

## Point Source Audio EO-8WL EMBRACE Earmount Microphone

By: Mark Johnson

Point Source Audio was founded in 2004. In the world of pro audio equipment manufacturers, you could arguably call it a young upstart. It was just 13 years ago that the company started designing and manufacturing transducers on an OEM basis. In 2008, PSA released its own branded prod-

uct, the CO-7, an omnidirectional lowprofile earworn microphone system that could be used either as a single ear mic, or, with an accessory earpiece added, a dual earset system. The mic's claim to fame was that it was darn near indestructible. The boom had the ability to withstand all sorts of

flexing and general abuse. The promotional material showed the boom being wrapped around a finger. While the CO-7 is discontinued, PSA now engineers and manufactures other mics in the CO line, including the CO-3, CO-5W, CO-6, and the flagship CO-8. The CO-3, 5, and 6 feature omnidirectional pickup patterns; and the SERIES8 includes the CO-8, with an omni pickup pattern, or the CR-8 with a cardioid pickup pattern. Another hallmark of some PSA mics is that they are waterproof. One of the design criteria for the mics was the ability to stand up to sweat and makeup, which is definitely desirable in most theatrical applica-

Typically, theatrical sound designers are tasked with coming up with creative solutions to ensure that audiences can hear performers' vocal nuances. Microphones have been installed in hats and wigs and taped down in a multitude of locations on the heads, faces, and upper torsos of actors and singers. The main challenge is consistent sound quality as performers move their heads or change body positions.

To help achieve consistent sound quality, sound designers started positioning miniature microphones on the side of performers' faces. This assures a consistent distance from the mic to the sound source. Typically, though, the mic is either affixed with medical tape directly on the face and makeup is applied to hide the tape and the mic, or designers must devise something that usually consists of a stiff wire formed to attach the mic around the ear (like an earset mic, but with a





Embrace with X-Connector.

much shorter boom, to keep the mic element discreetly out of sight). Basically, the audio team for a given production is responsible for configuring some sort of solution. The industry is ripe for a commercially available mounting system for theatrical vocal mics.

#### **Embracing EMBRACE**

EMBRACE is Point Source Audio's newest product. The EO-8WL kit includes the Embrace earmount (more detail about this device in a minute); a Point Source Audio CO-8 omnidirectional condenser mic; an X-Connector, which is used to adapt the microphone proper to the wireless bodypack transmitter of your choosing; and mic clips for a traditional lavalier (an alligator clip and two slider clips, for securing the mic to fabric, and a windscreen).

The X-connectors allow the adaptation of the microphone to many commonly used wireless transmitter systems, including those made by Audio-Technica, Sennheiser, Shure, and others.

Now back to the Embrace earmount. At first glance, the earmount looks similar to a shortened earmount microphone system, minus a microphone. However, on closer examination, the backside features a channel





Cable channel

for a thin lavalier mic cable to be run through the earmount, allowing the mic element to be positioned either at the top (above the ear) or the bottom (below the ear), with the cable guided through the earmount and exiting back behind the ear. There's a lot going on with this seemingly simple design. It creates a great deal of flexibility when positioning a miniature microphone on a performer.

The earmount comes in beige, brown, or black, and theatrical color markers can be used to further color the mount to blend in with hair color, costume color, or skin color. The earmount is bendable and will retain whatever shape you choose. That enables the opportunity to create a custom-fitted microphone mounting system. The Embrace also provides detents at the top and bottom that act as guides for trimming the unit to your desired length, so the mic element can be situated just below the ear to about the cheekbone, or right above and in front of the ear (around the sideburn hairline) depending on your requirements and application.

You can reshape as needed to fit other performers, but once you cut the boom, you are committed to that length. PSA also provides a protective

silicon cap to cover the trimmed area. Since there are definitive front and rear surfaces to the Embrace, there is a distinction between whether the unit mounts on the right or left side of the head. The earmount itself is manufactured using a molded, pliable, semisoft silicone type material, with a thin stiff wire embedded in the business portion (the part that fits around the ear) of the mount.

While the kit includes the Point Source Audio CO-8 microphone, those with an affinity for other brands or models of miniature microphones can purchase the earmounts separately, and use the mic of their choosing. The earmounts are available in packages of 6, 12, and 24 (half are right-side mount, half are left-side mount).

For the purposes of this review, I was provided slightly different accessories than would ordinarily come in a kit, including a selection of X-Connector adapters for a couple of different wireless systems. As it hap-



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pened, shortly after receiving the Embrace system, I also received a Shure Axient wireless system for review, so I immediately connected the Shure adapter to the Embrace CO-8 mic, connected to the bodypack transmitters, and fired the whole rig up.

Two hallmarks of Point Source Audio microphones are their durability and resistance to moisture. Physical abuse and moisture (read sweat) are all in a day's work in theatrical miking, so no matter how good the microphone is, specification-wise, if it's not up to the task of lasting through multiple performances without failure, then it is ultimately of little use in this type of production environment. The Embrace system ticks both boxes. The CO-8 mic is durable and nearly impervious to sweat (it has an IP57 waterproof rating to withstand water, sweat, and makeup), and it sounds great.

The embedded wire allows the



Accessories include two slider clips, one alligator clip, and one foam windscreen.



Untrimmed Embrace, showing the cable channel.

ability to shape the Embrace to custom-fit the performer. This ensures a secure, low-profile fit. I was initially concerned that the Embrace would interfere with the fit of my eyeglasses. While there was some contact between the earpiece of my glasses and the Embrace, it was minimal, and both felt secure. More importantly, the fit was, dare I say, comfortable. Since it's compact and lightweight, its presence is not distracting and if I were a performer, I'd most likely be able to

go about my business without being distracted by a microphone contraption on my head.

#### Flexible in every way

As mentioned, the Embrace is malleable and retains its shape (due to the embedded wire) and trimmable, so you can create a custom fit earpiece. The unit is also designed to provide microphone placement options; above the ear, below the ear, close to the ear, at the cheekbone...again, depending



on your production requirements.

But what about the microphone? It is a Point Source Audio EO-8 omnidirectional with a back electret condenser element. The advertised frequency response is 20Hz to 20 kHz, and the maximum SPL is 136dB (enough to withstand any powerful vocal). The cable length is just a tad over 4' (including the X Connector). The X-Connector is a 6" adapter cable with a small gold threaded connector on one end to attach to the CO-8 cable; on the other end is your choice of 11 different connectors to fit many popular wireless transmitters. Even though it is lightweight, the Embrace feels like it can take some of the abuse a system such as this would typically face.

#### **Target markets**

Of course, Embrace is ideal in theatrical applications, including houses of worship that present theatrical-style productions and events. Embrace could also be applied in a corporate or broadcast environment, basically anywhere that you would want a low-profile and easy-to-camouflage microphone.

The list price for Embrace EO-8WL kit is \$530, which includes the SERIES8 omnidirectional mic element, left and right side over-ear mounting pieces, a finishing cap, and an X-Connector to fit the wireless bodypack transmitter of your choosing, three lavalier microphone clips for utilizing the EO-8WL mic in a traditional lavalier application, and a foam windscreen. All are packed in a handy storage box. The pricing for the earmount only packages is \$330 for six, \$600 for 12, and \$1,080 for 24.

### File under practical application

Point Source Audio innovates by creating commercially available products (read: produced in large quantities and sold to the general pro audio populace) based on the handmade solu-



Shure and Sennheiser X-Connector and XLR options.

tions that audio people have been cobbled together for years. Along with Embrace, another example is the recently released SERIES8 dual omni lavalier mic, which is two independent mic elements paired in one housing to provide redundancy and backup in mission-critical situations. An Embrace version is available.

Point Source Audio designs highquality tools for many of the challenges faced by audio pros in a variety of production environments. It's a good idea to bookmark the PSA website for future reference.



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Manufacturer:



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