



KAUNAS AQUATIC CENTER | CASE STUDY

Kaunas Aquatic Center Utilizes AtlasIED Atmosphere™ Platform to Tame Challenging Acoustics

Welcome to Kaunas, Lithuania — a city on the Nemunas River, steeped in history and tradition, with numerous sports facilities.

Among them is the Šilainiai swimming pool. Venue staff recognized that the pool itself and the facility as a whole needed upgrades to stay competitive with other family entertainment venues in town. Among the identified upgrades was the need for a new audio system that would ensure high-fidelity background music while also being user-friendly to operate.

G&B Sistemas and Modulit Solutions partnered to design and implement the new audio system at the aquatic venue. Sound plays a crucial role in creating unforgettable experiences and communicating important information, even in challenging environments, which is why they based the new design around AtlasIED's [Atmosphere](#) platform.

"Sound reinforcement in acoustically challenging venues such as swimming pools is no small undertaking," said Maciej Rychta, Audio Products Manager at Modulit Solutions. "With our company's capabilities, we can basically tailor a system to



SOUND PLAYS A CRUCIAL ROLE IN CREATING UNFORGETTABLE EXPERIENCES AND COMMUNICATING IMPORTANT INFORMATION, EVEN IN CHALLENGING ENVIRONMENTS, WHICH IS WHY THEY BASED THE NEW DESIGN AROUND ATLASIED'S ATMOSPHERE PLATFORM.

meet the customer's requirements. When selecting equipment, we also consider the facility's conditions and the need for future expansion. AtlasIED's Atmosphere platform met all the requirements for superior sound and ease of use."

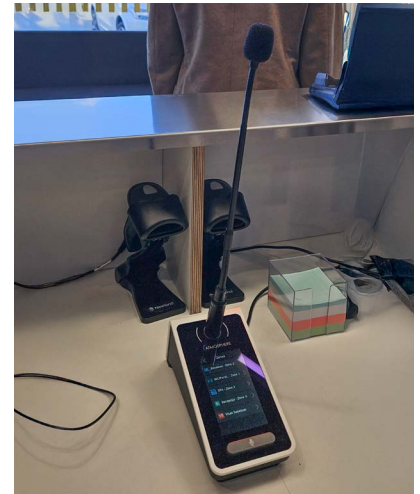
An [Atmosphere AZMP4](#) was well-suited to meet the venue's needs. The AZMP4 is a four-zone digital signal processor with an integrated 600-watt amplifier, serving as the heart of an Atmosphere audio control system. A built-in message player, virtual wall controllers, learning ambient noise sensing, Tilter Filter™, auto-gain, GPIO, room combine, and more make the AZMP4 a processing powerhouse.

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– Maciej Rychta,
Audio Products Manager at Modulit Solutions.

Management is simple via an on-board web interface optimized for common use cases. The control interface is device agnostic, responsive, and meticulously designed for an ideal user experience without sacrificing design freedom. In addition to Ethernet, built-in Wi-Fi allows tablets and other controlling devices to connect directly to the AZMP4 via rights-based access.

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PAGING THROUGHOUT THE AQUATIC CENTER IS INITIATED FROM AN ATMOSPHERE X-ZPS ZONED PAGING STATION.



Paging throughout the aquatic center is initiated from an [Atmosphere X-ZPS](#) zoned paging station. Equipped with a full-color 4.3" touchscreen, the paging station supports zone paging, all call, and custom group paging features, along with a high-quality gooseneck microphone. The X-ZPS also serves as a system controller for volume, source selection, message recall, and more. The swimming pool uses the paging station to make general announcements and notify participants during swim competitions.

The zoned environment helps minimize disruptions. For example, if information needs to be conveyed in the pool or changing rooms, then guests in other areas, like the spa, will not be disturbed. This intelligent sound zoning enables staff to relay messages effectively while maintaining a tranquil atmosphere for guests and ensuring the appropriate sound level in every situation.

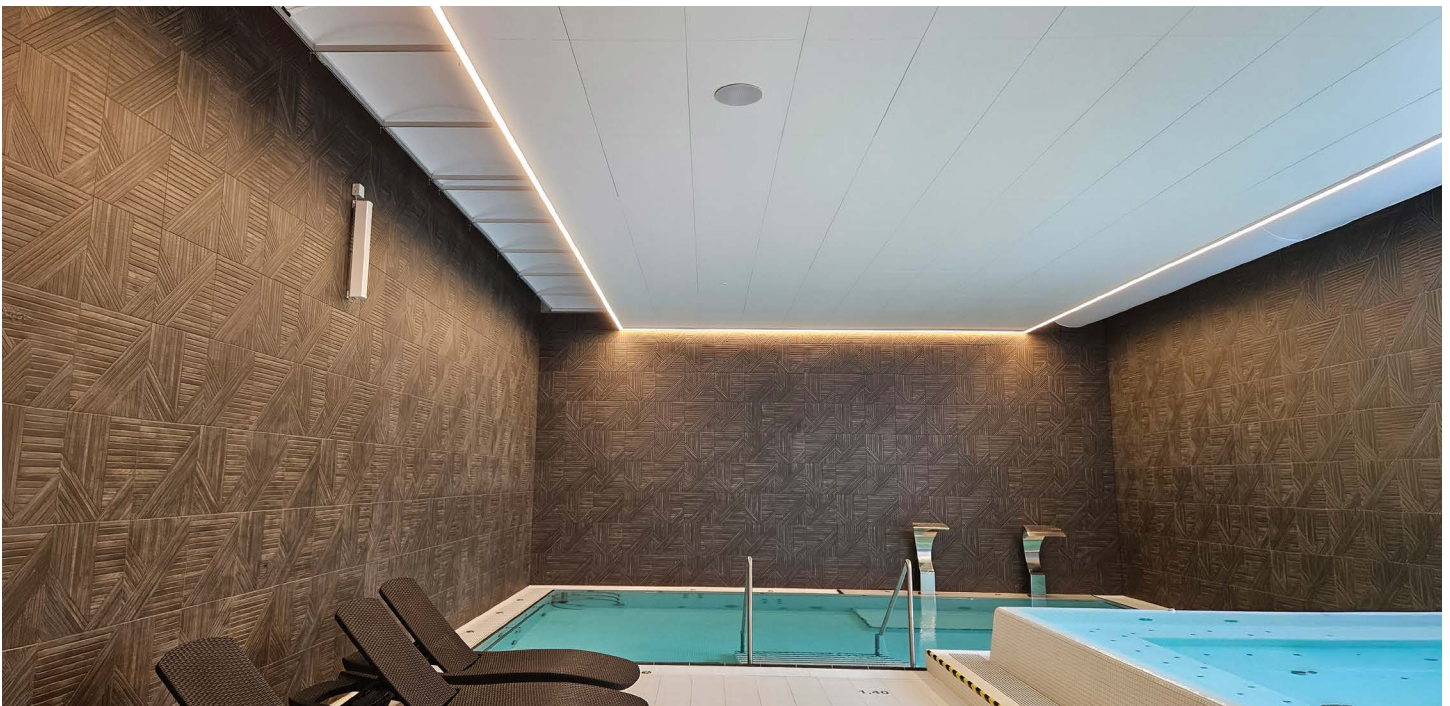
The project also included the installation of Atmosphere smart accessories, including the [Atmosphere volume controller](#) and [Atmosphere ambient noise sensors](#), which can automatically adjust the volume based on the noise level around the pool during both quiet and busy times.

High humidity, steam, and water splashes are common at the pool. To ensure reliable operation and consistent sound quality day after day, the Atlas+Fyne IsoFlare™ FC Series in-ceiling loudspeakers, the Strategy II series FAP in-ceiling loudspeakers, and the AS Series all-weather surface-mount loudspeakers were chosen for their ability to withstand harsh environmental conditions.

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ATMOSPHERE AMBIENT NOISE SENSORS, WHICH CAN AUTOMATICALLY ADJUST THE VOLUME BASED ON THE NOISE LEVEL AROUND THE POOL DURING BOTH QUIET AND BUSY TIMES.



The IsoFlare [FC-6T](#) is a wide-bandwidth, high-sensitivity 6" in-ceiling loudspeaker designed for the ultimate in fidelity, coverage, and aesthetics. Unlike standard discrete and 'coax' offerings, the IsoFlare driver exhibits excellent harmonic alignment between HF and LF sources, the effect of which is to deliver accurate and natural reproduction with superb tonal balance, ensuring seamless integration in any environment. Propagating a spherical wavefront, homogeneously aligned on all axes, the IsoFlare point source driver yields an even response throughout the listening area, a constant time delay over the entire frequency spectrum, providing exceptional off-axis performance.

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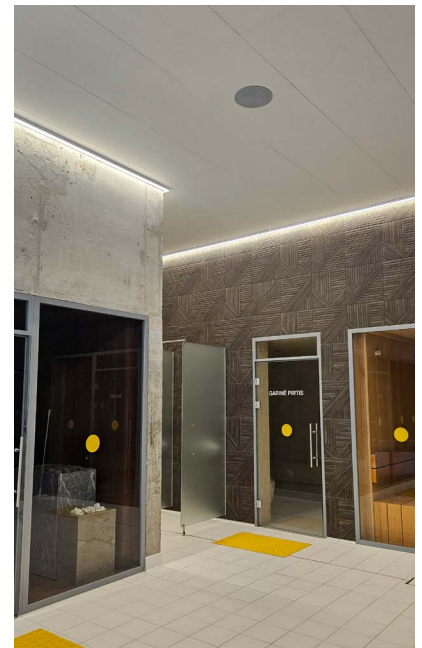
– Paulius Martinkėnas,
Events and Communications Manager for Kaunas Swimming School.

The [Strategy II series](#) FAP in-ceiling loudspeakers are high-performance, tuned and ported loudspeakers. They include one-piece quick mounts in an attractive and easy-to-install system. FAP loudspeakers are ideal for high-intelligibility voice, music, and signal reproduction in commercial, industrial, and institutional applications.

The [AS-10T](#) is a two-way compact surface-mount loudspeaker boasting an exceptional performance-to-size ratio for demanding foreground and background applications where durability, modern, understated aesthetics, and outstanding sonic performance are prerequisites. Featuring a high-excursion, weather-treated 10" woofer that seamlessly transitions to a 1" exit compression driver, the AS-10T



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THE ISOFLARE FC-6T IS A WIDE-BANDWIDTH, HIGH-SENSITIVITY 6" IN-CEILING LOUDSPEAKER DESIGNED FOR THE ULTIMATE IN FIDELITY, COVERAGE, AND AESTHETICS.

delivers a consistent and accurate broadband frequency response, both on- and off-axis. Equipped with a low insertion loss 60W transformer for 70V or 100V distributed applications, wattage tap selection and low impedance bypass are easily configurable via a rear-mounted slide selector switch with a security cover. The durable, scuff-resistant, high-impact ABS enclosure with UV inhibitor is weather-resistant (IP55) for consistent performance in adverse conditions, both indoors and out.

The Šilainiai swimming pool has reopened as a modern aquatic center, offering eight 25-meter lanes for swimmers, along with a new spa area featuring saunas and jacuzzis. It is now prepared to host major swimming competitions while also offering a top-quality recreational space for visitors from across Lithuania. The new AtlasIED audio system provides rich, balanced sound and enables staff to easily control and manage sound zones, including independent volume levels and the freedom to select sources for each zone.

"The transformation of our facility has been truly remarkable," said Paulius Martinkėnas, Events and Communications Manager for Kaunas Swimming School. "Thanks to the advanced AtlasIED audio system, the Šilainiai swimming pool has become not only a place for swimming, but also a space where guests feel comfortable. We can manage the sound system seamlessly, and each zone, whether the pool or the spa, provides the best sensory experience."



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THE ŠILAINIAI SWIMMING POOL HAS REOPENED AS A MODERN AQUATIC CENTER, OFFERING EIGHT 25-METER LANES FOR SWIMMERS, ALONG WITH A NEW SPA AREA FEATURING SAUNAS AND JACUZZIS.

AtlasIED PRODUCTS USED IN THIS PROJECT INCLUDE:

AtlasIED FAP40T

AtlasIED FAP42T

AtlasIED FC-6T

AtlasIED PM4FA-W

AtlasIED AS-10T-W

AtlasIED SM42T-WH

AtlasIED AZMP4

AtlasIED X-ANS

AtlasIED C-V

AtlasIED X-ZPS

AtlasIED DPA1202

AtlasIED MW100-HH