

Above: The auditorium of the multi-purpose Playhouse theatre.

Right: A cut-away view of Azura..

The cruise ship industry is booming and P&O Cruises' newest ship, the 115,000 ton, 3,080 passenger Azura knows how to attract its customers with the best entertainment afloat. Geny Caloisi reports on how P&O Cruises has taken the opportunity to enhance the consistency and reliability of the ship's technical entertainment installation . . .

Azura was launched in April 2010 by prima ballerina Darcey Bussell. Built in two years by Fincantieri in Italy, Azura is modern and sophisticated in its design. Fully integrated with seamless technology, its aim is to attract both first-time cruisers and experienced cruising passengers alike. It is family friendly and follows P&O Cruises' traditional style: fine dining, afternoon tea, a million pound art collection featuring contemporary British artists, and ballroom dancing on the ship's three dance floors, including the atrium, which hosts regular dance evenings.

Structurally, Azura is the same as P&O Cruises' Ventura and Princess Cruises' Grand-class vessels, but in each new ship the design is pushed one extra step further. P&O Cruises has in-house shows on six of its seven ships, and a great deal of attention has been paid to the way its Playhouse Theatre is set up. The multipurpose theatre offers three shows a night every night, from a repertory of seven, plus guest entertainers. This would not have been feasible if it wasn't for the latest application of audio and visual technology.

P&O Cruises entertainment sound and light manager Phil Yeomans emphasises: "This is the most technologically advanced cruise ship we have in the fleet."

Consultant Jim Tetlow of San Diego-based Nautilus Entertainment Design, who designed and specified all of the audio-visual, lighting and special effects on board, comments: "Immediately after the delivery of the previous P&O Cruises vessel, Ventura, which was delivered in the spring of 2008, we began discussions as to what they would like to change for Azura. We then took requests from P&O Cruises entertainment and developed the modifications so that it meets their requirements and fits into the budget."

Although delivered on time, the journey was not easy. Tetlow continues: "As it was a sister ship to Ventura, based originally on the Princess Grand class, there was not too much development needed from the construction point of view. However, with a February commissioning for a March delivery, we had a lot of problems with severe weather that delayed the completion of the large LED video display for the open air cinema. Fortunately, the installation and commissioning were completed just prior to delivery at the end of March."



entertainment

The technical systems installation, including lighting, AV and audio, was carried out by Kezia Group. The moving lights installation was conducted by HSL Group Holdings Ltd, following the formation of a direct relationship between lighting manufacturer Robe and P&O Cruises.

The Playhouse Theatre

The Playhouse is the heart of Azura's entertainment facilities. A multi-functional room with capacity for 820 people, The Playhouse runs three 45-minute shows every night of the week. And, of course, it is well equipped, with a specification that sets the standard for all the entertainment and lesiure areas throughout the ship. The lighting rig features more than 70 ETC Source Four profiles and 60 Source Four Pars (around 70 ETC fixtures are fitted with Morpheus ColorFader scrollers), more than 100 intelligent lighting fixtures from Robe, with lighting control from an MA Lighting grandMA system and DMX distribution from Pathway Connectivity. There are also two Robert Juliat 1800W Victor followspots, Scenic projection is from six Christie Roadster S+12K projector in conjunction with Robe DT7000 DigiSpots.

The Playhouse also features a 56-input Yamaha PM5D/RH digital mixing console; a d&b audiotechnik Q-Series PA system with T10, E0 and E8 fills; a Peavey Nion DSP system and Clear-Com intercoms. Show control is from an Alcorn McBride V4 Pro, with touchscreen interfaces from AMX. Atmospheric effects are provided by Ultratec and MDG Fog. It is a typically high-spec set-up.

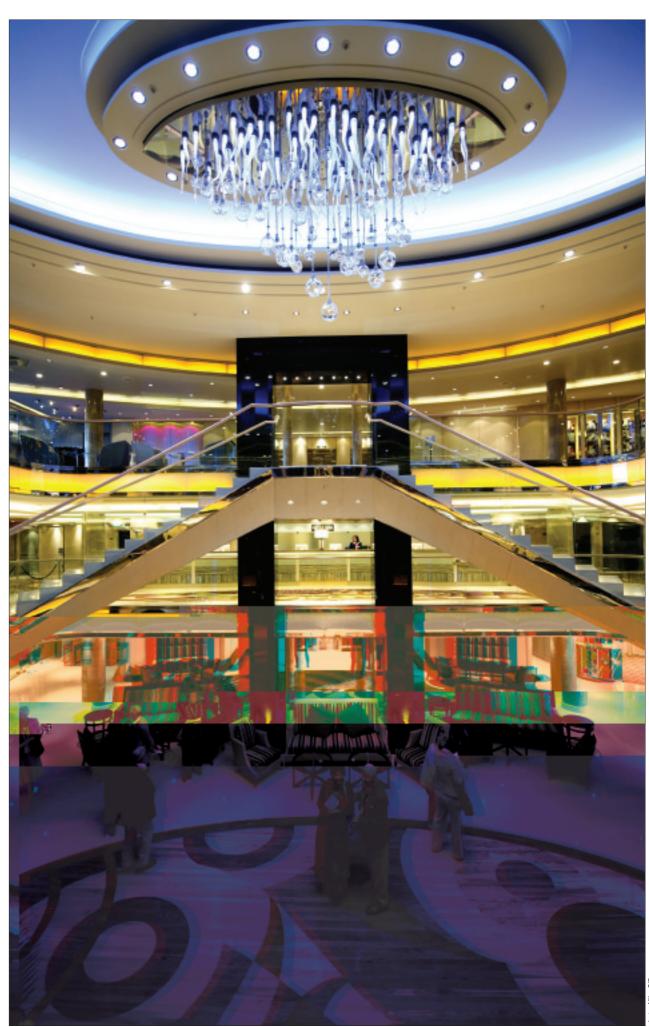
Yeomans explains: "The Playhouse can be compared with any West End theatre, the main difference being that we run a different

show every night of the week. Given that all cruise ships have limited space, we have implemented clever use of AV technology to achieve outstanding results on every show." He added: "What we need here is flexibility. The shows vary and can range from a full band playing music, to a magician, to a full-on dance and acrobatics show. The equipment we have installed has to cater for all these needs and be reliable. This room is a multi-purpose space, so we needed to create a rig that gave us these capabilities."

Steve Bee, entertainment production show manager at P&O Cruises' in-house theatre company, Headliners, was once an actor and singer himself, so when he made the transition to show director, he knew what was needed to produce top quality performances. He says: "People that come on these cruises know about variety shows. They have seen high-tech entertainment programmes on TV and they expect to be properly entertained when they are on board. We have to retain their attention for the whole 45 minutes of the show."

Bee says that this was one of the most challenging projects he's been involved with. "We built a brand new rig for brand new shows on a brand new cruise ship, so there was a great deal of detail. On the night of the premiere everything worked wonderfully."

Ordinarily, shows are prepared six months before the launch of the ship. Of course, the cast had to carry out the rehearsals off site because the theatre was still under construction: this was done at Headliners' rehearsal studios in London. As soon as the company was able to get on board, they had only a small window of





opportunity to run through the whole show and to see the full effect. Everything needed to work

So, Azura has a different show every night, with different themes and costumes; the shows need to be West End style with the latest technology, yet the ship has limited space and strict safety regulations.

Obviously, using the right technology wisely is one of the keys to getting the job done.

A prime example of this is the use of scenic projection to minimise the set required for the various shows. On each side of the stage are three Christie Roadster S+12K projectors which project onto retractable Steward screens. These are used as part of the set, extending the stage to the sides and bringing it closer to the audience.

Rigged above the stage are the five Robe DT7000 DigiSpots - amongst many other Robe moving lights, including dozens of 700AT Profile and Wash fixtures, plus 575AT and 1200AT Profiles and Robin 300 Beam fixtures. The DigiSpots can project both still and moving images and are driven in the same way as any other moving light from the lighting console. The projection screens used for the different shows vary in size, shape and position within the stage, but the flexibility of the DigiSpots means they can always find their target.

HSL's managing director Simon Stuart, who managed the installation, comments: "The main advantage of the Robe projector light is that they provide different textures and sets without having to have the physical set on board, taking up a minimum space."

Steve Bee adds: "We wanted to use the projection in different areas within the stage. Obviously, we are limited by budget and we couldn't have 30 projectors pointing at different places on the stage, but the Robe DT7000 DigiSpots can be redirected to any angle within the stage."

Mick Hannaford, managing director at Robe UK explains: "Unlike traditional AV projectors, the DigiSpots are designed to move the same way as a light would move. So from a central location you can decide where the image is going to go and set it exactly to the screen. Everything is done from the desk. It's the link between the video industry and the lighting industry."

The DigiSpots are not just moving projectors, they also carry an integrated media server. All the content needed for the show is uploaded into the five units on the theatre rig and these are then controlled from the grandMA lighting console. Using the media server software, which has been wholly developed by Robe UK, the content is uploaded by drag-and-drop and welded together across the screens using Dataton's multi-display software, Watchout.

Hannaford adds: "People in the lighting industry who want to provide video can now do that without having to know too much about it. You don't need a separate video engineer or a separate video desk. All the content can be assembled on a laptop, uploaded into the product and run, just as

Left: The Manhattan cabaret stage.

Below: The Planet Bar.

Facing page: The impressive Atrium.

they would anything to do with lighting. It can change the way a show is put together."

Support Structures

P&O Cruises took a new approach when deciding how they wanted to deal with the equipment they invested in for Azura. Above all, they wanted consistency and reliability in the equipment (a key requirement, given that things can go wrong in the middle of an ocean when it's not that easy to simply change a faulty piece of equipment for a new one) backed up by excellent technical support. It was this quest for consistency that led P&O Cruises to establish a direct relationship with the UK office of Czech Republic-based lighting manufacturer, Robe Lighting.

Phil Yeomans says: "After looking over many different moving light manufacturers and suppliers, the Robe equipment range ticked all the right boxes for our needs, plus the competitive price and three-year guarantee they offered. Ships are a very demanding environment and we require a lot from the equipment - the robustness is an important factor to us."

He continues: "The production company, Headliners, required a large amount of projection capabilities including front, rear and moving projection, so the DT7000s where a natural choice. With this option it gives me the flexibility to continue moving the shows technical support forward as more are developed over future years."

Hannaford says: "The direct deal with Robe includes three years' full warranty and it is exclusive to this deal. But we know the product and its reliability, so we are confident. The whole package is based on









From top

Malabar - a club-style venue in the middle of the ship, with a stylish Indian theme; Manhattan - the late night venue with cabaret shows and disco dancing; The SeaScreen open-air cinema.

Facing page:

Left: Gareth Willox, deputy production manager, Sound, with Yamaha PM5D/RH. Right: L-R: Mick Hannaford of Robe Lighting UK, Simon Stuart of HSL Group and Phil Yeomans of P&O Cruises.

changing the way we normally sell our products, into something a bit more suited to the cruising industry. It's not just about original purchase, or price. It's also about getting return on the investment and capitalising on the products. So when you walk back onto the ship a year later, and it's no longer all sparkling and new, you can be sure that the equipment you have still works 100%."

But Robe UK could not have provided that level of support without the contribution of HSL. Hannaford says: "We only sell kit in boxes, HSL makes it happen." He adds: "This is a ground-breaking deal because it's bringing together the manufacturer, the guys that put it together, and the customer's experience and needs. This is actually what defines how this package works."

HSL's Simon Stuart adds: "We meet with the customer on a regular basis. P&O Cruises gets to see and use new products to check if they are suited to their needs. They can try them out in our offices or they can trial them on the cruise ships . . . The most important thing is to introduce products that are reliable and don't break down when the vessel is out at sea. Once they reach a decision, they can be sure the installation and our technical support will be with the cruise ship along the way."

Sound Investment

That quest for consistency, reliability and support also led P&O Cruises to choose Yamaha as a partner for its audio requirements. The sheer amount of Yamaha equipment in use throughout the world is another benefit to cruise ship installations. There's the familiarity - the majority of engineers will be familiar with the Yamaha user interface - a factor which is enhanced, in the Azura's case, by Yamaha equipment already being used on board other ships in the fleet, Ventura and Arcadia, allowing technical crew to transfer seamlessly between ships.

Again, reliability is a fundamental requirement, compounded by the salt-laden air of the sea environment. Corrosion is an ever-present threat, but Yamaha's desks are built to cope with such challenging environments. And the global presence of Yamaha equipment means that, if a replacement was required, it could be sourced quickly at the next port of call.

Karl Christmas, Yamaha's deputy general manager for Commercial Audio (UK), says: "Passengers pay a great deal of money for a cruise and so they, quite rightly, demand the highest standards from all aspects of the experience. The combination of reliability and flexibility - together with ease of use and familiarity for the technical crews working in a high-pressure environment - makes Yamaha equipment the ideal







solution. We are very pleased that Yamaha has been chosen for Azura and the other P&O Cruises ships."

Phil Yeomans says: "We have a number of ships that have been successfully running a range of Yamaha desks onboard. Again, we have a good relationship directly with them and are happy to continue this relationship for this project. The range of desks from PM5D/RH, M7CL/48 down to the 01Vs means we can utilise this wide range of product for our various venue requirements but still keep the same manufacturer to minimise training and spares costs."

A Walk Around

On boarding the cruise ship, one of the first things the visitor encounters is the 'wow factor' of the three-storey high atrium - the lively social hub of the ship, where nightly ballroom dancing takes place to the accompaniment of a live band. To cater for its audio needs, the Atrium has a rack-mounted Yamaha 01V-96V2 digital console with 24 inputs and 14 outputs. Nearby on the same level as the Atrium is The Whitewall Art Gallery, which regularly offers lectures from curators.

The Planet Bar, high up on Deck 18, is a tranquil and elegant Jazz bar. On one side, windows provide wonderful panoramic views, while on the other, six 103" Panasonic plasma screens work together to take passengers on a virtual journey, showing scenes from a different continent each night, while the theme is also reflected in the drinks and canapé menus.

Pacific 7, the production company which also provided the footage for the Metropolis bar on Ventura, created this new content for the six themes. The filming took two years to complete. The Panasonic screens can be used to display either individual content or to show panoramic views, with the content again combined using Dataton Watchout. Audio is again looked after by a rack-mount Yamaha 01V-96V2 digital console; sound is provided via Renkus-Heinz PNX loudspeakers, with amplification from QSC CX Series amplifiers and DSP from Peavey Nion.

There are three dance floors in total on Azura. The Atrium dance floor is big enough to take about eight couples dancing, while the Malabar and Manhattan bars have bigger spaces.

Manhattan is a late night venue with cabaret shows and disco dancing. The stage lighting rig features 14 Robe fixtures including 250 Club Spots, 250XT moving mirror lights and 170AT Profiles. There are also plenty more ETC Source Fours and S4 PARs, many fitted with Morpheus ColorFaders, plus Atomic strobe and Wizard Extreme effects from Martin Pro. Lighting and effects are controlled from an MA Lighting grandMA ultra-light console. A Yamaha M7CL/48 consoleis on audio duty, while Renkus-Heinz PNX loudspeakers deliver the sound.

The seating area is partitioned and there are relay screens above the different tiers of seating and some more by the stage. Three

cameras record the action on stage so that nobody misses anything. The whole place has colour-changing LED lighting from Pulsar: the ChromaDome LED fixtures embedded in the walls, partitions and columns constantly change its feel and mood.

Malabar is a club-style venue in the middle of the ship, with a stylish Indian theme inspired by the smart hotels of Mumbai's Marine Drive. Its semicircular stage, which features piano recitals and cabaret acts, features a similar lighting rig to that in Manhattan. The audio demands here are met by a Yamaha M7CL/32 digital mixing console (32-channel, custom-configured), and as with the other leisure areas onboard, Sennheiser mic systems, Peavey Nion DSP and Renkus-Heinz PNX loudspeakers are in evidence.

The Great Outdoors

The SeaScreen is Azura's open-air cinema in the main pool area. The 7.5m wide by 5m high screen is a Barco OLite 612 LED screen (12mm pixel pitch) with processing from a powerful Barco D320 Lite Digitizer. A light detection system raises or lowers the intensity of the screen depending on the ambient light levels. Although Azura is not the first cruise ship to have a giant LED screen, it is the first British ship to have one.

The Mica line array loudspeakers from Meyer Sound are flown in hangs of eight (including bass cabinets) on either side of the screen, plus six delay cabinets beneath the balcony, provide coverage over the whole deck area, while there are also Sennheiser headphones and an IR hearing assist system available for hearingimpaired passengers. The cinema is used to screen current blockbusters, as well as for playing interactive games. In the evenings, the sun loungers are transformed into comfortable beds with cushions and blankets to enjoy the shows. Passengers can even get cinema-style snacks.

The ambience of the SeaScreen changes according to what is being shown. Four Martin MAC 700 moving heads in weather-proof enclosures are positioned atop columns around the upper level of the cinema, and are able to provide coverage of the area as required. LED wash units complete the spectacle. Sound in this area, which includes a small stage, is managed via a Yamaha 01V-96V2 digital console (24 input, 14 out). A performance stage in the next top deck area features Martin MAC 2000s in weatherproof domes, along with further Robe AT700 fixtures and custom Robe ColorSpot 2500E followspots - developed between Robe, HSL and Phil Yeomans.

Azura has many innovative features to enchant its passengers, and the new direct relationships between operator and equipment manufacturer have provided an additional level of assurance for the passengers that the shows will go on.

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- > www.hslgroup.com
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