

The 360 is a holistic experience, as the projections on the table reflect the dishes and the wrap-around screen shows vistas of the regions where the food comes from



HOW AV KEEPS AN ENCHANTED PRINCESS ON THE CREST OF A WAVE

The restaurant *360: An Extraordinary Experience* is powered by AV you would expect to find in a theme park but it's on a cruise ship, *Enchanted Princess*, plying its way through a picturesque Mediterranean itinerary.

By Caroline Reid and Christian Sylt.

In early summer, the *Enchanted Princess* cruise ship was home to the European launch of a restaurant unlike any other at sea. Called *360:*

An Extraordinary Experience, it is powered by the kind of AV you would expect to find in a theme park attraction. However, it's not big or brash and instead takes place in the intimate setting of a small dimly-lit circular room. The setting resembles theatre shows of days gone by and it too is a cultural experience.

Before it begins, diners stand in front of a chic black and gold backdrop for a photo opp and then head into the darkened room. A curved table that can seat 20 people sweeps around the edges leaving a circular space in the centre. The dark brown carpet looks like soil and it soon becomes clear that this is no coincidence.

As the lighting is so low it's initially hard to tell whether the walls are lined with screens, paintings or projection surfaces. Once everyone is seated comes the big reveal.

It suddenly becomes clear to diners that they are encircled by a floor-to-ceiling LED screen when a photo of a leather-bound travel diary appears on it. With a clever sleight of hand, the smartly-suited host appears to pull the journal out of the screen and into his hands. It kicks off a journey around the

Mediterranean as vibrant 4K footage floods the wrap-around screen accompanied by rousing music. Diners are in the middle of the action.

It is far from a travel advert as a story ties the 90-minute seven-course spectacular together. The actress Brooke Shields plays a traveller called Bethany who is sitting on the balcony of a cruise cabin writing a diary and reminiscing about her culinary adventures around the Mediterranean. The host supposedly reads from its pages and whisks diners off on a virtual voyage to the foodie capitals of Europe.

It starts in Greece where colourful houses with terracotta tiled roofs line lush green hills in the Peloponnese region of the country. There we meet Tassos, a Koroneiki olive farmer who explains the

importance of olive oil in Greek culture. Then, as if by magic, a mezze plate consisting of those very same kalamata olives, tzatziki, olive oil and bite-size pita bread is served as the first course. It is followed by a course of grilled octopus and feta as the azure waters of Santorini sweep around the screen and the island's iconic cliffs come into view. That's just the start.

Unbeknownst to the diners, an array of motion sensing cameras, projectors and scent atomisers are hidden in the rafters and directed at each seat. During the first course the projectors transform the table's surface into a colourful animated mosaic and show intricate plates on it which appear to smash in true Greek tradition when diners bring their fists down on them. It creates a whole new world of immersive dining and this technical wizardry complements every sublime serving.

When diners are introduced to Salvatore Aceto's lemon farm in Amalfi, the overhead atomisers release a sweet citrus scent before burrata and spaghetti al limone arrives. "The scents align with what is happening on the screen so in Italy you see the lemon fields and you smell the lemon," says Vicki Johnson, senior vice-president of communications for Princess Cruises.

Even the drinks fit the theme as the Italian course comes with Lacryma Christi del Vesuvio, a white wine produced from grapes that have been grown



"No one's done it before. I haven't seen it anywhere. The 360 is truly our current apex. It's the cherry on top."

**John Padgett,
Princess Cruises**



An array above the diners is dedicated to tracking their movement, as well as lighting and projection on the table



The 360 even uses plates as screens which show the pin-sharp animated projections



High-resolution images surround diners

on the slopes of Mount Vesuvius. Local vintner, Maurizio from Pompeii Vineyards, explains that the region's agricultural tradition dates back to Roman times and shares his tasting notes on the sweeping screen. It gives diners a sense of satisfaction as they are subliminally learning whilst tucking into dinner. It doesn't stop there.

Next up is a submarine journey through the deep blue waters off the coast of Catalonia in north-eastern Spain. This showcases ElixSea, a red wine which isn't aged in oak barrels but on the ocean floor some 26 feet below the sea surface. ElixSea owners Mariona and Gergö explain this unique ageing process while the overhead projectors transform the table into decking on a boat. Completing the picture, waiters bring out barnacle-encrusted bottles so diners can see the fruits of the six-month odyssey endured by the Grenache-grape wine.

It is heaven for oenophiles and technophiles which is exactly what Princess intended.

For decades, dinner shows have been a mainstay of cruises but the format tends to be old-fashioned. The 360 brings it bang up to date and even describing it as 'Gastrotheatre' doesn't do it justice. "No one's done it before. I haven't seen it anywhere," says John Padgett, president of Princess Cruises. "The 360 is truly our current apex. It's the cherry on top."

In-house development

The 360 was developed by the in-house design team at Princess which was the production lead of a team spanning 100+ people including subcontractors. All of the footage was filmed bespoke for the restaurant by Orlando-based content agency, TinMen with support from specialist theme park creative studio, Super78. Padgett himself is a former Disney executive who developed a restaurant at its Orlando resort set in the world of its classic Beauty and the Beast cartoon. However, he says the 360 wasn't influenced by his time at Disney but rather the broader industry trend of introducing technology to restaurants for the sake of it.

"You would see everyone talking about technology in restaurants and they would say, 'we have a VR restaurant' or 'we have projections in our restaurant'. And I was saying, well, but that's not what the guest is there for. The guest is there to experience the senses, emotion and feeling."

Nowhere is this more noticeable than when the virtual tour heads to Spain. That's when diners meet the 65-year-old founder of a charcuterie shop in the town of Cantonigròs before sampling

his produce in a course of chorizo and tomato on toast. Then comes the main event.

The overhead projectors transform the table into a forest floor with twigs strewn on it whilst the plates look like they are covered in grass. Thanks to the motion sensing cameras, the projection of grass tracks the plate even if you move it on the table. That's not all.

A truffle hunter appears on the screen to tell diners where to forage for truffles and then they get a chance to do it themselves. Using their new-found knowledge, diners can rub the twigs in just the right places to make truffles appear.

They then get to taste the fruits of their work in a dish of delightfully succulent beef tenderloin topped with truffle butter sauce. Princess has cut no corners with the food but it's the marriage with AV which is particularly tasteful, especially as diners are oblivious to the tech behind the scenes.

Equipment menu

The main feature of the venue is the 1.81mm pitch LED wall supplied by DetailLED solutions with content driven with Disguise 4x4 PRO and VX 4 3D video effects servers. Panasonic provided the overhead projection alongside Microsoft Azure Kinect interactive cameras. Black Magic Design provide the Matrix Switcher with a mix of BMD and Extron peripherals to tie all of the systems

“The most complex aspect is the sound. The round room features sixteen channels of audio, including live music, pre-recorded music, sound effects, dialogue and the host's microphone.”

**Brent Young,
Super 78**

together for seamless operations. Two SuperLogics servers run a custom TouchDesigner application which is used for tracking and interactive triggers during the show.

Shure provides the wireless microphone and IEM capabilities running through Meyer Ashby ceiling speakers and Meyer UMS-1XP subwoofers with everything processed through QSC 510 Core and controlled via Apple Mac running QLab.

Not many dinner shows can boast an operator in a control room behind the scenes but not only does the 360 have that, it also has an additional operator panel hidden in the dining area so that the host can adjust the running of the show if needed. Including the chefs, it takes a team of around 20 people to keep the 360's wheels turning.

“Operators utilise Axis M3104-L cameras to monitor the show to ensure everything runs without a hitch,” says Johnson. “Lighting fixtures are provided by SGM and ETC with controls through Pathway Lighting splitters, Cisco network switches, MA Lighting MA3 command wing and OnPC.” Setting it up was far from a walk in the park.

“The most complex aspect is the sound,” says Brent Young, president of Super 78. “The round room features sixteen channels of audio, including live music, pre-recorded music, sound effects, dialogue and the host's microphone. Balancing the sound to allow guests to have conversations while ensuring the voiceover, provided by Brooke Shields, comes through clearly was crucial. Yessian Music did an outstanding job. They spent days in the space, working all hours to deliver the perfect sound.” It paid off.

“One thing we have really noticed, and we have heard directly from guests, is that it becomes such a shared experience, a special thing, whether it's



The star of the show is a 1.81mm pitch LED wall powered by Disguise 4x4 PRO and VX 4 3D video effects servers



for birthdays, anniversaries or unique milestones of some sort," says Johnson. The restaurant benefits from being on-board a ship as people often take cruises for celebrations. However, its location also posed some of the greatest challenges during development which began more than five years ago.

"The development process along with the hardware and software installation was compounded by the complexities of creating an experience on a moving ship," explains Johnson.

"The structure of the venue moves and therefore we had to ensure the correct mounting hardware was installed, along with anti-vibration mounts, and then ensured it was attached to the ship's structure in such a way as to keep everything steady – especially the projectors and cameras."

This comes into its own during dessert when the scent of lavender fills the air and fields in Provence fill the screen. It's inspiration for a lavender honey mousse filled with a lemon cream and topped with a honeycomb wafer. The dish is accompanied by a white chocolate filled with honey and jelly in the shape of bees.

The buzzing insects appear to be crawling all over honeycomb projected on to the table and then comes the jaw-dropper. As diners cup their hands over their plates, a pool of honey is projected into them and as they move them apart it is beamed on



Diners are taken to destinations that they can visit in real life on the ship

to the dish below. Pulling this off in a static, spacious square room would be an impressive feat but doing it in a tightly-packed circular space which is always moving is really pushing the boat out.

The final stop takes diners inland to the Drappier vineyard in the Champagne region of north-east

France. After a quick virtual lesson about the history and attributes of the bubbly drink, diners toast the end of the tour as the service staff enter the room to the tune of the can-can whilst fireworks explode on the screen around them. They take a bow before one final surprise when the snaps of the diners taken at the start of the tour appear on the screen in a highly personalised photo opportunity.

The AV adds an extra layer of complexity to what is already a carefully choreographed ballet. If any of the elements didn't perform it would break the immersion so Princess works closely with the suppliers to keep everything in ship shape.

"We have continued to work with all of our suppliers since we went live with 360. From service calls for fine tuning the LED wall, firmware or software updates to a speaker that needed to be replaced, we continue to remain close to our vendor partners as the subject matter experts in their field to ensure all of the equipment is fully functional and running at its peak. This ensures that every guest experiences the same show no matter what. We also work with a lot of the same suppliers on other projects as once you have a core team of reliable vendor partners, you want to keep using them."

Made for Instagram

The entire experience seems made for Instagram and Johnson says that it has made such big waves on social media that Princess is opening it up to a wider audience. The restaurant is currently only available for lunch and dinner on the Discovery Princess and Enchanted Princess cruise ships and can only be booked by guests in suites and select VIPs, including top casino players. However, Johnson says "we will in the somewhat near future be opening it up to other guests. We haven't named a price-point yet but it is in such high demand. It is very sad to have guests saying 'what do I need to do to experience this?' after they see it on social media."

Not only is the 360 unique to Princess but it is the only place that a number of the dishes and ingredients can be found onboard its ships. Princess has come up with an ingenious way of keeping the format fresh.

"We can see the application of the capability that we have," says Johnson. "You could make any itinerary (in the 360). Imagine Alaska." Of course, the more destinations it showcases, the more the diners will want to visit them. In turn, the more business it drives to Princess and the longer the company will stay on the crest of the wave. ■

The marine motif in the 360 reflects its setting

