My Internship in Stockholm

Sascha Mösle Hughes

Working with:

AV-HUSET

LJUD · LJUS · BILD · EVENT

Stockholm



• The first few days we met up with our teachers from Spain and did a little sightseeing of the City, we met up at the Tunnelbana central station, and from there we went first to City Hall.

City Hall



From here, we went straight to the Old part of town, Gamla Stan.

This is a relative modern construction by Swedish standards, starting construction in 1911 and being inaugurated by 1923, serves the function of government offices and, once a year, its the ceremonial land mark for the Nobel Prize Celebration.



Gamla Stan



Building started in the XIII century, It has become one of the most touristic areas of Stockholm, not only because its beautiful and has many small stores to buy at, but because its in the centre close to the royal palace, parliament and the port.

Stortorget, known as well as the Bloodbath square for the beheading of the Swedish Royal family by the King of Denmark



Suns out, Swedes out!





So the first day I got there I was introduced to all the colleagues, they gave me a tour around the warehouse, showed me the kind of work they do and the equipment we would be using in the following days, Cristian, my work tutor at AV-Huset, sorted me out with some work clothes since were not allowed to be out on a work site with clothes that don't have the company Logo. He also sorted me out with working area and laptop.

So the first day there wasn't to much to do, we cleared up the warehouse a little and unpacked some of the cases that came back from a job, so it gave me some practice to work with their computer program for warehouse inventory and also to see where all the items are stored and how.

One thing I've always liked to do when I start working somewhere new, is to ask the workers:

-"Whats the company like? Is the boss nice and fair?"

And through the first two weeks I got to ask all of my colleagues, and to my surprise every single one of them agreed on the same answer:

-"Theres nothing one can complain about, work hours are fair, pay is extremely good, boss is cool and easy going and the general conditions are more then right".



So, to get an initial idea of why everyone in this company is happy and works so well, here are some features of this company.

- Everyone is equal, and no one is superior. This means that the boss is a figure of knowledge and help for the workers, as in if we need to know something or how something functions or what were doing we ask him like we'd ask any other colleague, un like in Spain, he's not a superior person that you have to bow to before talking. And in terms of employment or disemployment, he would still have to ask and agree with the rest of the workers.
- The company gives you about 2000Kr as a "meal" concept, 5000Kr a year in "Fitness and health" concept, they provide you with phone and service, and any equipment you need as well as work clothes.
- Theres a level of trust that is amazing, any colleague can borrow if they need some equipment for a house party or a birthday, they just write an order in the computer and use them for as long as they need. But also, theres a level of responsibility by the workers thats almost more amazing, because no one abuses from these benefits here, no one steals materials or equipment, and theres no dark business with the financial and accounting since everyone is extremely honest here.



In the first week everyone had used up some of their time to explain to me what they were best at, so I would have some knowledge when I was out on a job. First the got me to work with Wireless Microphones and receivers, since thats a big part of the work, they wanted me to know the differences between Analog systems and Digital systems, how to Sync them, as well as the different type of connectors and cables we would be using in the following weeks.



Here's some different types of receivers we use, there's 1 and 2 Channels digital and 2 Channel Analog, slowly were trying not to use analog, they have BNC antenna connector for the input, and XLR output, but you can use EtherCon and link up many receivers with switch and bring all the outputs by a single Cat5 cable to the mixing table (dSnake) Following is the wireless microphone from Shure.







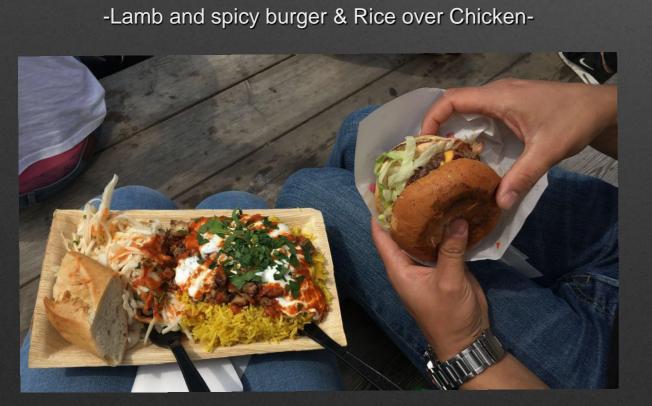
In the next days, I worked with some of the lighting specialists, and i got to know some of the features that make a light good and worthwhile and the things technicians dread to work with.

- LED is the clear future and it really has little Con's, its efficient and durable, doesn't get excessively
 hot, wide range of colours and you can sync one lamp with another, both power and signal (DMX).
 The only Con it could have is that initial buying price is high, but its worth it.
- Halogen, Xenon and discharge lamps are dying slowly because simply they cant be linked, consume far to much power and are a fire hazard.
- It has to have DMX to be able to link them and have far less cables
- If it has PowerCon and can be linked it just makes the job easier and cleaner.
- Careful to not mix up DMX 3 pin and 5 pin.
- If you're lighting up a stage, the best way is with moving heads now a days, they cost a lot, but they're worth their price once you use them professionally.
- All kind of fixtures and supports must be certified, and all the lights must have their correct security loop from chassis to the Tross.
- The software for learning to use lights and configure them is open source, so anyone can learn it, and its the same software they use in Eurovision so its pretty good.

Foodwise



-Lamb meatballs with spring onions, potatoes and beans-





-Salmon with gratinated potatoes-

-Beef Stake with cheese and paprika sauce-



The weather can be extremely unpredictable



You can be having a wonderful day like this one, and next minute it starts getting cloudy, first some rain comes down, and before you know it theres a snow storm and..

..you end up with this, which is pretty, but when you're driving a lorry it kind of ruins your day.





Small lighting installation. The client asked for curtain illumination to light up the curtains. The proyector, screen and PA sound system had been already set up. When we got there we were told we only had 35' to install everything, if not we would have to wait 2h after lunch. We made it and even had time to enjoy a nice coffee!

So the client wanted this exposition lounge fixed up like this because they were having international buyers come there to check out the new industrial machinery, they even had a huge field out back so the future buyers could test the vehicles before buying them



So this set up is pretty much as premium as it gets, at this point i'm sure Manolo would have told you how great Crown is, but this is the best I've ever seen, and it really works well, we use these amplifiers for concerts and all kind of big gigs, full digital, the weight is extremely low considering the power(<4kg), touch screen and various files you can save, or even load from a Usb drive.





The set up is simple, PDU-16A on the top, followed by to monitor amplifiers and the lowest is the bass amplifier, the numbers on the front aren't Mickey Mouse, their actually 3,5kW per channel and its 4 channels per Amplifier. The Bass amplifier is twin channel and 6kW each. Absolutely no messing around with these.. since each unit is about 9.000+tax... well the bass one is cheaper, just 8.000+tax...



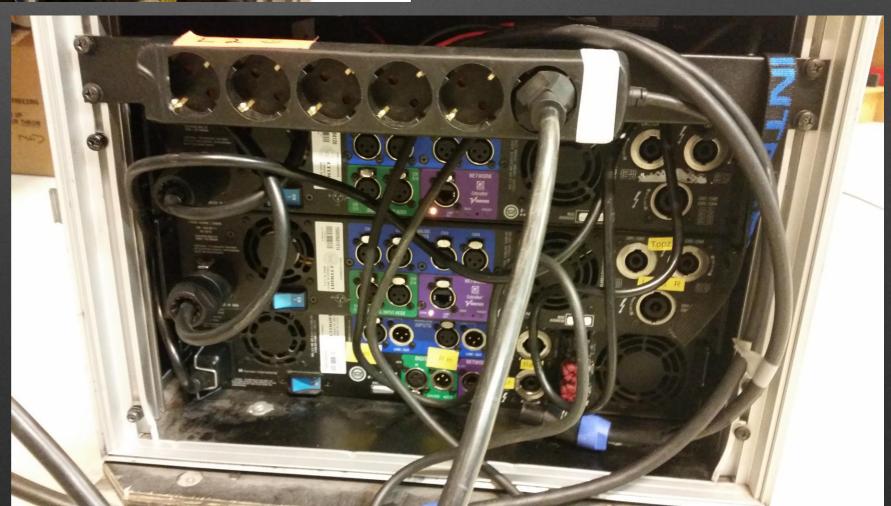
Normal Speakon NL4FX for 2 Channels (L&R) max power 7kW

Larger Speakon NL8FX for 4 channels, simplifies the cables since its only one from the amp to the splitter, but just consider that there will be up to 14kW on that cable...

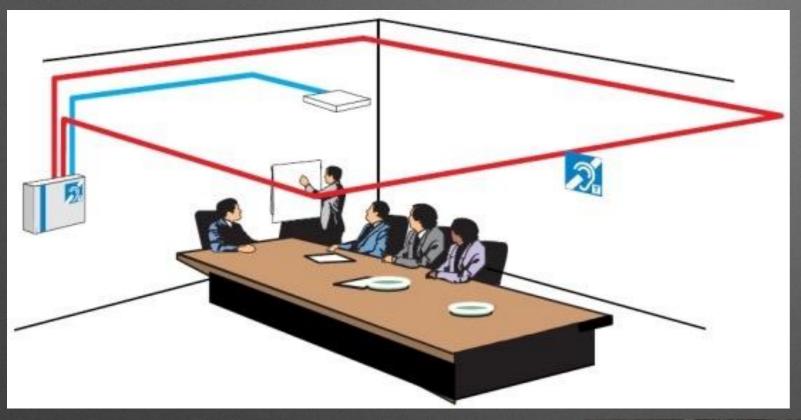
Ethernet port, very handy to use to control remotely from a laptop, link the amplifiers/mixing tables/wireless receivers..

XLR audio inputs

PowerCon mains input



Another wonderful feature of Sweden, is that no one gets discriminated for any kind of impediment or handicap they might have



This, for example, is a wireless inductive loop, and its function is simple, during a presentation or a conference, anything that is amplified like microphones or music will get amplified into the loop cable as well, and that wire must travel all around the room. People that have hearing impediment and for that use a hearing aid will be hearing everything like normal because the loop feeds inductively the sound to the hearing aid

This is one of the inductive amplifiers we have. Extremely simple Plug&Play system, if necessary one can also adjust the gain/amplification. Every public area in Sweden must be equipped with means and resources to install them, and there must not be any kind of barriers for anyone, blind / deaf / dumb / in a wheelchair...





Light and Sound installation at a modelling office. They were celebrating some kind of anniversary and decided to go "Night Club" style, blacking out all the windows and covering the glass doors and offices with backdrops, they wanted PA system but didn't need any Technician since they had their own DJ. The lighting was relative simple, no DMX signal, just static colours, in purple shades and in orange/yellow shades for the dance floor





So the last week of work was probably one of the best, we got to set up the 3 conference rooms and the exhibition room. The client was a comercial center company, I set up two of the breakout rooms, and later I would find out that the Speaker who came to talk was CEO of a well known music platform.

This is the set up from the big room, that there, is a 360" screen with double aligned projection, and just about 12kW in the front speakers, plus 10kW of the basses, later we would set up the sceptron and configure all the light fixtures, witch were LED motorised and had a fantastic controller system



That is the end result, the sceptron was so much more bright than I expected, they could actually play video and images like a normal screen but the clients only wanted a solid color and certain light effects





Technicians area, from here we controlled everything with just a single UTP cable to each system. All the lights were controlled from the A&H color mixer.











Kenneth Rising

MD / Project

Mobile: 073-082 00:24 E-mail Kenneth



Andreas Weis

AV Techniques

Mobile: 073-682 00:25 Email Andrew



Christian Hagen

AV Technician

Mobile: 073-682 00:26 E-mail Christian



Mikael Romell

AV Techniques

Mobile: 073-682 00:47 E-mail Michael



Totte Eriksson

rental Warehouse

Mobile: 070-667 17 75 E-mail Totte



Philip Briland

AV Techniques

Phone: 08-562224 24 Mobile: 073-682 24 24 E-mail Philip

Joakim Ekstrand

AV Techniques

Mobile: 073-682 00:23 E-mail Joakim

Mathias Nordlander

AV Techniques

Mobile: 073-682 00:29 E-mail Mathias

Gittan Blomqvist

Administration / Rent

Phone: 08-562224 44 E-mail Bridget

Cristian Cordova

Stock

Mobile: 073-682 00:46 E-mail Cristian

And these were work my Sweden, colleagues in and honestly I couldn't have asked for nicer and easy going people. So the first week I mostly worked only with Cristian and Totte, we were in charge of the warehouse, making sure there weren't any supplies missing and when ever someone needed something custom made Totte was an expert woodworker. working Everyone was with everything (Lighting, Sound and image) but there was things that each one were kind of experts at, like Andreas liked to work with Lighting, Joakim worked mostly with sound, Matte would jump on to the DJ mixer as quick as he Micke could, was very knowledgeable when it came to Gittan projectors, administrated everything, Phillip planned and organised and Christian was quite good at everything, but he was extra good with clients and doing designs of the the how room/scenario should look like.