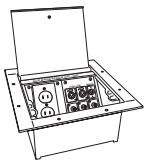

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INSTALL SPEC
Stage Management Products
Installation Spec Sheet
Revision: 1C.CSM-41/61

Model Numbers:	**#CSM-41C, #CSM-41SC, #CSM-61C, #CSM-61SC**
Model Name:	**Choir Stick Microphone with Shure® Elements**
Model Description:	**Choir Stick Mic, 40” or 60” Long with Cardioid or Super-Cardioid Elements**

Model Name: CHOIR STICK MICROPHONE

CHOIR STICK MICROPHONE INSTALLATION

Ace Backstage Co.’s Choir Stick Microphone is a wide-range miniature condenser microphone designed for quality sound reinforcement, professional recording, television, and other demanding sound pickup applications. It requires 9V to 52 V DC from an external phantom power supply (usually provided by the mixer). A recessed switch on the power module permits the choice of flat response or low frequency roll-off to help control undesired ambient noise. Two interchangeable Shure® elements (Cardioid and Super-Cardioid) are available to permit selection of angle acceptance from 115° to 130°.

Note: Figures 1 and 2 assume that the element in place is a Super-Cardioid element (115°). The combination of small size and excellent response makes the Choir Stick Microphone ideal for choirs, instrumental groups, or theater stages. A uniform 115° angle of acceptance from the cardioid element provides well-balanced audio pickup. The microphone should be located forward of the front-most source (24”-36”) and above the rear most source (approximately 24”-36”), and aimed between them (Figure 1). Increasing the height of the mic above the sources will tend to equalize the sound levels between them, but may also increase the background/reverberant sound pickup. Whenever possible, the distance from the mic to the rear-most pickup should be no more than twice the distance to the front source, to maintain front-to-rear balance (Figure 1). Width of the pickup is approximately 2.5 times the distance to the closest performer. If additional mics are needed for wide sources, they should not be closer together laterally than 2 to 3 feet, to avoid phase cancellation (Figure 2). This typical spacing is approximately 2.5 feet apart. To orient the mic element in the proper direction, bend the gooseneck housing until the desired location is found.

Note: All Shure® elements will have somewhat different configurations depending on the element(s) being used. The Super-Cardioid Element (130°) configuration will have a broader coverage pattern, leading to variations in the distance to the front-most source, the angle of acceptance (element polar patterns), and so on. Since applications may vary, please use this spec sheet as a guide. All drawings and measurements are for reference only.

SHURE® SUPERCARDIOID ELEMENT CHOIR STICK MIC CONFIGURATION

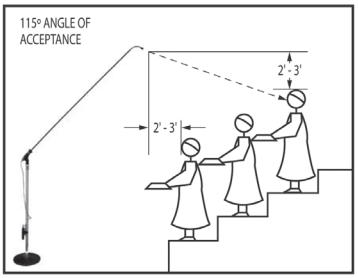

FIGURE 1
Vertical Positioning of Super-Cardioid Element

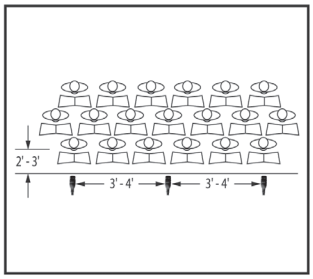

FIGURE 2
Horizontal Spacing of Super-Cardioid Element

SHURE® CARDIOID ELEMENT CHOIR STICK MIC CONFIGURATION

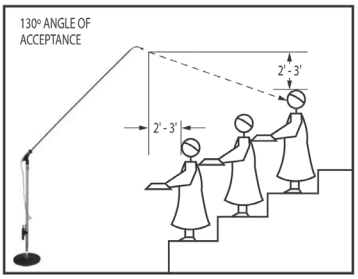

FIGURE 3
Vertical Positioning of Cardioid Element

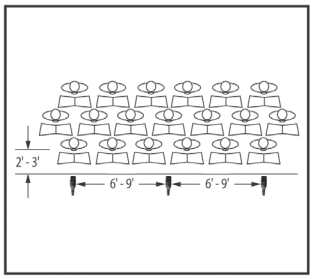

FIGURE 4
Horizontal Spacing of Cardioid Element