

MEGAWORKS 210D

POWERED SATELLITE/SUBWOOFER SYSTEM

USER MANUAL

C A M B R I D G E[®]
SOUNDWORKS



The lightning flash with arrowhead, 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 risk of electric shock to persons.



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 this product

WARNING

DO NOT OPEN

TO PREVENT THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE SPEAKER'S COVER. NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.

AVISIQUE

POUR EVITER TOUT RISQUE DE CHOC ELECTRIQUE, NE PAS DEMONTER LE COUVERCLE DU HAUT PARLEUR. AUCUN ENTRETIEN DES PIECES INTERIEURES N'EST REQUIS. TOUT SERVICE D'ENTRETIEN NE DOIT ETRE EFFECTUE QUE PAR DU PERSONNEL D'ENTRETIEN QUALIFIE.

READ AND HEED IMPORTANT SAFETY WARNING ON SIDE OF SPEAKER ENCLOSURE

CAUTION:

TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, INSERT FULLY.

ATTENTION:

POUR EVITER LES CHOCS ELECTRIQUES, INTRODUIRE LA LAME LA PLUS LARGE DE LA FICHE DANS LA BORNE CORRESPONDANTE DE LA PRISE ET POUSSER JUSQU'AU FOND.

IMPORTANT NOTICE:

THE SERIAL NUMBER FOR THE SPEAKER IS LOCATED ON THE SPEAKER'S CONTROL PANEL. PLEASE WRITE THIS NUMBER DOWN AND KEEP IT IN A SECURE AREA. THIS IS FOR YOUR SECURITY.

IMPORTANT SAFETY INSTRUCTIONS

READ INSTRUCTIONS – All safety and operating instructions should be read before the speaker is operated.

RETAIN INSTRUCTIONS – The safety and operating instructions should be retained for future reference.

HEED WARNINGS – All warnings on the speaker and in the operating instructions should be adhered to.

FOLLOW INSTRUCTIONS – All operating and use instructions should be followed.

CLEANING – Unplug the speaker from the wall outlet or other power source before cleaning. Use a damp cloth for cleaning.

ATTACHMENTS – Do not use any adapters or attachments not recommended by Cambridge SoundWorks as they may cause hazards.

WATER AND MOISTURE – Do not use the speaker near water—for example, near a bath tub, wash bowl, kitchen sink, or laundry tub; in a wet basement; or near a swimming pool or other similar areas.

ACCESSORIES – Do not place the speaker on an unstable cart, stand, tripod, bracket, or table. The speaker may fall, causing serious injury to a child or adult and serious damage to the product.

VENTILATION – Slots, openings and metal fins in the cabinet are provided for ventilation, to ensure reliable operation of the speaker and to prevent it from overheating. These areas must not be blocked or covered such as by placing the product on a bed, sofa, very deep pile rug, or other similar surface. The speaker should not be placed in a built-in installation such as a bookcase or rack.

HEAT – The speaker should be situated away from heat sources such as radiators, heat registers, stoves, and other products (including amplifiers) that produce heat.

POWER SOURCES – The speaker should be operated only from the type of power source indicated on the label. If you are not sure of the type of power supply to your home, consult your dealer or local power company.

POLARIZATION – The speaker is equipped with a polarized alternating-current line plug (a plug having one blade wider than the other). This plug will fit into the power outlet only one way. This is a safety feature. If you are unable to insert the plug fully into the outlet, try reversing the plug. If the plug should still fail to fit, contact your electrician to replace your obsolete outlet. Do not defeat the safety purpose of the polarized plug.

POWER-CORD PROTECTION – The AC power cords should be routed so that they are not likely to be walked on. No object should bring weight to bear on to the AC power cords.

LIGHTNING – For added protection for the speaker during a lightning storm, or when it is left unattended and unused for long periods of time, unplug them from the wall outlet. This will prevent damage to the speaker due to lightning and power-line surges.

OVERLOADING – Do not overload wall outlets, extension cords, or integral convenience receptacles as this can result in a risk of fire or electric shock.

OBJECT AND LIQUID ENTRY – Never use probes of any kind to reach into the speaker as they may touch dangerous voltage points or short parts that could result in a fire or electric shock. Never spill liquid of any kind on the speaker.

SERVICING – Do not attempt to service the speaker yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

DAMAGE REQUIRING SERVICE – Unplug the speaker from the wall outlet or other power source and refer servicing to qualified service personnel under the following conditions:

- a) When the power-cord or plug is damaged.
- b) If liquid has been spilled, or objects have fallen into the speaker.
- c) If the speaker has been exposed to rain or water.
- d) If the speaker does not operate normally by following the operating instructions; or exhibits a distinct change in performance.
- e) If the speaker has been dropped or damaged in any way.

REPLACEMENT PARTS – When replacement parts are required, be sure the service technician uses replacement parts specified by Cambridge SoundWorks or have the same characteristics as the original part. Substandard substitutions may result in fire, electric shock, or other hazards.

SAFETY CHECK - Upon completion of any service or repairs to the speaker, ask the service technician to perform safety checks to determine that the speaker is in proper operating condition.

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INTRODUCTION

Thanks for choosing the MegaWorks 210D loudspeaker.

It features the finest drivers, precision internal crossover and amplifier circuitry and an elegant enclosure design.

The satellite speakers feature “rare earth” magnetic assemblies which are strong, yet small and light. This increases the interior volume of the satellite enclosure for better low frequency performance.

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 Wiring Guide 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) AC Cord
- G) Volume Control
- H) 2 Satellite Connection Cables (2-meters)

Both signal cables (listed below) are 2-meters long.

I) **Single-Channel Signal Cable, Black RCA Phono Plug to Yellow/Orange 3.5 mm Miniplug**

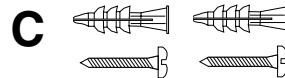
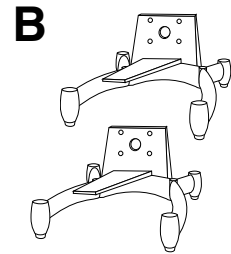
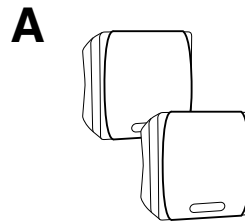
Plugs into DIGITAL IN

Connect to a minijack digital output, like the one found on Creative Sound Blaster Live! 5.1 sound cards.

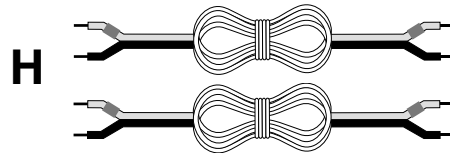
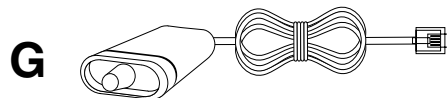
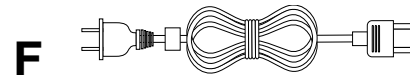
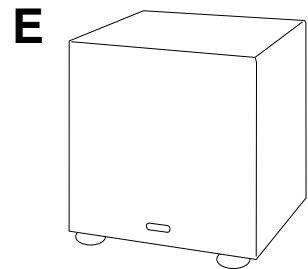
J) **Stereo Signal Cable, Green Miniplug to Green Miniplug**

Plugs into analog **LINE IN A** or **LINE IN B**

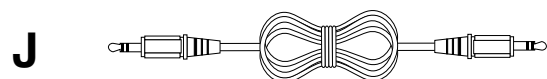
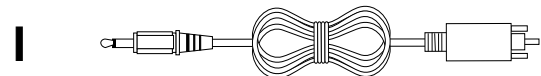
Connect to any analog sound source with a 3.5 mm stereo output jack, like Cambridge SoundWorks MusicWorks™, a portable CD player, a small headphone jack, or a computer sound card.



No. 10 screws and plastic wall anchors



To Signal Source Signal Cables To MegaWorks



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 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 install the Volume Control to a Desktop Stand (see page 12). Some program sources (stereo televisions, portable CD players) provide their own output level adjustment. The volume control is optional in these cases.

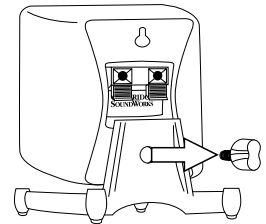
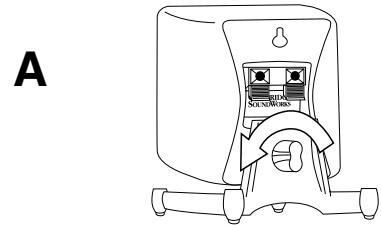
Shelf Placement (or other flat surface) without the Desktop Stand

- 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

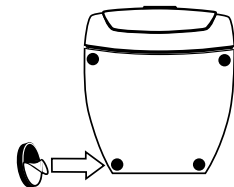
Note: Use the "hook and loop" fastener to secure the volume control to a convenient flat surface if not using the Desktop Stand

- C) Apply the soft, self-adhesive feet to the back of the satellite as shown. The feet improve stability mounting 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.



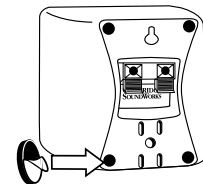
B

Apply Feet to Bottom for Shelves

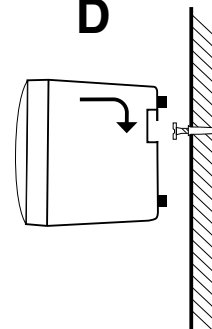


C

Apply Feet to Back for Wall Mounting on Screwhead

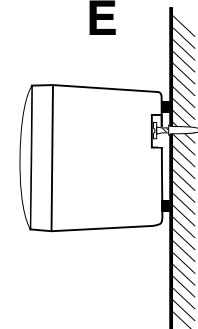


D



Install

E

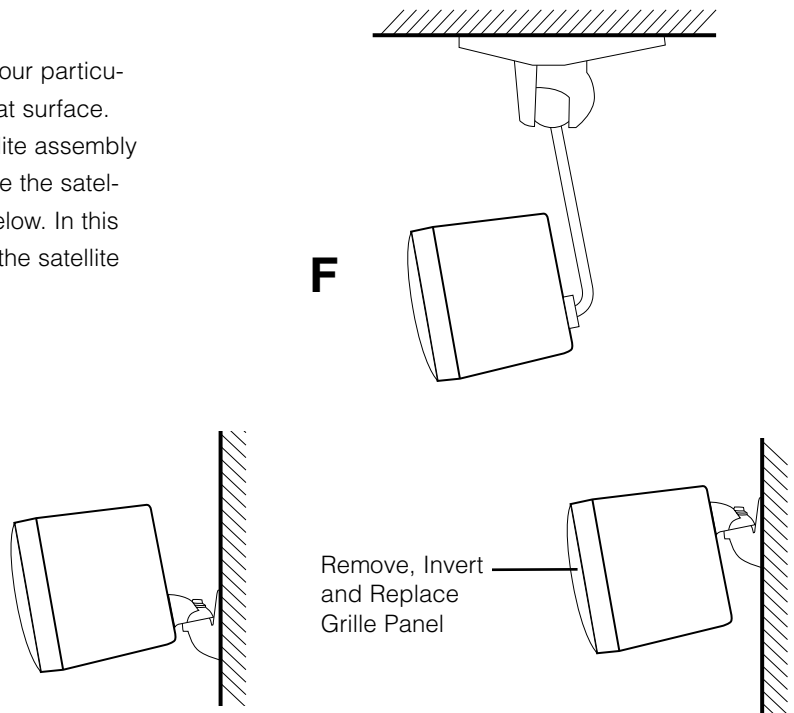


Mount Speaker

Wall Mounting With A Swivel Bracket

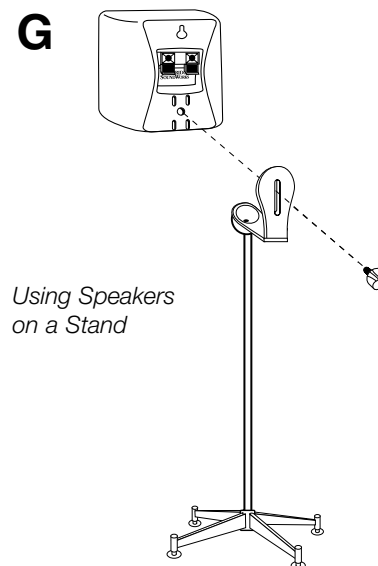
Contact Cambridge SoundWorks about available swivel brackets.

- F) Follow the installation instructions for your particular mounting bracket to attach it to a flat surface. 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.

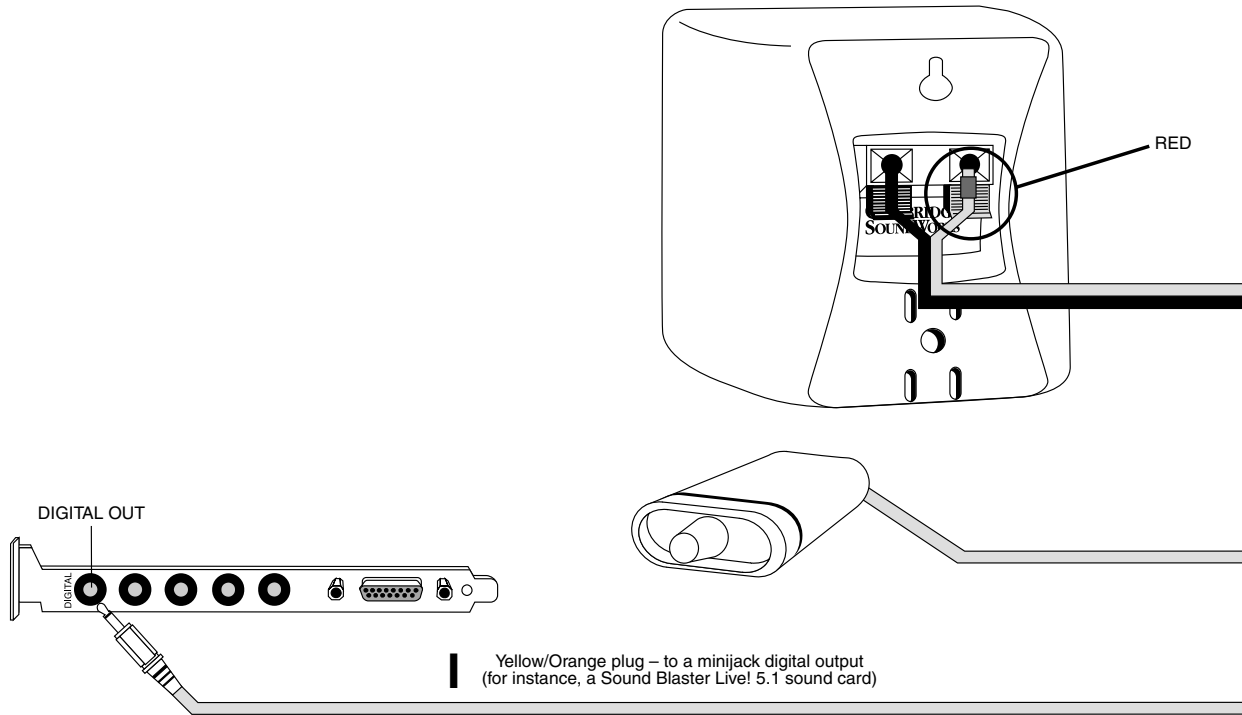


Floor Stands

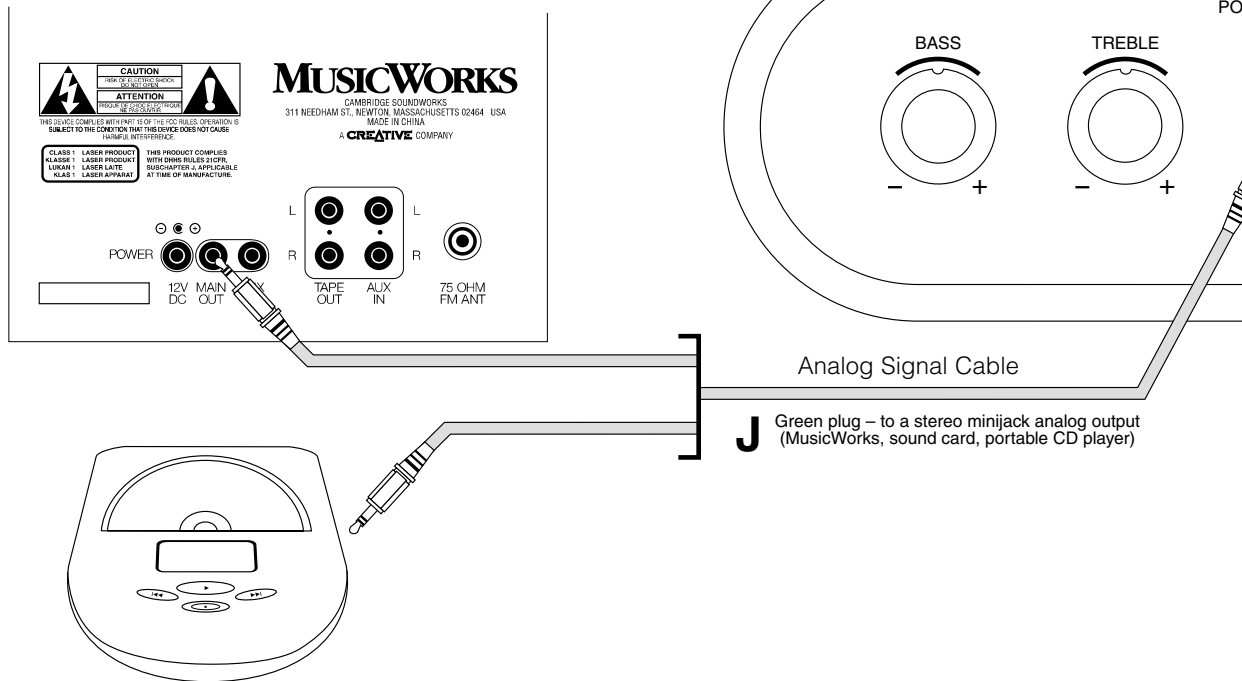
- G) Follow the instructions included with the Newton ST300 Floor Stands to install the satellites.

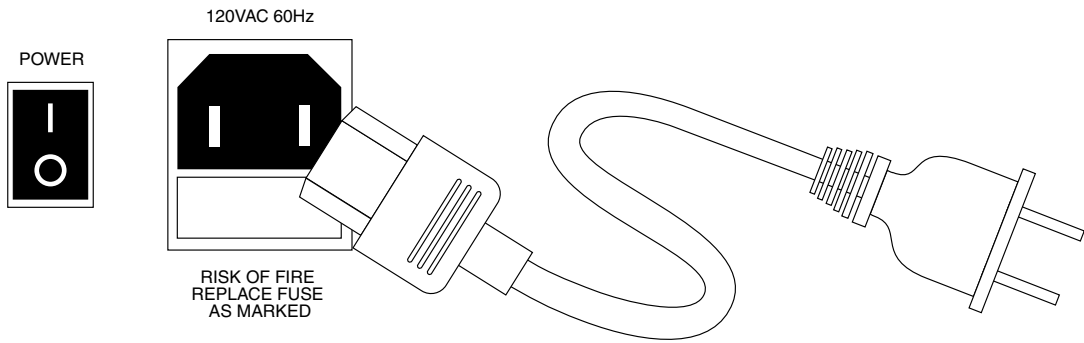
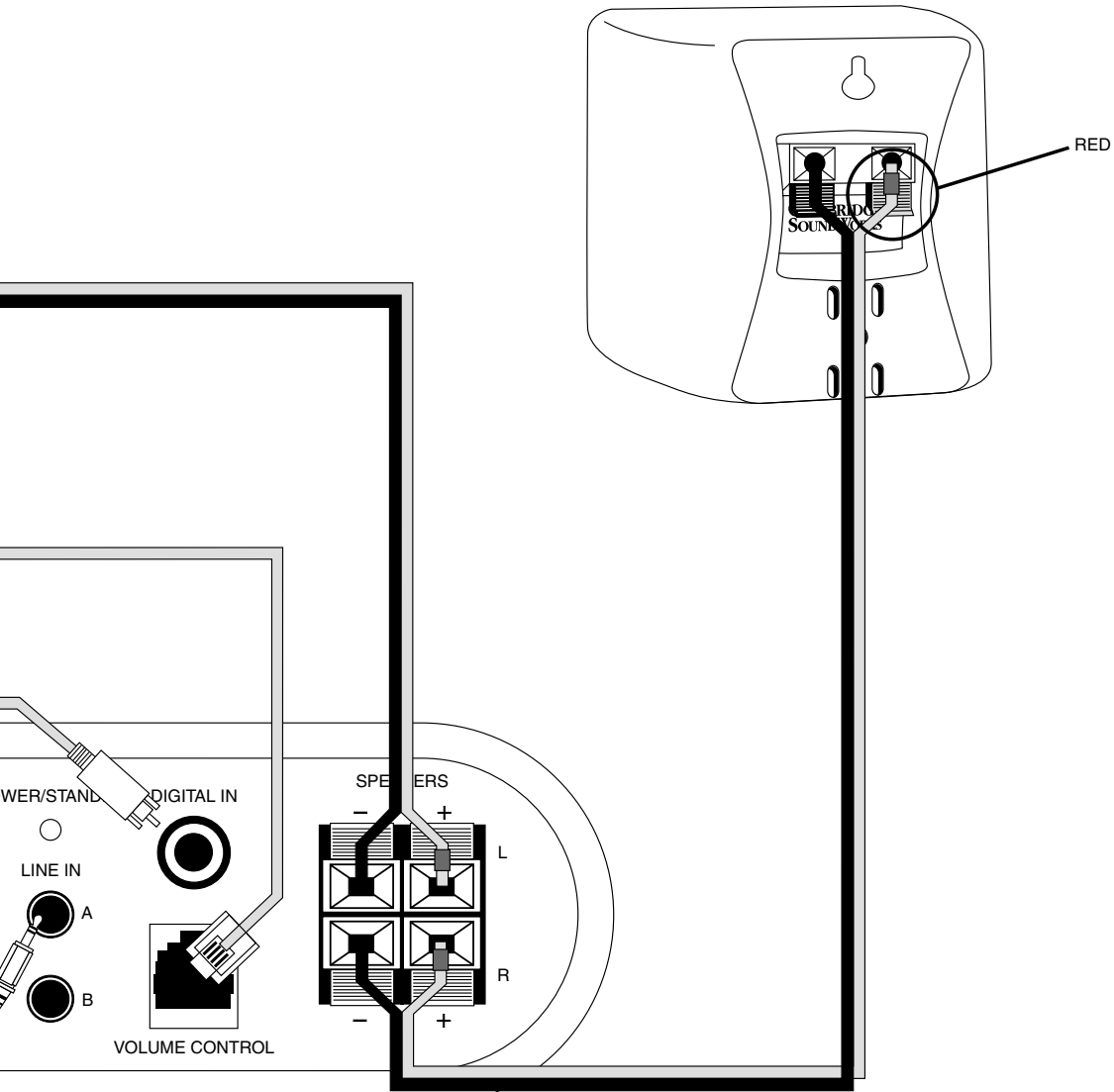


CONNECTION DIAGRAM



Digital Signal Cable





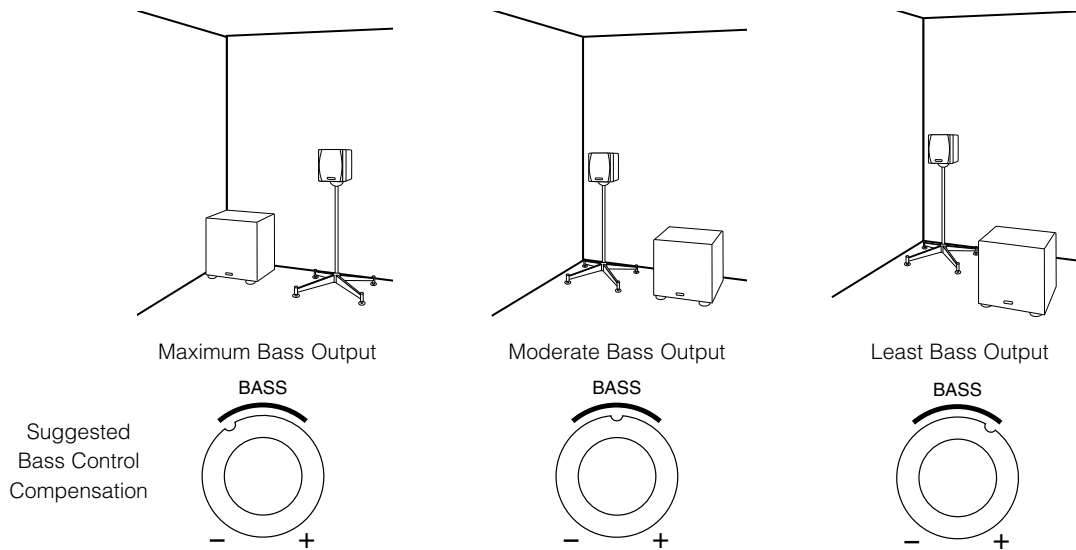
POSITIONING YOUR SPEAKERS

SUBWOOFER/AMPLIFIER

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

For maximum bass output, 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.

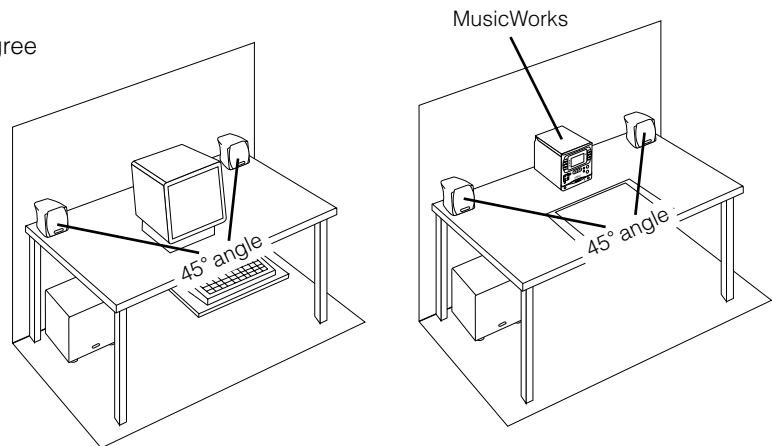


SATELLITES

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.



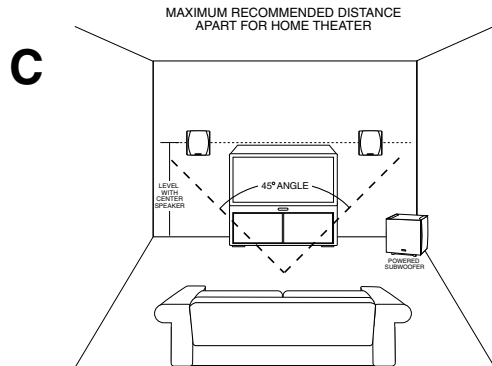
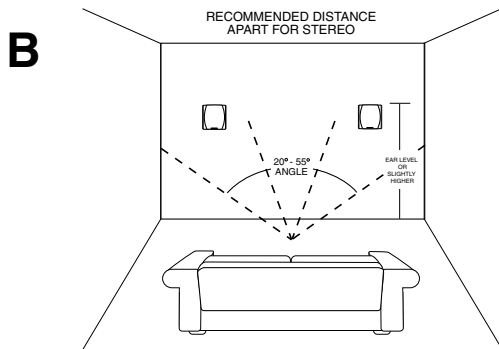
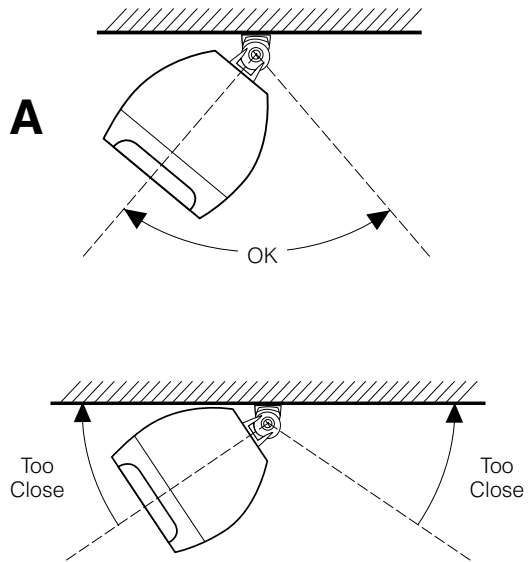
POSITIONING THE SATELLITES

Wall Placement

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).

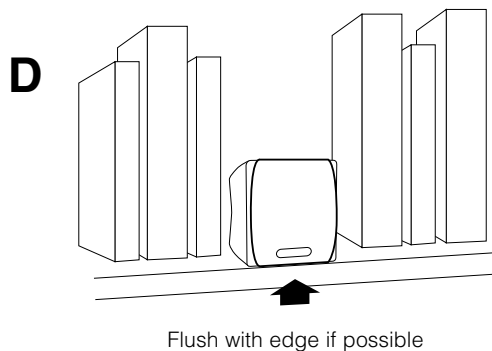
Try to position wall-mounted satellites so both are approximately at your ear level while sitting or slightly higher. Make sure the speakers form at least a 20-degree angle with your listening position. An angle greater than 55 degrees sounds like two separate speakers, rather than forming a continuous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

When using the speaker for video sound, place the satellites relatively close to the 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).

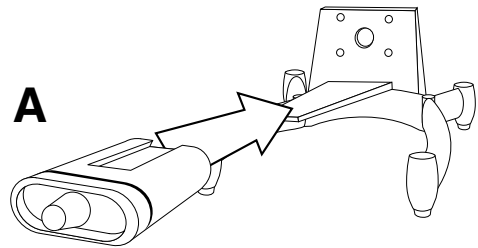


CONNECTIONS

Volume Control

- A) If you are using the Desktop Stand, slide the Volume Control onto the support strut on one of the stands.
- B) Insert the Volume Control's plug into the jack marked **VOLUME CONTROL** on the Subwoofer input panel until it snaps in place.

It is not necessary to connect the Volume Control if your audio signal source provides an output level adjustment you would rather use.



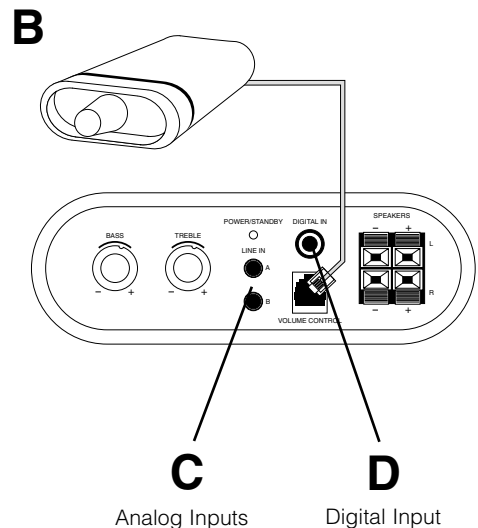
Signal Connections

The MegaWorks 2.1 has two analog inputs and one SPDIF digital input.

- C) **LINE IN A** (analog): Connect the 3.5 mm minijack output of any analog signal source to this 3.5 mm stereo minijack input, using cable **J**.
LINE IN B is a second audio input that blends with **LINE IN A**. Connect a second audio source program 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.

- D) **DIGITAL IN:** Connect the output of a digital audio signal source to this RCA jack. You can use cable **I** to connect to most computer sound card digital outputs. When a digital signal is present, the analog audio inputs are automatically muted. Digital signal format is auto-sensed.

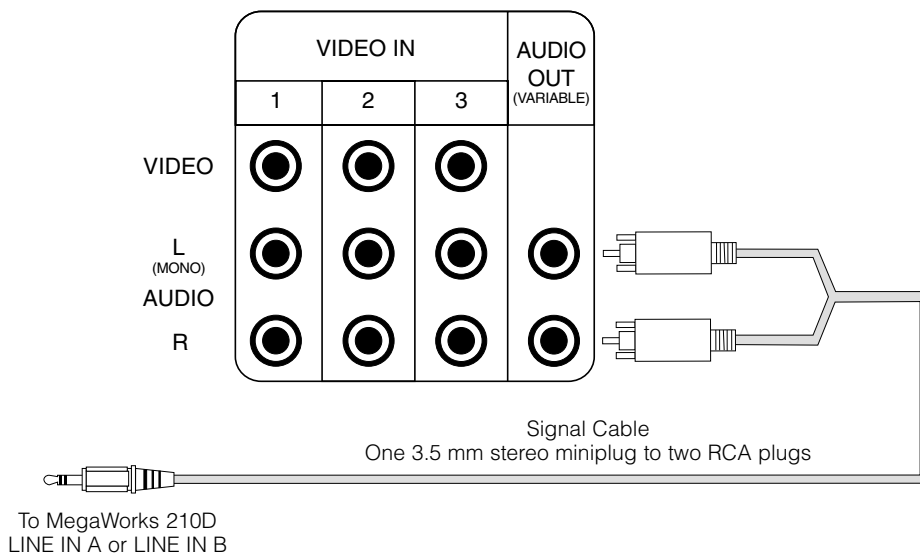
Typical digital audio signals are 44.1 kHz 16 bit (like CD audio) or 48 kHz 16 bit (like that stored on a Digital Audio Tape-DAT).



Other Connection Situations

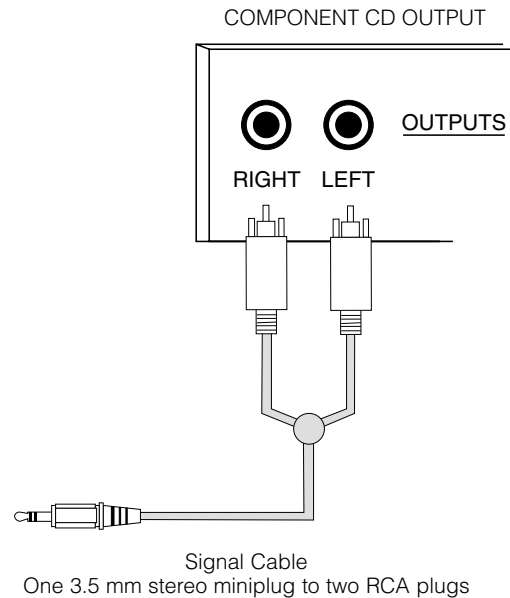
- 1) Using the MegaWorks 210D as a high performance stereo television sound system.
- a) A stereo television with audio signal output typically has two RCA-type jacks (one red, one white). To connect to these jacks, obtain a stereo signal cable with two RCA plugs at one end and a 3.5 mm stereo miniplug at the other end (a Cambridge SoundWorks A12MMSRC 2-meter cable, for instance). Connect the miniplug to LINE IN A of the MegaWorks 210D and the 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 "on-screen" menu selection.

- d) If your television has a *variable* audio output, you may not need to connect the MegaWorks 210D's volume control. The television's remote control will adjust the volume level. You *will* need to connect the MegaWorks 210D volume control if either of these situations occurs:
- * Noise is heard even at the television's minimum volume setting. In this case, connect the volume control and set it low enough to make the noise inaudible, then stow the volume control next to the subwoofer.
 - * You find the MegaWorks is too "sensitive." For instance, if the output level is too loud when the television "volume" setting is below 30%. Connect the volume control and reduce its setting to increase your television's volume range. Then stow the volume control next to the subwoofer.



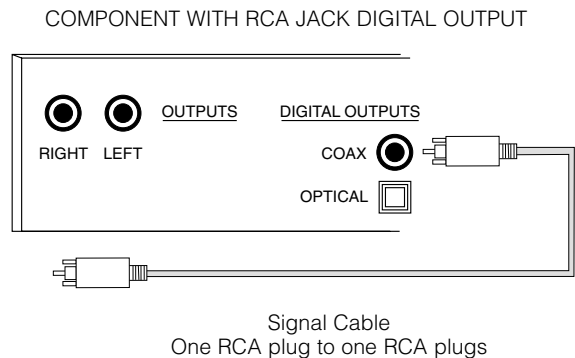
2) Using the MegaWorks 210D as a sound system for a component CD player.

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 miniplug at the other end (a Cambridge SoundWorks A12MMSRC 2-meter cable, for instance). Connect the miniplug to LINE IN A of the MegaWorks 210D and the RCA plugs to your CD player's red and white RCA jacks.



3) Using the MegaWorks 210D as a sound system for a home stereo component with a digital output.

A home component digital output will typically be an RCA-type jack. To connect to this output, obtain a signal cable with an RCA plug at each end (a Cambridge Works A1DCOAX2 2 meter cable, for instance). If a cable with one RCA plug at each end can't be obtained, a stereo version can be used. Just use one plug at each end of the same color.



The MegaWorks 210D does not support optical digital signals. The digital RCA jack output of many components is labeled "coax" or "coaxial."

Speaker Connections

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

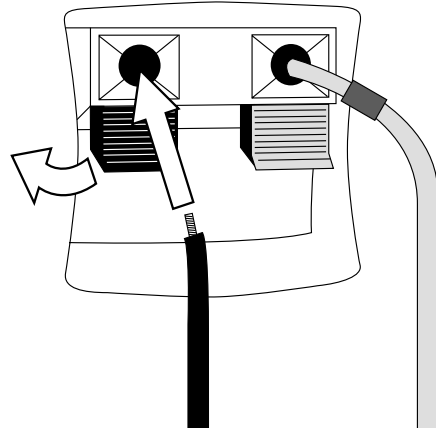
Push back the red speaker input tab on a satellite, exposing the wire hole.

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).

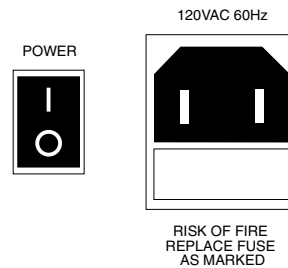


AC Connection and Placement

Make sure the subwoofer Power switch is in the OFF position (O).

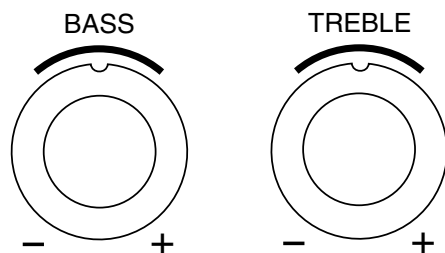
Plug the supplied power cable first into the subwoofer back panel AC socket. Then connect it to an AC power socket.

Place the satellites and subwoofer in their preferred positions, then switch the Power switch to the ON (I) position.



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 Bass and Treble controls.



Cleaning

The painted surfaces of the satellites and subwoofers should be wiped with a damp 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

Digital Input:

Supports 32 kHz, 44 kHz, 48 kHz and 96 kHz data rates, any word length up to 24 bits.

Amplifiers:

Satellite: 60 watts continuous at 1 kHz, two channels driven at less than .1% total harmonic distortion.

Subwoofer: 150 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: 32 Hz to 150 Hz +/- 3 dB

Drivers:

Nominal 8 inch subwoofer driver

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

1 pound, 1ounce

482 grams

Satellite (with stand)

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

160mm x 108mm x 143mm

1 pound, 3 ounces

539 grams

Subwoofer

11 1/8" x 10" x 10"

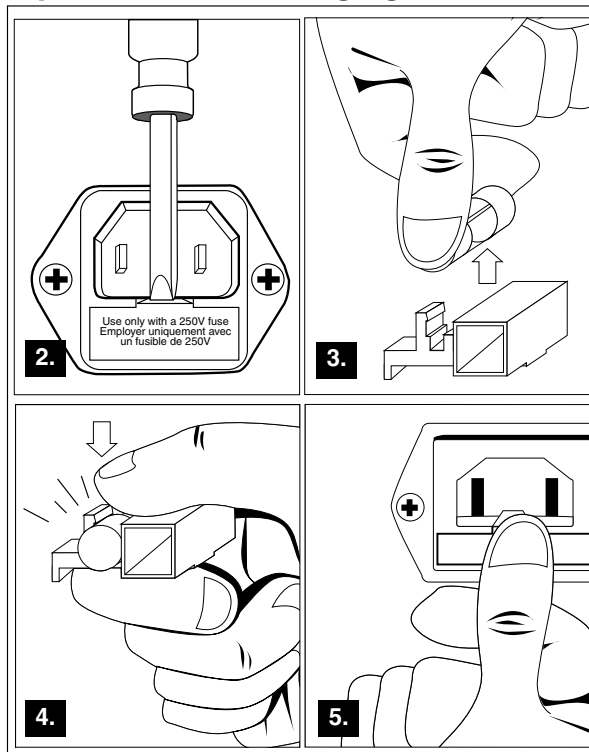
263mm x 255mm x 255mm

14 pounds, 8 ounces

6.6 kg

FUSE REPLACEMENT

IMPORTANT: Turn off and unplug the speaker before changing the fuse.



Fuse Replacement

The fuse holder is located in the power connector at the base of each speaker. The fuse is a 2.5A MDL type.

To replace the fuse:

1. Unplug the AC cord from the AC power source, then remove the AC power cord from the speaker's power connector.
2. Remove the fuse cap with a small, flat blade screwdriver (see diagram 2).
3. Remove the fuse from the fuse cap (see diagram 3).
4. Replace the fuse inside fuse cap with another metric 5X20mm size fuse (see diagram 4).
5. Replace the fuse and cap in the power connector (see diagram 5).
6. Connect the AC power cord to the speaker.
7. Connect the power cord to an AC power outlet.

CAMBRIDGE SOUNDWORKS, INC.
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Fax: 1-617-527-3194

A **CREATIVE** Company

P81-1750