



***The Poseidon system
can save more than
just precious seconds***



Drownings are a significant cause of mortality, particularly amongst young children and especially with children under 5. It is estimated that there are 140,000 fatal drowning accidents per year throughout the world. Near-drownings occur 5 to 10 times more frequently, and 10% of them have serious neurological consequences.¹

In either case, swimmers aren't the only victims; lifeguards are as well. The stress of an incident could affect them for life.

The solution isn't just more lifeguards or better training. It's a better, faster means of surveillance and detection.

In public swimming pools and health clubs around the country, professional lifeguards face two daunting challenges:

- Firstly, it is humanly impossible to monitor all swimmers, all of the time – especially given the varying environmental conditions such as surface reflection and glare, as well as high noise and activity levels.

- The second challenge is reaching the drowning victim before it's too late.

To prevent death or lifelong injury, the resuscitation of drowning victims must be achieved as quickly as possible – ideally within 30 seconds.

*To this end,
lifeguards urgently
need a “third eye.”*



One that never blinks.

¹ Laboratory of applied anthropology, University René Descartes Paris V – Lifeguard Vigilance, Bibliographic Study, September 2001.

An aerial photograph of a swimming pool. The pool is filled with clear blue water. In the upper right corner, there are white, concentric ripples on the water's surface, suggesting a recent splash or movement. In the lower right corner, a person is visible in the water, their head and arms partially submerged. The pool is surrounded by a light-colored deck. The overall scene is bright and clear.

It can help save lives.



The Benchmark for computer-aided drowning detection systems

The Poseidon system is an intelligent system that uses proprietary computer vision technology to help provide constant surveillance of the pool and monitor the trajectories of swimmers.



The system analyses activity in the pool captured by a network of cameras mounted both above and below the surface.

In as little as 10 seconds, the system alerts lifeguards via a pager or a LED display panel and a supervision workstation when a swimmer is motionless or in trouble beneath the surface.



Real-time video images of the incident and its location are displayed (and recorded) immediately on a supervision workstation.

Our system was not designed to replace lifeguards. It was created with the express purpose of assisting them to save lives.



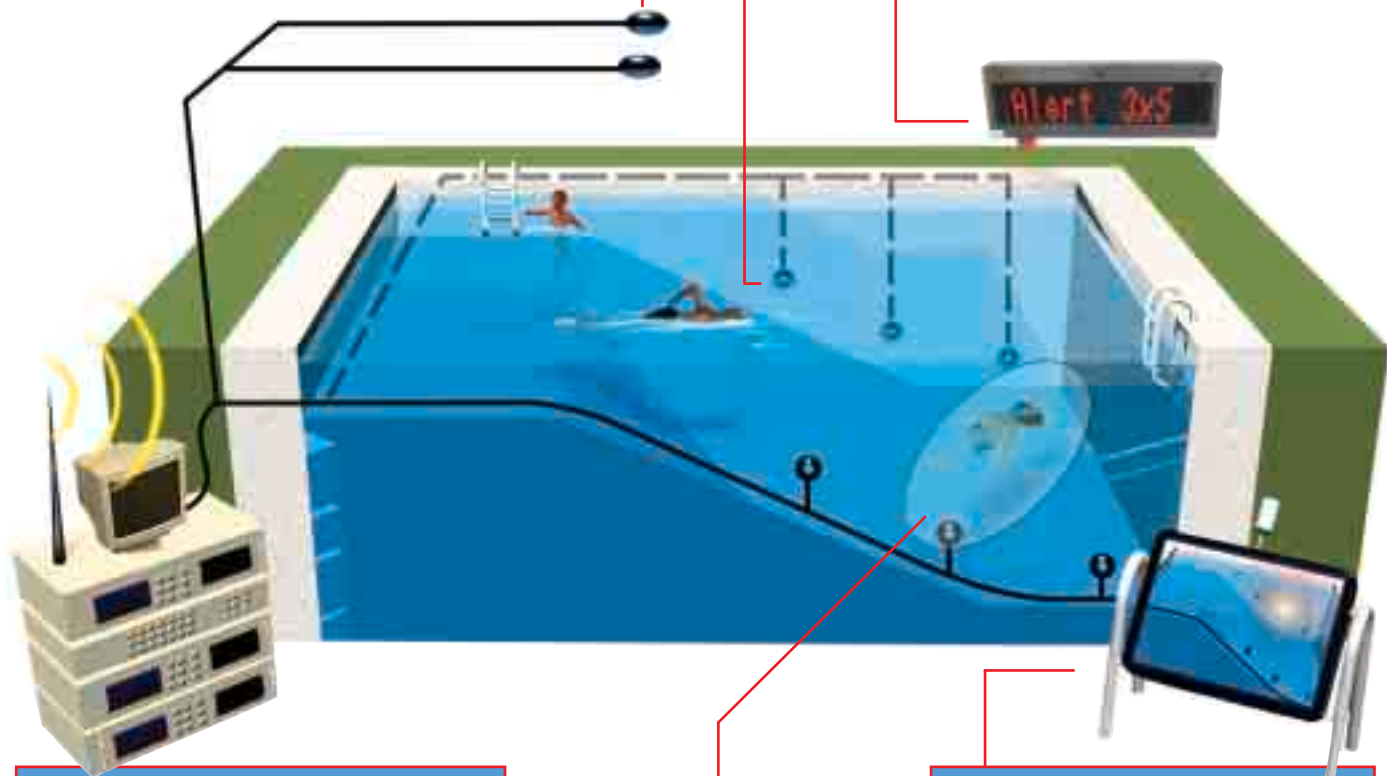
***Poseidon is the lifeguard's
third eye.***

CAMERAS

Poseidon uses cameras engineered for the demanding environment of the swimming pool. Mounted under the water in the walls of the pool for deep water, or overhead to monitor shallower areas, Poseidon's cameras provide a complete and overlapping view of the swimming pool.

LED DISPLAY PANEL

The LED display panel displays in real time the location of the swimmer in trouble and the elapsed time since detection. It is also equipped with an audible alarm. The panel is visible from 100 meters and is constructed of materials that resist corrosion and are water-resistant.



CENTRAL PROCESSOR

At the heart of Poseidon, the central processor unit manages and analyses the images from all of the cameras, tracking swimmers in the pool in real-time. When the system detects a swimmer in difficulty, it raises the alarm through the workstation and pagers.

A SWIMMER IN DIFFICULTY

The Poseidon system warns the lifeguards as soon as it detects a possible drowning.

SUPERVISION WORKSTATION

The workstation provides a way to control and visualize the operation of the system. A simple user interface allows operators to view images from the cameras and see alerts when they happen.



A company with vision

The Poseidon system didn't begin with the development of computer vision technologies. It began with recognising the urgent need for them.

As with many breakthroughs, developing vision technologies that could help save precious seconds in drowning incidents took years and long-term partnerships. The Poseidon system is the result of more than five years of research working in collaboration with international research centres on computer vision technologies for computer-aided surveillance.

Based on Poseidon's technology patents, the system and its components represent fundamental breakthroughs in computer vision, including real-time image processing, light-condition-independent computer vision, and the three-dimensional image analysis.

Developed under the watchful eyes of the world's leading aquatics professionals, the system has undergone extensive testing.

With an established base of installations in North America and Europe, with solutions for each customer – municipalities, schools, YMCAs, water parks, etc. – Poseidon is the benchmark for computer-aided drowning detection systems.

“We feel as though the system has saved the little girl’s life. The pool at the time was very busy. The lifeguards were at full stretch. We can say the extra pair of eyes identified her. This is the first time we’ve had to use it in the two years it has been installed. Everything worked according to plan.”

■ **Brian Evans**
Gwynedd Council leisure officer (Bangor - UK)
BBC News - 31 August 2005

“Based upon our review of the system’s technical capabilities, I am satisfied that this product can significantly enhance aquatic safety operations for aquatic facilities where it is installed.”

■ **Mr. Jeff Ellis**
President, Jeff Ellis & Associates, Inc.
International Aquatic Safety Consultants (USA)

“This is one of the most exciting developments in pool safety to hit the market that I have yet seen! The technology is sound – we have seen it working. The system does not replace the lifeguard, but helps the lifeguard to be even more vigilant and on the ball. This is new technology at its best. Swimming pool drownings could one day become a thing of the past thanks to Poseidon!”

■ **Ms. Linda Bishop Bailey**
ISRM Consultants (United Kingdom)

“The Poseidon system helps lifeguards get over the problem that you can’t monitor all of the swimmers all of the time.”

■ **Mr. Andrew Ebben**

**Managing Director IQL, Royal Lifesaving Society
(United Kingdom)**

“To me, your system appears to be one of the tools that will allow officials and their associates to wipe out the remaining uncertainties.”

■ **Mr. Jean Paul Delanoy**
Châtillon-Malakoff Swimming Pool Manager
(France)

“I am very impressed with the system. I know that the Poseidon system works and that it will be a significant technical enhancement to swimming pool safety.”

■ **Mr. Peter Mills**
Group Director of Quality Leisure Management
(United Kingdom)

“I know that the Poseidon system works and that the Poseidon System will be a significant technical enhancement to swimming pool safety.”

■ **Mr. Peter Cornell**
Head of Aquatic Safety, Royal Society
for the Prevention of Accidents
(United Kingdom)

Warning

The Poseidon system is intended to complement lifeguards, not replace them or reduce their responsibilities or vigilance. Poseidon does not save people from drowning - lifeguards do. Under no circumstances should the presence or use of Poseidon result in the reduction or modification of lifeguard staffing or duties as required by regulation or normal practice. This document is for information purposes only. VISION IQ/Poseidon reserves the right to modify the specifications of Poseidon at any time.



Poseidon
THE LIFEGUARD'S THIRD EYE

Vision IQ/Poseidon

3 rue Nationale
92100 Boulogne – France

Tél: +33 (0) | 55 20 55 55

Fax: +33 (0) | 55 20 55 50

www.poseidon-tech.com