

CASE STUDIES



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 forty 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.

The CDD Series: The Shape of Things to Come



Martin Audio brings engineering innovation to installed sound with the all-new CDD™ Series — combining distinctive curved enclosures with unique Coaxial Differential Dispersion™ technology to deliver class-leading performance, fidelity and coverage consistency to venues that demand the ultimate in cutting-edge technology and style at a commercial price that makes sense.

Whether it's a bar, an AV installation, a church or a prestige nightclub — the CDD Series has it covered. CDD is the one-stop solution with six two-way full-range coaxial systems — from the micro CDD5 to the powerful CDD15 — complemented by high-performance subwoofers able cover practically all install applications. Now with CDD-Weatherised option, those applications are extended even further.

The CDD Series has the audience covered too. Coaxial Differential Dispersion technology delivers more consistent audience coverage than systems with fixed dispersion X° x Y° horns — projecting more output to the rear of the

audience to distribute sound evenly front-to-back, while having wide horizontal coverage close-up. This increased coverage area can reduce the speaker count in larger installations by up to 25% thereby significantly reducing total installation cost of a project.

Visually-appealing enclosure design is a signature of the CDD Series. The full-range enclosures can be used in either horizontal or vertical orientation, with rotation of the coaxial driver easily accomplished by removing the screw-free, protective grille. The curved shape of each full-range enclosure allows it to be discreetly mounted close to a wall or ceiling.

In summary, architects are happy with the discreet design and often fewer speakers; system integrators are happy as they can provide exemplary coverage for spaces and competitive tenders that increases the number of jobs that can be won; and the quality of coverage and consistency not only delights the client but also their clientele. No wonder, CDD is the shape of things to come.

HOUSES OF WORSHIP

Systemmax AVL Upgrades Church of The Saviour UMC with CDD



Saviour United Methodist Church, USA

“OUR CLIENT IS ECSTATIC WITH THE SYSTEM. THE INSTALL HAS BEEN A MAJOR SUCCESS.”

Cincinnati, OH—SystemMax AVL was originally brought in to the Church of the Saviour United Methodist Church as consultants for a needs assessment and design working with local contractors, and they ended up doing an audio upgrade and theatrical lighting installation.

As SystemMax’s Darryl Johnson explains, ‘We ended up redesigning and installing the audio system for the worship space which is now doing split services with contemporary Christian worship and electric bands as well as traditional services with organ and choir.

‘The room had severe acoustic anomalies so we brought in an acoustic consultant, Haverstick Designs from Indianapolis, to do room measurements and recommend treatment for the space to bring it within viable parameters, and then we installed a Martin Audio CDD/CSX speaker system with Elation pro lighting.’

Max Maxwell, Johnson’s partner adds, ‘Church of the Saviour is in a modern structure built in the late eighties, early nineties and the worship area had a lot of drywall and 60% of the back wall is glass with a large stained glass window in the wall behind the platform, all of which created a four or five second decay. The glass is particularly challenging because there isn’t a way to treat that.

‘Based on the consultant’s recommendation, we put in ProSoCooustic 2-inch wall panels in different lengths and sizes on the side walls specifically sized to the areas where they were being used. With the treatments, we were able to get the decay time down to less than two seconds.’

The Martin Audio system included CDD12 and CDD8

speakers in tandem with CSX212 subs. ‘The way the structure is built,’ Darryl points out, ‘there was no place to ground-stack the subs or build them into the stage so we flew two left and right with one of the CDD12’s in the center section of the room that has a higher ceiling. Then we flew a CDD12 on the outside right and left of the room which has a lower ceiling. In the rear of the church, there’s a delay ring of three CDD8’s across the upper and lower portions of the ceiling. Luckily, the space is wide enough to rig all the speakers across the church.’

Asked about the system’s performance, Max responds, ‘it sounds phenomenal. We used a matched pair of Earthworks choir microphones and the CDD speakers clearly reproduced all the clarity and quality those mics offer. The church uses a Roland electronic drum kit and all the drums are perfectly reproduced through the system with significant bass response.

‘And even though Darryl and I are musicians, the main thing we’re focused on is clarity and articulation for the sermons which is critically important. If the pastor speaks and no one understands what she’s saying, we’ve pretty much missed the boat.

‘We felt that because of the CDD’s pattern control, wide dispersion and the way the high frequency drivers function, it was the most appropriate choice for the install and it turned out great. Speech intelligibility with the CDD’s is amazing,’ Max concludes, ‘and when you factor in the CSX subs, music reproduction is everything we could have hoped for. Our client is ecstatic with the system. The install has been a major success and we’ve gotten other jobs because of how great it sounds.’

Balanced Input Upgrades Historic Cochran Chapel with CDD



Cochran Chapel, USA

Mark Waker, owner of the New England-based integration and consulting firm Balanced Input, faced a variety of challenges for an audio upgrade at Phillips Academy Andover's historic Cochran Chapel.

In addition to two lines of large pillars that run the length of the building and obstruct the passage of sound, the Chapel walls have 10 ft. high wood paneling running around the space along with the wooden pillars and pews, all of which contribute to reflectivity that can further impact audio reproduction. Fortunately, Martin Audio CDD12 speakers would help in providing a one of a kind solution to overcome these challenges.

Phillips Academy, a private boarding school founded in 1778 with a list of prominent alumni that includes former presidents George H. W. Bush and George W. Bush, originally dedicated the Cochran Chapel in 1932. The historic space underwent an extensive renovation in 1998 to expand the balcony and seating and add projection screens, but the audio coverage still fell short.

Discussing the recent audio upgrade, Mark points out, 'the system had to provide superior audio for the wide variety of events held in the chapel including school functions, weekly worship services for different faiths, weddings, concerts and recitals by high profile artists such as Yo-Yo Ma and Bobby McFerrin along with guest speakers like Spike Lee and Jane Goodall.

'Of course, the biggest challenge was overcoming the problems posed by the two lines of pillars which are such a huge obstruction the school had to install the large projection screens to the left and right of the altar so

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people in the side aisles can see what's going on in the center.

'That, plus the reflectivity caused by all the wood in the space which further impacted the original sound system, large arrays installed on pillars toward the front of the space. The system fired right into the other pillars, causing a dead zone behind every pillar, and didn't provide adequate coverage for the expanded seating area in the center balcony.'

Mark had to design a new system that would expand the coverage so everyone in the chapel could hear the message that also had to be virtually invisible to preserve the aesthetic integrity of the historic space and complement the projection screens which can appear and disappear at the touch of a button.

As he points out, 'Usually, if you can't see a speaker, you probably won't be able to hear it either. It should line up with the listener at some point. After trying several different approaches, I realized the best way to go was something that had been tried before; installing the speakers high above the seating area inside the wooden archways at the top of the pillars. But that approach hadn't worked ultimately because the speakers weren't up to the task.

‘Fortunately, Martin Audio had come out with the CDD12, the only speaker that could succeed in that particular application because the horizontal dispersion is wider close in the nearfield and gets narrower as you move away from it. In addition to the unique dispersion pattern, the fact that it’s coaxial gave us a relatively small point source that fit the coverage we needed, which we couldn’t have done with a conventional 12’ two-way speaker.’

To provide the coverage needed to the people behind the pillars, Mark divided the chapel into 12 specific zones, six on the left, six on the right, with a speaker dedicated to each zone. Each of the 12 zones has a CDD12 driven by one channel of a Martin Audio MA2.8Q amplifier with its own processing channel from the DX0.5 Loudspeaker Management System. Three of the amps drive all the speakers and each speaker is flown at about 32° up from horizontal and mounted with custom brackets.

In addition to the CDD12’s, two CDD8’s serve as outfill for the faculty seating at left and right of stage and two others

are angled inwards as onstage monitors for the performers and speakers. Martin Audio C4.8T ceiling speakers are used for under balcony coverage. The audio system also included the school’s repurposed Yamaha 01V digital mixers along with Shure, Countryman Associates, Audix and Audio-Technica microphones.

As Mark sums up, ‘the faculty and AV staff at Phillips Academy is really pleased with the upgrade. They put the system to an initial test at an all school meeting. Their staff felt the system sounded spectacular with exceptional clarity throughout the space and smooth, even coverage in what was a packed house. And everyone appreciates the fact that the chapel has not been visually impacted by the speaker system. It still looks the way it did when it was first built because the technology is virtually invisible.’

‘The best sign of approval came when the Head of School looked over and gave us a thumbs-up almost immediately after starting his speech, which definitely showed that we had succeeded.’



Faith Free Will Baptist Church Upgrades with CDD



Faith Free Will Baptist Church, USA

Kenly, NC—A small 200-seat house of worship in Eastern North Carolina, the Faith Free Will Baptist Church recently upgraded its sound system with Martin Audio CDD installation speakers.

RMB Audio Tech Matt Johnson served as the planner, installer and designer for the system. A lifelong member of the church, Matt explains his personal family ties and the heritage of others within the Faith Free Will community. ‘I grew up in the church,’ he explains, ‘which was originally built in 1962 on a tract of farmland donated by my great-grandfather, its first pastor. My father, Edgar Alberdeen Johnson Jr., is Deacon of the church.’

‘The church was rebuilt in 2006 after a heavy snowstorm overloaded the roof and pushed out the walls. A new sound system was installed during that renovation, but it wasn’t providing the coverage or clarity they needed, especially for some of the older congregants who couldn’t hear the sermons.’

Matt is a MLA Compact-trained technician, and given his knowledge and experience with Martin Audio, the new CDD speakers were an obvious choice for the installation. ‘Even before I heard the CDD speakers,’ he recalls, ‘I was pretty confident about how they’d sound given my experience with the DD6 and DD12’s. Once I heard them, I knew they were something I could use that was more affordable.’

The church sound system is primarily used for the spoken word, acoustic instruments and CD playback during plays and worship singing. To adequately cover the room, Matt installed 2 Martin Audio CDD10’s in the 13 ft. high cathedral style ceiling.

“ MARTIN AUDIO HAS DEFINITELY HIT THE SPOT WITH THE CDD SPEAKERS. THEY’RE AFFORDABLE, EFFICIENT AND HAVE A REALLY NATURAL SOUND.

Although mounted only 3ft. away from the first row of pews, Matt is still impressed with the CDD’s coverage. ‘The fact that they can effectively cover such a short and long distance with a smooth frequency response was really impressive and a major advantage.’ The audio system also includes a Midas Venice 320 console, Ashly EQ, XTA processing and Crest amplification.

The congregation has responded positively to the new speakers. Matt’s father Deacon Johnson says, ‘Everything’s clearer, more natural and it sounds like the pastor’s right in front of you.’ Deacon Miles Moody adds, ‘You can hear everything so well in every seat of the church.’ Members of the congregation who use the hearing-impaired sound have commented on the vast improvement in clarity.

‘The Redeemed’ is a bluegrass gospel group that includes Matt and his family. The group plays in the Kenly gospel hall two nights a month. Matt also installed two Martin Audio CDD10’s and a CSX112 sub in the concert hall.

‘Martin Audio has definitely hit the spot with the CDD speakers,’ Matt concludes. ‘They’re affordable, efficient and have a really natural sound, which means small churches can now afford to put in an excellent sound system.’

BARS & RESTAURANTS

Martin Audio The Obvious Choice for Luxurious Blvd Restaurant



Blvd Restaurants, Chicago, USA

“SMOOTH, EVEN DISTRIBUTION WITH REALLY GREAT SOUND AND UNIFORM COVERAGE.”

Encompass AV recently designed and installed another successful Martin Audio CDD system for BLVD, which is quickly redefining the concept for elegant, high end restaurants in Chicago.

Owned by Sancerre Hospitality, BLVD was the Chicago 2017 Eater Award Winner for Design of the Year.

As Encompass owner Tim Pickett explains, “This was their first location and they wanted to do things right. Create a sexy restaurant with really good modern American cuisine, great sound and a different atmosphere than many of the Chicago restaurants.

“Instead of cold, they wanted warm, with lots of soft surfaces. So, they hired Studio K, one of the top design teams in the city, and they built a very classy, beautiful restaurant with kind of a 1950s Old Hollywood feel to it.”

“The venue is a two-story buildout where everything but the foundation was ripped out and they started from the beginning,” Tim continues. “The first floor is the main bar and dining room with a grand staircase that gets you up to the second floor. There are nine CDD6 and one CSX112 sub in the dining room and five CDD6 and two CSX112 subs in the bar.

“There is lounge type seating around the staircase with a private dining room and bar behind a glass wall. Upstairs, there are a dozen C6.8T ceiling speakers and six CDD6 and two CSX112 subs in the private bar and five CDD6 in the lounge area. All of the CDDs and CSX subs are ceiling mounted except for the private dining room bar where they’re integrated into the furniture.”

Tim reports that the client, “is very happy with the sound, we worked hand in hand with them to achieve the right balance between high energy audio and an environment where you can easily have a conversation. Indeed, Sancerre’s Frank Callero maintains, “Encompass did a great job installing the Martin Audio speakers. We’re thrilled with the quality and sound.”

Asked about his choice of speakers, Tim concludes, “There are many reasons why Martin Audio CDD is the right choice for all kinds of environments. The smooth, even distribution with really great sound and uniform coverage from a cabinet that is reasonably priced is the no. 1 factor.”



Martin Audio MLA And CDD Shine for Merivale



The Newport, Australia

Merivale is a large, fast-growing Australian hospitality operator with a number of high-profile pubs, bars and restaurants, mainly in the Sydney area.

The business is run by Justin Hemmes, who takes a very personal and hands-on interest in the audio; thus when The Newport was added to the portfolio this year, he and Merivale's AV Manager, Glenn Rayner were only likely to specify the best - and this included Martin Audio's new CDD (Coaxial Differential Dispersion) series and MLA (Multi-cellular Loudspeaker Array).

Formerly known as the Newport Arms, the venue is a large shore-line pub with an al fresco garden area that looks out over the water.

Setting out the sound design rationale, Glenn Rayner explained, 'We looked at the existing audio at The Newport and quickly established that the only way we'd get the sort of clarity and coverage we required was to have lots of speakers.' And this meant negating any dead spots or alternatively 'hot spots'.

In the final analysis they specified no fewer than 180 CDD loudspeakers. 'It's an enormous installation - the design process took months,' he admits.

“ BECAUSE IT'S COAXIAL YOU CAN INSTALL THE SPEAKER IN A LANDSCAPE OR PORTRAIT ORIENTATION AND MAINTAIN THE SAME HIGHLY COHERENT SOUND QUALITY.

The Martin Audio CDD loudspeakers were given the vote following a shoot-out with a number of other premium brands.

Glenn Rayner was already aware that the Martin Audio CDD coaxial loudspeaker design would be well suited to hospitality installs such as this. 'Because it's coaxial you can install the speaker in a landscape or portrait orientation and you maintain the same highly coherent sound quality. What's more, the dispersion pattern of the Martin Audio CDD design is intentionally non-symmetrical. It means there's a wider dispersion pattern for those close to the speaker (say, around 120°) and narrower for those more distant (~80°). The advantage of such an approach is a more consistent delivery of HF, regardless of the listening distance.'

But he could equally see a role for MLA in the Newport garden, which features a fully-fledged performance stage.

The audio comprises eight Martin Audio MLA Mini elements a side, each with a pair of MLA Mini subs. Every MLA enclosure is bi-amped and individually addressed (some 40 channels of amplification are devoted to the stage alone), and the array is beam steered down to constrain the throw to around 25m.

Explaining the rationale, Glenn Rayner said, ‘We wanted to do something that not only sounded good but looked the part. The Martin Audio array certainly looks like it’s meant to be there and looks a lot like a festival stage - which is what we were going for.’

Live music is a regular weekend fixture at The Newport and a rack has been prepared that’s easily wheeled to side of stage and with a single Cat5 connection plugged into the system. A ‘one-connection’ setup preconfigures the rest of the venue’s loudspeaker zones to accommodate the live performance. The remaining 180-odd loudspeakers throughout the rest of the venue are time-delayed, using the stage PA as ‘time zero’.

The system overall is driven by 38 four-channel amplifiers

- giving a total of 144 channels (with no more than three speakers assigned to each channel - giving far superior zone control.

‘Across every output and group of speakers we have EQ, compression, delay, HPF, LPF, DSP on every output; we’re not limited in any way,’ he continues. ‘It means we can walk the venue with a Wi-Fi device and fine tune settings for every set of speakers. It took weeks to get right.’

Much of the success of this design and installation was due to the involvement of experienced audio consultant (and Technical Director of Technical Audio Group, the Martin Audio distributors), Anthony Russo. He played a pivotal role in the design, while the meticulous installation itself was undertaken by Corporate Technology Services.

Looking to the future, Glenn Rayner foresees Merivale making greater use of IPTV across their venues. ‘I’m looking forward to having streamed media available all the time, anywhere. It’s something we have in a more modest way but I can see it being widespread when it’s more cost effective and simpler to use - that’ll be a great day.’



Award-Winning Apogee Rooftop Bar Outfitted with CDD



Dana Hotel Rooftop Bar, USA

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

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

perimeter of the bar and the main seating area. The bar’s 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.”

NIGHTCLUBS

Ministry of Sound Adds CDD for Dolby Atmos Install



Ministry of Sound Nightclub, UK

“ THE SOUND SYSTEM IN THE BOX IS THE BEST IN ANY NIGHTCLUB ANYWHERE IN THE WORLD

The world famous Ministry of Sound (MoS) nightclub, which runs Martin Audio sound systems exclusively throughout its London venue, has extended its long partnership with the British manufacturer by installing 16 of the company's new CDD15 (Coaxial Differential Dispersion) installation speakers in the ceiling of 'The Box', its premier dance room.

This will enable the club to utilise Dolby Atmos sound technology. Dolby Atmos transforms music performances by allowing sound to move anywhere around a room, even overhead.

The new year will see the first in a number of Dolby Atmos enabled events, kicked off by Hospital Records on January 23, utilising 22 Martin Audio loudspeaker channels.

Incorporating synchronised lighting cues, generated from music mixed in Dolby Atmos, Ministry of Sound will immerse visitors in unprecedented soundscapes delivered through the new Martin Audio CDD's and the existing ring of six bespoke Martin Audio ground stacks, positioned around the dance floor.

The additional speakers are designed to enhance the club's existing setup and change the perception of the way music is heard, confirms MoS production manager, Chris Thoms.

'When Dolby decided to introduce Dolby Atmos to the club world they were looking for a flagship venue to showcase it. We were approached both as a business and a music company - but more importantly we already had a six-point system set up, and The Box is an acoustically treated space - so it was a perfect fit.

'We told Dolby we wanted to maintain consistency with Martin Audio, so I contacted Jason Baird [Martin Audio's R&D Director]. We discussed various options and he

recommended the CDD15 because of its coverage and power output - and the fact that it could compete with the SPL level of our existing stacks and give us enough punch.'

Thoms explains the unique sound panning principle. 'With our current dance stack configuration you have always been able to get a Left/Right stereo pan wherever you are standing in the club. With Dolby Atmos, content is free from channel restrictions, allowing artists to pan individual audio objects anywhere across a room, including overhead, while maintaining the original stereo bed.'

The installation proved challenging due to an already congested ceiling. 'It's very tight because we have all the H&V and lot of fixtures up there. In that respect the mounting options on the CDD were useful - half the speakers are on yokes and a few are on steel suspensions. They are set at a uniform distance of 2.3m apart in a grid because they have to be close together to provide the best coverage for spatial elements.'

Hospital Records is hosting the first event and producers and artists from the label have been working closely with Dolby to master their music in Dolby Atmos. 'We are delighted to have the new Martin Audio speakers installed,' states Thoms. 'They have become perfectly integrated into the existing sound system infrastructure to support a Dolby Atmos performance.'

In conclusion, Lohan Presencer, CEO, Ministry of Sound, states, 'The sound system in The Box is the best in any nightclub anywhere in the world - but for our 25th anniversary next year, we wanted to raise the bar even higher. Dolby Atmos allows our patrons to experience the future of dance music, creating multidimensional soundscapes the likes of which have never been heard before in a nightclub environment.'

CDD Puts The Roar Back into Tiger Tiger



Tiger Tiger, London

Martin Audio has continued its long association with Novus Leisure's Tiger Tiger brand, with the company's latest generation of installation speakers, the stylish CDD range, being selected for the operators' original and flagship multi-room venue in London's West End

One of Novus Leisure's approved suppliers, Middlesex Sound & Light (MSL) specified CDD as part of a major overhaul, having already fitted the manufacturer's new Coaxial Differential Dispersion technology in several other high profile sites.

"We had also carried out a number of other recent refits for Novus using Martin Audio's AQ range, which we were great fans of," said MSL project director, Darrel Olivier. "But this high profile venue provided the perfect opportunity to debut the new CDD. In terms of aesthetics and sound quality CDD is a definite improvement, offering wider dispersion, as well as being less obtrusive."

According to Novus Leisure's Project Manager, Graeme Sutherland, the company had wanted to create a premium space, and looked at various options with Olivier before making the loudspeaker decision.

However, MSL first needed to carry out a careful review of the existing loudspeaker positional strategy. Some of the existing speakers were redeployed to ensure even sound coverage throughout while by ground-mounting the new subs it ensured maximum impact and LF extension."

Aside from the Tiger Bar, Novus Leisure has replaced its former Ibiza-style White Room, with the more sophisticated hosted LUXE Room, which is available for private hire.

The Tiger Bar and dancefloor area have been equipped with four CDD15, four CDD12 and three S218X subs, while LUXE has been fitted with six CDD10 and an existing AQ215 sub which has been redeployed. Also the beneficiary of two CDD10 and CSX212 sub are the two restaurant areas which are now linked more visibly to the main bar.

Working with interior designer Terri Naylor of Dakota Design, MSL were responsible for the full AV integration — which is dominated by a giant floor to ceiling high-resolution graphics wall in the main Tiger Bar.

Novus Leisure Regional Operations Manager, Jenna Edwards, said, "Sound is the most important element when you are out clubbing and this system is phenomenal to listen to; I think this establishes our position as the best club experience in London."

Concluded Tiger Tiger general manager, Darren Gaffney, "This new installation has created a real wow factor for customers. It's had an immediate impact on sales."

Finally, Darrel Olivier adds that the new CDD range has received an instant seal of approval. "Feedback has been strong and positive wherever we have installed these."



THIS NEW INSTALLATION HAS CREATED A REAL WOW FACTOR FOR CUSTOMERS. IT'S HAD AN IMMEDIATE IMPACT ON SALES

Martin Audio CDD And BlacklineX For Karova Club



Karova Club, Warsaw

The new Karova Club in Warsaw has opened, with an advanced technology infrastructure. As a central component of the AV fit-out, Phono Media, Martin Audio’s recently-appointed Polish distributor, supplied system integrator, LFX, with a CDD (Coaxial Differential Dispersion) and BlacklineX solution to fulfil the owners’ request for the Martin Audio brand cachet.

Explains Phono Media director Jacek Stanislawski: “This is a brand new club and the owner approached them for a quotation, believing that Martin Audio would be a perfect solution for the club sound. The owner, Marcin, has a lot of knowledge and passion for sound and he demands the same high quality as he would expect at home. His goal was to provide hi-fi quality to achieve the same result with classic club music.

“Once LFX had made a presentation, showing references of installations at the Ministry of Sound and fabric—and we had carried out a listening demo with CDD—they were sold.”

The 400-capacity venue is divided into two DJ booths and four other music zones — including a VIP area, Patio Smoking Room.

To achieve even coverage throughout they proposed four CDD12 and four CSX118 subwoofers as the main dancefloor sound. For stage sound they provided four Blackline X8 and Blackline X210 sub.

Project managing the installation were Jacek Stanislawski and LFX owner, Maciek Karczynski. Lukasz Rybinski was responsible for tuning the system, using Martin Audio’s proprietary VU-NET, along with Smart software.

“ THE CDD SPEAKERS OFFER GREAT TRANSPARENCY AND FULFIL THE CLIENT’S REQUIREMENTS 100% ”

In summary, Stanislawski said, “The CDD speakers offer great transparency and fulfil the client’s requirements 100%. In the short time we have been distributing Martin Audio we have carried out a number of installations with their systems, including Club 54.”



STADIA & LEISURE

OBA Equips Lee Valley Ice Centre with CDD

Lee Valley Leisure Trust came into operation in April 2015 to run 14 of the major sports venues and other sites owned by Lee Valley Regional Park Authority.

Last summer Martin Audio partner, Old Barn Audio (OBA) undertook a sound system upgrade at the £31m Lee Valley White Water Centre in Waltham Cross, one of the host venues for the 2012 London Olympics, using the manufacturer's new CDD range. Such was the level of satisfaction that the integrators were immediately asked to provide a similar Martin Audio solution at another Group venue, Lee Valley Ice Centre in Leytonstone.

Within this cavernous space, the operators host a range of learn-to-skate and public skating sessions, while the international sized ice rink is also home to the Lee Valley Lions and London Raiders Ice Hockey teams and the Lee Valley London Skating Club.

But the 15-year-old system was starting to fail and parts were no longer available. Chris Bailey, Technical Manager Lee Valley Leisure Trust, said, "Based on the performance of CDD at White Water I requested the Martin Audio CDD speakers again but being a bigger venue it needed a more powerful solution.

"I had listened to the MLA Compact subs when OBA's touring system was brought in for the ICF Canoe Slalom World Championships at Whitewater, and they told me that the CSX subs were voiced similarly. So based on the performance of the CDD10 with the companion CSX subs I knew Martin Audio was the way to go."

OBA directors Phil Clark and Neil Kavanagh created a cost-effective design that would enable them to work with the existing infrastructure. This would not only mitigate the pre-existing 'spill', but focus the sound over the rink while providing even coverage to the perimeter seating on all four axes.

The central roof truss houses a standard cube which displays digital scoring and timing, and also scrolls messages. Underneath is a circular truss to which OBA has fitted four CDD10 (10") loudspeakers. This is flanked by two further aluminium truss bars, fixed to the roof, and each supports twin CDD12 (12") and twin CSX118F (18" sub) via the Martin Audio flying yokes.

"The whole system has been phase aligned, time aligned and EQ'd so it is seamless — although we could virtually run it straight out of the box," said Phil Clark. "The old system had delivered a lot of echo but we were able to tweak this using SMAART acoustic measurement."

Programming is within a Symetrix DSP environment using the Martin Audio data files, and wall panels provide multiple source select across the seven zones; this not only includes the bowl but also the upstairs private Valley Bar where a further four stylish CDD8 (8") in white are to be found.

The Ice Centre uses PRS-licensed streaming service company, Ambie Media, who curate the playlists and



Lee Valley Ice Centre, Leytonstone

“ THE INTELLIGIBILITY IS NOW FANTASTIC AND THE FREQUENCY RESPONSE AND DYNAMIC RANGE OF THE MUSIC IS NOW SO MUCH BETTER.

provide constant bit rate streaming of 192kbps over the internet.

At the main rink-side Technical Area ice hockey commentaries are also delivered. And since the venue hosts international skaters there is also an ice-side music station to enable elite skaters to bring their own MP3s.

Meanwhile, in peripheral areas such as the café a button mic will also read ambient noise levels and auto sensors will raise the volume levels of the music accordingly.

Main Reception is also where the new master PAVA paging control is found, with 16 pre-recorded cascading messages with evacuation / fire alarm protocols. The touch screen computer panel is alerted via the bespoke MP3 trigger system designed by OBA, feeding serial ports in the DSP. Other than Reception, further paging stations are located in the rink-side Control Booth and Managers Office.

Both Clark and Kavanagh can reflect on another successful installation using CDD. Stated the latter, "We must have carried out 12 major CDD installations since Martin Audio first introduced the new product line. It is so well priced that we have been able to divert customers who couldn't have afforded Martin Audio previously but who now can."

And Phil Clark added, "CDD delivers a lot of bang for the buck, and the system here has been entirely tailored to the venue. We are honoured to have become part of the Lee Valley procurement team and proud to have carried out our second CDD installation for them in six months using Martin Audio's flagship product."

Chris Bailey concluded, "The CDD installation has made a massive difference. The intelligibility is now fantastic and the frequency response and dynamic range of the music is now so much better.

"It has greatly enhanced the user experience and given us one of the best sounding systems at any ice rink in the UK."

OBA Completes Third CDD Install for Lee Valley Olympic Facilities



World class Athletics Centre is the latest to benefit. Old Barn Audio has completed its third Martin Audio CDD installation within Olympic class venues owned and operated by Lee Valley Regional Park Authority (LVRPA).

Following successful fit-outs of the Lee Valley White Water Centre and Lee Valley Ice Centre, they have now completed a challenging installation at Lee Valley Athletics Centre in Edmonton.

This required the company to install a 30 metre long roof truss section down the middle of the 200m six-lane oval track, six and a half metres up in the air, to support over half a tonne of Martin Audio's popular CDD 12, CDD 10 and CSX sub woofers.

Built ten years ago at a cost of £15m, the Centre plays host to a wide range of athletes - operating as an elite venue for Olympians as much as a walk-in facility for the general public. Boasting 4,000 admissions a week, it is the busiest indoor athletics facility in the UK.

In such a wide open, cavernous venue, pristine sound is vital, as much for commentary at athletics meets as general messages and voice evacuation. However, the previous sound system was sadly lacking, as Centre manager Mick Bond explained. 'It piggy backed onto the fire alarm system so it was not really fit for general purpose. It was a constant source of frustration and produced feedback whenever turned up.'

'We managed to get funding for a replacement system and got various quotes. Old Barn Audio were both competitive on price and were tried and tested as far as we were concerned.'

Their project manager Neil Kavanagh knew that LVRPA wanted to main continuity with the proven CDD formula and his solution was to specify largely CDD12, enabling the CSX118 sub to take care of the lower frequencies.

This he knew would not only provide the level of speech intelligibility required for commentary and handle background music during daytime training, but also have sufficient muscularity to handle for small concerts. 'The venue is also available for hire so by providing a high spec. Martin Audio system this will facilitate a lot more business, leading to an excellent return on investment,' he said.

Kavanagh's first conundrum was how to tackle the acoustics of an inherently 'live' cantilevered venue, while at the same time integrating the pre-existing sound system. He specified 10 x CDD12, two CDD10 and four CSX118, ensuring that the subs fired down at the rubber floor, which would provide absorption, while the full range boxes were arrayed and directed at the 500 raked seat stand on one side of the oval (avoiding the facing wall entirely).

The internally wired truss itself is suspended from four points, with two tonne weight-loading and safety bonds at each end. The speakers themselves are fixed using half couplers and are safety bonded.

‘We assembled everything 1.5m off the ground and hoisted it into positions on four chain hoists and tethered it at the four hanging positions,’ said Kavanagh. The installation required 200m of single 19-core cable running back to the power room and 400m of additional speaker cable on the truss.

The result is a potent solution devoid of any reflections, which comes as no surprise to Neil Kavanagh. ‘What I really like about the CDD series is the accuracy of dispersion. It has been designed to offer a lot of sound within the budget. Not only that, but the inherent coaxial speaker technology offers power coupled with a sonic performance that is unrivalled for the price.’

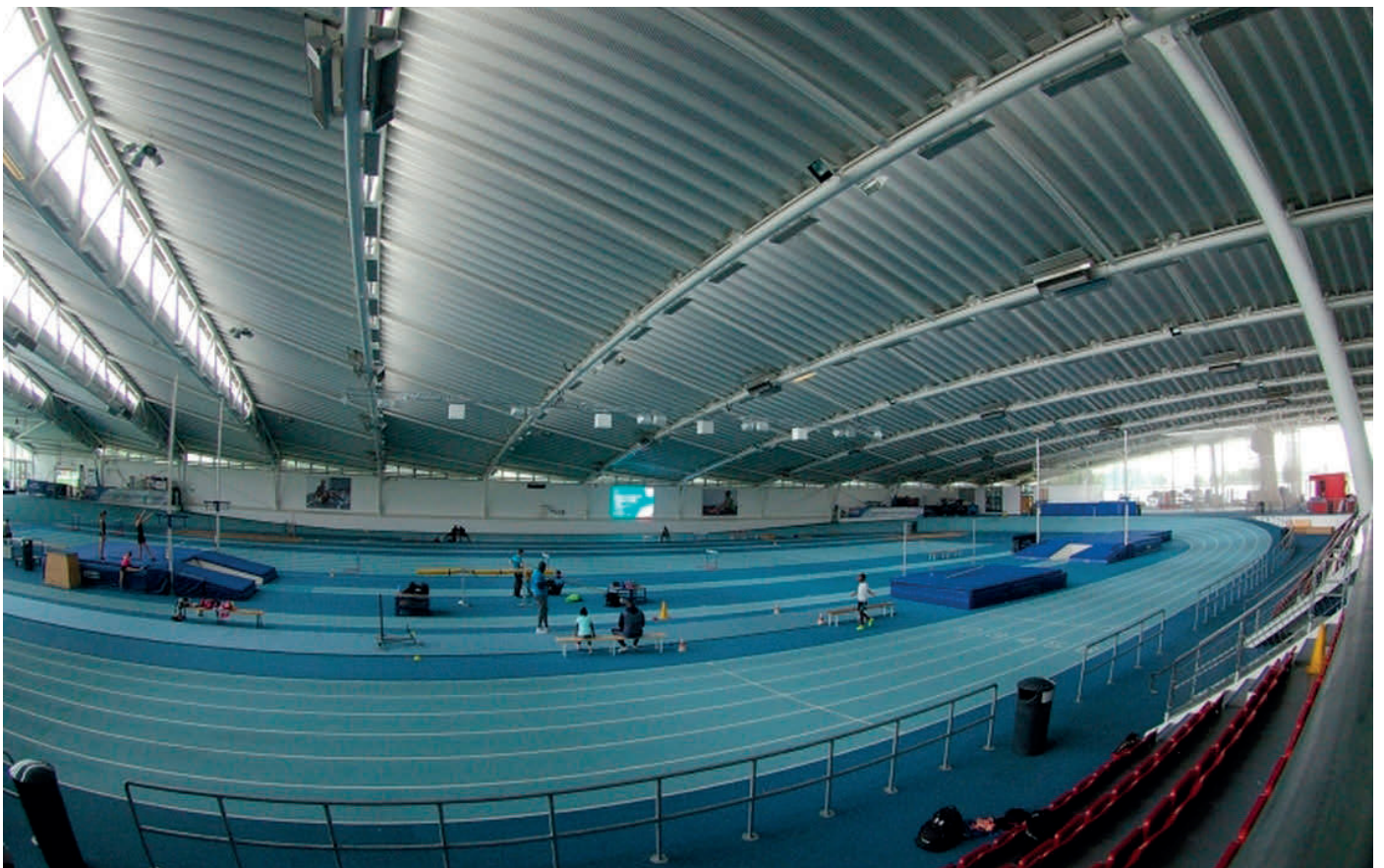
Control and amplification also followed the model set in the two other Lee Valley venues. As for integrating the pre-existing horn system this is now detailed to handle voice announcements only. ‘We have put a ducker into the main system so that it cuts for messages,’ Neil Kavanagh explained.

In summary he said, ‘Now that the Lottery Funding has finished and venues built for the London Olympics need to stand on their own two feet, a powerful sound system such as this is a wise investment. We are also grateful to Martin Audio for the excellent support.’

And according to Mick Bond the new Martin Audio system has proven extremely popular with the staff. ‘Although it was only recently installed it is already more than meeting our expectations,’ he said.



“ WHAT I REALLY LIKE ABOUT THE CDD SERIES IS THE ACCURACY OF DISPERSION.



Face Debuts CDD at Plopsa Amusement Park



Since taking over an amusement park on Belgium's north coast 15 years ago, and opening the first Plopsaland in de Panne, TV production company Studio 100 has rapidly expanded its operations and today has five sites in Belgium, Holland and Germany, both indoor and outdoor.

Systematic generations of Martin Audio's installation speakers have been deployed throughout that period by sound designer Steven Kemland (of FACE bvba) — dating right back to the EM Series. Today the dominant speaker is the C115 — with more than 500 pieces in total now distributed within the various locations, many forming the general PAVA/announcement system.

However, these are now old technology solutions, and destined to be replaced by the new and superior CDD (Coaxial Differential Dispersion) series. In keeping with the park's evolutionary policy, the latest attraction, the Prinsessia Castle — which is modeled on the existing TV series — has seen the new speakers' Belgian debut.

Sitting in its own sound zone, this new attraction, featuring the five singing princesses, was part-opened in time for Hallowe'en. It has seen FACE specify CDD6 enclosures inside the castle restaurant, and CDD5TX running 100V line, and weatherised by FACE, on the brand new merry-go-round ride outside. These form part of a complement of 50 loudspeakers that also include another popular item in FACE's shopping list, the Martin Audio C4.8T ceiling speaker.

“ THE POWER OF CDD IS GREATER, THE DISPERSION IS ABSOLUTELY FABULOUS, WITH SUPERIOR PATTERN CONTROL, AND IT ALSO LOOKS MUCH NICER. ”

Steven Kemland became an early adopter of CDD after its world premier at last year's Frankfurt Prolight+Sound Show. “Prinsessia provided a great opportunity to use the new range,” he said. “Such was the power and dispersion that it meant for the first time we didn't need to place two speakers on small masts, as we had with the C115, but we only needed to use a single CDD5 placed higher up on the pillars. What I noticed immediately was that the sound was even better [than the C115] — and although that has done a really great job for us it is now 15 years old.

“The power of CDD is greater, the dispersion is absolutely fabulous, with superior pattern control, and it also looks much nicer. CDD is also sensitively priced and being able to replace two C115 with a single CDD5 keeps the project within budget.”

Inside the Castle, the facility needed the additional power of the 6in CDD6 as it will often be used for presentations, with local iPod input. The FACE project man also notes that the quality of the transformers leaves him in do doubt that a 100V line approach was the correct one for its simplicity and consistency.

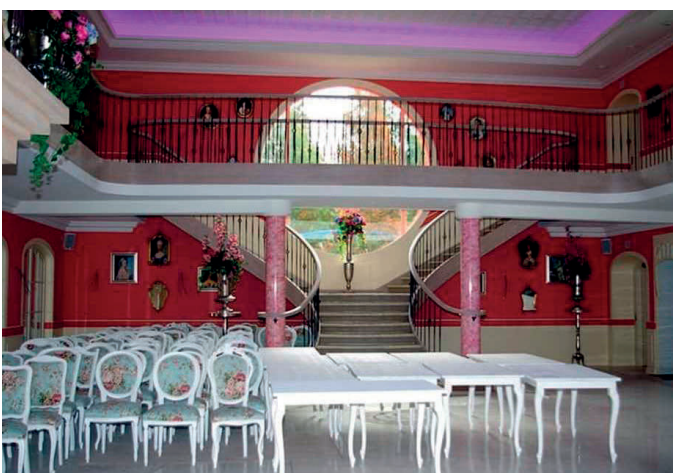


The main banqueting area is surrounded by a VIP room, toilets and a merchandising shop, with eight C4.8T ceiling speakers — frequently used by FACE — covering these ancillary areas.

Over the past 12 months, Martin Audio solutions have been applied to other areas such as de Panne’s new water park (Plopsaqua), but most significantly the principal ‘meet and greet’ stage in the main piazza. This performance stage, which also features many of the cuddly characters that appear on the children’s television networks, can routinely draw between 3,000-4,000 people into the square; and to broadcast the action Steven Kemland has specified a Martin Audio XD solution, providing six XD15 with two XD12, along with a pair of powerful WS218X subs.

“The XD series on the outdoor stage is one of the best sounding 12in and 15in speakers on the market and at a very competitive price,” he states.

And Steve Van Camp, part of the Plopsa Invest Team, responsible for investment in the entertainment systems, adds: “Originally we set the criteria for the XD to provide coverage for around 500 people, with the normal meet and greets, accompanied by background music. But when we have a live band playing it attracts several thousand — and when we heard the XD, particularly the XD12 stage monitors, we realised it could cope comfortably with that. In fact some visiting sound engineers have even asked ‘Where is the main system?’ ... until they hear it!”



His praise for Martin Audio systems extends right across the portfolio. “We have been happy with their solutions since Plopsaland first opened, and following the initial investment there has been almost no maintenance costs: the C115 has been used now for 15 years and is still working — however, we are certain that the new CDD range will deliver an even better service. What we can already hear in the new Prinsessia zone is that we have completely equal dispersion, despite using even fewer cabinets than we would have done with the C115 and AQ5 enclosures.”

FACE’s work for Plopsaland is never ending. They are presently planning several more projects at various sites, ranging from roller coaster rides to the new hotel at Plopsa de Panne. At this location, which welcomes 10,000 visitors a day in peak season alone there are 16 separate music zones but split into more than 100 sub-zones. Their goal is always to be able to plug into existing networks, and in many cases they are swapping their existing CobraNet cards with Dante, ensuring single-button operation for the technically unskilled staff (with announcements automated within the system). This is all under master control from their office in Boom, where they can carry out healthchecks.

“Clarity and vocal intelligibility are the most important elements here and we hope to be carrying out a fluent swop-over to a CDD5 solution in time,” Kemland concludes.



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