the finest drivers, precision internal crossover and amplifier circuitry and an elegant enclosure design.

The main left and right speakers feature magnetic shielding, allowing placement near any sensitive electronic devices.

The Product Development Team at Cambridge SoundWorks believes there is no better combination of audiophile-level attention to detail and reasonable cost.

Inspecting For Damage

Examine the speaker system carefully for shipping damage. If there is any, do not install or use the system. Return the speaker to the store where you made the purchase or call Cambridge SoundWorks at: 1-800 FOR-HIFI (1-800-367-4434) for assistance.

After Unpacking

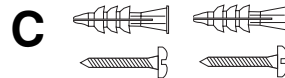
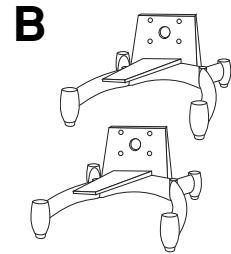
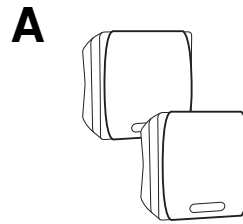
Store the shipping carton and packing material for future transport needs.

QUICK SETUP

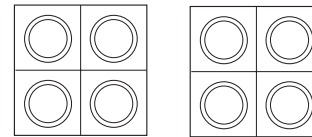
If you have connected amplified subwoofer/satellite systems before, the Connection Diagram on pages 8-9 may be all you need to get set up and operating.

CARTON CONTENTS

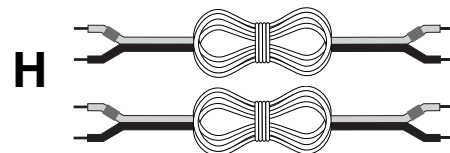
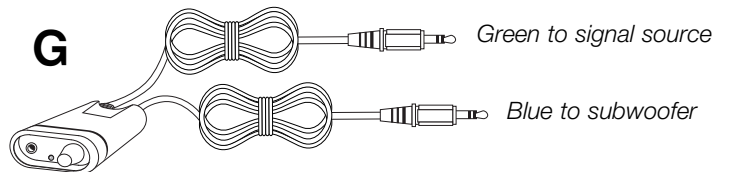
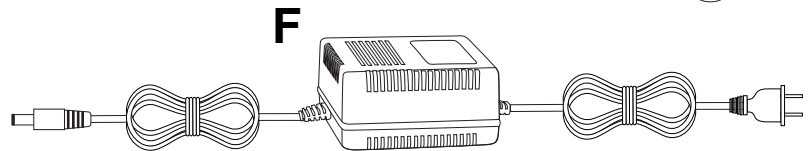
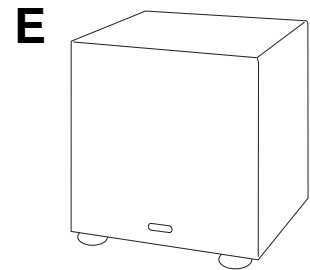
- A) Two Satellite Loudspeakers
- B) Desktop Stands, Thumb screws (installed on satellites)
- C) Wallmount hardware, Self-adhesive Feet
- D) Hook and Loop fastener (for volume control, if not used on Desktop Stand)
- E) One Subwoofer/Amplifier Loudspeaker
- F) Power Adapter (AC to AC)
- G) Volume On/Off Control
- H) 2 Satellite Connection Cables (2-meters)



No. 10 screws and plastic anchors



Rubber Feet



SETUP OPTIONS

Cambridge SoundWorks, Inc. supplies screws and plastic anchors for convenience, but it is the speaker purchaser's responsibility to insure that any speaker mounting or placement is secure, stable and reliable. Cambridge SoundWorks assumes no responsibility for damage to its products or any damage to property resulting from speaker positioning or placement.

SUBWOOFER/AMPLIFIER

The Subwoofer/Amplifier requires no assembly.

SATELLITES

Desktop Placement

Each satellite is shipped with a Desktop Stand installed. You can also mount the Volume Control to a Desktop Stand (see page 12).

Shelf Placement (or other flat surface) without the Desktop Stand

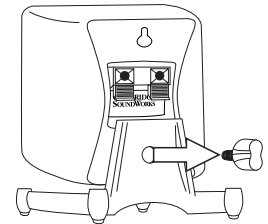
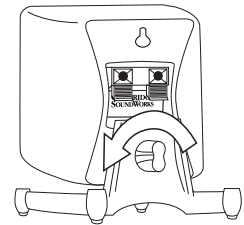
- A) Desktop Stand Removal: unscrew the thumbscrew to release the satellite.
- B) Apply the soft, self-adhesive feet to the bottom surface of each satellite, as shown.

Wall Mounting With Supplied Hardware

Note: Use the "hook and loop" fastener to secure the volume control to a convenient flat surface if not using the Desktop Stand

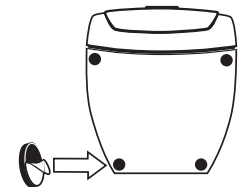
- C) Apply the soft, self-adhesive feet to the back of the satellite as shown. The feet provide mounting stability and protect the finish of both the wall and the satellite.
- D) Install the No.10 screw and anchor in the wall so that its screwhead protrudes about 3/8 inch.
- E) Adjust the screw so each satellite can be hung with just a small amount of pressure.

A



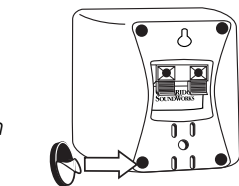
B

Apply Feet to Bottom for Flat Surfaces

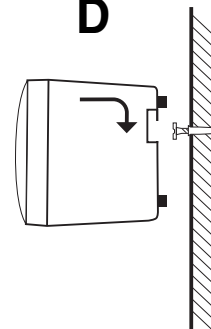


C

Apply Feet to Back for Wall Mounting on Screwhead

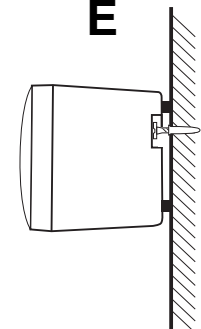


D



Install

E

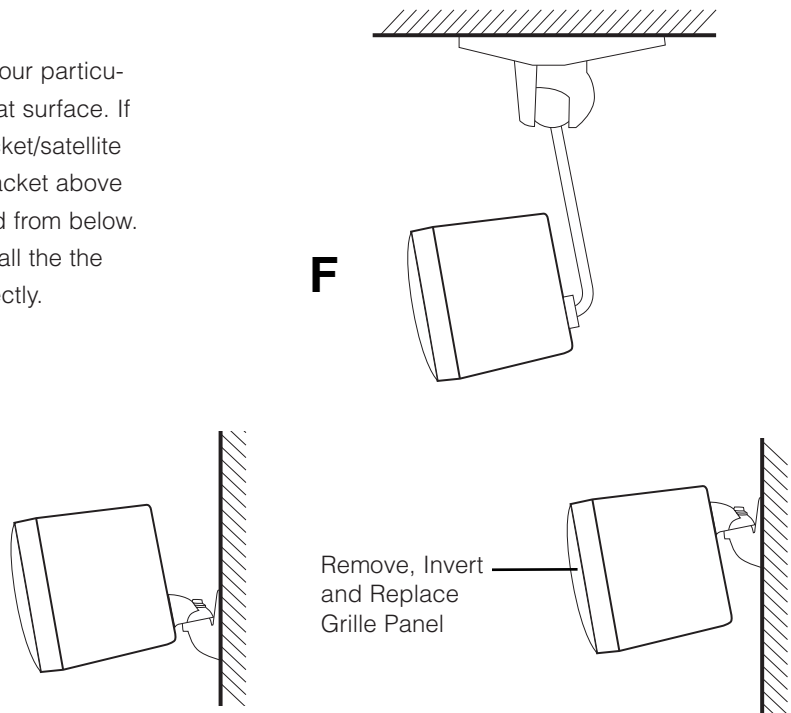


Mount Speaker

Wall Mounting With A Swivel Bracket

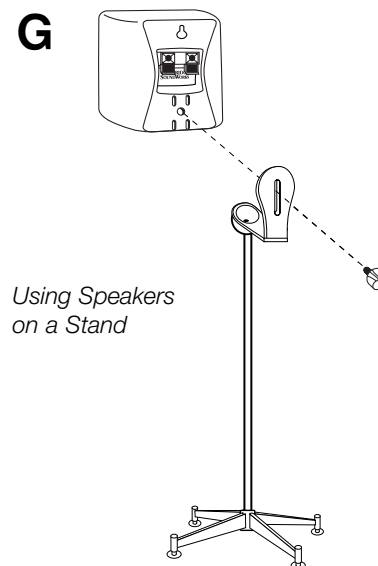
Contact Cambridge SoundWorks about available swivel brackets.

- F) Follow the installation instructions for your particular mounting bracket to attach it to a flat surface. If desired, you can install the whole bracket/satellite assembly inverted. This places the bracket above the satellite, concealing it when viewed from below. In this case, remove, invert and re-install the the satellite grille to position the logo correctly.

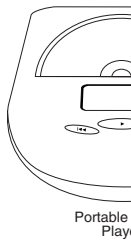
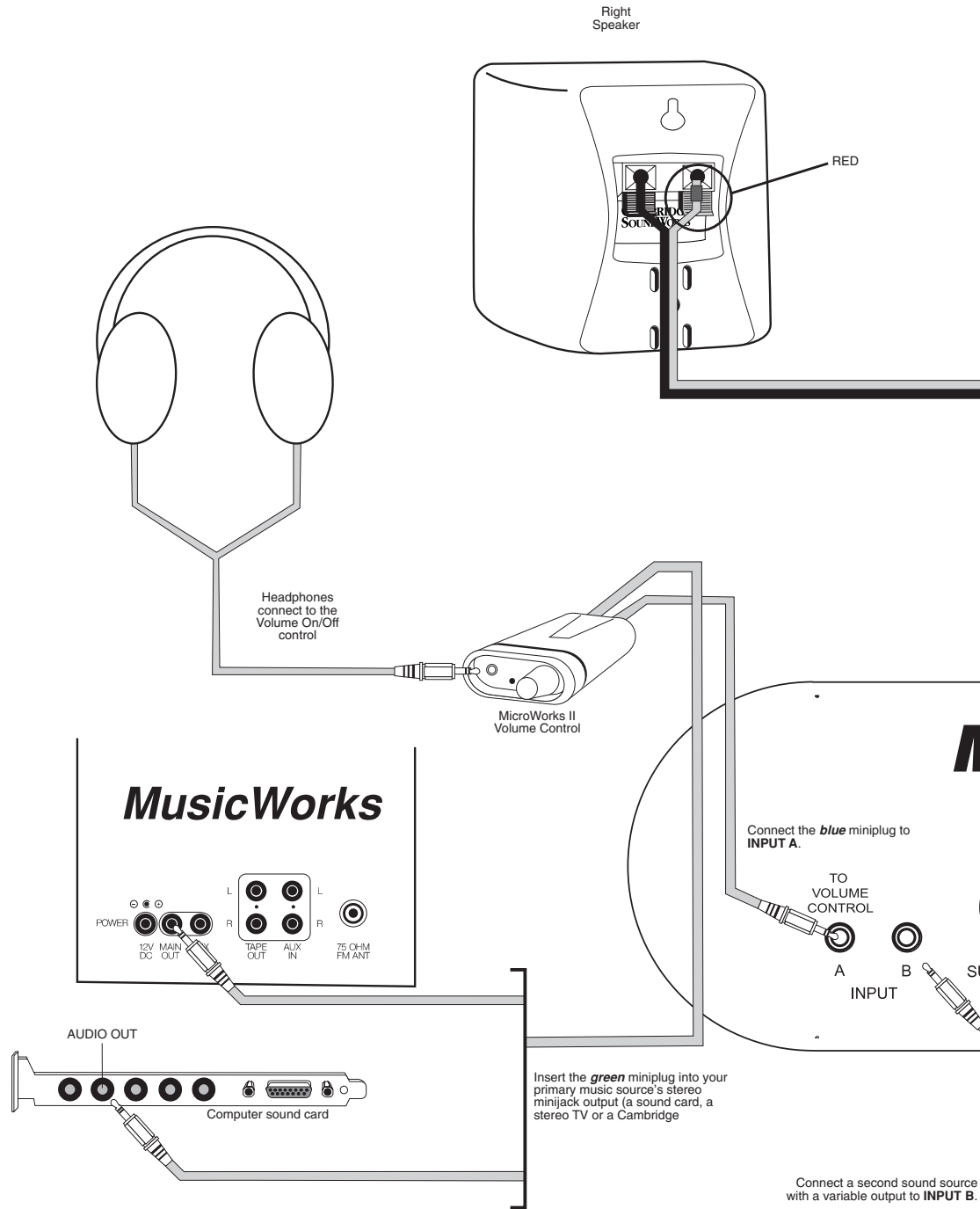


Floor Stands

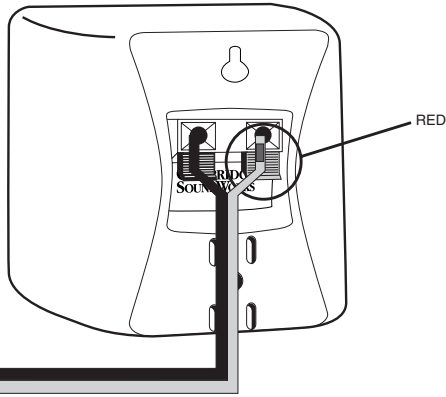
- G) Follow the instructions included with the Newton ST300 Floor Stands to install the satellites.



CONNECTION DIAGRAM



Left
Speaker

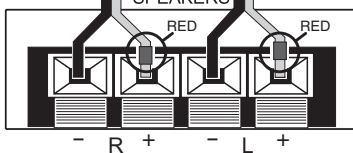


MicroWorks II

BY
CAMBRIDGE
SOUNDWORKS
A CREATIVE COMPANY

GE
SOUNDWORKS®

by
SPEAKERS



SUBWOOFER
LEVEL

Cambridge SoundWorks, Inc. Westwood, MA USA
Made in China

MicroWorks II
Subwoofer
Input Panel

Music
er

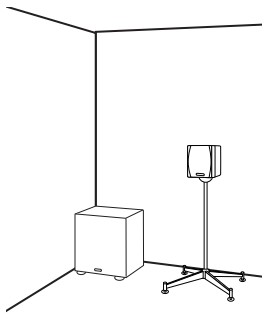
POSITIONING YOUR SPEAKERS

SUBWOOFER/AMPLIFIER

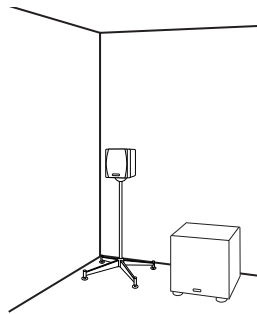
Place the Subwoofer cabinet on the floor, preferably near a wall. Do not place it on a desktop or shelf.

For the most efficient bass performance, place the subwoofer near a corner. If the subwoofer is placed away from the intersection of two room surfaces, the maximum bass output will be reduced.

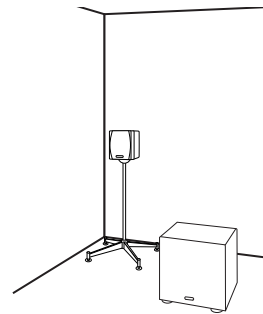
Use the Bass Level control to adjust the bass output to your desired balance. Recommended Bass control settings for each type of location are shown.



Maximum Bass Output



Moderate Bass Output



Least Bass Output

Suggested
Bass Control
Compensation



SUBWOOFER
LEVEL



SUBWOOFER
LEVEL



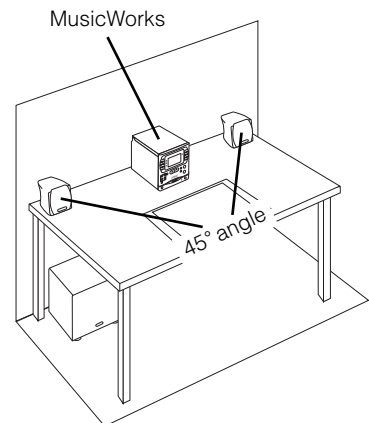
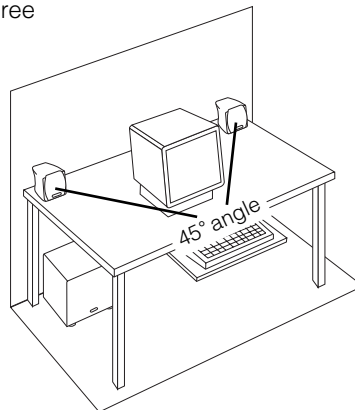
SUBWOOFER
LEVEL

SATELLITES

Desktop Placement

The Desktop Stands improve the sound for both a standing or seated listener.

Position the satellites so they form a 45 degree angle from your listening position.



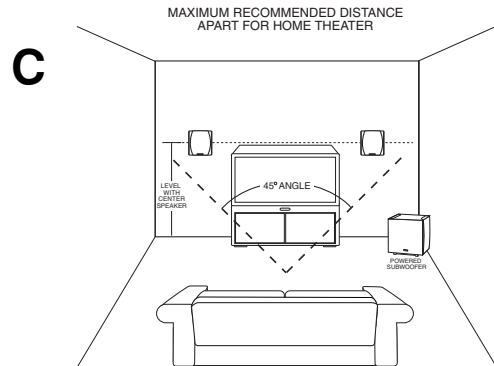
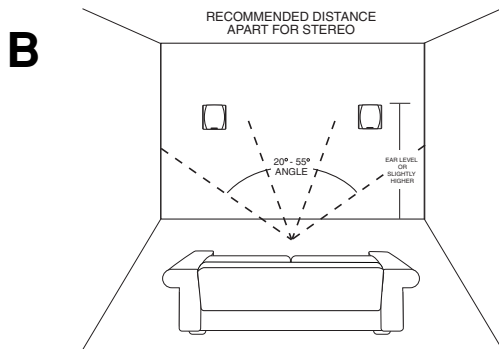
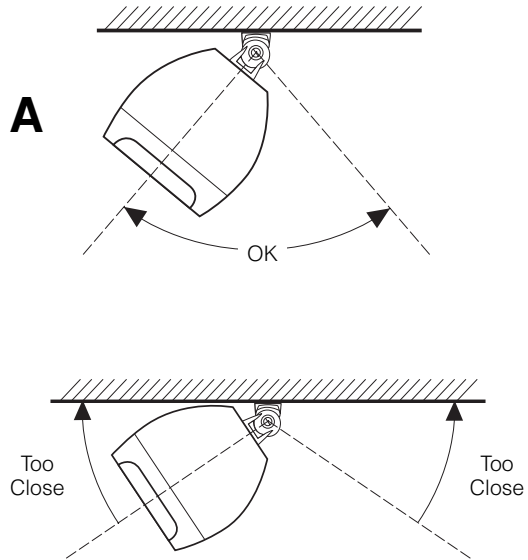
POSITIONING THE SATELLITES

Wall Placement *(Swivel brackets available separately)*

Avoid facing a satellite parallel to a nearby wall (within 6-8 inches). The reflected sound from the wall degrades the sound coming directly from the satellite (diagram A).

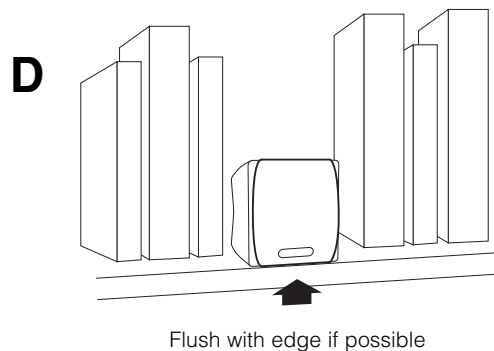
Try to position wall-mounted satellites so both are approximately at your ear level while sitting or slightly higher. Make sure the speakers form at least a 20-degree angle with your listening position. An angle greater than 55 degrees sounds like two separate speakers, rather than forming a continuous image of sound between the two speakers (diagram B).

When using the speaker for video sound, place the satellites relatively close to the left and right side of the television monitor, forming no more than a 45 degree angle with your listening position (diagram C).



Shelf Placement

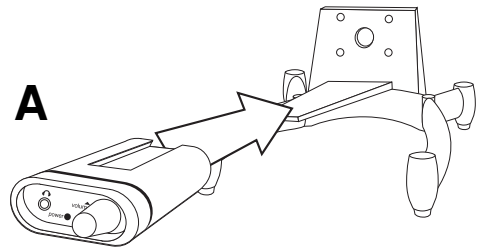
Place the satellites as close to the edge of the shelf as possible for best sound (diagram D). If the shelf is at ear level or above, it is not necessary to use the Desktop Stand



CONNECTIONS

Volume On/Off Control

- A) If you are using the Desktop Stand, slide the Volume Control onto the support strut on one of the stands.
- B) The BLUE miniplug of the Volume On/Off Control should be inserted into the subwoofer minijack "A" labeled "TO VOLUME CONTROL."



Signal Connections

- C) The GREEN miniplug of the Volume On/Off Control should be connected to your primary audio program source.

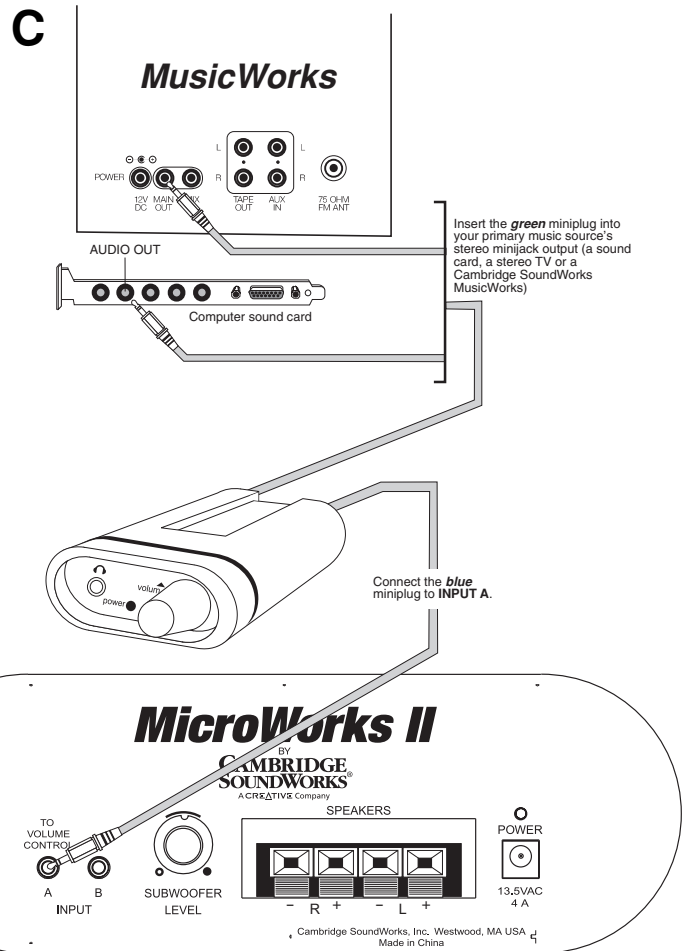
INPUT B is a second audio input that blends with **INPUT A**. Connect a second audio program source here. For a source with a 3.5 mm minijack output (like a headphone jack or line out jack on a portable CD player), use a 2-meter signal cable with a 3.5 mm miniplug at each end. Other sources may need a cable with a 3.5 mm miniplug and two RCA plugs or a 3.5 mm stereo miniplug and 3.5 mm stereo minijack.

Headphones

Plug headphones with a 3.5 mm stereo miniplug into the headphone jack of the Volume On/Off control.

Using headphones mutes the main speakers and subwoofer.

The headphone jack on the Volume On/Off Control is a direct connection to the signal Source. Headphone output must be controlled at the signal source. The speaker volume control does not affect the headphone jack.



Other Connection Situations

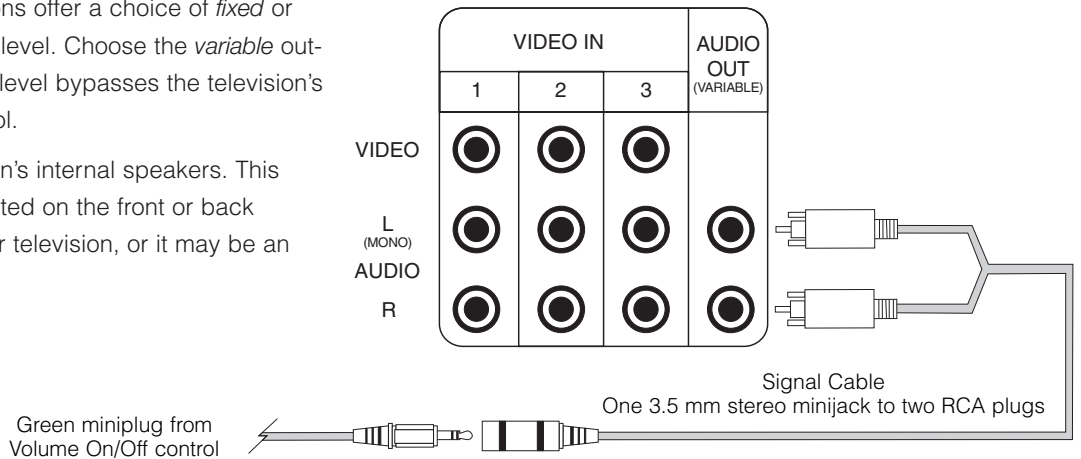
1) Using the MicroWorks II as a high performance stereo television sound system.

a) A stereo television with audio signal output typically has two RCA-type jacks (one red, one white). To connect the Volume On/Off Control to these jacks, obtain an audio cable adapter with two RCA plugs at one end and a 3.5 mm stereo minijack at the other end. Connect the GREEN miniplug of the Volume On/Off Control to the adapter's minijack. Connect the adapter's red and white RCA plugs to your television's red and white RCA jacks. (Do not connect to yellow RCA jacks. These are video outputs.)

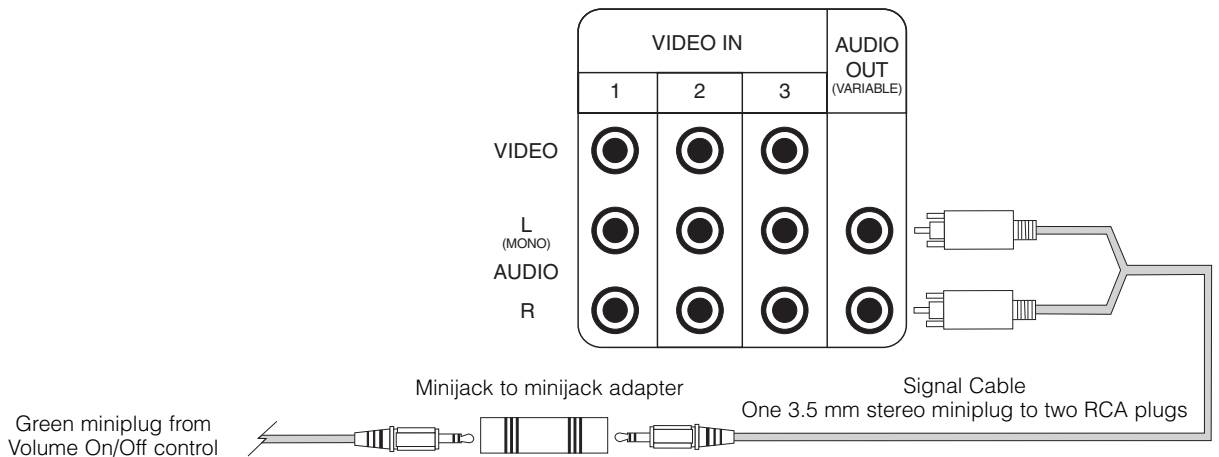
b) Some stereo televisions offer a choice of *fixed* or *variable* audio output level. Choose the *variable* output. The *fixed* output level bypasses the television's remote volume control.

c) Turn off your television's internal speakers. This control could be located on the front or back control panels of your television, or it may be an

d) If you connect the MicroWorks II to a television with variable audio outputs, you can still use your television's remote control to adjust overall output. Set the MicroWorks II Volume On/Off control at the 12 o'clock position. Then verify that the television's audio output is adequately loud when the television's remote control is increased to its maximum. Increase or decrease the setting on the MicroWorks II Volume On/Off Control (if adjustment is necessary), then stow it in an out of the way position.

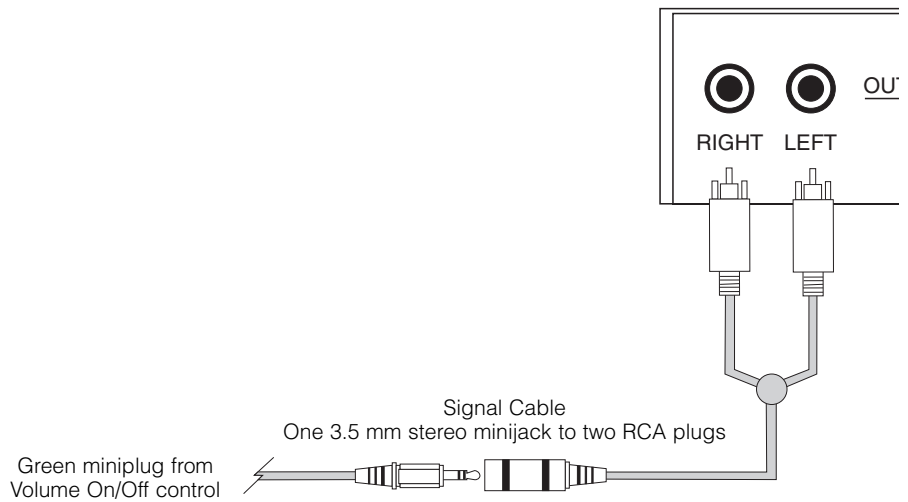
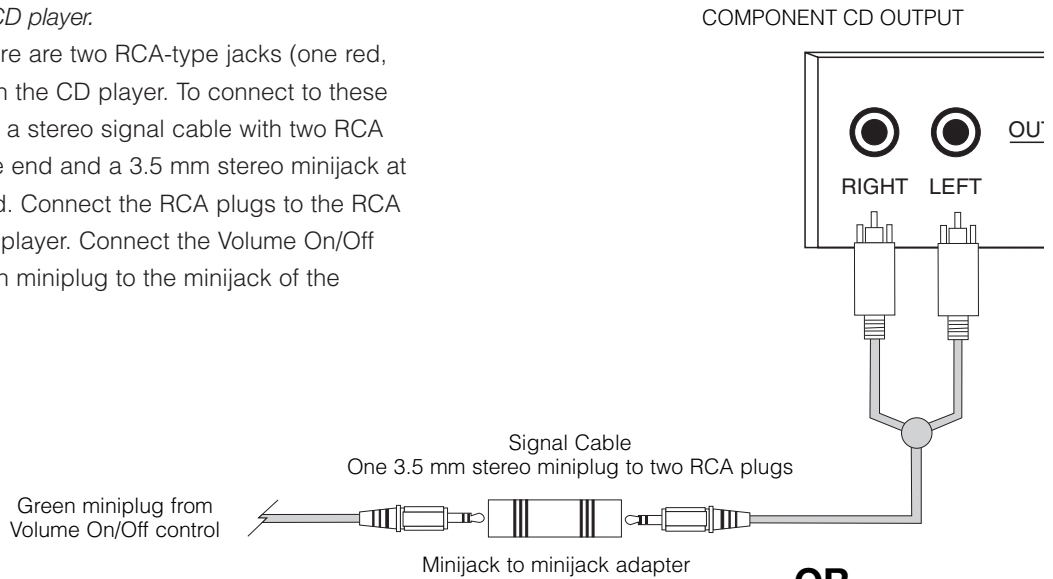


OR



2) Using the MicroWorks II as a sound system for a component CD player.

Typically, there are two RCA-type jacks (one red, one white) on the CD player. To connect to these jacks, obtain a stereo signal cable with two RCA plugs on one end and a 3.5 mm stereo minijack at the other end. Connect the RCA plugs to the RCA jacks on the player. Connect the Volume On/Off Control green miniplug to the minijack of the adapter.



Speaker Connections

To connect the 2-meter speaker cables (two wires at each end):

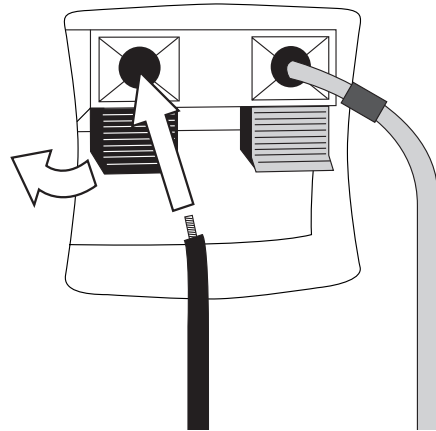
Push back the red speaker input tab on a satellite, exposing the wire hole.

Fully insert one of the wires with a red band into the wire hole and release the tab.

Repeat the procedure with the adjacent speaker wire and the black speaker input tab on that speaker.

Connect the two wires at the other end of that same speaker cable to the red and black “R” speaker input tabs on the subwoofer. This satellite becomes the Right channel satellite.

Repeat the preceding process to connect the other satellite (making it the Left channel satellite).



AC Connection and Placement

Make sure the Volume On/Off Control is in the Off position.

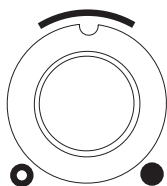
Insert the small plug of the Power Adapter into the Subwoofer POWER jack.

Connect the AC plug to a grounded AC receptacle.

Place the main speakers and the subwoofer in your preferred positions, then use the Volume On/Off Control to turn on the power.

OPERATION AND FINAL ADJUSTMENT

- 1) Use the Volume Control or the signal source control to vary output level.
- 2) Defeat or cancel any "tone control" or other sound adjustments within your audio program source. Portable CD players may have "bass boost" switches and many computer sound programs have audio adjustments concealed in drop-down menus.
- 3) If possible, play a variety of musical CDs with good deep bass content to judge the best setting of the SUBWOOFER LEVEL control.



SUBWOOFER LEVEL

Cleaning

The painted surfaces of the satellites and subwoofers should be wiped with a cloth or brushed clean. The grille panel material can be vacuumed or brushed clean.

SPECIFICATIONS

Analog Input:

775 millivolts for full output
10 kohms input impedance

Amplifiers:

Satellite: 20 watts continuous at 1 kHz, two channels
driven at less than **.1%** total harmonic distortion.
Subwoofer: 40 watts continuous at 100 Hz, one channel
driven at less than **.3%** total harmonic distortion.

System Frequency response:

Satellite: 150 Hz to 15 kHz, +/- 3 dB
Subwoofer: 45 Hz to 150 Hz +/- 3 dB

Drivers:

Nominal 6.5 inch subwoofer driver with 8 inch passive radiator
Nominal 3.5 inch satellite driver

AC Voltage:

120VAC, 60Hz

Dimensions (H x W x D) and Weights

Satellite (without stand)

4 1/2" x 4 3/8" x 4 7/8"

113mm x 108mm x 125mm

2 pounds, 1 ounce

916 grams

Satellite (with stand)

6 1/4" x 4 3/8" x 5 5/8"

160mm x 108mm x 143mm

2 pound, 3 ounces

988 grams

Subwoofer

11 1/8" x 10" x 10 3/4", including cables

263mm x 255mm x 275mm

12 pounds, 12 ounces

5.5 kg

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