



Italian artefact: Automation turns home into piece of art

Out of office

Pandemic leads to permanent working from home in office of the future

Shaken not stirred

This South of France smart home is enough to make the owner feel like James Bond

Rack builds

Tips and tricks on how to build a neat rack for your client's home



Hidden wonders

Having tried a DIY system in a previous home, this time the customer wanted the real deal. **Amy Wallington** takes a look at the more professional system.

Located in the heart of Helsingborg, Sweden, this customer lives in a penthouse apartment next to the harbour, overlooking the Sound across to Denmark. Living with his wife and 15-year-old son, the client bought the apartment in Spring 2019, with work starting almost immediately in the October.

Not new to home automation technology, he had tried his hand at building a DIY smart home using a Fibaro system that he programmed himself in a previous home. Although it worked well, he wanted a more professionally installed system in his new penthouse. Integrator, Fremlab took on this project and convinced the customer to have a Crestron control system installed.

Although Fremlab do the occasional smart home installation, they are more commonly known for taking on commercial projects and renting out AV equipment for corporate events. The founder of Fremlab, Carl-Fredrik Malmgren, met the client three years ago when he hired AV equipment from the company for his 50th birthday party. The party was a joint birthday celebration for

the client and two of his friends which entertained 150 guests with several artists and fireworks. Malmgren was invited as he knew one of the other people whose birthday it was.

"After a few meetings at my company to plan the party, the client realised we also do installations," says Malmgren. "He asked me if I could help him when he realised that doing it himself was not the way to go after building and programming a DIY Fibaro system at his old house."

Work began in October last year and was finished by 1 March this year, just in time for the global lockdown. Malmgren explains: "The flat was totally stripped down to the concrete. They also managed to reclaim about 20m² of extra space. The old flat had very high ceilings so both floors were 144m² but now they have about 165m² instead."

A brief brief

When planning this project, the client's brief only specified integrated audio. However, it gradually built up as Malmgren suggested new ideas. "At first it was just sound, then he also wanted Crestron

lighting control with retrofit infiNET, and it kept growing," states Malmgren. "There was no list of things he wanted as such, just drawings and my suggestions as we went along. He agreed to all of my suggestions as he had full confidence that I knew what I was doing."

As the project grew, it became clear that they would need another profession to come in to take care of the electrics. "When I realised the scale of the project, I suggested bringing in an electrical consultant to plan the electric works and the central rack," he recalled. "Now, looking back, the client is very thankful I suggested this as everything ran a lot smoother because of it."

Clever hides

The penthouse apartment is spread over the top two floors of a six-storey building, with other flats below. The bottom floor of the penthouse consisted of an open-plan kitchen, living room and dining room as well as the son's bedroom, while upstairs featured an open-plan master bedroom, bathroom and walk-in wardrobe.

What started out as a small audio installation project turned into something much grander. Compared to a lot of home automation projects, this space was much smaller, so they had to think of clever ways to install the technology to ensure the place didn't feel small or congested. Malmgren suggested hiding the TVs using Future Automation.



This was the biggest part of the project, and living in a penthouse apartment, it certainly came with its challenges, as Malmgren recalls: “An unusual part of the project for us was to be installing a 75-in TV hinged lift in someone’s living room with a price tag of around €35,000. It was too big to fit in the elevator so a crane was hired to get it into the flat. What’s more, serious work had to be done in order for the ceiling to support the 225kg TV lift. A steel bar had to be installed which was a big job. The neighbours were not always happy!”

Fremlab installed the TV lift into the ceiling in the open-plan living area downstairs. The mechanism they had chosen allowed the TV to swivel to three different positions so that they can watch TV from the kitchen, the dining table or the sofa. When not in use, the 75-in TV folds up into the ceiling, hidden away to save space.

Another Future Automation TV lift was used in the master bedroom, this time lifting the TV out from the bottom of the bed. When not in use, it lowers down into the foot of the bed so it is not on show and the views of the harbour can be seen again.

Under full control

A Crestron system was installed to control the lighting, HVAC, TV lifts, and blinds/curtains in the apartment with various Crestron touchscreens, keypads and wall plates situated around the flat. “We developed a dynamic range fader for the LED lights because usually, zero is set to around 30% and full light is set to 70%,” says Malmgren. “We changed this and set it from 0-100% giving the same power of 30-70% but it makes it more user friendly.”

The integrator and client decided on a Bose sound system for the flat. He admits: “At first we suggested a slightly bigger sound system, but he and I both realised that they would not be able to play the music very loud due to the neighbours so we settled on an FS3 system which is good enough for this space.”

Eight Bose FreeSpace 3 Satellite

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speakers and two matching subwoofers were installed into the kitchen and living room, while the toilet and laundry room had two Bose 161 speakers fitted. Both the downstairs and upstairs balconies each feature two Bose DesignMax DM3SE speakers, as well as six Bose FreeSpace 3 Satellites and two subwoofers installed in the master bedroom and bathroom.

Malmgren added that the client was thrilled with the end result and is already making plans for Fremlab to install a



home automation system into his other house in Marbella, Spain. The total cost of the installation was around €100,000.

Tech-Spec

- Bose 161 Speaker Systems
- Bose FreeSpace 3 Series Subwoofers
- Bose FreeSpace 3 Surface-Mount Satellites
- Bose DesignMax DM3SE
- Com Hem TV Boxes
- Crestron AP3-Series Control System
- Crestron Cameo Keypads
- Crestron Ceiling Mount Passive Infrared Occupancy & Daylight Sensors
- Crestron DIN Rail High-Voltage Switches with Digital Inputs
- Crestron DIN Rail Two-Channel DALI Interface
- Crestron DIN Rail Two-Channel Motor Controls
- Crestron DIN Rail Universal Dimmers
- Crestron TSR-310 Handheld Touchscreen Remote
- Crestron TSW-1060 10.1-in Touchscreens
- Crestron TSW-760 7-in Touchscreen
- Future Automation CHRSTV Ceiling Hinge & Swivel with Telescope
- Future Automation LSM-TU TV Lift & Telescope 50-65-in
- Samsung QE75RATXXC TV
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- Sonos Amps