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Product Information

The Halo™: 6-Microphone Array

For Automotive Audio Measurement Applications

Introduction

The Halo™ is an innovative low cost 6-microphone array mount for in-car audio measurements. It represents the listener without requiring an artificial head. With six precisely positioned microphones in the configuration recommended by the AES Technical Committee on Automotive Audio, Halo™ creates a standardized representation of the occupant listening space. This enables accurate, repeatable in-car acoustic measurements while dramatically reducing cost and complexity.

Materials

The Halo™ is manufactured from rugged, lightweight, ABS plastic using modern 3D printing techniques. This material offers low resonance compared to metal structures, minimizing interference with test data. The microphone clips feature unique snap fittings for fast setup with secure, consistent microphone positioning and the height is easily adjusted for precise compliance with TC-AA guidelines.

Microphone Labels

The microphone positions are numbered according to the TC-AA specification, and an optional braided cable for 6 SCM microphones is marked with the microphone number at each end for clear visual correlation of microphone position to input channel. Although we recommend pairing the Halo™ with our ¼" SCM microphones, it is compatible with any measurement microphone with a ¼" shaft.

Error-free Operation

The Halo™ can be rotated ± 90° with respect to the horizontal plane, and a built-in bubble level makes it easy to precisely set it to the 30° angle specified in the TC-AA guidelines. This is faster and easier than using an inclinometer and more accurate than a level in the base as it also accounts for any seat incline. The standard ¼" screw thread makes it easy to mount on any microphone stand.

Cost

Although the AES TC-AA specifies this configuration for wider cost accessibility, the Halo™ is the first product to truly lower the cost barrier of making standards-compliant automotive audio measurements. Its sales price is just $650 (without microphones); other similar-functioning 6 microphone arrays retail for considerably more.

Feature Overview

- Low cost – significantly less than other automotive 6-microphone arrays
- Made from rugged, non-resonant ABS plastic
- Snap in fittings for fast and accurate microphone positioning
- Compatible with any microphone with a ¼" shaft
- Bubble level for precise alignment to guidelines
- Numbered microphone positions
- Fits any microphone stand with ¼" screw thread
- Available in 2 colors: black for a sleek, professional appearance, and green for clearer visibility in dark-colored automotive interiors

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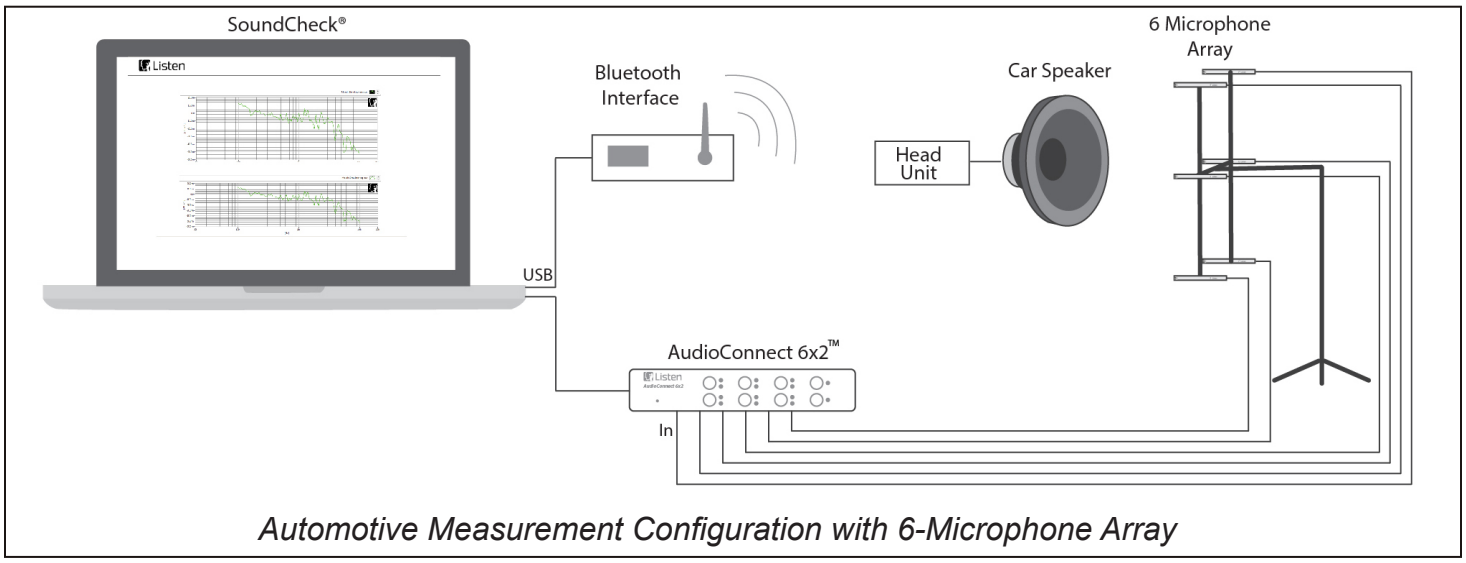
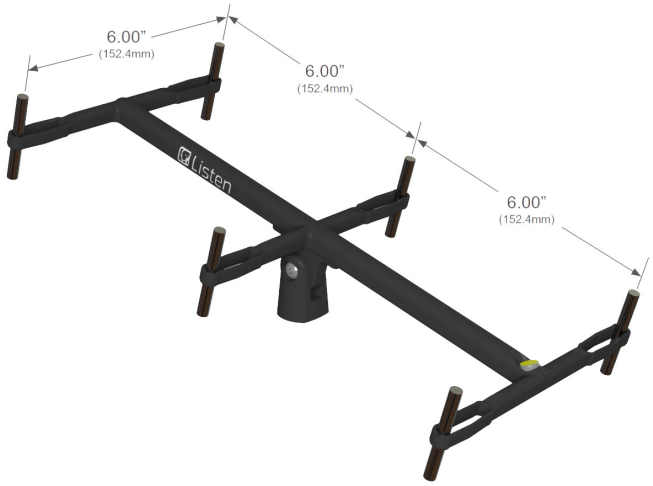
The Halo™ 6-Microphone Array (cont.)

Setup Diagram



Automotive Measurement Configuration with 6-Microphone Array

Specifications



Rear View

Ordering Information

Part # 4110: Listen Halo SCMA-6, 6-microphone array holder for SCM 1/4″ microphones (stand not included). Black

Part # 4110-G: Listen Halo SCMA-6, 6-microphone array holder for SCM 1/4″ microphones (stand not included). Green

Part # 4120: 49 inch/120 cm Extendable Tripod stand for 6-microphone array holder

Part # 4140: Listen Halo SCMA-6, 6-microphone array holder with 6x SCM 1/4″ microphones, stand, cables and adapters (add -G suffix for green version)

NOTE: Specifications are subject to change. Please contact Listen for current information or questions.