

## Martin Audio Wavefront Precision at Blackpool Conference & Exhibition Centre



A highly complex, and reconfigurable Martin Audio Wavefront Precision design throughout the new Blackpool Conference and Exhibition Centre is the brainchild of system designer Samuel Williams of Derby-based Media Powerhouse. The first major building development at the Winter Gardens complex since the construction of the Opera House in 1939, the venue, set on two levels, is one of the largest of its kind in the north of England. It features the necessary infrastructure for hosting modern conferences and exhibitions. Media Powerhouse's integration includes cutting edge projection video and smart lighting technology as well as Martin Audio scalable line arrays in each of the eight rooms

The exhibition space is set on the first floor, with a large 2000-capacity conference space on the second floor. It is conceived as four separate but reconfigurable venues on both floors. With a total 2400 sq.m of reconfigurable space, the venue is ideal for large events. The space can be combined with other venues throughout the complex to further expand the 7,000 capacity.

Williams, who also acted as the consultant, was aware that the spaces needed to function as both stand-alone spaces, or divided into smaller cells with the partitions removed. This would require the technical infrastructure to be highly flexible, with presets for all technical services available for each room configuration. He was also aware that the venue would need to cater for a raft of different events - from the recent Conservative Party Conference to pure theatre productions and full tilt rock 'n' roll.

"Martin Audio was [in the frame] from the beginning," says Sam. "We had briefly looked at another brand, but it wouldn't have given them what they wanted - from a

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15m throw up to a 60m throw - or the versatility. It needed a different kind of box, and one that was affordable. Initially, we were going to use WPM, but it was not big enough so when Martin Audio released WPS we immediately made the decision to upgrade. It's certainly one of the better sounding boxes on the market."

"In fact Martin Audio is putting some serious engineering into its products, where other manufacturers seem to have stopped and are relying too much on digital processing. You look at other waveguide designs and they haven't changed whereas WPS is a good example of speaker design innovation, both physical as well as digital design."

With assistance from Martin Audio Product Support Engineer, Robin Dibble, Williams specified a total of 32 x WPS elements along with their flying frames divided between the eight rooms, 12 x XD12 stage monitors, 32 x Blackline X8 and 12 SX118 subs. In its basic configuration, the processed arrays are powered from Martin Audio iKON iK42 4 channel amplifiers in 2-box resolution, with each pair of array cabinets fed from one amplifier channel. Everything runs on a Dante backbone.

"For each usage there is an individual optimisation for the WPS arrays, carried out in DISPLAY 2 and stored in the iKON amplifiers. We can recall the optimisations automatically via the venue control system depending on the changing configurations. In the first installation of its kind, when the array is changed, the configurations are recalled through the presets," says Williams.

"Every room has a default setting, and everything works automatically; the system just needs to be told what mode it is in, and all incoming production needs to do is to patch into the system."

This has been a long project. "I designed the original layout nearly four years ago," says Williams, who was responsible for all programming. "After we bid successfully for the job the contract got delayed for a number of years. The venue is now being operated by Blackpool Entertainment Co. Ltd.

Confirmed Deputy Head of Facilities / Technical Manager, Ben Rooney, "Media Powerhouse has been able to accommodate technical design changes to suit the direction of the business. Sam reassured me that for the required application Martin Audio was far more suited to our business model [than the other brand under consideration] due to its multiple tier offerings.

"Upon hearing WPS as a visiting system in the ballroom prior to the installation I knew it would be a platform we could deploy in all of our large format venues. Media Powerhouse subsequently invited me and complex facilities manager, Phil Jackson, to Martin Audio's UK factory where we listened to some ADORN and O-Line products which we are currently looking at for installation within some of our other venues, as part of our future fitout plans."

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