

A tale of **Ninjas** and **Samurais...** from Australia

Atomos is well known as a manufacturer of video, broadcast and cinema equipment but don't be fooled by its branding into thinking this is a Japanese firm. The team behind the quirkily named Ninja, Samurai and Ronin Apple ProRes and Avid DNxHD 10-bit 422 recorder/monitors has been based in Melbourne, Australia, since it was co-founded in 2010 by former Perth resident Ian Overliese and Sydneysider Jeromy Young. Will Thompson, Atomos Business Development Manager, tells the story.

The road to Atomos started for Ian and Jeromy long before the incorporation of the company in 2010. As Ian, the technical co-founder, stated in an interview with Rick Young in 2011: "[the first Atomos products, the Ninja 1 and Samurai, were] a culmination of everything I've learned from my entire career".

Via the UK and Japan

The journey started for Ian as the son of a TV repairman. Ian spent his childhood learning from his father and tinkering with electronic components during the boom years of personal computers. These years of self-learning and hobby electronics led on to a degree in Electrical Engineering at

Curtin University from which Ian graduated on the back of a thesis in 3D graphics.

The ink barely dry on his testamur, with youthful exuberance, Ian jettied off to the UK where VideoLogic threw him in at the deep end, having him work on the first motion picture video capture board for Windows 3.1 VFW systems and PowerVR. After nine years in the UK with VideoLogic, then 3DLabs and ARM, there followed a short stint in Sweden working on SDI over fibre optic (the internet backbone) before returning to a role at a then unknown company in Melbourne, Australia. Ian, as Director of Hardware Engineering, spent the next six years steering Blackmagic Design's engineering team. During his third year there Ian was joined in management by Jeromy, who had been brought in by the fledgling company to manage Global Sales and Distribution.

Meanwhile, Jeromy's journey to Atomos was no less adventurous and representative of the globalised world we now inhabit. After finishing a scholarship/cadetship at BHP and Wollongong University in Materials and Manufacturing Engineering, where he obtained honours with a thesis on Microwave Sintering of Ceramics, Jeromy was seconded to Osaka University to replicate his world-first thesis results. After the six-month tenure, he decided a short stint in Japan teaching English was the next logical progression. This 'short stint' turned into seven years and a very successful move to Canopus, a leading manufacturer of DV video cards at the time. Jeromy started in product design before making a serendipitous jump to sales. Through a series of promotions he advanced to the role of Global Sales Manager before

the acquisition of Canopus by Grass Valley prompted a return to Australia via England.

The time in Japan had not only given Jeromy a raft of experience but had also engendered a love of the Japanese manga character Atom Boy – a fascination that would later be reflected in the start-up company's choice of company and product names (Atomos is based on Atom Boy and the model names all come from Japanese folklore characters).

At Blackmagic Jeromy's sales acumen and global distribution experience proved to be a powerful business partner to Ian's engineering skills and the two enjoyed watching their work develop into yearly earnings of more than US\$50 million for their former employer.

Breaking away

Not ones to stick with the safety of management jobs in an established company over risk and adventure though, Ian and Jeromy soon decided to forge their own destiny. With a strong interest in music the duo looked at entering the high-end speaker space – even submitting a patent application for a unique speaker design. However, in the end, they settled on their concept of a versatile video recorder/monitor that would record into the popular editing formats of Apple's ProRes and Avid's DNxHD for the launch of their company Atomos.

Similar products were already on the market but Jeromy and Ian thought they had the market understanding and technical nous to pull off a strong competitor product and drive the market in their desired direction. Specifically, they thought size, power consumption, usability and, most importantly, a screen, were key features the competitors were lacking. The desired direction was, and remains, to give consumer-level cameras the recording functionality of professional-level cameras at an affordable price for the YouTube/Vimeo



The HDMI compatible Ninja 2 on top of a Canon XF300

generation creative.

At this junction in the story Jeromy and Ian would love to be able to say "and abracadabra the Ninja 1 was born" but the reality was very different. Although experienced in their respective domains, it was the first time the two had captained the ship and they were met with waves of new challenges to solve: from negotiating with Apple for access to the ProRes codec, to parts purchasing, navigating the manufacturing noodle bowl of China, developing prototypes and understanding plastics and metal. When asked for his hindsight impression of this period in the company's annals, Jeromy unabashedly observes: "It was all hard!" Pushed to answer if he would do it again though, the reply is no less enthusiastic: "Yeah, I would. I get to use my manufacturing knowledge, learn about global sales, gain marketing experience and leverage my interest in products and getting them to market."

“After two years in development, Atomos' first product, the Ninja, was launched at IBC 2010 and started shipping before NAB 2011.”



The first Samurai on a shoot with a RED Epic camera





The AtomOS allows for Cut & Tag editing from the Ninja 2 onwards

department, Ian focused on refining the Ninja and designing an SDI counterpart while Jeromy concentrated on expanding Atomos' presence at industry conferences, trade shows and events.

New launches

The growing Atomos team has since then launched new products at each of the annual NAB trade shows hosted in Las Vegas. In 2011, the Samurai 1, Atomos' answer to the needs of the high-end video camera market was announced with mini-BNC connectors for HD-SDI and a 5.0inch 800 x 480 pixel touchscreen as well as Smartlog editing functions and D-Tap/AC power compatibility.

2012's launch, the Ninja 2, boasted an HDMI loop out port, a higher quality 4.3inch 800 x 480 pixel touchscreen, Smartlog editing functions, Monitor Assist functions (Focus Peaking, Blue Only etc) and D-Tap/AC power compatibility and, of course, recording 10-bit 422 Full-HD to Apple's ProRes and Avid's DNxHD codecs.

Due to Ian and Jeromy's focus on expanding the engineering team, output increased and Atomos launched its HDMI to HD-SDI and HD-SDI to HDMI Connect converters between the 2011 and 2012 NAB shows at IBC 2011 in Amsterdam. With both a wart-less AC version and a battery-powered version, as well as a Test Program Generator and start/stop trigger pass-through, the Connects have proven popular with broadcasters and in-the-field technicians.

Over the same period, sales spread to the Middle East, Africa and Asia and the major camera-makers – ARRI, Canon, JVC, Nikon, Panasonic, RED and Sony – started to open up more of their cameras to provide clean HDMI and stop/start trigger function integration to the new Atomos products.

New staff were brought in, offices outgrown and the rack-mountable broadcast studio and OB van-focused Ronin recorder/monitor was added to the Atomos stable of products.

Samurai Blade

In April 2013, at NAB in Las Vegas, Jeromy and Ian announced their most advanced monitor/recorder yet: the Samurai Blade. With a 1280 x 720 pixel 325dpi IPS touchscreen, full BNC connectors and a new OS, now titled AtomOS, which included a suite of monitor-assist, waveform and Vectorscope functions, the Samurai Blade was a powerful shot across the bows of their competitors' boats.

Within months of its launch, the collection of Atomos recorder/monitor products has taken 80% of the recorder/monitor market and Atomos has become an international company with offices in Australia, the USA, Germany, Japan, Hong Kong and China.



Ninja 2 with its large set of out-of-the-box accessories



Atomos HQ staff enjoying a photo shoot

Not happy to rest on their laurels, the close of 2013 found the now 30+ strong Atomos team firmly looking ahead, planning even grander schemes and products for their vision of the future for broadcast and video production nerds.

Looking to the future

Jeromy provided the industry with his insider's outlook on the future of 4K in a widely read and circulated article published in several publications prior to IBC 2013. In it he stated unequivocally that Atomos is working towards the 4K future but, despite the horde of new top-end 4K cameras on the market, he believes the reality is that 4K won't become a mainstay of households for another couple of years.

Jeromy reminisces back to the early 2000s when High Definition was the latest buzzword: "In 2000, Australia was hosting the Sydney Olympics and Panasonic was shouting from the treetops how they would be shooting the Olympics for the first time in High Definition. The reality was Panasonic had two HD cameras with a multitude of wires going back to a semitrailer-sized truck." Jeromy goes on to say: "Twelve years later the Western world has only just moved to HD on most channels and major markets like China and India are still primarily Standard Definition. I'm not saying it is going to take 12 years for 4K to reach the average household but you have to think: Was it the move from SD to HD or the move from CRT screens to plasma and LCD flat screens that really precipitated High Definition's acceptance?"

That Atomos helped progress HD codecs from semitrailers to standard 2.5inch hard drives is not lost on Ian and Jeromy. Intent on doing the same for 4K and whatever other value of K the industry subsequently jumps on, Ian and Jeromy are also looking at other inefficient aspects of current acquisition and post-production workflow processes.

"There are so many parameters that are currently corrected for at the post-production stage that could be controlled at the acquisition stage if the cameraman and director were given the correct tools," comments Jeromy. "It makes sense in both efficiency of workflow but also for freeing the post guys to focus on the creative aspects of post-production. This is why we have made a move into monitor screen colour calibration and co-produced the Atomos Spyder colour calibration tool for the Samurai Blade with DataColor. Calibrating screens prior to acquisition makes the post-production colour normalisation process across multiple shots more efficient. Our goal is to make the best and most affordable tools for controlling these parameters at the acquisition stage."

What this means for the Atomos roadmap is still under wraps with Jeromy only giving a cheeky wink and a 'watch this space' comment. Given Atomos' past history of innovative products with unusual names, one can only speculate what Japanese fable characters will be joining the Atomos stable of Ninjas and Samurais next. As they say in Japanese 'Omachi Shite-Orimasu' – we are waiting!

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The Ninja is born

After two years in development, Atomos' first product, the Ninja, was launched at IBC 2010 and started shipping before NAB 2011. It featured a 4.3inch 480 x 272 pixel touchscreen, HDMI in from the camera's sensor and the capability to record to Apple's ProRes codec and later Avid's DNxHD codec to affordable solid state and spinning drives.

The American market was first to pick up on the Atomos Ninja, with TecNec and B&H coming on as distributor and major reseller, respectively. Europe soon followed, forcing Jeromy to frantically criss-cross the world setting up Atomos' fast-growing distributor and reseller network.

With the newfound cash flow the team of two full-time and two part-time employees was able to expand and move to a dedicated office space in the trendy suburb of Windsor in Melbourne's south. With more firepower in the engineering

