



CASE STUDY

Public Library of the Year Demands Reliability from Cameras and Projectors

Awarded as Public Library of the Year, listed in TIME Magazine's World's Greatest Places, and winner of the AZ Award, Oodi library in Helsinki, Finland has received a number of nominations for its functional and inspiring ambience. 3 million visitors during its first year prove that there is plenty to see and do in Helsinki's new living room: not just a library, Oodi is home to studios, editing rooms, coworking and learning spaces and a movie theatre.

Product(s) supplied:

PT-RZ31K

PT-RZ21K

PT-RQ13K

PT-RZ970

ET-D75LE95

ET-DLE030

"The property and its functionalities were designed in cooperation with their future users. The final design was based on reliable material and equipment choices with sensible life cycle costs. The strengths of Panasonic projectors are the vast selection of different models and the predictability of their life cycle costs. We were able to fulfill all the requirements for projection sizes, minimum lumen outputs and other technical specifications with just two model series"

Urpo Nylander

ICT expert

Oodi's AV technology

The architecture and large windows created challenges

There are a total of 31 Panasonic laser projectors in Oodi, 14 of which utilise Ultra-Short Throw (UST) lenses. Additionally, Oodi has seven 4K PTZ cameras, two live switchers, a camera control panel and a 360 degree 4K camera. "In terms of the entire AV setting, we got what we hoped for - it was relatively easy to find a solution for each space. Laser projectors were a must, because with our operation hours we'd need to replace lamps all the time", says Nylander.



Installing projectors in a building awarded for its beautiful architecture was challenging, which also set out requirements for the AV technology. The locations and mounting angles needed to be thought through so that the desired screen sizes and levels of brightness were met. The ceiling, electricity and HVAC, but also the corridors and windows had their say in the process.

When Oodi was still being built, Nylander had an agency develop a "sun tool", which he used to make sure the brightness of the projectors was sufficient at different times of the day. The large windows on the first floor let in so much sunlight that the widescreen projections in the entrance hall demanded 30 000 lumen projectors. Using the tool, Nylander was also able to determine suitable projection sizes for all different locations and surfaces.



Cameras and projectors for art, movies and events

The PT-RZ31K 3-chip DLP™ projectors in the entrance hall are used mainly for widescreen art projections. They are also connected to the AW-HE40S PTZ cameras and AW-UE70 4K PTZ cameras in Maijansali hall for streaming. The cameras are operated with an AV-HLC100 Live Streaming Production Center and can be used to stream or record events in the hall.

Maijansali hall also has a PT-RZ970 1-chip DLP™ projector and will get a 360° Live Camera (AW-360B10 & AW-360C10) to live stream events to remote viewers' virtual reality headsets. "The camera will be mounted on a seat: when you put on your VR headset, it's almost as if you're sitting in the audience with people around you", explains Nylander.

Under the escalator in the entrance hall a PT-RZ21K 3-chip DLP™ projector equipped with a Ultra-Short Throw Lens (UST) ET-D75LE95 is used for art projections. The movie theatre Kino Regina in Oodi has a PT-RQ13K 3-chip DLP 4K+ projector, which is used for streaming events, projecting 4K quality movies and can also be used for projecting subtitles on films.

Oodi also has a number of mobile projectors, AW-UE70 4K PTZ cameras and AV-HLC100 Live Streaming Production Centers for art projections and outdoor events, like the one held in August 2019 in honour of the Public Library of the Year award.

Special projections and digital smart walls

The Cube is an immersive space with two digital smart walls. The smart walls are coated with transparent projection film and equipped with a touch feature. Seven PT-RZ970 1-chip DLP™ laser projectors with Ultra-Short Throw Lenses (UST) ET-DLE030 project video onto the smart walls. “The UST lenses made it possible to mount the equipment in a narrow corridor without passersby casting shadows on the projection”, says Nylander. There are also two projectors inside the Cube for presentation purposes.



Near the cafe on the first floor three PT-RZ970 1-chip DLP™ projectors equipped with Ultra-Short Throw Lenses (UST) ET-DLE030 produce a large panoramic projection on the wall. The projectors can also be used to show individual images. The multi-purpose room for children uses five projectors to produce one large image on the surface of two walls. One of the projectors in that room can also be used separately e.g. for watching movies.



A 3-million visitor count demands operational reliability

Oodi library is open from Monday to Friday from 8am to 10pm, so the cameras and projectors accumulate a lot of operating hours. They can only be maintained at night, which means operational reliability and low maintenance needs were a necessity. "The entrance hall projectors can only be maintained from an access platform, because they are mounted above the main entrance. I'm so glad there has been no need to climb up there. The projectors have been as silent and reliable as I expected", says Nylander.

As in any library, the majority of Oodi's spaces and equipment are available for anyone to loan with a library card. Because of this, ease of instructing the users was a prerequisite in choosing the equipment. The AV technology in larger spaces is controlled with logic panels and lighting controllers, with mixers available for professional users. "For non-professionals it is enough to know how to use a remote", explains Nylander.

Easy management and predictable life cycle costs

Since all the projector needs were fulfilled with only two model series, the AV logic commands and functional settings needed only two variations. One software can be used to remote control all the models, and all projectors follow the same service schedule. The mounting brackets had only two different types of bottom mounting solutions, which made installation work easier.



Nylander also expected easy controllability from the equipment. “The Panasonic control panel has worked just as I hoped. With the push of a couple of buttons you can stream the live feed to the service you want with no special tricks. All the projectors can be controlled with the same remote, which makes everyday work easier”, he says.

The life cycle costs of the projectors are easy to predict: the 1DLP models don't require filter change, because their optical block is sealed and cooled with liquid. The 3DLP models have a frame surrounding the optical area, which is dust proofed with long life eco filters. “Also the extended five year warranty for the projectors brings peace of mind”, says Nylander smilingly.



100% utilisation rate for new spaces

The larger panoramic projections and especially the Cube space have attracted visitors. The projectors' image brightness has been praised and the Cube's glass wall has been a unique experience for many. The whole experience has been inspiring for Nylander, too, who's seen many types of AV productions in his career.

"Panasonic's solutions bring loads of ideas. I've had to settle myself down, since we're not even making use of all the ideas we thought of previously. The building was opened before the construction had been finished, and now with 3 million customers we are desperately completing and opening up new spaces. When we open one up, the usage rate is 100% from the start. Usually the next free slots in the calendar are a couple of weeks away. Our cooperation will undoubtedly be beneficial for both parties in the following years", praises Nylander.

Kauko Oy is the distributor of Panasonic Pro AV solutions in Finland. The technical advisor for projectors and cameras toward designers, contractors and the project team was Kauko's AV expert Juha Lindqvist.