

50-2250

User Manual

Warranty Information

This device is warranted against manufactures defects for a period of one year from the date of purchase from the dealer. This warranty extends solely to the repair or replacement of this product and does not cover additional costs, including but not limited to installation or removal of the product or any incidental or consequential damages. Nor does it cover damage due to improper use, storage or application of this device.

Should a service issue arise within the one year period, please contact the dealer in which this device was purchased. It will be the sole decision of MCM Custom Audio to repair or replace any device found to be defective during this



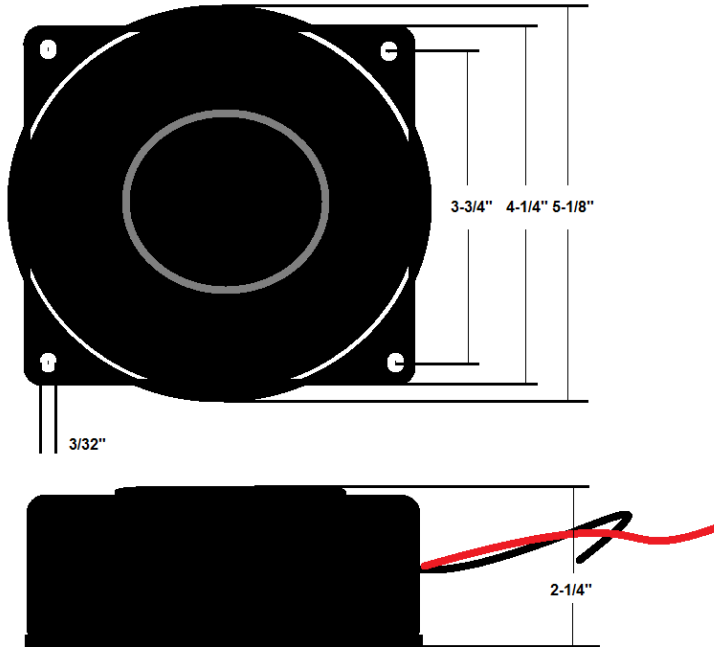
BT50

Bass Transducer

Introduction

The concept of the BT-50 is that the lowest frequencies are felt rather than heard. It moves a weighted mass at high speeds to produce low frequency vibrations. The most common usage for this device is in a home theater to add extra impact for explosions and action scenes in movies and television.

Technical Drawing



Specifications

- Driver Size: 3" weighted plate.
- Impedance: 4 Ohm
- Resonant Frequency: 45Hz
- Frequency Range: 28Hz ~ 55Hz
- Power Handling (RMS): 50 Watts

Wiring Instructions

It is highly recommended that these MCM Custom Audio Sound Transducers be driven with an independent amplifier. For best results, a low pass crossover should also be considered, with adjustable crossover point around 100Hz. These transducers each employ a 4 ohm voice coil, and appear in the same manner as a 4 ohm speaker to the connected amplifier.

Each transducer applies a 4ohm load to the amplifier, most consumer amplifiers are able to handle no lower than a 4 ohm load, and operate best between 4 ohm and 8 ohms. If multiple transducers are to be connected to a single amplifier, proper wiring must be utilized to prevent permanent damage to the amplifier. Figure 1 shows traditional "series" wiring, in which case the impedance of the two transducers is added, totaling 8ohms.

Figure 3 shows the same two transducers connected using a traditional "parallel" configuration. This yields a net impedance of 2 ohms, which may be too low for many amplifiers. In most cases, this is not recommended. This is however being shown to illustrate a method in which many transducers can be connected together and yield the same impedance as only one, see figure 4.

Figure 4 shows a combination series/parallel wiring configuration. Each vertical set of two transducers is connected in parallel, yielding 2 ohms per pair. The two pairs are then connected in series, yielding 4 ohms, which is fine for most amplifiers.

In the event the amplifier can handle no lower than an 8 ohm load, a single transducer cannot be used. Instead, two must be connected as shown in Figure 1. In this case, if four are desired, they must use the arrangement shown in Figure 3, yielding 16 ohms.

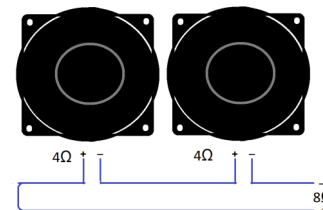


Figure 1

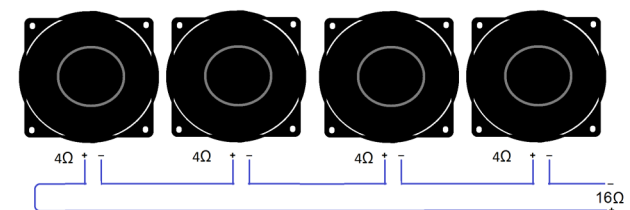


Figure 2

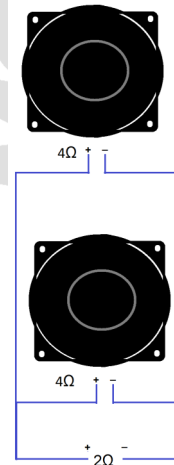


Figure 3

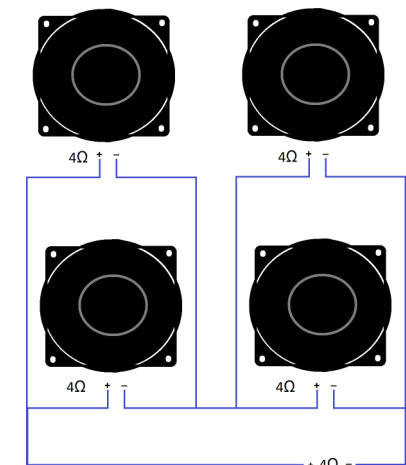


Figure 4