

## THREE SASS® SURROUND METHODS

The Crown SASS-P MKII stereo microphone (Stereo Ambient Sampling System) does a great job providing ambience and audience sounds for the rear channels in surround recordings. Let's look at three surround miking techniques that use the SASS.

### Five-Channel Microphone Array with Binaural Head

This method was developed by John Klepko of McGill University. It combines an array of three directional mics with a 2-channel dummy head (Figure 1). Although Klepko did not mention the SASS, it probably could replace the dummy head because of their similarity.

- Front left and right channels: identical supercardioid mics
- Center channel: a cardioid mic
- Surround channels: a dummy head with two pressure-type omni mics fitted into the ear molds, or a SASS mic.

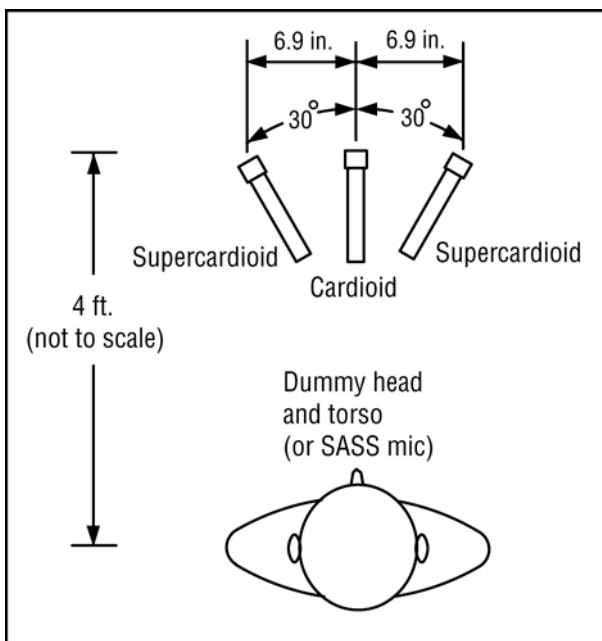


Figure 1. The Klepko surround-sound miking method.

The mics have equal sensitivity and equal gains. Supercardioids are used for the front left/right pair to reduce center-channel buildup.

According to Klepko:

“The walkaround tests form an image of a complete circle of points surrounding the listening position. Of particular interest is the imaging between  $\pm 30$  degrees and  $\pm 90$  degrees. The array produces continuous, clear images here where other (surround) techniques fail.”

### Stereo Pair Plus Surround SASS

In this method, the center-channel mic is omitted. You use a standard stereo pair of your choice to pick up the musical ensemble, plus another stereo pair of your choice (such as the SASS) to pick up the hall ambience (Figure 2). The hall mics feed the left-surround and right-surround channels.

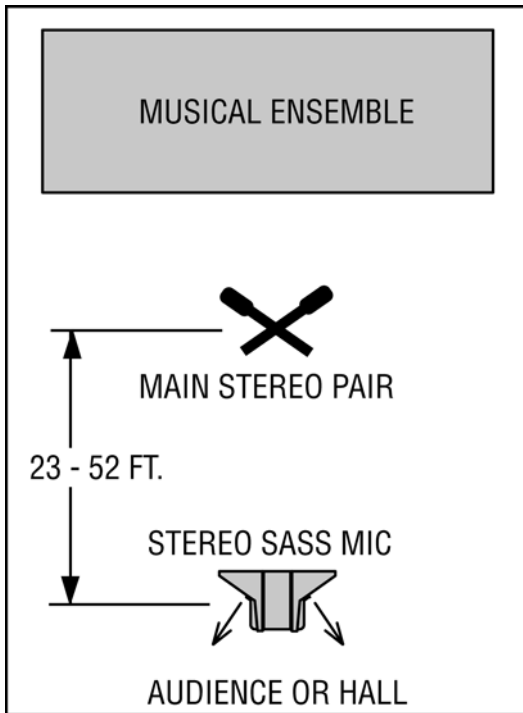


Figure 2. Stereo pair plus surround SASS

#### Mike Sokol Method

When recording concerts, surround-sound guru Mike Sokol often uses a Crown SASS-P MKII stereo mic aiming toward the audience, feeding the surround channels. The front soundstage is a multitrack mix of several close-up mics (Figure 3). Because the SASS can handle up to 148 dB maximum SPL, screaming audiences are no problem.

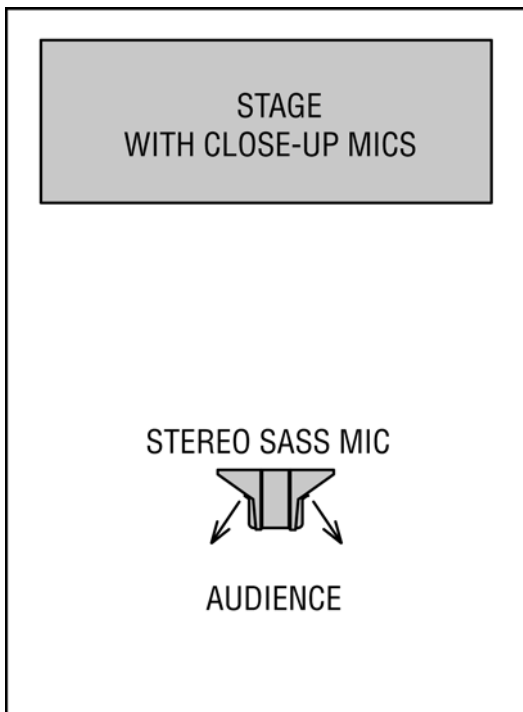


Figure 3. A surround method by Mike Sokol