

Recording Vocals, February 1997 Thoughts From Both Sides of the Microphone

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Recording vocals is tricky business. In addition to having the requisite recording chops, engineers must walk that fine line between achieving their ideal sonic environment and providing a comfortable atmosphere for the singer. In this personal situation, communication must go both ways: Performers must be able to express concerns as well as clearly define the sound they hope to achieve.

For both the engineer and the performer, these skills come with experience, and with an understanding of goals the other person is trying to achieve in the studio. To gain some insight into this complicated issue, *Mix* talked to seasoned engineers and vocalists, to find out the methods they have developed over time to get that optimal vocal recording.

STEVE COUNTER

Like many engineers, Steve Counter started out as a musician. Eighteen years ago, he began mixing in his hometown of Denver before migrating to Phoenix—where he recorded everything from country music to traditional Navajo music to polkas to heavy metal—and then settling in the San Francisco Bay Area, where for the past 10 years he's mostly focused on R&B and hip hop. He recorded En Vogue's first two albums there; other credits include albums by Digital Underground, Michael Cooper and the late Tupac Shakur. Currently, he's in the studio with En Vogue, working on their third album.

"Over the years, I've found a lot of mics that I prefer," Counter says, "and if I'm not sure, I have a lot of microphones available to me. I'll just set them up side by side, in a big 'press conference' array, and have the singer sing into them for comparison. I don't run this comparison to tape. You're usually

dealing with a limited amount of time, and one thing I learned many years ago is you really can't wear somebody out experimenting on them. They're in there to sing and get their job done, and the less you put in the way of that, the better."

Counter says that with the exception of rock 'n' roll cuts, he tends to prefer tube mics to solid-state models. "Right now, I'm very fond of the AKG C-12VR re-issued C-12," he says. "I like the original C-12; it's a very warm mic, nice and bright, clear top end, and a little bit scooped in the middle. I'm using a re-issued U67 tube mic a lot; it has a real warm, full midrange. I like the Neumann U47; it has a little older sound, it's great for country western."

With Digital Underground, Counter used a Neumann M250 almost exclusively. "It has a little bit of the same character as an M49 Neumann, but it's a much brighter, edgier microphone," he says. "It worked well for the style that rap has: pretty aggressive, not a particularly laid-back vocal style. And then of course there's always the old standby, the [AKG] 414. If I want an edgier kind of vocal sound, it's got nice air to it; it's a little too edgy compared to a tube mic for me, but sometimes you want that; you need that bite. The other thing I'll do is, sometimes for rock 'n' roll, I'll use an SM57 or a SM58 Shure dynamic microphone, set it up in the control room, turn the monitors up and just go for the raw guts sound."

"When I was over at Fantasy Studios for the second En Vogue record," says Counter, "we used exclusively the Telefunken 251 tube mic, and it was wonderful. Great, lovely top end, and a lovely, warm middle; pretty much everything you want. Fantasy has an old Neve mic/line mixer, and a pair of old Neve compressors. And that basically was my signal path. I bypassed the console entirely. I might use a little Pultec program EQ with a little 10 or 12k on top, a couple dB, but that was about it. That was a great signal path."

Counter mostly used a single mic to record En Vogue's background vocals, one or two singers at a time. "I set up a booth out in the studio with a couple of gobos around the microphone, sort of a half-shell around the back of the singers, with the microphones in front, and the singers usually facing the control room. I try to get at least ten or so feet away from the glass. I don't want to hear the glass, and I've even on occasion turned the singers sideways because of having a real problem with reflections off of the glass. If it's a good-sounding room, I don't mind a little touch of ambience, a little after-ring. Particularly in background vocals, it adds a little extra coloration if it's a good-sounding room. For lead vocals though, I don't like much ambience, because when you go to mix, you might be processing them in such a way that ambience could cause problems."

When dealing with pitch issues, Counter says getting the headphone mix correct is a priority, "which might mean maybe not as much reverb in the headsets, and certainly level is a factor," he says. "I have this problem surprisingly a lot with singers—they'll crank the headphones, particularly if they've been on the road, and they're used to hearing the band behind them. Then they'll start singing real sharp while they're trying to out-shout the headset. The opposite is also true: If the headsets are way down, they start singing timidly to fit into the mix in the headphones, and their pitch starts sliding all over the place, 'cause they're not really grabbing the notes and pushing air. They're just sort of holding way back, and you can hear it. It's very obvious."

"From a philosophical standpoint," Counter says, "whether it's vocalists or musicians or any kind of session, the big thing is not to get in the way of the music. You don't want to put people through a lot of technical stress in what is basically an artistic event."

CHRIS ISAAK

Since the 1990 breakthrough of "Wicked Game," featured in David Lynch's hit film *Wild at Heart*, Chris Isaak has been internationally successful as a singer-songwriter, often compared vocally to the likes of Roy Orbison and Elvis Presley. In addition to recording six hit albums, he's landed roles in films such as *Twin Peaks: Fire Walk With Me* and *Little Buddha*. Isaak doesn't like to talk technical much; when asked what mics he prefers, he replies, "You know, I find that I like to use a ribbon microphone." His decade-long career has provided him the chance to work with industry veterans, including producer/manager Erik Jacobsen, and to learn the studio ropes.

Isaak says that in the studio, it's important to provide examples of the sounds he's looking for. "When I make a video or a film, and I want it to look a certain way, I'll cut pictures out of magazines," says Isaak. "I'll make a tape of little pieces of film, and I'll say, 'See this lighting? This is the lighting I want. See the shadows on this? I want this.' And bring that to the cinematographer. I do the same thing in the studio. You come in, and you say, 'I want you to listen to this voice and the way that it's treated; here's what I'm shooting for.' Giving somebody an example of the sound. To me, if I was an engineer, I'd slap you if you came in and said, 'I don't know, more warm. More yellow, yeah, more yellow.' You hear artists say, 'I want more echo.' Is it echo you want, or reverb? And is it a slap? What is it? The good thing is, if you take time to actually stay in the studio with people, you learn something."

"I remember coming into the studio, thinking, 'I'm nervous about this.' So you wear dark glasses, you're kind of hiding your face, and you go out to sing, and you sing in the other room, and say 'Turn down the lights,' you know? Or sometimes you can just put a screen in front of yourself, so they can't look at you when you're singing."

But the reality of it is, to me, I like to sing as close to them as I can be—if they're in the same room with me, that's fine, and I want the lights up bright, and I'm not worried about them seeing me sing. Maybe if I have a tough time—so what? I think the reality of it is, besides being comfortable, it helps everybody just to kind of go, look, it's a tough thing to sing, and everybody's going to have tough days."

Isaak says he tries to approach a track as if it's a one-take. "If you can go back and fix something, great, but the reality of it is, I try not to," he says. "I kind of feel like it's nicer if you can sing the thing. The last album I did, I know that probably it's 99 percent one-take recordings. When people know that the vocal is actually going to be the one, they play and listen to it, they pay attention to it; and when they do that, everything gels together nicely."

TOBY WRIGHT

Toby Wright's work over the past decade has helped define the sound of some of rock's cutting-edge bands. An independent engineer and producer, he's recorded Queensryche and Corrosion of Conformity, and he worked on the last three Alice in Chains albums. He's even mixed a little bit of R&B. When *Mix* caught up with Wright, he was in the studio recording and mixing Queensryche's latest project.

"The first thing I do is put up a variety of my favorite mics: U47, M49, mostly all tube mics," says Wright. "If the band is looking for a harder edge, I'll go with more contemporary condenser microphones: 87s etc., depending on the song and the vocalist. I have gone as far as hand-holding a 57, singing in the control room. I'll go through and have them sing into each of the mics, and record them and play them back to see which ones sound best on the vocals. Then we'll start from there."

"When I talk to somebody without a microphone between us," he adds, "I listen

to the vocal characteristic and try to duplicate that coming through the speakers. So I choose whichever microphone best captures the full range of their voice. Also, the placement: I worked with Ann Wilson of Heart and I found that if I miked her above her mouth, she sounded different, and if I miked her below her mouth, around the neck and chest area, she would sound totally different. Miking around the soundfield of the source, sometimes there are different characteristics that are enjoyable in a person's voice; sometimes it doesn't come directly out of the mouth."

Wright finds that a double-miking technique works well in certain applications. "In a song that has varied intensity—such as, it goes into a chorus, for instance, and you want a distorted feel; then you're coming back out into a verse, but you want that clean—I put up two mics or more, depending on how many different sections we require. I'll put up two or three mics, and one might be a very clean mic, with very little compression—say, an M49—for the verses, and then for the chorus, there might be a 57 with massive compression and distortion. They'll sing the verse and move their head to the left or right, depending on what makes them comfortable, and have the other microphones set up a different way, so the voice sounds totally different."

"I own a bunch of outboard preamps, and I love them to death," says Wright. "Add a tube mic, a compressor, and we're off to the races. I typically will not EQ a vocal to tape, because if I do, then I think that I have not chosen the right microphone. Typically I'll use an 1176, because they're fast, and they're not real hard; they don't sound like they're squashing. I love a lot of dynamics—if a singer is overcompressed, it takes away from the dynamics. You build up an intensity, and you don't want a compressor holding you back."

DIANNE REEVES

Dianne Reeves has a diverse history. Since

her discovery nearly 20 years ago at a high school jazz band competition, the vocalist has ventured into R&B, jazz and world music, earning two Grammy nominations along the way. In the early '80s, she sang on Harry Belafonte and Sergio Mendes tours; she's also worked with the Latin Ensemble and Caldera. Her ninth album, *The Grand Encounter* (Blue Note), is a return to her jazz roots and features such legendary performers as Toots Thielemans, Joe Williams and Germaine Bazzle.

"I usually work with Eric Zobler, and I really trust the vocal sound that he gets," says Reeves, of her longtime engineer. "We're always trying different mics in different places because I record live, and I like to feel like when I'm in the studio with the musicians, everything is as if I were onstage, only I'm isolated, but I can see all of them. So he uses lots of different mics, sometimes really old, warm mics, tube mics, but more than anything, I just like a lot of presence in my voice. I want everybody to hear everything, from high to low, to breath, so it sounds like I'm right there with them."

Reeves says that working with Zobler for so long has made sessions more streamlined. "Basically we just find a nice range of closeness to the mic, because if I sing something that's really soft and I really want to lean in, I use the mic a little bit, because onstage I use the mic a lot," she says. "And it's different things for different kinds of projects. If we're doing more of a pop-oriented project, then usually I have to stay at a certain place because my voice is big. But if we're doing a jazz thing, I can lean up, and I can whisper, and I can do all kinds of things, and he makes it so that it'll come out right."

Reeves prefers to record as many one-takes as possible. "We try to do the song no more than three times, live with the musicians, because then after that for me, it's redundant and I try to do what I did on some other take. And usually the first or second take is it. It's usually the one when

you're not thinking, you just do it. And so [Eric is] always ready for that. The one thing I like about working with Eric is, he knows me so well, that he just always has the tape rolling. And I might be messing around and it might just be totally right. As I remember one night, the lyrics of the song had just been written, and I said, 'Well, let me run through it and see how this is going to work.' And it was the take."

Reeves usually works with longtime friend and producer George Duke. "George and Eric are like a wonderful team," she says. "George is very well-rounded, a deep background in all kinds of music. Usually he just wants you to be in there and to be totally comfortable, and they both kind of supply that comfort. They don't tell me how to sing, they just make sure that they hear what it is that I'm doing, and make sure that what I'm doing gets across. And Eric does that with sound, and George does that in terms of going through the lyrics to make sure that I said the word the right way, or the pitch was on, or whatever."

"Also, Eric has some musical background, which makes a difference," Reeves says. "I know that he approaches his instrument, the board, like it's part of the music. And the thing that I love about working with him is the fact that he knows the lyrics of the songs. And that's really important, so that he can enhance what it is that I'm saying, how the music is, the colors. Everything sparkles, and it's just right."

DAVID REITZAS

Last year, David Reitzas mixed *Evita* for Madonna, *The Preacher's Wife* for Whitney Houston and *Destiny* for Gloria Estefan. Engineering credits for '96 also include the likes of Michael Bolton, Barbra Streisand and Natalie Cole's follow-up to her multiple Grammy Award-winning *Unforgettable*. Some of Reitzas' previous recording highlights include a Grammy for Best Engineered Album for *Unforgettable* and for Houston's *The Bodyguard*. Reitzas' 10-year relationship with producer David Foster has

given him the experience of recording some of the most influential vocalists around. “There is absolutely nothing more important than being prepared when it comes to recording vocals,” Reitzas says. “Prior to working with a vocalist, I’ll always do research on the artist. This could be anything from reviewing their previous albums or maybe even placing a phone call to another engineer who has recorded that artist. If I find myself on a session that is tracking well before a vocal session takes place, this becomes my opportunity to ask questions of an artist or look for hints about his or her likes or dislikes about recording vocals.

“Before a session begins, I’ll conceptualize what I’d like the results of the session to be, and usually I can select two or three mics that I feel would be appropriate for the style of music or vocalist,” he says. “At this point, I’ll verify all of the microphone connections and start to listen to the general sound characteristics of each mic. From this listening test I’ll have a pretty good idea which microphone will most likely sound the best. I’m a big believer in the magic of a first take so I had better have my shit together before the vocalist even steps up to the mic. I want that first vocal take to be a usable performance for my comps.” Three other important aspects Reitzas stresses are one, an inspiring, well-balanced headphone mix; two, track management—“I’ll make myself aware of the existing sounds that are recorded on each track of the multitrack, and then I’ll rearrange tracks (only in the digital domain) or I’ll create some type of clone or safety in order to free up as much available track space as possible”; and three, the vibe—“Candles, floor lamps and even incense can add to the mood of a session like you wouldn’t believe.”

Reitzas’ favorite mics are tube models, and although he’ll usually rent mics that have been successful for him in the past, he’ll often experiment with the selection of mics a studio has to offer. “I tend to listen for a

microphone that exhibits the characteristics of full body. I want a mic that has a lot of bottom and fullness,” he explains. “Ninety percent of the time I use a tube mic in combination with the Night Technologies Air Band found on their EQ3 and PreQ3. Each recording session has its unique highlights, and I try to remember the characteristics of all the mics I’ve used and how they might play a part in any of my future recordings.”

Reitzas describes his typical signal path: “Microphone, NTI PreQ3, NTI EQ3, compressor, two 3-channel mults, tape inputs. Then the tape outputs are fed in my vocal comp box, and its output feeds the tape input of what I use as a comp rack. I’ll even monitor that comp rack with a bit of the Spatializer to add more presence and pull it out of the speakers slightly. Once I started using the NTI equipment for recording, I began noticing much more positive feedback from the artists about their vocal sound.” Once a vocal sound has been determined by the selection of the microphone, preamp, EQ, compressor etc., Reitzas says the remaining factor is “the ability to mold several vocal performances into one while maintaining the integrity and feel of spontaneity. For this, the Sony PCM 3348 has become my most valuable tool.

“Recording vocals is not rocket science,” Reitzas concludes. “With what I’ve expressed about preparation, it should be fairly straight-ahead to record. Experience is my best friend; When I remember what didn’t work the way I had planned it, then I am able to avoid those problems in the future. I am constantly aware of what is happening before I hit the Record button on any machine, always knowing what I am erasing and what I am about to record.”