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MT6 TWO

#### SPEAKER SPECIFICATIONS

MT6 ONE

Speaker Type: 2-Way In-Wall 2-Way In-Wall Tweeter Pivoting 1" Silk Dome Pivoting 1" Silk Dome Woofer: 6½" Polypropylene Cone 6½" Glass Composite Cone with Filleted Rubber Surround with Filleted Rubber Surround Impedance: 8ohm 8ohm 92dB 1W/1m Sensitivity: 92dB 1W/1m None Frequency Adjustments: Front-Mounted 3 Position ±3dB Treble Adjustment Switch  $50Hz - 20kHz \pm 2dB$  $45Hz - 20kHz \pm 2dB$ Frequency Response: Power Recommendations: 100 watts (undistorted) 120 watts (undistorted) Dimensions (H x W x D): 12¼" x 8¾6" x 3½" 12¼" x 8¾6" x 3½" MT6 THREE MT6 FOUR Speaker Type: 2-Way In-Wall 2-Way In-Wall Tweeter: Pivoting 1" Aluminum Dome Pivoting 1" Aluminum/Magnesium Dome Woofer: 6½" Aluminum Cone with Dual 6½" Aluminum/Magnesium Cone with Dual Voice Coil and Filleted Rubber Surround Voice Coil and Filleted Rubber Surround 8/6/40hm, depending on switch settings 8/6/40hm, depending on switch settings Impedance: 90dB 1W/1m 90dB 1W/1m Sensitivity: Frequency Adjustments: Front-Mounted 3 Position Front-Mounted 3 Position ±3dB Treble Adjustment Switch ±3dB Treble Adjustment Switch & ±3dB Bass Adjustment Switch & ±3dB Bass Adjustment Switch Frequency Response:  $40Hz - 20kHz \pm 2dB$  $37Hz - 20kHz \pm 2dB$ Power Recommendations: 125 watts (undistorted) 150 watts (undistorted) Dimensions ( $H \times W \times D$ ): 124" x 81/6" x 31/8" 12¼" x 8¾6" x 3½"

In our attempt to constantly improve our products, features and specifications are subject to change without notice.

SpeakerCraft offers a variety of accessories to make your installation of these speakers and other SpeakerCraft products easy, economical, and professional. Contact your authorized SpeakerCraft Dealer for more information.

Should you have any questions regarding this, or any other SpeakerCraft product, please call our toll-free service hot line at 1-800-448-0976. We are available to assist you every weekday, except holidays, between the hours of 7:00 a.m. and 5:00 p.m. PST.

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## **OWNER'S MANUAL**

# MT6 SERIES ONE/TWO/THREE/FOUR

### Mirror Image Technology In-Wall Loudspeakers

Congratulations on your purchase of SpeakerCraft "Mirror Image Technology" In-Wall Speakers. Your speakers are equipped with pivoting dome tweeters, which allow you to direct the sound toward or away from a listening area, and "Mirror Image Technology" in which the tweeters are mounted in an asymmetrical offset position to their baffles. This design minimizes diffraction and reflection effects for better stereo imaging than speakers with conventional center positioned tweeters. SpeakerCraft has a wide variety of accessories to compliment your Mirror Image Technology In-Wall Speakers. Contact your dealer or SpeakerCraft direct for more details.

#### SPEAKER PLACEMENT

Before installing your speakers, you should consider the placement carefully, taking into account the location of electrical, plumbing and other fixtures. Contact your dealer for assistance if you are not sure of the best location in your particular room environment.

Placement In Wall: When installing your speakers into the wall, ideal sound will be achieved when the tweeters are placed at ear level or slightly higher and the usual listening area is no closer to the wall than the distance between the speakers themselves. (See Diagram 1) The MT6 series is designed with the tweeter below the woofer to facilitate optimum imaging. If the speakers are positioned far away from the primary listening area, adjust the pivoting tweeters so they are pointed toward the primary listening area.

Note: To avoid possible damage to the pivoting tweeters, read the section entitled "SPEAKER ADJUSTMENTS" in this manual prior to performing the tweeter adjustment.

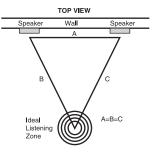


Diagram 1: Ideal Placement

#### MOUNTING SURFACE PREPARATION

#### **New Construction - Unfinished Walls**

A New Construction Bracket, SpeakerCraft P/N BKT90601 (available from your dealer), may be installed prior to drywall application across studs (up to 24" on-center) where a speaker will be located. Insulation material should be in place prior to installing drywall. After the hole is cut and the drywall is installed, the speakers are then easily installed following the instructions for mounting in "Finished Walls". Note: If the speakers are to be mounted more than 24" on-center, a special "Extra Long Wing", SpeakerCraft P/N WING90226, is available from your dealer.

#### Finished Wall

Prior to the actual installation of the speakers, it will be necessary to run cables to the speaker locations. See your dealer for more information about cable installation. After the cable has been properly installed, you are ready to mount the speakers. Following the simple steps listed below will result in a professional looking installation:

- **1.** Determine the best area to mount your speakers. This area of the wall should be free of obstructions such as electrical conduit, HVAC ducts, or water lines. This can best be determined by noting the placement of fixtures and gaining access to an attic or crawl space for further analysis of the location of such obstacles.
- **2.** Find the studs nearest the desired speaker mounting location. We highly recommend using a good stud-finder tool for this procedure. If you are lining up the speakers to some other object or molding in the room, make sure you consider the size of the baffle flange which extends beyond the mounting hole on all four sides.
- **3.** Mark the hole. A template for setting the hole is provided in the box (along with two paint mask inserts for use when painting). Position the template in the desired position and pencil an outline on the wall.

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- **4.** Cutting the hole. CAUTION: This is the most important part of the entire installation. If you are not certain whether any obstructions exist behind the desired mounting area, you should start by cutting a small hole in the center of your penciled mounting hole with a drywall saw. Cut at a 45° angle towards the inside of the hole (See Diagram 2). Cutting the small hole at this angle will make drywall repair much easier as the piece cut out can be installed neatly back into the hole. Once you have determined there aren't any obstructions in your desired mounting location, start cutting the finished hole at a 90° angle to the wall surface.
- **5.** Add insulation. If the area in the wall is not already insulated, add an adequate amount of insulation material to fill the wall cavity. If the insulation material used is faced with foil or paper, position the foil or paper away from the speaker.

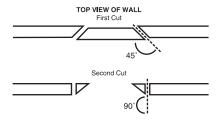


Diagram 2: Wall Cut Out

**Push Tweeter Here** 

#### SPEAKER ADJUSTMENTS

The Mirror Image Technology Series speakers come from the factory with the tweeter facing straight out from the baffle. This will result in the overall smoothest response. However, depending on your particular primary area, room acoustics, ceiling height, or personal preference, you may find the sound more pleasing by pointing the tweeters in a particular direction. If additional treble is desired in the primary listening area, point the tweeter towards that area; and if less treble is required, point the tweeter away. When used in a home theater surround sound environment as side or rear channel speakers, the best result will be obtained by pointing the tweeters toward an adjacent wall. Push gently at the edge of the tweeter to point it in the desired direction. (See Diagram 3)

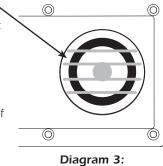
CAUTION: Avoid touching tweeter dome as damage WILL occur on metal dome tweeters (MT6 THREE & FOUR).

#### Tweeter Adjustment (MT6 TWO, THREE & FOUR):

The 3 vertical buttons with the center button labeled "T" allow for 6dB of TREBLE adjustment. Your speakers were shipped with the treble set to neutral. This setting provides the most linear frequency response. If you desire more treble, push the button with the up arrow and the treble will play 3dB higher. If you want less treble, push the button with the down arrow and the tweeter will play 3dB lower. To return to the neutral setting, push the "T" button. (See Diagram 4)

#### Woofer Adjustment (MT6 THREE & FOUR):

The 3 vertical buttons with the center button labeled "B" allow for 6dB of BASS adjustment. Your speakers were shipped with the bass set to neutral, resulting in 60hm of impedance. This setting provides the flattest bass frequency response. If you desire more bass, push the button with the up arrow and the bass will play 3dB higher and lower the impedance to 4ohm. If you want less bass, push the button with the down arrow and the bass will play 3dB lower and increase the impedance to 8ohm. This setting provides a more linear bass frequency response. To return to the neutral setting, push the "B" button. (See Diagram 4) Remember that altering the impedance affects the number of speakers able to be driven by an amplifier. If multiple pairs of speakers are to be driven by one amplifier, SpeakerCraft suggests using the lowest output position (the down arrow) until it is determined that the amplifier will operate properly with the speakers switched to a higher output mode. If you want to safely operate multiple pairs of speakers, consider purchasing SpeakerCraft S4 or S8 Speaker Selectors.



Tweeter

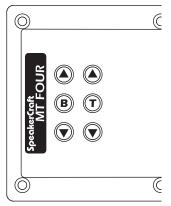


Diagram 4: Bass & Treble Adjustment Switches

#### SPEAKER INSTALLATION

Note: Your MT6 Series speakers may have come with the optional Jawz speaker wire connector. Before using Jawz, please follow the instructions included with the connector.

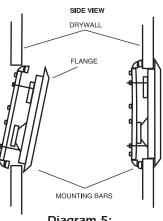
The unique integral mounting bar system incorporated into your MT6 Series speaker allows for a quick installation by following the easy steps below:

- 1. Remove the grille by pushing the two mounting bars, located at the rear of the speaker, towards the front of the speaker. The long screws attached to the mounting bars will force the grille off the baffle.
- 2. Attach the speaker cable, observing the proper polarity with your amplifier ( + to + and to -). Make sure the left channel of the amplifier is connected to the left speaker, and the right channel is connected to the right speaker.

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**3.** Slide the ends of the two mounting bars at the tweeter end of the speaker behind the drywall so the drywall is now between the mounting bars and the back of the speaker baffle. This should be enough room for the other ends of the mounting bars to clear the other end of the drywall hole and slide behind the drywall as well. (See Diagram 5)

- 4. Position the speaker into the hole and start tightening the six screws evenly. This will cause the mounting bars to properly sandwich the drywall between the self-adjusting mounting bar feet and the speaker flange. Make sure the speaker is positioned correctly before final tightening of the six mounting screws. Note: The flange of the speaker is designed to flex and conform to any small imperfections in the wall's surface. The tension on the screws should not be tightened so that the flange bows out. If this occurs, back off the tension on the screws until the bowing is eliminated.
- 5. Adjust the pivoting tweeter to the desired position.
- 6. Adjust the BASS (MT6 THREE & FOUR) and TREBLE (MT6 TWO, THREE & FOUR) switches to the desired position.
- 7. Push the grille firmly into the slot in the speaker baffle



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Diagram 5: Mounting Bars

#### PAINTING THE SPEAKERS

If you plan to paint your speakers, we recommend that it be done prior to installation. If you decide to paint your speakers sometime in the future, it is best to remove them by simply reversing the steps for Speaker Installation listed above. When painting the speakers, the paint masks provided in the carton must be installed in place of the grille. The grilles can also be painted, however, great care should be taken not to clog the holes as this will greatly reduce the sound quality of the speakers. SpeakerCraft recommends only light spray painting using 5 parts thinning agent to 1 part paint. Do not paint the grilles while they are attached to the speaker. If it is necessary to paint the material under grille, follow the same procedure used to paint the grilles.

#### SPECIAL FIRE WALL INSTALLATION

If you plan to mount your speakers in a fire-rated wall, you should purchase SpeakerCraft 6" Rectangle Sound Enclosures, model #SE1612. This metal enclosure mounts easily between studs, and contains a standard electrical connector for connecting your speaker cable directly to the speaker.

#### LIMITED LIFETIME WARRANTY

SpeakerCraft Inc. warrants to the original retail purchaser only that this SpeakerCraft product will be free from defects in materials and workmanship, provided the speaker was purchased from a SpeakerCraft Authorized Dealer.

Defective products must be shipped, together with proof of purchase, prepaid insured to the SpeakerCraft Authorized Dealer from whom they were purchased, or to the Speaker Craft factory at the address listed on this installation instruction manual. Freight collect shipments will be refused. It is preferable to ship this product in the original shipping container to lessen the chance of transit damage. In any case, the risk or loss or damage in transit is to be borne by the purchaser. If, upon examination at the Factory or SpeakerCraft Authorized Dealer, it is determined that the unit was defective in materials or workmanship at any time during this warranty period, SpeakerCraft or the SpeakerCraft Authorized Dealer will, at its option, repair or replace this product at no additional charge, except as set forth below. If this model is no longer available and can not be repaired effectively, SpeakerCraft, at its sole option, may replace the unit with a current model of equal or greater value. In some cases where a new model is substituted, a modification to the mounting surface may be required. If mounting surface modification is required, SpeakerCraft assumes no responsibility or liability for such modification. All replaced parts and product become the property of SpeakerCraft Inc. Products replaced or repaired under this Warranty will be returned to the original retail purchaser, within a reasonable time, freight prepaid.

This Warranty does not include service or parts to repair damage caused by accident, disaster, misuse, abuse, negligence, inadequate packing or shipping procedures, commercial use, voltage inputs in excess of the rated maximum of the unit, or service, repair or modification of the product which has not been authorized or approved by SpeakerCraft. This Warranty also excludes normal cosmetic deterioration caused by environmental conditions. This Warranty will be void if the Serial Number on the product has been removed, tampered with or

This Warranty is in lieu of all other expressed warranties. If the product is defective in materials or workmanship as warranted above, the purchaser's sole remedy shall be repair or replacement as provided above. In no event will SpeakerCraft be liable for any incidental or consequential damages arising out of the use or inability to use the product, even if SpeakerCraft Inc. or a SpeakerCraft Inc. Authorized Dealer has been advised of the possibility of such damages, or for any claim by any other party. Some states do not allow the exclusion or limitation of consequential damages, so the above limitation and exclusion may not apply.

All implied warranties on the product are limited to the duration of this expressed Warranty. Some states do not allow limitation on the length of an implied warranty. If the original retail purchaser resides in such a state, this limitation does not apply.