

## 5.4 Subwoofer Owner's Manual

C I T A T I O N

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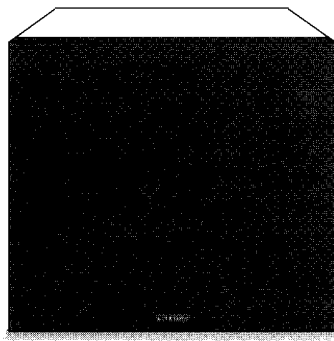
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# Introduction

Thank you for selecting the Citation 5.4 Subwoofer Speaker as part of your audio system. It has been carefully designed to deliver the best possible sonic performance for home theater and critical audio applications. In order to obtain the maximum enjoyment from your new speaker, please take a few minutes to read the information contained in this manual. This brief investment of time will yield major dividends by making certain that your amplifier is properly installed and optimized for the specifics of your system.

Welcome to the Citation family. We wish you many years of listening pleasure!



# Description

The Citation 5.4 is a high-quality, subwoofer loudspeaker, designed to be used in conjunction with either full-range or satellite speakers in a home theater or critical listening environment. The Citation 5.4 is Home THX® certified, and it is a perfect companion to other Home THX speakers in the Citation line.

The Citation 5.4 is designed for forward-firing installation. It uses a 12-inch driver with a cast frame basket, a 12-pound magnet motor assembly and a 3-inch voice coil. When combined with the carefully constructed, heavy-duty speaker cabinet, the Citation 5.4 forms a powerful system to deliver the thunderous lows of the latest action adventure movie, or the smooth bass notes of a classical organ concert.

The Citation 5.4 is a passive subwoofer, which means that it does not include any onboard crossover or amplifier. It is strongly suggested that this speaker be used with a Home THX surround processor such as the Citation 7.0 or a properly adjusted electronic crossover system. The use of high-quality amplifiers such as the Citation 5.1 will also enhance the performance of this subwoofer.

# Unpacking

The carton and shipping materials used in protecting your Citation 5.4 Subwoofer were specially designed to cushion it from the shocks and vibration of shipping. We suggest that you save the carton and packing materials for use in shipping if you move or in the event that the speaker ever needs repair.

To minimize the size of the carton while in storage, you may wish to flatten it. This may be done by carefully slitting the tape seams on the bottom and collapsing the carton down to a more two-dimensional appearance. Other cardboard packaging and protective materials may be stored in the same manner. Packing materials that cannot be collapsed should be saved along with the carton in a plastic bag.

# Speaker Placement

In order to assure optimal performance of the Citation 5.4, some planning and experimentation may be required to find the correct placement in your listening environment. Different room sizes, shapes, furnishings and wall treatments may cause a speaker location that works well in one room not to work in another. In general, subwoofers are non-directional, due to the ear's insensitivity to the directionality of low frequencies. This means that they may be placed in a number of locations within a room. Do not be afraid to move the subwoofer around the room somewhat if you find that the original placement does not produce the desired result.

In addition, the size, or cubic volume of a listening room may have a direct impact on the performance of a subwoofer. Depending on the size of a room, and the placement of the speaker, two or more subwoofers may be required to produce smoother bass response over a broader listening area.

A good starting point for locating subwoofers is to place them within three feet of the front channel speakers, such as the Citation 5.2. Put one next to the right speaker, and one next to the left. As an alternative, placing one or both of the subwoofers in a system in the corners of a room will increase the bass response.

If you are in doubt as to the proper location for speakers in a specific installation, please consult with your dealer or installer. They will be able to advise you.

# System Connections

**Note:** When making connections between your amplifiers and the Citation 5.4, be certain that both the input device and the amplifier are turned off. To assure that there will be no unwanted signal transients that can damage equipment or speakers, it is always best to unplug all equipment before making any connections. Modern electronic products often have a “standby” mode that may be activated even though the product may appear to be turned off.

As a general rule, avoid running any input signal or speaker wire connections in parallel with each other, or with AC power cords. This can result in undesired hum or other interference that will greatly degrade signal performance.

It is highly recommended that the length of cable connecting any set of speakers be identical. For example, if there are two subwoofers in your system, make certain that the cable length connecting each speaker to the amplifier is identical, even though one speaker may be physically closer to the amplifier than the other. If one speaker has excess wire in its lead to maintain equal length, make certain the extra cable is NOT coiled in a circle, as this may form an inductor that will negatively impact the performance of your speakers.

## Cables or Connecting Wire

To assure that the high quality signals produced by your Citation system are carried to your speakers without loss of clarity or resolution, we recommend the use of high-quality speaker cable. Many brands of cable are available, and the choice of cable may be influenced by the distance between your speakers and the amplifier, the type of speakers in use, personal preferences, and other factors. Your dealer or installer is a valuable resource to consult in selecting the proper cable for connections between your amplifier and speakers.

Regardless of the brand or type of cable selected, we recommend that you use cable constructed of fine, multi-strand copper with a gauge of 14 or larger. Remember, that when specifying cable, the lower the number, the thicker the cable.

Cable with a gauge of 16 may be used for short runs of less than ten feet. We do not recommend that you use any cables with an AWG equivalent of 18 or higher due to the power loss and degradation in performance that will occur.

One way to insure that cables will deliver a predictable level of performance is to use cables that are Home THX certified. This certification assures that the cables have met a rigorous set of specifications designed for home theater applications.

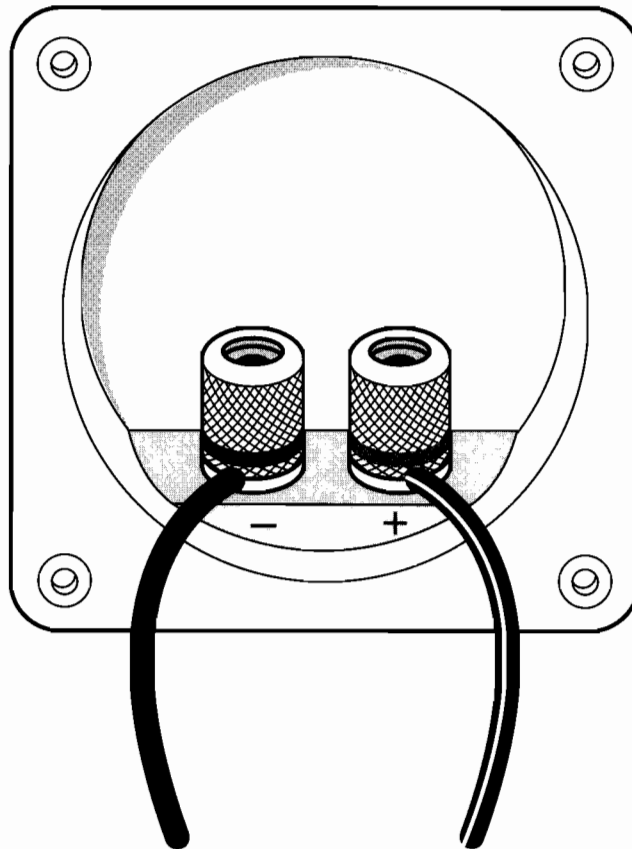
Cables that are run inside walls should have the appropriate markings to indicate listing with UL, CSA or other approved testing agency standards for that application. Questions about running cables inside walls should be referred to your installer or a licensed electrical contractor who is familiar with the NEC and/or the applicable local building codes in your area.

## Connections to Speakers

Connections to the speakers from the system's amplifier may be made using bare wire, banana plugs or spade lugs.

If bare wire is used for the connections, strip approximately 1/2 inch to 3/4 inch (20mm) of insulation from the end of each wire and carefully twist the strands of each conductor together. Be careful not to cut the individual strands or twist them off; for optimal performance, all strands must be used.

Before connecting the wires to the speaker, note that the binding post connections in the terminal cup have black and red colored rings on the gold-plated terminal screws. These are your keys to maintaining correct phasing with the amplifier and processor.



**Figure 1** *Terminal Cup*

Loosen the binding-post screws far enough so that the pass-through hole is revealed. Note that one conductor of the speaker cable will have no markings, and the other will have a red line, brand name markings, a black thread, or some other positive indication. Place the wire with no markings, or a “-” sign through the terminal with the black colored ring. This will be the “negative” conductor. Place the wire with the “+” sign or the thread or markings through the hole in the terminal with the red colored ring. This is the “positive” conductor. Twist the terminal screws back so that a positive connection is made, but do not overtighten or use tools, as this may break the delicate wire strands and decrease system performance. (Figure 1)

If you are using spade lugs, connect them to the wire using the manufacturer’s instructions. Loosen the caps on the binding posts and place lugs between the screw terminal and the back of the binding post, as if it were a horseshoe on the game’s post. Be sure to observe proper polarity, by placing the “-” or blank wire to the black post, and the “+” or marked conductor to the red post. Tighten with your fingers to obtain a positive contact.

Banana plugs may simply be inserted into the jack provided on the speaker terminal connection. Before inserting the plugs, make certain that the binding post’s screw cap is tightened down by turning it in a clockwise direction. This makes certain that the maximum contact area is available. Also, be certain that the plugs are firmly inserted so that a proper connection is made.

Finally, run the cables to the amplifier, and connect the cables using the instructions provided by the manufacturer. When making connections at the amplifier end, be certain to observe proper polarity, connecting the “black” wire to the negative terminal and the “red” wire to the positive terminal.

As previously noted, if more than one subwoofer is in use, make certain that the wire length from the amplifier to each speaker is identical, and that any excess wire is not coiled in a circle.

# Operation

Operation of the Citation 5.4 is simple, and there are no controls to adjust. Audio level controls are set and adjusted using the appropriate controls on your controller, processor, preamp or external electronic crossover.

# Service Information

If your installation has followed the suggestions in this manual you should enjoy many years of trouble-free operation and high-quality listening enjoyment. If you suspect that there is a problem that requires assistance, contact your dealer or installer. If they are not able to assist you, contact the Citation Center at 800-787-6766. The Citation 5.4 does not contain any user-serviceable parts.

It is important that any repairs be carried out only by an authorized Citation service agent to assure proper service and to preserve the protection of your Limited Warranty. It is a good idea to keep your sales slip or receipt in a safe place with this manual so that it will be available to verify the purchase date for warranty claims.

# Use & Care

The wood veneer finish of your Citation 5.4 Subwoofer may be cleaned with any furniture-grade polish. Do not use petroleum-based cleaners or abrasives. Any dust that accumulates on the grille cloth may be lightly brushed away by hand, taking care not to put too much pressure on the grille.



# Specifications

Frequency Response:	28 Hz - 100 Hz $\pm$ 3 dB
Driver Complement:	12" Woofer with Cast Frame Basket
Nominal Impedance:	8 Ohms
Sensitivity:	90 dB SPL/1 watt @ 1 meter
Power Handling Capability:	Over 200 watts
Dimensions (HxWxD):	19"H x 22"W x 17-1/2"D (not including feet) 483 x 559 x 445 mm (not including feet)
Weight:	70 lbs/31.8 kilos

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