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FINALIST 2020

A modern manor house, Lapworth

A home automation project that just kept growing and growing

Cyberhomes got involved with this modern manor house project at architect's design stage, well before ground had been broken; so we could work with the client throughout the build to maximise the potential of installed integrated technology.

The homeowner had no previous experience of smart home systems, but a demonstration of the Savant Pro control and automation capabilities convinced him it would be perfect for his new luxury home. To ensure all this technology would be seamlessly woven into the fabric of the building, we introduced the client to interior designer Camilla Leech who we worked closely with throughout the design and installation phases.

Let there be light

This large house required over 200 lighting circuits which meant a Lutron Homeworks QS solution was the only consideration. Its reliability and scalability ensured it was up to the task. With 44 on-wall keypads as well as integration to the Savant Pro system—lighting scenes can be recalled instantly for any room. And that included control of natural daylight too with 84 windows having motorised blinds or curtains. Faradite movement sensors act as triggers for security and convenience.

Efficient heating

Zoned heating control is essential for a home of this size to avoid wasting energy on rooms that aren't currently in use. Over 50 underfloor heating zones were installed, all independently controllable and programmable to meet the needs of the family. Cyberhomes managed the third-party heating engineers to design the optimum climate control solution.

Audio-visual heaven

This project takes the concept of multi-room audio to the extreme. There are 28 zones of audio that can stream multiple sources of music to all the rooms' discrete in-ceiling speakers as well as a huge outdoor Sonance speaker array consisting of 24 satellite speakers and five subwoofers.

Video content too can also be streamed around the home to 21 zones feeding 17 Samsung TVs, plus waterproof mirror TVs in the master en-suite and pool area; not forgetting the dedicated cinema room. To keep TVs out of sight when not in use some rooms incorporated a 'rolling art' picture lift which disguises the TV screens as artwork when not being watched. In the master bedroom a TV lift moves the TV out of sight as it is switched off.

To distribute content to all these screens a Just Add Power AV over IP 24-port matrix was used allowing any screen to view 4K content from sources such as Apple TV and three Sky Q boxes.

Motorised TV lift moves the bedroom TV out of sight when it's not in use

Interior design meets Lutron lighting control meets best in audio-visual entertainment meets smart home integration...

The dedicated six-seater cinema room has a 3.5 m wide screen with images projected by a Sony 4K laser projector. A 7.1.4 Dolby Atmos immersive surround sound system with Anthem processor and amplifiers and Triad speakers rivals the performance of high-end commercial cinemas. See our separate case study on the cinema room for more details.
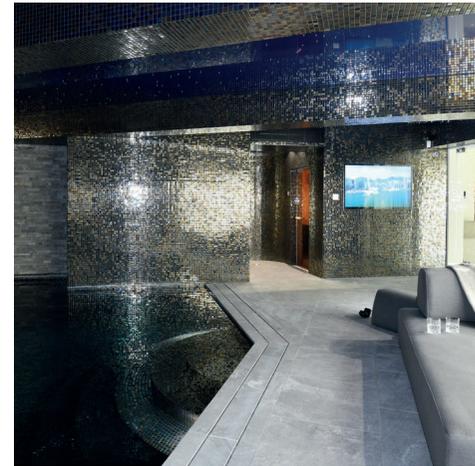
An eye on security

Clearly a property of this size needs to be secure. We oversaw the install of a Texcom intruder and fire alarm system which we integrated into Savant Pro along with 22 Hikvision CCTV cameras that the homeowner can view on his smartphone wherever he is in the world. Sensors at the perimeter of the grounds trigger an 'intruder alert' announcement when motion is detected. The homeowner can select where this announcement is heard, externally, internally or everywhere. Savant video intercoms are located at front and rear gates.

Under control

With so many systems installed, having a centralised control system that was powerful, responsive and reliable was

Waterproof TV in the pool can access all the home's video sources and becomes a mirror when not being watched

essential. Savant Pro allowed all the technology to be integrated into a simple and easy-to-use interface. There are eight Savant touch screens around the home as well as the app running on each of the family's personal smartphones and tablet devices. The homeowner is able to create their own scenes such as 'Goodnight' and 'Holiday' which put the lighting, heating, AV and security throughout the home into the desired state with a single command.

![Cyberhomes the smarter choice]

A managed network of 16 Ruckus Wi-Fi access points ensures access to the system from every corner of the property.

Eight touch screens and 44 custom-engraved keypads ensure control of all the home's systems are always readily available

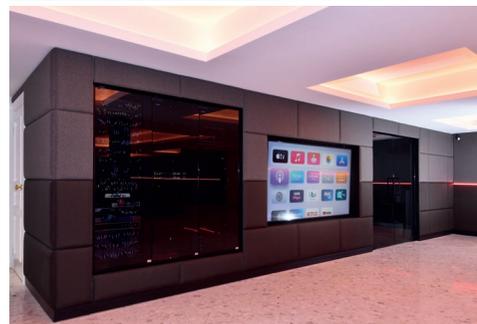A 'no compromise' award-winning luxury home cinema room

![Cyberhomes — the smarter choice]

Equipment racks

Originally all the equipment was to be housed in the designated plant room, but when that became full of heating equipment an alternative needed to be found. Cyberhomes took the opportunity to convert the huge garage space into not only a rack area but a complete party zone. The equipment racks were made a feature and inset into the walls, and an additional TV and sound system added. Of course there was still space to celebrate the homeowner's luxury car collection.

Project partners

+ Camilla Leech—Element Studios
+ TSR Electrical
+ Ace Contracts
+ Carter Security
+ Richard Voller Lighting design
+ Pulse Cinemas

The extensive equipment racks were made a feature in the basement garage/party space

Installed Systems

🏠 Automation and control: Savant Pro with eight wall-mounted touchscreens and app for smartphones and tablets

🎚 Multi-room AV: 17 x Samsung LED TVs; 2 x Illusion rolling picture mechanisms; 2 x Video Tree waterproof mirror TVs; 3 x Sky Q satellite receivers; 2 x Apple TV 4K; Just Add Power 'video over IP' 4K video matrix with 17 x Just Add Power receivers; 52 x B&W CCM665 in-ceiling speakers; 7 x B&W CCM664SR stereo in-ceiling speakers; 4 x Artcoustic CPH-10 on-wall speakers; 4 x Artcoustic Spitfire Control-2 subwoofers; 4 x B&W AM-1 waterproof speakers; 24 x Sonance landscape speakers; 5 x Sonance subwoofers; 6 x Savant IP Audio 50 music servers

📹 Security: 22 x Hikvision CCTV cameras; Texecom intruder alarm; 2 x Savant video intercoms; 26 x Faradite motion sensors

🌡 Climate control: North Commander building management system with 54 x underfloor heating zones

💡 Lighting control: Lutron Homeworks QS with 44 custom-engraved wallplates; over 200 lighting circuits; 84 x motorised blinds/curtains

📽 Home cinema room:

Visual: Sony VPL-VW760ES 4K projector; Screen Research 2.40:1 3.5 m screen with motorised side masking; Kaleidescape 4K movie server

Audio: Anthem AVM60 Dolby Atmos® 7.1.4 processor; 2 x Anthem MCA325 power amplifiers; 1 x Anthem MCA525 power amplifier; 3 x Triad In-Wall Gold/6 LCR monitor speakers; 4 x Triad In-Wall Gold/4 surround bi-polar speakers; 4 x Triad On-Wall Silver 12" sub-woofers with DSP700 power amp; 4 x Triad In-Ceiling Silver/6 speakers

▦ Network: 14 x Ruckus R510 managed Wi-Fi access points; 2 x Ruckus T310 external Wi-Fi access points; 3 x Ubiquiti network switches; Draytek 2862 router