

CASE STUDIES

# Hospitality



**Unite Your Audience**  
The Martin Audio Experience



## Martin Audio

At Martin Audio we believe that uniting audiences with exciting sound creates shared memories that sear into the consciousness delivering more successful tours, events and repeatedly packed venues.

We achieve this by an obsessive attention to detail on the professional sound system's acoustic performance, frequently challenging convention and involving a sophisticated mix of design, research, mathematical modelling and software engineering, to deliver dynamic, full-frequency sound right across the audience.

With over fifty years of live sound and installation expertise to our name, Martin Audio offers a wide range of premium professional loudspeakers so customers can be assured of selecting the right system for their chosen application, whether it's a small scale installation or a festival for over 150,000 people.



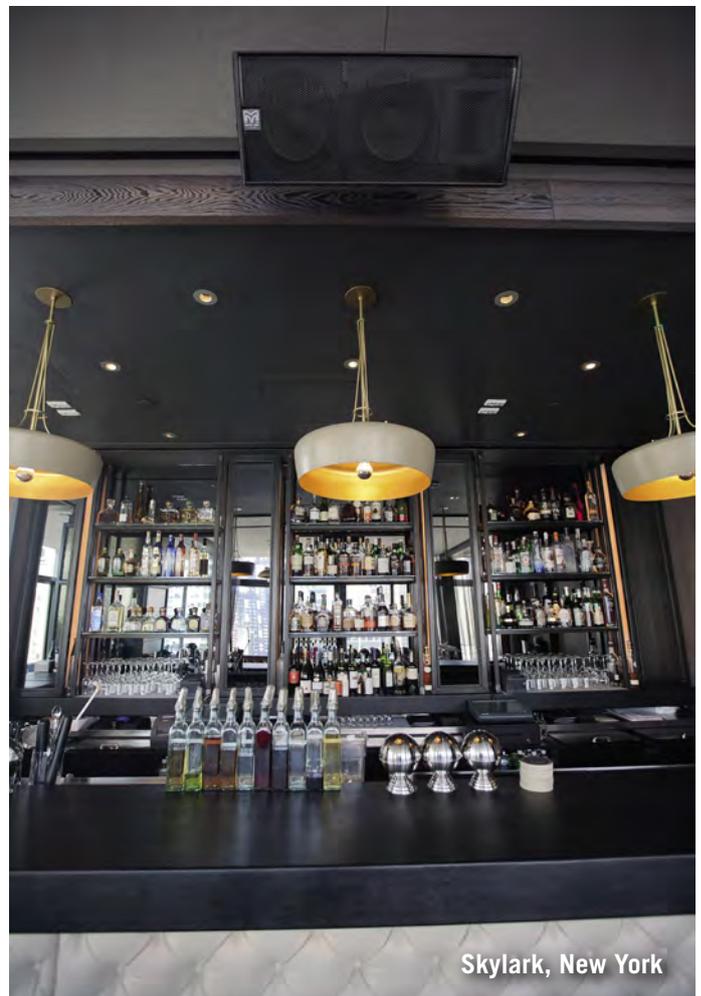
La Playa in Varna, Bulgaria

## Hospitality

Designed to offer performance features not normally associated with install product, Martin Audio brings innovation and sound quality to this market sector. For Bars, restaurants, hotels and casinos with a premium reputation to uphold and to fulfil their varied sound reinforcement needs for their clientele, Martin Audio product solutions truly deliver.



Bunga Bunga, London



Skylark, New York

## Martin Audio Install at Caesar's Vista Lounge



Caesar's Palace, Las Vegas

Las Vegas, NV—Caesar's Palace recently upgraded several of its lounges and bars including what is now the new Vista Lounge, a unique immersion experience featuring the latest in video technology along with a sophisticated Martin Audio sound system.

SenovA of Los Angeles, San Francisco, New York and Toronto, a design and management group specializing in the entertainment, special event, architectural-construction and media services industries, was tasked with the design and integration of this one of a kind multimedia project.

Bill Sage, SenovA Account Executive for the project, explains, "We worked with the Rockwell Architectural Group in New York and Bergman Walls and Associates in Las Vegas. They came up with this immersion concept for the Vista Lounge that makes you feel like you're at the top of a skyscraper looking out of the windows down at panoramic skylines of cities like Dubai, New York and Beijing through the use of 4K UHD videos in the windows and LED panels in the lounge's ceiling.

"We had to come up with the video and audio elements to make their vision and intent work," Sage adds. "We started with 32 NEC monitors projecting the programmed city views from a Watchout video media server that synchronizes and runs the video to all of the different displays with Crestron processing and control.

"The videos overlook various cities with real time effects like day to night, building office lights, airplanes, clouds and rain striking and running down the windows. The lounge can also load in content for branded environments and special events when a sponsor wants to buy out the bar. We also put 55 Oracle 8mm LED panels in the center of the lounge ceiling with special glass and effects that are synced to the window content to simulate a large skylight."

Choosing a sound system to complement the video scheme was easy for Sage and Curtis Kelly, Lead for SenovA's Systems Design Group, given they share over 20 years of

experience with Martin Audio in both the live sound and installation markets.

"Vista is supposed to be a relaxed, low-key alternative to some of the more over the top clubs at Caesar's," says Bill. "There's a DJ who plays what I'd call chill-out music that doesn't overwhelm the patrons with sound and reinforces the romantic mood. The client wanted an Ultra-Lounge system with high quality sound they could feel, which added up to Martin Audio for us because Curtis and I knew it would give them everything they wanted and more.

"We mounted five Martin Audio DD12s high up on the walls at angles facing the bar which provide real smooth coverage for the room because of the Differential Dispersion™ technology in the boxes. There are also two PSX compact powered subwoofers, one buried under the DJ booth and one on the other side of the room which worked out well because we didn't have space for amps in the rack room and the built-in processing warms up the sound without overpowering the room. We also installed 8 Martin Audio C8.1T ceiling speakers for additional fill and to supplement the system when playing low-key background music. A BSS BLU-80 Audio DSP system provides additional processing."

In addition to Sage and Kelly, crew for the installation included Project Manager Coty Shipe, Video Server Programmer Andy Kulhavy and Crestron Programmer Micheal Block.

Asked about the client's response to the installation, Bill confirms, "They really love the Martin Audio system. Vista Lounge is a nice counterpoint to some of the other clubs at Caesar's because the videos really take you to other places and the sound is subtle but fantastic."



(left to right): Andy Kulhavy, David Cromer, Wayne Olson, Curtis Kelly, Jordan Catillaz, Coty Shipe.

## TORUS and CDD Dominate German Themed Albert's Schloss Music Venue



Described as “a retreat from the modern world” the German-themed Albert’s Schloss emporium was influenced by the operators’ across Alpine Europe.

Named after Prince Albert, the second unit in Birmingham (following the opening in Manchester) is set on a giant new-build footprint—part of the city’s Paradise Forum development—which required an equally expansive sound system.

Integrator Richard Anderson of Pro Technical (UK) Ltd, who had worked with directors of the operating company, Mission Mars, in the days when they ran the hugely successful Revolution bars, recommended Martin Audio’s new TORUS

**“ THE MARTIN AUDIO SYSTEM HAS PROVIDED ALBERTS SCHLOSS WITH A GREAT SOUND; WE ARE REALLY HAPPY WITH THE RESULT**

constant curvature array, combined with a CDD solution. This is already proving so successful that it has been adopted as the template for future openings.

“These venues are solid entertainment venues,” said Anderson. “Therefore they wanted a powerful array for the stage but also something that would fit within the budget. Martin Audio is a reputable brand and we have used CDD many times over the past ten years.”

TORUS had been suggested as the perfect nearfield solution for the stage in the giant beer hall, which has a vibrant programme of live bands—from cabaret to full-on rock—seven nights a week, as well as DJs and background music during its all-day trading hours.

Thus Richard Anderson mixed pairs of TORUS T1230 (30° vertical dispersion) and T1215 (15° vertical dispersion) constant curvature arrays in stacks either side of the stage, with Martin Audio’s proprietary DISPLAY software optimisation and manual horizontal dispersion adjustability, providing tailored medium throw coverage across the width in front of the stage.

Both TORUS models also feature a 12” driver, but the low end is reinforced by four SX118 (single 18” subs) set under the stage, with the 550-strong clientele further back down the hall immersed in a sound field created by 24 powerful coaxial differential dispersion CDD10’s.

Upstairs is Ludwig’s Tavern, named after former Bavarian king Ludwig II. This more exclusive

area, where customers can play shuffleboard, takes a feed off the main system downstairs but also has its own independent DJ plug-in point. This is served by six CDD6 and a powerful fully displayed Martin Audio SX210 which sits loud and proud. “The client has never worried about having the speakers fully visible,” says the installer.

The entire system was powered by a combination of Martin Audio iKON iK42 and VIA5004 amplifiers, and was commissioned by Martin Audio’s Nigel Meddemmen, who also provided design support.

“The client is ecstatic and we’re now looking forward to adopting a similar model in Liverpool,” concludes Richard Anderson. This was backed up by Mission Mars Group Property Director, Godfrey Russell. “The Martin Audio system has provided Alberts Schloss with a great sound; we are really happy with the result,” he stated.



## Martin Audio Combines The Essence of The Windy City with The Spirit Of Nobu



Nobu Hotel Chicago, USA

Located in the vibrant West Loop neighbourhood, Nobu Hotel Chicago combines the essence of the Windy City with the spirit of Nobu. Innovative architecture and 115 stylishly-appointed rooms and suites seamlessly blend old-world Japanese influences with ultra-modern design. The Nobu Restaurant is at the heart of the hotel, opening out onto Randolph's famed Restaurant Row.

Technology had to contribute to the guest experience, and sound was no exception. Nobu Hotel Chicago partnered with Martin Audio's team of experts for audiovisual and AV low structured cabling. Encompass AV gave the team an opportunity to flex their design, acoustics,

**“ WE WANTED PEOPLE TO BE ABLE TO WALK THROUGH EVERY AREA AND NOT HEAR ANY DROPOUTS OR COMB FILTERING, AND WE WERE ABLE TO ACCOMPLISH THAT WITH THE CDD SERIES.**

audio visual infrastructure, and overall hospitality strengths and sound performance.

Encompass AV came in to rethinking the entire audio visual, structured cabling that ensured greater network infrastructure to deliver the Martin Audio solution. They also wired the entire building with the high-end audio visual

low-voltage and electrical systems, all while integrating seamlessly with other vendors on the site.

System design was focused entirely on the guest experience from display screens that come down on mechanical lifts with the touch of an iPad, to audio systems that deliver extremely high-quality sound across the property's many settings. One of the key elements in this was Martin Audio's differential dispersion technology to provide even coverage throughout the hotel.

Pickett and the Encompass AV team decided on a similar system design for each of the public spaces but tailored to the specific needs of each area. The CDD series forms the backbone of the solution in each area to ensure that even coverage and high audio quality is maintained throughout the hotel. With the pool, spa, fitness areas,

restrooms, lobby, conferencing space, rooftop bar and, of course, the centerpiece restaurant to cover, dozens of CDD6 ultra-compact two-way passive loudspeakers have been deployed from the entrance all the way up to the rooftop.

"With Nobu Hotel Chicago, we're looking for even coverage with a really tight, nice low end throughout the entire space," explains Pickett. "We wanted people to be able to walk through every area and not hear any dropouts or comb filtering, and we were able to accomplish that with the CDD series."

The award-winning CDD6 delivers the hotel's smooth, even coverage thanks to its Coaxial Differential Dispersion technology which achieves 'point source' summation of the LF and HF sections — eliminating off-axis variations in frequency response associated with non-coaxial designs. It also improves on conventional coaxial designs thanks to the static waveguide that merges with the unique cone shape to maintain the dispersion pattern all the way out into very high frequencies.

Coverage was only one aspect that led to the selection of the CDD speakers, with the aesthetics playing just as important a role. The compact footprint of the CDD6 and its close mounting capabilities for walls and ceilings ensured the loudspeakers could be easily hidden in every space. "In areas like the rooftop bar we were able to hide all the CDD6 speakers above the ceiling, so you really don't see them," recalls Pickett. "It made a lot more sense to us to use more of the smaller cabinets which could be installed out of sight more easily, than fewer of the larger CDD family members that could have been more of a challenge to hide."

A global lifestyle brand, Nobu Hospitality is built on instinctive design, a passion for service and a commitment to great food. "The real prize in the building is the restaurant," says Pickett. "High-quality sound and even coverage were definitely requirements. They needed that feeling where you walk into a high-end restaurant and it sounds the part, that it has that feel to it and carries that energy with it. The CDD6 was able to deliver this perfectly. The sound is phenomenal."



## Metinteractive Installs Nearly 750 Martin Audio Speakers At Live! Casino



Live! Casino & Hotel Philadelphia, USA

Nearly 750 Martin Audio components have been specified and fitted as part of a complete AV integration at the new \$700m Live! Casino & Hotel Philadelphia.

The 510,000 sq. ft Cordish Companies development is set in the City's Stadium District. The audio-visual design and implementation was managed by ECI (Entertainment Consulting International) as are all the entertainment complexes and sports arenas within the estate of their parent company.

Audio-visual requirements in the multi-zone space, incorporating a collection of sports bars and diverse restaurants, were specified by

consultants, Las Vegas-based Coherent Design, with integration company, Metinteractive, providing the successful bid for the fit-out.

At the business end, the work was overseen by Dan Defendorf, Director of A/V & Corporate Music Programmer for 130 or so Cordish Companies properties—casinos, bar/restaurants, sports and entertainment venue complexes—spread across nine districts of the US. He planned the design in conjunction with the Ryan Dewey, Director of A/V at the Live! Casino & Hotel.

Defendorf had already set up a relationship with Martin Audio, via Southeast Regional Sales Manager Brad Stephens. But the turning point

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came at InfoComm 2019 when he arrived at the manufacturer’s demo room, essentially looking for a reliable and discreet ceiling speaker at an attractive price point. Projects in Philadelphia and Pittsburgh were initially discussed with the company’s Northeast Regional Sales Manager, Martha Callaghan, and a loose template established.

Callaghan recalls that there was a myriad of featured areas that needed to be equipped with high quality audio and big screens in Philadelphia, since this is essentially a sports fanzone. It particularly applied to Sports & Social, a bar described as providing “the ultimate fan experience,” equipped with 65ft 4K media wall as well as 26 65” HDTV’s, and on game days this is simulcast with the similarly high-octane R Bar. Hence top-quality audio, with high intelligibility, was also a prerequisite.

In fact both these spaces have been identically-specified, with 144 Martin Audio C8.1T ceiling speakers, underpinned with 60 x SX112 subwoofers, while CDD10 and CDD12 are set into the walls, acting as main speakers for DJ nights, and when something punchier is required. Further CDD10 can be found distributing voice announcements and background music from the central bar, while two other areas— Prime Rib, a contemporary fine dining steakhouse, and Luk Fu, specialising in sushi and Asian cuisine— feature the manufacturer’s CDD8.

Altogether, the vast space is populated with no fewer than 436 C8.1T (8”+1”) two-way vented ceiling speakers and 142 C6.8T (6.5”+0.8”), some run 70V line and some low impedance. These also route sound to a pair of private dining rooms, equipped with karaoke systems, as well as all the general and ancillary areas.



Dan Defendorf couldn’t be happier with his product selection. “The reason we have used so many Martin Audio speakers across our bars and restaurants is because they are great sounding, offer good dispersion and have an impressive throw. Also they are not too obtrusive, and they hit the right price point. The correct location of the speakers was vital when it came to the design.”

Admitting that the intervention of COVID had “slowed things down” in terms of the project development, he was relieved that once they arrived on site, the installation process had been so straightforward. “There were no issues whatsoever with the Martin Audio speakers, and so we didn’t really need technical support. With so many properties to look after it is the main reason for wanting to create a standardised template for upgrades going forward, based on trusted brands such as Martin Audio.”

Among them will be technical makeovers of properties within the nearby Xfinity Live! including the NBC Sports Arena.

## New Multi-Zone Lytham House Equips with CDD and ADORN



Sound Stage Lighting Live (SSL Live) was set up by brothers Elliott and Jack Smith near Preston, in the north-west of England, three and a half years ago.

It didn't take them long to fall in love with the signature sound of Martin Audio. "We liked the clarity of sound, functionality and ease of deployment," they say. "We also liked the reliability — we have since installed 500-600 installation speakers and there has never been a problem."

While their Events subsidiary also purchased a Martin Audio WPC scalable line array pre-lockdown, their installation division has been

busy installing a combination of CDD and ADORN series speakers, BlacklineX and ceiling speakers for use in venues ranging from leisure and hospitality to immersive fitness centres.

All four Martin Audio commercial ranges feature in Red Fox & Peacock Ltd's new flagship Lytham House, a multi-zone bar/restaurant, occupying a prime position on the upmarket coastal resort of Lytham, on the Fylde coast.

Run by Ross Robinson, the company's other venues—The Eagle at Weeton, The Ship at Freckleton and The Queen's Hotel, Lytham—are already equipped with Martin Audio from SSL Live.

“From an audio perspective the owners trust us, and once again we have given them the best speakers for the purpose,” they say. The site, a former Italian restaurant on a large plot, was left empty for two years as potential buyers waited for the price to drop. Eventually purchased by a local building contractor it was promptly leased back to Robinson’s company and the interior designers set to work in creating a multi-zonal, upmarket venue, incorporating restaurants (private and public), bars and a dancefloor area in the main restaurant.

SSL Live were again the technology contractors. Four Martin Audio CDD8 provide 360° dispersion, around the large steel tree that bores up through the centre, with four CDD5 providing dancefloor infill, and a pair of SX212 subs, situated left and right of the stage. The dining alcoves are serviced by three ADORN A55. There are DJ plug-in points, and DJs have the extra bonus of hearing their reference sound through a pair of Martin Audio Blackline X10.

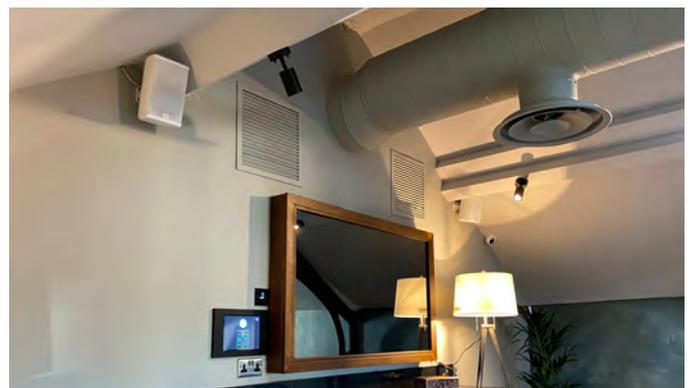
Mounted in the top of the tree, in the upstairs dining area, are four ADORN A40 while four wall-mounted CDD6 maintain both consistency and coverage pattern.

Sound reinforcement in the front bar area is provided by six ADORN A55, with an SX110 sub discreetly sited under the seating, and the two private dining rooms are respectively catered for with another four ADORN A55 in each.

An ADORN A40 links the sound on the stairs, with the photo booth likewise equipped, and in the ancillary areas and toilets are a selection of C4.8T ceiling speakers (with a pair of ADORN A55 allocated to the men’s toilets).

The sound is processed and routed through a BSS Soundweb digital environment, with local remote control at the bars, and to further ease operation of both sound and lighting (which SSL Live also provided) is a custom iPad lighting control and music playback system.

But the journey is far from finished, as two further Woolton-based licensed operations are now earmarked for development, one of them a high calibre unit that will mirror Lytham House in terms of quality, and feature Martin Audio sound reinforcement.



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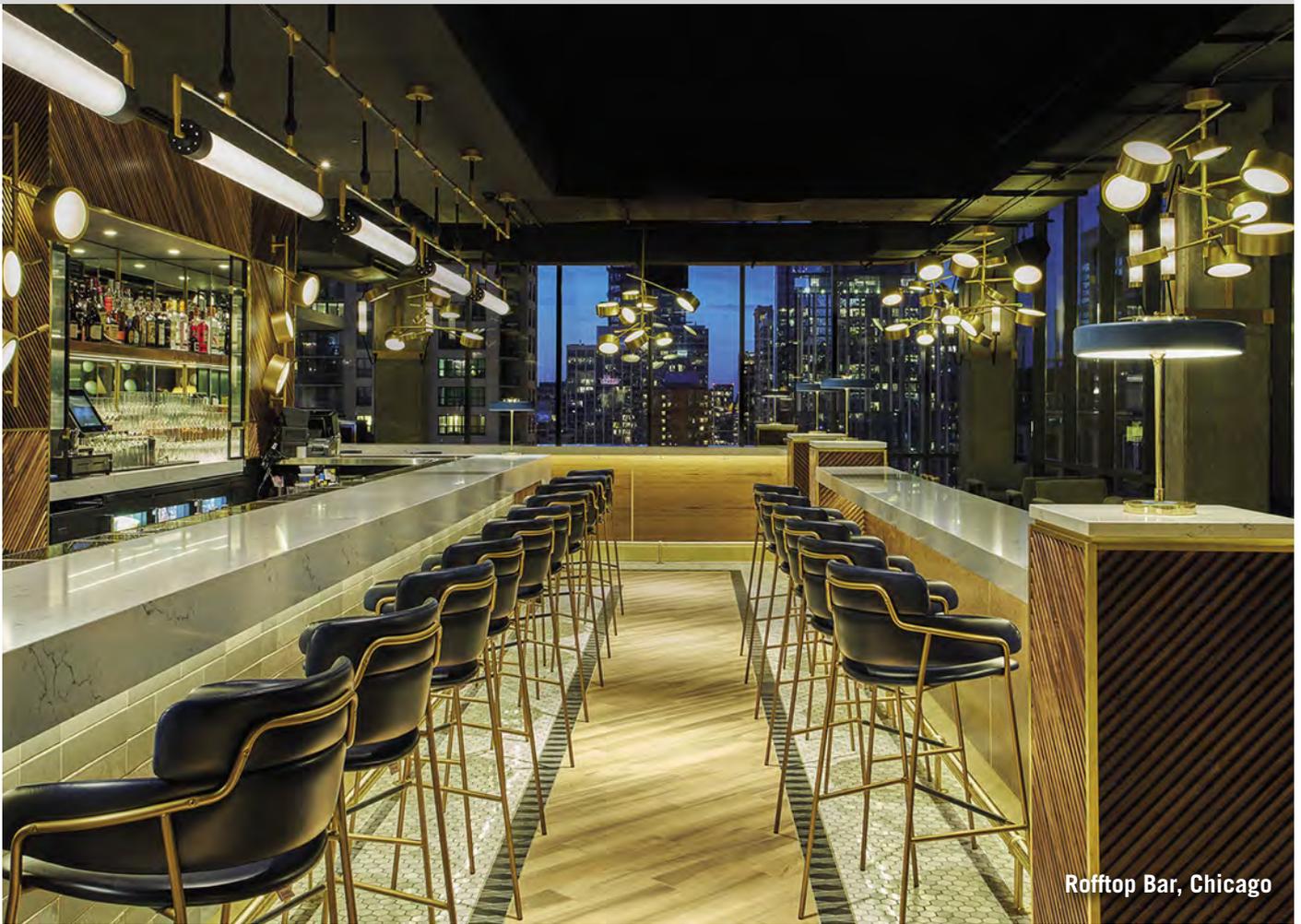
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## Award-Winning Apogee Rooftop Bar Outfitted with Martin Audio



Chicago, IL—Apogee, an innovative rooftop bar on the 26th floor of the Dana Hotel and Spa, was recently awarded “New Concept of the Year” at the Nightclub and Bar Awards in Las Vegas.

Self-described as “the ultimate high point in the cocktail scene,” Apogee features “master mixologists that deliver quality cocktails quickly and consistently in hand-blown glassware and custom ceramic vessels.”

According to Tim Pickett of Encompass AV who installed a Martin Audio CDD system during Apogee’s original upgrade: “The venue is a re-concept by the Fifty/50 Group whom we work with on a regular basis for a number of restaurant and club installations in Chicago.

“They were replacing and totally upgrading the original bar that was on site, and the owner and his team were concerned that the original sound system wasn’t up to par. It was only two or three years old, but really hurt your ears at loud volumes. We did an A-B demo with Martin Audio CDD12’s and the original 12” speakers, and you could clearly hear the quality difference with the CDD12’s.”

The installed sound system included 12 CDD12’s and four CSX118 subs mounted on the ceiling around the perimeter of the bar and the main seating area. The bar’s

“**THE COVERAGE IS INCREDIBLY CONSISTENT, THE AUDIO QUALITY IS AMAZING, AND THE LOW END SOUNDS PHENOMENAL.**”

VIP room is equipped with four CDD10’s mounted on the walls with yoke mounts and two CSX212 subs mounted above acoustic paneling but ported outwards so the sound can be evenly distributed.

Tim confirms that the ownership “is ecstatic with the final results. There were originally some noise concerns because the venue is on top of a high rise with neighbors and other condos close by, but we were able to tweak the system and quickly eliminate any possible problems because of the control we have with CDD’s differential dispersion technology.

“Bottom line, the club sounds great,” Tim concludes. “The coverage is incredibly consistent, the audio quality is amazing, and the low end sounds phenomenal. The owners are way happier with the Martin Audio system than the original PA.”

## Martin Audio Installed in Guerra's Bachata Rosa Restaurant



“ THE FINAL RESULT USING MARTIN AUDIO WAS IMPRESSIVE, WITH GOOD INTEGRATION OF THE SYSTEM IN THE DIFFERENT AREAS.

Bachata Rosa Restaurant

Punta Cana, Dominican Republic—Sound Video Lighting of Santo Domingo recently installed a full complement of Martin Audio CDD speakers in Juan Luis Guerra's popular Bachata Rosa restaurant as part of a comprehensive AV upgrade.

Guerra is a Dominican singer, songwriter, composer, and producer who has sold over 30 million records and won numerous awards including 18 Latin Grammys, two Grammys, and two Latin Billboard Music Awards.

According to SVL's Jonathan del Villar, “The restaurant has six zones including the terrace with two Martin Audio CDD5s, two CDD12 and one CSX112 sub. The main dining salon is equipped with two CDD12, one CSX212 sub and four C4.8T ceiling speakers for a special VIP area with lower ceilings. Bachata Rosa dining, the thematic area with a small stage where all the decoration and ambiance is based on Juan Luis Guerra's music and career, has four CDD12 and two CSX212 subs.

“For the entrance, a hallway that recreates a street of the old Santo Domingo city, there are five buildings with different themes, each with a CDD5. There's the ‘guagua’ (bus) room, based on one of Guerra's big hits, “La Guagua,” that you have to go through to enter the thematic area of the restaurant with two CDD5 in a separate zone and a player always playing a loop made by Juan Luis with background from the original song recording. The six

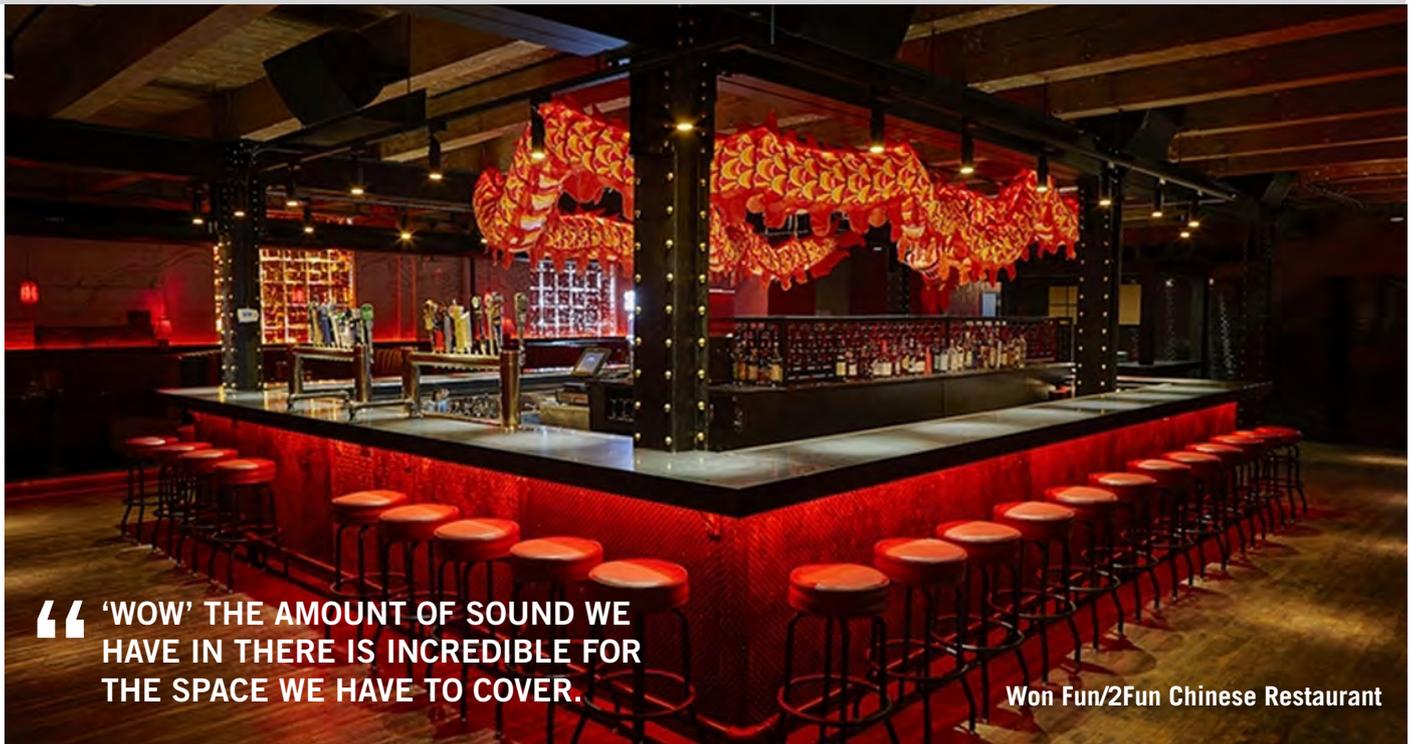
bathrooms are equipped with four C4.8T speakers as well. Power was provided by eight iKON iK81 10kw 8-channel power amplifiers.

“For the design and distribution of the speakers in the different areas,” Jonathan explains, “we used Ease Focus v3 to make predictions. We did the whole system setup process with Martin Audio's VU-NET 2.1, where we used the CDD presets from the library, also through VU-net we were able to work system settings like EQ, Delay, Phase, etc. directly on the amps. All measurements were made with a Smaart Live V7 Steinberg audio interface and Earthworks M30 mic.”

Asked why Martin Audio was chosen for the project, Jonathan adds, “because of the level of quality and prestige of the brand, considering that this restaurant is thematic of one of the most important artists of Dominican Republic, likewise the system had to be at the highest level.

“The final result using Martin Audio was impressive, with good integration of the system in the different areas, the dispersion and coherence of the excellent sound and the incomparable quality. We are very pleased with the result and very grateful to our client for the trust placed in Martin Audio, considering that this is one of the first establishments of this type in installing the brand in the Dominican Republic.”

## Encompass AV Installs CDD in Chinese Restaurant/Lounge



“WOW” THE AMOUNT OF SOUND WE HAVE IN THERE IS INCREDIBLE FOR THE SPACE WE HAVE TO COVER.

Won Fun/2Fun Chinese Restaurant

Martin Audio CDD speaker systems were installed by Encompass AV to optimize coverage and audio quality in the stylish Won Fun/2Fun Sichuan Chinese restaurant/lounge complex in the West Loop district of Chicago.

The Won Fun restaurant downstairs is complemented by the high energy 2Fun lounge upstairs with DJ’s, Karaoke and light food.

To get optimum audio quality and coverage, Encompass AV’s Tim Pickett reports, ‘We chose Martin Audio CDD for both spaces. Won Fun is a narrow rectangular space with 6 CDD10’s mounted on the ceiling above the hanging lights and two CSX 212 subs built into the booths. With 6 CDD10’s, the system can handle anything from background music up to a high-energy lounge feel.’

‘Upstairs, the 2Fun Lounge has a much larger system to accommodate the higher energy live music, with nine CDD15’s flown in a u-shape around the bar, four on each side and one on the end cap facing outwards that cover the room beautifully and six CSX118’s built into the booths.’

‘The only real challenge in that space was getting the low end where we wanted it. We had to play with phase and timing and run each sub channel with its own DSP just because the subs are in the booth seats. We had to flip some subs out of phase, add some delay to tighten the sound up, and play with crossover points. But when we got it set up, the room came alive like crazy. We got a tremendous amount of low end energy that hits real hard and obviously the CDD15’s just sound better as they get louder.’

Tim has chosen CDD for many of his installation projects, largely based on the extended coverage: ‘What I really like about CDD is the wider dispersion which allowed us to use less boxes but still have great coverage even close to the cabinets throughout the venue. It also allowed us to spend the money on the larger CDD15’s so we could get the higher SPLs the club owner wanted.’

‘They’re ideal,’ he adds ‘because the lounge is not a big room where you need a giant horn to throw 40 or 50 ft. We had nine of these to cover 3,000 square feet which was more than enough, especially considering 1,000 ft. is an area where you didn’t want coverage. And because of the low ceiling and the short throw distance you need that wide dispersion and it worked out great.’

‘Downstairs, the CDD10’s works perfectly in the narrow space because of the wide dispersion down low so people who are only two or three feet away from the speaker or off axis are still getting good coverage.’

Asked about his client’s reaction to the CDD system, Tim concludes, ‘He was ecstatic and didn’t even know what he had until we really pushed the system. He had asked if they had to bring in sound reinforcement for the DJ’s and I said, ‘absolutely not.’

‘I played some tracks to show what the system could do at higher volumes and he was absolutely blown away. He just said, ‘Wow’ with a big smile on his face. The amount of sound we have in there is incredible for the space we have to cover. The owner was adamant about having a great quality sound system that, in his words, would ‘rage.’ And that’s exactly what we did.’

## CDD Installed at Tangled Roots Brewery



John Barleycorn River North, Chicago

“ USING THIS SYSTEM HAS CREATED THE BEST MUSIC VENUE EXPERIENCE IN THE AREA.”

Ottawa, IL—Encompass AV recently deployed CDD and a range of other Martin Audio speakers for the newly built Tangled Roots Brewing company, a complete gut and remodel in a historic building site that includes a high end restaurant/bar with a performance space alongside a brewery, adjoining tasting room and private meeting spaces.

The Lone Buffalo restaurant on site specializes in “slow food” from the Brewery’s own farm with a variety of home crafted beers and has a small stage for local country, classic rock, bluegrass, acoustic reggae and roots artists.

To effectively provide background music for the restaurant, Tim Pickett and the Encompass AV team mounted 12 Martin Audio CDD8’s around the walls complemented by two AQ210 subs under the booths. Live performances benefit from a Martin Audio PA consisting of two flown XD15’s and two CSX218F subs above the stage.

Asked about both systems, Tim explains, “Background music sounds great with very smooth, balanced coverage throughout the room. The live system is working well too. Super stable, doesn’t feed back and responds well with all kinds of music.”

The tasting room, located next door to the restaurant, is equipped with 10 Martin Audio C6.8T in ceiling speakers along with two CSX212 subwoofers in the front and back of the space.

Upstairs, 12 CDD6 and three CSX212F subs for the 2nd floor restaurant and 6 CDD6 plus one CSX212F for the private dining room are all mounted in the rafters to provide effective yet visually unobtrusive dispersion of background music. Again, Tim comments, “It sounds great in both rooms, with plenty of clarity, definition and very smooth, balanced coverage.

The rest of the sound system includes a combination of Lab Gruppen and Martin Audio amplifiers and Symetrix Radius digital signal processing. The video system is comprised of Philips BDL5530QL and Sony XBR-65X850C displays with a Just Add Power Network Video System.

Asked about the audio, Tangled Roots partner and managing director Scott Struchen comments: “I’ve been working in the hospitality entertainment business for over 20 years. Starting up a new brewery with a live entertainment venue, I needed to make sure everything was perfect. We only use the best companies and equipment. Encompass AV was the solution using the top of the line Martin Audio system in our venue. Using this system has created the best music venue experience in the area! Thank you for making our place exceptional Encompass AV & Martin Audio!”

Concluding, Tim adds, “CDD not only reduces the amount of boxes you need because of the wide dispersion, saving time and money for installs. The speaker produces perfectly even coverage patterns without the gaps horns create when you get closer to the speakers, and that’s a very big deal.”

## MSL Fits New Restaurant Brand with Martin Audio CDD



**Burger & Lobster Bar, Bath, UK**

Long time advocate of Martin Audio's signature sound, venue installation specialist Middlesex Sound & Light (MSL) has wasted no time in introducing the manufacturer's new CDD range to the leisure hospitality industry.

The company has completed several high profile projects including its first installation for the burgeoning Burger & Lobster bar/restaurant brand. For their sixth venue opening in Bath the operators took over the Grade II\*-listed Octagon Chapel — originally built in 1767 but recently restored within the courtyards of the city's new Milsom Place retail and restaurant development.

The new CDD — the successor to Martin Audio's popular AQ architectural range — combines distinctive curved enclosures with unique Coaxial Differential Dispersion™ technology to deliver high performance, projecting more output to the rear of the audience to distribute sound evenly front-to-back, while having wide horizontal coverage close-up.

Darrel Olivier, project director at Middlesex Sound & Light, selected nearly 50 of the ultra-compact CDD5 (5") drivers, taking advantage of the point source performance and consistent coverage in a combination of factory fit black and white enclosures. Providing 120°-90° horizontal (and 80° vertical) they blend seamlessly into the environment.

Working with main contractor, Du Boulay Contracts, design LSM interior designer Andrew Harwood and Burger & Lobster project manager, Alex Neil, Darrel Olivier says that he was sold on CDD from the moment he heard it demonstrated. "CDD is a significant move on from AQ and

we were massive fans of that," he stated. "Aesthetically it's better, the sound quality has improved, with wider dispersion, and it's less obtrusive. The designer didn't want speaker visibility and as it's a listed building fixing speakers and running cables was challenging. But luckily CDD comes with versatile brackets and so this provided a great opportunity for us."

MSL had provided quotes for previous openings, but with the development plan in full spate it was not until Bath before they were given the opportunity to put their own specification together. Olivier eschewed the speaker brand used elsewhere in favour of CDD, explaining, "Because of the make-up of the building, which is octagonal and on three floors — and the fact that it coincided with the launch of CDD — it seemed to be the obvious route to go, particularly with the support we receive from Martin Audio."

The venue itself comprises a large ground floor bar/restaurant, a mezzanine area overlooking the well below, with its giant chandelier drop. Underneath that are the original basement vaults, presenting a number of private alcoves forged into the open stonework, and an exit onto the modern piazza at the lower level.

MSL counteracted the natural reverberation from the building's hard surfaces within the rotunda, by specifying a generous quantity of speakers that could be run at low volume from the Powersoft amplifiers.

At ground floor level 10 CDD5s have been mounted under the mezzanine balcony, along with three CSX112 (12in) subs. The mezzanine itself sees eight further CDD15

and three CSX112 while in the basement are 14 x CDD5 and three CSX112.

Each of the venue's three separate entrances are equipped with a further pair of CDD5's at the door, while along the customer routes in this mazy environment are 10 more of the tiny speakers; some are concealed in lobster pots, part of the bric-a-brac in the route leading to the rest rooms, where Martin Audio C4.8T ceiling speakers have been specified.

For the most part the ground stacked subs have also been given low visibility, either recessed into fixed seating or mounted behind grilles, concealed by the lobster tanks. However, in the basement, the subwoofer in the stone snug has been sensitively washed by MR16 in-ground LED.

Played out from their own music player is a carefully customer profiled playlist created by Burger & Lobster's own Zarig,. "Music is a big part of the offer," states Olivier, "and we have given them a plug-in point for a DJ down in the basement."

To carry the music evenly into every nook, cranny and corner of the labyrinthine octagon, split across 24 sound zones, MSL has also specified a BSS Soundweb BLU-100 DSP and two BLU-BOB output expanders — giving them a necessary 24 outputs and greater control of the delays. Local bar control and source select on each of the three trading floors is provided via BLU-10 wall remotes.

According to Darrel Olivier, the reaction to CDD, as fed back by his installation tech team, was 100% positive. And Burger and Lobster Restaurants' Head of Projects & Property, Alex Neil, added his own endorsement. "The design of the system is very effective," he stated. "I personally think the overall quality and distribution of the sound is excellent, especially considering the shape and age of the building."

**“ THE DESIGN OF THE SYSTEM IS VERY EFFECTIVE, I PERSONALLY THINK THE OVERALL QUALITY AND DISTRIBUTION OF THE SOUND IS EXCELLENT, ESPECIALLY CONSIDERING THE SHAPE AND AGE OF THE BUILDING.**



## Swingers Goes Crazy for Martin Audio CDD



“ WE ARE MASSIVE MARTIN AUDIO FANS. CDD WORKS WELL, LOOKS GOOD, PROVIDES EVEN COVERAGE AND REPRESENTS EXCEPTIONAL VALUE.

Swingers, London

More than 70 of Martin Audio's new CDD installation loudspeakers, featuring patented Coaxial Differential Dispersion driver technology, have been installed by Middlesex Sound & Light (MSL) in a London based leisure hospitality venue, called Swingers.

Built around two nine-hole crazy golf courses, Swingers also consists of a dining area with street food, a two-tier Clubhouse and five bars.

Run by the Institute of Competitive Socialising (ICS), it not only hosts corporate crazy golf sessions for the business world — bringing the outside indoors — but then transforms the 16,000 sq. ft of space into a more upbeat vibe after dark, with nightly DJs. It is described as an environment of “competitive socialising”.

MSL are just one of a number of integrators who have made the CDD their ‘go to’ solution since its spectacular launch in Frankfurt 15 months ago. Director Darrel Olivier says that after seeing the Swingers operation, run by Jeremy Simmonds and his business partner Matt Grech-

Smith, prototyped at a short-term pop-up in Shoreditch, he was excited by the prospect of equipping the quirky underground venue opposite the Gherkin in Leadenhall Street with a full AV integration.

“We were asked to provide very high quality and evenly distributed audio system which could be ramped up for the night time trade,” states Olivier. While MSL have fitted 24 CDD8 (8”) speakers and a total of five CSX112 (1 x 12”) subs around the two golf courses it is for the Clubhouses that Olivier has reserved the most potent sound. Here he has placed four CDD8 and a powerful CSX212 (2 x 12”) sub for the DJs after dark, with a further four CDD6 in the Lower Clubhouse bar and 10 x CDD6 in the Upper Clubhouse on the mezzanine level.

Moving through the building MSL have specified four CDD6 in the Private Dining Room and six CDD8 in the general dining area. Elsewhere, there are a pair of CDD5 (5”) in Reception, four CDD6 in the Entrance, eight further CDD5 in ancillary areas, such as Corridors, Washrooms and

Toilets. The entire system is driven by Powersoft M-series amplifiers.

The installers have also designed an intuitive series of presets and routing commands programmed into the BSS DSP, with source select and global volume control. “We worked closely with the operations team at Swingers, to create different presets for volume at different times of the day and because of the inherent reverberation in the building worked hard on the gain structure of the individual input channels to make sure we delivered the best sound. By installing so many CDD enclosures we were able to compensate for the challenging environment.”

Inputs are derived from BGM, DJ, live feeds, various AV inputs and there is a separate aux audio input. Two 65” Sony commercial display screens have been detailed — one for the Private Dining area and the other for the leader board — connected and run by WyreStorm HDBaseT matrix HD video switcher, with headroom for future proofing.

Summing up, Darrel Olivier says, “We are massive Martin Audio fans. CDD works well, looks good, provides even coverage and represents exceptional value, while the variety of Martin Audio bracketry gives us enormous flexibility.

“Because we spec so much CDD I know it like the back of my hand. And when clients see your confidence in a system it helps you negotiate the sale.”

Jeremy Simmonds was equally positive. “This is a challenging environment in which to achieve top quality sound, particularly given the challenges presented by the building and the many different areas within our scheme. CDD handles everything thrown at it while Darrel and his team have integrated and programmed all the AV technology in such a way that the system works for our needs as the atmosphere changes from lunch time right through to the early hours.”



## Sound Division's Top London Club Installs

Sound Division Group has carried out three installations in high profile London venues this summer, making widespread use of Martin Audio's discreet but high performance C6.8T and C8.1T ceiling speakers.

Featuring a 6.5" (165mm) bass driver and a 0.8" (19mm) dome tweeter, these circular recessed speakers have achieved wide adoption since their launch in view of their wide (150°) dispersion, high SPL and suitability for low-ceilinged venues.

In two of the venues — Circus Bar & Restaurant in Covent Garden and Aqua Nueva at Oxford Circus — these have been retrofitted into an existing Martin Audio technical infrastructure as part of major revamps carried out by the London based installation company.

Circus was first fitted out by Sound Division with Martin Audio AQ architectural speakers back in early 2010. The latest phase sees the company bringing more control to the bar/restaurant areas — adding four C6.8T ceiling speakers in each zone, with a further three distributed in the rear bar lounge. Another C6.8T can be found under the atrium in the front dining area, while a recessed C4.8T relays music in the washrooms.

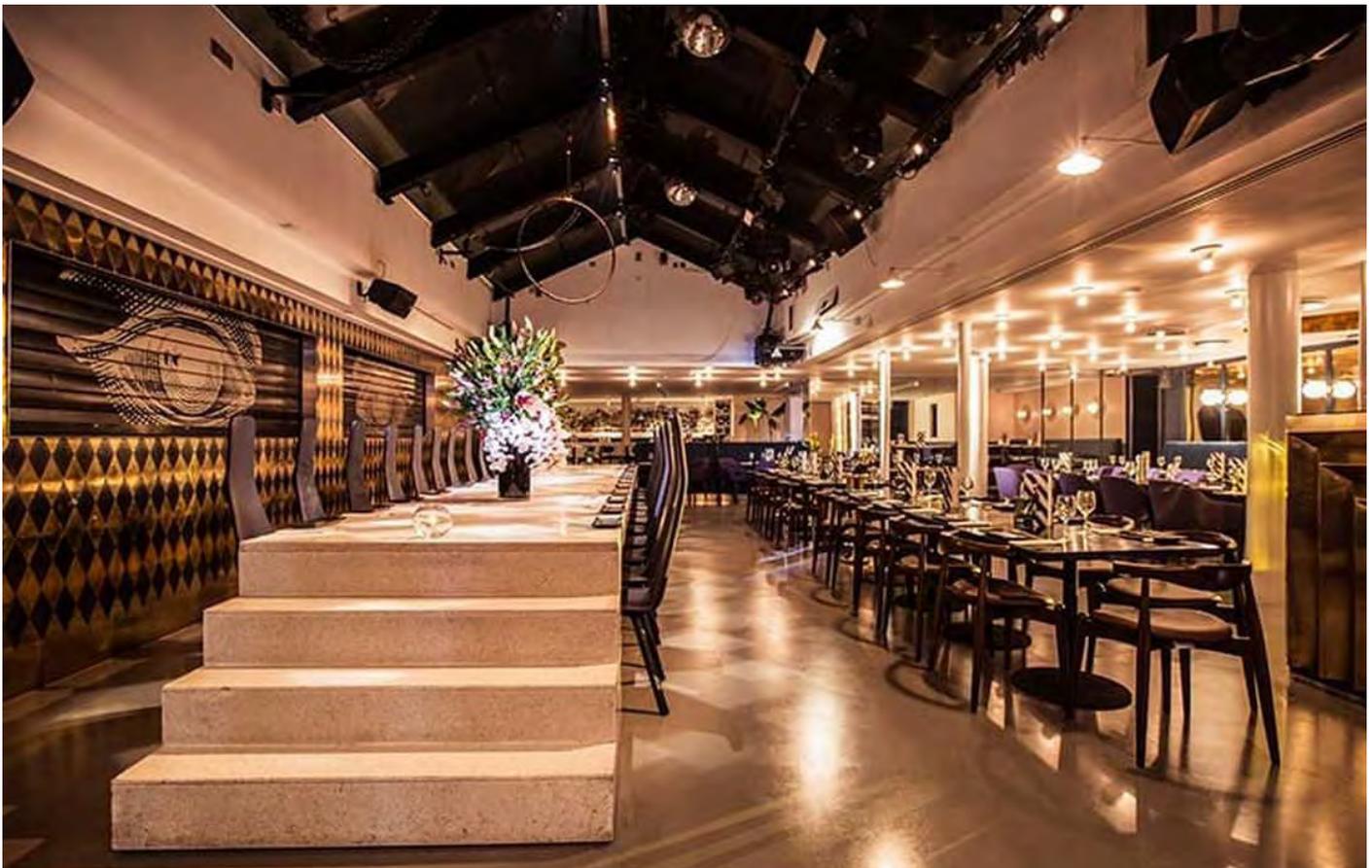
Meanwhile, the main performance area continues to operate with the successful implementation of AQ8's originally installed.

Circus Bar & Restaurant owner, Adam Davies confirmed, "We wanted to move to a more discreet speaker, create more zones and reduce the distance between each customer and the nearest speaker. We could then reduce the noise pollution to our neighbours without compromising the venue's sound quality. Sound Division came up with the solution to do this.

"We are extremely happy with the result. The extra speakers perform remarkably well for ceiling speakers and the general sound quality for the whole venue has improved. We have eliminated any dead spots, not compromised our volume and kept our neighbours happy."

Sound Division MD David Graham adds, "With their excellent clarity, Martin Audio C6.8T's were the perfect solution for the venue's problems. At the same time we redeployed the existing amplifiers [Martin Audio MA1.3s and MA900] and re-EQ'd the system in Soundweb."

With its large footprint, and impressive views from the fifth floor balconies overlooking both Regent Street and Argyll Street in London's West End, the Aqua Restaurant Group — with sites ranging from Hong Kong and Beijing to London's Shard — has refurbished and refocused its Spanish restaurant, Aqua Nueva, into a traditional dining room, courtesy of interior specialist, Rob Angell Design International. In so doing it has extended its exclusive relationship with Martin Audio and Sound Division.





“ THE DISCREET CEILING SPEAKER IN THE RESTAURANT PERFECTLY MEETS OUR REQUIREMENTS FOR BACKGROUND MUSIC WITHOUT INTRUDING ON THE DESIGN AESTHETIC.”

Several C6.8T and C8.1T ceiling speakers were installed in the dining rooms when the venue opened around five years ago and these have been reused and extended.

A covered walkway now links the main central bar and Japanese Kyoto restaurant with the Spanish Nueva, where there are also two private dining rooms.

The bar itself features 10 x Martin Audio C8.1T ceiling speakers and Sound Division has provided supplementary cabling should additional bass support be required in the bar.

The new Spanish dining room sees five Martin Audio C6.8T flush speakers (in custom matching finish with further C6.8T's in each of the private dining rooms — along with the washrooms.

At the same time Sound Division has upgraded the sound management system for both restaurants to a pair of networked Soundweb London BLU 100 DSP routers, containing the gain structure.

With its all-day trading the operation veers between background music (customer profiled and played out through 8Track Music Solutions servers) and DJ entertainment.

Stated Chris Martin, General Manager, Aqua Restaurant

Group, “The discreet ceiling speaker in the restaurant perfectly meets our requirements for background music without intruding on the design aesthetic, while the intelligent reworking of the existing Martin Audio system ensures that we have a more powerful option for private events, and on DJ nights”.

Meanwhile the growing chain of Birley Sandwiches, recently took on a prestigious site in London's historic financial district — on the piazza behind the commercial skyscraper, 20 Fenchurch Street (also known as the ‘walkie talkie’ in view of its shape).

Set on two floors overlooking the piazza, Sound Division were introduced to the project by shopfitters, Bastille, and duly installed a background music system on the ground floor sandwich bar and similar upstairs in the lounge bar. Once again David Graham's company chose Martin Audio C6.8T — detailing four for the downstairs area and six for the floor above.

Summarised David Graham, “We have enjoyed considerable success, both with Martin Audio's AQ series but particularly with this Ceiling series, which are easy to fit and provide smooth, articulate speech and punchy music. They have always proved popular with our London-based customers and their chic clientele.”

## Lexington Upgrades with CDD from LMC Audio



**THE UNIQUE CDD TECHNOLOGY  
 ENSURES THE AUDIO IS CONSISTENT  
 ACROSS THE DESIRED AUDIENCE SPACE.**

**The Lexington, London**

Situated between London's Kings Cross and The Angel, popular entertainment venue, The Lexington, has upgraded the sound reinforcement system in its downstairs lounge bar — with Martin Audio's popular new CDD series, which makes use of patented Coaxial Dispersion Driver technology.

Supplied by LMC Audio, the main PA in the American-themed bar comprises four CDD10 (10") mounted on four pillars, firing into the centre. These are supported by a pair of ultra-compact CDD5 (5") that will be used as DJ monitors, and a CSX212 (2 x 12") compact subwoofer which is also situated in the DJ booth. Managing and optimising the system is Martin Audio's dedicated DX0.5 controller.

The venue had decided that an upgrade had been necessary in its downstairs bar. Although a refurbishment had already taken place on both floors of the venue, owner Stacey Thomas sensed the need to invest in the technical infrastructure and realised that a first class sound system was essential to this. It was deemed that the previous PA rig had been too 'noisy' and unfocused.

They approached LMC Audio and JP Cavaco, their London sales manager, suggested that CDD would provide better definition, with more controlled dispersion, from a more compact speaker. "I knew Martin Audio CDD would satisfy on all points," he said. "The coaxial design keeps the enclosure size compact and unobtrusive, and the unique CDD technology ensures the audio is consistent across the desired audience space. More than ever the installation

market must recognise the need to minimise sound pollution and CDD technology is the perfect tool for this application."

This assertion was borne out by the system demo conducted by Martin Audio account manager, Richard Van Nairn.

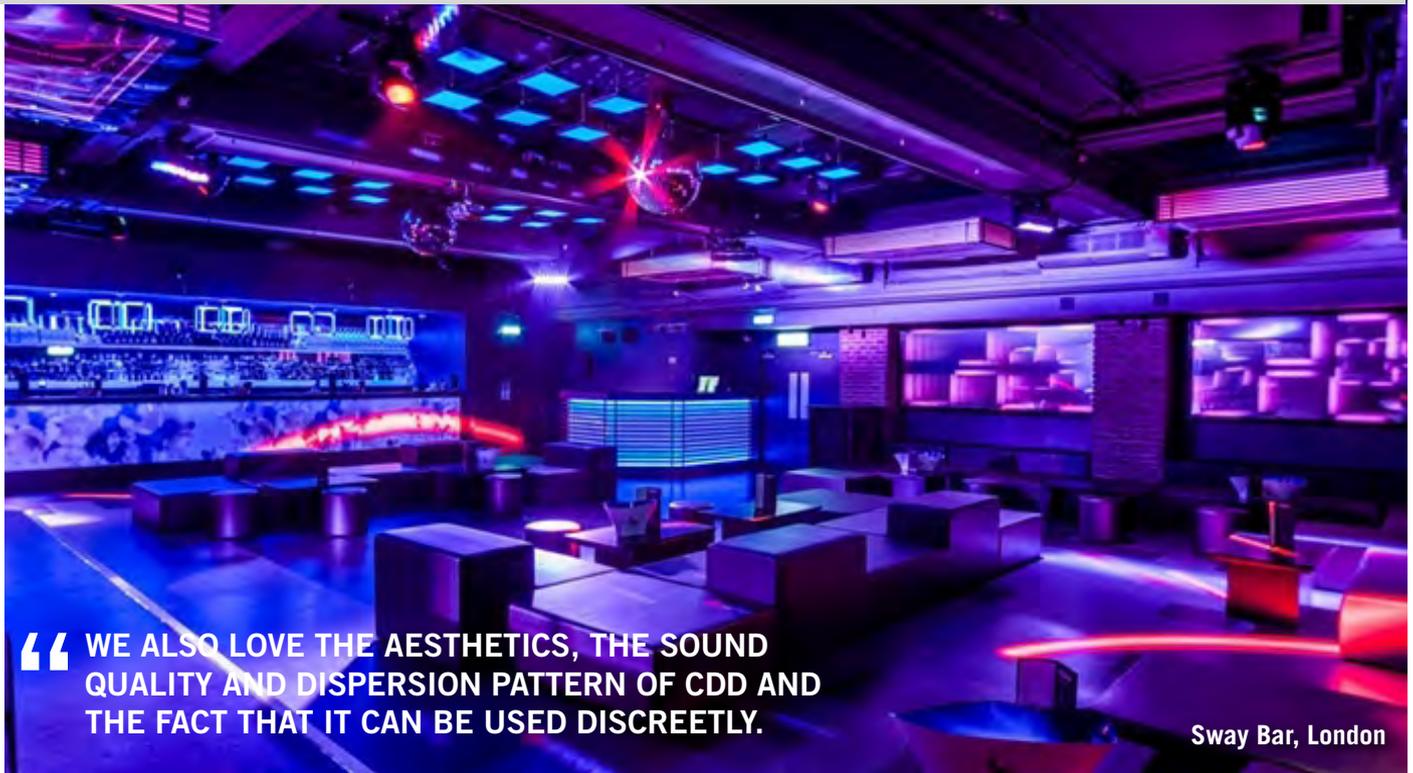
The new installation, which will come into its own during club nights, has certainly satisfied the requirements of resident sound engineer, Joe Hawley. "The CDD's are incredible boxes for their size — sufficiently loud but not too harsh. They deliver a far more focused sound in the centre of the room than the system we had previously, and offer highly controllable dispersion. It gives us the ability to keep the bar area quiet and focus the sound elsewhere as required."

He added, "As we have issues with the low end spilling out of the bar, by having the sub in the booth both the DJ's and those on the dancefloor can really feel the low end; but it is really contained in a small area in order to avoid spillage.

"As for the DX0.5, this made everything so easy. Although there was no preset for exactly what we wanted to achieve, building a preset specifically for us was easy, and the Martin Audio recommended settings for the CDD series sound great. All we had to do on the DX0.5 was minor level adjustment and limiting on the inputs."

This level of control also satisfies sound restrictions outside the venue, he concludes, "while inside, a happy bar staff makes for a happy clientele."

## Martin Audio CDD Holds Sway for Novus Leisure



Novus Leisure has carried out a major upgrade to its multi-room Sway Bar in London Holborn's fashionable Great Queen Street, imbuing it with a cool New York vibe.

Of the venue's five rooms three were earmarked for a major technical and design overhaul as part of the £1m refurbishment, and Middlesex Sound & Light (MSL) specified Martin Audio's new CDD (Coaxial Differential Dispersion) installation range of loudspeakers in each. The spaces concerned were the now sophisticated basement Cocktail Bar (previously Crystal Bar) and Club Room (a conversion of the former Groovy Wonderland), as well as the Ground Floor Bar and Kitchen upstairs. MSL also installed new lighting.

Novus Leisure Project Manager, Graeme Sutherland, says that the aim was to bring a traditional 1980s style disco into the modern age and give the venue greater flexibility, with the ability to host third party conferences downstairs as well as up. This required a versatile sound system, since the venue trades all day, six days a week, feeding both background music at low level from a Kaleidovision multi-zone player in the daytime before the DJs ramp up the volume on the Pioneer CDJs in these locations after dark.

In the upstairs Bar and Kitchen MSL have deployed eight Martin Audio CDD8 (8in) speakers, with two CSX212 (2 x 12in) subs handling the low frequencies and two CDD6 (6in) as infills. Downstairs in the Cocktail Bar the music is pumped out via six CDD12 (12in) speakers, while two of Martin Audio's AQ215 (2 x 15in) subs from the previous installation have been reused. Meanwhile, the Club Room now boasts a powerful sound output generated from four CDD15 (15in) and two CSX218 (2 x 18in) subs.

Each area also has its own independent input point and is controlled from an amp rack in the basement. Sound levels and thresholds are programmed into BSS Soundweb, with additional output expansion and local input/volume control, and specially created parameter presets reflecting the different type of functions hosted at Sway.

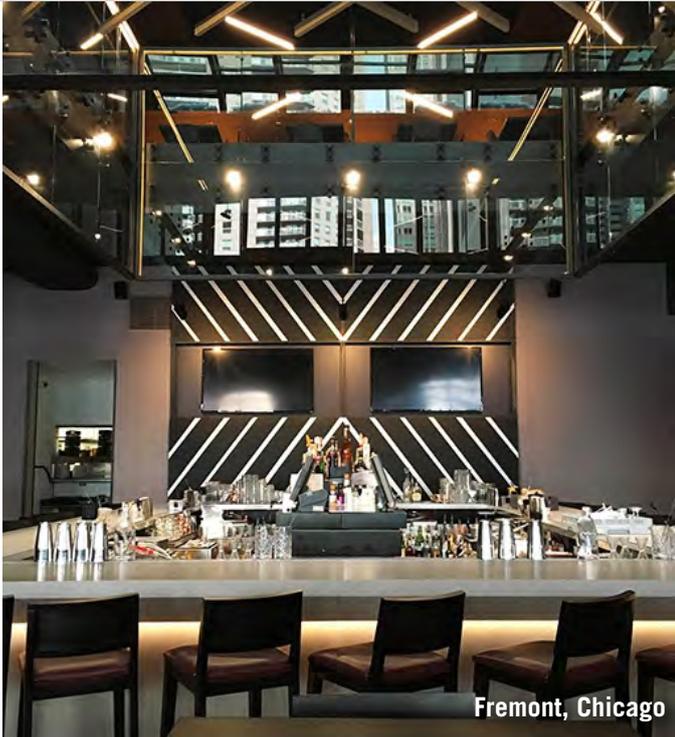
In some instances this enables the Martin Audio subs to be muted, leaving the mid highs to operate as full range boxes.

All the flown CDDs downstairs are set in landscape orientation (with the exception of the CDD15s), while upstairs they have been specified in white to blend in with the new décor conceived by Terri Naylor at Dakota Design.

This is the latest of numerous installations of Martin Audio's CDD series in less than a year since its launch, while the operators themselves have a long tradition of using Martin Audio speakers. MSL director Darrel Olivier says much of this is due to the support they receive from the manufacturer and the versatility of the mounting hardware. "We also love the aesthetics, the sound quality and dispersion pattern of CDD and the fact that it can be used discreetly. It is our 'go to' solution which accounts for why we have already installed more than 400 of these enclosures."

Graeme Sutherland is equally positive, stating that the system meets all the requirements for improved sound as befits the new streamlining of the operation. "This is a big multi-room venue in a strategic location; it's a lot more open than previously, with a realigned entrance, and the new refurbishment will certainly benefit the customer experience," he confirmed.

## CDD Covers Multiple Levels at Fremont Chicago



Ayre Productions recently completed an audio upgrade for the Fremont Chicago, a new upscale restaurant/lounge in the city's River North area, which includes a complement of Martin Audio CDD loudspeakers that provide exceptional coverage for both levels of the venue.

One of several audio renovations in the Chicagoland area for their client the Four Corners group, Fremont Chicago provided Ayre with an ideal opportunity to install CDD for the first time.

As Ayre's John Wagner explains, "We'd been telling our client about CDD, but we wanted to hear the product before committing to it. So we met with Martin Audio at InfoComm 2015, heard the speakers which completely blew us away, and CDD is now what we're proposing for pretty much every install."

The fact that Fremont Chicago functions both as a restaurant on the main floor and an upstairs bar/lounge with a performance space on the first floor presented unique challenges in terms of speaker positioning and coverage.

"On the first level, it's one big room they want to function as a restaurant where there's a large opening in the ceiling to provide a view of the second floor, which has a retractable glass roof. As you enjoy dinner on the first level, you can also see what's going on onstage," John points out. "The first floor was designed for dining and conversation. After dinner, the second level is available to enjoy music provided by DJ's or live bands on Thursdays.

"We also mounted two CDD12's above the main dining

space directed down the center of the room, with two CDD5's mounted 15 to 20 ft. up on the back wall as rear fill for the bar, and three CSX212 subwoofers positioned discreetly around the room along with C6.8T ceiling speakers to help with the booth areas, all of which covers more than enough of what the client would even want. This setup provides flat and even coverage. Everyone who sits in the dining room rants and raves about how amazing it sounds!"

In addition to an expansive bar and lounge area, the second floor has a small stage for weekly appearances by live acoustic performers with a mandate to avoid loud volumes that might annoy patrons dining downstairs.

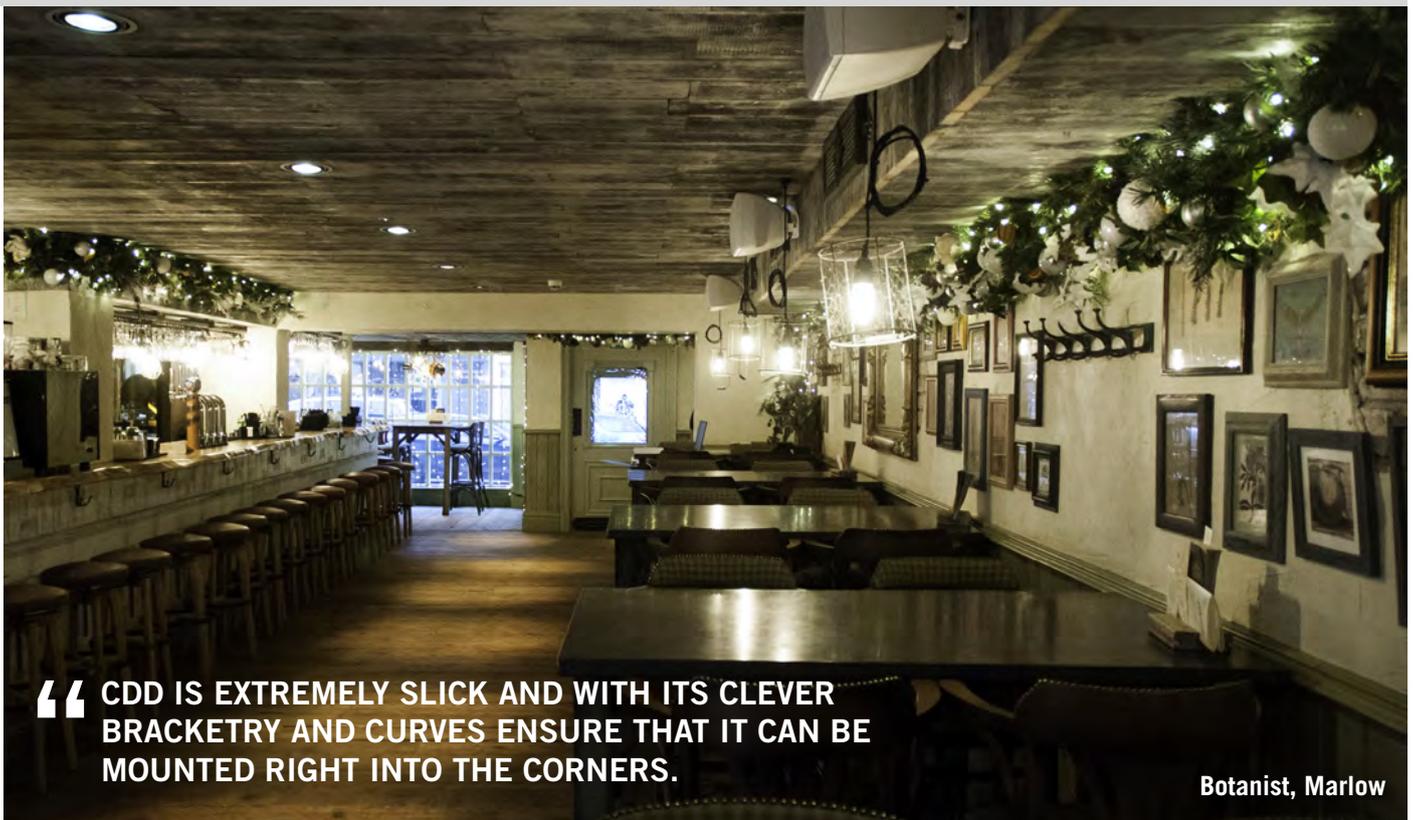
"For the lounge itself, we have CDD15's as FOH over existing subwoofers under the stage and CDD12's mounted in four corners firing into the center of the room. Two CDD5's are mounted on either side of the upstairs bar for additional fill with a CDD5 in a long hallway to the bathrooms and five C6.8T ceiling speakers around the perimeters of the room. There's also a CSX212 sub in a soffit and two CSX118 subs deployed on the other side of the room. The sound system is for stage reinforcement, background music and some dancing. All of the booths are maneuverable to provide more standing room, so we had to create a system that's super versatile."

For John, CDD's initial appeal is based on "their unique styling, mounting flexibility, ease of installation and use. In terms of audio performance, I believe CDD goes beyond what other cabinets are capable of. We work with other manufacturers, but a speaker like the CDD5 is ridiculous in terms of its incredibly compact size and the amazing amount of output it reproduces. That plus the sound quality and clarity is exceptional. You can mount a CDD5 in a corner between a ceiling and a wall and you barely know it's there, but you're hearing a huge sound."

Summing up, John adds: "The CDD's wide dispersion capability allows us to use a smaller amount of speakers for each space. The price point on each of these enclosures is also a pleasant surprise. They come in slightly less expensive than the typical speakers, and not having to use as many cabinets to cover a room saves money in terms of time and labor as well. The cabinet construction is great, the devices in them sound great, and price is a key factor in selling CDD.

"Best of all, our clients love CDD. They'd been using another brand but were ready for something different and when we brought their attention to the CDD line, they were skeptical but very interested. To demo the speakers, I took a CDD5 to the location and plugged an iPod directly into the amplifier and all of their eyes opened up and they saw stars. Now they want to do four more locations with CDD as well!"

## Martin Audio CDD Blooms for The Botanist



“CDD IS EXTREMELY SLICK AND WITH ITS CLEVER BRACKETRY AND CURVES ENSURE THAT IT CAN BE MOUNTED RIGHT INTO THE CORNERS.”

Botanist, Marlow

The fast expanding Botanist chain of music-led bar/restaurants, the brainchild of operators The New World Trading Company, recently opened its latest outlet in Marlow, Bucks.

Cheshire-based music consultants Genre Music, who have overseen all previous six Botanists (as well as the other venues in the operators' 12-strong portfolio), managed the installation of Martin Audio's new CDD installation range loudspeakers —specified on the recommendation of their sub-contractors F1 Sound Co.

Explained Genre Music MD, Steven Walter, “While we handle all the operators' music requirements and book their live acts, we bring in technical experts for the sound system installations, working in conjunction with several partner companies; in the south, this is F1 Sound Co.”

The Whitstable-based pro-audio specialists, run by Matt Bate and Sam Liston, have long been fans of Martin Audio's premium systems and Bate had wanted to use CDD since attending its launch at last year's Prolight+Sound Show in Frankfurt.

CDD (Coaxial Differential Dispersion) was engineered to deliver class-leading coverage consistency to demanding venues. And they don't come any more demanding than the Botanist with its seven nights a week live music policy and daytime background music, programmed and playlisted by Genre Music themselves, and played out through a C-Burn hard drive system. Not for nothing is its slogan: “Real music by real musicians”.

Explaining the interior concept, Walter adds, “We try and maintain consistency of style throughout the estate as far as the hardware is concerned, and the CDD range fits perfectly into that ethos; I have worked with Matt Bate since 2000 and knew he had been a big user of Martin Audio over the years.

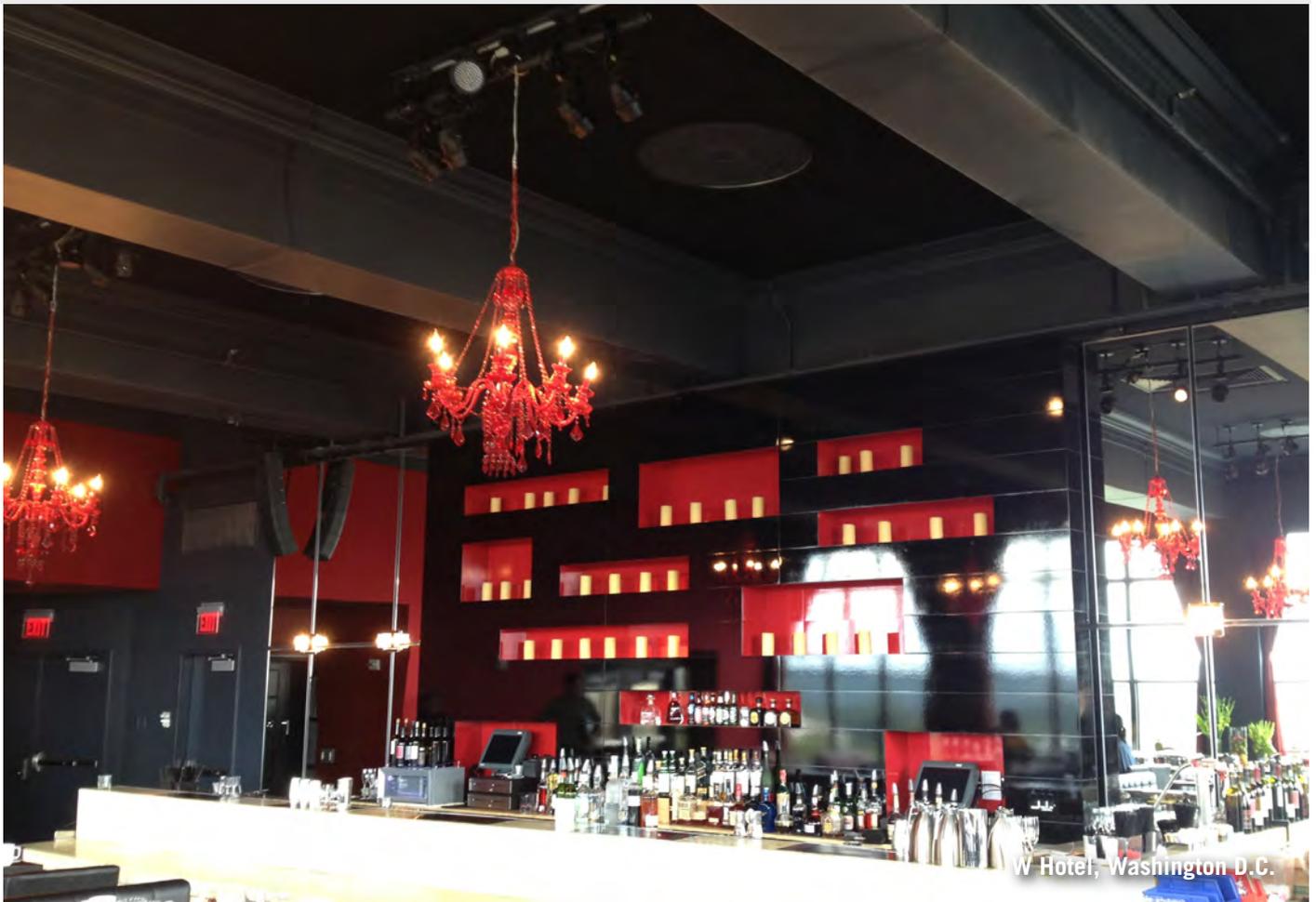
“The demand from interior designers is always for the speakers to look good — stylish and discreet but at the same time be powerful and transparent. CDD is extremely slick and with its clever bracketry and curves ensure that it can be mounted right into the corners.”

The venue itself is divided into four zones to serve a clientele of 180. This includes Bar, serving ales, craft beers and chic cocktails, Restaurant, serving deli and rotisserie inspired food, heated Outdoor Garden and Toilets/Ancillaries. Eight CDD6 (6”) speakers can be found in the bar, including a musician monitor on the tiny stage, wall mounted above the piano, with two CSX112 12” subs concealed behind grilles across the front of the bar.

Over in the restaurant there are 11 wall-mounted CDD6's, run full range, while outside four CDD5s are recessed under a garden roof.

In conclusion, Steve Walter says, “We are delighted with CDD. The system was really easy to set up and very little EQ was necessary. The response from the clients and musicians has also been excellent — and you feel with these boxes that they are no bigger than they need to be to deliver first class sound. It also meets the budget and fits with the operational requirements.”

## W Hotel, Washington D.C.



A popular luxury stopover the W Washington D.C. hotel was remodeled in 2009 with contemporary interior designs and color schemes combined seamlessly with the original beaux arts exterior which was carefully preserved.

It soon became apparent that a comprehensive audio upgrade was required and CTSI (Corbett Technology Solutions, Inc.) specified a range of new equipment including Martin Audio O-Line arrays and AQ Series speakers for the lounge, terrace and lobby.

Asked about the acoustic challenges for each space in the W Hotel, Mike Wilson, CTSI Director of Systems Engineering explained, “The P.O.V. lounge is on the roof or 11th floor of the building and consists of a nightclub and outdoor terrace area with an awning which faces out onto the Treasury building across the street. The hotel’s VIP suites are right underneath the lounge on the 10th floor and the increased SPL levels would either bounce down to the street or back to the side of the hotel off of the Treasury and disturb the guests on the lower floors.

“Because the sound systems were cranked as loud as they could be, the original wall-mounted speakers and subs throughout the room sent vibrations down through the original plaster walls, which was also a problem. Our clients wanted to maintain a ‘nightclub’ sound within the space without affecting the lower floors below so we chose

a Martin Audio O-Line array because it provides enhanced intelligibility, has a very small, non-intrusive form factor and can be hung from the ceiling without adding a lot of weight.”

“The lounge is basically a rectangle and the bar in the center of the long side of that rectangle,” continues Wilson. “With the help of Martin Audio’s software, we designed a system with a left-right array on each side of the bar comprised of an AQ210 sub and an 8-module O-Line array with optimum splay angles for each cabinet underneath. This gave us the full range we needed to cover the room while controlling the volume and vibrations and keeping sound off the floor and back wall. The AQ cabinets were chosen for their effective mid-bass sound and ultra-compact design.”

Another major challenge for CTSI was carrying the nightclub sound from the lounge outside onto the rooftop terrace while controlling it so that guests in the VIP suites below weren’t disturbed. The solution was mounting eight Martin Audio AQ10 two-way cabinets high up on the exterior brick wall to provide the necessary coverage without overspill problems down the sides of the building. As Wilson points out, “We were able to aim the Aqs down using better mounting and alignment techniques while providing improved DSP control with the software. That plus the 10” woofer gave us more low end to better

simulate the club-like sound from the lounge onto the terrace.”

The majestic W hotel lobby presented another distinct challenge with a high 25-foot ceiling, hard plaster walls and ceiling, and marble floors. CTSI needed to design a system with exceptional clarity and articulation far beyond the original recessed 70-volt speakers that created non-intelligible sounds at normal listening heights.

Again, Martin Audio O-Line arrays were selected for their small form-factor design and lighter weight to overcome the drawbacks implicit in older plaster walls. According to Wilson, “Every Friday and Saturday night they put up velvet ropes for entrance to the lounge and feature a guitarist and singer so they wanted a better sound system that would allow guests to enjoy that.

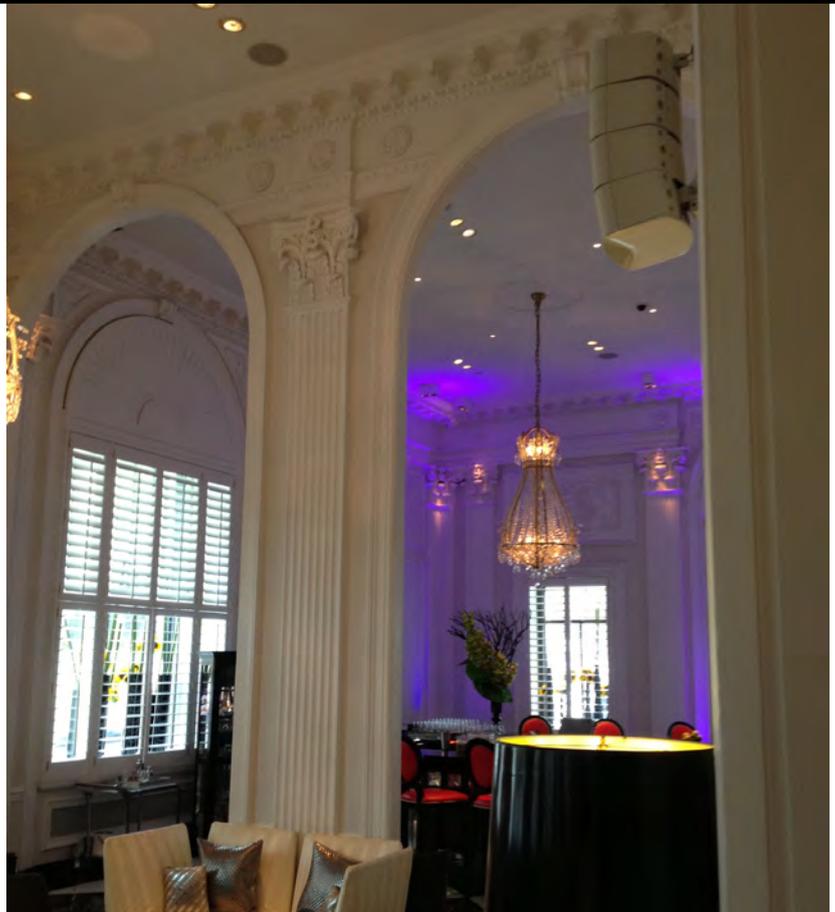
“So the O-Lines were a good choice because of their coverage and range, and the music in the lobby was acoustic so we didn’t have to worry about the low end as much. We wall-mounted two hangs of 4-module arrays about 15 feet off the ground and the software helped us figure out the different angles we needed for the room. We supplemented the low end by tweaking the DSP and making the full-range ceiling speakers more midrange to fill out the bass end.”

To make all of the speakers even less intrusive visually, all of the speakers were custom-painted by Custom Refinishing Solutions in Baltimore, MD to specifically match paint sample numbers provided by the hotel: clean white for the terrace, black for the lounge and off-white for the lobby

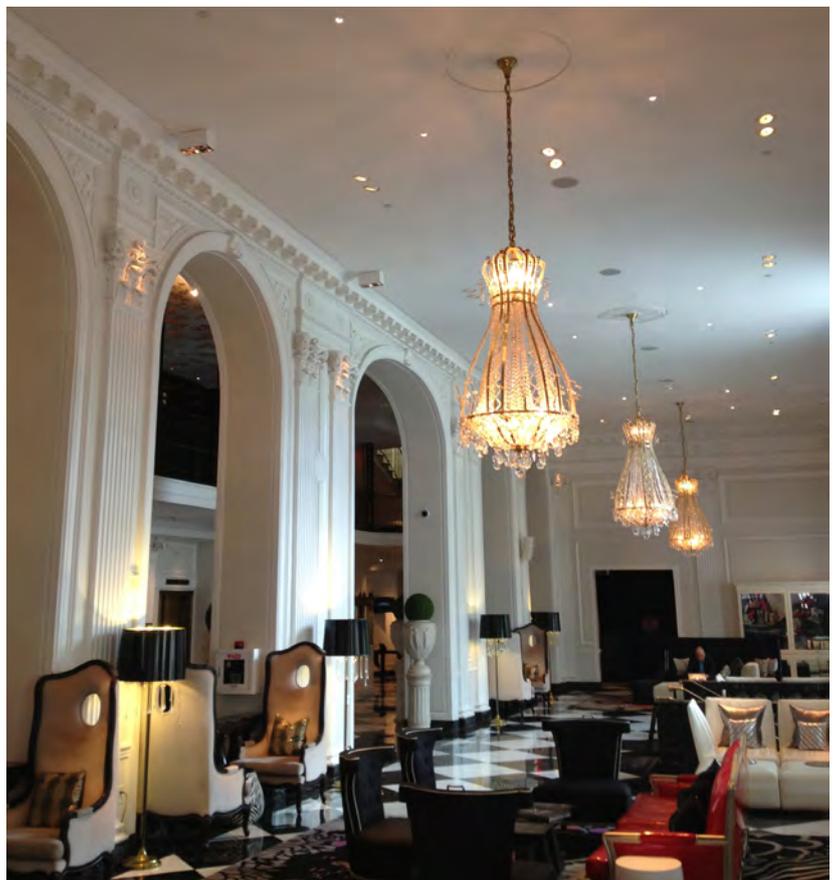
Summing up, Wilson says, “O-Line was the right choice, mainly because of their small footprint and excellent coverage. The Hotel wanted the upgrade to be as clean and ‘invisible’ as possible. Ultimately, they were very happy with the audio levels, clarity, intelligibility, coverage and overall sound quality of the Martin Audio system we provided.

“As to the lounge itself, the speakers sound great and fit very well into the environment in terms of what they need. They bring in big name DJs and are happy because they now have a real nightclub-sounding environment with a stereo left/right point source as opposed to a 70 volt-distributed system around the room.

According to reports from the hotel, even guests have commented positively on the upgrades.



“**ULTIMATELY, THEY WERE VERY HAPPY WITH THE AUDIO LEVELS, CLARITY, INTELLIGIBILITY, COVERAGE AND OVERALL SOUND QUALITY OF THE MARTIN AUDIO SYSTEM WE PROVIDED.**



## Emirates Palace Hotel, Abu Dhabi



“THE AIM OF THE SYSTEM WAS TO HAVE IT SET UP FOR EASE-OF-USE, CONSISTENCY AND FLEXIBILITY — AND THAT’S WHAT WE HAVE ACHIEVED.”

Emirates Palace Hotel, Abu Dhabi

The magnificent seven star Emirates Palace Hotel in Abu Dhabi, with its grand marble entrance and gold leaf atrium overlooking the Persian Gulf, is one of the world’s most beautiful buildings.

AV system integrators, Bond Communications, were tasked with replacing and retro-fitting a new sound system that would not only serve the ballroom space as a complete unit, or in its three separate, divisible modes, but do so discreetly, aesthetically and with simple control and operation.

The system also had to be sufficiently flexible to deliver high spec intelligibility across the frequency spectrum for presentations but also be capable of concert style reinforcement from a conventional Left/Right stage system, when the venue was cranked up for live entertainment.

Bond decided that a combination of Martin Audio’s award-winning O-Line scalable micro-line array, in conjunction with a W8LC Compact Line Array would cover all bases.

It was decided to use line array loudspeakers for the main front-of-house system as these have more ‘throw’ than a conventional loudspeaker and the dispersion pattern is very predictable thus offering more control over the large coverage area.

Normally, to cover a distance such as the length of the Ballroom, a long line array, accurately articulated and flown, would suffice and delays would not be needed. However, with the relatively low ceiling height of the Ballroom a different approach was required. A shorter, five-box array of W8LC’s each side, has been supported at the bottom of the hang by a single W8LCD Downfill box to maintain clarity, impact and fidelity; the addition

of four delay points, comprising time-aligned W8LCDs, evenly distribute the sound further down the room. Used only as required (rather than part of a permanent install), this delay system maintains the tonality and dynamics of the system.

Although mounted discreetly behind an acoustically transparent cloth the W8LC would generally function more than adequately as a full-range system. However, also incorporated into the design are eight WS218X dual 18” subwoofers (four per side) providing low end extension that can be used as required. For stage monitoring, ten Martin Audio LE1200S floor wedges were also supplied.

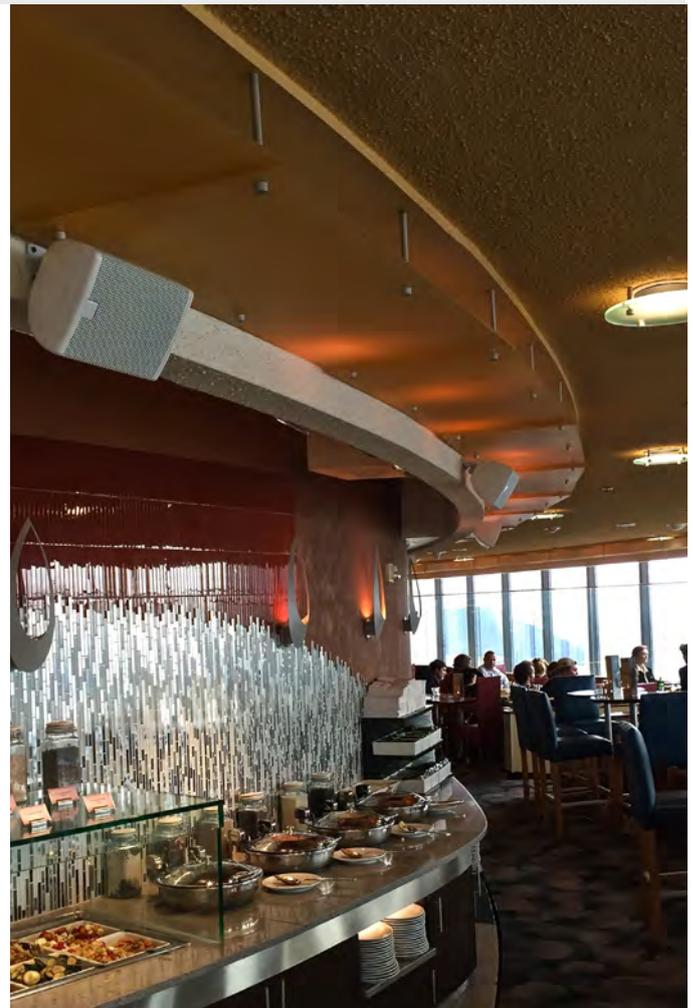
In conference mode 12 clusters of 16 O-Line enclosures now provide the playback. The design consists of two O-Line columns at each end of the three conference sections so that the point of focus can change based on the physical location of the presentation.

This approach ensures that intelligible speech and high quality music playback are delivered as unobtrusively as possible.

The system is powered entirely by Martin Audio amplification. The WS218X subwoofers are driven by a pair of MA18K’s, the main FOH system and W8LC/LCD delays are run from a total of 18 x MA5.2K’s and the O-Line system is assigned to nine MA6.8Q’s.

Summing up the system performance, Mitch Schuh says, “The aim of the system was to have it set up for ease-of-use, consistency and flexibility — and that’s what we have achieved. For the size of the room and type of events staged I’m extremely happy with the result — and so is the client.”

## Marriott's The View Upgrades with CDD



### IT'S VERY DYNAMIC AND THE PERFECT CHOICE FOR A COMPACT, UNOBTRUSIVE BACKGROUND SPEAKER IN A RESTAURANT

Global Audio Systems recently completed a retrofit replacement of the current sound system in The View, New York's only revolving rooftop restaurant, with Martin Audio CDD5 installation speakers.

Located on the 48th floor of the Marriott Marquis Hotel overlooking Times Square, The View provides constantly changing views of the city along with upscale fare for its diners as it completes a 360-degree rotation every hour.

Global's Jason Ojeda comments that the client 'wanted to replace the existing in-ceiling speakers with a system that could provide clarity and full frequency reproduction. We designed a system consisting of 40 of CDD5 speakers mounted up on the wall of the circle's inner section that fire to the outside ring where the patrons are seated.

'The system is designed to maintain stereo imaging of the music for all of the diners as they revolve around the restaurant's matrix for the ultimate music experience to accompany the amazing views of the city.

'A media player complemented by BSS London processing provides the program material which is a blend of jazz and pop music,' Jason continues. 'They also have the capability to modify the system for a DJ.'

In terms of performance, 'CDD provides absolutely consistent coverage throughout the restaurant with no drop offs, perfect balance and audio quality that's exceptionally clear and smooth wherever you're located.

'Because CDD has such wide dispersion, we'd originally planned on 50 speakers for the job but when we plotted it out onsite, we ended up needing only 40 boxes to get exceptional results. The CDD-5's output and frequency response is unbelievable for a 5' speaker. It's very dynamic and the perfect choice for a compact, unobtrusive background speaker in a restaurant.

'The client is ecstatic with the system,' Jason concludes, 'so much so it looks like this project will turn into another retrofit in the Marriott's main lobby and bar area.'

## Martin Audio Covers All Bets at The River City Casino



River City Casino Event Center

St. Louis, MO—TSI Global chose a Martin Audio MLA Compact for the ballroom performance space at the River City Casino Event Center because their client needed a multifaceted sound system to handle touring bands, Mixed Martial Arts bouts and a variety of other live events.

As Paul Murdick, General Manager TSI Global Companies LLC, explains: ‘The original project for us was Phase II for the Casino which was to build a Hotel and Event Center. We were chosen as design bid contractor for the Casino portion and everything went so well, we ended up doing the AV for the Event Center with a focus on the ballroom performance space.

‘The Event Center is also a bi-divisible conference space in addition to being a ballroom, so there is AV for that in terms of a control system with distributed audio. The client decided to go with Crestron control and portable video for the divisible spaces and conference rooms, and a large LED wall for the stage.

‘The MLA Compact system was chosen over all other contenders as the performance audio system because of its ability to quickly reconfigure coverage for different events via Display software and to create areas of hard avoid in what is a challenging space acoustically.

‘The ballroom is basically a square box,’ Paul continues. ‘And they needed to control the pattern with hard avoid on the back walls to eliminate reflections that would have caused a major problem with typical arrays.’

In addition to the reflective walls and ceilings, the ballroom’s floor is also combined with portable risers to

create 1200-capacity stadium style seating areas for concerts and a special configuration for MMA events which uses the stage and the area directly in front of the stage for VIP seating. ‘These different configurations allowed the unique coverage abilities of MLA’s cellular technology to be the perfect fit for the room,’ Paul adds.

The performance system consists of five MLA Compact enclosures flown on both sides of the stage with four DSX subwoofers under the stage. Two flown Martin Audio DD12’s are used for outfill with four AQ28 dual 8’ speakers provide lip fill. Five LE1200RS and five LE1200LS monitor wedges, right and left respectively, are used for the stage.

‘We also installed six Martin Audio DD12’s in the Casino’s Grand Promenade and two in the outdoor entranceway because the client wanted high quality audio for special events and people walking into the building.’

According to Paul, ‘Our client is very pleased with the audio quality, coverage and control and the fact that the MLA system would easily be approved on any rider coming through the venue.

The DD12’s were recommended and brought in as a mockup for the side fills in the house MLA Compact array, and they were pleasantly surprised to find the quality matched what was needed.

‘During testing, the output of the subs comprised some of the downlight fixtures in the Event Center. The Pinnacle Management team were amazed at the results and decided to keep the DSX Sub audio settings and replace the lights.’

*Photo credit: Catina Bryant*



“ THE PINNACLE MANAGEMENT TEAM WERE AMAZED AT THE RESULTS



## Recommended Products

### MLA Systems

MULTI-CELLULAR  
LOUDSPEAKER ARRAYS



[martin-audio.com/products/series/mla-systems](http://martin-audio.com/products/series/mla-systems)

### Wavefront Precision

PASSIVE OPTIMISED  
LINE ARRAYS



[martin-audio.com/products/series/wavefront-precision](http://martin-audio.com/products/series/wavefront-precision)

### O-Line

PASSIVE OPTIMISED  
MICRO LINE ARRAY



[martin-audio.com/products/series/o-line](http://martin-audio.com/products/series/o-line)

### TORUS

CONSTANT CURVATURE  
ARRAYS



[martin-audio.com/products/series/torus](http://martin-audio.com/products/series/torus)

### CDD/CDD-WR

PASSIVE INDOOR/OUTDOOR  
LOUDSPEAKERS & SUBS



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### ADORN

ON WALL AND CEILING  
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This is just a small selection from a wealth of examples from around the world that you can find out more about by visiting [www.martin-audio.com](http://www.martin-audio.com)

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