

MPS1000

MARINE POWERED
SUBWOOFER
OWNER'S MANUAL



JBL

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The Official Brand of Live Music.

MARINE

INSTALLATION

THANK YOU

for choosing the JBL® MPS1000. In order that we may better serve you should you require warranty service for your new subwoofer, please retain your original purchase receipt and register your new JBL marine subwoofer online at www.jbl.com.

WARNING

Playing loud music in a boat can hinder your ability to hear other boats, passengers and nearby swimmers and can permanently damage your hearing. We recommend listening at low or moderate levels while operating your boat. JBL accepts no liability for hearing loss, bodily injury or property damage resulting from the use or misuse of this product.

IMPORTANT

The MPS1000 has been designed to provide the kind of high-performance low-frequency reproduction that used to require big, clumsy enclosures, large amplifiers and complex installation. To ensure maximum performance, we strongly recommend that installation be entrusted to a qualified professional. Although these instructions explain how to install the MPS1000 in a general sense, they do not show the specific installation methods for your particular boat. If you feel you do not have the necessary tools or experience, do not attempt the installation yourself; rather, ask your authorized JBL car audio or marine audio dealer about professional installation options. Remember to keep this manual and your sales receipt in a safe place for future reference.

NOTE: This marine product is not intended for automotive applications.

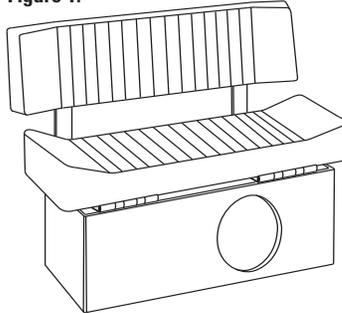
INSTALLATION WARNINGS AND TIPS

- Always wear protective eyewear when using tools.
- Turn off the audio system and other electrical devices before you start. Disconnect the (–) negative lead from your boat's battery.
- At the installation sites, locate and make a note of all fuel lines, hydraulic lines, vacuum lines and electrical wiring. Use extreme caution when cutting or drilling in and around these areas.
- Check clearances on both sides of a planned mounting surface before drilling any holes or installing any screws. Remember that the screws can extend behind the surface. Do not use screws long enough to penetrate the boat's hull.
- Before drilling or cutting holes, use a utility knife to remove unwanted fabric or vinyl to keep material from snagging in a drill bit.
- When routing cables, keep input-signal cables away from power cables and speaker wires.
- When making connections, make certain they are secure and properly insulated.
- If the amplifier's fuse must be replaced, use only the same type and rating as that of the original. Do not substitute another kind.

CHOOSING A MOUNTING LOCATION

Choose a mounting location that doesn't interfere with walkways, seats or the operation of steering, control or safety mechanisms. The MPS1000 must not interfere with the safe operation of the boat. The best location is usually a vertical wall that separates an under-seat storage compartment from the boat's interior space, as shown in Figure 1.

Figure 1.



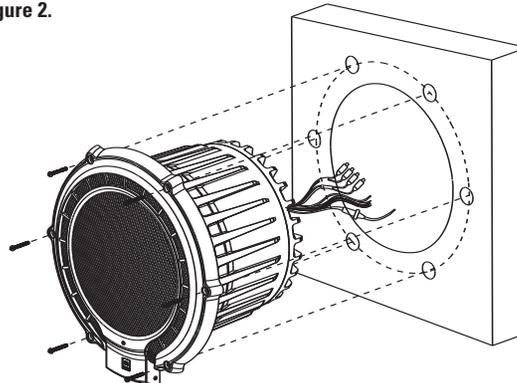
MOUNTING THE MPS1000

CAUTION: Make sure mounting screws will not puncture wiring harnesses, control cables, hydraulic or fuel lines, the fuel tank or the hull. Some or all of these may be located behind or under the mounting surface.

Cutting the Hole and Mounting the MPS1000

1. Check that there is enough clearance behind the mounting surface to accommodate the MPS1000.
2. Using the included mounting template, check for clearance of the mounting flange and overall shape of the MPS1000 in front of the mounting surface.
3. Mark the hole in the baffle for the MPS1000 and the holes for the mounting bolts.
4. Using a jigsaw or a rotary tool with a blade appropriate for the material you'll cut, cut along the line that marks the mounting hole.
5. Using a drill and bit, drill the holes for the mounting screws.
6. Insert the MPS1000 in the mounting hole, align the screw holes, insert the screws and then tighten them to hold the MPS1000 in place.

Figure 2.



CONNECTIONS

About Power and Ground Connections:

The red B+ wire and the black ground wire should be connected directly to the battery terminals in your boat. If your boat has a two-battery system, connect the red and black wires to the battery that provides power for your boat's accessories rather than the battery that provides power to start your boat's motor. JBL's MPS1000 is designed to shut off if it senses that your battery's voltage has fallen below 10 volts, in order to prevent your battery from becoming fully discharged while you're on the water.

Power Connection

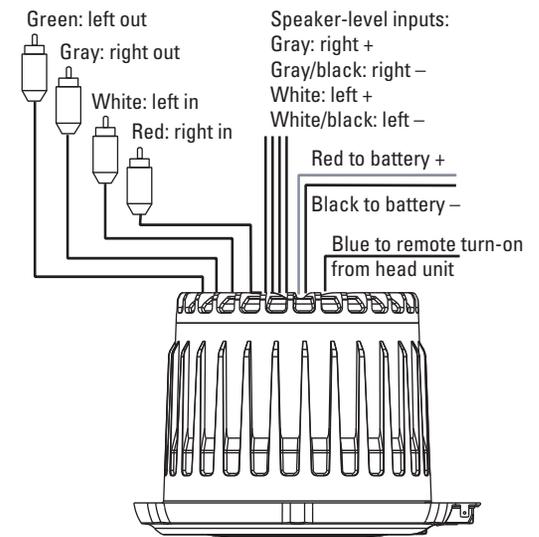
Connect power, ground and remote turn-on signal to the MPS1000, as shown in Figure 3. Also observe these installation tips:

- Use at least #12 AWG wire for the +BATT (+12 Vdc) and GND (ground) connections. Use at least a #20 AWG wire for the REM (remote) connection.
- When routing power, ground, remote and signal cables, ensure that wires are not able to become entangled with cargo, control cables, the boat's motor, passengers' feet or any other object that could become a safety hazard.
- Install a fuse holder with a 30A fuse within 18" of the battery + terminal (see Figure 5).
- The REM connection requires +5 to +12 Vdc signal for the MPS1000 to turn on. Most head units provide this remote voltage signal.

Connecting the Signal

The MPS1000 includes a 2-channel speaker-level input and a 2-channel line-level input. Either input connection type may be used. Follow the diagram below to connect signal to your MPS1000.

Figure 3.



CONTROLS AND FUNCTIONS

The MPS1000 has several controls and indicators that simplify sonic integration with the rest of the speakers on your boat. To gain access to the controls, you must remove the cover and the water-tight rubber plug underneath. To remove the cover, remove the two small Phillips-head screws and pull the cover away, according to the arrow in Figure 4. To reinstall the cover, follow the arrows in Figure 6 and replace the two screws.

Figure 4. Removing cover

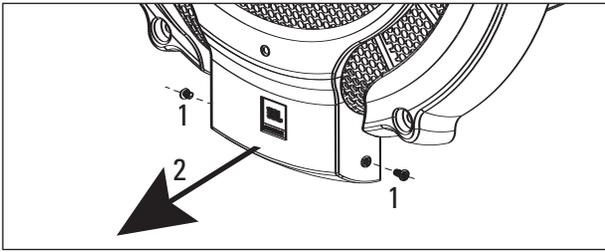
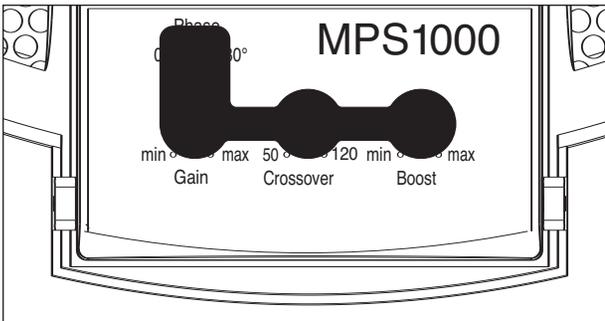


Figure 5. Rubber plug



NOTE: Be sure to replace the rubber plug after making adjustments.

Figure 6. Reinstalling cover

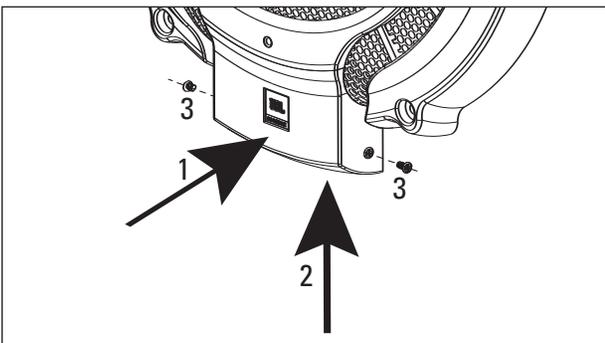
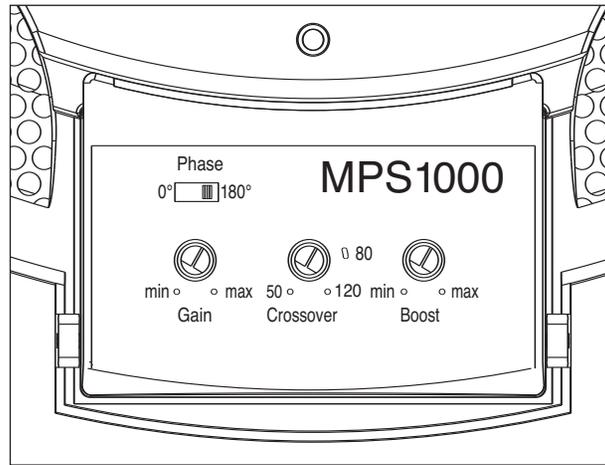


Figure 7. MPS1000 controls on the front panel



Power LED: This indicator will glow blue when the MPS1000 is operational.

Gain Control: Use this control to adjust the volume (loudness) of the MPS1000, compared to the loudness of the other speakers in your boat.

Crossover: Use this control to adjust the amount of high-frequency information in the MPS1000's output. A lower value means less high-frequency signal will be present in the MPS1000's output.

Bass Boost: Use this control to correct any perceived peak or dip in the bass response. This control provides boost or cut at 50Hz. Set the control to any value between 0dB and +7dB, according to your preference.

Phase Control: Use this switch to reverse the phase of the MPS1000's output, with respect to its input. Choose the position (0° or 180°) that sounds best. See "Tuning the MPS1000."

TUNING THE MPS1000

1. Make sure the head unit is off and its volume control is set to minimum.
2. On the MPS1000's front panel, set the Gain control to the midpoint position.
3. Set the Crossover control to its maximum position (clockwise).
4. Set the Bass Boost control to the minimum position (counterclockwise).
5. Set Phase to 0°
6. Turn on the head unit and play a favorite music track that has substantial bass. Set the head unit's volume control to 75% of the total output (approximately 3 o'clock on rotary controls).
7. Listen to your system, making a mental note of the amount of upper bass being reproduced.
8. Switch the Phase control to 180° and listen again for upper bass content. There may be more upper bass, less upper bass, or no change at all. The position that provides the most upper bass is correct.
9. Adjust the Crossover control clockwise or counterclockwise until you hear only low-frequency information in the output of the MPS1000. For example, you should NOT hear any vocals coming from the MPS1000 when seated in the normal listening position.
10. Adjust the Bass Boost control clockwise to suit your preference.

NOTE: In most cases, the steps above will provide satisfactory tuning. However, the actual process may require several readjustments of each control, since the settings will interact with each other. If necessary, consult your authorized JBL car or marine audio dealer for help in tuning your system.

NOTE: Depending on the MPS1000's orientation and location in your boat, reversing the phase may (or may not) increase or decrease the amount of upper bass being reproduced.

TROUBLESHOOTING

SYMPTOM	LIKELY CAUSE	SOLUTION
Power LED is not lit.	Fuse is blown.	Fuse should be replaced.
	Head unit is not functioning properly.	Check remote voltage, and power, ground or remote connections. The MPS1000 is designed to shut off if the battery voltage falls below 10V. This is to ensure that your battery isn't completely drained. Charge the boat's battery.
Power LED is lit but there is no bass.	Inputs are not connected.	Check connections.
	Head-unit fader control is not set properly.	Adjust head-unit fader control to feed audio signals to the MPS1000.
MPS1000 sounds muddy or distorted.	Gain control is set too high.	Readjust Gain control (see "Tuning the MPS1000" on the previous page).
	Bass Boost is set too high.	Readjust Bass Boost control (see "Tuning the MPS1000" on the previous page).
	Head-unit output is distorted or blown.	

A valid serial number is required for warranty coverage.

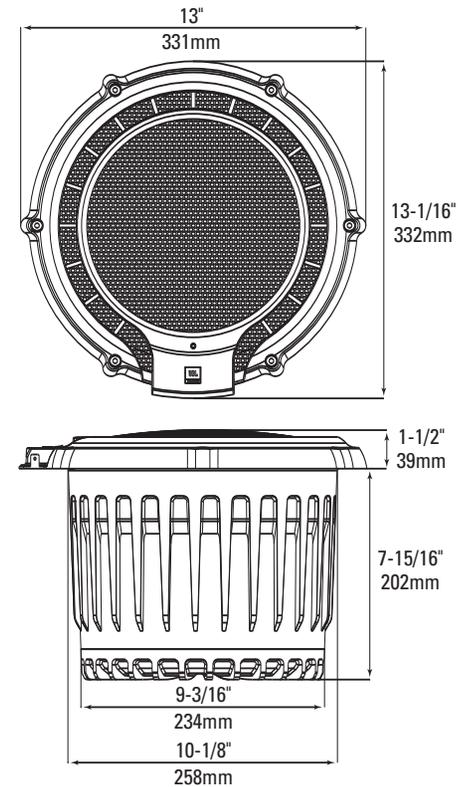
Features, specifications and appearance are subject to change without notice.

SPECIFICATIONS

MPS1000

10" (250mm) Marine Powered Subwoofer

- Amplifier Power: 250W RMS
- Frequency Response: 40Hz – 100Hz
- Signal-to-Noise Ratio: 81.1dB
- Fuse: 30A
- Max. Current Draw: 14A
- Idle Current Draw: <1.03A
- Input Sensitivity:
 - Line-Level Input: 100mV to 6V
 - Speaker-Level Input: 1V to 13V
- Crossover Frequency: 50Hz to 100Hz
- Crossover Slope: 12dB per octave
- Bass Boost: 0dB to +7dB @ 50Hz
- Mounting Depth: 7-15/16" (202mm)
- Cutout Diameter: 10-1/8" (258mm)
- Overall Diameter: 13"/13-1/16" (331mm/332mm)
- ISO-8846 Marine-compliant



Declaration of Conformity



We, Harman Consumer Group, Inc.
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72500 Château du Loir
France

declare in own responsibility that the product described in this manual is in compliance with technical standards:

EN 55013:2001
EN 55020:2002

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