



IW500 BACKBOX IN-WALL LOUDSPEAKER

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# OPERATION MANUAL

**M&K Sound**

**Backbox In-Wall Loudspeaker**

**IW500**



***The Choice of Professionals***<sup>®</sup>



IW500 BACKBOX IN-WALL LOUDSPEAKER

# Congratulations!

Your new M&K speaker system will give you years of unmatched enjoyment and excitement while listening to your favorite music and audio/video sources.

We encourage you to read this owner's manual, as there is a great deal of information provided here to help you achieve the best possible performance from your new speakers.

If you have any questions about your speaker system, please contact your M&K dealer.

Additional information may also be obtained on our web site: [www.mkksound.com](http://www.mkksound.com).

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# IW500



# MILLER & KREISEL®

## Introduction

The IW500 in-wall loudspeaker is the result of years of M&K Sound’s expert engineering team’s research and development. It is the first ‘2-in-1’ THX Certified Dominus in-wall model, meaning that it meets identical performance requirements, whether mounted vertically or horizontally.

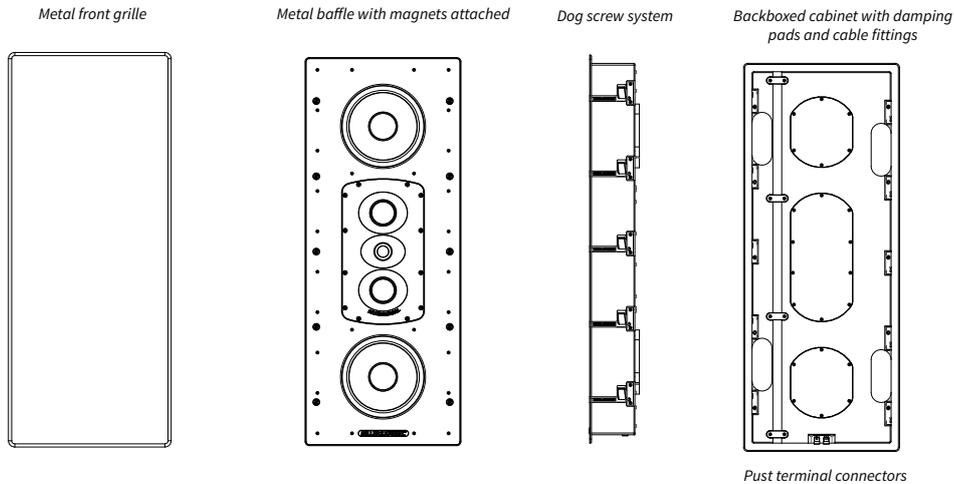
THX Certified Dominus is the latest and largest performance class of THX Certification, designed to bridge the gap between large home theater speakers and those commonly used in movie theaters around the world.

Home theater owners with rooms of up to 184 cubic meters in volume and with a 6-meter viewing distance (or up to 6500 cubic feet and up to 20 feet, respectively) can fill an entertainment space with the superior, reference quality audio they have come to expect from M&K Sound. That means even clearer, quiet whispers to larger explosions - and everything in-between - but at a greater distance from the screen.

The M&K Sound IW500 backbox in-wall loudspeaker system is designed for easy installation. You are just a few steps away from enjoying the acclaimed M&K Sound.

## Accessories

- Cut-out template integrated in packing for marking of wall position and cut-out dimensions
- Damping pads, cable fittings, and push terminal connectors for quick installation
- Dog screw mounting system with self-locking clamps for solid attachment to wall

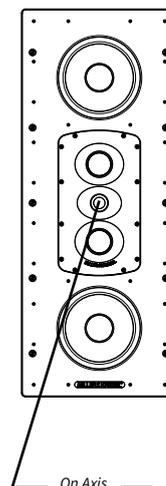


## Placement

For placement of the M&K Sound IW500 in-wall loudspeaker, please note the following basic recommendations for installation.

Defining the correct placement height for the IW500 in-wall loudspeaker for two- or three-channel behind-screen systems, setup is essential, beginning with finding the acoustic “on-axis point”. This is the line of sight associated with the center-mounted tweeter between the soft dome midranges (as illustrated to the right).

For both stereo (two-channel) and home theater (left/center/right three-screen-channel) systems, the acoustic on-axis point should be approximately at ear level when sitting in the main listening position.

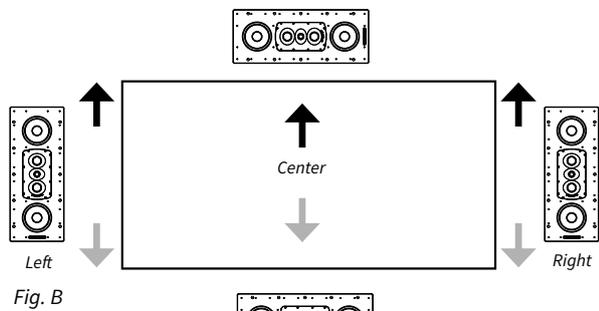
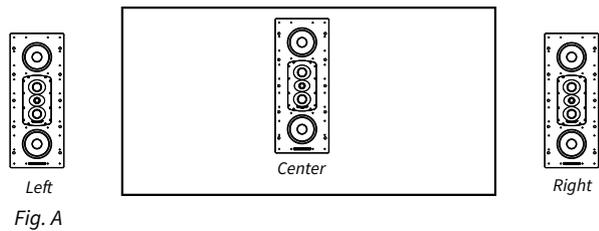


## IW500 Left / Center / Right Orientation

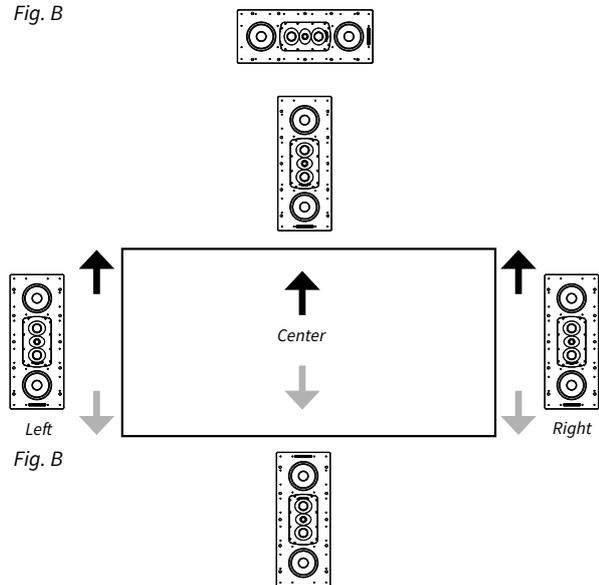
### LCR front three channels for home theater

M&K Sound recommends that the IW500 should primarily be installed vertically in a home theater setup, with the tweeter positioned at ear-level across the front (LCR) soundstage. This ensures 100% consistent coverage across the entire front soundstage, with identical horizontal dispersion for the screen speakers. However, if you are not using a projector with an acoustically transparent screen, the IW500 is certified to be used horizontally as a center channel, allowing more installation flexibility (such as when using large-format flat panel TVs or displays). The IW500 ensures pinpoint imaging, no matter the orientation.

When mounting the IW500 behind an acoustically transparent screen, placement on a center line with each tweeter as close as possible to ear-level at the listening position is recommended (see Figure A).

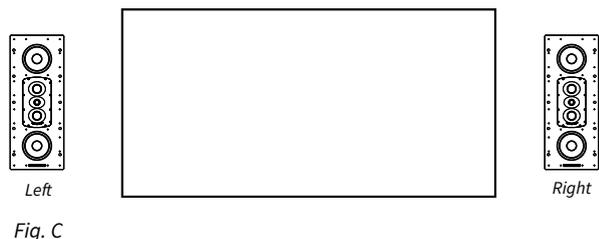


When using the IW500 with a non-transparent screen, i.e. a flat panel display device or TV, the center channel can be placed horizontally above or below the screen, while the left and right speakers may be moved up or down to approach the horizontally placed center channel position (see Figure B). Keeping all three front left, center and right (LCR) speakers as close as possible to the same horizontal plain is preferred for soundstage cohesion.



### Stereo Orientation

The above recommendations should be followed for any stereo music or home theater application, where only two loudspeakers are used instead of three. A good formula when setting up a two-channel stereo system is to have the same distance between the left and right speaker to the listening position. In other words, the two speakers should be placed equidistant from the center line of the main listening position.



## Speaker Installation

The IW500 in-wall loudspeaker can be mounted into a masonry, dry wall or a purpose-built “baffle wall”. A baffle wall is usually designed by an architect or specified by a commercial installer to accommodate loudspeakers behind an acoustically transparent projection screen. Often built from a 2- x 4-inch timber frame with a flat MDF or timber ceiling-to-floor baffle, the front surface may incorporate rockwool or a similar acoustically treated surface. In all scenarios, the IW500’s front steel fascia is designed to mount flush with the surface of the wall structure.

To support precise wall cut-out for M&K Sound backboxed speakers, use the template included inside the IW500 carton. The 2-piece carton template matches the speaker’s outer dimensions, with a “push-out” section to be used for the actual cutting.

### Tools Required:

- T25 Torx drivers and bits
- Cutting utensil
- Wire stripper

Following the instructions in the illustrations below will result in proper and easy installation of the speaker:

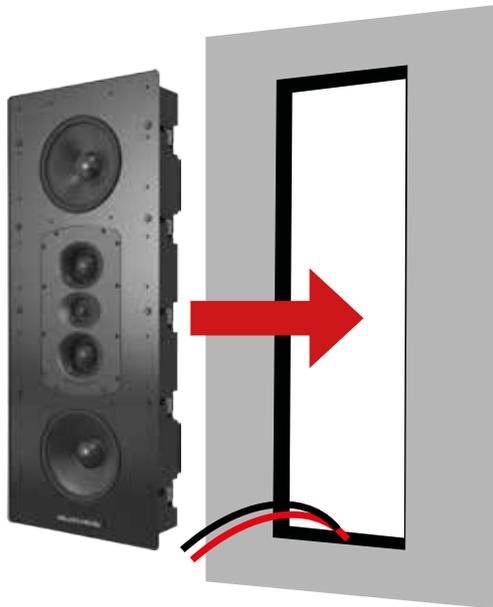
**1. Use the overall carton template to visualize wall position for system, before pushing out the actual cutting template at the perforated lines**

**2. Hold the “pushed out” cutting template at the wall to mark a line for the actual cut**

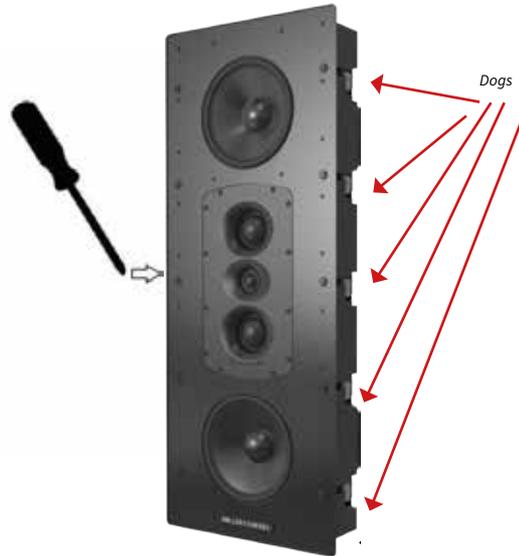
**3. Cut to the inside of your marked line on the wall**

**4. Cutting direct on the template is not recommended**

5. Connect the speaker to cables in the wall, and place cabinet into "the wall cut"



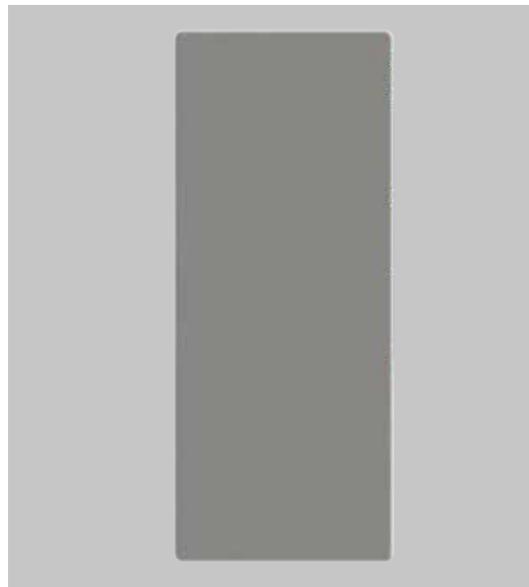
6. When speaker is placed into "the wall cut", turn the Torx screws on the front clockwise to activate the dogs. For ease of installation, it is best to turn the torx screw 1/4 turn counterclockwise before turning clockwise to tighten. This disengages the dog from its rest position



7. Check the IW500 for perfect alignment



8. Mount and align the optional magnetic grille and the installation is complete



### Important Practical Information

When using an electric tool for screw mounting, adjust the tension function to prevent the dog screws from being over-tightened. It is also recommended to use moderate or low speed when tightening the dog screws.

If removal of the speaker is needed for service, make sure to loosen the front dog screws slowly until some resistance is felt. At this point, the dogs should be turned back to the neutral position and the speakers will be ready to be pulled out from the wall cut.

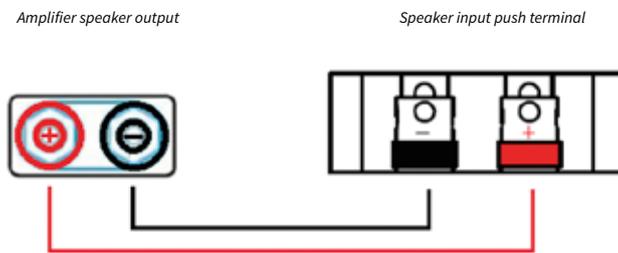
## Speaker Connection

Use the solid push terminals for easy speaker wiring to an amplifier for cables of up to 5 mm/AWG 6.

In either stereo, surround or immersive audio system setups, it is important to wire all speakers for correct phase. It is therefore recommended to use speaker cable with wires marked for positive (+) and negative (-) leads for an easy visual check of the connection at both sets of terminals (see illustration below).

**The Positive (+) lead  
from your amplifier or receiver  
should be connected  
to the Red (+) INPUT terminal.**

**The negative (-) lead  
from your amplifier or receiver  
should be connected  
to the Black (-) INPUT terminal.**



**Note** All M&K Sound loudspeakers are designed to be used with the company's acclaimed subwoofers. The THX Certified Dominus IW500 partners ideally with M&K Sound's THX Certified Dominus X15+ powered subwoofer in large home cinema rooms.

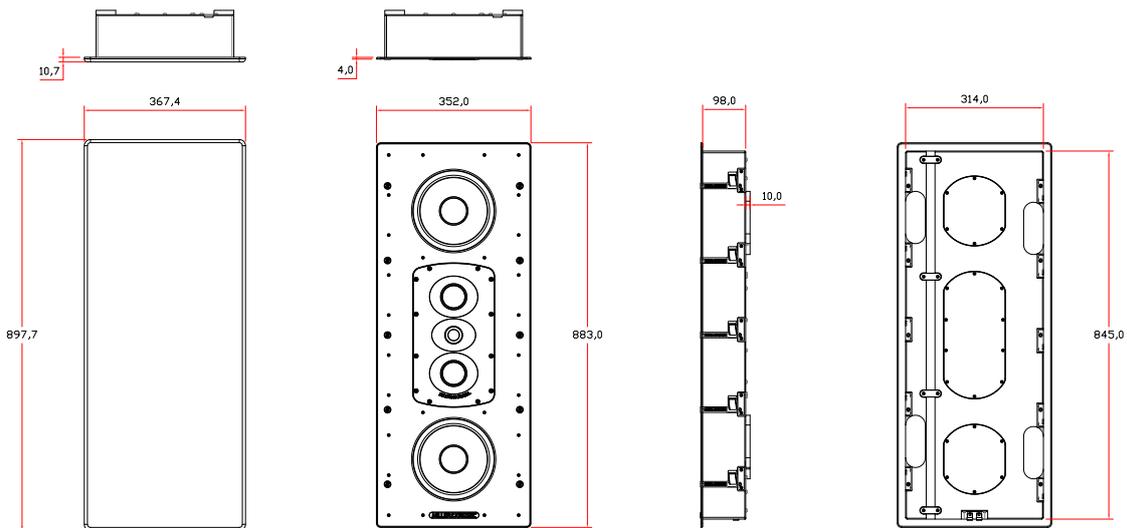
For more information, go to [www.mkssound.com](http://www.mkssound.com).



**Specifications**

**M&K Sound IW500 In-Wall Loudspeaker**

Impedance ..... 4 ohm  
 Frequency Response ..... 80 – 20 kHz (+/- 1.5 dB on-axis)  
 Tweeter ..... 1 x 1-inch soft fabric dome  
 Midrange ..... 2 x 3-inch coated silk dome with rear chamber  
 Sensitivity ..... 92 dB  
 Woofer ..... 2 x 8-inch carbon fiber laminated driver  
 Recommended Amplifier Power ..... 100 – 500 watts  
 Cabinet Dimensions (H x W) ..... 33.27 x 12.36 inch / 845 x 314 mm  
 Grille Dimensions (H x W) ..... 35.35 x 14.45 inch / 898 x 367 mm  
 Wall Cutout (H x W) ..... 33.35 x 12.44 inch / 847 x 316 mm  
 Weight ..... 40.8 lbs / 18.5 kg  
 Finish ..... Black  
 THX Certification ..... THX Certified Dominus



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