

The Science of “Accelerated” Swimming Improvement

How integrated audio and video technologies are critical to the future of swimming athletes and coaches worldwide.



autocoach.
Wireless integrated sporting systems

EXECUTIVE SUMMARY

- World-leading **Swimming Real-Time Timing Technologies** company used in 30+ countries by thousands of athletes and coaches
- Two key products – Timing Watches and Timing Scoreboards – give all-in-one-place **audio, video and coaching feedback**
- Easy, simple setup. Avoids the burden of timekeepers and record-keeping – everything is **automated** with Autocoach SwimTech.
- Applications at all levels from junior training up to leading Olympic teams – get started immediately.
- Affordable pricing for public pools, athletes, schools and coaches (subscription available in most countries) + free training modules.
- R&D facilities in Australia and testing on many of the world’s leading swimmers.

SCIENTIFIC RESEARCH FOR COACHES

Autocoach 55-minute presentation will share the significant scientific benefits and academic/university research supporting the power of real-time integrated and automated feedback for Swimming athletes and coaches. Science has shown that swimming improvements that can be improved by up to **30% in XXXX over 12 months** by using real-time integrated human performance feedback.

Our presentation will share the scientific research and evidence focused on human performance and swimming focused on:

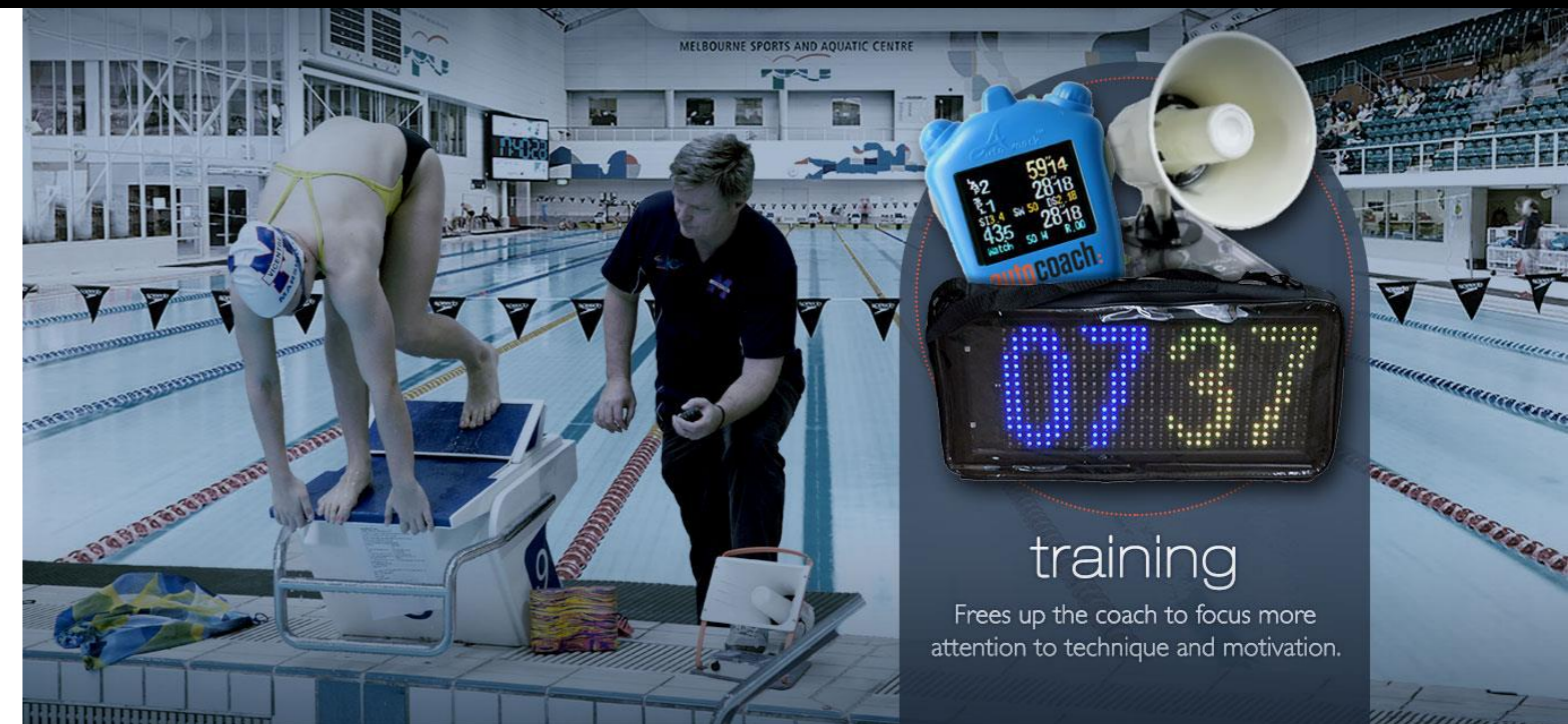
1. Accelerated skill development & technique
2. Improves coaching productivity and efficiency
3. Accurate technique identification in-motion for swimmers
4. Increase motivation and maximize performance

MAJOR BENEFITS

Time Keeping Solution: Unlike conventional stopwatches our performance stopwatch can measure velocities as well as times over a range of courses, transmit data in real-time and visually and audibly present the results in real time. We can understand how the athletes doing each lap, not just historically what they did. On a 50M pool, we divide the lap into four segments, (15, 25, 35 and 50M) and splits are done when the athlete's head passes the first three markers, and the stopwatch calculates the average velocities over each zone. This used to require video analysis by a sports scientist.

- ✓ Our wearable devices allow coaches to talk to athletes whilst swimming, rather than when they have finished. Athletes can hear the ratings, splits and velocities measured by the performance stopwatch whilst swimming.
- ✓ Our wearable device can automatically measure and log a selection of metrics that include rest time, push-off velocity, stroke rating, lap time, turn rotation time, stroke index and more. These settings can be configured by a coach with up to sixteen athletes at once. Selected metrics are spoken to the athlete whilst swimming in addition to being wirelessly transmitted.

Customized Swimming Scoreboard: Modular race meet systems and large LED multifunctional displays that are compatible with this technology allowing multiple uses for the equipment.



LIST OF PRESENTATION OBJECTIVES AND SUMMARY OF CONTENT

Overcoming the challenges presented by the aquatic environment to improve efficiency of technique improvement, times and also ensuring engagement and team building in swimming can at times feel very isolating. Our presentation focuses on the science and technologies of accelerated swimming improvement and accelerated swimming learning.

Objective 1: Integrated Real-Time Feedback: There are a broad range of measures applied to swimming athletes to get a broader understanding of the efficiency they have in moving through water. This includes, but is not limited to; strength tests, stroke length, stroke rate and swimming performance. Due to the aquatic barriers present in the sport, time-based measurements are mainly utilised over, physiological and biomechanical determinants, on a day-to-day basis in the athletes training program

Objective 2: Science & Academic Research: Underpinning the Future of Swimming Accelerated Improvement: We present scientific research and how Autocoach embodies best practice and coaches on the science of swimming.

Objective 3: Working Together: By building a wirelessly integrated sports ecosystem, using products that use various modes of result delivery, we can capture visual, time, and audio-based results that are instantaneously shared to swimmers and coaches.