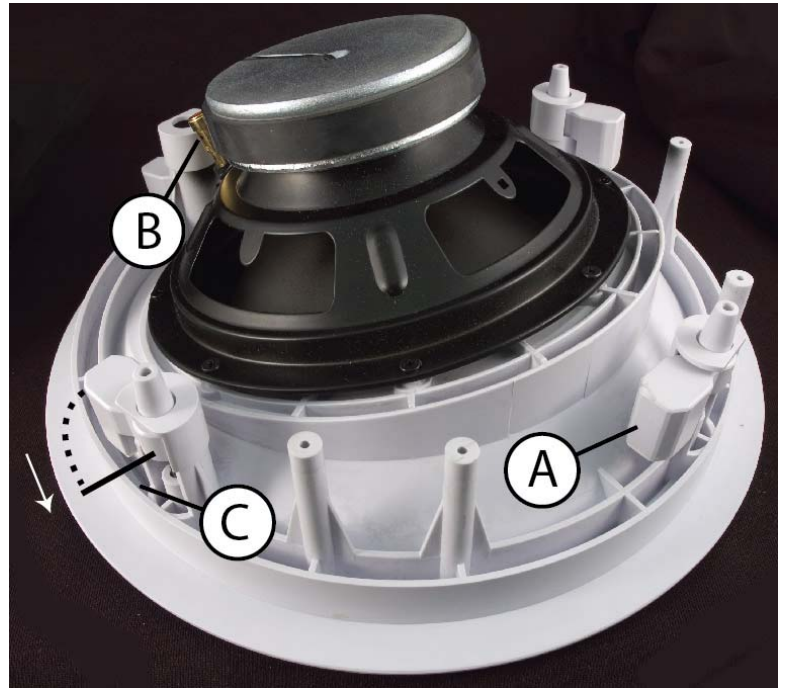


# Installation of 15° Angled LCRS Ceiling Speakers

1. Check ceiling area for concealed obstructions such as wiring, plumbing, heating ducts, etc.
2. Use a "stud finder" to locate positions of joists or rafters. Make sure that your intended locations for your speakers are unobstructed and that the holes will be at least 2 inches away from joists or rafters.
3. Use the supplied compass or cut-out template/paint mask to draw a circle with the diameter that corresponds to the model of your speaker on the chart below, and carefully cut out the hole.
4. Remove grille from speaker assembly using included grille remover.
5. Before installation, turn the "Angle Lug Installation Clamps" (Item A) so they are positioned as in photo below. This way, they will clear the cut-out hole for installation.

Models	Mounting Diameter	Mounting Depth
AP-615 LCRS	9 1/4"	5"
AP-815 LCRS	11 1/2"	5 3/4"



*Rear View of Speaker Assembly*

6. Prior to inserting speaker assembly into cut-out hole, attach speaker wires. Make sure to observe polarity (the "+" and the "-"). Speakers wired *out of phase* will exhibit an apparent loss of bass response. The wires will be held in place by the "Spring Clip Terminals" (Item B). Wires should be stripped about .25". Tinning of wire ends will assure a trouble free installation, but is not necessary.
7. Insert speaker assembly into hole and orient it so that it is angled toward the listening area. A clear plastic template is included to precisely align the direction of the speaker. The template must be removed before the speaker is operated.
8. Begin to tighten installation screws. As you start to turn each screw, the "Angle Lug Clamps" will rotate outward to engage ceiling material (Item C). **CAUTION:** Do not overtighten the clamps. Too much torque may snap off the lug, causing the speaker not to seat securely. A snug fit is all that is necessary to assure proper performance.
9. If speaker assemblies are to be painted, either before or after installation, use the paint masking template (cardboard disc) to cover the speaker driver(s) to prevent damage. **DO NOT TRY TO PAINT THE GRILLE AND FRAME ASSEMBLY TOGETHER.** The grille should always be painted separately. Use thin coats taking care not to block perforations with excessive paint.
10. Your speaker includes a pivoting tweeter and it may be aimed to achieve even better imaging. Tweeter output should be directed toward the typical listening position. **USE CARE TO AVOID DAMAGING THE DOME OF THE TWEETER DURING AIMING!!**