

# CYBERHOMES CASE STUDY

**Location: Wandsworth, London**

**Project time and cycle: 7 months**

**Value £90,000**

## **Our Involvement:**

- Initial design & specification
- Total system design
- Cable run out schedules & CAD designs
- Managing & overseeing the first fix works
- Second fix installation & equipment supply
- System programming & Commissioning
- Supply of Cyber Homes operating system manuals
- After sales training & support

Originally built as two flats, the property was subject to a major refurbishment and enlargement project. Almost everything apart from the front façade was demolished and rebuilt using modern construction materials, allowed the creation of large open living spaces with high ceilings, favoured by modern living.

In addition, a basement was created under the entire house, front and rear gardens, providing additional entertainment, utilitarian and living space. Under floor heating, thermal and acoustic insulation, 1800 sq ft of wenge wood floors, air-conditions throughout the property.

The result is a house of almost 5,000 square feet, fitted out with opulent man made and natural surfaces. Almost all furniture and fittings have been bespoke designed and manufactured, incorporating the best innovations from the European and North American markets.

The house is owned by a local London property developer, who was eager that it incorporated the most convenient elements of 'Smart House' technology. Key elements being:

- Hardwired and wireless networks
- Multi-room music system
- HD video distribution
- Surveillance monitoring
- Lighting control
- Thermostatic control
- Intercom and access control
- In particular, it was essential that it could all be controlled in a convenient way.

The controls should be comprehensive enough to provide 'blanket' coverage of all systems, yet intuitive enough to allow use by all in the house - even the less technically minded!

In order to minimise disruption to the carefully planned decorative finishes of the house, it was decided to mostly have 'floating' control tablets, rather than ones fixed in wall plates. Similarly, Amina 'plaster-in' speakers were used to facilitate complete invisible sound throughout the house, including the steam room.

Being a large house over four floors, filled with young children, it was essential that people can communicate with each other as well as be observed for safety and security purposes.

This client was recommended to us by an existing client from a previous job.



## Audio Systems

An 8 zone multi-room audio system was provided and distributed throughout the house to in 'Amina' ceiling speakers and 'Speakercraft' rock shaped speakers in the garden; a hard disc sound server was used to store all the clients' cd's, album and cover art information which was then viewable from any plasma or 'RTI' touch screen within the property. The in wall and wireless colour touch screens provided full control of all the equipment stored within the rack (ie Dab Tuners, sky, DVD, Sound server) and audio within each zone. We decided to go with paint over invisible Amina speakers as the client did not want to litter the house with viewable technology.

## Visual Systems

The client wanted to be able to view Sky HD in all the main viewing areas within the home so we decided to install a 'Smart-e' audio visual switch that was capable of distributing high definition pictures over industry standard Cat-5 data cable to all of the LCD and plasma screens throughout the property.

All the plasmas were capable of viewing any one or all of the 8 CCTV cameras around the property with full control of recorded footage.

Even the in-wall 'RTI' touch screens were capable of feeding back live images from CCTV, Sky TV and DVD.

Under the rear patio and at the back of the basement the client had set aside a room for a stand alone cinema. After our careful assessment and off site demonstrations the client decided to go for the ore inspiring 'Screenplay 777' projector, this unit was set up to fire high definition video onto an 8 ft fixed widescreen display. As this room was a stand alone cinema there was no need for hidden speakers,

so the decision was taken to go for high end floor and wall mounted speakers run from a top of the range Marantz amplifier.

Adjacent to the main basement area the client decided to install a top of the range spa/steam room with a granite bath cut from a single slab of stone. This room was equipped with 'Amina' plaster over speakers within the ceiling for audio reproduction and an Aquavision 23" LCD TV sunk into the tiled wall, this unit was also heated so as not to steam up, all this was controlled via a waterproof 'RTI' wireless controller.

The master bedroom was discreetly equipped with a pop up LCD TV located at the end of the bed, at a touch of a button the screen rises from a cabinet and turns on to Sky HD.

## Lighting and Automation

The lights were also integrated into the system, offering scene control from any of the in wall or wireless 'RTI' touches screens. All the stairs in the house have floor lights which are activated by movement sensors after 11.00 at night creating illuminated walk ways without the need to press a switch.

On leaving the property the house would go into occupancy simulation and play back every light that had been turned on or off the two weeks prior in that order. The system also used an astronomical clock to tell when it is day or night and allowed for daylight savings. This gave an exact copy of the owner's routine to leave potential burglars no doubt that there were people at home.

Both the main car gate and the side door are electrically operated; the client is able to open them from pressing a button on any touch screen within the property.



The automation was even extended to control the garden water features and various elements of the marine fish tank.

### **Security and CCTV**

There were eight cameras in total four external and four internal. The client specified that he would like to be able to view his children playing in the any of the main rooms and also their bedrooms from any plasma within the home. We installed discrete cameras that looked like security movement sensors, in fact they were working movement sensors that were attached to the main security panel and acted out two jobs. All the cameras were set to record only when triggered, at night the external cameras were able to see in the dark as they had built in infra red LEDS to illuminate the area in black and white.

We set up the camera system to be viewable over the internet from any computer by just typing in a web address into Microsoft explorer. Access was only given when a full password was entered after which there was full access available to live and recorded footage.

The security system was set to dial out to the client's mobile phones when there was a break in or fire. The door phone/doorbell could even dial out to a mobile phone to and have a full two way conversation with somebody at the door. This is a very useful tool to catch someone that you may have missed and also can be used to pretend that you are in when you are actually out.

When the client is at home the door-phone dials straight through to the internal phone system, this enables the client to talk to someone at the gate and also open both the electric side door and the main car gates from pressing keys on the telephone keypad. This whole operation can be viewed from any plasma within the property, or you can view over the internet where the same operations apply.

Intercom was also provided for room to room communication using a wireless 'Panasonic' telephone system. These sets had the ability of displaying the different room names on their colour displays allowing direct paging between rooms.

### **Heating Control**

We integrated the 'Heatmiser' heating system into our control system and were able to set it up to be controlled remotely over the internet. As the client travels a great deal this gave him the ability to turn on and monitor his system from anywhere in the world, heating up the house in preparation for there return.

### **Products used**

- Lighting Control - Rako Controls
- Security/Automation - Comfort Home Controls
- Multi-room Audio - Xantech
- Touch screen control - RTI
- Speakers - Amina & Speakercraft
- Cinema Audio products - Marantz
- Heating control - Heatmiser

### **A special mention to Justin Harris**

Although a self-build project, the owners relied heavily on the expertise of their project manager, in enabling their vision to become reality. Contact Justin Harris at Menthon Design - [info@menthondesign.com](mailto:info@menthondesign.com)

