# **ET·N** Cutler-Hammer

# Installation Instructions for Wall and Ceiling Mounted Speakers ESWA6550SC, ESWA6500SC, ESWA0800SC, ESWA6500SW

New Information Effective May 2006



# Wall and Ceiling Mounted Speaker Installation Instructions

Installation Manual IM00412012E

# **Prior to Installation**

Each speaker requires one speaker wire set consisting of a positive and negative wire. Eaton recommends using an 18 gauge wire or larger for the best quality sound.

Speaker cable should be run to each speaker location prior to speaker installation. In new construction applications, run the speaker wire to the speaker locations prior to drywalling.



Before you install your speakers you should carefully consider their location to ensure the best quality sound. Make sure to note the location of lighting fixtures, electrical wiring, plumbing, HVAC ducting, or any other possible obstructions.

Once you have selected the area for installation, locate the studs or joists nearest to the desired location. By marking the location of the stud or joist first, you can avoid cutting into it as you cut the speaker hole. A speaker cutout template is included to help you measure cutout dimensions.

Position the template into the desired location and outline the speaker opening. If you are still not sure of possible obstructions, cut a small hole in the center of your mounting location. This small hole will allow you to check for obstructions behind the surface prior to cutting out the entire speaker hole.

If there are no problems with your mounting location, proceed to cut out the outlined hole. If the area where the speaker will be placed is not already insulated, Eaton suggests adding insulation, Dacron, or some other sound dampening material. If you add insulation with a foil layer, make sure to mount the foil side away from the speaker magnet.

# **Ceiling Placement**

Speakers placed into the ceiling should be mounted above or as close to the listening area as possible. Take furniture arrangements into consideration when finalizing your speaker locations. The tweeters located in the speakers can be adjusted to point towards the listening area of the room.



Speaker Grill Removed From Frame

# **Speaker Installation**

**Note:** Speaker cable should be run to each speaker location prior to speaker installation. In new construction applications, run the speaker wire to the speaker locations prior to drywalling.

# To Install

Remove speaker grill first. Locate the mounting brackets on the rear of the speaker.





Mounting Bracket Locked In

# Mounting Brackets on Rear of Speaker (Locked In)

Twist the mounting brackets out of their locked position so they can slide down the open channel.



# Mounting Brackets on Rear of Speaker (Unlocked Out)

Push the brackets down the slide channel towards the front of the speaker, holding onto the speaker frame for support.



*Push Down on the Mounting Brackets to Pop-Off the Speaker Grill* Once the mounting brackets are pushed down, the grill will release from the frame.



Pushing Down on the Legs of the Mounting Bracket Releases the Speaker Grill From the Frame



#### Speaker Rear View Consisting of a Positive and Negative Wire Set

Next, attach the speaker wire from mounting location to the back of the speaker.

**Caution**: Make sure to observe polarity (positive + to positive + and negative – to negative -).

Finally, to mount the speaker, turn all the mounting brackets in toward the speaker. This will allow the speaker to easily fit into the hole you have just cut. Insert the speaker into the hole.



Mounting Brackets in the "in" Position

#### **Speaker Installation (continued)**

Make sure that the speaker is level and carefully tighten the mounting screws to secure the speaker. As you tighten the screws, the mounting bracket feet will flip into position to grip into the drywall. Do not over tighten the mounting screws.



the screws will mounting brackets into the open position to grip drywall.

#### Mounting Brackets Opened to Grip Into Drywall

#### **Adjusting Swivel Tweeters**

The adjustable, swivel tweeter allows you to direct mid-range and high-range frequencies towards or away from the listening area.



#### Speaker With Adjustable Swivel Tweeters

To adjust the position of the tweeter, gently apply pressure on the edge of the tweeter housing toward the desired area.

**Caution**: Too much pressure during this procedure can cause damage to the tweeter.



Adjusting the Tweeter

#### **Reapplying the Speaker Grill**

Once the tweeters are adjusted, the grill can be replaced. Recheck that the speaker is level. Gently press the speaker grill into the grooves on the speaker frame. Be sure to apply pressure evenly as you press the grill into place. Uneven pressure can cause damage to the grill.



Push Evenly the Grill Back Onto the Speaker Frame

#### **Setting Level Controls**

To achieve desired sound, set tweeter levels first, then match bass output.

If only two channels (R & L) of your amplifier are driving more than one pair of speakers, Eaton suggests using the lowest output position for the woofer until you can make sure the amplifier can handle the additional woofer settings.

#### **Painting the Speaker**

Speaker Grill: Remove the speaker grill from the speaker frame. Paint the grill lightly, being careful not to clog the holes. Do not paint the grill while it is still on the speaker.

Speaker Frame: Eaton suggests painting all parts of the speaker prior to the installation. If you must paint after installation, place the provided paint guards around the grill area. After the paint guards are in place, paint the frame of the speakers.

# **Speaker Specifications**

SPECIFICATION	ESWA6500SW	ESWA6500SC	ESWA6550SC	ESWA0800SC
Туре	2-Way In-Wall, Rectangle Shape	2-Way In-Ceiling, Round Shape	2-Way In-Ceiling, Round Shape	2-Way In-Ceiling, Round Shape
Tweeter	1-Inch Cloth Swivel	.75-Inch Mylar Swivel	.75-Inch Cloth Swivel	1-Inch Cloth Swivel
Woofer	6.50-Inch Polyproylene	6.50-Inch Polyproylene	6.50-Inch Polyproylene	8-Inch Polyproylene
Power	80 Watts	80 Watts	80 Watts	120 Watts
Impedance	8 Ohms	8 Ohms	8 Ohms	8 Ohms
Frequency Range	55 – 20,000 Hz	57 – 20,000 Hz	53 – 20,000 Hz	44 – 20,000 Hz
Sensitivity	89 dB	88 dB	90 dB	90 dB
Packaged	1 Pair	1 Pair	1 Pair	1 Pair
Finished Dimensions (Inches)	12.00 High x 8.63 Wide x 3.13 Deep	9.00 Diameter, 3.13 Deep	9.00 Diameter, 3.13 Deep	10.50 Diameter, 3.50 Deep
Cutout Dimensions (Inches)	10.75 High x 7.25 Wide	7.75 Diameter	7.75 Diameter	9.75 Diameter

Eaton Electrical Inc. 1000 Cherrington Parkway Moon Township, PA 15108-4312 United States tel: 1-800-525-2000 www.EatonElectrical.com



© 2006 Eaton Corporation All Rights Reserved Printed in USA Publication No. IM00412012E / Z4072 May 2006