



# Niclas Arvidsson

## Founder and CEO

### Wireless Solution Sweden AB

A pioneer of the W-DMX genre in Europe, Niclas Arvidsson is a familiar face at international AV exhibitions and the man behind Wireless Solution Sweden AB, the market leader in wireless solutions for DMX, DMX512A, and RDM as well as ethernet protocols such as ACN. Confident, charismatic and a tireless worker, Arvidsson is a born leader and with a passion for technical innovation. He also possesses a delightful personality and a wonderful sense of humour.

Arvidsson launched Wireless Solution Sweden AB in 2003 with the intention of providing event designers with the ability to place their lighting fixtures exactly where they wanted without the constraints of running data cable. Wireless Solution AB's first product won a PLASA Award for Innovation in 2004. Since then, it has become the leading European provider of wireless systems for the lighting industry. The company's success has been achieved through relentless innovation, shrewd marketing and lots of old-fashioned hard work.

In an exclusive interview with Entertainment Technology Asia Magazine, Arvidsson talked about the challenges he faced setting up his company, his goals for the Asian market and the reasons why Wireless DMX has become more popular as a networking protocol.

#### **ETA: Tell us about your background and how you got into the Wireless DMX business**

**NA:** I started working in rental and sales of lighting and sound equipment in 1993. In 1997, we converted strictly to the sales and distribution of lighting equipment within Sweden for many brands. Our local company, Interlite, will celebrate 20 years in business in 2013. At the beginning of 2000, we began investigating a solution to make wireless lighting control easier to use, more cost effective and still very stable and safe. With experience in both the IT and broadband business, we began building both wireless and cable infrastructure in our off time and found an interesting approach in applying the technology of a networking concept to the lighting industry.

#### **ETA: Why do you think Wireless DMX has become more popular as a networking protocol?**

**NA:** The first system off the market in the mid-1990s was based on more off-the-shelf radio products that use a converter to send and receive DMX. Many of these systems were good enough for the time but there were a few issues that needed to be addressed and we put it in our business plan for Wireless Solution to launch W-DMX™ in 2004. We had three criteria:

1. It had to be easy to use. It is a product for the lighting industry and not for a computer technician. It had to be "plug and play" and we introduced the concept "One button 2 go", a concept that for all basic settings, the user just needs to push or hold one button to create a wireless link for up to 500 meters.
2. The customer had to be comfortable with using wireless technology and have complete trust in it. Therefore, we had to create a very robust link with minimal drops in the data transmission. We used technology proven from both Army standards and mobile phone industries like FHSS (Frequency Hopping Spread Spectrum) and TDMA (Time Division Multiple Access) technologies.

3. It had to be affordable. The average price at this time was prohibitive and it needed to be at a more competitive level. When we launched W-DMX in 2004, our product was 40-50% cheaper than any other product on the market. To be able to sell volume and get people to try it, they had to be able to see a return on investment quickly, either in money or time. Today, after just 7 years, we've been able to add significant features and at the same time, reduce our prices. This is the benefit of volume sales. In 2011, we produced approximately 50,000 units for both OEM sales and our "box" range of BlackBox, WhiteBox and Micro.

People quickly began to see the time savings realised by using wireless technology, while also finding many situations where wireless is the only solution because running cable is simply not possible. It has also become a de facto standard for many people to have wireless DMX offered standard in fixtures, even if they don't use it every day, but as a "life saver" when they need it.

**ETA:** In less than 10 years, Wireless Solution Sweden has gone from start-up to becoming the 'trendsetter' for dependable wireless transmission of lighting data. What are the reasons for your company's success?

**NA:** When I founded the company, we had to set very clear goals if we were to be successful in a "niche" business. I know that to be able to create a trend you need to spend quite a lot of money in marketing for exhibitions, advertising, maintaining a website, PR, branding and especially market research, which is why we take our partnership with lighting designers very seriously. We have seen the trust level in our products increase significantly. A big part of that is our customer support. We are very quick to reply to customer inquiries, we have a loyal trade-in and service program and we offer on-site support to help customers with projects.

To become a trendsetter, it is always a combination of having a good product with the right blend of marketing events, to be seen, heard and to communicate.

We do spend a lot of time and money in both R&D and marketing to be able to create the products and for the last 5 years we spent up to 20-25% of our turnover to further develop the right products for our customers, largely based on their feedback and suggestions.

I also think we have created products that are suited for the user. There is a different product range for different needs but they are all compatible with each other. With the G4 (shipping spring 2011) it was kind of a

milestone as we increased the flexibility and added features for the user, yet still lowered the price. We don't want to sell to a limited market, we want wireless to be available to everyone and an important part of that is price. But there still needs to be room for the user to grow. Our clients can start with an entry level product and then expand as needed, while maintaining full compatibility between the ranges.



*The BlackBox G4 MK2*

**ETA:** What were some of the challenges you faced when starting Wireless Solution Sweden AB?

**NA:** Any start-up company will face challenges. It takes time and you don't know if you are going to be successful or not. For me, personally, it is always full speed ahead and just go with the flow. We had a strong advantage by using connections that I have worked with in the industry for over 10 years. It is always easier when you have a good starting position, together with an optimistic attitude that everything is possible if you believe in it. Rather than seeing things as a challenge, I choose to see possibilities. For example, finding a strong financial position to be here long term. I have never been a fan of venture capital so I invest my own resources that later prove to be a good return on investment. It

was also important to find the right partners to work with. We produce almost everything here in Sweden with outsourced production. We have a state-of-the-art factory with the highest ISO standards, and I can personally go in on a regular basis for quality assurance checks.

**ETA:** Wireless Solution Sweden has launched many successful products. Which of these products are your favourites and why have they been successful?

**NA:** I will say two products - the W-DMX BlackBox F-1 and our OEM Module called PICO.

The W-DMX BlackBox F1 is the world's first dual band 2.4 and 5.8Ghz transceiver so it can be both a transmitter and receiver, giving the user the ability to change it on the fly. It's an easy plug-and-play unit with support of RDM and optional Ethernet, making it a really flexible product at a good price. The BlackBox has been really successful because it offers flexibility for the user, it has many functions and it's easy to use, making it an extremely good value. For the rental market, the BlackBox is a great product and in 12 months we sold 2000 units.

My other favourite is the PICO OEM Module. We have sold over 100,000 units of this since we started. The PICO OEM Module is a standard by OEM application. With the 4th generation, the prices have come down and it's easy to implement for OEM partners. It is a good addition to our products and gives added value. As more people are thinking wireless, the OEM module has seen steady growth.



*The state-of-the-art Wireless Solution factory in Uddevalla, Sweden*



**ETA:** What are the benefits of using Wireless RDM (Remote Device Management), the protocol enhancement to DMX512? Will it prove to be as successful as Wireless DMX?

**NA:** In my opinion, the big benefit for RDM is really in the installation market, but it will take time before it really becomes regular practice. I think by 2013 we will start to see much more of it. It is the same for almost all innovative technologies – everybody wants it, but very few people use it right away. RDM is an added value to DMX or lighting control but it needs to become standard in both consoles and fixtures to ensure its success.



W-DMX training session

**ETA:** What are your goals for the Asian market? How do you intend to achieve these goals?

**NA:** We are very strong with the Asian OEM market, although there is still more to cover in Japan, Korea and India. Our big focus for 2012 is to increase our distribution in Asia and increase our exposure through trade shows, client visits and training.

**ETA:** What are some of the challenges you experience when doing business in Asia?

**NA:** In many countries in Asia, labour costs are so much lower compared to Europe or America. One of the main arguments to use wireless DMX technology is to save time and money installing cable, assuming the same labour cost for one person for one month to install compared to buying a wireless transceiver. This argument does not apply to every country. This is something all brands from Europe need to cope with because lower labour costs generate either cheaper products or lower installation costs. In this way, we are trying to adapt a range of products for all markets, so we have special products that fit better in lesser developed countries. W-DMX is probably the only company to offer a complete range of products based on features and price so we can provide for all kinds of applications. The quality remains the same but the features are slightly different without the compromise on the wireless quality.

**ETA:** Your company has been involved in some high profile projects in Asia like the Singapore Flyer and the Grand Opening of the Marina Bay Sands Resort and Casino. Which of these projects have you been most proud of? What other projects do you have in the pipeline?

**NA:** We are working on many projects at the same time but you never know exactly how many because we become involved at an early stage. For example we are working on a very big airport project, a new flyer similar to Singapore's and a couple of big outdoor installations. The key and most important thing is to offer a proper "cell plan" for the clients with the right choice of accessories. We have trained personnel all around the world to keep the cost down and this is a very important service for all clients that are interested in wireless lighting control.

**ETA:** With the advances your company is making in wireless technology, do you think that signal cable will eventually become obsolete?

**NA:** To be honest, that will never happen. It is not realistic. I will say that if wireless technology can be used in 25% of all applications, this will be a very big achievement. Today, wireless is still used mostly in applications where cables are not possible or for special projects and outdoor installations. In rental applications, the market is growing quickly because it is more forward thinking and shows an interest in wireless technology. Right now, the big savings are seen on all outdoor installations as well as all retrofitting of DMX distribution.

The advantage of having wireless standard inside a fixture for rental companies is to have the option to go wireless, even if they use it 1

time out of 10. The potential cost savings and time savings are huge. Wireless DMX today is not expensive anymore.

The key focus for us at Wireless Solution is the word FLEXIBILITY. This is what we create for our clients. We are designing a complete range of products for our clients, both in price and in features. For example, we offer most of our units as transceivers so they can act as both transmitters and receivers. We offer two different frequencies – 2.4 and 5.8GHz. Our new BlackBox offers one unit with Quick Lock, DIN Rail as well as 19" Rack - all 3 connections from one box.

At Wireless Solution, we let our clients speak and we listen. We are equally a lighting company and a wireless company. If we can't understand our lighting clients, we will never make good products. It is not enough to make a very good wireless product unless you have the lighting experience.

[www.wirelessdmx.com](http://www.wirelessdmx.com)



The Singapore Flyer