



# REVIEW



## SAMSystems INTEGRAL Close Miking

*Convenient system for guitar cab miking*

### REVIEW BY ALEX HAWLEY

The INTEGRAL Close Miking system by SAMSystems is a clever solution designed as a convenient and streamlined way to mic the speaker of your guitar amp. After years of development and road testing, SAMSystems first showcased the INTEGRAL Close Miking system at the 2018 NAMM show. In this review, we'll discuss the installation process and put it through its paces in the studio and on stage.

### Overview

INTEGRAL has a choice of 10" and 12" models to fit the two most popular corresponding amp speaker sizes. INTEGRAL is essentially a black plastic disc that attaches along the outer perimeter of your speaker, with a crossbar across the middle. In the middle of that crossbar is a Sonic Diffuser that fits over the cone and houses a dynamic microphone in a fixed, non-adjustable position. According to SAMSystems, they

took great care to find the correct spot to ensure a consistent tonality.

The mic is angled off-axis from the cone and pointed towards the side of the driver. The Sonic Diffuser is designed to diffuse harsh frequencies resonating from the cone, allowing the microphone housed within to capture a balanced representation of the *diffused* sound.

This system virtually eliminates bleed from other instruments while playing on

stage, providing a consistent tone (since the placement and conditions will always be the same). It also eliminates the need to set up standard mics on stands in front of the cabinet, which can be prone to being knocked around on stage or potentially suffering from placements not quite in the sweet spot.

INTEGRAL notes that the mic's sound is designed to provide a neutral, transparent representation of the diffused speaker sound. It's not meant to be a "Shure SM57-style" capture—the intention is to provide the engineer or FOH with a balanced sound that can be EQ'd into the preferred tone based on genre and personal preference. SAMSystems notes the response is "purposely generous in the mid to high frequencies."

### Installation Process

Once you remove the backplate of your amp and remove the speaker, installing the INTEGRAL system is surprisingly easy. The mounting holes on the INTEGRAL directly line up with those of the speaker. Screw the speaker back into place with the INTEGRAL laid on top, and the XLR connection gets routed to the rear of your cabinet for easy access. INTEGRAL also provides hardware if you'd like to permanently fix the XLR jack to the back of your cabinet. This requires drilling a hole in the frame and securing the jack—necessary for closed-back cabinets. I used an open-back cabinet, so it was easy to position the XLR jack in an accessible position out of the back. With the XLR securely placed in an accessible position, it's easy for any engineer to take the feed directly from the INTEGRAL mic to use with studio preamps for FOH.

### Rig It and Gig It!

Once the INTEGRAL system was up and rolling, I took that cabinet (loaded with an Alnico Blue 12" speaker) on some gigs and recording sessions. Soundchecking for live shows was a breeze, and the sound remained very consistent from gig to gig.

Its tone is extremely direct and the INTEGRAL does an excellent job of isolating the speaker's sound. Its sound and ease of use yield an almost 'DI-like' experience while still moving a bit of air in the process.



**Price:** £109 (\$138) INTEGRAL 10";  
£119.99 (\$150) INTEGRAL 12"  
**More From:** [integral.uk.com](http://integral.uk.com)



In the studio, the response is brighter and more direct than I'm accustomed to on guitar cabinets, especially after years of dynamic and ribbon mic combinations at varied placements and distances. As mentioned, this is by design, and as advertised, it takes EQ rather well. I shaped the response to round out the upper-midrange and highs (the 4 kHz to 6 kHz range is moderately emphasized) and boosted the lows to get more body and gravitas. I also noticed a rather sharp drop-off below 125 Hz (likely designed this way to help cut through mixes on stage). Luckily, because of the unchanging position of the mic on the cabinet, when recording or mixing, any EQ profiles you write down or store in a plugin preset will remain consistent and translate, no matter where you are recording or performing.

### Integrated Thoughts

The INTEGRAL Close Miking system provides an effortless and consistent solution for capturing the sound of your speaker in isolation that will save setup time in studio sessions and live gigs.

It is also possible to fit more than one Integral in a cab with multiple speakers. In a 2 x 12 cab, for example, you can create a stereo setup by routing each Integral into a separate channel on the desk, which can then be panned left or right. ➔