“AMX effectively solves the complexity of managing the centre’s complement of technologies and operating platforms, with one all-encompassing and scaleable solution.”

With its high-tech specification and enviable home electronics provision, the Centre of Innovations for Technologies of Intelligent Buildings (CITIB) in Prague is a showcase for the concept of the smart home. The creation of Cholupice INVEST and systems integrator, Insight Home Inc, this impressive facility is a working demonstration of custom-installed home automation and all its possibilities. And, for the technological brain behind this state-of-the-art set-up, look no further than leading manufacturer, AMX.
AMX Puts the Smart Into the Czech Smart Home

Spanning an area of 4,000m², this is a show facility like no other; incorporating two family homes and a summerhouse, the complex comes complete with its own Koi lagoon, swimming pool and fully landscaped grounds. Its technical specification is equally as impressive; with the properties boasting the very latest in entertainment, access, security, lighting, blinds and environmental systems – the centre even has its own weather station. As the technical backbone to the entire installation, innovative AMX technology provides future-ready control of all the automation in situ; giving both the end-users and the design and construction professionals who visit the CITIB, an unrivalled insight into the benefits of a centrally-controlled and technology-rich lifestyle.

Providing precision management of all the complex’s automation elements, the intuitive AMX system simplifies the way in which visitors interact with the technology around them. By integrating entertainment, access, security, lighting, blinds and environmental systems; AMX effectively solves the complexity of managing the centre’s complement of technologies and operating platforms, with one scalable solution so all encompassing that even the central vacuum cleaning system is AMX controlled!

5.2” and 8.4” Modero ViewPoint touchpanels, 5” Modero wall-mounted touchpanels and Mio Modero R-4 remotes provide fingertip control of the automation elements in the family home and summerhouse; including the impressive entertainment provision. Both houses are equipped with Loewe LCD TVs which communicate with AMX over RS-232. Sound and video is delivered via Pioneer receivers and the audio system is BOSE. Multimedia, such as pictures, home video, films and music, are centrally stored on 3 TB Microsoft Home Server and distributed via Microsoft Windows 7; Xbox provides a platform for gaming and TV channels are received via a two dish satellite system. A projector-based home cinema system has been installed for an unrivalled cinematic experience. All elements are accessed, integrated and controlled with the intuitive AMX system.

AMX technology allows for simple control of temperature, lighting and shades; effectively communicating with the CITIB’s built-in systems to give users the environment they need, when
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they need it. The Centre’s lighting systems, both internal and external, are linked by data bus to the AMX central controller; giving users a unified control solution which can be easily configured to suit different needs and activities, through a range of pre-determined lighting scenes.

The AMX-based solution also effectively operates and monitors the energy consumption throughout the complex; integrating seamlessly with the SIEMENS Synco Living system, to deliver precision control over the heating and environmental systems. With a single touch of an AMX touchpanel or mobile phone, it is possible to check or change the temperature in any given room, increase or decrease the heating throughout the house or change to pre-programmed heating modes.

Integrated control stops the heating and cooling systems ‘fighting’, making everything work much more efficiently. This sophisticated system also interfaces with the on-site meteorological station. Fully integrated as part of the AMX system, the Vantage Pro2 Plus weather station monitors all meteorological information such as wind strength and direction, precipitation, outside temperature, humidity, air pressure and solar intensity, as well as the temperature of the pool and lagoon. The station can also display weather conditions for any selected location and forecast weather conditions up to one week in advance; the Rain-Bird garden water pouring systems then use this information to monitor and maintain the soil humidity. Dynamic feedback as to energy usage and consumption is provided via the AMX touchpanels.

The Centre’s Galaxy security system from Honeywell has also been fully integrated into the AMX system, complete with two-way communication. At any one time, the system can give a perfect overview of all the safety devices within the home including; the alarm system, fire detectors, CCTV system and even the IR beams which have been installed to trigger an alarm should a child get too near the swimming pool. And, should something out of the ordinary occur, such as a decrease in the temperature of the fish tank, a power cut or fault with the heating system, the owner can be informed via SMS. After the last occupant leaves the house, the alarm system also automatically activates; the lights go off, sockets that are not in use are de-activated, the blinds pull down and the HVAC switches to economy mode.

The entire CITIB complex is monitored at all times by Panasonic IP cameras which are connected to a Panasonic video server and relayed onto any AMX screen, TV, computer LCD or internet-enabled mobile phone. An AMX Metreau Entry Communicator at the front gates enables one-way visual and two-way audio conversation with visitors. Working over a straightforward Ethernet connection, the discreet Metreau allows occupants to view crystal clear video of a visitor on their touchpanels and TVs, and talk via telephone, mobile wireless touchpanel or their in-wall screen.
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Behind the scenes, a high-performance and ultra-fast NI-4100 NetLinx Controller is the brains of the entire AMX solution, allowing the large number of devices and components to become integrated as part of the central control system. Additional control capability is provided with a NetLinx® CardFrame, NetLinx ICShub Expander Card and 6 x Dual COM Port Card.

Structured cabling is the key to the AMX networked system. All three houses are connected by optical fibre and structured cabling has been included in every room. The individual rooms, garden, grounds and gate are further connected with the use of intercom and VoIP technology.

With its high-tech specification, the CITIB truly is a showcase for the concept of the smart home and the totality of the AMX system. Proving that, when a forward-thinking installer harnesses the brain-power of AMX, the result is truly intelligent living.

* To find out more about AMX’s range of unified control and automation solutions please contact our sales desk on +44 (0)20 7652 9481/2 or email salesdesk@amxeurope.com