

DIMENSIONS AND SPECIFICATIONS - MiniMe DSP P8



DIMENSIONS INCLUDE FEET, GRILLE, AND AMPLIFIER

ENCLOSURE TYPE	Sealed Enclosure With Passive Radiator
AMPLIFIER POWER	600 Watts MAX
DRIVERS	8" Premium Extended Excursion Active Driver 8" Mass Tuned SLAPS-M8 Passive Radiator
FREQUENCY RESPONSE	25Hz-160Hz
CROSSOVER FREQUENCY	40Hz-160Hz
SIGNAL SENSING	AUTO/ON/OFF
INPUTS/OUTPUTS	Low Level RCA Input Mono DSP RCA Output
OTHER FEATURES	Auto Room Tuning Adjustments 0-180° Phase Adjustment Switch IR Remote & Remote Eye 110V/220V AC Selector iWoofers™ Compatible
FUSE RATINGS	110-120V~60Hz: ø5x20, T6.3AL/250V 120-240V~50Hz: ø5x20, T3.15AL/250V

INTRODUCTION

Congratulations on your choice of Earthquake Sound's MiniMe DSP series of subwoofers. MiniMe DSP subwoofers were designed to dramatically enhance your enjoyment of music and movies at home by adding power and impact to low frequency sound effects without taking up your entire living space. Congratulations and thank you for choosing the Earthquake MiniMe DSP subwoofer as a key component of your home audio system.

The MiniMe DSP 8 subwoofer utilizes an advanced digital class "D" amplifier, a premium long throw active driver, and patented mass tuned SLAPS passive radiator technology. With a ported style design and black piano gloss enclosure, the MiniMe DSP 8 delivers phenomenal bass from a compact enclosure. With the iWoofers™ Pro app interface, users will have the option of automated professional room tuning with full control of the DSP from a mobile device.

Designed in the U.S.A., The MiniMe DSP series of subwoofers meet and exceed industry standards of performance and quality. With uncompromised "World Class" performance and superior technology, MiniMe DSP subwoofers embody both power and elegance.

MiniMe DSP 8

**Stylish & Ultra-Compact Subwoofer
With Superb Low Frequency Response**



WHAT MAKES A MiniMe DSP

Digital Class “D” Amplifier

The MiniMe DSP amplifier utilizes an advanced class “D” circuitry with over 90% efficiency, allowing it to perform continuously without getting hot. A 600 watts peak power amplifier is fully equipped with IR inputs, auto room tuning adjustments, 0–180° phase switch, low level RCA inputs and outputs, auto signal sensing, and an app controlled DSP module.

Premium Long Throw Drivers

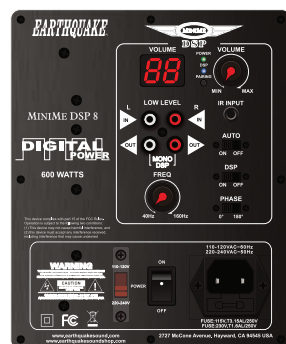
The active driver installed in every MiniMe DSP 8 is specifically designed for accurate reproduction of bass and sub-bass frequencies. Built with TCT (Turbine Cooled Transducer) technology, stitched tensile leads, anti-wobble cone construction, and reinforced dust cap, the MiniMe DSP 8 driver effortlessly produces phenomenal bass with extremely low distortion while staying cool.

Mass Tuned SLAPS Passive Radiator

Earthquake's patented SLAPS passive radiator technology dramatically increases a subwoofer's efficiency and capability for ultra low frequency reproduction. The unique design of the SLAPS-M8 employs dual (identical) suspensions, allowing the passive driver to move the same amount of air in either direction. Coupled with a good quality active driver, SLAPS enables the subwoofer to deliver a deeper, dynamic, and more powerful bass response without additional amplifier power.

Luxurious Piano Gloss Cabinet

The deep luxurious piano lacquer begins with a thorough sanding and priming, followed by multiple applications of black lacquer with additional fine sanding between each layer and finished with a smooth, high gloss clear coat.



ROOM TUNING WITH iWoofertm

Room Correction Control

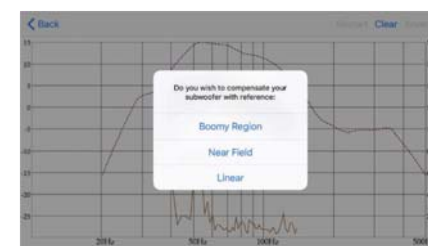
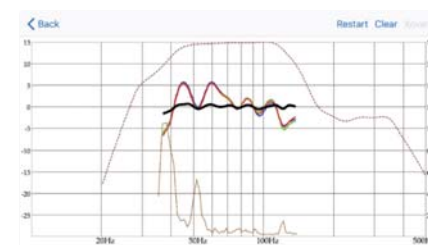
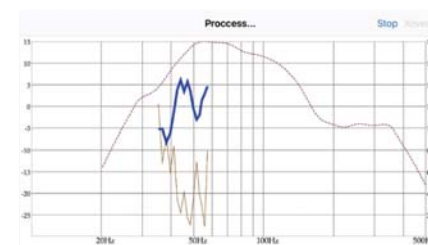
The iWoofertm Pro app features automatic room correction. To begin select “Room Correction” from the main menu. Once there, select “Wizard” to begin the automatic room correction process. Before beginning, ensure that the gain knob is properly adjusted on the woofer and that the sub is not over-driven.

The iWoofertm Pro app will begin by taking a near field measurement. Place the microphone as close as possible to the subwoofer and equal distance from the passive side. This can best be done by placing the microphone so that it is facing the side of the subwoofer half-way between the active and passive. After placing your mobile device in the proper location, select “Next” to begin the sweep. It is important to remain as silent as possible during the sweeps. The subwoofer will now sweep through the frequency range. Once completed, you will be asked to add an additional response or sweep measurement or you may continue. Earthquake Sound recommends performing a minimum of 3 response sweeps in order to get an accurate measurement.

Once you have obtained the desired sweeps select “No, Next” to continue to the next step. You will then be prompted to select the reference type for the room compensation, Boomy Region, Near Field or Linear. We recommend the “Boomy Region” selection since it maintains the high energy peaks of the low frequencies while creating a linear response for the mid range. The Near Field option is ideal for users with poor mic tolerance as it measures relative SPL and only compensates for the

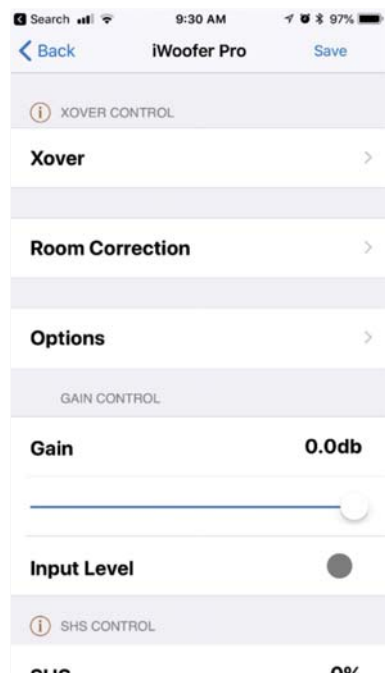
room reflection and not the woofer/box itself. The final reference, Linear, creates as flat as a response curve as possible throughout the frequency range.

After the desired option is selected, iWoofertm will then instruct you to place the mic in your typical listening position. Once the mic is placed, click “Next”. The iWoofertm Pro app will then proceed to sweep again. As before, we recommend performing at least 3 response sweeps. Click “No, Next” when you have concluded your response sweeps and iWoofertm will proceed to make the necessary adjustments to your subwoofer's response.



ROOM TUNING WITH iWoofer™

Main Menu Cont'd

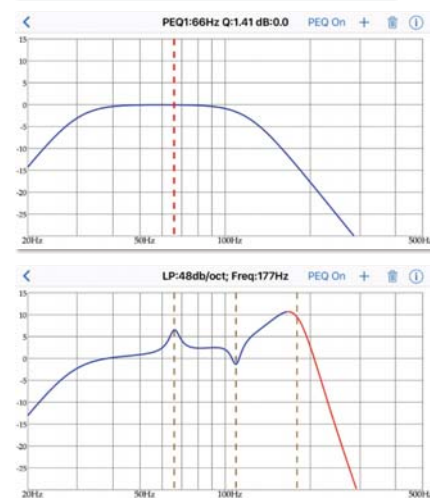
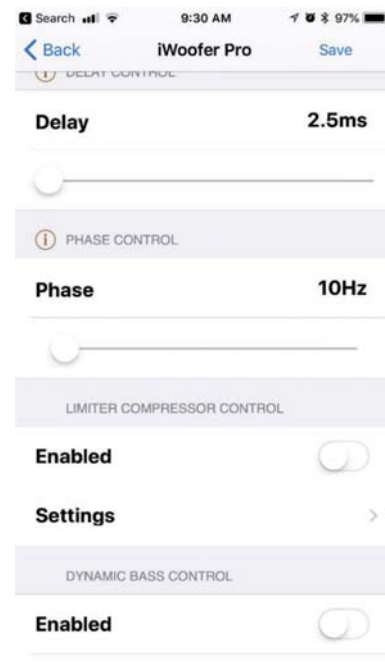


Xover Control

The XOver or Crossover control allows the user to control both the Low Pass and High Pass filters by double tapping the curve, or pressing and holding it for more than 1 second. The curve can then be slid left to right to control the frequency from 20Hz up to 500Hz. The curve can also be slid up and down to control the order of the filter up to an 8th order or 48 db/oct filter.

To add a fully Parametric Equalizer (PEQ), select the "+" icon. Up to 25 bands can be added, to remove a band select the trash icon. Double tap or press and hold a band for more than one

second to select it. Once selected, slide the band left or right to change the frequency and up and down to control the gain. You can also use two fingers in a zoom in or zoom out fashion to change the Q factor, or PEQ bandwidth.



AMPLIFIER PLATE OVERVIEW

(1) Low Level RCA Input

Use this input to deliver an audio signal from your A/V source to the MiniMe DSP 8 amplifier.

(2) Mono DSP RCA Output

Use this RCA output to deliver signal to an additional powered subwoofer or amplifier. When the DSP switch (5) is turned to the ON position, the MONO DSP will output a corrected signal.

(3) Low Pass Filter

A variable low pass filter from 40–160Hz is designed to control the subwoofer's cutoff frequency. Any Signals above the set crossover frequency will gradually roll off to prevent from interfering with your surround speakers.

(4) Phase Shift Switch

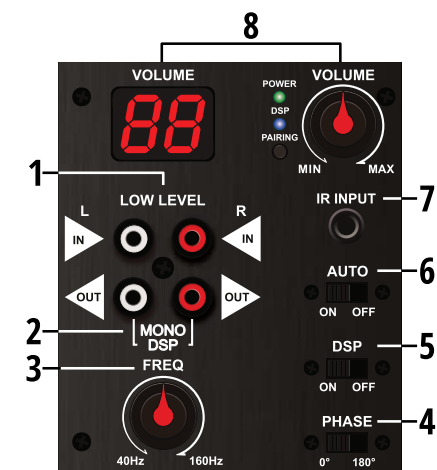
This 0–180° switch allows the user to synchronize the subwoofer to obtain a better and more precise bass response.

(5) DSP On/Off Switch

This switch is used to enable or disable the application controlled DSP. When set to the OFF position, the frequency adjustment knob (7) will be active allowing the user to make manual adjustments.

(6) Auto/On/Off Mode Switch

This is a 3-way switch. When ON, the amplifier will remain on regardless of signal presence. When set to AUTO, the amplifier will only turn on when audio signal is detected. Additionally, the amplifier will go to sleep/standby if it does not detect any signal after 15 minutes. When set to OFF, the amplifier will remain off regardless of signal presence. Note that the MAIN POWER switch must be in the ON position in order for this feature to work.



(7) IR Input

Used to control the amplifier using the included remote control. Simply plug the remote eye in the IR INPUT.

(8) Volume Control

This rotating knob along with digital display allows users to control the volume of the subwoofer. Always start at the lowest setting and slowly increase the volume until the desired subwoofer level is reached. The included IR remote with eye also allows you to control volume as well as mute functions for the MiniMe DSP 8 subwoofer.

AMPLIFIER PLATE OVERVIEW

(9) Power & Signal LED

This LED indicator reflects the main power status of the amplifier as well as the state of the MiniMe DSP 8 amplifier (whether the AUTO Sensing is on/off and whether signal is being fed to the amplifier). Note that this LED will only illuminate when the main power switch is set to the ON position.

(10) DSP LED

This LED indicator reflects the status of the on board DSP. When the DSP switch is set to the ON position the blue LED indicator will illuminate. Please note that while making any adjustments or saving presets in the iWoofers™ mobile app, you may see flickering from this LED indicator. This is considered normal as you are making on-the-fly adjustments to the amplifier.

(11) Pairing

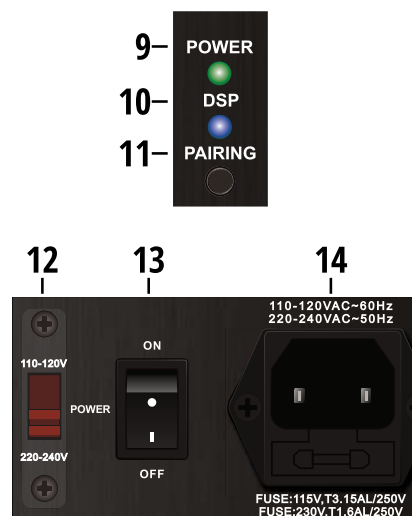
Use this button to pair a mobile device via Bluetooth and to also factory reset iWoofers™. To lock a password press/hold for 3 seconds.

(12) 110V/220V AV Selector

The MiniMe DSP 8 can operate in a 110-120V or 220-240V environment. Simply slide the selector switch to the required power setting and replace the fuse to the proper rating prior to connecting the subwoofer to any power source.

(13) Power Switch

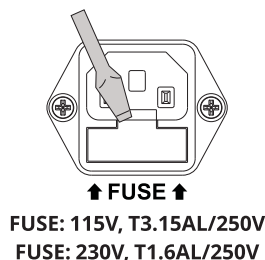
Used to turn the MiniMe DSP amplifier power on or off. Set this switch to the ON position in order to use the AUTO ON function as described in section (6).



(14) AC Power Input With Built-In Fuse

The AC line connector is fused to protect the subwoofer from unwanted power surges. Be sure to use the proper fuse rating when replacing the fuse. To access the fuse compartment, simply unplug the subwoofer from any power source and place a flat-head screw driver in the small notch and pry it open as illustrated below.

110-120V-60Hz:ø5x20mm, T3.15AL/250V
220-240V-50Hz:ø5x20mm, T1.6AL/250V



ROOM TUNING WITH iWoofers™

About iWoofers™

iWoofers™ is a mobile based application developed by ARTEM KHLIUPIN, that allows the user to control DSP settings from a mobile device. In addition to full DSP control, the iWoofers™ Pro app offers automatic room correction to achieve a more linear or boomy response from the woofer.

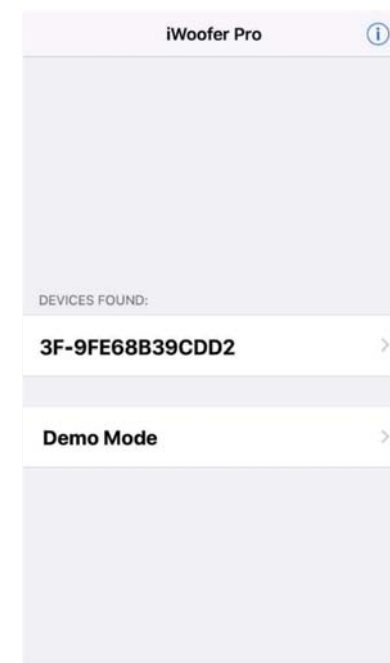
Getting Started

Launch the iWoofers™ or iWoofers™ Pro app on your mobile device. Ensure that the iWoofers™ supported subwoofer is powered on and that Bluetooth is enabled on your mobile device. There is no need to search for the Bluetooth signal, the iWoofers™ app will automatically find it. Once the application has been launched, a list of devices found will appear as shown in the image. The device name is generally a string of letters and numbers representing the unique MAC or UDID address of the woofer you are connecting to. Alternatively, the “Demo Mode” can be used to test the iWoofers™ features without connecting to a woofer.

After selecting your device, you will be prompted to import a DSP preset. If no previous presets have been saved on the woofer, select “Cancel” to continue connecting, otherwise select “OK”. Your mobile device will now connect with the woofer. Once connected, the device can be renamed from the “Options” menu.

Main Menu

Once connected, the iWoofers™ application will automatically take you into the main menu. The iWoofers™ menu features and options are listed.

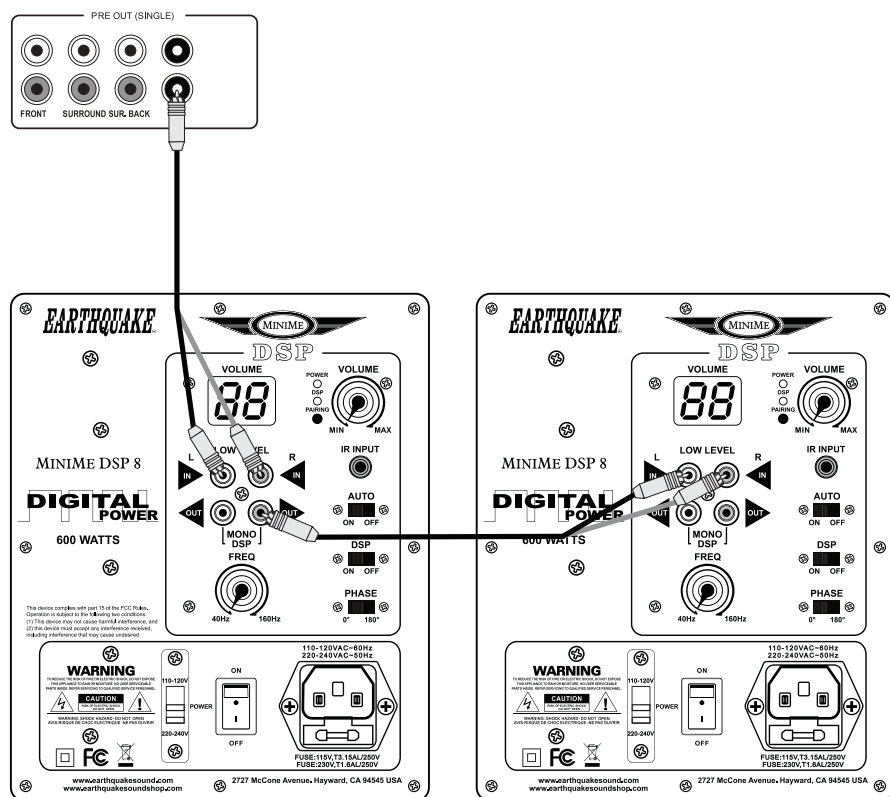


- XOver Control
- Gain Control
- SHS Control
- Delay Control
- Phase Control
- Limiter-Compressor Base Control
- Limiter-Compressor Detailed Control*
- Dynamic Bass Base Control
- Dynamic Bass Detailed Control*
- Remote Hardware Control
- Preset Manager
- Preset Import/Export Features
- Room Correction*
- SPL Meter*

*iWoofers™ Pro Features Only

Low Level Mono DSP Setup - Dual Subwoofers

The diagram below illustrates how to connect a MiniMe DSP 8 subwoofer to an additional subwoofer using the MONO DSP output. Note that in order for the second subwoofer to receive the room corrected signal you must have the DSP switch set to the ON position. A non DSP subwoofer can also be used in this setup.



PLACING YOUR SUBWOOFER(S)

You often hear the term “subwoofers” are non-directional.” This is not true. It is harder to choose subwoofer placement when low frequencies are crossed. The wider the room, the more directional the subwoofer. The easiest solution is to use two (2) subwoofers and feed a mono signal to both and place them in front, one on the left and another on the right.

While having two (2) subs is better than one, the MONO signal that drives those subs keeps them from projecting the three dimensional images in the subharmonics. Using two (2) subwoofers allows you to cross the subs up to 250Hz sound quality, imaging and staging. In some applications, you might have small front speakers or planar speakers. The two front-subwoofer system is an excellent solution to planar speakers' low frequency response early roll off from 150Hz on down. When placing these subwoofers in close proximity to the stereo satellite, the subs will enhance low frequency extension. It will be better to have a stereo subwoofer to help in the lower bass notes and their placement.

Suppose you have only one (1) subwoofer in the room and it is placed on the right side of the room. If a bass guitar player was standing on the left side of the stage and played a EE note (42Hz), then the sub will also respond to that from the right side of the room and completely destroy the stage.

You will see illustrations showing the two (2) different suggested setups. In each of them, note the breakaway and the image separation represented by the black and gray arrows.

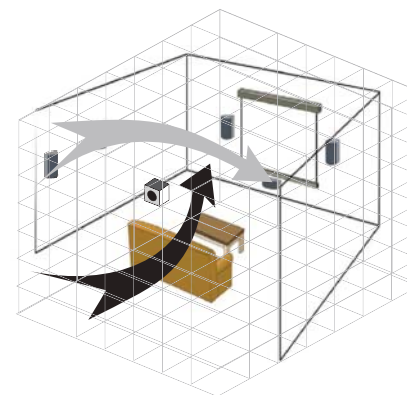
The black arrows represent the sub-harmonic frequencies

The gray arrows represent the lows, mids, and highs as they follow the action.

The best response is achieved when the subharmonic frequencies are dynamically synchronized with the rest of the audio system, the black and gray arrows are identical.

Single Subwoofer Setup

This is a GOOD setup. The subharmonic frequencies (black arrow) always move towards the sub in the single sub setup while the lows, mids, and highs (gray arrow) follow the action.

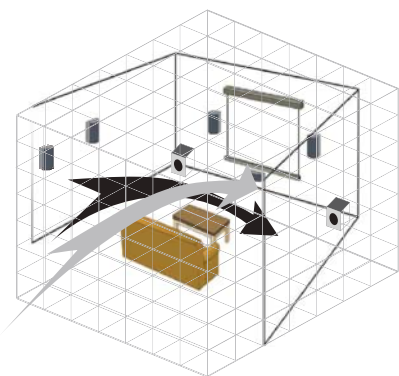


Placing the subwoofer in the corner of the room will produce a more boomy effect, often preferred for movies and sound tracks. For a music application, place the subwoofer as show above or against the front wall, about a third of the room width.

PLACING YOUR SUBWOOFER(S)

Dual Sub Setup With Mono Signal

This is a BETTER setup. In a dual subwoofer setup, the sub-harmonic frequencies (black arrow) always move towards the middle of the room while the lows, mids, and highs follow the action (gray arrow).



Notice the breakaway and image separation is less in this setup than the single subwoofer setup.

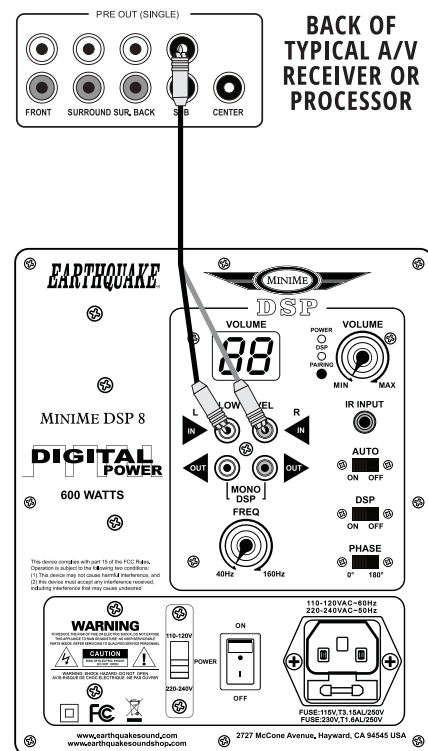
CONNECTING THE MINIME DSP

Low Level RCA Setup - Single Subwoofer

This is the best way to drive an audio signal to your MiniMe DSP 8 subwoofer. Today, all signal processors (5.1, 6.1, etc.) come equipped with built-in pre-amplifier outputs (RCA) that include a subwoofer output. Generally, the SUB PRE OUT is in a mono format. Connect the SUB PRE OUT from your audio/video processor to the MiniMe DSP 8 LOW LEVEL INPUT using a “Y” RCA cable.

We strongly recommend that you use the best available RCA connectors and cables. High quality cables are normally triple shielded and the connectors are gold plated with forceful grasping.

When using this connection, the MiniMe DSP 8 only receives bass signals from the source. Therefore, the crossover frequency should be set at max value.



CONNECTING THE MINIME DSP CONT'D

Low Level RCA Setup - Dual Subwoofers

For a more realistic sound stage and even greater theater experience, we suggest having two (2) subwoofers and running them in stereo.

Using a “Y” RCA cable, connect the SUB PRE OUT 1 of the receiver to the LOW LEVEL INPUT of the left side MiniMe DSP 8.

Using another “Y” RCA cable, connect the SUB PRE OUT 2 of the receiver to

the LOW LEVEL INPUT of the right side MiniMe DSP 8.

In case the subwoofers become out of phase with the main front speakers, flip the phase switches to correct the problem. Note that maximum bass is only achieved when the subwoofer is in phase with the rest of the speakers in your audio system.

