

## Transport HOUSE, Sydney

Transport House is a heritage listed building situated on Macquarie Street in Sydney's CBD. As a listed building special consideration was required to ensure no damage occurred to any existing surface during the installation of the new lighting system. New bulkheads were built to accommodate building services, however other areas required use of existing conduit in the concrete slab floors as these areas were designated heritage.

CTI engineered a solution that incorporated two systems DSI and a DALI/C-Bus combination, maximising functionality using minimal cabling over seven floors. DSI was predominantly used throughout the building with the exception of levels 3 and 5. The Commissioners Room on level 5 was cabled via existing conduit in the ceiling as was the lift lobby on both level 5 and 3. In these areas DALI was incorporated using a C-Bus gateway to control the lighting without compromising the interior surfaces.

The solution also included daylight harvesting using photoelectric cells for perimeter lights.



*Street view of Transport House*

The user interface is easy and simple to use. The Building Manager has total control of the building lighting with master override to all floors using a touch screen, the touch screen also controls the lighting schedule to automatically turn on and off lighting on each floor at designated times. The Building Manager can easily adjust scheduled times to cater for tenant operating hours.



*Transport House*

The initial multi-network "base building" design created a platform which led to easy integration of the lighting control system for tenants including M&C Saachi.

SYDNEY  
MELBOURNE  
BRISBANE  
CANBERRA  
PERTH

Complete Technology Integrations

CTI Building Automation  
CTI Energy Management  
CTI SmartHome

# CASE STUDY

## Project highlight

The project highlight was incorporating a modern lighting solution within a heritage building.



A unique feature of the refurbishment was the Frenger light fitting; the fitting incorporates the fire sprinkler system as well as the air-conditioning again reducing the impact of services on the buildings internal structure.

The project required a huge amount of integration with all services, the consultant and the heritage office. CTI evaluated several products and decided DALI and DSI was the best option to control the light fitting with minimal control cables as existing conduits had to be used.

Using a simple Bus system meant all switches and sensors could reside on one cable, again using minimal conduit real estate.

CTI is very proud of this project and the outcome given the high level of complication and details.

## Project Information:

Value: \$2,633,000 (refurbishment)

Description: 7 storey plus house

Floor Space: approximately 8,390m<sup>2</sup>

NABERS: designed to achieve 4 Star NABERS Rating

## System Components Used:

Intelligent relays

DSI gateways

DALI gateways

Touch screen

360 degree motion sensors

90 degree motion sensors

Light level sensors (PE Cell)

Network bridges

Pascal automation controller

Reflection series switches

## Project Partners:

Product: C-Bus DSI and DALI

Front End: C-Bus Touch Screen

Contractor: Raven Electrical

Consultant: Aurecon Group

Architect: Dale Jones-Evans Pty Ltd

Owner: Mulpha Australia Ltd



SYDNEY  
MELBOURNE  
BRISBANE  
CANNBERRA  
PERTH

Complete Technology Integrations

CTI Building Automation  
CTI Energy Management  
CTI SmartHome