A high-end suburb in New South Wales, Australia, Kangaroo Point is well-known for the multi-million dollar waterfront mansions lining its shores. One of the latest is a new 350-square-meter house spanning three levels, with an accompanying boat shed. For the family that lives there, the home is more than its sleek, sophisticated design. Beyond the aesthetics is a technological powerhouse, complete with lighting, HVAC, and security systems, in addition to whole-home audio distribution and a variety of video sources played out on seven displays and a projector.

But packing a home to the gills with technology is one thing, and making it “smart” is quite another. Real intelligence comes from bringing all of its separate electronic systems together under a unified control system, enabling the convenience of automation and the simplicity of one-button scenes. For the family in Kangaroo Point, their control system also needed to be completely reliable, offer simple but elegant interfaces to complement the home’s aesthetic, and provide remote access capabilities on mobile devices. To meet these requirements, integrator Ryelec Automation relied on RTI’s control platform.

“RTI is our go-to control and automation solution,” says Tom Ryan, director of Ryelec Automation. “Not only does the platform allow us to seamlessly integrate virtually any third-party system, but the company’s Integration
The home's control system is built on a foundation consisting of RTI's XP-6s processor — with support from three RM-433 RF receivers and a PCM-4 port control module — and a myriad of two-way IP and RS-232 drivers to seamlessly integrate the home's environmental, security, and AV systems. These include drivers for multiple Doorbird IP video door stations, Elk/Ness M1 alarm panels, Clipsal C-Bus lighting and blind control, CoolMasterNet HVAC control, Sonos multiroom audio, a Denon receiver, a Bluestream matrix switcher, and the Schedule Manager driver for automation schedules.

On any of these interfaces, family members can switch and control video sources — including an Apple TV, free-to-air television, two Foxtel cable boxes, a Blu-ray player, and CCTV for an 8-zone NVR system — as well as access Sonos favorites and control playback, adjust the temperature and lighting, and more. The KX10 touchpanels are further equipped with multi-level floorplans to simplify navigation. All the home's touchpanels can be used as intercoms for the Doorbird door stations and provide keypads for disarming the alarm system. A Schedule Manager page allows automation schedules to be set for lighting, HVAC, floor heating, and more. In addition, Ryelec was able to integrate the home's C-Bus wall plates into the system, enabling real-time scene feedback on RTI devices and two-way HVAC control from the wallplates.

The family has a number of options for interacting with their technology. Each of the home's three levels features a common area equipped with a KX10 10-inch in-wall touchpanel, while an additional KX3 3.5-inch in-wall touchpanel with an integrated control processor is located in the boatshed. The home's bedrooms and lounge feature SURFiR companion remote controls, while the media room is outfitted with RTI's T4x touchscreen handheld remote control. RTI's RTiPanel app provides control via the family's iPhones and iPads, whether they are home or away.

Designer APEX programming software enables complete customization of the GUI. This was imperative for this project, as touchpanel interfaces would be displaying multi-level floorplans. Furthermore, RTI products deliver rock-solid reliability, while the company's RTiPanel app provides the remote access capabilities our client was looking for.

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Tom Ryan
Director, Ryelec Automation

INTELLIGENCE BY DESIGN
RTI Control and Automation Solutions Put the Smarts in New Kangaroo Point Smart Home
Where the system really shines, however, is in its one-button scenes. For example, the Watch Movie scene closes the blinds, dims the lights to off, turns on the projector, drops the projector screen, and turns on the AV receiver to a pre-defined volume. The Goodbye Scene turns all lighting in the home off slowly, shuts down all AV equipment and multiroom audio, turns off the AC, and arms the alarm system. Room Off scenes shut off lighting, AV, and AC on a room-by-room basis. For the ultimate in convenience, when a family member enters the home when it’s armed, the touchpanels automatically display the alarm keypad. Disarming the home via the touchpanels, Doorbird stations, or external access keypad triggers the lighting and HVAC to turn on, automatically adjusting lighting levels and the temperature in accordance with a number of variables, including the time of day.

“Our client couldn’t be happier with how smart their home really is, whether it’s eliminating the need to hunt down remotes and adjust component settings when they want to watch a movie, or having the lighting and temperature automatically set to optimal levels when they come home,” adds Tom. “RTI makes it as simple as possible to deliver real intelligence to our customers’ homes and far exceed their expectations.”

List of RTI products used:
- 1 x XP-6s Control Processor
- 1 x KX3 3.5-Inch In-Wall Touchpanel Keypad With Control Processor
- 1 x T4x Handheld Remote Control
- 5 x SURFIR Companion Remote Controls
- 2 x KX10 10-Inch In-Wall Touchpanel
- 3 x RM-433 RF Receivers
- 1 x PCM-4 Ethernet Control Module
- RTiPanel App for iPhones and iPads