# C508GTi MkII C608GTi MkII

PROFESSIONAL-GRADE AUTOMOTIVE COMPONENT SPEAKER SYSTEM OWNER'S MANUAL



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## GENUINE JBL

## **INSTALLATION WARNINGS AND TIPS**

### ABOUT THESE INSTRUCTIONS

Installation of automotive stereo components can require extensive experience with a variety of mechanical and electrical procedures. Although these instructions explain how to install GTi component systems in a general sense, they do not show the exact installation methods for your particular vehicle. If you do not feel you have the experience, do not attempt the installation yourself – instead, ask your authorized JBL car audio dealer about professional installation options.

#### LOUD MUSIC AND HEARING

Playing loud music in an automobile can hinder your ability to hear traffic, as well as permanently damage your hearing. The maximum volume levels achievable with JBL speakers, combined with high power amplification, may exceed safe levels for extended listening. We recommend using low volume levels when driving. JBL accepts no liability for hearing loss, bodily injury or property damage as a result of use or misuse of this product.

## A NOTE ABOUT SYSTEM PERFORMANCE

For the best performance possible, the GTi components should be used with a two-channel amplifier with output power of at least 50W RMS per channel. The passive crossover contains impedancecompensating circuitry and has been computer-optimized for the flattest possible frequency response with the tweeter flush-mounted, on-axis with the listener. The combined responses of the speakers and passive crossover constitute a 4th-order Linkwitz-Reily acoustic alignment and cannot be duplicated with any electronic crossover currently available for car audio use. Consequently, bi-amping a GTi component system with an electronic crossover is not recommended

#### SPEAKER PLACEMENT

Figures 1–4 show possible speaker placements in the order of most desirable to least desirable. Kick-panel mounting will provide the best staging and imaging in most vehicles.



Figure 1. Mounting the woofer and tweeter in the kick panels



Figure 2. Mounting the woofer in the door and the tweeter in the kick panel



Figure 3. Mounting the woofer and tweeter in the doors



Figure 4. Mounting the woofer in the door and the tweeter in the dash

## INSTALLATION

## TWEETER INSTALLATION



Figure 5. Surface-mounting the tweeter: first push in (1), then turn (2)



Figure 6. Flush-mounting the tweeter: first push in (1), then turn (2)

## WOOFER INSTALLATION



Figure 7. Mounting the C508GTi or C608GTi woofer where there is no factory speaker location. To mount the C508GTi in factory locations, omit the grille and grille tray.



Figure 8. Mounting the C608GTi woofer in standard 5-1/4" holes (in many Japanese and American automobiles)



**Figure 9.** Mounting the C608GTi woofer in 165mm holes (in many European and American automobiles)

## ELECTRICAL CONNECTIONS AND CROSSOVER ADJUSTMENTS



Figure 10. Connecting the speakers and the amplifier to the crossover





Figure 11. Adjust the crossover using the jumpers provided

## SPECIFICATIONS

|                             | C508GTi MkII<br>5-1/4" (130mm)<br>Professional-grade<br>automotive component<br>speaker system | C608GTi MkII<br>6-1/2" (160mm)<br>Professional-grade<br>automotive component<br>speaker system | Tweeter       |
|-----------------------------|--|--|---------------|
| Power handling (peak)       | 500W   | 600W   | n/a           |
| Power handling (RMS)        | 125W   | 150W   | n/a           |
| Frequency response          | 58Hz – 21kHz   | 50Hz – 21kHz   | n/a           |
| Nominal impedance           | 4 ohms   | 4 ohms   | n/a           |
| Sensitivity (2.83V/1m)      | 88dB   | 89dB   | n/a           |
| Crossover                   | 4th-Order Linquitz-Riley Acoustic, 3500Hz, 24dB/octave   |  | n/a           |
| Cutout diameter             | 4-5/8" (118mm)   | 5-1/8" (131mm)   | 1-3/4" (45mm) |
| Mounting depth              | 2-3/8" (61mm)  | 2-11/16" (69mm)  | 1" (25.4mm)   |
| Thiele and Small Parameters |  |  |               |
| Revc                        | 3.00   | 3.50   | 3.14          |
| Levc                        | 0.16   | 0.25   | 0.01          |
| Sd                          | 0.0086   | 0.0117   | 0.0006        |
| BL                          | 6.00   | 6.69   | 2.22          |
| Vas                         | 3.34   | 7.90   | 0.0016        |
| Cms                         | 322.0  | 405.0  | 31            |
| Mms                         | 12.07  | 18.21  | 0.46          |
| Mmd                         | 11.61  | 17.48  | 0.452         |
| Fs                          | 80.7   | 58.61  | 1320          |
| Qms                         | 6.51   | 9.01   | 1.8           |
| Qes                         | 0.51   | 0.52   | 2.463         |
| Qts                         | 0.47   | 0.50   | 1.04          |
| Top-plate thickness         | 3/16" (5.08mm)   | 1/4" (6.35mm)  | n/a           |
| Voice-coil length           | 1/2" (12.7mm)  | 11/16" (16.51mm)   | n/a           |
| Voice-coil diameter         | 2" (50.8mm)  | 2" (50.8mm)  | 1" (25.4mm)   |
| x <sub>max</sub>            | 1/8" (3.44mm)  | 1/8" (3.44mm)  | n/a           |

## A valid serial number is required for warranty coverage.

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

This product is designed for mobile applications and is not intended for connection to the mains.

Harman Consumer Group, Inc.

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Part No. C508/C608GTiMkIIOM7/06



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| Declaration of Conformity  |
|--|
| CE   |
| We, Harman Consumer Group International<br>2, route de Tours<br>72500 Château du Loir<br>France                              |
| declare in own responsibility that the products described in this owner's manual are in compliance with technical standards: |
| EN 61000-6-3:2001  |

Klaus Lebherz Harman Consumer Group International Château du Loir, France 7/06