



8-ohm IN-WALL SPEAKERS

For music and home theater

Instruction Manual

INTRODUCTION

M&S in-wall speakers are designed for the discriminating listener who wants the ultimate in superb acoustics. M&S has full range of in-wall speakers that will bring out the best in any home-theater or whole-house stereo music system. These products also offer many features, including the following:

- Swivel tweeter
- Designed to handle power requirements of most stereo amplifiers
- Wall mount
- Discrete design
- Cam-lock mounting system

DESCRIPTION

S150W

Frequency Response	35 Hz to 15 kHz
Maximum Power Rating	150 Watts
Impedance	8 Ohms
Overall Dimensions	10" W x 14" H x 4" D
Specifications	Two way; 8" woofer, 1" soft dome swivel tweeter
Mounting Dimensions	8 ¾" W x 12 ¾" H x 3 ½" D
Grille	Metal
Color	White

S100W

Frequency Response	40 Hz to 20 kHz
Maximum Power Rating	100 Watts
Impedance	8 Ohms
Overall Dimensions	8 5/8" W x 12" H x 3 5/8" D
Specifications	Two way; 6½" woofer, 7/8" soft dome swivel tweeter
Mounting Dimensions	7 3/8" W x 10 ¾" H x 3 ¼" D
Grille	Metal
Color	White

S50W

Frequency Response	50 Hz to 16 kHz
Maximum Power Rating	50 Watts
Impedance	8 Ohms
Overall Dimensions	8 5/8" W x 12" H x 3 3/8" D
Specifications	Two way; 6 1/2" woofer, 1" mylar swivel tweeter
Mounting Dimensions	7 3/8" W x 10 3/4" H x 2 7/8" D
Grille	Metal
Color	White

S40W

Frequency Response	60 Hz to 20 kHz
Maximum Power Rating	40 Watts
Impedance	8 Ohms
Overall Dimensions	7 1/2" W x 11" H x 3" D
Specifications	Two way; 5 1/4" woofer, 1" mylar swivel tweeter
Mounting Dimensions	6 1/8" W x 9 5/8" H x 2 5/8" D
Grille	Metal
Color	White

UNPACKING YOUR SPEAKERS

After carefully unpacking your speakers, the carton and the packing material should be saved for possible use later. If any speaker appears to be damaged, do not attempt to repair or to connect the unit to the amplifier. Repack the speaker and notify your distributor or M&S Systems for replacement or repair.

SPEAKER LOCATION

Careful consideration must be given to the speaker location to realize the full frequency range. In-wall speakers should be spaced 6 to 8 feet apart but no closer than 2 feet to any adjacent wall or ceiling. Typical height from the floor would be in the 4 to 6 foot range. Avoid placing speakers in air return wall cavities or walls containing plumbing. **Do not** install speakers in outside walls, stud cavities containing 120/240V appliances, within 18 inches of dimmers, security wiring and other control wiring.

SPEAKER INSTALLATION FOR NEW CONSTRUCTION

Step 1. After you have determined the speaker locations using the guidelines above, secure a 16 gauge 2 conductor cable, such as the M&S Systems MS16X, (DO NOT USE STAPLES) for attachment to the speakers after the dry wall has been installed. Leave at least 18 inches additional cable for the connection during final speaker installation.

Run the other end of the speaker cables to the speaker volume control location and secure in a single gang box along with a 4 conductor 16 gauge cable, such as the M&S Systems MS164X, that will connect to the amplifier. **NOTE:** Make a drawing of each speaker location. This will assist you in locating the wires that have been covered by the sheet rock.

Step 2. To begin installation of the speakers, first locate the area where the wires are installed. At each location, cut a hole to the dimensions shown in the tables (Mounting Dimensions) found on pages 2-3 for the model being installed. The cutout should be centered in the stud space opening. Prepare the speaker wiring by stripping off approximately 3 inches of the outer jacket (care should be taken so the insulation on the wires inside the jacket are not damaged) also strip approximately 3/8 inch off the ends of the two inside conductors. Twist the ends of the stranded cable until the wires are tight.

Step 3. You are now ready to install the speaker. Remove the front grille from the speaker. (Be careful not to touch the speaker cones in order to prevent any damage). Attach the speaker cable to the speaker by pressing down on the red (+) or black (-) tabs and inserting the red wire in the red terminal and the black wire in the black terminal. Make sure that none of the strands from the black and red wires are touching each other. This can create a short circuit that can damage your electronics. Index the mounting tabs to make sure that all tabs will clear the opening. Insert the speaker in the wall with the large speaker at the bottom and tighten the tabs with the screws on the front of the grille. (Make sure that the grille is straight on the wall). DO NOT OVERTIGHTEN THE SCREWS, the screws should only be tight enough to secure the speaker.

Step 4. After the speaker is mounted, adjustments to the swivel tweeter (small speaker) can be made by either directing the sound

visually or by using a musical source to determine the best sound coverage for the listening area. To position the tweeter, press at the outside edge of the tweeter cone area. (DO NOT PRESS ON THE CONE DIRECTLY). Install the metal grille to complete the speaker installation.

Step 5. Follow the instructions with the volume control and amplifier to complete the installation.

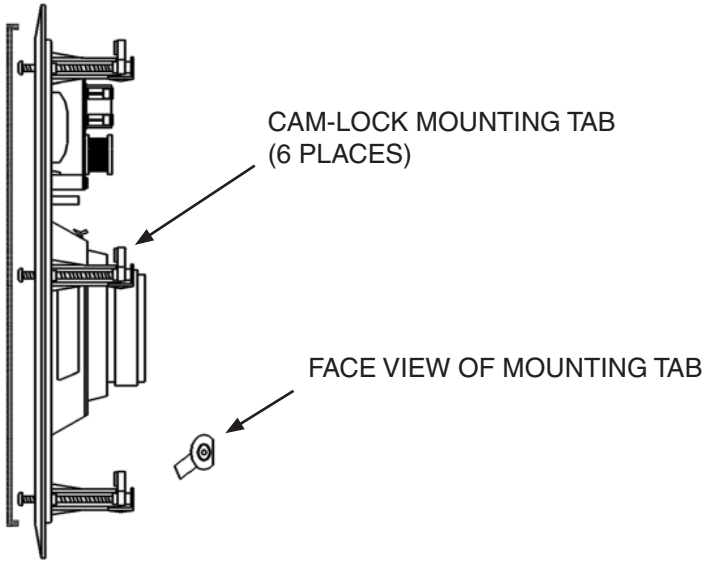


Figure 1

SPEAKER INSTALLATION FOR EXISTING CONSTRUCTION

For existing construction, use the same guidelines that apply for new construction with the following precautions. It is very important to determine what is in the wall space that you will open to install the speakers. Check for standard spacing (16" on center preferred) so you will not need to cut studs and check the wiring path to the volume control and amplifier. Avoid 120V wiring and air return duct and pipe. Proper speaker spacing is also critical to a good system.

The only difference between new and existing construction is the order in which the process is done (steps 1, 2 and 3). In existing construction the speaker hole is cut, the wire is run to the volume control box, and the speaker is connected to the wiring and installed in the wall. You are ready to complete the process using steps 4 and 5 for new construction.

SERVICE & TROUBLESHOOTING

M&S Systems is committed to producing high quality products for the home. If you have any questions or problems with the speaker systems or the system is not operating properly, contact your M&S installer or call M & S Systems at (800) 366-9422.

M&S Systems Limited 2-Year No-Fault Product Warranty

M&S Systems warrants for 2 years from the date of “first user” purchase all products to be free of factory-caused defects of material and workmanship. M&S Systems will repair or replace, at its option, parts and materials at no charge. This warranty extends to the original purchaser of the product and to each subsequent owner of the product during the term of this warranty. This **NO FAULT** warranty covers only the liability described above, and does not include liability for incidental or consequential damages. **NOTE:** Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation may not apply to you.

