# OWNER'S MANUAL



Low Frequency Audio Transducer

Movies, Music and Games should be felt, not just heard.



**BK4-4** 

Thank you for purchasing the ButtKicker<sup>®</sup> Advance low frequency audio transducer!

This User's Guide is designed to help you install and use the ButtKicker<sup>®</sup> Advance in order to receive the most possible enjoyment.

If after following these instructions you are not COMPLETELY THRILLED with the ButtKicker<sup>®</sup> Advance, please contact us. Call, email or fax us. We will do everything possible to make sure you are completely satisfied.

### **Contact Information**

The Guitammer Company P.O. Box 82 Westerville, OH 43086 support@guitammer.com Phone: 1-888-676-2828 / 1-614-898-9370 Fax: 815-346-9532

Please visit our website <u>www.thebuttkicker.com</u> for additional technical information, specifications and FAQs.

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### **Product Description**

The ButtKicker<sup>®</sup> Advance is a patented low frequency audio transducer that utilizes a magnetically suspended piston. ButtKicker<sup>®</sup> transducers are musically accurate, have powerful low frequency response, and are virtually indestructible and maintenance free. With a natural working range of approximately 5 - 200 Hz, it is designed primarily to move structure, not air, and to provide a much more direct method of sound perception. Because it provides a more effective sense of feeling than that produced by a speaker system, the ButtKicker® Advance enables your subwoofer and speaker system to function in their more natural, audible working ranges. Many users wind up turning their sound system's volume (especially the subwoofer) down when using ButtKicker<sup>®</sup> products reducing the amount of sound that their significant others, family, friends and neighbors hear outside of the theater area. For this reason, ButtKicker<sup>®</sup> brand products are an ideal solution for connected housing, such as apartments.

### ButtKicker® Advance Specifications

Dimensions:	6.125" W x 4.875" L x 4.375" H
	155.6mm W x 123.8mm L x 111.1mm H
Frequency Response:	5 - 200 Hz
Weight:	4.5 lbs / 2 kgs
Nominal Impedance:	4 Ohm, inductive
Power Handling:	75 watt minimum /
	400 watt maximum

## **Quick Setup**

This section is for those who are more experienced with sound system installation. The ButtKicker® Advance is a passive, 4 Ohm speaker load, which requires power from an audio power amplifier which in turn requires an adequate signal feed from your sound system (Figure 1). Shaking forces are produced in the direction of the axis of the shaker as shown (Figure 2). A positive voltage at the red terminal wire will produce a "push" by the ButtKicker® Advance toward its feet (red terminal is positive). It can be mounted on the topside of a surface; inverted and mounted to the bottom side of a surface or, using the side mounting plate, mounted to the side of an object as long as the unit is facing up or down.

It may also help you to consider the ButtKicker® Advance as a "silent subwoofer" that enables you to "feel" the low end (bass) by vibrating the surface to which it is attached as opposed to moving air like a subwoofer. And, like a subwoofer, the ButtKicker® Advance also requires a separate amplifier to power it. While powered subwoofer's have their amplifiers in the speaker cabinet. the ButtKicker® Advance's amplifier is a separate component.





Figure 2. Piston Direction

### **Integration into Your Sound System**

#### Powering

The ButtKicker<sup>®</sup> Advance is a passive load and therefore requires its own dedicated audio power amplifier. See the Specification section on Page 1 for Power Handling details. The use of 14 gauge speaker cable between the amplifier and the ButtKicker<sup>®</sup> unit is recommended. For cable runs over 25 feet, 12 gauge speaker cable is recommended.

#### Low End Roll Off

When choosing a power amplifier other than the ButtKicker Power Amplifier BKA300-4, please be aware of the low frequency response of the amplifier. Many manufacturers' amplifiers roll off, or cut frequencies below 20 Hz, because anything below 20 Hz has been considered unusable and damaging for speaker systems. This roll off of low frequencies (also called "Low Cutoff" or Hi Pass" filters) is not best for ButtKicker<sup>®</sup> transducers because they respond to frequencies as low as 5 Hz.

#### Source Material

The ButtKicker<sup>®</sup> Advance responds to a broad range of bass frequencies, including those far below what we hear, or deep down into the feeling range of sound. Today's digital sound sources (DVD's, MP3's, etc.) are capable of carrying signals down to 5 Hz, but it is the producers who determine the content of a sound track, so the level and range of bass contained within any given sound track will vary. Even though a DVD may show the launch of a rocket, the audio track will contain only what the producers chose to include in the audio track. The ButtKicker<sup>®</sup> Advance responds accurately to the existing low frequency content, much as a subwoofer responds to the signal given it.

## **Source Connection to Amplifier**

### Surround Sound System

One signal source for the ButtKicker® Advance is the "Subwoofer" output of your surround receiver/processor. This output is controlled by the master volume control and usually a separate subwoofer control. If a subwoofer is also a part of the sound system and connected to this signal output, then a "Y" connector may be used to split the signal two ways.

### **Gaming Consoles / Stereo Systems**

The ButtKicker<sup>®</sup> Advance also works with two channel stereo systems and gaming consoles like Microsoft's XBOX<sup>®</sup>, Sony's PlayStation<sup>®</sup> 3 and Nintendo's GameCube<sup>™</sup>. In a two channel stereo system, the low frequency signals are very seldom only on the left or right channel, so a connection to either left or right channel preamp output would produce satisfying results.

### **Mounting Guidelines**

#### **Floating Wood Floors**

A suspended joist floor is an ideal mounting surface for the ButtKicker® Advance. Best results are obtained by installing two 2" x 6" boards between two floor joists. Place them near the center of the room, or near the seating area of the audience, avoiding any supports and bracing that would not allow the floor to move. Then mount the ButtKicker® Advance to the two 2" x 6" boards.

#### **Chairs, Couches and Other Types of Furniture**

The "Chair / Couch Mounting Accessory Kit" (sold separately) is the ideal companion for using the ButtKicker® Advance with all types of chairs, couches and furniture. Additionally, the ButtKicker® Advance unit may be attached directly to your furniture where and when possible. NOTE: For proper performance the rubber isolators must be used underneath each leg of the furniture. Rubber isolators are included with the Chair / Couch Mounting Accessory Kit or may be purchased separately.

#### **Platforms and Risers**

Many home theaters have more than one row of seats, with the second and third rows on risers. The ButtKicker® Advance can be mounted above or below the top surface of the riser. If above, consider people traffic and furniture placement. If mounted underneath, some simple framing can be done to avoid the extra room needed under the riser. As always, keep in mind any maintenance that may become necessary.

If you're building a riser, build it similar to a suspended wood joist floor to give the riser its greatest low frequency response. The major differences between a riser and real floors are the suspension points and tie points (other external structures). The riser should be free floating - not tied into any adjacent walls. The greatest flex of the riser will be along its long dimension, the riser's short dimension will offer much less low frequency flexibility. Therefore, when possible, avoid any support along the long dimension.

#### Mounting Guidelines, continued

#### **Rubber Isolators**

Rubber Isolators should be used under furniture or platforms where the ButtKicker<sup>®</sup> Advance is mounted to maximize its effectiveness. Position the rubber isolators under each leg of your furniture or along the corners or your riser to isolate the vibration within the furniture or riser. This will maximize the effectiveness of the ButtKicker<sup>®</sup> Advance. Additionally, use of the rubber isolators will help reduce any vibration from your furniture from being transmitted throughout the rest of your home or apartment.

More information on rubber isolator types and usage can be found in the support and FAQ sections of the ButtKicker<sup>®</sup> website: <u>www.thebuttkicker.com</u>.

### Vertical vs. Horizontal Mounting

As noted in the "Quick Setup" section, the ButtKicker<sup>®</sup> Advance was designed for optimal performance when mounted vertically (either "up" or "down"), but will function at any angle. Horizontal orientation will not damage the ButtKicker<sup>®</sup> Advance, however a vertical installation - either "up", "down" or mounted using the bottom or side plates - is strongly recommended for the best effect.

### **ButtKicker<sup>®</sup> Advance Dimensions**

All measurements are in inches and millimeters.





## **Thermal Protection**

If the ButtKicker<sup>®</sup> Advance is driven too hard (i.e. given too much power for too long of a period of time) it may overheat. For this reason, each ButtKicker<sup>®</sup> Advance has a built in thermal switch. This switch will automatically shut down the ButtKicker<sup>®</sup> Advance if its internal temperature reaches a preset limit. If tripped, the thermal switch will automatically reset after the unit has cooled sufficiently and then the ButtKicker<sup>®</sup> Advance will resume normal operation. Cooling off time can be 5 – 20 minutes, depending on ventilation. While in thermal protection mode, the ButtKicker<sup>®</sup> Advance may feel warm to the touch, but the cutoff point has been set to avoid damage or harm.



If you have questions or need technical support, please contact The Guitammer Company, not the store where you purchased the product.

**The Guitammer Company** 1-888-676-2828 / 1-614-898-9370 8:30 AM to 5:30 PM EST

Email us at: support@guitammer.com Visit us on the web at: www.thebuttkicker.com

#### Please Record the Serial Number on the side of your ButtKicker® Advance for easy reference.

Serial Number:

BK4-

## **Limited Warranty**

This Guitammer Company product is warranted against defects in materials and workmanship for a period of one (1) year from the date of purchase by the original end-user. Items returned for repair under warranty will be repaired or replaced at the sole discretion of The Guitammer Company without charge for materials or labor, providing such items are returned for inspection, transportation prepaid, to The Guitammer Company or an authorized service center. All repaired or replaced items will be returned freight collect. Warranties do not apply to products that have been subjected to abuse, accident, modifications, improper handling or installation, or repairs made by anyone other than The Guitammer Company or an authorized service center. The Guitammer Company shall be the final authority in the determination of all warranty service claims.



