



((( **Powered Subwoofer** )))

MSUB-122BL / MSUB-A082

## **MSUB-122BL Powered Subwoofer**

Speaker Type :	12" High Performance Powered Subwoofer
Driver :	12" Reinforced
Amplifier Power Output :	150 Watts(RMS)
Frequency Response :	50Hz - 250 Hz
Lowpass Crossover :	Adjustable from 50Hz - 150 Hz
Functions :	Power (On, Off)
Inputs :	Hi Level (Speaker), Line (RCA)
Dimensions :	17" H x 17 1/4" W x 17 1/2" D



## **MSUB-A082 Powered Subwoofer**

Speaker Type:	8" High Performance Powered Subwoofer
Driver:	8" Reinforced
Amplifier Power Output:	60 Watts (RMS)
Frequency Response:	50Hz - 250 Hz
Lowpass Crossover:	Adjustable from 50Hz - 250 Hz
Functions:	Power (On, Off)
Inputs:	Hi Level (Speaker), Line (RCA)
Dimensions:	13 3/4" H x 11 3/4" W x 11 3/4" D



## Explanation of Features and Controls

See (Figure A)

- 1) Power Switch - This two position switch controls the power status of the subwoofer.  
Off-Turns the unit off  
On-Turns the unit on regardless of whether a signal is present or not.
- 2) Subwoofer Crossover - This rotary control adjusts a variable low pass filter to set the upper frequency at which the output of the subwoofer begins to roll-off. Continuously variable from 50 Hz, it matches the upper frequency characteristics of the subwoofer to the low frequency response of the main stereo speakers.
- 3) Line Level Input - These RCA phono jacks accept a line level full range signal from the pre-amplifier output of a receiver or pre-amplifier. This full range signal is processed and amplified to power the subwoofer.
- 4) Speaker Level Input - These spring loaded terminals accept a stereo, speaker-level, full range signal from a receiver or power amplifier. This signal is processed and amplified to power the subwoofer.
- 5) Fuse - For continued protection always replace the fuse with the same type and size listed.
- 6) Level Control - This rotary control adjusts the volume level of the subwoofer and is used to balance its volume with that of the main stereo speakers.
- 7) Status LED - This light emitting diode shows the status of the subwoofer electronics. "Red" indicates that the amplifier is plugged in and the power switch is on.
- 8) Auto ON Switch - In order to function the Power switch must be turn on, as indicated by the red color of the LED. With the Auto ON switch in the ON position the subwoofer is on at all times and ready to play program material. If the Auto ON Switch is in the Auto ON position and no audio signal is received, the subwoofer will go into Standby mode to conserve power. When an audio signal is sensed, the subwoofer will switch itself into the fully ON mode and begin playing the program material. After a period of about 2 minutes during which no signal is sensed, the subwoofer will return to Standby mode.

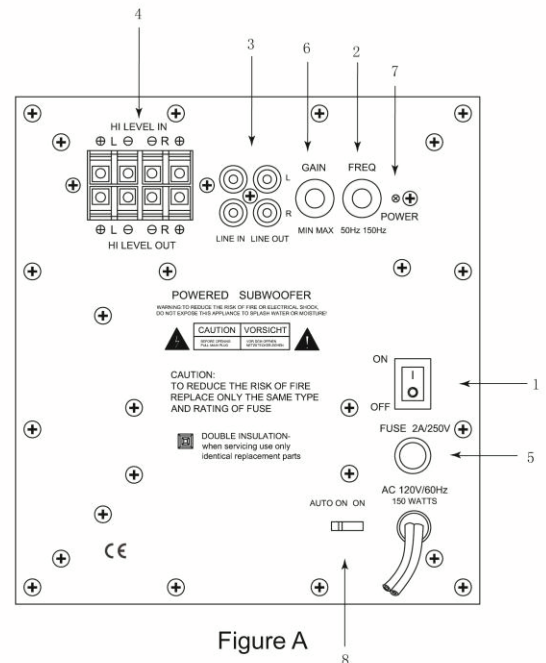


Figure A

## Placement or Positioning

Your new subwoofer will work well in a variety of locations. However, placement in your listening room will affect its performance.

Because of their longer wavelengths, low-frequency sounds tend to be omni-directional. This means that the location of the subwoofer in relation to the left and right channels will not affect the directional cues you receive from the mid-range and high-frequency sounds from the main speakers.

Because of the way that sound waves are reflected and propagate throughout a room, what you hear will be a combination of direct sound from the speaker and reflected sound off your walls, floor, ceiling, etc., sometimes in phase and sometimes out of phase. So, while placement will not affect left/right channel location cues, it will affect the volume and quality of the sound.

In general, placing the subwoofer in a corner will tend to increase its audible presence, but can produce a somewhat uneven sound level. Placing it next to a wall will slightly decrease the peak presence, but will smooth out the sound levels. Placing it in the middle of the room will produce the smoothest sound levels, but will also result in the lowest overall presence.

No matter where you choose to place the subwoofer, it will be a compromise between volume level and smooth response. You should experiment with various locations, listening to familiar audio material with substantial bass content, until you find the location that sounds best to your ears and fits in with your room's overall décor.

## Set-up and Adjustment

After you have selected an initial location for your subwoofer and have connected it into your system, turn on some audio material with substantial bass content. Sit in your normal listening position and make the following adjustments. Note that this will be much easier if you can have someone else make the adjustments for you as you listen to your sound system:

- 1) If you are using the line level inputs and your main speakers are receiving a full range signal, set the subwoofer crossover frequency control to its full counterclockwise position of 50 Hz.
- 2) Set the gain control fully counterclockwise to the "minimum" position.
- 3) Turn off the loudness control and set the bass tone control on your main amplifier to the flat position.
- 4) Use familiar program material that has substantial bass content and play your main system at a moderate volume level.
- 5) Slowly rotate the subwoofer level control clockwise until a good balance is achieved between the low frequency output of your subwoofer and the mid-range and upper frequencies from your main speakers.

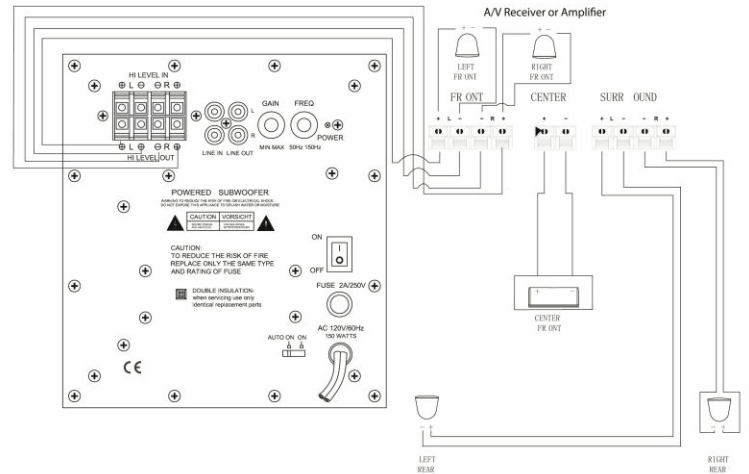


- 6) Slowly rotate the subwoofer crossover frequency control clockwise to attain the best blend between the level of the subwoofer and the main speakers in the mid-range crossover region. Advancing the control too far will cause a “boominess” in the overall sound and will add an unnatural “chesty” quality to male voices.

**Figure B**

## WIRING AND CONNECTIONS

Turn off all power to your subwoofer and other equipment before making any connections. Installation using speaker level inputs. **See (Figure B).**



**Figure C**

Installation with A/V amplifiers and receivers that have 5.1 channel line level output. **See (Figure C).**

Use and RCA “Y” adaptor to connect both line level inputs

