DAVID PENSADO THE MIX MASTER

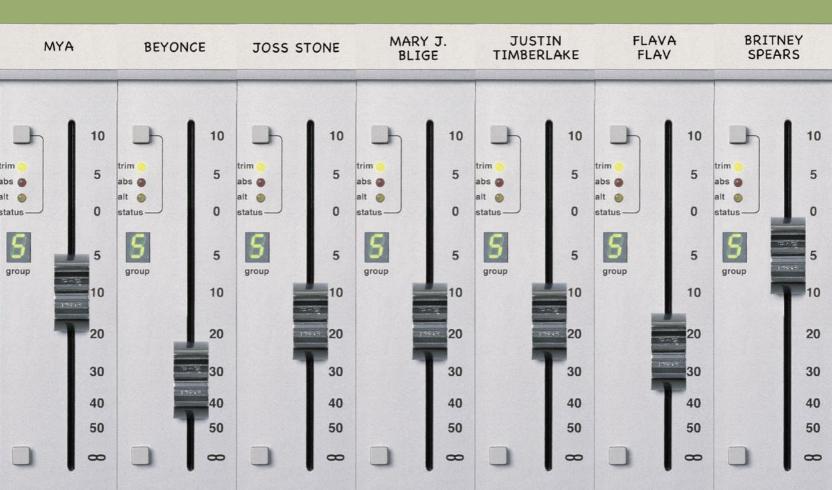
David Pensado is one of the most successful mix engineers of all time. So strap yourself in for some forthright opinion on new media, 'old farts', plug-ins, as well as plenty of specific info on the tools of his trade.

Text: Paul Tingen

One of über-mixer David Pensado's favourite pastimes is to rub his colleagues up the wrong way. He does this very gently, as he's a good-natured man who wouldn't harm a fly. Yet, despite his friendly demeanour, he takes an almost perverse pleasure in slaughtering as many sacred audio cows as he can. In the process he tends to delight many of the young guns, while in equal measure enraging large swathes of pro audio's 'establishment'.

To give you an idea, here's a typical Pensaphorism: "It is better to sound new than to sound good." Not even bothering to allow space for the passionate discourse such a statement is bound to stir up, he immediately throws more petrol on the fire, stating: "These old farts that are spending their time trying to sound good have all become irrelevant. The only time we ever see them is when the Grammys give them some bullshit award for something that doesn't matter any more. Instead, spend your time trying to sound new, because that's what pop music is about." Take that, anyone who has spent a lifetime pursuing hi-fidelity audio.

Or take this: "Show me a guy who doesn't like a particular format and I'll show you a guy who doesn't know how to use it." Ouch. Or what, in a time when everyone seems to think of the late '60s and early '70s as the golden age of pop music, of this ear-popping Pensaphorism: "I'm in an extreme minority, but I think that the music being made today is the best ever." And before the dust has a chance to settle, yet another holy bovine bites the, erm, dust: "Trying to protect trade secrets



makes as much sense as Ernest Hemingway trying to guard his verbs. So I put my exact plug-in settings on the internet."

On the plug-in subject, Pensado loves stating that many of them sound better and offer more options than old-fashioned outboard gear. As if that isn't controversial enough, he can't help but twist the knife. "The reason the old-timers are bitching about the digital stuff," reckons the mixer, "is that they haven't taken the same amount of time to figure out what the various plug-ins are good at. I greatly admire and respect the skills these guys have, but I just don't understand why they don't apply the same vigour to today's technology as they did with analogue gear when they were 18 years old. I wish they would turn loose on today's technology and blow us all away with the records that they are capable of making."

BITS BETWEEN THE TEETH

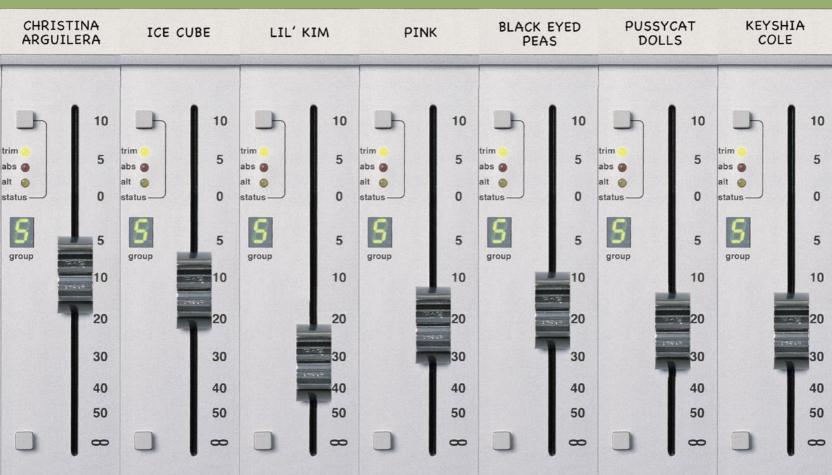
Now calm down back there. Before you jump into an argument with Pensado, consider the man's track record, which is intimidating, to say the least. He's one of the most successful mixers of all time, having had more hit records than one could shake a plug-in at; earlier this year enjoying three No. 1 hit singles in the same month: Mary J. Blige's sumptuous Be Without You, Beyonce's Check On It, and Keyshia Cole's Love (No. 1 on the US R&B chart). Other hit records include songs by PussyCat Dolls, Pink, Christina Aguilera, Destiny's Child, Justin Timberlake, Brian McKnight, Ice Cube, Black Eyed Peas, Warren G. + Christina, Lady Marmalade by Lil' Kim, Mya, Missy E & Pink, and so on, and on, and indeed, on.

Pensado's achievements are, to a large degree, the result of him spending endless hours cutting his teeth in Atlanta in the late '70s and the '80s as a live engineer and at a studio called Monarch Sound, while also exploring the local club and hip-hop scene. When he moved to LA in 1990 looking for the big time, he instantly hit on it, mixing the No. 1 Do Me Baby for Bell Biv DeVoe within three months of his arrival. His phone hasn't stopped ringing since. Most of Pensado's work has been of a hip-hop and hit parade-oriented nature, which adds a crucial qualifier to his earlier combative statements, in that he isn't talking about the high-end audio skills that are a prerequisite for recording jazz or classical music.

"Of course, there are kinds of music that require eight trillion bits and extensive skills," admits the mix engineer, "because they are about capturing the ultimate jazz sound or the most beautiful orchestra. We could not do what we're doing today had it not been for the guys who're doing this. But it's not the type of music that I make; I'm doing pop music, hip-hop music, and rock music. And Stairway To Heaven could not have been any better had it been made in eight trillion bits or on a half-inch tape machine. It's a great song, and the engineering and production and mix all worked together to create something that moves us. That's what contemporary music is supposed to do. We shouldn't be centred on elite snobbery about what has the most bit rates, we should talk about the types of music we create and present to the public, and the fact that the only limitation now is our imagination."

"the old-timers ... think that it's their technical know-how that stops them from being irrelevant. But it's not, it's their taste."





With this last statement Pensado hits on another bugbear. While happily spilling every single last bean of his technical skills and settings, he tries at the same time to deemphasise the importance of technology. "My settings are not going to work on anything else than what I used them on," explains Pensado about the seeming contradiction. "What publicising them may do is give a young engineer or producer a starting point, and the confidence to be creative and try their own thing. You have to master the technical side so proficiently that you simply forget about it while working. But that doesn't mean that I have a great respect for technical skills. You can teach anybody to get a great vocal sound, but you can't teach what a great vocal sound is. Taste is what distinguishes one mixer from another. Which brings me back to the old-timers, who think that it's their technical know-how that stops them from being irrelevant. But it's not, it's their taste."

MIXING - THE PROCESS

So what then, is the first thing Pensado does when he gets the call? He says that unless it's an artist that he's mixed for in the past, he'll ask to hear a rough mix, simply "because there are things I'm good at and things I'm not so good at. I want to put myself in a position

where I have a challenge, but not so great that what I'm doing is going to suck. When I decide to do the mix, I'm a big believer in sitting down with a pad and paper while listening and writing down what you like and what you think could be you better. The delay in the vocal sound in the second verse may be incredible, but the shaker and the hi-hat aren't moving the song enough, for example."

Pensado currently works almost without interruption at Larrabee Studios in Los Angeles. He doesn't have his own facility because he likes "the feeling of being taken care of and having top-notch stuff around me. I can have a major technical problem at 3am and it will be fixed at 3:05am. In a home studio you don't have that." He also works pretty extreme hours — "from noon until three o'clock in the morning" — for at least six days a week. His ferocious appetite for work earned him the nickname 'Hard Drive'. In the last decade, as hard drives have become omnipresent, the name has become doubly apt.

"The sessions will arrive on hard drive or DVD," Pensado says, "and almost always in ProTools format – I haven't seen tape in maybe three years! Very occasionally there's a Logic session, which my assistant immediately transfers to ProTools. He'll also put the song in



FORMATS ISSUES: ADJUSTING FOR MP3

"Whatever gets what we do to the largest amount of people for the least amount of money is a wonderful thing. Right now that's MP3 and the iTunes format. It allows millions to hear our creativity. Great. From a pure engineering point of view I would of course prefer that we could get a little bit better fidelity. But we've always been obliged to cater for all formats. We have always had to make sure that mixes sounded good on little mono TV speakers, hi-fi speakers, car speakers, the radio, and now computer speakers and so on. And there's always technology that comes along to make that possible, like the Yamaha NS10 speakers. Everybody hates them, but we all know that if your mixes sound exciting and bright and you can hear the bottom end on NS10s, they will probably sound good everywhere.

"Today there are more formats than ever that we have to cater for. I mix to one-inch tape, and to 44.1/88.1k, or if it comes in to me on that, to 48/96. From these alternatives we choose the master The 44.1/88.2k seems to convert easier to CD and probably sounds a bit better. But it's only very slight. In any case, for me the emphasis with different resolutions, 44.1, 96, or 192, is on the word 'different'. One is not better than the other. 16-bit is better for sledgehammer hip-hop-like tracks, while higher resolutions and sampling rates are better

for the airy, spacious stuff.

"The issue with MP3 is mainly width, and some subtleties that can get lost, like reverb decays and spaces between instruments. Usually the two octaves below 100-125Hz are hard to get to come through on MP3. And sometimes the vocal appears to get sucked into the mix, or the transient response on the snare just isn't there. I make my own MP3 files using the ProTools MP3 codec (highest quality at slowest speed), and if there's something I don't like, I may alter the mix to compensate.

"I always put the Waves L3 Multi Maximizer across the mix to cater for MP3. The settings don't

vary too much from the default. The main point is to keep the signal from going into the dreaded 'above 0' distortion territory. Think of the L3 as a five-band parametric with a compressor on each band. Or think of it as five compressors, each compressing only a small assigned part of the frequency spectrum. Notice the spectrum from 289 to 1278Hz. I can raise or lower that part with the gain, I can compress that part, and I can assign it a priority, i.e., how much

emphasis the compressor gives to that frequency. Also notice that I can move the 289 or any other frequency, just like bandwidth control on a parametric.

"The MP3 files that I make sound pretty good and I'm planning to mix specifically for MP3. I'm starting mixing Christina's new album next week, and I want to talk with her about this. She has the power to get the record company to release our own MP3 files."



MARY J BLIGE'S BE WITHOUT YOU

"A lot of people try to make Mary J. Blige's sound 'street', and I find that you can't make her sound anything but street, because that is who she is. But on Be Without You I also wanted to make her sound 'expensive'. That gave me some leeway to use some new effects and new approaches to the EQ, and I think the world responded to that. "I used the Waves Phase I incore EQ and the ManSSP.



E6 on Mary's vocals. I had the E6 set to the standard Classic I, which I then ran into an old Neve 1073, and out of that into an old Gates STA-Level compressor. That is the first time the signal hits the SSL and the outboard gear. So I am getting the high-techness, the brand new special sparkle, from the Phase Linear and the McDSP. In addition there's an 8k and above presence that you can only get on the Neve. Then, like a good spaghetti sauce, it all melted together, so you don't hear the individual spices. Instead it becomes all one nice beautiful sound.

"Hecently I have become much more aware of the effect of panning. Five years ago you had those big, wide, massive backgrounds that you used to hear on Babyface songs, but they now sound old

and tired. I realised that I like my panning a little more compact now. As I brought stuff in, the mixes started sounding leaner, more aggressive and more relevant. If you listen to the Mary mix, you'll notice that it is basically a tight compact mix, but with very selective things that are big and wide. I feel that gives me the best of both worlds. I can imply that Mary is considered in the same league as great singers like Whitney and Mariah and so on by hinting at the wideness of their mixes. At the same time I can have that tight, compact hip-hop centre, that makes everybody remember that Mary is a tough girl from the street."

"Show me a guy who doesn't like a particular format and I'll show you a guy who doesn't know how to use it."

a layout that I like, with the vocals at the top of the session, then the drums and percussion, and at the bottom the instruments. I'll then go back to my original notes and listen to the rough mix again, as there's usually a more recent one, and take more notes. Now all my ideas are starting to produce a direction, a game plan. If the song is percussion-driven, like a hip-hop track, I'll start with working on the drums, if it's a song that centres around an amazing vocal performance, like Christina Aguilera, I'll start with the vocals and weave everything around that.

"So I start with what I judge to be the foundation elements of the mix, get them to a point where I think they're great, and then bring more elements in. With every new element I bring in, everything starts changing. I take a five-minute break every hour or so, and when I come back into the room, it always sounds different and I'm better able to distinguish the good stuff and the flaws. At this stage mixing is like sculpting. Not that I want to compare myself to him, but Michelangelo would start with a blank rectangular block of marble, and chop away until he got what he wanted. For me mixing is a process of taking out what I don't want, until I'm left with what I do want.

"At this point I have something that I can evaluate, and this is where it becomes the most fun. I have something that's organic and has a life of its own, that has the creativity of the writer, the performance by the artist, and the vision of the producer. Now it's time to take things to the next level, to bring in the elements that are going to move somebody,

to create something that's more than the sum of the parts. This is where my songs become different from those of other mixers. I actually often change quite a bit, perhaps adding the lowest octave, 40 to 80 cycles, to the kick drum, things like that. Also, when a song comes to me, it may already be one and a half years old, and it may be another year before it's released. Part of my job is to anticipate where sounds will be going in one or two years. So I may add some samples to make sure it will sound fresh by the time it hits the radio."

SOUND SCULPTING - THE GEAR

Pensado explained that when the artist and producer are present he "can take more chances, because I can give them more ideas to choose from," whereas if he's on his own, he tends to mix "a lot more conservatively". In his customary colourful language, Pensado draws an analogy between mixing and hairdressing, "some people want a small trim, others want to change their entire look. So some clients want the rough mix, but a little better, whereas others want me to go off and do whatever I do. The main problem is finding out what they want."

With that, Pensado returns to the image of the mixer as sculptor, this time discussing the tools of his trade, notably effects. "I use plugins probably 60 percent of the time now," he explains. "Let me get back to the Michelangelo analogy. When you're working with a piece of marble, you have tools to knock off huge chunks, and you have tools to knock off small pieces, and even to polish the marble. The beauty of plug-ins is that you can get very microscopic, you can really polish with them.

"It is better to sound new than to sound good."



PENSADO & SSL

"I still love working on an SSL and one of the reasons – please don't laugh and think I'm an idiot – is that it makes me feel like a big-time mixer! Ever since I wanted to do mixing for a living, the SSL epitomised the pinnacle of success. There is something about sitting in front of that console that gives me the confidence that I can conquer the world. I just love sitting in front of thousands of knobs. If I were racing, I'd want a car with lots of horsepower, a good-looking paint job, and all kinds of stickers. So on one level I want an SSL for purely psychological reasons.

"Having said that, I feel that the SSL also gives me a bit of an advantage in other ways. I've mixed a few things 'in the box', like Kelly Clarkson's Miss Independent (with Steve McMillan), Melanie C's Never Be The Same Again, and Angel of Mine by Eternal, all using a [Digidesign] ProControl and a mouse. But there's something about doing it on an SSL that makes it sound better. Mixing on an SSL is like playing a keyboard. Whether you draw a keyboard part in with a mouse or play it in and then quantise, theoretically there should be no difference. But playing it always sounds better. Another issue is that summing [blending tracks together] is not quite as good in the digital domain as it is in the analogue domain. But it won't be long until that changes, and then guys like me will have some serious decisions to make."

You can pull out a band as narrow as between 998 and 1002 cycles with the Waves Q-series. In general you can't do this in the analogue world.

"Now, please – especially for the up and coming guys - don't consider this a rule, it's just a guideline. And we're talking EQ here. But in general I like to do the broad carvings in the analogue world, with stuff like Neve, Avalon 2055, GML, API 550 and 560, Pultec, and so on. Everybody uses these. I'll then move onto my plug-ins to give me colours and shades and nuances. We have such a wide and varied range of plug-ins available, just consider that between companies like McDSP and Waves we have 50 EQ plug-ins to choose from. They're all amazing and all do things that were not available in the analogue world. I still use the McDSP E6 [shelving equalizer] a lot. The high end has a 'grain' that I just love on vocals. And McDSP's F2 is very useful for rolling off low end on reverb returns or to make the bass and kick drum fit with each other.

"In the compression world I still like one of the oldest plug-ins ever invented, the C1 SC by Waves. SC stands for Side Chain, and when I find an irritating frequency in the vocal, typically somewhere between 1k and 2.5k, I put that on the side chain and let the compressor pull that out for me, so I don't have to have a separate fader with that notched out. In the old days we would dedicate anywhere from two to six faders to just the lead vocal. One fader would have the straight vocal; most singers sing more softly and breathy in the verses, so another fader would have a bit of low end rolled off, and a third fader would be for the chorus with the low-end back in plus a little notch around 1k, and so on, and you would pull up the fader you wanted. But today you can automate plug-ins, so you don't need multiple-plug-ins, and you do anything you want under one fader.

"I also like the Waves C4 and Renaissance, the new SSL plug-ins, McDSP M2000, the Bomb Factory LA-3A emulation, and so on. The M2000 and C4 are basically four-band compressors. Think of them as parametric EQs with four bands and a compressor on each – they are tremendously powerful tools. The SSL EQ plug-in and G-series compressor plug-in [from Waves] are incredible. They sound exactly like the SSL. The LA-3A sounds spectacular on pianos, and a lot of the time I'll send the vocals through that before I send it through an analogue compressor. Once again, it's better to sound new than good, so when the whole world is using Pultecs, don't go out and do it as well! Figure out something else, find a plug-in that gives you something better."

Pensado remarks that he has no time for the very concept that makes many people reach for vintage gear. "I don't like the word 'warm'. For me it's another word for 'dull'. I love saying that, because it pisses a lot of people off! Having said that, I've noticed over the years that different keys and tempo affect what kind of gear I like using on it. For example, F#, A, E are bright keys and seem to like tube gear, while B-flat, E-flat, and sometimes some of the slow tempos, seem to like the newer gear and plug-ins."

Pensado instantly adds, clearly concerned that people will take his statements the wrong way: "This is not a rule, just an observation. And I would love to hear some feedback on it." With that he offers his e-mail address and declares, "I get about 20 to 30 emails a day, and I hope that in giving loads of technical details I don't do more damage than good. It's not about the gear, it is what you do with it. So I hope that people go, 'Oh, it's good to know how Dave does it, now I can find my own way of doing it'. In the end, one doesn't sell one's engineering skills, one sells one's creative skills."

David Pensado can be reached at: fdpen@ix.netcom.com

Check out Issue 16 of AT for a previous chat with David Pensado.