

## Case study Rozelle Residence

Location Philips Lighting

Sydney, Australia Philips Dynalite Controls



#### Background

It is often a challenge to renovate a heritage property in a way that retains its historical roots, while delivering all the benefits and convenience of a modern house. A property in the Sydney suburb of Rozelle has achieved this balance, using Dynalite controls to manage the home automation systems.

#### The challenge

Renovating is one of Australia's greatest pastimes. In a country with a limited span of history since European settlement began, there seems to be an almost national collective drive to modernize existing buildings rather than demolish them and build anew — a predilection that is reinforced by the planning laws. The challenge for every renovator is to retain enough of the heritage of the existing structure, while creating a contemporary space with all the modern amenities to match the needs of today's fast-paced life.

Property owner, Anthony Merlin, decided to give a new lease of life to his 1800s workers terrace house in the Sydney suburb of Rozelle. Merlin engaged a systems integration specialist firm and Philips Dynalite Dimension Dealer – Infrared, to design the AV systems within the house and to install, program and commission the integrated lighting and automation solutions.

The 190 square-meter property comprises four levels, including the garage — although from the original house frontage, you could be forgiven for thinking it is just a single-storey dwelling. The garage at the original rear of the property is the lowest level and above this

there is a study and a small courtyard. From here, you move along the terrace to the main living and entertainment areas, comprising open plan lounge, kitchen and dining room. Upstairs, there are three bedrooms, a family bathroom and a master ensuite above the main bedroom. The main bedroom is situated at ground level for the heritage frontage of the building.

The main criteria for the lighting design was that it tied in with the overall architectural brief to achieve a simple and stylish feel. The lighting controls needed to be intuitive so that anybody could use them. Another essential requirement was for the use of an iPad as a user interface to control lighting, plus the AV systems and the TV in the media and living rooms.

Infrared ensured all AV, lighting and security systems were integrated in a seamless operation that works with the occupants, seemingly anticipating their every need. Programming the doorstrikes proved particularly challenging. As people now enter the property through the garage — and with one doorstrike to enter the garage, one to enter the courtyard and another to enter the living room — it was important that these should be configured to avoid the possibility of people getting stuck between doors.

#### The solution

For the lighting side of the project, LEDs were used throughout, with RGB LEDs used to illuminate the courtyard and a fountain located in a glass-roofed enclosure below ground level at the original front of the property. A combination of Philips Dynalite controllers was used throughout the project, including DDLE802 leading-edge, DDRC1220FR-GL relay, DDBC1200 ballast and DDMC802 multipurpose controllers. These were interlinked into a single network using Philips Dynalite's sophisticated peer-to-peer communications serial bus network, DyNet.

Dynalite DR2P keypads were used, featuring stainless steel fascia, charcoal buttons, blue LED indicators and white LED backlights, although much of the system is automated through the use of a built-in DDTC001 timeclock and DUS804C sensors.

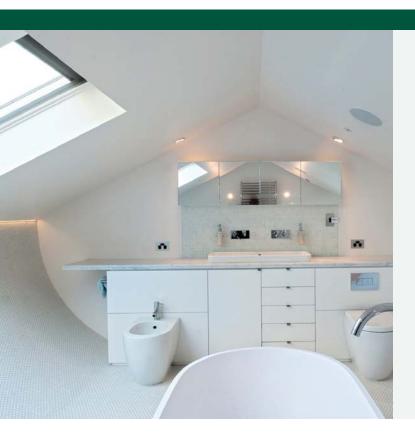
Different lighting scenes can be achieved through a combination of automated settings and by means of user preference. When you enter the property from the garage, a 'welcome home' button illuminates a pathway through to the living room. A 'goodbye' mode locks everything and turns everything off and a 'holiday' mode turns off the floor heating, shuts down the house and activates a preprogrammed cycle of lights to make it look as though somebody is at home.

In addition to these settings, in the master bedroom there is a 'his' and 'hers' switch to turn off all lights downstairs at night. For entertaining, a preset lighting configuration is activated for the main living and courtyard areas. This can be fine-tuned through the RTI software on the iPad, so the amount of red, blue and green light can be adjusted via slider controls.

Integration was provided to the external louvres and motorized blinds in the media room, motorized blinds in the third bedroom — which can be a bit of a suntrap — and to the vergola in the ensuite. Floor heating is also integrated to allow the four zones to be manually turned off via the DR2P keypads.

The AV systems were probably the most involved aspect of the integration, with separate systems for the media room and the

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#### Fast facts

#### Customer

Property owner, Anthony Merlin

Location

Sydney, Australia

Architect

Carter Williamson Architects Website: www.carterwilliamson.com

Dimension Dealer

Infrared

Products

DDLE802 Leading Edge Dimmer Controller; DDRC1220FR-GL Relay Controller; DDBC1200 Dimmer Controller; DDMC802 Multipurpose Modular Controller; DDTC001 Timeclock; DUS804C Multifunction Sensor; Revolution Series DR2P User Interface.

Lighting Solutions

Energy efficiency and architectural lighting design is achieved with a residence-wide lighting control system, to control: lighting, heating, cooling, security, louvres, blinds and audio-visual equipment.

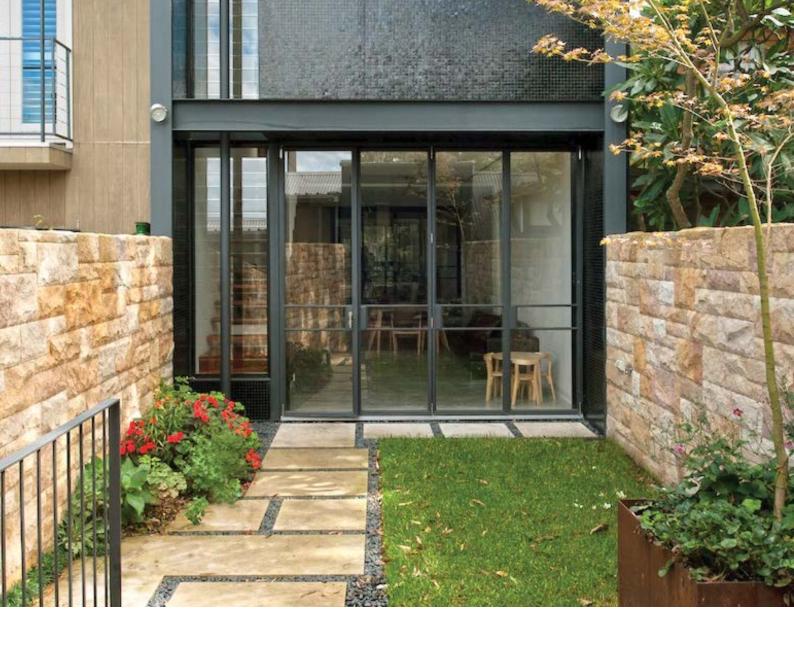
living room. In the media room, a motorized projector screen drops down from the ceiling, with control for the projector, TV and AV system possible through the iPad. Equally, in the living room the iPad allows control of the TV, home theater system, five speakers and a subwoofer. Additional speakers in the ensuite, master bedroom and courtyard can also be controlled via the iPad.

The main challenges on this project revolved around the amount of space there was to work with. The hardware of the system was difficult to keep out of sight, this issue was solved with the use of a couple of system racks that roll out of a cupboard to house the structured cabling, data and telephone points and the AV equipment.

The building type also presented problems for cabling. There are a number of tall glass windows, steel frames on the doors and polished concrete floors, all of which restrict where cables can be run through the property. However, clever design helped enable the maximum functionality to be incorporated seamlessly in a way that feels clean, fresh and stylish.

#### **Benefits**

The end result is a very stylish house that keeps its heritage roots while delivering a modern, luxurious living environment. The client is extremely happy with the end result. It is a great house to live in, with a fantastic finish and attention to detail. The automation is practical and simple. It is easy on projects like this to over-program the smart systems, but it is a measure of how right Philips Dynalite's Dimension Dealer – Infrared – got this project, that there has been no need to return to fine-tune any of the systems.



### www.philips.com/dynalite



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