

# **SUB 550P**

300-Watt, 10" (250mm) Powered Subwoofer



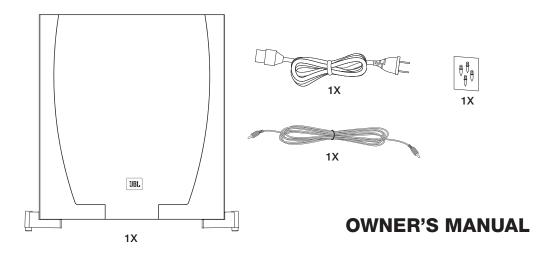
# THANK YOU FOR CHOOSING THIS JBL® PRODUCT

Your new JBL® SUB 550P 300-watt powered subwoofer incorporates a 10" (250mm) forward-firing cone transducer and a built-in high-performance 300-watt RMS amplifier that deliver the powerful, dynamic and accurate low-frequency performance that makes your film soundtracks and music come alive. And with line-level and LFE inputs, adjustable crossover and phase controls and automatic turn on/off, the SUB 550P is also simple to connect and set up.

We're confident that this JBL subwoofer will provide every note of enjoyment that you expect – and that when you think about purchasing additional audio equipment for your home, car or office, you will once again choose JBL products.

This owner's manual contains all the information you need to set up, connect and adjust your new subwoofer. For even more in-depth information, go to our Web site: www.jbl.com.

# **INCLUDED ITEMS**



# 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.
- 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-type plug has two blades and a third grounding prong. The wide blade or 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.
- 10. Protect the power cord from being walked on or pinched, particularly at the plugs, convenience receptacles and the point where they exit from the apparatus.
- 11. Only use attachments/accessories specified by the manufacturer.
- 12. Use only with the cart, stand, tripod, bracket or table specified by the manufacturer or sold with the apparatus. When a cart is used, use caution when moving the cart/ apparatus combination to avoid injury from tip-over.
- **13.** Unplug this apparatus during lightning storms or when unused for long periods of time.

- 14. 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 has become damaged, when liquid has been spilled or objects have fallen into the apparatus, when the apparatus has been exposed to rain or moisture, when the apparatus does not operate normally, or the apparatus has been dropped.
- **15.** Do not expose this apparatus to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the apparatus.
- **16.** To completely disconnect this apparatus from the AC mains, disconnect the power supply cord plug from the AC receptacle.
- 17. The mains plug of the power supply cord shall remain readily operable.
- **18.** Do not expose batteries to excessive heat such as sunshine, fire or the like.



The lightning f ash 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.



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 product.

**WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

**IMPORTANT:** The subwoofer requires proper ventilation and is not to be used in an enclosed environment.

### **USING THE SUPPLIED SPIKES**

Four metal spikes are supplied for use when you place the subwoofer on a carpeted surface. Using the spikes decouples the subwoofer from the foor and prevents unwanted acoustic damping.

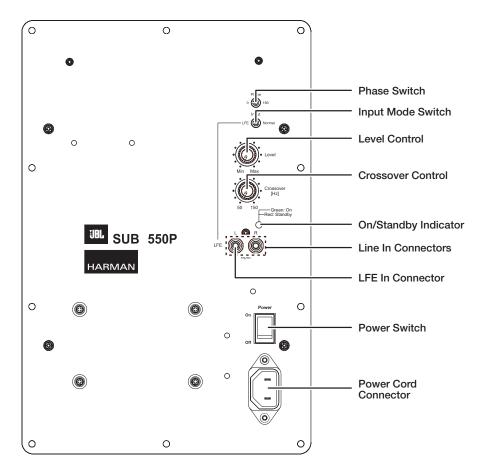
### TO INSERT THE SPIKES:

- 1. Gently turn the subwoofer upside down on a soft, nonabrasive surface.
- 2. Unscrew and remove the rubber bumpers from the subwoofer's feet.
- Screw each spike into the threaded insert in each foot. Make sure all four spikes are screwed in completely for stability.

**NOTE:** NEVER drag the subwoofer to move it, as this will damage the spikes, the feet and/or the subwoofer cabinet itself. Always lift the subwoofer and carry it to its new location.



# SUBWOOFER REAR-PANEL CONTROLS AND CONNECTIONS



**Phase switch:** This switch determines whether the subwoofer driver's piston-like action moves in and out in phase with the system's other speakers. If the subwoofer were to play out of phase with the other speakers, the sound waves from the other speakers could partially cancel out the sound waves from the subwoofer, reducing bass performance and sonic impact. This phenomenon depends in part on the placement of all the speakers relative to each other in the room.

**Input Mode switch:** When this switch is in the "Normal" setting, the input signal from the Line In connectors is active. When this switch is in the "LFE" setting, the input signal from the LFE In connector is active, and the subwoofer's internal crossover is bypassed.

**Level control:** Use this control to adjust the subwoofer's volume. Turn the knob clockwise to increase the volume; turn the knob counterclockwise to decrease the volume.

Crossover control: This control determines the highest frequency at which the subwoofer reproduces sounds. The higher you set the Crossover control, the higher in frequency the subwoofer will operate and the more its bass will "overlap" that of the system's other speakers. This adjustment helps achieve a smooth transition of bass frequencies between the subwoofer and the other speakers for a variety of different rooms and subwoofer locations. NOTE: The Crossover control functions only when the Input Mode switch is in the "Normal" position. When the switch is in the "LFE" position the subwoofer's built-in crossover and Crossover control are bypassed.

**On/Standby indicator:** This LED indicates whether the subwoofer is in the On or Standby state:

- When the LED glows green, the subwoofer is turned on.
- When the LED glows red, the subwoofer is in the Standby mode.
- When the LED is off, the subwoofer's Power switch is set to "Off."

**Line In connectors:** The signals from these connectors pass through the subwoofer's internal low-pass crossover. When you're connecting the subwoofer to the preamp or subwoofer outputs of a receiver/processor that does not have its own low-pass crossover network, use both Line In connectors. **IMPORTANT:** You must also set the Input Mode switch in the "Normal" position. If your receiver/processor has only one subwoofer output, you can use either the L or R connector.

**LFE In connector:** The signal from this connector bypasses the subwoofer's internal low-pass crossover. When you're connecting the subwoofer to the dedicated subwoofer output of a receiver/processor that has its own low-pass crossover network, use the LFE In connector. **IMPORTANT:** You must also set the subwoofer's Input Mode switch in the "LFE" position.

**Power switch:** Set this switch in the "On" position to put the subwoofer in the Standby mode (the On/Standby LED lights red); set this switch in the "Off" position to turn the subwoofer off.

**Power Cord connector:** After you have made and verified all subwoofer connections described in this manual, plug the power cord into an active, unswitched electrical outlet for proper operation of the subwoofer. DO NOT plug this cord into the accessory outlet found on some audio components.

# PLACING THE SUBWOOFER

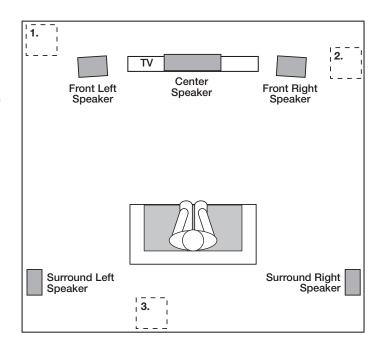
The performance of a subwoofer is directly related to its placement in the listening room and its physical position relative to the other speakers in the system.

While it is true that in general our ears do not hear directional sounds at the low frequencies where subwoofers operate, when installing a subwoofer within the limited confines of a room, the ref ections, standing waves and absorptions generated within the room will strongly inf uence the performance of any subwoofer system. As a result, the specific location of the subwoofer in the room does become important to the amount and quality of bass that is produced.

For example, placing the subwoofer next to a wall generally will increase the amount of bass in the room; placing it in a corner (1) generally will maximize the amount of bass in the room. However, corner placement can also increase the destructive effect of standing waves on bass performance. This effect can vary depending on the listening position – some listening positions may yield very good results while others may have far too much (or too little) bass at certain frequencies.

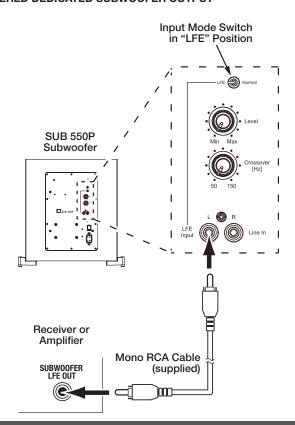
In many rooms, placing the subwoofer along the same plane as the left and right speakers (2) can produce the best integration between the sound of the subwoofer and that of the left and right speakers. In some rooms, the best performance could even result from placing the subwoofer behind the listening position (3).

We strongly recommend that you experiment with placement before choosing a final location for your subwoofer. One way you can determine the best location for the subwoofer is by temporarily placing it in the listening position and playing music with strong bass content. Move around to various locations in the room while the system is playing (putting your ears where the subwoofer would be placed), and listen until you find the location where the bass performance is best. Place the subwoofer in that location.

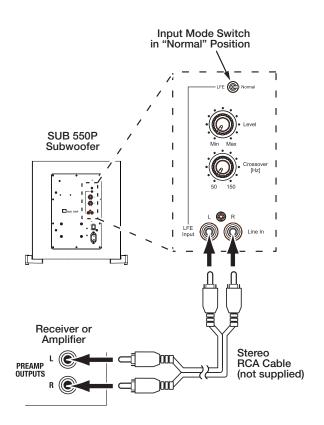


# **CONNECTING THE SUBWOOFER**

# TO A RECEIVER OR PREAMP/PROCESSOR WITH A LOW-PASS FILTERED DEDICATED SUBWOOFER OUTPUT



# TO A RECEIVER OR PREAMP/PROCESSOR WITH LINE OUTPUTS



# **OPERATING THE SUBWOOFER**

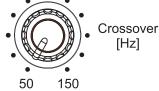
### **TURNING THE SUBWOOFER ON AND OFF**

Set the subwoofer's Power switch to the "On" position. The subwoofer will automatically turn itself on when it receives an audio signal, and it will go into Standby mode after it has received no audio signal for 20 minutes. The subwoofer's On/Standby LED will glow green when the subwoofer is on and will glow red when the subwoofer is in Standby.

If you will not be using the subwoofer for an extended period – for instance, if you're going on vacation – set the Power switch to the "Off" position.

### SUBWOOFER ADJUSTMENTS: CROSSOVER CONTROL

**NOTE:** The Crossover control functions only when you are using the Line In connectors and the Input Mode switch is set to "Normal." Setting the Input Mode switch to "LFE" bypasses the subwoofer's built-in crossover and the Crossover control.

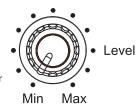


The Crossover control adjusts the subwoofer's built-in crossover between 50Hz and 150Hz. The higher you set the Crossover control, the higher in frequency the subwoofer will operate and the more its bass will "overlap" that of the satellite speakers. This adjustment helps achieve a smooth transition of bass frequencies between the subwoofer and the satellites for a variety of different rooms and subwoofer locations.

To set the Crossover control, listen for the smoothness of the bass. If the bass seems too strong at certain frequencies, try a lower Crossover control setting. If the bass seems too weak at certain frequencies, try a higher Crossover control setting.

### SUBWOOFER ADJUSTMENTS: VOLUME

Use the Level control to set the subwoofer's volume. Turn the knob clockwise to increase the subwoofer's volume; turn the knob counterclockwise to decrease the volume. Once you have balanced the subwoofer's volume with that of the other speakers in your system, you shouldn't have to change it.



Notes on Setting Subwoofer Volume:

- Sometimes the ideal subwoofer volume setting for music is too loud for films, while the ideal setting for films is too quiet for music. When setting the subwoofer volume, listen to both music and films with strong bass content and find a "middle ground" volume level that works for both.
- If your subwoofer always seems too loud or too quiet, you may want to place it in a different location. Placing the subwoofer in a corner will tend to increase its bass output, while placing it away from any walls or corners will tend to lessen its bass output.



#### SUBWOOFER ADJUSTMENTS: PHASE

The Phase switch determines whether the subwoofer driver's piston-like action moves in and out in phase with the system's other speakers. If the subwoofer were to play out of phase with the other speakers, the sound waves from the satellites could partially cancel out the waves from the subwoofer, reducing bass performance and sonic



impact. This phenomenon depends in part on the placement of all the speakers relative to each other in the room.

Although in most cases you should leave the Phase switch in the "0" position, there is no absolutely correct setting for the Phase switch. When the subwoofer is properly in phase with the rest of the system's speakers, the sound will be clearer and have maximum impact, and percussive sounds like drums, piano and plucked strings will sound more lifelike. The best way to set the Phase switch is to listen to music that you know well and to set the switch in the position that gives drums and other percussive sounds maximum impact.

# **SPECIFICATIONS**

Low-frequency transducer:	10" (250mm) PolyPlas™ cone, cast basket
Enclosure type:	Sealed (forward-firing)
Amplifier power:	300W RMS; 500W peak
Frequency response:	27Hz – 150Hz
Audio controls:	Volume level, crossover frequency, phase
Connections:	RCA line-level and LFE inputs
Power requirement:	120V, 60Hz (US); 220V – 230V, 50Hz/60Hz (EU)
Power consumption:	<6W (120V), <0.55W (230V) standby; 360W – 3.8A (120V) , 395W – 2.1A (230V) maximum
Dimensions (W x H x D):	17-1/2" x 14-29/32" x 14-31/32" (444mm x 379mm x 380mm)
Weight:	50 lb (23kg)

HARMAN

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