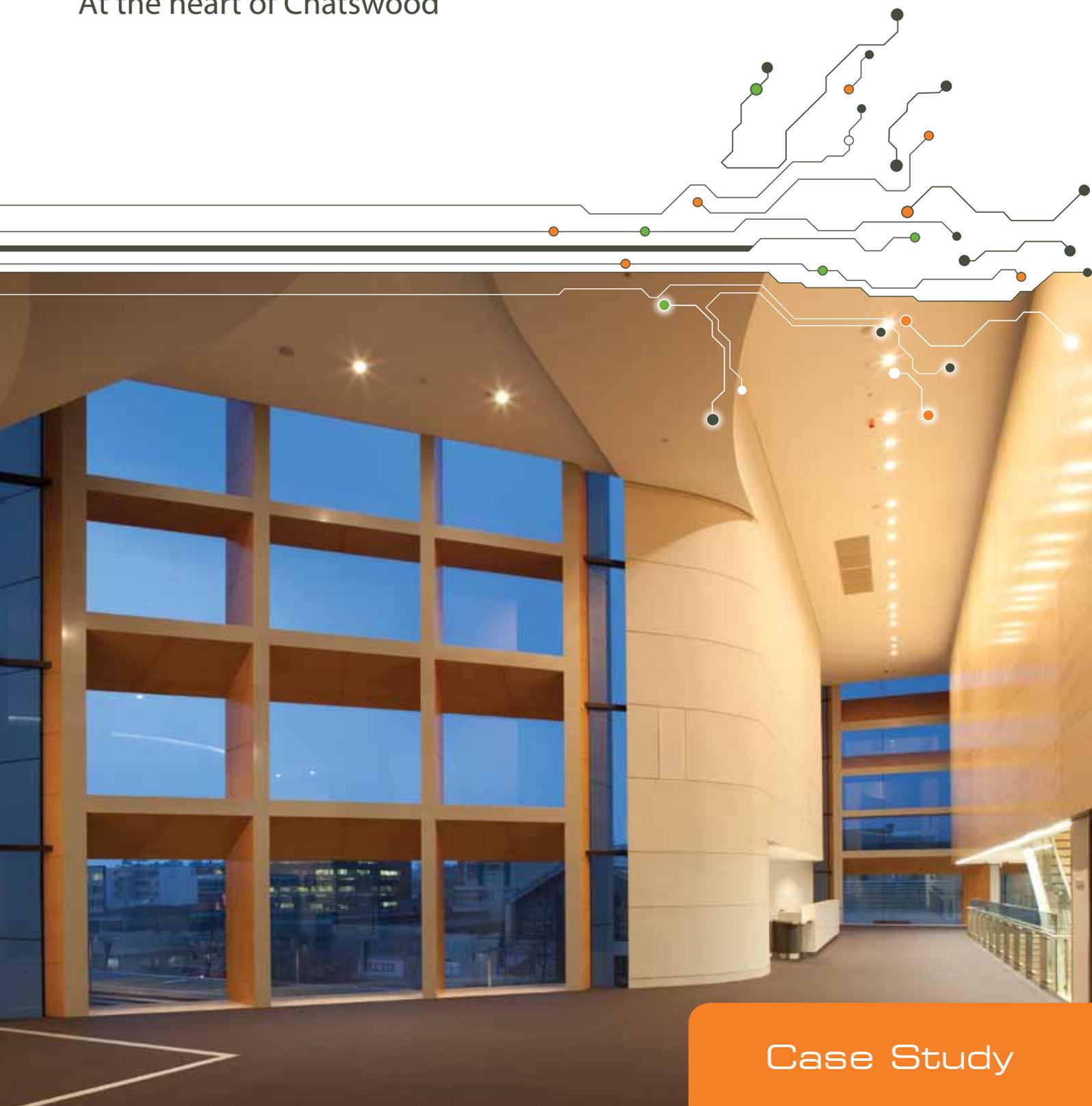


mySmartCTI™

The Concourse

At the heart of Chatswood



Case Study

The Concourse

At the heart of Chatswood



Project Details:

Location	Sydney, Australia
Type of Building	Civic Centre
Investor	Willoughby City Council
Architect	Francis-Jones Morehen Thorp
Builder	AW Edwards
Electrical Consultant	Lincolne Scott
Electrical Contractor	Stowe Australia

Opened in September 2011, The Concourse is an innovative civic building precinct designed with a clear focus on sustainability and user comfort.

Located on a 14,000m² site in the heart of Chatswood's CBD the building has been designed to operate with minimal water and energy consumption and houses a 5,000m² library, a 1,000 seat concert hall, 500 seat theatre as well as art and outdoor open spaces.

This multi-award winning building uses a combination of passive design elements, energy efficient heating, ventilation and air conditioning systems and a high performance lighting control solution by **mySmartCTI**. Due to the different operating requirements the lighting control solution is optimised to each of the unique spaces. Faced with this challenge the **mySmartCTI** team chose a platform based around a C-Bus operating system. This gives a lighting control solution that allows easy accessibility, versatility and tremendous reliability.

mySmartCTI is immensely proud to be associated with such a project, one that redefines the performance of civic buildings throughout Australia.



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The Concourse Light Control

The lighting control system utilises a Clipsal C-Bus microprocessor based control system incorporating relay and dimmer units, touch screens, switches, sensors and interfaces to automatically control various forms of lighting throughout the precinct. The structure of the lighting control system incorporates nine areas or zones that are interconnected on an Ethernet based network with central control and management via a dedicated PC in order to provide maximum end-user flexibility.



Theatre and Concert Hall

Due to the need for lighting in the Theatre and Concert Hall to be operated by the C-Bus system and a performance lighting desk a solution utilising C-Bus Architectural Dimmers and Colour Touch Screens has been implemented. The Architectural Dimmer allows control by the lighting desk via DMX when performance mode has been selected. At all other times lighting scenes are activated through the colour touch screens. The touch screens include the selection and adjustment of pre-set or created scenes combining different house light circuits, comprising;

- › Dimmed fluorescent lighting through DSI dimmers
- › Dimmed 'acoustically sensitive' lighting through Sine Wave Dimmers
- › Feature optic fibre wall panel lighting through Sine Wave Dimmers
- › Aisle seat and LED feature lighting switched through C-Bus relays

Foyer areas are controlled via pre-set or programmed scenes activated via the touch screen with movement sensors for outside of event hours.





Library

Key to the configuration of the library is ensuring the balance of natural and artificial light is correct to ensure user comfort. With high levels of natural light included as part of the architects' design it would be very easy to have too much artificial lighting in perimeter areas thus wasting energy. To ensure correct lighting levels are maintained light level sensors are strategically placed around the perimeter to manage daylight harvesting. Lights in the perimeter areas are programmed to dim below 50% of full power level.

All other functions in the main library space are controlled via touch screens, timer schedules stored in the Head End software and movement sensors for after hours control in open areas.



External Lighting

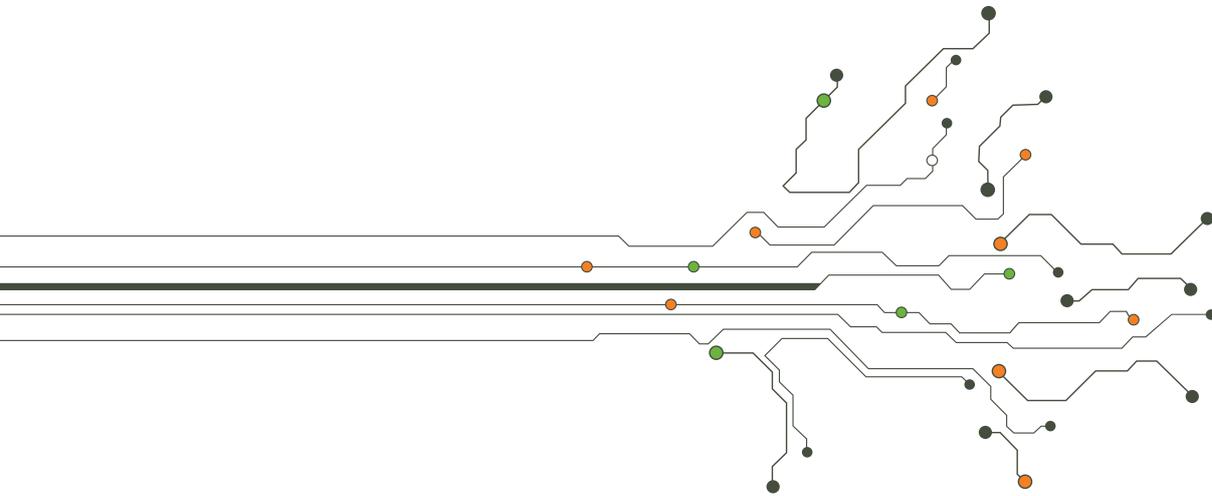
External lighting around the precinct is controlled using an automatic seven day time schedule activated by the Lighting Control PC. Each area has a separate time schedule whilst sunset, sunrise and any required fixed times may activate these events.

Additionally light level sensors are located around the building to activate lights outside of pre-set times if required.



Foyer and Art Space

As one of the signature areas of the building the foyer and art space utilises a series of touch screens activating programmed scenes as well as time scheduled events. These pre-sets can all be adjusted via the touch screens.



Emergency Lighting

Emergency lighting controls throughout the building are linked to the EWIS network. On activation lighting levels will increase to maximum regardless of the scene currently in operation. The EWIS and House Lighting Emergency Override mushroom pushbutton switches work in tandem to activate and deactivate the emergency lighting.



Car Park

Located underground in the basement the car park lighting control is designed to use sensors to ensure drivers can safely enter, navigate and exit the carpark. Sensors are used to ensure that light levels in the car park are aligned to the ambient external light levels assisting the vision of entering drivers.

Motion sensors and infra-red beams are used throughout the car park to ensure that only lights in the areas of the car park being trafficked are active. These are on a timer function to further reduce the amount of energy used for lighting in the car park whilst ensuring safety of users.

About mySmartCTI

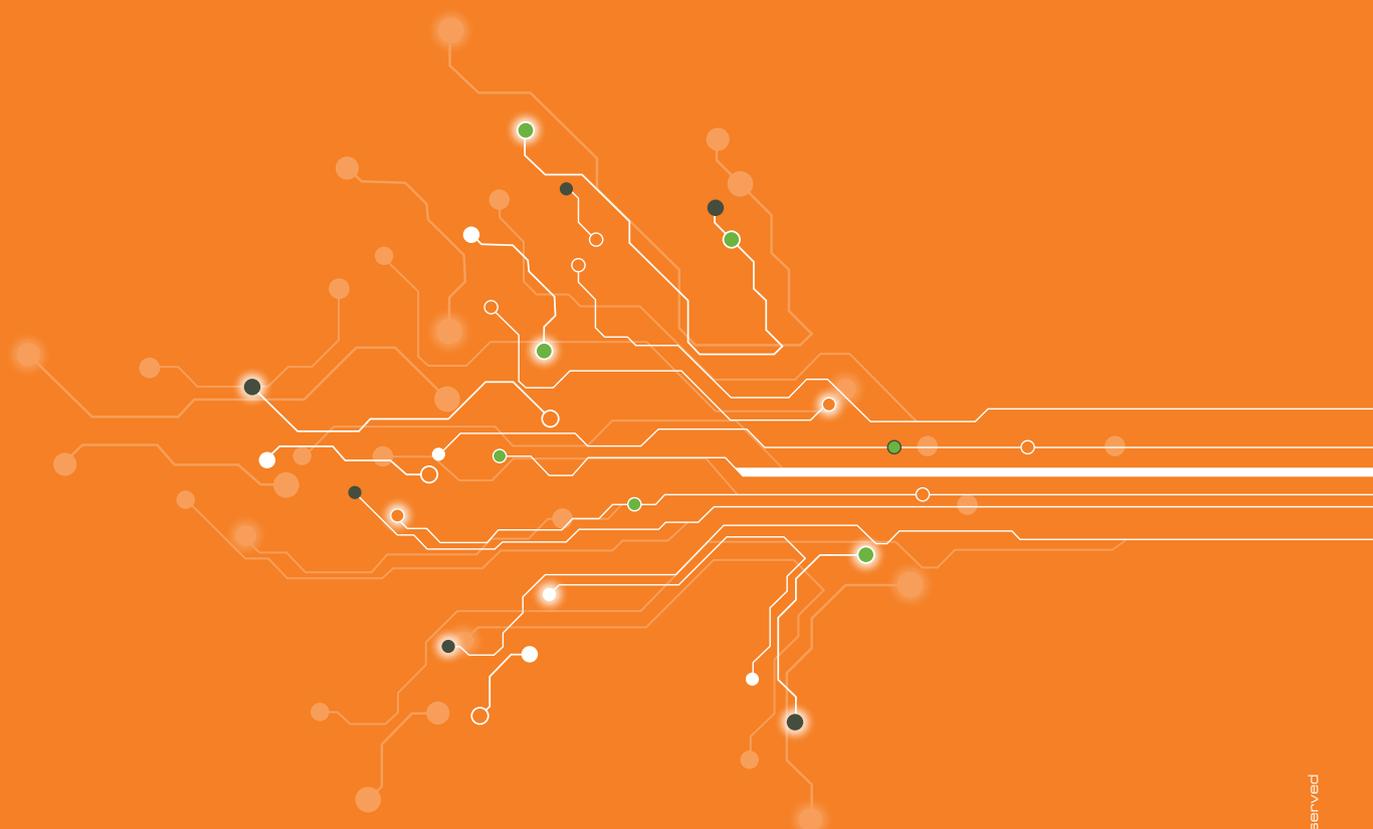
mySmartCTI is an Australian company that prides itself on making a positive difference for its customers, their employees and the environment. **mySmartCTI** helps to create the most energy and resource-efficient environments possible.

Using the latest technologies with highly trained consultants and service technicians, **mySmartCTI** is able to optimize buildings and outdoor built environments so they are more comfortable and use less energy and resources with a resulting reduction in ongoing operational costs.

Established, originally as Complete Technology Integrations (CTI), in Sydney in 2001 before being rebranded in 2011, **mySmartCTI** remains wholly Australian owned. With almost 50 staff it has offices in Sydney, Melbourne, Brisbane, Canberra and Perth. The company operates across a range of markets, including hospitality, education, health services, aged care, retail, residential, defence and Industrial.

mySmartCTI's solutions include:

- › Lighting control solutions which provide daylight harvesting and timed control
- › Basic and high performance metering and reporting solutions for energy, solar, water and gas usage
- › enGauge behavioural change displays for showing energy usage and savings
- › Fully integrated building automation systems providing lighting and façade management control, audio-visual interfacing, HVAC control, reporting and central control.
- › Hotel room control systems for controlling lighting, HVAC and blinds with full integration to the hotel check-in system
- › Stand-alone intelligent motion sensors
- › Unique custom solutions



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