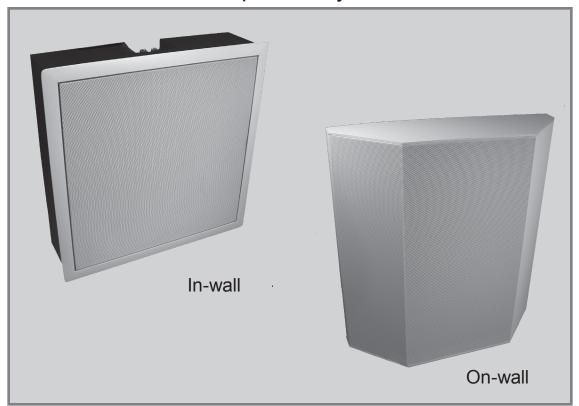


## Loudspeaker Systems



# HT30-IW/HT30-OW Installation Guide



WARNING - TO REDUCE RISK OF FIRE OR ELECTRICAL SHOCK, DO NOT EXPOSE THIS EQUIPMENT TO RAIN OR MOISTURE.

NO USER-SERVICEABLE PARTS INSIDE. REFER SERVICING TO QUALIFIED PERSONNEL.

# IMPORTANT SAFETY INSTRUCTIONS!

## PLEASE READ THEM BEFORE OPERATING THIS EQUIPMENT.

#### General:

- 1. Read these instructions.
- 2. Keep these instructions.
- 3. Heed all warnings.
- 4. Follow all instructions.
- 5. Warning: To reduce risk of fire or electrical shock, do not expose this equipment to rain or moisture. This unit is capable of producing high sound pressure levels. Continued exposure to high sound pressure levels can cause permanent hearing impairment or loss. User caution is advised and ear protection is recommended when playing at high volumes.
- 6. Only use attachments/accessories specified by the manufacturer.

#### **Installation:**

- 7. Install in accordance with the manufacturer's instructions.
- 8. When mounting the Wall Loudspeaker System to a building structure it is important to follow all of the local building/construction codes. Make sure the Wall structural members can support a total weight of five times the weight of the Wall Loudspeaker System.
- 9. Do not install near any heat sources such as radiators, heat registers, stoves, or other equipment (including amplifiers) that produce heat.
- 10. Do not use this equipment near water.
- 11. Do not expose this equipment to dripping or splashing and ensure that no objects filled with liquids, such as vases, are placed on the equipment.

#### **Care of Equipment:**

- 12. Clean only with a dry cloth.
- 13. Do not permit objects or liquids of any kind to be pushed, spilled and/or fall into the equipment through enclosure openings.

## **Repair of Equipment:**

- 14. Refer all servicing to qualified service personnel. Servicing is required when the equipment has been damaged in any way, liquid has been spilled or objects have fallen into the equipment, the equipment has been exposed to rain or moisture, does not operate normally, or has been dropped.
- 15. Do not attempt to service beyond that described in the operating instructions. All other service should be referred to qualified service personnel.
- 16. When replacement parts are required, be sure the service technician has used replacement parts specified by McIntosh or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock, or other hazards.
- 17. Upon completion of any service or repairs to this product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.

### Thank You

Your decision to own this McIntosh HT30 Loudspeaker System ranks you at the very top among discriminating music listeners. You now have "The Best." The McIntosh dedication to "Quality," is assurance that you will receive many years of musical enjoyment from this unit. Please take a short time to read the information in this manual. We want you to be as familiar as possible with all the features and functions of your new McIntosh.

## **Please Take A Moment**

The serial number, purchase date and McIntosh Dealer name are important to you for possible insurance claim or future service. The spaces below have been provided for you to record that information:

Serial Number:	
Purchase Date:	
Dealer Name: _	

### **Technical Assistance**

If at any time you have questions about your McIntosh product, contact your McIntosh Dealer who is familiar with your McIntosh equipment and any other brands that may be part of your system. If you or your Dealer wish additional help concerning a suspected problem, you can receive technical assistance for all McIntosh products at:

McIntosh Laboratory, Inc. 2 Chambers Street Binghamton, New York 13903

Phone: 607-723-3512 Fax: 607-724-0549

#### **Customer Service**

If it is determined that your McIntosh product is in need of repair, you can return it to your Dealer. You can also return it to the McIntosh Laboratory Service Department. For assistance on factory repair return procedure, contact the McIntosh Service Department at:

McIntosh Laboratory, Inc. 2 Chambers Street Binghamton, New York 13903 Phone: 607-723-3515

Fax: 607-723-1917

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## **Important Information**

- 1. For additional connection information, refer to the owner's manual(s) for any component(s) connected to the HT30 Loudspeaker System.
- 2. The HT30's built-in speaker protection incorporates an automatic resetting solid-state device in the cross-over network. If there is a reduction in output volume the Protection Device may have activated. This device will automatically reset when the volume level of the amplifier is reduced significantly and kept low until the output of the Loudspeaker returns to normal.
- 3. When discarding the unit, comply with local rules or regulations. Batteries should never be thrown away or incinerated but disposed of in accordance with the local regulations concerning battery disposal.
- 4. For additional information on the HT30 and other McIntosh Products please visit the McIntosh Web Site at www.mcintoshlabs.com.

### **Performance Features**

## • High Performance Drivers

Each HT30 enclosure contains one 5-5/8 inch Low Frequency Driver and two 2-3/4 inch Midrange/Tweeter Drivers arranged in an Antiphase Dipole, Mirror Image configuration.

## • Special Crossover

At frequencies below 1000Hz the Low Frequency Driver operates in-phase; above 1000Hz the Midrange/Tweeters operate out-of-phase thus providing the desired diffused surround effect. The Low Frequency Driver crosses over at a 12dB per octave rate and the Midrange/Tweeter Drivers cross over at a 12dB per octave rate.

## • High Efficiency

The Loudspeaker Elements used in the HT30 Loudspeaker System have also been designed for high efficiency. As a result any McIntosh Power Amplifier, even our smallest, will provide satisfying room filling sound, yet they can be used with amplifiers up to 200 watts.

## • Minimum Visual Impact

The HT30s offer a unique solution to the problem of integrating superb surround sound into a room without drawing attention to the Loudspeakers. The removable metal grilles can be custom painted or wallpapered to perfectly match your decor.

## • High Power Handling

The Loudspeaker Elements and Crossover Components of the HT30 are all chosen for use with amplifiers up to 200 watts. The automatic resetting solid-state device protects the Loudspeaker from possible damage.

## • Sealed Enclosure

A sealed solidly braced enclosure is used for superior sound and freedom from bleeding into adjacent rooms.

#### Gold Plated Input Connectors

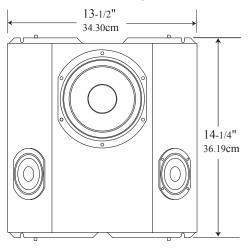
The HT30 input connectors are gold plated for superior corrosion resistance and high electrical conductivity.



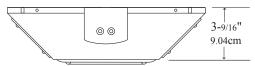
## **Dimensions**

The following dimensions can assist in determining the best location for the HT30 Loudspeaker System.

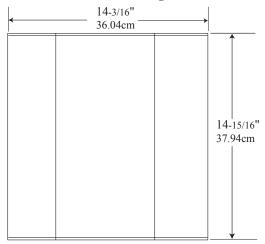
## HT30-OW On Wall Loudspeaker Front View without grille



HT30-OW On Wall Loudspeaker Top View without grille



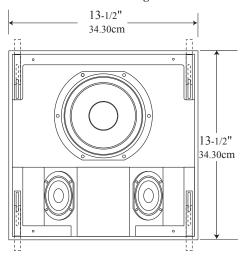
## HT30-OW On Wall Loudspeaker Front View with grille



## HT30-OW On Wall Loudspeaker Top View with grille



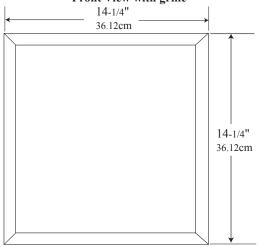
## HT30-IW In Wall Loudspeaker Front View without grille



HT30-IW In Wall Loudspeaker Top View without grille



## HT30-IW In Wall Loudspeaker Front View with grille



## HT30-IW In Wall Loudspeaker Top View with grille



## Installing the Loudspeaker

#### Location in the Room

The McIntosh HT30 Loudspeaker is specifically optimized for Surround Sound Applications. The Loudspeakers are intentionally designed to create a very diffused sound field. The HT30 uses a dipolar radiation pattern to achieve this performance. A dipole Loudspeaker radiates sound both forward and backward, with an acoustic null located at the horizontal center of the enclosure. If a dipole Loudspeaker is placed such that the listeners are seated within the null, they will hear surround sound only after it has been randomly reflected off the walls of the room. The listener will perceive no specific direction for Surround Sound. Refer to figure 1.

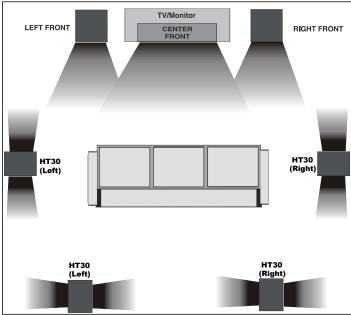


Figure 1

The HT30 achieves this dipolar radiation via independent forward and rearward firing Loudspeaker Drivers connected in antiphase to assure a cancellation null at right angles. Complete mirror symmetry of forward and rearward firing faces of the HT30 assure a deep broadband null of all directional frequencies for any position on the dividing plane of the system. This includes upward and downward elevation angles and allows the HT30 to be mounted in a variety of heights on the side wall (or even on the ceiling), as long as the listener is on the dividing plane between left and right halves of the HT30.

#### Varying the Sound Field

Some listeners will want a less diffused and more directional effect from their surround Loudspeakers. To them, sound panning off screen, such as jets flying overhead, are more important than the creation of a diffused sound field.

This is perfectly acceptable and can be achieved by mounting the HT30 Loudspeakers so that the listener is not in the null of the system but 30 degrees forward or backward of the null. The selected volume level of the surround speakers will also play a major role in determining whether the surround effects are obvious or subtle.

In very large installations, more than one pair of HT30 Loudspeakers can be used. This would apply in home installations with two, three or more rows of theater style seating. For such installations install a pair of HT30 systems in the normal way adjacent to the first seating row. For every third or fourth row behind, install an additional pair. Refer to figure 2.

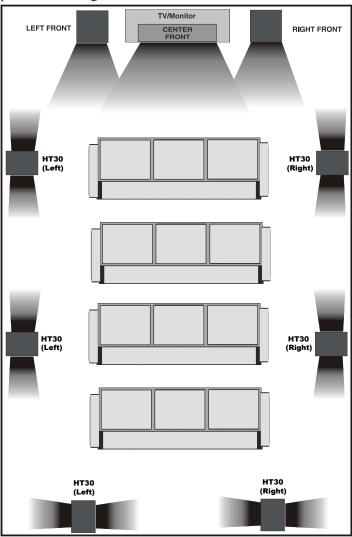


Figure 2



## Installing the Loudspeaker, con't

## Installation

The HT30 Loudspeaker System may be installed by one person, however two people will add to the safe handling during installation. Follow the instructions below for unpacking and assembly. It is recommended that the Professionals at your McIntosh Dealer, who are skilled in all aspects of installation and operation, install the HT30 Loudspeaker System and any associated audio equipment. The HT30 Loudspeaker System is a mirror-image, dipole design with the system connected out of phase with each other and identified as HT30 Left and HT30 Right Louspeakers. The pair facing forward toward the viewing screen must be in phase with the front Loudspeakers. Refer to page 5 for additional information as to which HT30 (Left Loudspeaker or Right Loudspeaker) to use at a given location in the room. Also refer to page 7 for connection information.

## HT30-OW On Wall Mount

- 1. Remove the front grille from the HT30-OW by gently pulling it forward. Refer to figure 3.
- 2. Position the HT30-OW on the wall where you wish to

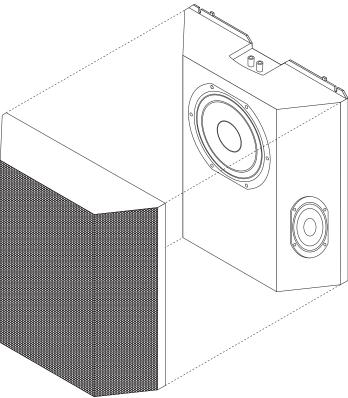


Figure 3

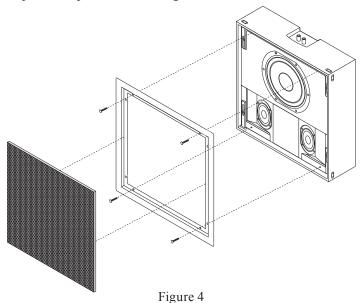
mount it. Using the supplied template, mark on the wall the locations for the four mounting screws.

- 3. Install using four suitable wall mounting fasteners and insert the screws partially so they extend out far enough to clear the thickness of the HT30-OW back panel.
  - Note: Each fastener must have a total of 20 pounds or more of load capacity.
- 4. Position the HT30-OW over the screws and slide it down so the screws fit in the mounting slots. Tighten the screws.
- 5. Replace the HT30-OW grille.

Note: If the HT30-OW is ceiling mounted, additional fasteners may be required to secure the grille to the Loudspeaker.

## HT30-IW In Wall Mount

1. Determine the location where you wish the HT30-IW Loudspeakers to be installed in the wall using the supplied template. Refer to figure 4.



2. Cut a 13-5/8 inch (34.61 cm) square hole centered in the desired position. The location should be centered between the wall studs since the HT30-IW will take most of the space, with just a small clearance on each side.

Note: There must be no obstructions within 1 inch (2.54cm) of the cutout on the top and bottom. This is to provide clearance for the slide fasteners to fit behind the wall panel. The area behind the HT30-IW must be free of any wires, cables or other obstructions since the speaker depth is 3-15/16 inches (10.0cm), and may fill the entire space between the walls.

3. Remove the front trim frame and grille.

Note: If the wall studs are 2 x 6, it may be desirable to have the trim frame installed loosely on the HT30-IW at this time to prevent the HT30-IW from falling down inside the wall.

- 4. Proceed to page 7 for connection information and then perform step 5 below.
- 5. Carefully slide the HT30-IW into the wall cutout.
- 6. Loosen the round head screws on the four slide wall fasteners. Slide the fasteners up and down so they fit behind the wall to hold the HT30-IW in place and then tighten the screws.

- 7. Place the trim frame in position over the HT30-IW and secure it to the Loudspeaker system using the supplied flat head screws. Use the mounting holes at the top and bottom edges of the frame.
  - Notes: 1. The holes on the sides of the frame are not used.
    - 2. If the wall thickness is greater than 1/2 inch (1.27 cm), longer screws might be required to secure the trim frame.
- 8. Carefully press the grille into the trim frame, so the foam gasket holds the grille in position.

Note: If the HT30-IW is ceiling mounted, additional fasteners may be required to secure the grille to the Loudspeaker.



## **How to Connect the Loudspeaker**

Caution: The AC Power Cord should not be connected to the Power Amplifier until after the Loudspeaker Connections have been made. Failure to observe this could result in Electric Shock.

When connecting HT30 Loudspeakers to an amplifier it is very important to use cables of adequate size, so there is little to no power loss in the cables. The size is specified in Gauge Numbers or AWG (American Wire Gauge). The smaller the Gauge number, the larger the wire size:

Loudspeaker Cable Distance vs Wire Gauge Guide					
Loudspeaker Impedance	25 feet (7.62 meters) or less	50 feet (15.24 meters) or less	100 feet (30.48 meters) or less		
2 Ohms	12AWG	10AWG	8AWG		
4 Ohms	14AWG	12AWG	10AWG		
8 Ohms	16AWG	14AWG	12AWG		

 Prepare Loudspeaker cables by choosing one of the methods below:

Bare wire cable ends:

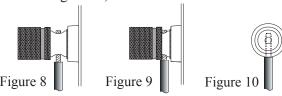
Carefully remove sufficient insulation from the cable ends, refer to figures 5, 6 & 7. If the cable is stranded, carefully twist the strands together as tightly as possible.



Note: If desired, the twisted ends can be tinned with solder to keep the strands together or attach spade lugs.

Spade lug or prepared wire connection:

Insert the spade lug connector or prepared section of the cable end into the terminal side access hole, and tighten the terminal cap until the cable is firmly clamped into the terminal so the wires cannot slip out. Refer to figures 8, 9 & 10.

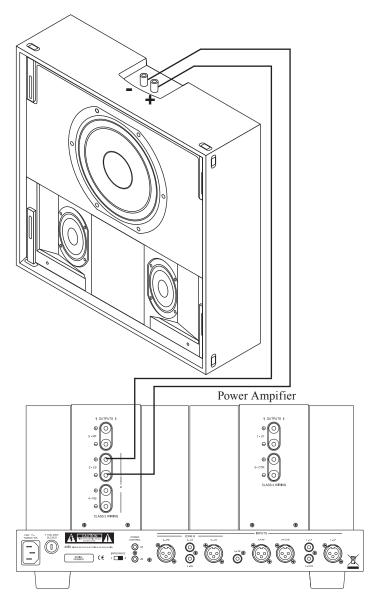


2. Based on the information contained in "Installing the Loudspeaker" on page 5 and the Identification Label located on the HT30 Loudspeaker (Left or Right), determine the correct Loudspeaker to use for the given location in the room.

3. Connect a Loudspeaker cable from the HT30 (-) Binding Post to the (-) (4 $\Omega$ ) Binding Post of the Power Amplifier.

Note: It is important to maintain the correct polarity at both ends of the Loudspeaker cables.

- 4. Connect a Loudspeaker cable from the HT30 (+) Binding Post to the (+) (4 $\Omega$ ) Binding Post of the Power Amplifier.
- 5. Tighten all of the Loudspeaker and Amplifier Binding Posts.





## LOUDSPEAKER PRODUCTS FIVE YEAR LIMITED WARRANTY

elcome to the family of McIntosh owners. This is the Warranty for your new McIntosh Loudspeaker Product (the "Speaker"). Your Speaker has been designed to give many years of trouble-free performance. Nonetheless, failures do sometimes occur even with equipment as well-built as McIntosh's. Therefore, please read this Warranty carefully, because it contains rights, as well as limitations, exclusions, and obligations, which in the event of such a failure may be very important to you. If after reading it thoroughly, you have any questions about

the Warranty, please do not hesitate to write or telephone McIntosh at the address or phone number shown on the back of this warranty. Please note that this is the only Warranty which McIntosh provides for your Speaker, and that no one, including your dealer, has any authority to either modify or expand upon this Warranty. If your dealer has offered or made any warranties or representations concerning the Speaker which differ from those contained in this Warranty, they are strictly between you and the dealer, and will neither be binding upon McIntosh nor change any of the provisions in this Warranty.

#### Scope and Duration of Warranty

Subject to the terms and conditions stated below, McIntosh Laboratory, Inc. ("McIntosh") warrants to the original owner that this Speaker shall be free from defects in workmanship or materials for a term of five (5) years from the date when it was purchased from an Authorized McIntosh Dealer.

## Limitations on Persons and Speakers Covered by this Warranty

This Warranty and all rights provided here under are limited to the original owner. In the event that the original owner transfers ownership of the Speaker prior to expiration of the five-(5) year term, this Warranty shall terminate in its entirety upon the date of such transfer. In addition, McIntosh does not warrant in any way Speakers which are purchased from anyone who is not an Authorized McIntosh Dealer, or which have had their Serial Numbers altered or defaced. Therefore this Warranty is void and inapplicable if this Speaker has been purchased from someone other than an Authorized McIntosh Dealer, or has had its original Serial Numbers altered or defaced.

#### Important Note Regarding Mail, Telephone, and Online Purchases

In order to insure the highest possible level of customer satisfaction, Authorized McIntosh Dealers are expressly prohibited from selling new McIntosh Speakers by mail, telephone, or the internet. Therefore, if you purchased the Speaker which is accompanied by this Warranty by mail, by telephone, or over the internet, your seller was not an Authorized McIntosh Dealer, and/or the Speaker you purchased is used and you are not its original owner. In any such event, this Warranty is void, as provided in the preceding paragraph, and any warranties, service agreements, or other representations of any kind which you may have received from your seller are binding solely upon your seller and not upon McIntosh. If you have been misled in any way on this subject, you should make immediate inquiry of your seller.

#### Geographical Limitations

This Warranty has been included with a McIntosh Speaker that is designed, intended to be sold and used only within the United States and Canada. Accordingly, this Warranty only applies to Speakers which are purchased in the United States or Canada, and only applies while such Speakers are used in the United States or Canada. Speakers purchased outside the United States or Canada, and failures occurring outside the United States or Canada, are not covered by this Warranty.

## What McIntosh will do under the Warranty

In the event of any defect covered by this Warranty, McIntosh shall without charge provide all parts, materials, and labor necessary to restore the Speaker to its original specifications. After repair, McIntosh shall return the Speaker to its owner at the owner's expense. In the alternative, McIntosh may at its sole option either replace the Speaker without charge, or if replacement is not commercially practicable or repair or replacement cannot be accomplished within a reasonable time, McIntosh may refund the purchase price of the Speaker, subject where appropriate to reasonable depreciation for actual use in accordance with applicable laws, in full satisfaction of its warranty obligations. McIntosh or its Authorized Service Agency will undertake to complete the repair and return of the Speaker as soon as circumstances permit, unless prevented by causes beyond their reasonable control.

### Limitations on McIntosh's Obligations under the Warranty

McIntosh's sole Obligation under this Warranty shall be to repair or replace the Speaker, or at its option refund the purchase price, as provided for hereinabove. McIntosh

does not warrant against, nor shall it be liable for, any of the following: removal or installation charges; shipping expenses either to or from McIntosh or its Authorized Service Agency; loss of use; property damage of any kind; or other incidental or consequential damages or losses of any kind.

Note: Some states do not allow exclusion or limitation of consequential damages, so the foregoing exclusions may not apply to you.

#### Parts and Occurrences that are not Covered by the Warranty

This Warranty does not cover any of the following: (a) glass panels, cabinetry, trim, or other appearance items (except where they are defective at the time of original sale and the Speaker is delivered for repair within the first thirty (30) days thereafter); (b) atteries, or damage to the Speaker caused by failure of batteries; (c) failures arising from accident, catastrophe, misuse, neglect, or failure to properly connect and operate the Speaker in accordance with the accompanying instructions; (d) failures arising from improper installation or removal of the Speaker; or (e) failures arising from any tampering, alteration, or attempted servicing of the Speaker by anyone other than McIntosh or an Authorized McIntosh Service Agency; and McIntosh shall have no liability or obligation of any kind with respect to any of the foregoing types of failures.

### What the Owner must do to obtain service under this Warranty

To obtain service under this Warranty, the owner must at the owner's expense arrange for any necessary de-installation of the Speaker, and deliver or ship the Speaker to McIntosh at the address below, or to an Authorized McIntosh Service Agency, properly packaged, prepaid, and insured at the owner's expense. In addition, the owner must provide evidence that the Speaker is at the time of delivery within the scope of his Warranty, by either having completed and submitted to McIntosh on a timely basis the accompanying Warranty Registration Card, or by including the original sales receipt (photocopies are not acceptable) with the Speaker when it is delivered for repair.

#### What the Owner must Pay For

As noted above, the owner must pay any expense of removing the Speaker from its installation, and must pay any expenses for delivery of the Speaker to McIntosh or the Authorized McIntosh Service Agency. Upon return of the Speaker to the owner following repair, it shall be the owner's responsibility to pay for the shipping charges incurred in return of the Speaker, as well as to arrange and pay for any re-installation which may be required. In addition, it shall be the owner's obligation to pay for any repairs made to any Speaker for which the owner has neither completed and submitted the Warranty Registration Card at the time of purchase nor included the original sales receipt with the Speaker when delivered for service, at McIntosh's or its Authorized Service Agency's then-current repair rates.

## How to learn where the nearest Authorized McIntosh Service Agency is, or obtain answers to other questions concerning this Warranty

In order to learn the name and address of the nearest Authorized McIntosh Service Agency, obtain instructions for shipment of a covered Speaker to McIntosh, or obtain the answers to any other questions you may have concerning this Warranty, you may telephone McIntosh's Customer Service Department between the hours of 9:00 a.m. and 4:30 p.m. Eastern Time, Monday through Friday, at 888-979-3737 (607-723-3512) or write to McIntosh at 2 Chambers Street, Binghamton, New York 13903-2699, Attention: Customer Service Department.

Note: This Warranty gives you specific legal rights, and you may also have other rights which vary from state to state.



## **Specifications**

## **System Driver Complement**

One 5-5/8 inch Cone Woofer Two 2-3/4 inch Midrange/Tweeter

## **Impedance**

4 ohms Nominal

## **Frequency Response**

80Hz - 20kHz

## **Sensitivity**

83dB (2.8V/1m equivalent measured in the null)

## **Crossover Frequency**

1,000Hz

## **Power Handling**

200 Watts Maximum

## **General Specifications**

#### Finish

Grilles and Trim are painted White

### **HT30-OW On Wall Overall Dimensions**

Width is 14-3/16 inches (36.0cm) Height is 14-15/16 inches (37.78cm) Depth is 4-1/16 inches (10.3cm)

#### **HT30-IW In Wall Overall Dimensions**

Width is 14- 1/4 inches (36.12cm) Height is 14- 1/4 inches (36.12cm) Depth is 4 inches (10.16cm)

## HT30-OW On Wall Weight

13 pounds (5.9 kg) net, 30 pounds (13.65 kg) in shipping carton (carton contains one pair of Loudspeakers)

## HT30-IW In Wall Weight

12 pounds (5.44 kg) net, 32 pounds (14.51 kg) in shipping carton (carton contains one pair of Loudspeakers)

## **HT30-OW On Wall Shipping Carton Dimensions**

Width is 22- 1/2 inches (57.15cm) Depth is 18 inches (45.72cm) Height is 19- 1/4 inches (48.90cm)

## **HT30-IW** In Wall Shipping Carton Dimensions

Width is 17-3/4 inches (45.08cm) Depth is 14-1/8 inches (35.88cm) Height is 19-3/8 inches (49.21cm)

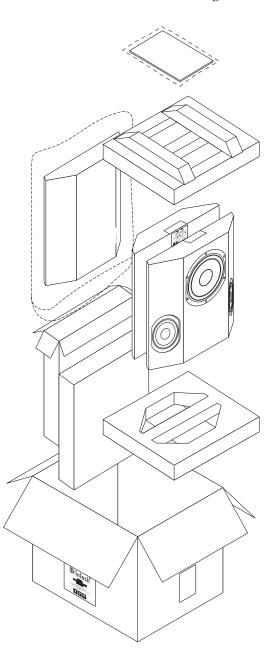
## **Packing Instructions**

In the event it is necessary to repack the equipment for shipment, the equipment must be packed exactly as shown below.

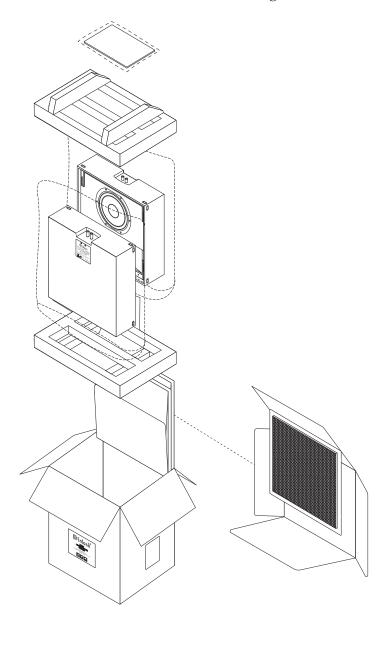
Use the original shipping carton and interior parts only if they are all in good serviceable condition. If a shipping carton or any of the interior part(s) are needed, please call or write Customer Service Department of McIntosh Laboratory.

Quantity	Part Number	<u>Description</u>
1	03451300	HT30-OW On Wall
		shipping carton
1	03451200	HT30-IW In Wall
		shipping carton

## HT30 OW On Wall Packing



## HT30 IW In Wall Packing





McIntosh Laboratory, Inc. 2 Chambers Street Binghamton, NY 13903

The continuous improvement of its products is the policy of McIntosh Laboratory Incorporated who reserve the right to improve design without notice. Printed in the U.S.A.