

USHER

Owner's Manual

Congratulations! As the new owner of Usher speakers, you have at your command an extraordinary product. Please read this manual thoroughly for maximum safety, performance and pleasure.

Enjoy your new Usher speakers!

USHER

Contents

Safety Precautions and Unpacking	page 3
Quick Start	page 4
Single-wire Connection	page 5
Biwire or Biampify Connection	page 6
Speaker Break-In	page 7
Care & Maintenance	page 8
Obtaining Service	page 8
Sound Pressure Levels	page 9

USHER

Safety Precautions

1. Disconnect your amplifier from the AC mains before connecting or disconnecting speaker cables to reduce risk of electric shock or fire.
2. Do not expose speaker to rain or moisture. Do not place beverages or potted plants requiring water on top of your speakers.
3. Best placement is in a shaded area as long exposure to direct sunlight may damage the finish.
4. Do not locate any sensitive electronic devices such as televisions, magnetic data storage systems, computer equipment, etc., within one meter of each speaker.

Unpacking

Carefully unpack each speaker — don't touch the tweeters! — and remove all accessory items from the cartons. Keep all packing materials for future use. We discourage shipping speakers without their original packing material.

Inspect your new speakers, and if you discover any shipping damage, contact your Usher dealer right away.

We recommend carefully pivoting speakers into position rather than sliding them if your floor is prone to scratch.

We offer information, suggestions and tips for speaker placement in our Speaker Placement Guide and encourage you to read it through.

USHER

Quick Start

Follow these steps to connect your source components (preamp/controller, power amplifiers) to the speakers. (If necessary refer to the owners manuals included with your audio components to confirm their connection procedures.)

1. Begin by disconnecting your entire system from the AC mains before connecting or disconnecting any cables.
2. Connect source components (CD, DVD, LP, etc.) to your preamp/controller.
3. Turn down the volume on the preamp/controller to avoid thumps and bumps when powering up your amplifier.
4. Connect the preamp/controller to your power amplifier.
5. Connect the speakers to your power amplifier. Be sure to maintain consistent polarity. For each channel output, connect the left-channel (negative/black) output terminal of the amplifier to the (negative/black) input terminals of each speaker. Then connect the (positive/red) output terminal of the amplifier to the (positive/red) input terminal of each speaker.

CAUTION! Never short-circuit the amplifier's output terminals by touching bare speaker wires against each other! Turn off amplifier before changing cables.

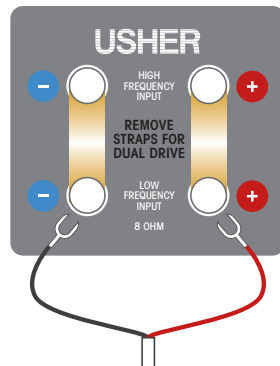
6. Be sure that all system connections are firm.
7. Turn on your system.
8. Slowly raise the volume on the preamp/controller. Enjoy your favorite music while reading the rest of this manual.

USHER

Single-wire Connections

Connect your new Usher speakers to your audio system in one of three ways: single-wire, biwire or biampified. Please follow these hookup instructions carefully.

1. Use high-quality speaker cable with high-quality connectors. Consult your USHER dealer for recommendations.
2. Turn off all audio system power before making or changing connections.
3. Verify correct polarities (i.e., + to + and - to -) when making connections. Incorrect polarity results in unfocused sound and softer, diminished bass.
4. Only a single-wire speaker cable is necessary for each speaker when using the supplied solid-brass jumpers.



◀ FIGURE 1: Regular Connection

NOTE: When biwiring or biampifying, you must remove the terminal jumpers on the crossover panel on the rear of each speaker. Jumpers are not required when using two pairs of speaker cables for biwiring or biampifying.

CAUTION! Failure to remove the terminal jumpers when biwiring or biamping may damage some amplifiers.

USHER

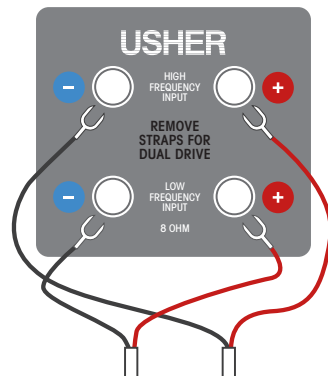
Biwire or Biampify Connections

Please follow these hookup instructions carefully. When biwiring or biamplifying:

1. **Biwire:** After removing the crossover jumpers, install two pairs of speaker cables connected to a single amplifier output terminal. Connect the +/red and -/black connectors of one pair of cables to the HIGH FREQUENCY INPUT terminals (top pair) and the + and – connectors of the other pair of cables to the LOW FREQUENCY INPUT terminals (lower pair). Take care to connect both +/red cables to the +/red amplifier terminals and both -/black wires to the -/black amplifier terminals.
2. **Biampifying:** Remove crossover jumpers and use separate amplifier channels to drive each set of high- and low-frequency drivers.

NOTE: When biwiring or biampifying, you must remove the terminal jumpers on the crossover panel on the rear of each speaker. Jumpers are not required when using two pairs of speaker cables for biwiring or biampifying.

CAUTION! Failure to remove the terminal jumpers when biwiring or biamping may damage some amplifiers.



◀ FIGURE 2: Biwiring

USHER Speaker Break-In

Driver suspensions are electro-mechanical devices that require several hundred hours of physical movement to reach proper compliance. The easiest and certainly most enjoyable way to break in your new Usher speakers is to simply play a variety of music, listening for changes as the drivers loosen up.

Easily perceived sonic improvements set in after about 60 hours of play, while the bass and treble will continue to sound more refined up to about 180 hours or so when the speakers are finally broken in.

USHER

Care & Maintenance

CAUTION! Disconnect your entire system from the AC mains before cleaning.

1. Remove dust from cabinet by wiping it with a clean, smooth cotton cloth. Be especially careful when dusting lacquered surfaces. Any cloth other than combed cotton will cause micro scratches in the finish.
2. Remove dirt and fingerprints by wiping the surface with a soft, smooth cotton cloth slightly dampened with mild soapy water. Wipe only in the direction of the grain. Non-abrasive acrylic polish may be used on lacquered surfaces.
3. Clean the grille with gentle vacuuming.
4. The woofer cone may be cleaned with a moist soft cloth. Never touch the tweeter!
5. Occasionally use furniture polish on wood panels to maintain the beauty of the hardwood veneers.

CAUTION! Never use benzene, thinner, alcohol or any other volatile cleaning agent. Window spray is not recommended. Do not use abrasive cleaners as they may damage the finish.

Obtaining Service

Please contact your dealer for service. Your dealer will decide how to solve your service needs. Never attempt to disassemble, remodel or repair this product. Any modification to the product voids the warranty. Any Usher product purchased from an unauthorized dealer will not carry manufacturer's warranty.

USHER

Sound Pressure Levels

What is the loudest music or noise we can listen to before it damages our ears?

The human ear is incredibly sensitive and can hear everything from near total silence to a gunshot. In terms of power, the sound of the gunshot is about 1,000,000,000,000 times more powerful than the smallest audible sound!

But both music and noise can cause hearing loss if it's loud enough and lasts long enough. The decibel (abbreviated dB) is the unit of measurement for intensity of sound. On the decibel scale, the smallest audible sound is 0dB. Decibels are measured logarithmically. Thus, 20dB is 10 times the intensity of 10dB, and 30dB is 100 times as intense as 10dB.

Here are some common sounds and their decibel ratings:

0 dB	The faintest sound the human ear can detect
30 dB	Quiet library, whisper
40 dB	Living room, refrigerator, bedroom (away from traffic)
50 dB	Normal conversation, quiet office
60 dB	Sewing machine, typewriter
70 dB	Vacuum cleaner, hair dryer
80 dB	Normal city traffic, bedside alarm clock
90 dB	Lawnmower, truck traffic, subway, motorcycle
100 dB	Garbage truck, chainsaw, pneumatic drill
120 dB	Loud rock concert, thunderbolt
140 dB	Gunshot, firecracker, jet engine
180 dB	Rocket launch

All these ratings were taken near the sound. Distance affects the intensity of sound — if you are far away, the power is greatly diminished.

USHER Sound Pressure Levels

Continual exposure to sound above 85dB will cause a gradual hearing loss, and louder sound will accelerate the damage. The permitted exposure time for unprotected ears decreases by ONE HALF for EACH 5dB INCREASE in average sound level.

For instance, exposure is limited to 8 hours at 90dB, 4 hours at 95dB, and 2 hours at 100dB. The highest permissible sound level exposure for the unprotected ear is 115dB for 15 minutes per day. Any exposure to 140dB sound causes pain and even brief exposure injures unprotected ears.

Hearing loss usually develops over a period of several years, painless and gradual without calling attention to itself. Take no chances, hearing loss is permanent.

Usher speakers are designed for very loud, wideband, dynamic and undistorted playback. Care should be taken to optimize volume level when enjoying music.