LIVE SOUND REPORT:
TOM COCHRANE
by Alan Hardiman | Photos by Roy Timm

From the drapery and colourful area rugs on the stage to his heartfelt greetings to family and friends in a jubilant Massey Hall in Toronto, it was obvious that the highway had finally brought Tom Cochrane back home. What made the show a treat for so many in the audience wasn’t just a great performance in an intimate setting, but that the sound reinforcement was expertly tailored to the unique characteristics of the material performed under the constraints imposed by that particular venue.

“That’s the loudest Toronto audience I’ve ever heard,” Cochrane told me enthusiastically the morning after the show. “It was right up there with the Mad Mad World tour – I think even louder!” In fact, the adulteration of the frenzied near-capacity crowd peaked at around 105dB_A (A-weighted), about twice the sound power of the loudest parts of the show – up to the encores, that is, when FOH mixer Ettore Dedivitis decided to get even and pushed the master fader ever so briefly to kiss the audience goodnight, with a nudge at about 108dB_A. Up to that point, he had worked a wide dynamic range, dipping as low as 82dB_SPL during the "acoustic" set and cresting no louder than 102dB_SPL, a comfortable level which allowed the audience to go home without that cursed ringing in the ears caused by the unnecessarily loud sound pressure levels that prevail in too many concerts.

Cochrane and Dedivitis spoke with me at length about this, because it’s an issue not only of audience relations in the personal sense, but also of matching and adjusting the performance sound system intelligently with a specific hall, something they had to do differently for every date of Cochrane’s No Stranger cross-Canada tour in support of the recent eponymous CD release. I suggested that the practice of some acts to turn up the volume to make the show sound better is really no different from turning the lights down to make your date more attractive – in the end, who do you think you’re fooling?

“A lot of the rooms we’ve been playing are deader than Massey. I forgot how live Massey Hall is,” Cochrane said. “Winspear Centre in Edmonton and Jack Singer Concert Hall in Calgary were some of the other bigger concert halls, and they’re a little deader than Massey Hall. And Massey changes quite radically from one spot to the next. There used to be a real problem with older PAs, just underneath the first ledge of the first balcony. The best sound that I’ve experienced in Massey Hall was up to the right in the first balcony, and I was there for Neil Young in the centre and I was over on the right of that first balcony for the Band. That’s actually a cat-bird seat, I find that’s where the best sound is,” Cochrane said. Coincidentally, my own seat for Tom’s show was just about where he had been for Neil Young decades earlier.

“There used to be a whole side of Massey Hall that was prohibitive because of the stack of speakers over there on the right or left stage. Now that doesn’t exist. You can fly the systems and get them out of the way. For practical considerations like sight lines, these modern systems have got smaller and smaller and technology is better. Distortion levels are lower and so it’s easier on people’s ears,” Cochrane observed.

ABOVE: MONITOR MIXER TODD FARHOOG AT THE MIDAS HERITAGE 3000 CONSOLE. LEFT: EIGHT QSC WIDELINE ARRAY UNITS PER SIDE (SHOT DURING SOUNDCHECK).
and Red Rider
at MASSEY HALL
"I guess my philosophy is that I like to mix at a comfortable volume," Dedivitis said. During a career spanning 30 years, he has mixed FOH and monitors for such artists as Babymouse, Honeymoon Suite, Goddo, Alanna Myles, and Jeff Healey, and for the past 10 years he has worked with Natalie Cole as FOH mixer.

"Massey Hall is a hard hall to do, just because it's an older hall that was built more for orchestra with no amplification," he said. Built in 1894 by industrialist Hart Massey, the "grand dame of music halls" soon became internationally famous as Canada's most important venue for concerts and lectures. It was home to the Toronto Symphony Orchestra and the Toronto Mendelssohn Choir until the completion of Roy Thomson Hall in 1982. Over 11 decades, Massey Hall has attracted such luminaries as Enrico Caruso, Eleanor Roosevelt, George Gershwin, Glenn Gould, Oscar Peterson, Maria Callas, Luciano Pavarotti, and of course, Gordon Lightfoot. Massey Hall underwent an Art Deco-inspired facelift in 1933, but acoustically it's pretty much the same as it was 113 years ago.

"Even the rake of the stage was designed for performers to project sound from the rear past those on the front of the stage out into the audience without the aid of loudspeakers. So I don't want to fight the hall with volume, because you're not going to win. And now with artists like Tom Cochrane, Natalie Cole, and Babymouse, you're starting to get an older crowd and you don't want to blast their ears off," Dedivitis said.

His approach favours intelligibility over sheer volume, and it's an approach that pays off in a venue like Massey Hall that was designed with hard walls and ceiling, and reflective balcony fronts. These architectural elements help achieve a reverberation time long enough to support orchestral music with peaks in the area of 90-95dBR. Reverberation time - RTₚₚₚₚ - is a measure of the time it takes for reverberation to decay 60dB - effectively to inaudibility under normal circumstances. It's painfully clear that with higher levels of say, 110-115dB, the reverberation will still be audibly rumbling around the hall, muddying up the sound for a much longer period.

"Tom Cochrane has stories to tell, and you want to make the vocal as intelligible as possible. I want people to walk away with the stories," Dedivitis said. "When he talks about "Northern Star," a song on the new album, or about his daughter moving to Scotland, these are stories he tells that lay behind the songs. You want people to hear and understand what he's saying. That's what I look for when I'm mixing. So I don't mix loud.

"We carried our own rig, the QSC WideLine line array system, which I was very happy with. I found it to be very warm. You had to push it a little bit to get the sparkle out of it. All the line arrays that are available nowadays are great, and with Tom I was looking for something a little warmer, which is why I went with the QSC WideLine systems," Dedivitis said.

The QSC WL2102 cabinet is smaller than many other line array elements currently on the market. It features two 10" long excursion, low-frequency transducers and a single 3" neodymium compression driver mounted on a proprietary multiple aperture diffraction slot waveguide.

Cochrane agreed. "I really love this system. I think it's a real state-of-the-art system, and apparently it's got wider horizontal dispersion. It's a warmer system, which is funny because people usually associate bigger boxes with warmth, but that's sort of a misconception because I know that the 10" speaker is a warmer speaker for bass and for guitar, as opposed to a bigger speaker, which is kind of odd but that's the deal," he said.

The performance sound system, supplied by Metalworks Production Group of Mississauga under the direction of Dedivitis and System Tech Paul Caccamo, consisted of four WL2102 cabinets and four WL218-sw WideLine subwoofers floor-standing on each side of the stage, an eight-enclosure hang flown over each side of the stage, and a single QSC HP-1221i two-way side-fill cabinet at the extreme edge of the stage to provide coverage for the seats on the side, all powered by a total of 28 QSC PL230 amplifiers. Front-fills were four JBL Marquis MS28 loudspeaker systems supplied by Massey Hall that sat on the stage lip. Loudspeaker processing was fairly minimal, being comprised of a single Dolby Lake LP4D12 processor and two XTA Electronics GQ-600 graphic equalizers.

"Everybody who sat in the front was very happy. For people with seats in front of the subs - and in Massey Hall it's difficult to locate the subs optimally - there's not much you can do, but you try to please everybody as best as you can. If you're sitting up in the balcony you might lose some of the bass, simply because we didn't have subwoofers flown," Dedivitis said.

"The warmth of the loudspeaker systems worked to offset the somewhat bright character of the digital FOH console, which in this case was a Yamaha PM5D, the board Dedivitis uses most often. "The sound of the digital console is a little brighter than analog. It's not as warm so you have to work on it a little more," he noted.

"The convenience of digital - having your mix on a flash card anywhere around the world that the console is available - makes it worth it. It gives you more time to get the show sounding right - before people walk in, rather than coming in and having to use 'equipment-du-jour,' especially on smaller tours, and being at the mercy of the hall or the sound company. With digital you are way ahead of the game rather than starting from scratch all the time, labelling the console and spinning knobs for however long it takes.

"The PM5D is a good all round straight console that does everything you need to do. I've also worked on the Midas XL8 and I've played with the Digesign [D-Show] console. I find the digital consoles a great asset. They are very easy to use, they don't take up much space and you don't usually need racks of effects because they're built in. If you carry a flash card, you can keep it consistent no matter where you play in the world, you just
plug in that card and go. It saves everything – your inputs, your outputs your effects, libraries, whatever you want. And that makes it easy while you’re travelling around,” Dedvitis said.

On this show he used 32 inputs, including returns. “Tom and I had a discussion about keeping it simple. I don’t use a lot of compressors and gates and reverbs. In the studio it’s great, we use a lot of dynamics processing to make the record sound good. But live, you’re on stage in front of an audience and there’s a lot of dynamics with the band that I think you can crush if you don’t do it properly, and you’re taking away from the band. When you listen to Tom sing, the way he pulls from the mic and screams, if you had a compressor on that it would take away from him by making it always the same level instead of having the dynamic colouring to the sound.

“Ken Greer does his guitar leads and his rhythms at different levels and you don’t want to fight it and keep it all at the same level. When his lead comes out, you want it to sing. To me you want live to be live, you want it to be fun, you want people to walk away and go, ‘Man, that was incredible how he played that lead.’” Dedvitis said.

Cochran feels that live performance differs significantly from studio work in that it has to be kept simpler. “A part of that reason is that the louder things get, the less your ears can accommodate a lot of detail, and I think that’s the biggest thing live. If I was sure of two things, one is that the louder you get, the simpler things should be. And the other thing is that you’re only as good as your drummer, if you’re a band. I really believe that. Obviously people come to hear the singer and the songs. That’s a given, but the drummer has got to be good and he’s got to be on and he’s got to suit the music. And Gary Craig does that,” he said.

“If you’re fighting the drums, more than any other instrument – now I’ve had the blessing of playing with some pretty good guitar players like Kenny [Greer] and Bill Bell – but if you’re fighting the drums, believe it or not, that’s where singers start to lose their voice, because you’re trying to pull the groove with your voice and it’s a bad thing. When you’re a real song-oriented artist like I am you’ve got to have guys who really are playing to the song, and it starts with the drummer, the foundation. Those are two important overviews or theories I’ve developed.

“And then you’ve got to have a good monitor mixer. He controls the show almost more than the FOH mixer, because if you’re having a good time as an artist and a band it translates, and the audience picks up on it. If I’m hearing a lot of bad things in the monitors, I start to forget words, I start to forget parts, then you get insecure. It leads to train wrecks. And Todd Farhood is just awesome. He’s worked with Blue Rodeo so I knew he’d be on because they’re very song-oriented as well, and pretty demanding with a couple of great vocalists – one great one with Jim Cuddy and one real signature one with Greg Keelor, and that’s really important,” Cochrane said.

Farhood mixed monitors for Cochrane on a 48-input Midas Heritage 3000 console, with a modest effects rack that included three BSS DFR404 quad compressors, a pair of XTA GQ-600 dual graphic equalizers, a single TC Electronics M-One dual-effects processor, and a Yamaha SPX990 multi-effects processor. Stage mics were exclusively Shure, as was the in-ear monitor system worn by everyone on stage except for multi-instrumentalist Greer, who prefers to use stage monitor loudspeakers.

“If anything, Massey Hall was easier for me than the other halls because you’ve got a high ceiling so there’s less reflection,” Farhood said. Having spent the last 22 years mixing both monitors and FOH, he believes that mixing monitors is a mechanical process, whereas mixing FOH is an artistic one. “On monitors, it’s more about levels, getting the right levels between instruments to the different performers.”

No reverbs were used with Tom Cochrane and Red Rider, although the girls of Dala, the opening act who also sang backup for the headliners, requested “just a bit” of reverb in their in-ears.

“Tom likes a lot of crispiness on his vocals in his in-ears,” Farhood said, and that, combined with the acoustics of Massey Hall may have contributed to a slight discomfort that Cochrane sometimes felt in his left ear. “I tend to have my buds a little loud and I think there’s a lot of ambience from that room that came through, and I think that’s where you get a lot of problems,” Cochrane said. “But Todd has been really good and given us a more complete mix in our buds. Having the in-ear monitors and having a good monitor guy who knows what you like and can tune that for every room so that it’s consistent – that’s critical.”

“This was one of Tom’s best tours,” Dedvitis said. “I’ve known him for 12 or 13 years and this is the most fun he’s had in that time. We kept it simple in a way that it could be supported with a smaller crew. It gets to be fun when you keep it on a comfortable level, rather than if you have 30 or 40 people on the tour bus that you don’t know. It was just a fun, enjoyable tour and that projected in the shows. My goal was to have people who know very little technically about sound walk out of the concert saying that it sounded good. It just projects from the band into the audience. When people who paid for tickets have a good time, then we’ve all done our jobs.”

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