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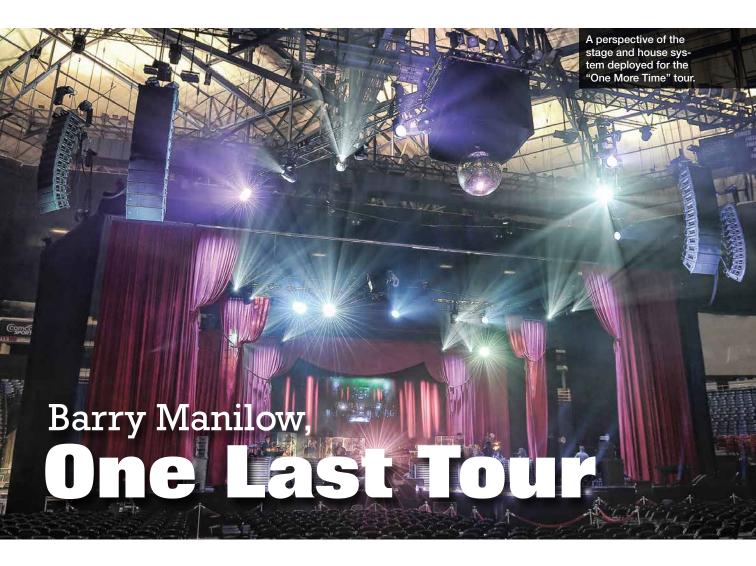
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Engineer Ken Newman on best practices with Barry Manilow



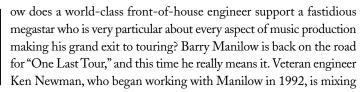
TAMING THE RF BEAST HOW NOT TO RECORD A SHOW THE LATEST ON DIGITAL CONSOLE APPS



A conversation with
engineer Ken Newman
by Mark Frink,
photos by Steve Jennings



Barry Manilow performing on the current tour with a Shure KSM9.



for the first time on a DiGiCo SD5 console and a Martin Audio MLA loudspeaker system, managed by Delicate Productions system engineer Phil Reynolds.

Will Miller, who Manilow "borrowed" from Josh Groban, mixes the artist's monitors on a dual-surface Yamaha PM1D console, while Francois Paré handles the band's monitors from the console's second surface via Aviom personal mixers and an assist from Tony Luna on stage.

Manilow is easily one of the all-time top-selling pop artists, with 25 consecutive Top 40 hits between 1975 and 1983 and worldwide sales of more than 80 million albums over his 4-decade career. Last year's My Dream Duets debuted at number 4, making it his 15th Top 10 album.

I caught up with the "One Last Tour" in San Jose at the Shark Tank (officially called SAP Center) for a conversation with Newman about his role at the helm and the unique combination of best practices that he's built for Manilow. He started out working for a local New Jersey sound company, coming off the road for Atlantic City house gigs at Resorts International and then the Sands, but then went on tour with Shirley MacLaine for several years followed by a string of other top tier A-1 Audio clients like Ann-Margret, Liza Minnelli, Engelbert Humperdinck, Tony Orlando and Paul Anka.

Between mixing gigs in 1991, A-1 Audio sent him out as system tech for several of Manilow's "Showstoppers" dates, with Paul Dalen mixing. When the "Greatest Hits" tour was organized the following year and Dalen wasn't interested, he suggested Newman for the role. And the rest, as they say, is history, with Newman mixing Manilow's live shows for a dozen years until 2004's "One Night Live! - One Last Time!" in-the-round arena farewell tour.

On breaks between Manilow tours, he also mixed Chris Isaak, Julio Iglesias, Anita Baker, Stevie Nicks, Burt Bacharach and Sergio Mendes, and during Manilow's seven years of Las Vegas residencies at the Las Vegas Hilton and Paris Las Vegas, he worked for corporate staging vendor WorldStage. When Manilow went back on the road in 2012, he called on Newman once again, and now he's serving this final arena outing.

## **The Same Everywhere**

The main loudspeaker arrays provided by Delicate Productions (Camarillo, CA) consist of 11 Martin Audio MLA modules plus a single MLD down fill cabinet per side. Side hangs are comprised of a dozen MLA Compact modules per side. Three MLX dual 18-inch subwoofers per side are used in a cardioid configuration, and front fills are W8LM mini line array enclosures.

"The biggest challenge on the Manilow show has always been gainbefore-feedback on Barry's vocal mic, because he's not comfortable putting the mic close to his mouth, and he's not the loudest singer I've ever worked with. Those factors, combined with his desire for every aspect of his dense arrangements to be heard by his audience while keeping his vocal well on top of the mix, combine to make gain on his vocal mic a constant challenge.

"Barry also frequently talks about how the entire audience should hear everything, with no one being offended by the show being overly loud, but at the same time by the show being loud enough to be exciting and moving. So I guess you'd call that the challenge of even coverage."

MLA is a marriage of loudspeakers and software, where transducers are individually driven and optimized to deliver the summation of clear sound at the ears of the audience to meet the goal of even and smooth coverage is uniform throughout. That allows me to concentrate on my main job, which is mixing the show and making sure the mix is everything Barry wants it to be, by listening to the previous show's multitrack file and refining the mix as if it was the actual show. Through headphones, of course, so as not to bother the rest of the crew that's working on setting up the show.

"MLA doesn't need much in the way of tuning, because we've already entered our target curve into the system's software. Optimization mainly consists of adjusting the delay times of the side hangs, subwoofers and front



across the entire coverage area. The system does this by controlling EQ and phase for individual transducers after modeling the physical listening area. After the DISPLAY2 software's optimization procedure is complete and the individual presets are loaded into each cabinet via the U-NET network, the system is 98 percent tuned at turn-on.

"The MLA system allows me to spend less time walking the room because I have confidence that coverage fills. It can be done in as little as 15 minutes, or if I want to really nitpick, it can take up to an hour.

"Also with MLA, the level from the front to the rear of the seating area changes considerably less than with a traditional speaker system, and the tonal quality is significantly more uniform. Those are two of the main aspects of MLA that I really love. Knowing that I'm not scorching people in front of me with up to 10 dB more level than at the mix position is very comforting. And knowing that people in the 'cheap seats' are getting the whole mix and at a comfortable listening level is so great."

Delicate Productions president Jason Alt adds, "It's a real privilege to be a part of Barry Manilow's 'One Last Tour.' I worked as a system tech with Ken on Manilow at A-1 Audio, and I know MLA gives him exactly what he has always wanted out of a system: great sound, accurate representation of the music, and what only MLA can deliver, control of a system that adapts to the environment."

## Something Old, Something New

The system has proven to be a good fit for his time-honed approach. "For many years, the zones I send to the drive rack are left and right outputs for the mains, mono for the side hangs, and front fill for the first several rows. I'm an old (Yamaha) PM2000 guy and that's where I defined my preferences," he notes. "These days I use five stereo groups mixed to matrix outputs: vocal, background vocal, band, rhythm, and playback. This allows me to adjust front



Will Miller (above) and Francois Paré, who mix monitors on a dual-surface Yamaha PM1D console.



fills to have more vocals, less rhythm or whatever's needed, and to insert processing or adjust parameters like EQ or compression on those subgroups.

"When I first started working for Barry, he'd been through a few microphones and was using a Shure SM87 on a Vega wireless. One day Harold Blumberg (a friend and colleague) told me about a new mic that Shure would be coming out with, and offered me a wireless system with it. It was the Beta 87, and it made getting the sound Barry wanted on his voice much easier. We used the Beta 87 until I stopped working on the show in 2004, but when I came back at the end of 2011, I thought it would be good to use the latest, greatest mic Shure had to offer so we switched to the KSM9. I'm looking forward to trying the KSM9HS for hopefully more gain before feedback."

Newman is mixing on a DiGiCo SD5 for the first time. "When I came back in 2011, the last console I had used on Barry's show was an Amek Recall that was no longer supported, so I needed to switch to a newer digital console. I went through a lengthy process selecting the right digital console for my situation. The Soundcraft Vi6 fit that bill exactly, and turned out to be a fantastic console. At the end of 2014, when there was talk of another tour with additional inputs needed, I felt that despite the fact that I really loved many aspects of the Vi6, I had maxed out some of it's capabilities.

"There are so many great DiGiCo features, it's hard to say which ones are my favorites. The fact that I can put any channel anywhere on the surface and the ability to make any strip stereo. How great is that! For this show, it doesn't get much better. And then there's the fact that the fader banks are 12 faders (as opposed to 8) each, and they're switchable to different layers independent of each other. And how about that multiband compressor? I could go on and on.

Newman's personal outboard rack has a TC Electronic M5000, an Eventide H3000S and a TC M-One. "I learned long ago that making this show sound the way Barry wants is largely about reverb and effects. When I started, we had a rack of Lexicon PCM70s with my PM4000. Gradually I was introduced to different effects units over the years that I came to rely on as part of 'the Barry sound.' When I came back to the show at the end of 2011, I wanted to start with that basic palate of effects so that with both a different console and a different speaker system from what I had used previously, at least the effects were the same.

"I use one engine of the M5000 for

Barry's main vocal reverb and the other for strings, guitar or percussion reverb. The M-One is for drum reverb. This is really key to the show's sound. The H3000 is for Barry's vocal double and effects. I have a number of presets in each unit that are selected by MIDI output from the SD5 per snapshot. Some snapshots are only firing MIDI changes, to change, for example, the drum reverb, which is mostly snare, at the end of a song."

## **Innovative Approaches**

Newman relies on a BSS Soundweb 9088 to solve two problems. "I'm a big fan of having my record mixer be separate so that it's completely independent of the main console. In the old days, we took a BSS DPR804 dual delay line, a little Yamaha M406 mixer and a Shure VP88 stereo mic to make show recordings with other artists like Paul Anka. Barry really wants the best representation of what it sounded like in the room, complete with room ambience and audience, so I simply continued using the same recording setup.

"During the seven years I wasn't working for Barry, I worked for a company that does primarily corporate events, and they used Soundweb as system processors with their analog consoles, so I got quite familiar with their capabilities. When I returned at the end of 2011, I combined the functions of the DPR804 and M406 into four channels of Soundweb. I have both a 'With Mic' recording output and a 'Board Mix' output, and also add a taste of compression and EQ as well.

"I also realized that when Barry's audience gets loud, it would be nice to mix on nearfield monitors, so I designed a little Soundweb configuration to take the same stereo mix feeding the main clusters and delay them and EQ the (Genelec 1032) nearfields to closely match the PA above 100 Hz, and now I



can hear more closely what's happening with the mix. I also want to listen to the console's solo output, and my personal preference is that the solo is not delayed, so the solo output of the console comes into two more inputs on the Soundweb.

"I built a custom GPI remote control that can switch between 'mix' and 'solo,' and set the delay and EQ each day in a control panel in Soundweb. I also added a level control and a mute switch on the remote, complete with a footswitch jack so that if I'm really getting into the mix on the nearfields, I can step on the footswitch and mute the them to check the room's sound.

"Barry wants what I call a 'With Mic' recording of each show, so I make a CD for him (on a Tascam SS-CDR200) as well as recording the same mix onto a USB stick so I can hear what he listens to. The same mix is sent to the video guys, who record it onto his show DVD. I also make a board mix recording onto a USB stick for the musical director, and I make a simple 4-track Pro Tools recording on my Mac Mini, with the board mix on two tracks and the VP88 stereo mic on the other two tracks. This way I can make a better-sounding mix of the show later, varying the level of the VP88 as needed. I also make a multitrack (Pro Tools) recording of each show for archival use and virtual sound check."

## **Extra Gain**

Newman's outboard rack also includes a Shure DFR22 and a Rupert Neve Designs 5045. "In the ongoing quest for maximum gain-before-feedback, I've always been a fan of parametric EQ, so I insert a DFR22 into the stereo vocal sub-group that includes the vocal mic as well as its reverb and effects.

"I then 'ring out' the vocal mic along with its reverb each day, and hopefully get as much gain before feedback as possible. I call the 5045 a 'magic box' that gets me a few more dB of gain before feedback. I ring out the mic with the 5045 punched out, and then I just dial in a few dB of 'depth' on the 5045 for just a bit more gain before feedback. Magic!

"The Summit DCL-200 is another item that I used with an analog console that carried over to the new setup. Since I need so much gain on Barry's vocal mic, I like to get just a few dB of that gain from the DCL-200, along with a very subtle amount of compression when possible, while I'm at it."

With pressing matters at hand as show time approached, we wrapped it up, with Newman concluding, "There's a show scheduled June 17 at the Barclays Center in Brooklyn, where Barry grew up, on his 72nd birthday, so that should be quite the event. It's also currently shown as the last stop on the tour. I haven't yet been to the Barclays Center, but I hear it's quite large, so I look forward to MLA doing its thing and bringing the happiness of Barry Manilow to all of the audience members equally."

MARK FRINK is a regular contributor to Live Sound International and is available to mix IEMs this summer. He can be reached at livesound@markfrink.com.