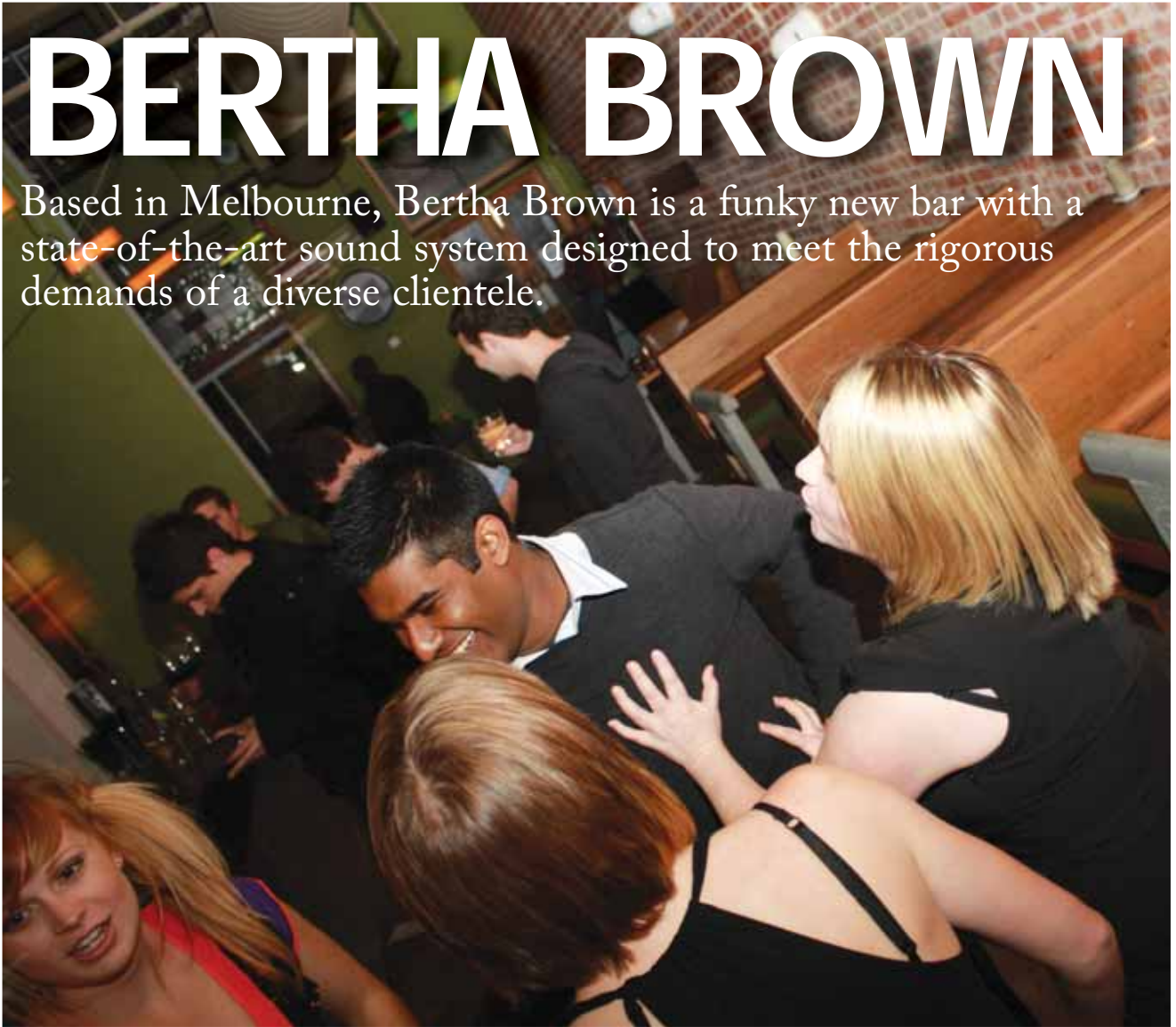


BERTHA BROWN

Based in Melbourne, Bertha Brown is a funky new bar with a state-of-the-art sound system designed to meet the rigorous demands of a diverse clientele.



By **STEPHEN BRUEL**

Located below the newly developed Melbourne Central YHA at 562 Flinders Street in the heart of the CBD, the bar is a popular place to hang out for international backpackers, suits from nearby office blocks and everyone in between.

For bar owners Dan Sheehan and Tash Colangelo, the aim was to get the right sound system in place from the start. Partners in life as well as business, with previous joint ventures including the Nash Hotel in Richmond and the Hotel Bedford in North Melbourne, this invaluable experience has driven home the importance of using quality systems from the get go.

“The idea of ‘bang for buck’ is important but not if all you hear is bang, bang, bang. Sure you can save a dollar or two now, but you will forever spend money fixing amps and blown horns,” said Sheehan. “When your system is on 18 hours a day, seven days a week and 52

weeks a year, year after year, the initial spend for the long-term reliability and quality is money well invested.”

For Sheehan, too often sound systems are the last on the list for fit out budgets and after years of constantly repairing and patching sound systems, enough was enough.

“The sound concept was simple; have a great sound,” said Sheehan. “Rather than rely on two or four really big speakers blasting sound at huge levels to remote corners of the bar, we wanted a soft flood of sound embracing the customer as they entered.”

Sheehan and Colangelo started to explore what options they had to achieve their audio ambitions given their budget and they chose a system from Funktion One Australia. Established in 1992 as Funktion One UK by revolutionary loudspeaker designers Tony Andrews and John Newsham, this pioneering approach to audio quality and excellence is continued by the Australian arm of the operation.

Funktion One Australia managing director John O’Donnell has a solid background as a sound engineer and designer, including experience with live gigs, night clubs, jazz clubs and theatre environments, and was the Head of Sound at The Victorian Arts Centre for 10 years prior to joining the company in 2001.

“The reason we chose Funktion One was John O’Donnell’s absolute passion for creating the best sound we could in the space we had,” said Sheehan. “The after sales service promised was fantastic and delivered, and we couldn’t be happier.”

For O’Donnell the challenges surrounding this installation included gaining access to the venue, treating the space acoustically while maintaining the funky visual aesthetic and getting a great sound in a large reflective space.

“By far the biggest challenge was the time it took to actually get into the building as the builders dealt with the nuances of renovating a 150-year old structure,” said O’Donnell. “Bertha

Brown's is large and all brick & concrete, so normally you would carpet and drape such a place to make it as dead as possible. However the owners wanted to do something more creative and make an appealing music venue for travellers that have a little more cash than the usual backpacker."

For O'Donnell, the layout of the venue also called for careful consideration as the space is essentially divided into three segments, including a stage area and two other zones.

The stage area consists of two Resolution 1 and two MB212 minibass speakers. The Resolution 1 is a 2-way 5" loudspeaker that eliminates the need for compression drivers and smoothly connects with the 12" ported bass driver at 520Hz that results in a lively and well-defined bass. The Minibass 212 incorporates 2 x Funktion-One 16 Ohm 12" loudspeakers which drive a ported resonant chamber enclosure handling 600 Watts and averaging 104dB sensitivity between 40Hz and 125Hz. The efficient 8ohm enclosure allows multiple units to be driven by one amplifier.

The second zone has five F81 compact loudspeakers on separate delay taps and one MB210 microbass speaker. The F81 features excellent bass definition and high vocal intelligibility, enclosed tuning and driver optimisation to eliminate processor or system equalisation and is ideally suited to use in smaller venues due to its compact size. The MB 210 is a smaller version of the MB212 and incorporates two Funktion-One 16 Ohm 10" loudspeakers handling 400 Watts and averaging 102dB sensitivity between 50Hz and 125Hz. The third zone has six F81 compact loudspeakers and an MB210 microbass speaker on a further 3 delay taps.

"The speakers are highly accurate and relatively high Q devices which work well in an extremely reverberant space," said O'Donnell. "They sound good at low level, but are also capable of going very loud."

The signal is processed using a BSS Audios 3088 Soundweb programmable digital audio system with an 8X8 I/O. Each zone has its own BSS Audio SW9012 hardware controller for volume and source select functionality, and a Xilica DCP3060 digital loudspeaker management system with three inputs and six outputs.

"While the Soundweb may be getting a little old now, it is still an extremely versatile and efficient way to zone, process and distribute sound in a venue," said O'Donnell.

For amplification, O'Donnell decided



Dan Sheehan (with bass bin).



The F81 is small and understated enough not to mess up the decor.



The horizontal orientation of the Resolution 1 saves the sightlines.



Funktion 1 Resolution Series boxes have a distinctive look to them.

to go with MC2 Audio amplifiers including two T2000 (1000W/channel into 4 ohms), one T1500 (750W/channel into 4 ohms) and two T1000 (500W/channel into 4 ohms) models. Each of these amplifiers has AB bipolar outputs; analogue level controls and uses the MC2 current driven floating drive stage.

O'Donnell also installed a T4-250 (4 x 250W amplifier housed in a 2U chassis) designed specifically for multi-zone venues.

"The MC2 amplifiers are the cleanest and most robust amplifiers I have used and I use them in all my installations," said O'Donnell.

