

# AVAYA

**MODELS: 700286297 / 700286305**  
**(White)      (Black)**

ENVIRONMENT-PROOF  
INDOOR/OUTDOOR LOUDSPEAKERS

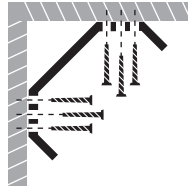


# ENVIRONMENT-PROOF INDOOR/OUTDOOR LOUDSPEAKERS

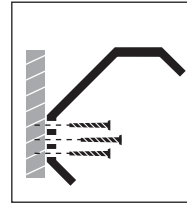
## BRACKET INSTALLATION



FLAT SURFACE



90-DEGREE ADJOINING SURFACES  
*(secure both ends)*



CANTED

**WARNING:** Mounting brackets must be secured in accordance with local codes. If in doubt, consult a professional contractor to determine the integrity of the structure to which the bracket will be attached. When required, a user-supplied safety strap can be secured to the back of the speaker cabinet using the threaded brass insert and supplied screw.

## MULTIPLE SPEAKERS AND SOUND COVERAGE

Placement is critical when the goal is smooth, even sound coverage of an area. Horizontal and vertical dispersion usually vary with 2-way speakers, so installation orientation should be consistent. The coaxial 700286297 and 700286305 deliver about 90 degrees of horizontal sound coverage. Too great a distance between any 2 speakers will create a dead spot in the coverage. When in doubt, use more speakers to ensure adequate coverage.

## OTHER FACTORS TO CONSIDER

Distance is not the only factor affecting sound intensity. Others that should be considered in the planning phase are adjacent surface reinforcement and environmental effects such as temperature extremes and humidity (mainly in outdoor installations).

## LOW FREQUENCY OUTPUT

Bass output level depends on a speaker's location. The more reflecting surfaces in proximity to the speakers (walls, ceilings, floors), the greater the bass output. Therefore, speakers mounted in free space (e.g., hanging from an overhead support) will produce comparatively less bass output.

## UNDERPOWERING VS. OVERPOWERING

Most speaker damage is caused by amplifiers with too little power. An overdriven amp sends clipping distortion to the speakers. Clipping is usually audible; it may vary from a harsh sound to a fuzzy or blurry sound. If you hear clipping at loud volume levels, turn down the volume until the distortion is no longer present. Damage caused by operating the speakers at distorted volume levels is not covered by the warranty.

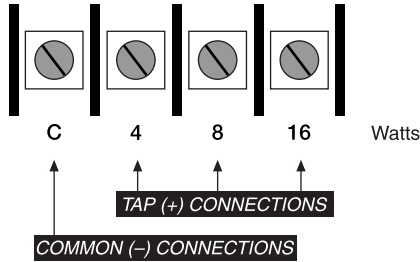
## PAINTING

The speaker cabinet and grille can be painted with a thin coat of spray paint. Remove the grille and mask the speaker assembly so that only the cabinet gets painted. Then, if desired, spray the grille lightly to avoid plugging the holes.

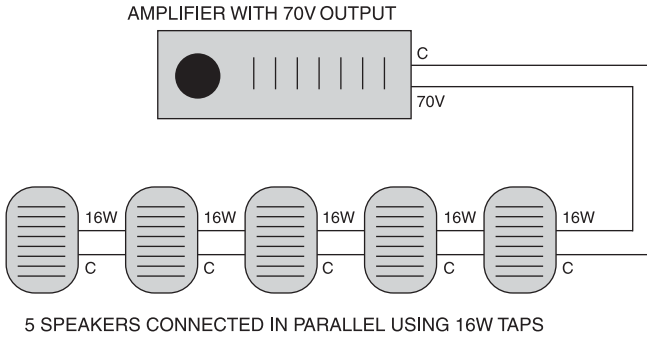
## MAINTENANCE

None required. Speaker cabinets can be wiped clean with a soft, damp cloth.

## BACK-PANEL CONNECTIONS



## EXAMPLE OF 70V SYSTEM CONFIGURATION



**NOTE:** The total number of speakers multiplied by the tap value cannot exceed the output power (in watts) of the 70V amplifier. The above example shows 5 speakers. Using the 16W taps, you need an amplifier with at least  $(5) \times (16) = 80W$ . A good rule of thumb is to select an amplifier with 20% greater power; in this case, an amplifier that delivers about 100W.

## SPECIFICATIONS

<b>MODEL NUMBER</b>	<b>700286297 / 700286305</b>
<b>LF Driver</b>	6" MDT
<b>HF Driver</b>	1/2" Polycarbonate
<b>Freq. Response (-10 dB)*</b>	55 Hz to 20 kHz
<b>Impedance</b>	70V
<b>Power Handling (70V)</b>	16W
<b>Sensitivity (1M/1W, 8-ohm)</b>	88 dBspl
<b>Additional Taps (70V)</b>	8W, 4W
<b>Dispersion Angles</b>	Horiz. - 90° Vert. - 90°
<b>Speaker Dimensions</b>	9" dia. x 8" D
<b>Product Weight</b>	10 lb.
<b>Terminations</b>	Gold-Plated, Rust Proof Barrier Strip

\* Half-Space Response

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## TECHNOLOGIES

These environment-proof loudspeakers feature unique technologies that improve sound quality and operating reliability. All models feature MDT (Metal Diaphragm Technology) and MLS (Magnetic Liquid Suspension).

### **MDT (Metal Diaphragm Technology):**

- High rigidity and low mass of metal versus traditional papers and plastics
- Extremely stable cone structure over long periods of time
- Fast transmission of sound through the diaphragm means low energy storage
- Special anodizing process creates a ceramic coating for increased stiffness
- Efficient heat-sinking of voice coils under long-term, high-power situations

### **MLS (Magnetic Liquid Suspension):**

- Voice coil is constantly centered for lower distortion
- Voice coil is more efficiently heat-sunked by fluid instead of air
- Greater linearity is accomplished because the mechanical spider is eliminated
- Constant lubrication of the gap prevents oxidation from outdoor use

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