

JBL

## G SERIES LOUDSPEAKERS

### OWNER'S MANUAL

40  
100  
200  
300  
400  
500

## INTRODUCTION

Congratulations on choosing JBL loudspeakers. Their highly accurate, uncolored and balanced sound character will greatly increase your enjoyment of recorded music. JBL speakers are built with careful attention to detail, using only the highest quality materials. They will provide many years of excellent performance.

## PLACEMENT

For the best stereo reproduction, the two loudspeaker systems should be placed an equal distance from your listening position and separated so that the angle between them, at the listening position, is between 40 and 60 degrees (see Fig. 1). For example, if your listening position is 8 to 12 feet (2.5 to 4 m) from each speaker, the two systems should be about 8 feet (2.5 m) apart. Placing the loudspeaker in a corner or against a wall will result in the strongest (but not necessarily the most accurate) bass. If possible, G models that are ported on the back should not be placed closer than 12 inches (305 mm) from the wall behind it.

For the best stereo imaging, we recommend that the systems be placed so that the high frequency transducers are positioned approximately at ear level of a seated listener. That's why smaller loudspeakers will benefit from placement on stands or bookshelves. Every room is different and there are different tastes. So don't hesitate to experiment on your own.

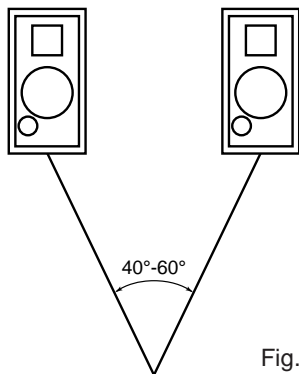


Fig. 1

Thanks to their high efficiency, JBL loudspeakers will produce reasonable volume levels in a room of moderate size with very little amplifier power. However, using a small amplifier to obtain the desired volume listening levels may lead to overdriving the unit. This will generate high distortion levels and may cause damage to your loudspeaker. For the best performance, an amplifier should be selected with an output rating that is greater than the maximum power that will be used. This margin of reserve power will ensure that the amplifier will not attempt to deliver more power than its design allows. However, the power amplifier's power rating per channel must not exceed the maximum recommended amplifier power for that specific loudspeaker model. Please see the specifications section for details. Following these two guidelines will provide virtually distortion-free sound reproduction and long loudspeaker life.

## CONNECTIONS

To connect your JBL loudspeaker systems to a receiver or an amplifier, use two-conductor insulated wire. Your JBL dealer can recommend suitable cables, or you can buy wire at most hardware stores. We recommend #16 AWG wire as a minimum size. If your speakers are more than 30 feet (10 m) from your receiver or amplifier, use larger diameter wire. Connections are made at the terminals located on the back of the loudspeaker system. The terminals accept bare wire or dual banana plugs, either of which will provide easy, secure connections.

### *Preparing the hookup wire*

1. First determine the distance between the most distant speaker.
2. Now make the hookup wires for both speakers this length, even if one loudspeaker is much closer to your amplifier than the other. This will help maintain proper signal balance.

3. Strip off 3/8" of insulation from both ends of each conductor.
4. Twist each set of thin wires into a tightly-bunched spiral.
5. At this point you need to identify a visual difference between the two conductors of each molded pair of speaker wire. Differentiating marks can be a different color wire (copper or "silver"); a strand of yarn in one conductor; thin, raised ribs on one part of the outer insulation; or a printed "+" marking on one of the insulators. It does not make a difference which of the two conductors of wire go to (+) and (-) on the speakers and amplifier, as long as both speakers are connected identically. Push down on the button below the terminal and insert the wire, or the banana plug, through the hole (see Fig. 2).

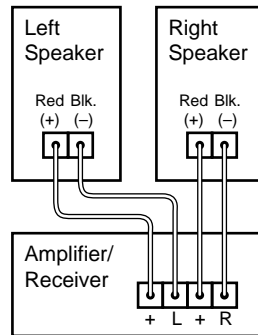


Fig. 2

For each channel, the red terminal on the loudspeaker should be connected to the red or (+) loudspeaker connection terminal on the receiver or amplifier, and the black to the black or (-). Connecting the loudspeakers in this manner ensures that they will be in phase; that is, work together rather than in opposition. Connecting the loudspeakers out of phase will not damage them, but will result in less bass and poor imaging.

## TROUBLESHOOTING

The vast majority of new speaker “malfunctions” end up being traced to connections or switch settings. Check the following tips first, before requesting service.

### ***No sound at all or very faint sound from both speakers***

1. Amp/receiver tape monitor button pushed in while using CD, FM or phono inputs.
2. Wrong speaker switch, “A” or “B” speaker output.
3. Sound source (CD, cassette deck, turntable) not turned on, not activated, not hooked up or not selected on amp/receiver front panel.

### ***No sound from one speaker***

1. Balance control turned all the way left or right.
2. Speaker wire has become disconnected.

### ***Both speakers play at low volume but shut off as volume is increased OR sound turns on and off intermittently***

A few strands of speaker wire may be shorting out. Recheck the connections. Recheck the impedance requirements of the amp.

### ***Bass is very weak AND/OR sound seems to come from each speaker separately, without creating a stable stereo image between the speakers.***

1. The polarity (+&-) of one speaker has been reversed relative to the other. Double check connections.
2. Speakers are too far away from back and side walls or too far apart. Experiment again with the speaker placement. If you are still experiencing problems, consult your JBL dealer.

## GENERAL CARE

The grille is held in place by pins near the edges (except G40, which has a non-removable grille). To remove the grille, grasp it by both top and bottom edges and pull gently. To replace grille, reposition it carefully and press gently at the corners. Do not push on the center area of the grille.

The loudspeaker cabinet may be cleaned with a slightly damp cloth. To remove dust from the grille cloth, use a vacuum with a brush attachment. Spots may be removed with a commercial spot remover. Do not use any cleaners or solvents on the speaker drivers themselves.

## SERVICE

Should your loudspeaker ever need service, return it to the JBL dealer from whom it was purchased. If for some reason this is impractical, call 800-336-4JBL for your nearest warranty station. Do not return products to the JBL factory without prior authorization.

Specifications	G40	G100	G200
High Frequency Transducer	2" fiber cone	14 mm	1"
Low Frequency Transducer	5"	5"	6-1/2"
Crossover Frequency	2.2 kHz	3 kHz	3 kHz
Frequency Response (-6 dB)	75 Hz - 20 kHz	70 Hz - 20 kHz	55 Hz - 20 kHz
Sensitivity (1 Watt/1 Meter)	86 dB	87 dB	88 dB
Nominal Impedance	8 Ohms	6 Ohms	6 Ohms
Power Handling Range	10 - 50 Watts	10 - 50 Watts	10 - 60 Watts
External Dimensions (H X W X D)	11 x 6-1/2 x 7-1/4" 280 x 165 x 184 mm	12-3/16 x 7-1/8 x 8-3/4" 310 x 181 x 222 mm	15 x 9-1/4 x 8-13/16" 381 x 235 x 224 mm
Weight (each)	7 lbs / 3.2 kg	8 lbs / 3.6 kg	12.1 lbs / 5.5 kg

<b>Specifications</b>	<b>G300</b>	<b>G400</b>	<b>G500</b>
High Frequency Transducer	1"	14 mm	1"
Midrange Transducer	5"	5"	5"
Low Frequency Transducer	8"	10"	(2) 8"
Crossover Frequency	600 Hz/3.5 kHz	800 Hz/4.5 kHz	600 Hz/3.5 kHz
Frequency Response (-6 dB)	50 Hz – 20 kHz	35 Hz – 20 kHz	42 Hz – 20 kHz
Sensitivity (1 Watt/1 meter)	89 dB	91 dB	89 dB
Nominal Impedance	8 Ohms	8 Ohms	6 Ohms
Power Handling Range	10 – 80 Watts	10 – 150 Watts	10 – 120 Watts
External Dimensions (H x W x D)	21-1/4 x 10-3/4 x 10-1/2" 540 x 272 x 267 mm	34-1/2 x 13 x 11-3/4" 876 x 330 x 298 mm	37-7/8 x 10-5/8 x 12-3/4" 960 x 270 x 323 mm
Weight (each)	20 lbs/9.1 kg	36 lbs/16.3 kg	36.3 lbs/16.5 kg

JBL continually strives to improve its products. New materials, production methods and design refinements are introduced into existing models without notice as a routine expression of our design philosophy. For this reason, JBL loudspeakers may differ in some respect from their published specifications and descriptions, but will always equal or exceed the original specifications unless otherwise stated.

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**H** A Harman International Company  
Part No. 75993 Rev B G40 Manual

Declaration of Conformity

We, JBL Europe A/S  
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DENMARK

declare in own responsibility, that  
the products described in this  
owner's manual are in compliance  
with technical standards:  
EN 50 081-1/1992  
EN 50 082-1/3.1995

Steen Michaelsen  
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Birkerød, DENMARK, 2/96