

BUILDING]



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JOINTLY PRODUCED BY CLIPSAL INTEGRATED SYSTEMS AND THEIR NETWORK OF SYSTEMS INTEGRATORS

CIS: A Sixth Sense for Switches

High-Rise Society
Automated apartment living

HomeSpeak
Voice recognition software

Home Theatre
The next revolution



Hello and welcome to another issue of Building IQ!

Whilst still considered a fairly new technology, the benefits of automation have been proven time and again.

In both domestic and commercial environments, automatic control, multi-way dimming and switching, energy savings and whole-home audio, visual, telephone and computer distribution are all made possible through automation systems. Yet, despite these proven advantages, many homeowners and designers are still cautious of the technology.

This is the result of the perception that automation systems are difficult to operate, when in fact, the purpose of automation is to make life easier. To add a level of simplicity, flexibility and convenience unachievable in a non-automated home. When an automation system is successfully designed, installed and commissioned, the technology should be transparent to the user.

To achieve this objective, it is important to involve the knowledge and experience of a systems integrator. Specifically trained in designing and implementing smart building solutions, systems integrators will liaise with architects, building designers and homeowners to establish a complete understanding of their requirements and design a system accordingly.

One of the key elements of a successful automation system is selecting a user interface that will suit the client's requirements, both in terms of ease of use and appearance. Clipsal Integrated Systems (CIS) have noted the importance of this and introduced a user-friendly range of interfaces including the C-Bus Touch Screen, the Neo and Reflection key input units and HomeGate software.

CIS together with their network of systems integrators are dedicated to providing you with smart solutions that maximise the potential of your projects. Through Building IQ we hope to prove to you the real lifestyle benefits possible with automation technologies. Enjoy!



Ron Ghezzi

Marketing Manager – Clipsal Integrated Systems.



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Can the automation system also carry out my security system requirements?

Yes. A Systems Integrator can design a system so that the various systems installed can 'talk' to each other. It is then possible to touch one button before exiting the building that will switch off all lighting, TVs and air-conditioning and at the same time arm the security system. These are the types of requirements that Systems Integrators have the know-how to design, install and commission.

How does the automation system know what to do?

When an automation system is installed it is given a set of 'rules' by which it can control its environment. These rules are based on user specific requirements and can be easily reprogrammed. For example, if the garden soil is too dry it could turn the sprinkler on, or if it is dark outside it could turn the exterior lights on.

How is an automation system controlled?

An automation system can be programmed to 'intelligently' control your environment

through the use of wall-mounted switches, touch sensitive screens, remote controls or a computer. For example, with one wall switch you could turn lights on or off, close the curtains, turn on your TV and switch it to your favourite channel.

What can be connected to the automation system?

Virtually any electrical device can be automated and/or controlled. In the home theatre, all audio and video equipment can be distributed to any TV in the house, and the integration of security cameras and intercoms can enable you to see who is at the front door from any television, talk to visitors and unlock the door from any nearby telephone. Dimming and switching functions can be controlled via remote control or a cordless phone, whilst the security system can be programmed to turn off lights, close curtains, turn the temperature down and arm the system when you leave the building. External lighting can be set to turn on automatically at dark or when someone is approaching, and irrigation and pool pumps can also be integrated to the system. The possibilities are endless.

It sounds a little complicated, will the user be able to work the system easily?

Yes. Users decide how they want to control their environment and systems integrators then design a system based on these requirements. Because of the many different types of user interfaces available from CIS, a system can be designed such that potentially complicated functions can be initiated with the touch of one button.

Will visible parts of the system complement the architecture?

Yes. Systems Integrators work closely with architects, interior designers and owners to ensure the wall switches, touch screens etc, are in keeping with the design of the space. Also, a Clipsal Integrated Systems' automation system allows a single switch or touch screen to control multiple functions, therefore wall clutter can be greatly reduced.

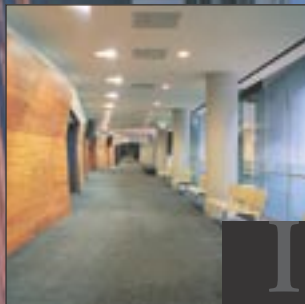
Who can I call to help me get started and provide pricing on a project?

Contact a CIS Systems Integrator, who will work with you to design a system suitable for your project. A complete list of Systems Integrators in your state is available on pages 12-15.

VICTORIAN COUNTY COURT

Completed in May 2002, Melbourne's new multi-storey Victorian County Court incorporates the latest in state-of-the-art automation technologies.

Housing Clipsal Integrated Systems' C-Bus Control and Management System, Scene Controllers and C-Lution Graphical User Interface (GUI), the building is now equipped with the technology to cater for the busy and ever-changing demands of the court's schedule.



Q

The Building

Situated in the heart of Melbourne, on the corner of Williams and Lonsdale St, the Victorian County Court is a 10-storey building, with an additional basement level housing judges' car parks, plant rooms and holding cells.

The ground floor accommodates six courtrooms, as well as administration offices and jury lobby areas. Levels one to seven contain courtrooms along one side of each floor and judges' offices on the other, whilst levels eight and nine have been left bare in anticipation of future expansion. The top level houses an additional plant room.

The Requirements

The aim of the project was to provide the client with an energy efficient lighting control solution that was capable of a high level interface with the court's Honeywell Building Automation System (BAS) and the Courtroom Allocation Management System (CRAMS).

To meet this requirement, Melbourne based systems integrators, Elecraft, recommended the C-Bus system. With a renowned reputation for energy efficiency and product reliability, C-Bus provides the courts with an adaptable and future-proof automation solution.

The Result

To ensure the robustness and reliability of the C-Bus system, a dedicated Ethernet control backbone for C-Bus services has been implemented. A C-Bus Network Interface has been located on each floor, with a separate internet-style IP address allowing easy network identification and programming. This high-speed connection offers the client complete control of the vast internal and external lighting networks throughout the building.

The application of Clipsal Integrated Systems' C-Lution SCADA software has enabled a high level Modbus interface with the Honeywell BAS system. The software runs from a computer in the basement plant room, where a fully interactive

Graphical User Interface (GUI), displays the status of active lighting zones with Modbus BAS and local control interface logging. This facility enables lighting scheduling of access and courtrooms as well as booking override facilities.

Once courtroom lighting is scheduled, it is then managed via Scene Controllers, which have been programmed to achieve four preset lighting levels. Any unauthorized use of courtroom lighting, will be recognized by the C-Lution system and the lighting shutdown within 30 seconds.

The system also caters for 'out of hours' functioning where lighting zones, when scheduled to switch off, will reduce to 50% illumination for a period of five minutes, thus allowing occupants to leave the zone or reschedule the lighting. Lighting can be manually rescheduled via the single gang key inputs located in all judicial and administration areas.

In addition, to ensure continued operation during a power failure, all equipment is connected to a backup uninterrupted power supply system.

The Benefits

After overcoming some initial teething problems, the building owner, the Liberty Group Consortium (a wholly owned subsidiary of Challenger International), are now finding the system simple to operate and very reliable. To ensure smooth operation, a full-time Facility Supervisor has been appointed by Honeywell, administering the day to day running of the system.

Manual override facilities in judicial zones allow the convenience of after hours control in primary and associated lighting zones, whilst two hour timing in these zones ensures maximum energy efficiency at all times.

The incorporation of automation in the County Court House has provided a flexible, convenient, energy saving and cost-efficient building management solution.

CASE STUDY

Photography: Erin Lewis

Clipsal HomeSpeak



With Clipsal HomeSpeak you can control any electronically linked device in the home, all at the command of your voice. This includes sound systems, garden irrigation, home theatre equipment and lighting.

Clipsal Integrated Systems have introduced speech recognition technology to their extensive range of hi-tech home automation products.

Clipsal HomeSpeak is a virtual electronic partner capable of setting lighting scenes, turning lights on and off and dimming them, all at the command of your voice. When used as part of a Clipsal Automation System, you can also control devices like security systems, home entertainment, garden irrigation, phones and faxes.

With Clipsal HomeSpeak there is no need to learn automation commands because simple, everyday language will do. HomeSpeak's ingenious software translates verbal commands for you, allowing common phrases and sentences to activate any number of systems connected to the C-Bus Control and Management System.

When you talk, it listens

Once you give HomeSpeak a name you're in control, because HomeSpeak actually listens to your commands. For instance, you might want to call your HomeSpeak system "Rex". Then, to give Rex a command you might say, "Rex, please set the dinner party scene".

Rex will then go about setting lights throughout the house to create a mood ready for your dinner party. Some lights will turn off, while others will

turn on and automatically dim to the desired level. Voice commands can also program events to occur at a later time. For example, "Rex, can you please set the dinner party scene for 8.30 tonight?"

Through HomeSpeak you can also control the intensity of individual lights; previously impossible using conventional lighting systems. For example, "Rex, dim all the lights upstairs by 70%."

Rex is eavesdropping once the party starts too. With the dinner in progress, you might want to play a few tunes on your sound system. There's no need to get up - "Rex, can you play from track 8 on the CD player please."

Remote access

You're not restricted by speech alone to get HomeSpeak working for you, it's also possible to control HomeSpeak using a computer, either at home or via the Internet.

Provided the appropriate connections are in place you can ask Rex to check on your house from anywhere in the world. For example, if you get to work and can't remember if you switched the Security System on you can ask Rex to check it for you. Simply connect to your home and type, "Rex, make sure the Security System is turned on."

If you like, Rex can also let you know once the command has been acted upon. In future releases, even a Personal Digital Assistant (PDA) will communicate with HomeSpeak.

Smart Solution

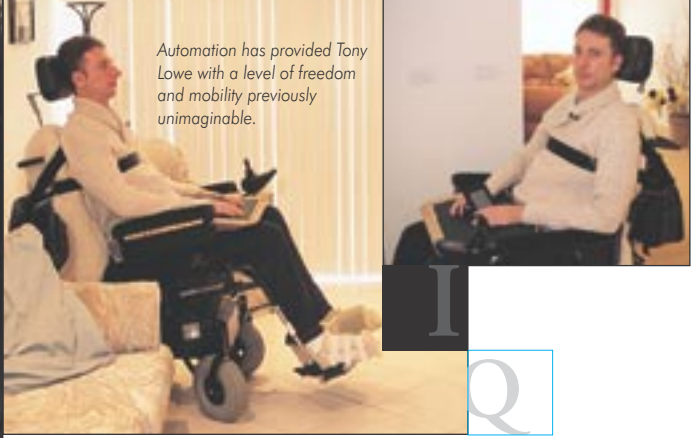
HomeSpeak signals the beginning of handsfree technology in the home.

It can only be installed in buildings using Clipsal's C-Bus Control and Management System and must be connected to a computer with the Microsoft Windows operating system (Windows 95/98/NT4/2000/XP).

HomeSpeak allows interchangeable use of both speech and text interface and features a user-friendly General User Interface to enable simple configuration of the system and one step automatic linking to wiring.

Clipsal's HomeSpeak electronic partner, provides users with the ultimate control of their living environment.

For more information, contact one of CIS' System Integrators or, download a copy of the Clipsal HomeSpeak brochure at www.clipsal.com/cis



Automation has provided Tony Lowe with a level of freedom and mobility previously unimaginable.

HOME ACTIVATION

In 2001, New South Wales Systems Integrator, Automated Lifestyles, embarked on a unique project – to automate the home of their quadriplegic client, Tony Lowe, and enable him to control any electronically linked device in the home.

The incorporation of Clipsal's C-Bus Control and Management and HomeMinder Automation Systems, Theatre Commander and the integration of a voice recognition system provided them with an innovative and future-proof solution.

The Requirements

Situated in one of Sydney's newest growth areas, Rouse Hill, this modest, single storey residence needed to be transformed into a wheelchair-friendly, voice activated home.

The main objective of the project, was to allow Tony to become more independent. He needed more freedom and control over his activities in order to make it easier for him to stay at home alone.

Through rehabilitation, Tony has regained feeling in his upper arms. However, he is unable to move his fingers and only has dull feeling on his forearms. For this reason, an intelligent control system was needed that would provide an easy, effective and remote means of controlling lighting, air-conditioning, security and the home theatre. In addition, there was a need for automated operation of the front door, giving Tony the freedom and mobility to enter and exit the house as he pleased.

The Result

To achieve the functionality required, Automated Lifestyles used a voice recognition software program and teamed up with Sydney-based remote control system specialists, Command Systems.

With C-Bus employed as the electrical infrastructure, the software and audio control technology were integrated into the system, providing three remote options for controlling the home's different electrical devices; voice activation, a portable touch screen and a radio frequency (RF) remote control.

The voice activation system has a dedicated PC with UPS backup, ensuring it's online 24 hours a day. It has been programmed to respond to unique word commands and male voice patterns through a wireless microphone. The technology gives Tony the power to control all lighting, audio, air-conditioning and home theatre equipment, such as changing TV channels, playing videos and CDs, skipping music tracks, turning air-conditioning up/down, on/off, activating different lighting circuits etc. The home theatre features have also been reproduced on the TV in the bedroom providing independence for the viewing habits of the household as well as catering for times when Tony is in bed.

The portable touch screen, "joey", is an infrared control that has been programmed to activate the same scenarios as the voice activated commands. Through the limited movement Tony has regained in his arms, he has trained himself to press the buttons and a special beeping function indicates when a feature has been activated.

The third remote option of control that has been integrated to the C-Bus system, is the RF remote that controls the front door and gate and garage door. Access is simply a matter of pressing a button that transmits a radio frequency to the RF receivers mounted in the control area, which feeds into HomeMinder.

The inclusion of HomeMinder has provided additional versatility, programming various lighting

and security scenarios, as well as motorised front door control. This is particularly beneficial at the front entrance, where a motorised front door was installed and programmed to respond to voice commands. It can also be controlled via a two gang C-Bus switch. Through HomeMinder, a second close command is issued after a set time period should the doorway be obstructed by an object. In addition, when the front doorbell is rung, the Theatre Commander system is programmed to turn down all audio in the house, so Tony can talk to the visitor through his wireless microphone. A simple voice command can then unlock the door to let the person in.

Benefits

The inclusion of C-Bus and HomeMinder in this project has supplied Tony with a level of control and independence unachievable with a conventional wiring system.

Though the state-of-the-art automation technologies integrated to the system, he is capable of remaining mobile, even when left alone and operating all home theatre, lighting and security features.

This unique project, has opened new doors to the application possibilities of the C-Bus and HomeMinder systems and set a new standard for the quality of life achievable for people with disabilities.

CIS MALAYSIA

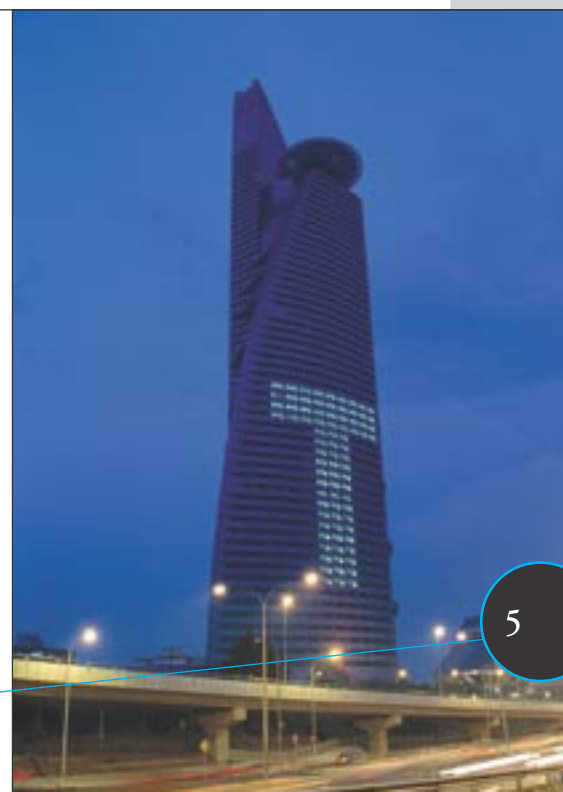
Another of CIS Malaysia's latest undertakings is the state-of-the-art Menara Telekom building in Kuala Lumpur.

CIS Malaysia has grown in leaps and bounds since its inception in 1997. In March this year, CIS Malaysia expanded from their core focus on development, marketing, distribution and providing regional support for technology solutions to create a new division, Clipsal Engineering.

Based in Kuala Lumpur, Clipsal Engineering is the software development and systems integration division of CIS. With a focus on developing network and internet-based applications, Clipsal Engineering will undertake complex integration projects, particularly for Clipsal control systems products. They will also perform specialist integration and development work for the Clipsal Group and focus on developing software applications and integration software for the Clipsal C-Bus Control and Management System.

One of the notable achievements in the region, is the completion of the high-end residential project Tomlinson Condominium by Wing Tai Property in Singapore. Located a stone's throw away from Orchard Road, this project is the most comprehensive home automation system installed in Singapore. The project consists of C-Bus Lighting Controls for all the bedrooms, living and dining, kitchen and study areas. C-Bus is also used to control the air-conditioning and automatic blinds in all areas. A C-Bus Touch Screen is installed for master control and monitoring of the entire apartment and a security system with telephone dial-in controls is part of this exciting home automation system. The latest internet access to control and monitor the apartment is also provided.

For more information on CIS Malaysia, log on to www.cisasia.com.my



HIGH-RISE SOCIETY

Inner city living is becoming a popular phenomenon in Australia, as the housing market experiences a construction boom in high-rise apartments. Many architects and building designers are capitalising on this growth, by including intelligent automation systems in their projects. We explore the trend in multi-storey residential developments and the benefits of including automation.



CAD image of the Aqua CBD Apartments, Adelaide.

The trend in high-rise living has been increasing for years. Recent figures from the Australian Bureau of Statistics (ABS) show that between 1993 and 2001, the number of multi-storey apartment buildings (4 storeys or more) as a proportion of total dwellings constructed, increased from 1.6% to 11.2%. In accordance with this growth, inner city populations have risen. In Melbourne alone, the population of persons living in high-rise blocks in the inner city area increased by 556.9% between 1986 and 1996.

The driving force behind this attraction to high-rise apartments, is the desire for the ambience of city living. Close proximity to work, family and entertainment are all high on buyers' wish lists and urban environments in inner city areas provide all these conveniences and more. The buyer market is largely owner-occupier and made up of retirees and professionals who travel a lot. Buyers are looking to simplify and enrich their lifestyles, adding a sophisticated level of flexibility and convenience which includes hassle-free security systems and eliminates the need to worry about time-consuming domestic activities.

Local governments have been proactive in encouraging inner city growth, initiating changes to urban planning policies and building regulations that promote higher housing densities and make better use of existing infrastructure. On-going

competition for land in inner city areas has also favoured the construction of adjoined dwellings, particularly in high-rise blocks. In the 1986-96 period, 64% of new dwellings in inner Sydney were in high-rise blocks, as were 45% of new dwellings in inner Melbourne. In fact, in all capital cities the most rapid development has occurred in the construction of high-rise residential blocks, with multi-storey apartment buildings currently comprising 10% of total dwellings.

This explosion of multi-storey residential developments has opened up new avenues of building design. One of the most exciting opportunities, lies in the application of smart building solutions. This involves the installation of an intelligent building control system that allows the seamless integration of any number of sub-systems. Clipsal Integrated Systems' (CIS) flagship product, C-Bus, is a sophisticated automation system that when integrated to the HomeMinder Automation System can be designed to control anything from multipoint dimming and switching to air-conditioning, data networking and security.

The concept of "smart living" was first introduced to residential development in 1998, when the C-Bus and HomeMinder Home Automation Systems were used in Sydney's luxurious Observatory Tower apartments. The system was configured to control all lighting, HVAC, security, floor

heating, heated towel rails and motorised curtains throughout the 30 storey building. Customised "Welcome Home", "Goodbye", "Goodnight" and "Vacation" scenarios were also set-up to suit the individual requirements of each of the 200 apartments, providing users with flexible control of their living environment.

Apart from the high degree of customisation possible, the C-Bus system has also been proven to provide an energy efficient building solution, particularly in commercial projects. In 1995, C-Bus was installed in Melbourne's Rialto Towers, resulting in a dramatic reduction in electricity bills. Energy savings of 2,310kW.h per month were measured, equating to a saving of \$438.20 (based on the D Tariff of 18.97 cents per kW.h (peak) at the time) ie. a saving of \$5258 per annum. Based on this figure, a payback period of just over two and a half years was calculated.

Aqua CBD Apartments is one of the newest high-rise blocks to hit the Adelaide skyline. Designers of the luxury, 7-level development, Loucas Zahos Architects, have included CIS automation technologies in each of the 15 luxury apartments as standard. This was to not only differentiate their development in the marketplace, but also to assist people in understanding the lifestyle benefits of automation. They were rewarded for this foresight, when the 300sq.m penthouse was sold for the record Adelaide-price of \$1.2million.

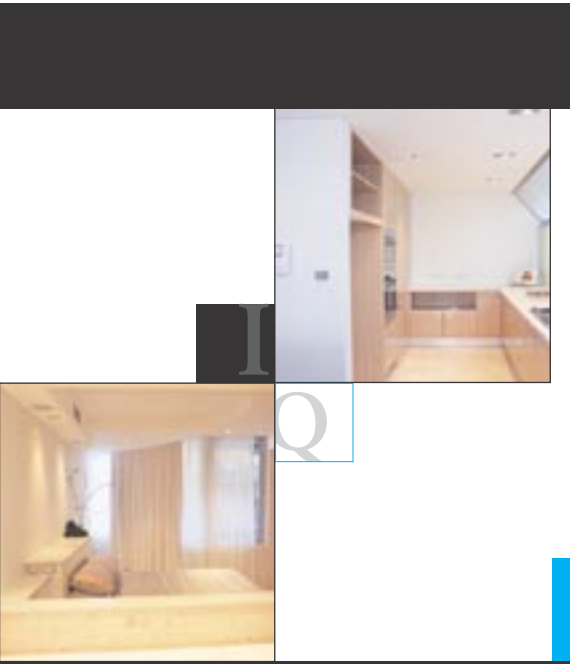
Director of Loucas Zahos Architects, Michael Loucas, is impressed by the simple yet sophisticated capabilities of CIS technologies and excited by the way they have been received.

"Integrated automation systems allow the homeowner to simplify and improve their lifestyle by taking daily tasks, applying logic and technology to their execution and then putting those tasks in the background," he said.

"The buyers are buying because of the overall quality of the development and because they see the technology as providing an important



Aqua



By automating this multi-storey project in Cronulla, Harvey Norman Commercial have created a level of functionality unachievable with conventional wiring.



Aqua

component of that quality and long-term value of their purchase."

The Aqua CBD Apartments include the C-Bus system as the backbone, with the option of Neo key input units, StarServe Lite or StarServe Pro and the HomeMinder system which can be integrated to control both security and landscape.

Michael Loucas is confident that automation will become a common and popular inclusion of new building developments and is certain that he will specify the technologies again. He recommends that fellow building designers start specifying the technology in anticipation of the growing consumer demand.

"It's a bit like buying computers and televisions," he said. "People will eventually come to expect the features and look for them in their purchase."

Real estate agent for Apartment Sales SA Pty Ltd, Michele Alexandrou, was responsible for the record price achieved for the sale of the penthouse at Aqua. As one of Adelaide's top selling agents for inner city properties, Michele has seen firsthand the dramatic increase in the

popularity of inner city apartments and the benefits the inclusion of automation provides.

"Where two years ago, these apartments were selling for \$200,000 to \$500,000, they are now fetching between \$500,000 and \$1.2million," she said.

"It's becoming more acceptable to live in apartments and the automation was a big selling point for us."

With only three apartments remaining, the Aqua Apartments have been sold at between \$3440 p/sq.m and \$4166 p/sq.m. This price is considerable in comparison to the median price of \$3336.87 for non-automated apartments, achieved by Apartment Sales SA between 1994 and 2000. Michele attributes this to the changing demands of inner city dwellers.

"People don't want to have something that's just an investment driven product, they want the total lifestyle," she said.

"They want data cabling, they want Clipsal C-Bus and they want the benefits of it. They don't want to have to worry about security and gardening."

One of CIS' newest Systems Integrators, Harvey Norman Commercial is heavily involved in intelligent, multi-storey residential developments. Manager of Harvey Norman's Home Automation Division in Sydney, Sam Bouzounis, attributes much of the popularity of multi-storey developments to skyrocketing housing prices.

"In Sydney \$400,000 will buy you a standard home 50km out of the city," he said.

"With the cost of housing so expensive, people are preferring to live in smaller residences.

The company has been installing CIS products for 18 months, including the C-Bus and HomeMinder Home Automation Systems, the StarServe Home Networking System and C-Bus Touch Screens. In their experience, the rate of uptake has been particularly strong in the high-end sector.

"All the luxury blocks fit some kind of automation," Sam said. "Whether it be intercoms, access control, lighting control or home theatre."

"But in the next three to five years, I predict every apartment will have some form of automation in it."

Reflecting on the response to the technology from architects and other building designers, Sam notes that it has been mixed, yet encouraging.

"There are architects that have jumped at it and others who haven't," Sam said. "They just have to realise that they are going to get an onsell value.

"Those who use it, love it."

As for the influence of automation in the selling process?

"It's a point of difference," Sam said.

"Buyers love the fact that they have something not many other people do."

SMART SWITCHES

The extensive range of C-Bus key input units are sleek, stylish and suited to any décor.

A Reflection of the Times

The latest addition to CIS' extensive range of switches, is the C-Bus Reflection Key Input Unit.

A switch that is both stylish and discreet, the Reflection switch is constructed from stainless steel and boasts a flat, rectangular design. Incorporating a screwless fascia, the metal look switch buttons feature 'cool blue' LED status indicators, that are easily detached for the purpose of engraving or pad printing for circuit ID labelling.

As part of the Clipsal C-Bus system, the Reflection range is capable of controlling any combination of C-Bus output devices including lighting, entertainment systems and even air-conditioning.

Available in 1, 2, 3, 4, 6 & 8 gang configurations, the Reflection range is designed to make building management easier and look right at home in today's modern domestic and commercial environments.

Face the Future

Stylish, modern and cleverly constructed, Neo has an understated presence that people are drawn to.

Offering a completely new alternative to the standard look of electrical wall switches, Neo is designed with architecturally inspired straight edges with a gentle curved front to the face. The large, flat control buttons have been designed to blend into the fascia and each button has a small built-in window with the choice of a cool blue or orange LEDs available behind each window.

To add to the sleek aesthetics of the new switch, is a handy infrared remote control. The hand held control allows the user the convenience of being able to control any combination of C-Bus output devices either remotely or via the switch plate.

Available with a choice of 2, 4 or 8 switch configurations, designers have the option of a range of colours and faux metal finishes.

Sliced extra thin

At first glance, Slimline looks exactly like our C2000 Classic Series switches and sockets. Viewed from the side however, it's a completely different story.

The Slimline range boasts a thin projection of just 4mm, that blends effortlessly into the wall surface. Available in 1, 2 and 4 gang versions, LED status indicators are built into individual keys to signify the status of the C-Bus output devices being controlled.

A comprehensive range that is truly unique, Slimline cover plates are available in plastic and metallic finishes as well as a choice of designer colours.

No switch or socket goes on thinner

With a remarkably thin 4mm profile, the Eclipse range of switches has reached new heights in switch and socket innovation.

Up to 60% thinner than most other switches, the Eclipse range is available in 1, 2 and 4 gang versions. Individual keys are programmable as toggle switches, dimmers, timers or as customised functions and status indicators are built into each key, indicating the state of the C-Bus output devices being controlled.





SLIMLINE

METAL PLATE

COUPLER

For more information on any of the switches featured, log on to the CIS website at www.clipsal.com/cis

The sleek elegance of Eclipse rests smoothly on any surface and ensures a slim and highly fashionable finish. Moulded designs in white, cream, soft grey, desert sand, black and brown are available, as well as metal finish covers in gold, brushed brass, chrome and brushed aluminium. There's a finish to suit all décor.

Metal Plate Series

In response to demand for metallic, contemporary-looking switch décor, CIS introduced the innovative range of Flat Metal Plate Series switches.

Available in stainless steel and brass finishes, the Metal Plate Series is offered in 1, 2 and 4 gang configurations. Individual keys are programmable as toggle switches, dimmers and timers and can be customised to perform dual functions.

LED status indicators are also utilised on each key, to display the state of the output devices being controlled. The default is load on indicator on, load off indicator off.

2000 Series

The Clipsal 2000 Series C-Bus Key Input Units are programmable wall mounted switches designed to manually control lighting and other electrical services connected to a C-Bus Network.

Like all units that make up a C-Bus system, the 2000 Series is Australian designed developed and manufactured and available in a wide range of colours and finishes.

With 1, 2 and 4 gang configurations on offer, the 2000 Series is capable of controlling any combination of output devices and keys can be customised to achieve dual functions from a single key. C-Bus makes it possible to easily achieve multi-point, multi-function switching or light dimming.

C2000 Series

A timeless looking switch, the C2000 Series of classic C-Bus key input units is available in a number of finishes including white, black, polished brass and aluminium.

Like all C-Bus switches, the keys are capable of being programmed to achieve various functions and feature orange LED status indicators.

The C2000 is available in 1, 2, and 4 gang

Smart Solution

The C-Bus2 Coupler unit is designed to interface C-Bus to standard Clipsal or third party voltage free mechanical switches, including latching and toggle switches.

In this way the user can mix and match Clipsal's 2000 Series, Standard Range, Heritage Range, Metal Plate or Prestige Series switch plates as well as the 30M Range and Clipsal 56 Series Range of Industrial Switches.

By allowing standard and existing switches to be controlled via the C-Bus system, the Coupler eliminates the need to spoil the ambience of the surrounding décor whilst still allowing intelligent lighting control to be achieved. For example, character homes can maintain their traditional feel by interfacing the Coupler to Clipsal's conventional range of Heritage switches.



MOVIE SCENE

The role of automation in modern home theatre set-ups and why you, the building designer, should be aware of it.



At its inception, a typical home theatre system consisted of a TV set, a video source such as a VCR or DVD player, and at least four speakers. Today, the idea of "home theatre" has been transformed, describing an experience as much as the equipment.

With new delivery formats and a staggering array of viewing and listening equipment constantly hitting the market, there is no doubt that consumer awareness of home theatre technologies is rising. In fact, research by America's Consumer Electronics Association (CEA) has shown a dramatic increase in consumer interest in home entertainment and information features.

Sydney based systems integrator, Len Wallis Audio, is the most awarded retailer in the Hi-Fi industry. They have been heavily involved in custom installations for the last 15 years, winning the CEDIA 'Installation of the Year' five times since 1996.

Managing Director, Len Wallis, predicts huge growth in the home theatre market and attributes its popularity to the introduction of DVD players.

"The advent of DVD has made high quality systems much more accessible at better prices," he said.

In fact, since their introduction in 1997, DVD players have enjoyed an unprecedented growth rate, with current research indicating a 25 per cent penetration level in American homes. Projection TVs are another sophisticated audiovisual product soaring in popularity, and can already be found in 15 per cent of US homes.

In anticipation of a reflection of US trends in the Australian market, Len encourages architects and building designers to familiarise themselves with home theatre technologies.

"Home theatres are now high on the wish list of many consumers," he said. "With many finding that a quality theatre is also a great family activity centre.

"This market is going to be driven by the consumer if specifiers do not become involved.

"Many architects have already realised that home theatres are now a demand item and are becoming familiar with the technology.

"This familiarity gives them an edge over their competitors."

For building designers, this growth in sophisticated home theatre set-ups creates a whole new sphere in which they can extend their creativity. Home theatres seek to reproduce the visual and audio effects of the movie theatre experience and through the implementation of automation technologies, building designers have the opportunity to further enhance the viewing experience. The scene control functions capable through automation systems provide users with intelligent solutions that enhance the impact of hi-tech audiovisual equipment.

One of the most obvious benefits of automation in a home theatre is lighting control. Integrated lighting systems give users complete control over a large number of lights and allow them to set lighting scenes. (Lighting scenes are programmed

lighting levels and "on" or "off" settings that respond to a single command.) The multiple dimming and switching combinations possible with integrated lighting systems can be used to create different moods, drama and sophistication. In the home theatre, modern integrated lighting systems can be configured to dim lights to suit adventure, kids and romantic moods, all of which enhance the viewing experience. In addition, other smart features such as, motorised curtains, can be integrated to the system to create an authentic cinema atmosphere. In fact, any number of scenes can be programmed, with the only limit being your imagination.

Another benefit of automated home theatre systems, is the virtual elimination of downtime. An automated system has inbuilt functions that automatically warn the user of any problems or maintenance required to ensure the system is always operational. For example, the system will indicate when a bulb needs changing, so you don't have to wait until you're presenting a seminar or hosting a party to realise that your system needs to be serviced. This feature is particularly valuable in commercial environments where these sophisticated technologies have become a significant selling tool.

VAF Research in Adelaide, is another of the industry leaders in automated home theatre systems. Housing one of the most sophisticated audiovisual showrooms in Australia, the company has had extensive experience in middle to high-end domestic installations as well as commercial projects Australia wide.

Founder & CEO of VAF, Philip Vafiadis, is certain that the desire for sophisticated home theatre systems in the Australian market is present and growing.

"I think what people are looking for is enhancing their lives," Philip said.



Images courtesy of Len Weallis Audio.

"If they want to watch a movie they don't want to know they're in a home theatre, they just want the movie experience and all the benefit that comes with that.

"Automation provides the solution to that."

Philip is also confident about the growth potential for automated home theatres in commercial environments, recommending it for anything from boardroom facilities and showroom spaces to museums, libraries and convention centres.

"It's not a fad and there are real commercial and lifestyle benefits to using the technology," he said.

"The time is long gone where these things are commercially unviable.

"It's inevitable that if building designers want to stay relevant to new markets, they're going to have to be part of this world."

Whether you deal with residential or commercial projects, there is no doubt that the home theatre market is booming. Hi-tech audiovisual products are becoming a part of daily life and the consumers are looking for products that will enhance the home theatre experience. The inclusion of automation in modern home theatres has promising market potential. Its success is simply a matter of building designers capitalising on this potential and making consumers aware that these features are available.



OUR SOLUTION

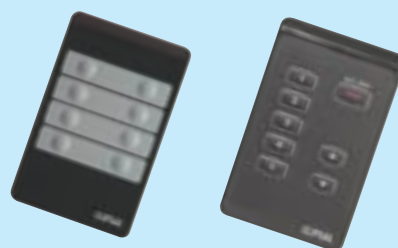
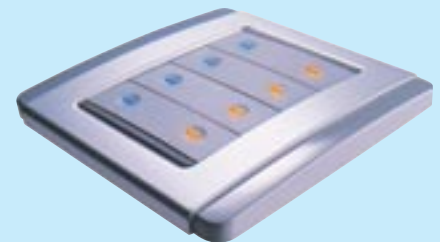
In Australia, Clipsal Integrated Systems (CIS) has observed the changing trends in home theatre technology and is taking an active role in providing hi-tech automation solutions. CIS offer consumers three options through which they can create different scenes with tailored lighting and automation features: Scene Master, the C-Bus Touch Screen and Neo.

Scene Master is a wall mounted Lighting Scene Controller that provides switching, dimming and scene control. Capable of producing up to five preset lighting scenes with flexible control of up to 33 lighting groups, the push button unit can be reprogrammed whenever you want via the easy to understand display. What's more, Scene Master's sophisticated automation technology enables it to be integrated with other systems, such as motorised curtains and air-conditioning, giving you the ability to create whatever scene you like at the touch of a button. In commercial applications, Scene Master is perfect for conference rooms, executive offices, hotel lobbies, auditoriums, restaurants, museums and galleries. Spectacular effects can also be achieved in residential home theatres, lounge rooms, bedrooms and outdoor entertaining areas.



Using a touch sensitive LCD screen, the compact and elegant C-Bus Touch Screen is a stylish alternative to multi-gang light and dimmer switches. Available in many different plastic surround covers – as well as stainless steel and brass finishes – the unit blends elegantly with any surrounding décor. Easily programmed using Windows™ based configuration software, there is virtually no limit to the number of screens or buttons that can be customised. The C-Bus Touch Screen connects directly to the C-Bus network so that it can be programmed to control any C-Bus connected device including lighting, security, pool pumps and irrigation. In the home theatre, the volume of the audiovisual system can be displayed on the same screen as lighting dimmers to quickly set the mood with optimum control. Buttons with text, images, shapes, sliders, clocks and per cent indicators can all be placed on the screen to help you navigate through the system.

The newest addition to CIS' product range of automation solutions is the revolutionary Neo switch. Compatible with Clipsal's C-Bus building automation technology, Neo makes it easy to manage the most complex building automation systems. Available in a range of colours and faux metal finishes, Neo is designed with architecturally inspired straight edges with a gentle curved front to the face. With a choice of 2, 4 or 8 switch configurations, the large, flat control buttons have been designed to blend into the fascia and each button has a small built-in window with the choice of a cool blue or orange LED available behind each window. Neo lets you get the most out of switching and dimming functions, by enabling each switch to be programmed to dim lights up or down and switch lights on or off in any combination. Neo is also capable of controlling any device connected to C-Bus including home office equipment, automatic curtains, pop-up sprinklers and home entertainment systems.



For the ultimate in flexible control, all three products come with a credit card size (IR) remote control, whose buttons mimic the scene options of the wall unit. This advanced technology enables users to operate the unit remotely via the IR control, as well as manually via the wall unit.

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