



sensible heat case study

Surrey home

sensible heat
ADVANCED
HEATING
CONTROLS



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case study

Konexions plays a sensible game at luxury Surrey home

Integrating HVAC control into a touchscreen control system should be a standard feature. That's the verdict of London-based installer, Konexions, who have recently completed a major smart home project featuring a Sensible Heat Hometronic system for a former Premiership international footballer in Weybridge.

Why would a custom installer want to bring a home's heating, ventilating and air-conditioning (HVAC) into a control system on a classic custom installation project which traditionally only covers the control of audio/visual home entertainment systems?

For Ian Myles, Managing Director at Konexions, the reply to this question is quite simply "why on earth, wouldn't you?"

"Customers who are investing in a touchscreen system expect it to do a bit more these days than just control their tv and audio systems. The notion of having a very capable user interface sitting on the wall alongside a traditional mechanical



thermostat seems crazy to most clients. Surely the whole purpose of touchscreen controls is to make all technology in the home easier to use, by presenting a consistent user interface, and reducing wall clutter? We usually like to integrate all of the disparate electronic systems within a house into a touchscreen system, so the user can "drive" their house through simple display screens rather than having to deal with lots of separate systems. Clients prefer this approach"

Dorin Court in Weybridge is a perfect example of the Konexions approach.

This impressive six-bed, new-build property, which also includes a luxury gymnasium and swimming pool, belongs to a former Premiership football star. As you might expect, the home features a





Master bathroom with in-wall TV and discrete thimble sensor



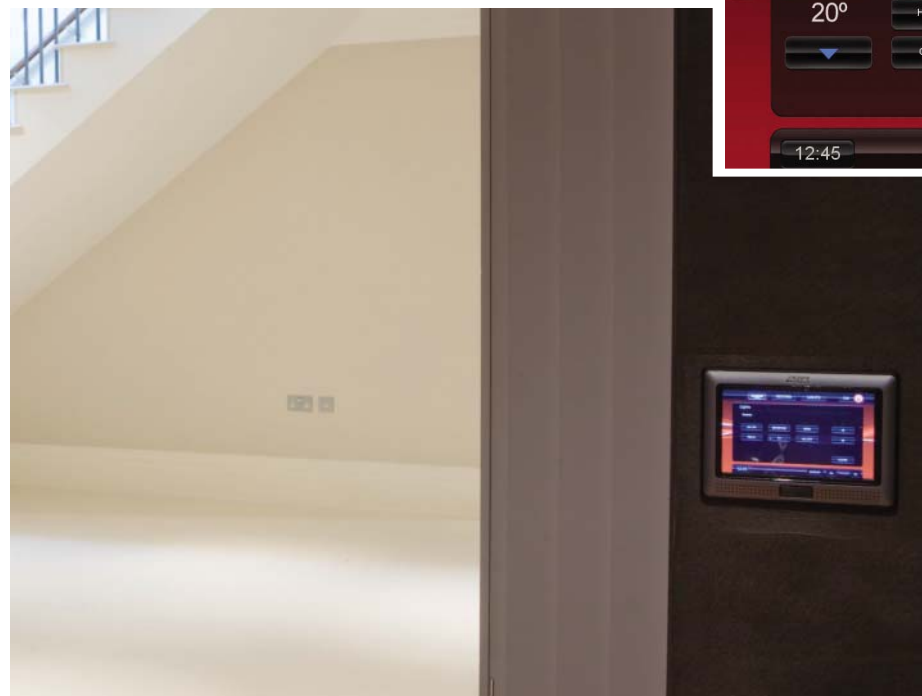
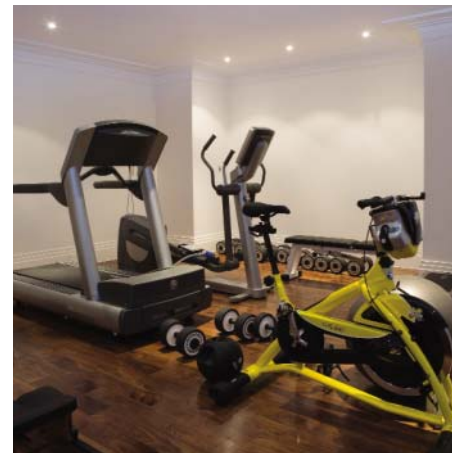
wealth of hi-end home entertainment technology. Among the highlights are a knock-out home cinema, multi-room video distribution and 16 zones of audio together with a Lutron lighting control system, an extensive wireless home network and sophisticated gate entry security, all controlled by a state of the art AMX system.

But a key element which makes this project stand out for Ian and his customer is the part played by Sensible Heat and its Hometronic wireless HVAC control technology.

"When we were designing this system, it was clear that our client liked what I'd call 'wow' factor technology" says Ian. *"But he and his family were also very interested in other things, like ease of use,*

reliability, comfort and a fantastic looking interior. That's why we brought Sensible Heat's Hometronic system into the mix. It's brought an added dimension to the project, helping us to tick all those boxes and deliver something extra special".

Konexions worked closely with Sensible Heat to design the heating and air conditioning control for Dorin Court. The Sensible Heat system governs 25 zones of underfloor heating, warming the house and the indoor



AMX Touchscreens allow the owner to control all of the electronic systems in the house easily, with a consistent user interface



swimming pool area, four domestic hot water tanks and heated towel rails in showers and bathrooms. All the heating is supplied by two gas boilers, which run on demand from any of the heating services in the home.

The Sensible Heat system is also interfacing with 20 Fujitsu air-conditioning units via a LonWorks Data Interface. This interlocks the heating and air-conditioning system, ensuring that the heating never

conflicts with the cooling operation, so maximising energy efficiency.

Ease of operation, aesthetics and reliability are key benefits of the installation.

Multiple AMX Modero touchscreens throughout the house integrate control of the heating and the air-conditioning with the home's AV, lighting and security sub-systems, through connection with three Sensible Heat WebManager interfaces.

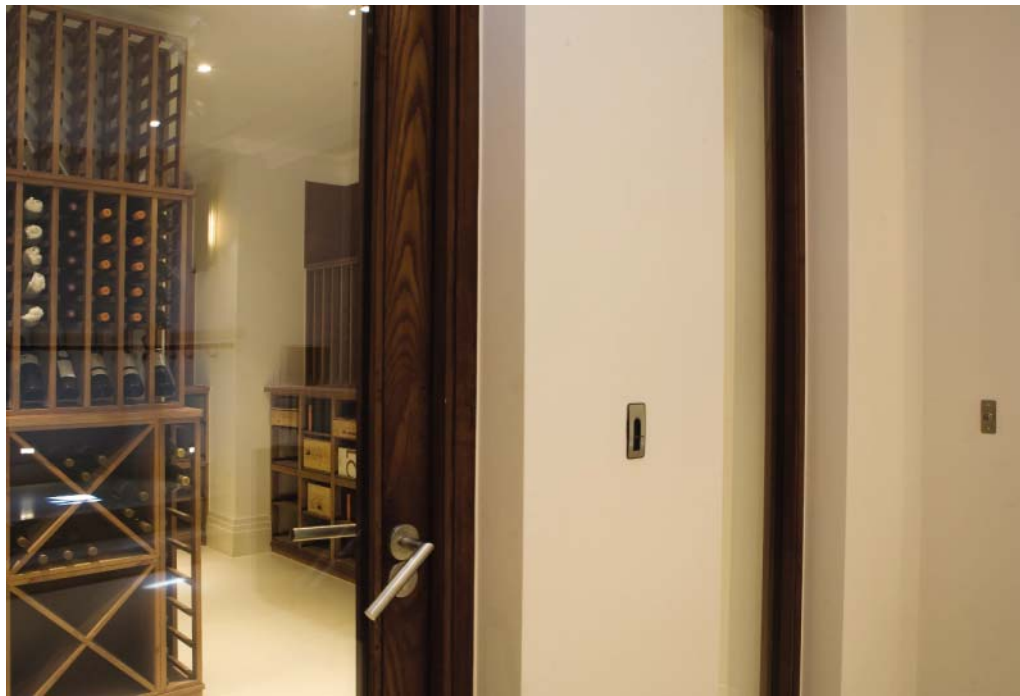
The AMX system allows individual display, adjustment and operation of all the heating zones and air-conditioning units. It also enables easy selection of pre-programmed 'Lifestyle' modes which are custom-designed routines for different modes, (such as At Home, Away, Summer, etc). As a result, the homeowner can automatically put the whole house into their desired comfort settings at the touch of a button.



Hometronic Manifold Controllers were concealed, next to the manifolds, in wardrobes and drawer units, so they can be accessed for maintenance



Thimble sensor, next to a matching fingerprint reader which allows controlled access to the wine cellar



Independent of the AMX system, the Hometronic Managers and Web Interfaces, located out of sight on each floor, enable the homeowner and his family to access and control the system directly or from any PC via the internet. So, in the event of a problem or failure with the AMX system, the heating and air-conditioning can still be controlled and operated, without any problem.

"As the client says, it's very easy to operate the system" explains Ian. "We've also eliminated the usual clutter you get with wall-mounted thermostats and independent heating and air-conditioning controllers, so preserving the clean-look of the interior. This was another key objective from the outset".

In-wall and wireless AMX touchscreens



The Hometronic System was also a breeze to install. Once the heating and air-conditioning engineers had completed installation of their HVAC equipment, pipework, underfloor heating manifolds, actuators and pumps, Konexions took over. They fitted the Sensible Heat Manifold control gear (all carefully hidden in the back of joinery units), controls for towel rails and hot water service, discreet wireless thimble sensors, which measure temperature in each zone, and the minimum amount of wiring which is necessary to bring the system under AMX control. Sensible Heat's engineering team then worked with Konexions to commission the system, and provide ongoing support, if needed.

"It was quick and really easy to bring

the Sensible Heat side of the job into the AMX system" adds Ian. "The fact that it's a wireless system is obviously a great help, but the software module for AMX control made programming and integration easy and Sensible Heat's input into the design, layout and commissioning of the system was invaluable. Everything worked first time".

The result is a job which scores spectacularly for the homeowner and his family, but also hits the back of the net in some style for Konexions.



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Editor's note: A Sensible Heat Hometronic system is capable of controlling a wide variety of HVAC equipment including radiators, underfloor heating, boilers, hot water and air-conditioning systems. The Hometronic system is proven to bring dramatic improvements in comfort levels for the homeowner as well as energy savings in the region of 30%.

As well as AMX, a Hometronic System can be easily integrated as part of a whole house automation system run by Crestron, Netstreams or Philips Pronto. The Hometronic Manager can also be accessed remotely using a PC, or iPhone via the WebManager or using a standard phone. Based in Lewes, East Sussex, Sensible Heat operates nationwide, providing a comprehensive design advice, supply, commissioning and after sales / technical support service.

For more information and further details, visit www.sensibleheat.co.uk or telephone +44 (0)1273 475834.

