

Do not permit the ball shaft to rest upon or push against the clamp assembly. There should be no contact between the ball shaft and the clamp assembly components during the tightening procedure. Be sure to support the weight of the speaker. Do not permit the speaker to "hang" from the clamp assembly while you're tightening the tension screw. Be sure the clamp assembly is oriented in the proper direction, as indicated on the template in step 1.2.

4.1 Check again that the clamp assembly is open enough to clear the ball. Get the 1/4" allen hex wrench. Have your assistant lift the speaker into position and "pop" the clamp assembly onto the ball.

While your assistant supports the weight of the speaker, insert the long end of the hex key.

(See Fig. 9)
Turn the hex tension screw clockwise to take up the slack in the clamp assembly, but do not tighten—the ball should be properly seated, and the speaker should still move easily).



Fig. 9

ADJUSTING THE POSITION OF THE SPEAKER AND TIGHTENING THE CLAMP ASSEMBLY

5.1-Have your assistant orient and hold the speaker in its final position.

Helpful Hints: Use a carpenter's level to position the speaker parallel with the walls, floor or ceiling. To precisely focus a speaker's sound at a selected point in the listening area, try using a flashlight in a darkened room. With some masking tape, attach the flashlight to the top of the speaker facing out, over the front of the speaker enclosure (put a soft cloth underneath it to avoid scratches). Use the light beam to precisely image and focus the sound.

Caution: As you tighten the tension screw the only pressure on the ball should be that of the clamp assembly compressing it. Support the weight of the speaker. Ensure that there is no pressure from the force of gravity pulling or pushing on the ball. Ensure that the clamp assembly is not creating a lever by resting on or pushing against the ball shaft.

5.2-Now, insert the short end of the hex wrench. Start tightening the hex tension screw.

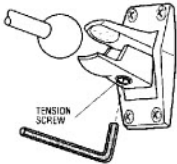


Fig. 10

How tight? To hold the speaker in position and prevent any slippage, the clamp assembly must get a good "bite" into the ball and form a solid joint. You need not be timid about the tightening procedure. Of course, it is possible to over-tighten and strip the threads on just about any screw—but it will take a lot to do so here. The OmniMount assembly is designed to withstand well in excess of the tightening force necessary for your speaker to hold position; yet the clamp assembly needs

to be tightened only enough to lock and hold the speaker firmly at the chosen angle of adjustment. When that point is reached, no further tightening is necessary.

If the speaker loses its position—do not attempt to move the speaker without first loosening the tension screw. Reposition, then re-tighten the tension screw further until the speaker is held firmly in place.

FINAL STAGES OF TIGHTENING THE BALL SHAFT TO THE WALL BRACKET

6.1-After you have chosen the final rotational position for the ball shaft, place the appropriate size wrench on the lock nut. With equal pressure push against the ball shaft in the opposite direction as you tighten the nut. This will minimize the stress on both the wall bracket fasteners and the wall.

NOTE: If you try to move the ball shaft without first loosening it where it joins the wall bracket, lateral forces will transmit to the wall bracket fasteners. The resulting stress, transferred to the mounting surface, could weaken the installation.

6.2-If you need to readjust the lateral position of the ball shaft, **always** loosen the shoulder nut first.

Remember: tighter does not mean better! Over-tightening fasteners can weaken the installation and damage your speaker.

Whenever you need to readjust the position of the speaker to move freely around the ball, re-adjust to the new position and then re-tighten. Always remember to support the speaker when repositioning and when tightening the clamp assembly.

6.3-IMPORTANT Since the ball will slowly compress under pressure, you should check the clamp after 15 minutes and tighten again if necessary. Then check once more in approximately one hour. Always support the weight of the speaker while positioning it and tightening the clamp.

6.4-Place the plastic cover on the wall bracket. Check that the small beads inside the cover interlock with the mating recesses on the top and bottom edges of the bracket. The bottom of the cover should seat flush with the bottom of the wall bracket.

Congratulations! Your installation is now complete!

Additional Reference...

1. U.B.C. (Uniform Building Code) 1994 Edition, Vol. 2, "Structural and Engineering Design Provisions."
2. United States Department of Agriculture, Agriculture Handbook #72, "Wood as an Engineering Material." Prepared by: Forest Products Laboratory, Forest Service, USDA
3. NDS Commentary on the National Design Specification® for Wood Construction (Commentary on the 1991 Edition), American Forest and Paper Association.

OmniMount products have been installed successfully worldwide for many years. To help ensure the safe and proper use of our products, we believe it is our responsibility to provide clear, detailed instructions with periodically updated precautionary information. Please Note: Every effort has been made to provide accurate and error-free assembly and installation information. OmniMount® Systems, Inc. disclaims liability for any difficulties arising from the interpretation of information contained in these instructions. OmniMount Systems, Inc. cannot reasonably assume responsibility or liability—direct, indirect or consequential—for the structural integrity or suitability of any speakers; nor the suitability for mounting or the structural integrity of the surfaces (walls, ceilings, decks, floors, etc.) to which such speakers are to be mounted. The same holds true for design or manufacturing defects in speakers themselves or design changes made by speaker manufacturers that may affect the safe and secure mounting of their speakers.

The General Ceiling Mounting Information and Installation Instructions provided herein are for use in the installation of loudspeakers. Although OmniMount products are often used to support many different kinds of objects, installed on a variety of mounting surfaces, such use and installation may be subject to different specifications requiring installation information in addition to what is provided in this pamphlet. In such cases, be sure to ascertain suitability and obtain the required additional installation information.

Notice to the Purchaser: The following is made in lieu of all warranties expressed or implied: the Manufacturer's only obligation shall be to replace parts of this product proved to be defective within two years of the date of purchase. We are aware that this mounting assembly may be used for purposes and in ways other than those for which it has been designed and manufactured. The Manufacturer, Distributor, Retailer, and their respective Agents cannot be held responsible or liable for injuries or property damage—direct, indirect or consequential—arising out of the use or inability to use this product safely and properly.



OmniMount Systems, Inc.
The Pointe at South Mountain
8201 South 48th Street
Phoenix, Arizona 85044-5355
Voice: (480) 829-8000
Fax: (480) 120.06-9000
1-800-MOUNT-IT (668-6848)
email: hdqrs@omnimount.com
Web: www.omnimount.com

Model 120.0 WB



Mounts from wall to bottom of speaker.

General Wall Mounting Information and Installation Instructions



Precautions-Read this section carefully

Whenever a speaker is affixed to a ceiling, you must take special care to mount it securely to prevent it from falling and causing damage or injury. For a safe and secure installation use good judgement and common sense throughout all phases of the installation.

Load

The OmniMount 120.0 WB will support speakers weighing up to 120 pounds (54.4 Kg). Be aware of basic physical laws that affect balance, stability and weight distribution. If your speaker is heavier than 120 pounds, we manufacture larger mounts with greater maximum weight ratings.

Mounting Surfaces

Carefully evaluate the composition, construction and strength of the surface you are mounting to. OmniMount 120.0 Series products are packaged with fasteners intended for use in mounting to interior walls of standard stud construction. The installation instructions provided here are limited to this type of wall construction.

OmniMount 120.0 Series products can be mounted to brick, cinder block, masonry and other types of wall construction. This type of construction does, however, require special anchors and fasteners for a secure and safe installation. There are standard construction practices and fastening products available for mounting to these types of structural surfaces. Seek professional help or contact OmniMount Systems technical support for more information.

The safety and security of your installation is most critically dependent on how securely the OmniMount 120.0 wall bracket is affixed to the stud.

When mounting things to stud walls here are some of the most common installation errors: Not locating the precise center of the stud—screwing fasteners into an edge rather than the center of the stud. This results in either splitting the wood or only partially engaging the screw shaft. (See Figs. 1 & 2)

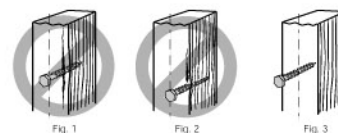


Fig. 1

Fig. 2

Fig. 3

To maximize pull-out strength, the screw shaft needs to be located in the center of the stud. (See Fig. 3)

Screw Related Installation Errors.

Drilling a pilot hole is necessary to prevent the wood from splitting. The pilot hole is also required to provide a straight pathway for the screw to travel as it penetrates the stud. A pilot hole should serve to simply **guide** the travel of the screw. (See Figs. 4 & 5)

Drilling "pilot" holes that are too large for the diameter of the screw shaft significantly reduces "pull-out" strength.

Screws have a major diameter and a minor diameter. (See Figs. 6 & 7)

The pilot hole should always be smaller than the minor diameter of the screw shaft.



Fig. 6



Fig. 7

Always use screws long enough to penetrate close to the entire depth of the stud. (See Figs. 8 & 9)

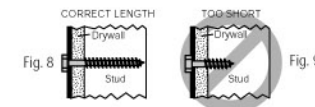


Fig. 8

Fig. 9

Locating the Center of a Stud

Do not rely on a measuring tape alone. Standard stud construction practice places wall studding on 12" or 16" centers. But in reality, studs are not always consistently on these centers. You find the greatest discrepancy in stud centers when you measure from the corner of a room, starting with the first stud. It may be helpful to locate several studs on the wall and measure their approximate centers.

There are a variety of electronic and magnetic stud finders available on the market. They can be a useful tool for finding the stud. But it is essential that you locate the exact center of the stud. How to do this is detailed in these installation instructions.

Metal Stud Wall Construction

Steel and sheet metal studs are often used for interior, non-bearing walls. This type of stud is most commonly found in buildings of relatively recent construction, or where there has been recent renovation. The gauge or thickness used for sheet metal stud wall construction varies widely. Sometimes the studs are formed from light gauge thin sheet metal; other times heavy gauge thick rectangular tubing sections are used. There are methods that will ensure safe and secure mounting to metal stud walls. Choosing the correct method depends on the gauge of the stud. The fasteners and anchors provided with your OmniMount assembly **may not** be suitable for this type of wall construction. Wall structure reinforcement may also be required. Consult with the appropriate building or engineering construction professional **before**

attempting installation. Contact OmniMount Systems if you need more information.

About The Speaker You Are Mounting To...

Some manufacturers provide "OmniMount prepped" threaded inserts on the back of their speakers. Such speakers have inserts that line up precisely with the hole centers in the OmniMount clamp plate.

Be sure to provide adequate reinforcement to the speaker if it is determined that such reinforcement is necessary.

When no threaded inserts for mounting purposes have been provided by the speaker manufacturer, a speaker can still be safely mounted on the wall. But you have to be sure that it is put together strongly enough with materials strong enough to support its own weight with the #14 coarse thread screws and anchors provided. Most compact speakers are made well enough and use adequate materials with adequate thickness for mounting with an OmniMount assembly. The #14 screws should not be used in masonite, thin panel wood, or plastic. Such materials will likely require different fastening hardware and methods—with the speaker probably needing reinforcement to be mounted safely.

If your evaluation raises any questions about the speaker's construction or material strength, contact your dealer or the speaker manufacturer and **ASK QUESTIONS!** More on this later...

More Precautions-Read this section carefully.

Fasteners

Attaching the clamp assembly and the wall bracket/ball shaft requires fasteners appropriately selected for strength and composition of the mounting surfaces involved. The type of fasteners and anchors OmniMount Systems has provided have been carefully selected. They are suitable for the majority of installation situations as discussed in these instructions. Occasionally, there will be an installation situation for which the fasteners provided are not suitable. If it is determined that different fasteners are required, they must always be 5/16 in. diameter for the mounting plate, 1/4 in. diameter for the clamp assembly. Fasteners must always be used in **all** available mounting holes. Never use smaller diameter fasteners (if you drill pilot holes, the holes should be **smaller** than the core diameter of the screws). Do not over-tighten fasteners. Over-tightening can weaken the mounting surface, damage the fasteners, and make the attachment **less** secure.

Caution: If you are not sure about the suitability of the fasteners provided for your installation, **ASK QUESTIONS!**

NOTE: A second person is necessary to hold the speaker in place during the tightening procedure.

Securing the clamp assembly to the speaker.

There are four things you need to know about your speaker before you begin:

- 1- Are any internal components (such as the crossover network) directly behind the location onto which you will be mounting the clamp assembly?
- 2- Is the material you are mounting into strong enough to safely support the load?
- 3- Is internal reinforcement needed?
- 4- Are the fasteners provided suitable for your installation?