

The ELC Lighting bv Story



Having marked its first quarter of a century, during which it firmly established two renowned brands, ELC Lighting has entered a new phase of its existence ...





Today, the company has the same strong and committed team, a new management structure and a reinvigorated focus on product development – and is ready to face the next 25 years. Here we take a look at the company’s journey, from the first spark of an idea to today’s hugely successful operation . . .

The Idea

Way back in the late 1990s, a young man working in the garage of his home in Eindhoven in The Netherlands came up with a clever new idea. He designed the prototype of a tool which would allow theatre technicians to take direct control of lights in their rigs. The tool was necessary because, as the young man had found through his own experience at his local theatre, even the most basic checks and changes to a lighting rig – levels, colour or focus – required access to the master control system. Not only did this take up valuable time and resources for the lighting team, but it was also fraught with risk. Why (he thought) was that necessary? Why not have direct, remote control?

Joost van Eenbergen, that budding inventor, had grown up in a stimulating environment. His father, Frans, was co-founder and lead design engineer for EELA Audio (the first ‘E’ was for ‘Eenbergen’), a successful Dutch manufacturer of broadcast and communications equipment, which he formed with Pieter Bollen in the mid-1970s. As a result, the family home in nearby Gemert was often filled with bits and pieces of Frans’ work in progress, the products that would equip radio stations worldwide, from the BBC to Beijing. Joost became fascinated with the exposed innards of electronic technology and, with his father’s willing encouragement, learned a thing or two along the way.

As well as his day job, Frans was also a keen supporter of his local theatre, and young Joost would help out when his father was involved, at an amateur level, with their annual pre-‘Carnaval’ variety show, ‘De Bonte Avond’ (The Colourful Evenings). Naturally, the young Joost’s initial introduction to show production was through his father’s forte – audio – but fortunately (for him and many others along the way), sound was soon outshone. “At some point,” he recalls, “I was shown the lighting stuff, and I was gone from audio! I think I was 10, 11, or something like that. That’s where it started.”

Of course, he well remembers the lighting kit he had access to at Gemert’s 400-seat De Eendracht theatre. “Strand lights, a very old ADB desk, and ADB dimmers – 36 channels.”



Technical Toolkit

Joost’s upbringing amid the alchemy of electronics and theatre production was soon underpinned with computer skills. “I think I was 12 when I first started working with my Commodore 64 – that’s where I learned programming,” he says.

Introduced in 1982, the Commodore 64 was the first computing experience for an entire generation, and would go on to become the highest-selling computer model of all time. With 64 KB of RAM, it brought to the mass market the kind of computing power with which NASA had put men on the moon little more than a decade before. For a youngster with a leaning toward the technical, these were exciting times.

“And, of course,” he continues, “I wanted to have a DJ set – lights, controls. So we made a device that we could hook up to the Commodore to control lights. That was where that whole thing with electronics and lighting really started.”

Frans continued to guide and support his son’s budding interest. “I could discuss ideas with him,” says Joost. Although at the time a career seemed a distant concept, he was vaguely aware that his future might entail running a rental company, or perhaps making dimmers or something along those lines.

By the early 90s, he began working occasionally with local lighting rental companies and even bought his first luminaires – some PAR 64s.

At college, he studied electronics and computer science at the HTS (Hogere Technische School or Higher Technical School) in Eindhoven’s University of Applied Science. “I learned a lot,” he says.

All this time, his interest in theatre grew. He became involved with lighting design, creating fully programmed



Cover - Silvio and Joost with Green-GO’s PLASA Award for Innovation, 2011.

Top - Joost (right) with his father Frans.

Left - On the trade show circuit for ELC: Silvio with Thomas Tan (AudioLight Asia) at PALA 2005 in Singapore.

Facing page - 2022: Joost marks the 10,000th WBPX and BPX backpack units with these special gold editions.



looks for a number of live bands and busy proms events. "These were large shows," he recalls, "with lots of people on stage. I was not just busking, but really listening to the music, and programming the whole thing."

However, when the time came to enter the world of work, the plan shifted. "It was a hungry time for software engineers," says Joost "and that was a problem for my father, because his software engineers were taken away. He needed me, so I didn't apply for a job - I went to work for him. It was not my plan. The plan was to go into lighting. But looking back, the good thing about it is that I learned how to make a product first."

It turned out to be a valuable experience: it was while working for EELA Audio that Joost came up with the idea that would point the way to his future - and influence that of so many others. The innovative concept was a remote transmitter, a 16-button handset, which transmitted its code via RF to a receiver connected between console and dimmers. This, Joost felt, was a useful tool. It would become focusHAND.

Sales Drive

Frans, ever supportive, also liked the idea and suggested selling it. The trouble was that his own market knowledge began and ended with audio. The lighting world was something else. Still, Frans understood from his own experience that designing a product and selling it were two different jobs - and he advised Joost accordingly. Then, thinking about EELA Audio's global sales network, Frans remembered one contact who also sold some lighting. He'd ask him what he thought . . .

Much as Joost van Eenbergen would a generation later, Silvio Cibien grew up surrounded by the magical possibilities of electronics. Silvio's father owned the Radio-TV shop which served the local community in Vallorbe, Switzerland. Every day after school, Silvio would pass his time at the shop before heading back to the family home. In this way, he became familiar with

electronics, and with the basic mic-and-two-speakers PA systems that his father would provide, free of charge, for various local events.

With the stimulus of radios, televisions and hi-fi systems in various states of repair or presented for sale, Silvio's young mind naturally absorbed some knowledge of technical matters. However, it was not the valves and circuit boards that stimulated his young mind the most: rather, it was the practicalities of business and the nice cars that the sales reps would park outside his parents' shop. After completing his studies in radio electronics, he worked at first for his father, but quickly found himself behind the wheel of a nice car, representing the Swiss distributors of pro audio brands such as Shure and Teac-TASCAM.

After some years of this, his desire for greater independence (or perhaps for an even nicer car) led him to establish his own distribution company. Animatec, founded in 1986, introduced him to EELA Audio, as he began selling the brand's radio wares during Switzerland's boom in non-state-owned radio transmitters - and another staple product which sold thousands of units. "At that time, EELA's Reportophone was THE toolkit for reporters, allowing them to hook a microphone on a phone line. They sold thousands of them," Silvio recalls.

In the following years, Animatec's portfolio would grow to include many of the leading professional sound and light brands of the time, including Clay Paky, MA Lighting, D.A.S Audio, Ecler and Prolyte. A regular presence on the global trade show circuit throughout these years, Silvio had come to know his counterparts at pro light and sound sales companies around the world. In 1998, it was to him that Frans turned.

Small Beginnings

"Frans told me 'Look, my son did this. What do you think?'," Silvio recalls, "and he explained the product. I thought it looked very promising. So, I asked about quantities - and he told me they only had three prototypes."

Having grasped just how new this idea was, Silvio met with Frans and Joost together and gave some useful insights into distribution networks, pricing structures and trade margins. He agreed to help sell it in Switzerland - but with his contacts worldwide in Clay Paky's distribution network, he knew he had the potential to contribute on a much larger scale. With this in mind, Silvio proposed that he be trusted to sell the new brand globally. And trusted he was. A new entity, Anima Network, would be created to drive ELC's sales. The three shook hands on the deal and - on the basis of that handshake - Silvio and Anima would be at the forefront of the company's sales network until the arrangement was formalised 25 years later, as we shall see.

ELC - for 'Eenbergen Lighting Company' - was formed. With hindsight, we know that ELC would go on to sell thousands of focusHAND remote systems, including significant OEM production for major lighting brands such as ADB, ETC and Strand. At this early stage, however, Joost's expectations





were modest. "I thought, well - with some connections, I might sell maybe 10?"

To take the important first step in this sales effort, Silvio called a friend in the USA - Norman Wright at Group One - who planned to exhibit at the forthcoming 1998 PLASA Show at Earls Court in London. Silvio explained his aim, and asked, could he use a single square meter of his booth? Norman agreed, and the fledgling ELC Lighting made its first market appearance. "Between June and September, I had a friend making a flightcase like a suitcase," says Silvio. "Inside was a Pulsar Mimic panel, with 36 small lamps - analogue control. It also had a Pulsar 36-channel DMX converter and the focusHAND remote control so I could easily demonstrate it."

The simple demo worked perfectly. "We immediately had a few distributors interested," Silvio recalls. "The first was Starlike from Finland, then Light Partner from Denmark and Impact [now Axente] from France. And those three companies are still our distributors."

Despite the early interest, it would take Silvio another year on the trade show circuit - including LDI in Phoenix, ProLight+Sound in Frankfurt and SiEL in Paris - for customers' interest to solidify further. "Distributors would wait a year to see if it was a serious product," he says. "In Germany, I was already a friend of Heinz Siller [of cast C.Adolph & RST Distribution]. He said, 'We'll wait' - and I waited. I've never tried to push in all my business life."

Full Time

While focusHAND slowly gained traction, Joost continued to work for EELA Audio. However, ELC Lighting was beckoning. With Silvio out in the market during '98 and '99, customer feedback and requests were soon leading to new ideas for Joost to develop. His understanding and his ability to respond quickly were impressive, and progress was swift.

One of the first requests was for a DMX recorder (although there were a number of replay units on the market, they were specific to the console manufacturers). FocusHAND was joined by focusBRAIN, which could save scenes. There were requests for a wired version of focusHAND, which became the AC 612 wall-mount 12-channel DMX controller. Joost explains, "The idea was to make a toolbox, to have creative tools to solve the issues that people would have."

Also introduced was the showSTORE DMX real time recorder/player and a full range of DMX accessories including splitters and mergers - what Joost and Silvio refer to as 'standard products'. Silvio says, "We said we didn't want



to make a splitter or a merger, because there's no innovation there - you find them everywhere. But a distributor would say, 'Okay, a splitter is nothing special, but if we have a range of DMX accessories in our catalogue, why should we look for another brand?' A distributor doesn't want to tell a customer to buy another brand or look elsewhere. That's why we also included those products."

As momentum grew for ELC, so did the need for commitment. Joost recalls, "I said to my father, 'I want to go full time with this', and he said, 'You can do it, but you need to plan it properly. And if it fails, stop - do something else. Take five years: if it's not working after five years, stop.'"

But more change was coming. At the end of 1999, internal issues at EELA Audio led to Frans deciding to leave, and he sold his shares in the company for one guilder. Joost relates what happened next: "He wanted to join me at ELC, but not as a partner, as an employee. So he did, and he was always an employee. It was my company, my decisions."

Ethernet

In time, Joost would take ELC Lighting into the area of technology for which it is now renowned: Ethernet networking. Back at the turn of the millennium, Ethernet was starting to be used in event production. The first version of Art-Net, the Ethernet streaming protocol from Artistic Licence, had been written in 1998 as a solution to the ever-increasing numbers of DMX channels required by feature-rich fixtures which were becoming common in the lighting rigs of the time. Data needs were snowballing.

"Ethernet was becoming a thing, but it was still something very strange and people had no idea what was going on," says Joost. "In 2000/2001 at large shows or tours I saw them using Ethernet networking, but really just as a multicore, to transport data. I saw that the technicians could view some stuff, but had no option to actually do anything. So I had the idea: give the backstage technicians control. Because the operator only has responsibility for pushing buttons at the right time, not to keep the rig running - that's somebody else's job."

Joost saw the possibilities in networking because it could provide more connections on one line. At the time, networking technology was considered difficult and



Left - Silvio's father Jean at work.
Top - Silvio Cibien - the man behind the sales drive!
Facing page - Green-GO training at the Gemert HQ.



expensive, requiring the use of dedicated PCs. "I dove more into that," says Joost. "I didn't know Ethernet well, but I started learning more, and I found you don't need a big PC to do this, because the data rate that we're sending with DMX, it's like nothing. So I came up with a design for the Node4." Whereas other systems of the time were using embedded PCs, ELC's Node4 was based on a processor that cost seven guilders (at the time, a little more than \$2.00).

The Node4 was the company's first Ethernet product. It offered data splitting, merging and backup when programmed using a new software package which has been at the heart of ELC's Ethernet lighting toolkit ever since – the free-to-download dmXLAN software.

The node4 could be configured via the front panel controls for basic operations, but with a PC running dmXLAN control software connected to the network, advanced functions were available. The PC was only needed during configuration, and for monitoring nodes and universes and fixture management as required.

"That was the difference," says Joost of the Node4, "everything was embedded on one circuit board, with no separate connections needed. The network gives you the opportunity. You have multiple destinations on that one line, and everything's available. That really drove where we were heading."

When the Dutch king Willem-Alexander married in February 2002, Joost was watching from home as the celebratory concert production – using his first prototypes – was broadcast live. ELC Lighting had entered the world of Ethernet networks.

Cost Aware

Today, more than 20 years later, ELC offers advanced solutions as to how DMX can be distributed by a modern Gigabit Ethernet network with its GBX Distribution System. And one notable feature of this – as with all ELC's solutions – is cost-efficiency. Nothing is over-designed – solutions are elegant and practical.



Their comprehensive range of Ethernet nodes use Art-Net, sACN and ShowNET as standard protocols. The most advanced is the dmXLAN node8GBX, which offers eight fully programmable DMX ports and a dual Gigabit port switch with user interface. The dmXLAN software also gives access to remote programming and monitoring of the node (and up to 15 of its 8-port slave units) including data splitting, merging, soft-patching and backup.

What's more, the dmXLAN nodeGBx system also offers full redundancy for the DMX system – simply by feeding the end of the DMX run, previously the last single point of failure risk – back into a nodeGBx unit. Setting this port as a DMX backup port ensures a smooth (and extremely quick – less than 50ms) take-over in case of any failure in the DMX run.

Another recent development in the dmXLAN platform has been the incorporation of QR codes. Using the dmXLAN QR app (iOS or Android) it is now possible for users to address RDM-enabled DMX fixtures simply by entering a fixture number in app and scanning an RDM-QR code – another major saving in time and resources.

As Ethernet capability has grown in line with data requirements, ELC's lighting network tools have been a triumphant success. As the business blossomed, it made money available for new equipment and systems. Investments included new in-house surface-mount technology, a capability that not only expedited manufacturing, but also enabled relatively fast and affordable prototyping. And this gave the team the opportunity to try something new . . .

"In 2010 I was in Montreal seeing our Canadian partner, André Girard," says Silvio. "We went to visit the technicians at Cirque du Soleil, to explain ELC's work with networks. They suggested we use our Ethernet network to control cue lights."

Talking Points

Cirque du Soleil's suggestion was that instead of using one dimmer channel just for a lamp backstage to give lighting signals to the technicians, it should be much easier to run this command over Ethernet. "I'm not an engineer at all," says Silvio, "So I came back to Joost with this request. When the request comes from Cirque du Soleil, you feel you should take it seriously!"

The suggestion slotted in to Joost's wider thinking, and he immediately replied that yes, it was possible – but then so was much, much more . . . He spent the next six months developing the digital communication system that would become the company's second major brand, Green-GO.

"We'd already had the idea for Green-GO for a long time," says Joost. "It was always there in the back of my mind, because with broadcast audio, my father's work was always to do with communication, with people's need to talk between locations. And now, with my knowledge of networking, I knew that with the network as your backbone, you don't need a central unit."

This utilisation of Ethernet network technology was the key

differentiator and stand-out innovation of the Green-GO comms system. It meant that, unlike its competitors, Green-GO would have no vital (and expensive) matrix at its heart – no single point of failure. What's more, in line with the established ELC ethos, the system was designed with cost-efficiency in mind. It was – and is – linearly scalable. It would serve from the very smallest to very large applications. Systems could be added to over time, as needs grew, without having to reinvest from scratch.

"It was basically the way I think about a lot of things," Joost explains. "I try to simplify it and don't make it fussy. It's just data packets. It's thinking about things differently." He adds, "At the time, I did think 'Okay, this could be big'. DMX networking is fine, but there were not many intercom providers – it's a much more limited marketplace."

Being affordable, scalable and reliable, it quickly drew attention, scooping up a prestigious PLASA Award for Innovation on its launch in September 2011. This was quickly followed by another distinction – Best Debuting Product of the Year Award in the sound category at LDI in Orlando. As a result, Silvio said at the time, "we started signing up regional distributors in the USA on the booth".

Better was to come: the following year at LDI 2012 in Las Vegas, Green-GO won ESTA's Rock Our World Award – and as ESTA's Mike Wood said at the time, "In all the years of the Rock our World Awards the Green-GO received the quickest agreement as an award winner that I can remember. The judges were universally enthusiastic in their praise."

Says Joost, "It was one of our proudest moments. Basically, it says, 'Okay, you're a real brand now: you're valid!'"

Going Green

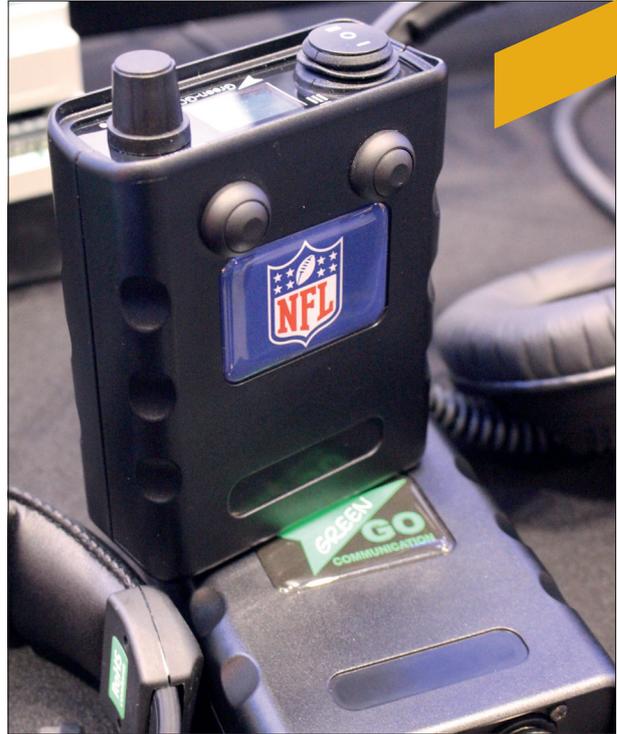
Over the next few years, word of mouth did its job for Green-GO. "But everybody wanted wireless," says Joost, "and in 2016 we introduced that." However, even before the arrival of the wireless models, one of the highest-profile successes for Green-GO came in the USA. In 2015, a rather large sports organisation was looking for a flexible, reliable Ethernet-based comms system to connect its various sites and broadcasting needs and, eventually, its coaches and players.

"NFL was interested in Green-GO rather than an existing comms manufacturer because we were native over the network, not something bolted on. They needed a native network solution," says Joost.

Silvio takes up the story, "They saw the spec sheet on our website, and sent an email, asking for a closer look. At that time, we had a new distributor in the USA . . . I told him about the enquiry, and the day after, he flew to New York."

Joost's flexibility, innovation and speed of response would again impress. "We had an interesting video meeting with the league's technicians," Silvio recalls. "While they were talking and asking questions, Joost was sitting there designing the hardware they wanted, the positioning of buttons and so on. At the end of the meeting, Joost showed them the design, saying 'So it could be like this?'. They were amazed that he had designed the prototype online during the discussion."

The relationship with that prestigious organisation continues to this day, and the brand's success in the USA continues: Green-GO systems are also deployed in some locations for NASCAR racing events. And again, cost-efficiency has remained at the heart of the range.



"At the end of COVID, we came out with Green-GO 5 – completely overhauled software. One nice thing, which I always wanted, is that even the units that we first produced are still fully compatible with the latest version," says Joost. "So customers who invested in us back then, they had a complete new system in 2022, for free. It puts the 'green in Green-GO!'"

Key Figures

"We have a very nice team," says Joost. The company has a low turnover of staff, too – always a good sign. A major contributor to the dmXLAN software is lighting engineer Bart van Stiphout. "He was one of the first to join me," Joost explains, "I think in 2005 or 2006. I asked him to join me in the software development team. He's a freelance lighting engineer, and does a lot of work with dmXLAN – actually using our software. And he's now the main software engineer. In his work he finds out the things that we need and we implement that into the software."

Another name is Hardware Engineer and Production Manager Stefan van de Lisdonk, "because he makes production more streamlined, more organised. So we don't make mistakes anymore!" says Joost with a smile.

A familiar face to the company's customers, joining Silvio on trade show booths and events around the world, is Support and Application Specialist Henk-jan Blok, who has now spent five years with ELC Lighting after more than a decade as a senior engineer at Ampco Flashlight. "Henk-jan joined us in 2018," says Joost. "That really helped us a lot because it meant I was no longer the first in line when a user was having an issue. He also filters ideas back to me from customers, and helps Silvio with exhibitions."

And of course, a major figure in the story of ELC Lighting was Joost's father, Frans. "He was my mentor, my mirror, my font

Top - Green-GO has long provided comms solutions to the NFL.

Facing page - Joost and Silvio at the PLASA Show in London, 2018.



of analogue knowledge and dealing with customers,” recalls Joost. Sadly, Frans passed away in 2022. Joost remembers, “Once COVID hit on 2021, I thought ‘Well, this is it’. But we had that loss for two months, then we saw a huge growth. At the same time, my father got sick in 2021 – and he passed away the following year. I didn’t want to do it alone. So I thought ‘Okay, something needs to change.’”

A New Era

Having steered the ship for almost 25 years, Joost felt he’d had enough of the pressure. Without the presence of his father to provide the support and encouragement that had been such an important foundation to Joost’s career, the prospect of day-to-day management lost its appeal. He knew that it was time for a new era to begin for ELC Lighting bv. “It became too big for me,” he says. “I never started this to have a big company. I just wanted to do what I wanted to do.”

And what he wanted to do was go back to where he had started – as a developer of useful new tools. To do this, the company needed a change of management structure, and options were limited. Selling the company to a competitor was quickly ruled out, for fear that a competitor would only take the technology, and kill the company off. Why should they need the factory, the machines and the people?

Another option was outside investment, but as Joost says, “You do that only when you need the money, and this was not a cashflow problem.” The fact was that ELC Lighting had tripled its turnover since 2019: it did not need ‘help’ of this kind. Besides, both Joost and Silvio had enough experience to know that with private equity, the future of the company could not be guaranteed.

“The other option was to alter the structure of the company and the management,” says Silvio, “to find someone special, with the experience and ability to take over responsibility for the day-to-day operations of the company. They should be a major shareholder. The best partner is someone who knows our industry and respects what we do.”



They were looking for an industry insider who was willing to come on board. At the same time, they would have to be willing to allow ELC Lighting to maintain its course, while giving Joost the space to focus on his primary strength – engineering and product development. Eventually, they found what they were looking for.

The new partner was found in French Team Partners (FTP), the owner of ELC’s long-standing distributor in France, Axente. They are also behind a number of other notable entertainment technology brands, including SIXTY82 in The Netherlands, and Frenetik, a line of Dante/PoE loudspeakers.

FTP was happy to become a major shareholder in ELC Lighting bv, on the condition that the new company kept hold of Joost and Silvio. “They said, ‘We want Joost to keep on with us, and we want Silvio to stay on board with the sales network. We don’t want to restart on zero,’” explains Silvio.

Also becoming an official minor shareholder along with Joost was Anima Network, which would now hold a formal contract with ELC Lighting. “Handshakes were not good enough for them anymore!” Silvio jokes.

ELC Lighting took the prudent decision to implement a new management board – one made up of people who were trusted to work in the best interests of the company. It’s a structural change which has seen the addition of new shareholders from within the European entertainment production industry. It has broadened the company’s insights and experience, while maintaining the overall independence of the business.

Importantly, the changes see Joost – who has conceived and delivered so many of the company’s award-winning innovations over the years – freed from day-to-day management duties, and able to focus his energies once again on what he does the best – smart, cost-effective problem-solving. In his stead, management duties are taken on by a newly recruited, dedicated General Manager, Wouter Wessels. Wouter brings with him extensive experience of high-technology production processes and management, all of which will help ELC Lighting to efficiently optimize its rapidly expanding operation.

Silvio, who describes Wouter’s role as “orchestra conductor” says, “Wouter allows everyone to focus on their strengths, while expanding the company in the best way possible.

We are all very happy with his appointment. We can already see the results in the general satisfaction of the team as well as the production efficiency.”

For Joost, this new structure confirms the legacy of ELC Lighting and strengthens its footing for the next stage of its existence. It promises the efficient management of continued growth and reinvigorates the focus on R&D, all while maintaining the knowledge and commitment of its valuable team – for the next 25 years and beyond.

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