

CUPSAL

* 214°E

0

0

0

-

10 200

cene

ghts

air co

audio

video

tool

allon

dining

landscape

@ 10:43AM

all off

chneider Electric

Lounge

Dining

Bed 1

Study

next 🗈

Contents

	Page	
C-Bus Control and Management	3	Commercial Dimming Solutions
C-Bus Network Design Considerations	4	Commercial Dimmers
C-Bus Dynamic Labelling Technology	6	System Units and Accessories
Reflection Key Input Unit	8	Pascal Automation Controller
Saturn Key Input Units	10	Telephone Interface Unit
Modena 800 Series [®] Key Input Units	12	DALI Gateway
C2000 / Slimline Key Input Units	14	Power Supply
C-Bus Colour Touch Screen	16	PC Interface
C-Bus MKII Black & White Touch Screen	18	Ethernet Network Interface
Input Units	20 – 21	Network Bridge
General Input Units	20	C-Bus BACnet Gateway
Bus Coupler	20	Wireless Gateway
Auxiliary Input Unit	21	Installer Tools
Sensors/Thermostats	21 – 23	Multi-Room Audio System - Overview
Outdoor	21	Multi-Room Audio System
Indoor	21 – 22	Matrix Switcher
Light Level Sensor	22	Amplifiers
Temperature Sensor	22	Speakers
Room Thermostats	23	Accessories
IR Wall Units	24	C-Bus Software
Infrared Output Units	25	C-Bus OPC Server
Remote Controls	26	Citect Facilities
Output Units – Wall Mounted	28	C-Bus Wireless Control and Management Sy
Output Units - Din Rail Mounted	29 – 35	Typical Schematics
Universal Dimmer	29	Technical Drawings
Leading Edge Dimmer	30	
DSI Gateway	31	
0-10V Analogue Unit	31	
Relay Units	32 – 34	
Shutter Relay	34	
Standard Relay Units	35	





C-Bus Control and Management

Overview > Introduction

C-Bus was first developed back in 1994, initially designed and manufactured for commercial lighting control applications, it was soon migrated to the residential market due to increasing world-wide demand.

The C-Bus system is a microprocessor based wiring system specifically designed to control lighting and other electrical services.

Whether it's ON/OFF control of a lighting circuit, an analogue or digital form of control such as dimming electronic fluorescent ballasts; C-Bus can control and automate virtually any type of electrical load.

To ensure fast and reliable operation, each device has its own in-built microprocessor, which can be individually programmed via 'point and click' PC based software.



C-Bus information is held within individual C-Bus units rather than one central point. This ensures optimum communications speed and reliability.

While a computer is unnecessary for normal C-Bus operation, C-Bus PC based control and management software is available and provides additional flexibility to clients requiring this type of control.

C-Bus is suitable for a wide range of applications, for example:

Commercial Lighting Control

- Fluorescent lighting control for energy cost saving in high rise buildings.
- > High-bay control in warehouses for energy cost saving.
- > Mood lighting in restaurants and retail outlets.
- Flexible and integrated control of lighting and audio-visual equipment in boardrooms.
- Architectural lighting control for hotel foyers, ballrooms, art galleries and museums.

Standalone Room Lighting Control

- > Integrated automation via touch screen user interfaces for conference rooms and home theatres.
- > Multiple scene/mood setting.

Residential Automation

- Home entertainment Integrated audio-visual, lighting control, and other electrical services
- Security Integrated security, lighting and other electrical services.
- > Comfort Dimming, scene setting.
- Convenience Multiple point control or central point control from touch screens, automated time based control, automated 'Goodbye' and 'Welcome Home' scenes.

C-Bus Network Design Considerations

- > Up to 1000m of C-Bus Cat 5 UTP cable may be connected to a single C-Bus network
- Up to 100 C-Bus units may be connected to a single C-Bus network
- Where more than 1 km and/or 100 standard C-Bus units are required, two or more networks can be created and linked with C-Bus Network Bridge and/or C-Bus Ethernet Interface Units
- Maximum number of networks in one installation is 255 (this limitation does not apply if a C-Bus Ethernet Interface is utilised, the system size is then limited to IP Addressing only)
- Maximum number of networks connected in series to the local network via Network Bridges is seven (i.e. using six network bridges)
- Each standard C-Bus unit requires 18mA @ 36V DC to operate correctly. Some C-Bus units, e.g. 5500PC require 36mA. Some C-Bus units, e.g. L5108D1A are self-powering and do not take current from the 36V DC C-Bus network
- More than one C-Bus power supply can be connected to a C-Bus network to provide sufficient power to the C-Bus units, the C-Bus power supplies will share the load evenly. Maximum total power supply allowed is 2,000mA (2A)
- > Any combination of power supply units is allowed as long as the total power available is 2,000mA or less
- Each C-Bus network requires only one network burden. This network burden is software selectable on C-Bus output units
- > Each C-Bus network requires at least one system clock generating unit (for data synchronisation)

- C-Bus power supply units may be connected to different phases
- Individual relay channels may be connected to different phases
- On L5508D1A units the mains supply to the units power supply and the mains supply to the output channels must be on the same phase
- The isolation between the mains supply circuitry and the 36V DC C-Bus circuitry is greater than 3.5kV. This is achieved using double wound transformers and optoisolators. This means the C-Bus wiring, connections and circuitry can be considered extra low voltage
- C-Bus Cat 5 UTP cable has mains rated sheathing which means the C-Bus cable can be taken inside electrical Distribution Boards, provided segregation requirements of local wiring standards are met.

Typical C-Bus Application – Board Room or Lecture Theatre



Typical C-Bus wiring schematics are shown on pages 66-70

C-Bus



C-Bus Dynamic Labelling Technology 5080DL Series

Dynamic Labelling Technology (DLT) has been incorporated in C-Bus Saturn units allowing C-Bus installers to electronically label switches according to the requirements of the user and easily change this labelling via software, as required.

Dynamic Labelling Technology switches incorporate editable LCD text or bitmap labels, plus function indicators such as bar-graphs. The units have eight programmable buttons for C-Bus Group/Scene control over two pages, with a Scroll button to toggle between these pages. The 64 x 128 pixel LCD screen incorporates a backlight. Text, sliders and bitmaps can be defined in the C-Bus Toolkit software and downloaded to the unit via a C-Bus network.



Features

- > Impact resistant glass fascia.
- Editable LCD labels with Dynamic Graphic Displays, which can be optionally enabled/disabled.
- > LCD labelling for each switch.
- Eight switches for C-Bus group/scene over two pages (four buttons per page).
- > Page/scroll button.
- Each can be programmed as on/off, dimming, time or a scene control.
- > 64 x 128 pixel screen.
- > More than 20 languages supported.
- > Dimmable White LED backlighting for the LCD.
- > Dimmable Blue LED on each button.
- > Ignore first key press option.
- > Fallback to page 1 option.
- > Real-time Clock Display.
- > Programmed via C-Bus Toolkit software.
- > Nightlight on all keys or just 5th key.
- > LCD feedback under Learn Mode.
- > Learn Mode enabled.

Product Specifications

Catalogue Number	5080DL Series
C-Bus supply voltage	15 – 36V DC, 22mA for normal operation. Does not provide current to the C-Bus network
AC input impedance	50k Ω @ 1kHz
Electrical isolation	3.75kV RMS from C-Bus to mains (provided externally to the unit)
Max. no. of units on network	50 units
Control functions	Load switching, dimming, timing, scene control
Status indicators	Blue, one indicator per button (dimmable)
Backlight	White, user configurable (dimmable)
Warm-up time	5 seconds
C-Bus connection	One terminal block to accommodate 0.2 to 1.5mm (24 to 16 AWG)
Operating temperature range	0 – 45°C
Operating humidity range	10 – 95% R.H.



Product Range

Catalogue Number	Description
5085DL, GF	Saturn glass fascia C-Bus switch, incorporating Dynamic Labelling Technology, 5 buttons, white, Learn Enabled.
5085DL-680	Saturn glass fascia C-Bus switch, incorporating Dynamic Labelling Technology, 5 buttons, white, Learn Enabled.
5085DL-J80	Saturn stainless steel fascia C-Bus switch, incorporating Dynamic Labelling Technology, 5 buttons, Learn Enabled.



1	-	
ľ	-	
Č	•	
ા		

Reflection Key Input Unit R5060NL Series

The C-Bus Reflection Range of architectural, flat metal style Input Units are available in a brushed stainless steel finish. The units feature a magnetic mounting mechanism, which ensures that the installed product does not have any visible mounting screws.

Each switch on the plate has an associated blue LED indicator providing feedback status. The Reflection Range supports a wide range of functions, such as Toggle, On, Off, Timer, Dimmer, Remote Scene Selection, etc.

Note that a custom Wall Box is required to mount this switch (catalogue number R5060WB, sold separately). Standard wall brackets and boxes cannot be used. The R5060WB Wall Box is fully adjustable allowing the Reflection Key Input Units to mount flush with any flat wall surface in a wide variety of building styles.

Features

The Reflection Range is not weatherproof, and is therefore not suitable for external/outdoor use.

- > Architectural design.
- > Stylish screwless stainless steel fascia.
- Magnetic fascia plate allows quick and easy assembly and removal.
- > Available in 1, 2, 3, 4, 6 or 8 gang configuration.
- Each key has a blue LED status indicator providing feedback status from the network.
- > Functions include: on, off, toggle, dimmer, ramp up, ramp down and scene control.
- Removable 'metal look' buttons for engraving or pad printing.
- > Grid mount configuration.
- > Incorporates internal height adjusters allowing perfect flush mounting.
- Mounted to a custom Reflection Range wall box (R5060WB, ordered separately), which incorporates internal height adjusters allowing perfect flush mounting.
- > Up to 8 keys can be set as scene controllers via the installation software.
- > Learn Mode enabled.



Reflection Wall Box



Product Specifications

Catalogue Number	R5060NL Series	
C-Bus supply voltage	15 to 36V DC	
Current drawn	18mA	
AC input impedance	100kΩ @ 1kHz	
Max. no. of units on network	100 units	
C-Bus unit type	KEYA1 KEYAV2 KEYA3 KEYAV4 KEYA6 KEYA8	R5061NL R5062VNL R5063NL R5064VNL R5066NL R5068NL
Control functions	Load switching, dimming, timing, remote scene triggering	
Status indicators	Blue, one indicator per key	
Nightlight option	Allows blue LED backlight illur	nination
Warm-up time	5 seconds	
Storage temperature range	-10 to 60°C	
Operating temperature range	0 to 45°C	
Operating humidity range	-10 to 95% R.H.	
C-Bus input terminals	0.2 to 1.5mm ² (24-16AWG)	
Dimensions (L x W x H)	115 x 70 x 31mm key unit	
	103 x 60 x 40mm wall box	





28

Product Range

Catalogue Number	Description
R5061NL	1 gang key input unit, stainless steel
R5062VNL	2 gang key input unit, stainless steel
R5063NL	3 gang key input unit, stainless steel
R5064VNL	4 gang key input unit, stainless steel
R5066NL	6 gang key input unit, stainless steel
R5068NL	8 gang key input unit, stainless steel
R5060WB	Wall box to suit reflection range key input unit





Saturn Key Input Unit 5080NL Series

The C-Bus Saturn series of Key Input Units enables control of electrical loads such as lighting and air conditioning via the C-Bus Network. Saturn is an innovative user interface that incorporates style and functionality.

Suitable for the most exclusive interiors, Saturn features an impact resistant transparent glass fascia with a white backing. The round silver push buttons incorporate a configurable blue or orange LED, giving a stunning luminous glow and providing status feedback from the C-Bus Network.

Available in 2, 4 or 6 gang switch configuration, each switch can be programmed with on, off, toggle, dimmer, timer, scene control and custom functions.

Features

Incorporating standard mounting centres Saturn can be easily mounted using standard mounting accessories including wall boxes and plaster brackets.

- Enables control of electrical loads such as lighting via the C-Bus Network.
- > Impact resistant transparent glass fascia with a white backing.
- > Available in 2, 4 or 6 gang switch configuration.
- > Each switch can be programmed with on, off, toggle, dimmer, timer, scene control and custom functions.
- > Round silver tactile switch buttons incorporate a configurable blue or orange LED indicator.
- > LED switch indicators provide illumination and status feedback and are configurable as follows:
 - Blue ON, Orange OFF
 - Orange ON, Blue OFF
 - Orange ON, nothing OFF
 - Blue ON, nothing OFF
 - Orange ON all the time
 - Blue ON all the time
 - Orange and Blue always OFF
- Nightlight function with 'ignore first key press' option when nightlight is on.
- Fall back level option to dim indicators at a set time after the last key press.
- Programmed via Learn Mode or the C-Bus Installation Software.
- > Communication with other C-Bus devices and the supply voltage is obtained via a single C-Bus twisted pair cable.
- > An inbuilt non-volatile memory retains programmed information of the unit in the event of a power failure.
- > Mounted via standard mounting accessories, e.g. wall boxes and plaster brackets (ordered separately).



Product Specifications

Catalogue Number	5080NL Series
C-Bus supply voltage	15–36V DC @ 22mA required for normal operation. Does not provide current to the C-Bus Network.
AC input impedance	50k Ω @ 1kHz
Electrical isolation	3.75kV RMS from C-Bus to mains (provided externally to 5080 Series Unit)
Max. no. of units on network	50 units
Control functions	Load switching, dimming, timers, scene control
Status indicators	User configurable Orange and Blue
Warm-up time	5 seconds
C-Bus connection	One terminal block to accommodate 0.2 –1.5mm ² (24-16 AWG)
Operating temperature range	0 – 45°C
Operating humidity range	10 – 95% R.H.







Catalogue Number	Description
5082NL,GF	2 key input unit, white glass fascia
5084NL,GF	4 key input unit, white glass fascia
5086NL, GF	6 key input unit, white glass fascia
5082NL-680	2 key input unit, black glass fascia
5084NL-680	4 key input unit, black glass fascia
5086NL-680	6 key input unit, black glass fascia
5082NL-J80	2 key input unit, stainless steel fascia
5084NL-J80	4 key input unit, stainless steel fascia
5086NL-J80	6 key input unit, stainless steel fascia
5080LC-8	Pre-labelled button caps
5080F,WE	Mounting frame, white





Modena Key Input Unit 800 Series



This new European inspired range of C-Bus enabled switches has all the functionality of the C-Bus Saturn range and will match the rest of the PDL 800 Modena range of wall plates within the home.

Each button has a dual colour LED for button status feedback. All typical button functions are included for lighting type applications involving scene control. C-Bus Modena wall switches will seamlessly integrate with all current and legacy C-Bus hardware including C-Bus Touch Screens for complete control of the home.

C-Bus Modena is available in white or black with 2, 4, or 6 button options. Nine interchangeable coloured picture frame surrounds provide 36 possible style combinations.

Features

- > European inspired design.
- > Aesthetically matches the PDL Modena 800 Series[®].
- Each button can be programmed for on, off, toggle, dimmer, timer scene control and custom button functions.
- > Control of typical electrical loads such as lighting, heating, irrigation control via the C-Bus network.
- > Available in 2, 4 or 6 button configurations.
- > Dual status LED Blue/Orange.
- > Variable indicator brightness.
- > Fall back dim indicator options.
- > Nightlight and timer functions.
- > Built-in non-volatile memory retains programmed information in the event of power failure.
- > Mounted via standard mounting accessories, e.g. wall boxes and plaster brackets.
- > Learn Mode enabled.





Product Specifications

Parameter	Description
C-Bus supply voltage	15 to 36V DC, 22mA for normal operation. Does not provide current to the C-Bus network
C-Bus AC input impedance	50k Ω @ 1kHz
Electrical isolation	3.75kV RMS from C-Bus to mains (provided externally to LHC88x Series unit)
Max. no. of units on network	50
Control functions	Load switching, dimming, timers, scene control
Status indicators	User configurable Orange and Blue
Warm-up time	5 seconds
C-Bus connection	One terminal block to accommodate 0.2 to 1.3mm ² (24 to 16 AWG)
Operating temperature range	0 to 45°C
Operating humidity range	10 to 90% RH





Product Range

Catalogue Number	Description
LHC882,WH	2 gang key input unit, Modena style, white
LHC884,WH	4 gang key input unit, Modena style, white
LHC886,WH	6 gang key input unit, Modena style, white
LHC882,BK	2 gang key input unit, Modena style, black
LHC884,BK	4 gang key input unit, Modena style, black
LHC886,BK	6 gang key input unit, Modena style, black



Standard C-Bus

Key Input Units Slimline[™] SC2000 Series



SC5031NL

SC5031NL	Wall switch 1 gang, orange LED
SC5032NL	Wall switch 2 gang, orange LED
SC5034NL	Wall switch 4 gang, orange LED
SC5031BNL	Wall switch 1 gang, blue LED
SC5032BNL	Wall switch 2 gang, blue LED
SC5034BNL	Wall switch 4 gang, blue LED

Features

- > May be programmed as dimmers, timers and on/off toggle switches.
- > 1, 2 or 4 buttons per wall switch.
- Each button features a programmable LED > status indicator.
- > Available in white or black, with the standard Slimline SC2000 range of cover plate options.
- Units draw 18mA from a C-Bus network. >
- > C-Bus Learn Enabled.

Classic C2000 Series





C5034NL

C5031NL

C5031NL	Wall switch, 1 gang
C5032NL	Wall switch, 2 gang
C5034NL	Wall switch, 4 gang

Features

- > May be programmed as dimmers, timers and on/off toggle switches.
- > 1, 2 or 4 buttons per wall switch.
- > Each button features a programmable status indicator.
- Available in white or black, with the standard C2000 > Classic range of cover plate options.
- > Units draw 18mA from a C-Bus network.
- > C-Bus Learn Enabled.

Desire the look, have it all

Offer your customers a seamless electrical solution for their home or business. Perfectly match their chosen C-Bus automation range with the equivalent 250V electrical accessories.

Complementary ranges to the C-Bus automation offer include:

- > Saturn 250V
- > Modena 800 Series
- > Slimline SC2000 Series
- > C2000 Classic Series



For more information contact Schneider Electric customer care 0508 254 7725



C-Bus Colour Touch Screen 5080CTC Series

C-Bus Colour Touch Screen is a wall mounted, touch sensitive LCD screen that can display pages of graphical items such as buttons sliders and images. These graphical items perform C-Bus related functions when pressed.

The unit also includes a real-time clock for automatic scheduling of events based on the time of day, week, month or year. The touch screen allows control via an infrared handheld remote control unit.

C-Touch Colour can be completely customised to suit user requirements via the included Windows[™] compatible configuration software. The software also includes a Logic Engine module that allows the installer to program logic based control into the touch screen configuration.

Available in Stainless Steel and Saturn glass style surrounds, the Colour Touch Screen is not only aesthetically appealing, but an extremely functional addition to the comprehensive range of C-Bus products.



Features

General

- > Connects directly to a C-Bus network (no external PC interface required).
- Control and monitor devices connected to C-Bus, Ethernet and RS-232 (Custom Ethernet and RS-232 support via the included logic programming language).
- > On-board audio supports external speakers and microphone.
- > Unit programmable via Ethernet.
- > Real-time clock (astronomical).
- 256MB compact flash factory programmed with Touch Screen firmware.

Software

- > GUI based drag and drop configuration software, plus Freeform logic programming language.
- Software interface design supports 101 levels of alpha blending.
- > Animated buttons with more than 256 animation frames supported.
- Fully customisable graphics including bar graphs, sliders, percentage indicators, images, gauges and clocks with any border and background style.
- > Supports web page embedding.
- > Supports project theme templates.
- > Audio WAV file support.
- > Scene control.
- > Event scheduling support.
- > Astronomical clock support.
- > Irrigation control.
- > Password access control.

Product Specifications

Catalogue Number	5080CTC	
Screen type	LCD active matrix	
Screen size	6.4 inch (diagonal)	
Screen resolution	VGA, 640 x 480 pixels	
Pixel pitch	0.204mmx 0.202mm (H x V)	
Screen viewing area	130.6mm x 97.0mm (H x V)	
Touch overlay type	Resistive membrane	
Viewing angles	Horizontal: typical. 70° left and right Vertical: typical. 40° up, 70° down	
Luminance	300cd/m2	
Backlight	Cold cathode with light sensor for automatic backlight level control	
Memory	256MB compact flash factory programmed with panel firmware	
Front panel	Ethernet 10/100 Port: RJ-45 port (under fascia) Speaker (under fascia) Infrared receiver	
Rear connectors	C-Bus RJ-45 connectors, x 2 Ethernet 10/100 Port: RJ-45 port for communication Composite video output via RCA socket (75ohm) RS-232 via DB 9 connector 2 x USB (type A connectors) for future software support Remote IR input (hardwired via 3.5mm mini-jack) External speaker/headphone connector: 3.5mm mini-jack	
Enclosure	Moulded Faradex	
Fascia	Saturn style: Glass	
Power	<5A @ 5V DC (Power pack included)	
Dimensions (W.H.D)	248mm x 175mm x 60mm	

Product Range

Catalogue Number	Description	
5080CTC2, GF	C-Bus Colour Touch Screen, 6.4 inch screen, white glass fascia	
5080CTC2-6	C-Bus Colour Touch Screen, 6.4 inch screen, black glass fascia	
B55000CTC2	C-Bus Colour Touch Screen, 6.4 inch screen, stainless steel fascia	
5000CTCPS	C-Bus Colour Touch Screen, Power Supply Version 1	
5000CTCPS/2	C-Bus Colour Touch Screen, Power Supply Version 2	



C-Bus

MKII Black & White Touch Screen 5080CTC2 Series

The massively enhanced C-Bus MKII Black & White Touch Screen, builds on the success of the original Monochrome touch screen.

- > Bigger screen.
- > Enhanced contrast.
- > Superior backlighting.
- > Available with or without C-Bus Logic Engine.
- > Models with RS-232 integration.
- > USB programming port accessible from the front of the unit.



User Benefits

To provide the user with an improved interface, the following have been included:

- > The unit includes a new, larger LCD screen. This has 50% more screen area than the Monochrome model.
- Improved, adjustable LCD screen backlighting with ambient light compensation.
- > The super bright LCD uses white on black technology to enhance clarity.
- Available in the white glass, black glass, stainless steel or white plastic fascia styles.

Installer Benefits

To ensure the unit is quicker, easier and more flexible to install and commission, the following features have been included in the MKII unit:

- > Program via a standard USB port on the front of the unit.
- > The USB port can be used as a PC interface.
- > A separate RS-232 port is included on the rear of the unit for third-party device integration*.
- Compatible with Version 4 of the C-Bus Windows[™] based programming software.
- > Available with or without built-in Logic Engine features.

Product Specifications

Parameter	Description		
Screen size	119mm (diagonal) 4.7 inches (diagonal) 100mm x 75mm (W x H)		
Resolution	QVGA (320 pixels x 240 pixels)		
Control functions	Load switching and dimming Scenes Logic (Versions with Logic Engine only) Schedules		
Power supply	Powered directly from C-Bus15-36V DC @ 65mA required for normal operation. Does not provide current to the C-Bus Network.		
Maximum number of controlled loads	255 Group Addresses on each of 10 C-Bus Applications		
Maximum number of C-Touch units on a single C-Bus network	10		
C-Bus connection	Loop-in/Loop-out removable terminal block for C-Bus		
Third party interface	RS-232 port (supported by the version with C-Bus Logic Engine only)		
Programming port	USB Type B (under front fascia)		
Overall dimensions	Plastic Fascia Version $W = 193mm$ $H = 134mm$ $D = 41mm$ Saturn TM Fascia Version $W = 195mm$ $H = 136mm$ $D = 47mm$ Stainless Steel Fascia Version $W = 193mm$ $H = 134mm$ $D = 45mm$		
Operating temperature range	10 to 45°C		
Operating humidity range	10 to 95% R.H.		
Fascia styles	Saturn™, Stainless steel, Flat plastic		
Accessories	RS-232 lead (only required for integrating to third-party devices) Part number 5000CT2RS232		
	Wall box Part number 5000CT2WB (external dimensions 179.5x122.5x55mm)		
Dimensions (WxHxD)	248mm x 175mm x 60mm		

Product Range

Catalogue Number	Description	
5080CTL2, GF	C-Bus Monochrome Touch Screen, 4.7 inch screen, white glass fascia with logic engine	
5080CTL2-6	C-Bus Monochrome Touch Screen, 4.7 inch screen, black glass fascia with logic engine	
BS5000CTL2	C-Bus Monochrome Touch Screen, 4.7 inch screen, stainless steel glass fascia with logic engine	
5080CT2,GF	C-Bus Monochrome Touch Screen, 4.7 inch screen, white glass fascia no logic engine	
500CT2-6	C-Bus Monochrome Touch Screen, 4.7 inch screen, white glass fascia no logic engine	
BS5000CT2	C-Bus Monochrome Touch Screen, 4.7 inch screen, stainless steel fascia no logic engine	
SC5000CT2,WE	C-Bus Monochrome Touch Screen, 4.7 inch screen, white plastic fascia no logic engine	
5000CT2WB	Wall box for MK2 Touch Screen	



Input Units

General Analogue/Digital Input Unit



5504GI

General input unit, 4 Channel

- > Four channel general input unit, DIN rail mounted.
- > 8M DIN modules wide.
- > Dimensions 144mm x 85mm x 65mm.
- Used to interface a C-Bus system to third-party products such as light level sensors, current sensors, temperature sensors, CO₂ detectors, differential sensors, pressure sensors, flow rate sensors, moisture probes etc. Ideal for 4-20mA current loop applications.
- Designed to either trigger the state of a C-Bus group address as a function of input level or broadcast a message on the C-Bus network, representing the input level.
- > Maximum of 10 units on a single C-Bus network.
- Can be used to measure analogue values (0-1V, 0-5V, 0-10V, 0-20V, 0-20mA, 4-20mA, 500 Ohm, 1k Ohm, 3k Ohm and 10k Ohm thermistor inputs).
- > Requires a 24V DC connection (power pack included).
- > Units draw 18mA from a C-Bus network.

Bus Coupler Input Unit



5104BCL

Bus coupler input unit, 4 Channel

- 5104BCL used to interface up to 4 standard voltage free mechanical switches, including latching and toggle switches to C-Bus.
- > Dimensions 55mm x 49mm x 18mm.
- > The unit is designed to fit into a standard wall box.
- > Each unit features a programmable status indicator.
- The maximum distance between the unit and an external voltage free switch is limited to 1 metre (use L5504AUX if longer distance required).
- > Units draw 18mA from a C-Bus network.
- > C-Bus Learn Enabled.

DIN Rail Mounted Auxiliary Input Unit



L5504AUX

Auxiliary input module, 4 Channel

- > Four channel auxiliary input module, DIN rail mounted.
- > 4M DIN modules wide.
- > Dimensions 72mm x 85mm x 65mm.
- > Permits voltage free switches to be connected to C-Bus.
- > Each unit features a programmable status indicator.
- The unit may be programmed in the same way as a wall switch, to achieve the same functions such as timer, dimmer or toggle switches.
- > Units draw 18mA from a C-Bus network.
- > C-Bus Learn Enabled.

Passive Infrared Motion Detectors



5750WPL

Occupancy sensor, infrared, IP66, outdoor

- > PIR motion sensor suitable for outdoor use.
- > The unit has a field of view of 110 degrees and a detection range which extends 18 metres.
- > The unit features a light threshold adjustment.
- > The time delay is programmable in the range 1 second to 18 hours.
- > Features a sunset switch program.
- > Units draw 18mA from a C-Bus network.
- > C-Bus Learn Enabled.

5751L

Occupancy sensor, infrared, indoor, corner mount

- > PIR motion sensor suitable for indoor use.
- The unit has a coverage range of 6m x 6m and a field of view of 90 degrees.
- > The unit features a light threshold adjustment.
- The time delay is programmable in the range 1 second to 18 hours.
- > Features a Sunset Switch program.
- > Units draw 18mA from a C-Bus network.
- > C-Bus Learn Enabled.



Input Units

Passive Infrared Motion Detectors cont'd

5753L

Occupancy sensor, infrared, indoor, flush mount, 360 degree

- > 360 degree, flush, ceiling mount PIR motion sensor.
- > Suitable for indoor use.
- The unit has a coverage range of 6m x 6m and a field of view of 90 degrees.
- > The unit features a light threshold adjustment.
- The time delay is programmable in the range 1 second to 18 hours.
- > Features a Sunset Switch program.
- > Units draw 18mA from a C-Bus network.
- > C-Bus Learn Enabled.

5753PEIRL

Multisensor, combined occupancy sensor, light level sensor and IR receiver



- Flush mount design with 360 degree detection pattern.
- Capable of controlling up to 8 C-Bus Scenes or 8 C-Bus Group Addresses.
- > Supports the 'Corridor Linking' feature for commercial building applications.
- Three LEDs indicate a range of actions from movement, to the receiving of IR commands and the device's status.
- > Light and PIR sensitivity are set via adjustment screws located on the sensor unit.
- > Dual element detectors minimise false triggering.
- > Refer to 5753PEIRL Installation Instruction for location and mounting details.
- > An LED status indicator on the unit is used to report the current state of the load controlling device.
- > Unit draws 18mA from a C-Bus network.
- > C-Bus Learn Enabled.

Light Level Sensor

5031PE

Light level sensor, 40 - 1600lux.

- Used to measure and regulate lighting in the range of 40 – 1600lux.
- Programmable target light level as well as the margin on installation.
- > Each unit features a programmable status indicator.
- Can be used to achieve bank switching or continuous dimming.
- > Units draw 18mA from a C-Bus network.

Temperature Sensor

5031RDTSL

Temperature sensor,

with temperature broadcast



5031PE

- 0 50 degrees Celsius
- Used to measure or regulate either heating or cooling in the range 0 - 50 degrees Celsius.
- > Programmable temperature target and margin on installation.
- Programmable setback temperature economy mode for when room is not in use.
- > Temperature broadcast facility.
- Can be used as a remote sensor for the C-Bus 4-zone room thermostat units.
- > Can be used as a measurement device for touch screens.
- > Units draw 18mA from a C-Bus network.



Single Zone Thermostat

5070THBR

C-Bus thermostat, programmable, single zone with 5 relays (relays for HVAC plant control only, not accessible via C-Bus)



4 Zone Thermostat with Programmable Time Scheduling

5070THPR

C-Bus thermostat, programmable, 4 zone, with 5 relays (relays for HVAC plant control only, not accessible via C-Bus)





5070THP

C-Bus thermostat, programmable, 4 zone, no on board HVAC plant control relays

- 4 zone (plus the common zone) programmable C-Bus thermostat.
- > Wall mounted.
- > Dimensions 105mm x 149mm x 24mm.
- Support for control of HVAC units via C-Bus or directly using on board HVAC relays (RWG control).
- Manually adjustable temperature set point, mode of operation (heating, cooling or ventilation) and time schedules.
- On board 7 day HVAC time scheduling (user programmable), manual fan speed control, and setback mode.
- Easy to use interface, comprising an LCD, manual control buttons and a rotating dial with an integral press switch.
- > Draws 40mA from a C-Bus network.
- > Available in white and black glass fascia' or a brushed stainless steel finish.



5070THB

C-Bus thermostat, programmable, single zone, no on board HVAC plant control relays

- > Single zone C-Bus thermostat.
- > Wall mounted.
- > Dimensions 92mm x 127mm x 24mm.
- Support for control of HVAC units via C-Bus or the internal HVAC relays ('RWG' control).
- > Manually adjustable temperature set point and mode of operation (heating, cooling or ventilation).
- The unit includes fan speed control and a 'Setback' or 'Economy' Mode.
- Easy to use operator interface includes an integral LCD to display the current temperature and mode of operation.
- > Draws 40mA from a C-Bus network.
- > Available in white and black glass fascia' or a brushed stainless steel finish.

IR Wall Units

Infrared Receivers

- > Wall mounted IR receiver incorporating 4 stations of IR receivers.
- > Available with or without C-Bus buttons.
- > May be programmed to achieve functions such as a dimmer, timer or toggle switch.
- > Units draw 18mA from a C-Bus network.
- > C-Bus Learn Enabled.

Classic C2000 Series



C5031NIRL 4 Channel infrared receiver

2000 Series



5031NIRL 4 Channel infrared receiver



C5034NIRL 4 Channel infrared receiver with 4 buttons



5034NIRL 4 Channel infrared receiver with 4 keys

Slimline[™] SC2000 Series



SC5031NIRL 4 Channel infrared receiver



SC5034NIRL 4 Channel infrared receiver with 4 buttons

Infrared Output Units

Infrared Output Units

- > Transmits IR codes to third-party devices.
- Capable of broadcasting IR messages through two IR output channels (consist of 3.5mm mini audio mono sockets).
- > Single or dual head emitter leads (ordered separately) should be connected to the output jacks.
- Programmed via the High Speed Programming Cable (part number 5100HSCU, ordered separately).
- > The installer has the facility to modify the stored codes using Windows[™] based application software.
- > Stores a library of commonly used IR codes.
- The Infrared Controller is based on 2000 Series, SC2000 Series and C2000 Series 4-gang wall switches.
- > The standard colours are White Electric, Soft Grey, Desert Sand, Cream, Brown and Black.
- > Units draw 32mA from the C-Bus network.

Infrared Output Units Accessories



5100HSCU

High speed USB programming cable for C-Bus 2 channel infrared transmitter unit



5034NIRT 2 channel infrared transmitter unit, 2000 Series wall plate



5100RP

Infrared code learning unit, complete with Windows[™] based software. Required for learning third-party infrared codes not included in the code library shipped with the infrared transmitter unit software



C5034NIRT 2 channel infrared transmitter unit, Classic C2000 Series wall plate



SC5034NIRT

2 channel infrared transmitter unit, Slimline SC2000 Series wall plate



Remote Control Units

Universal Infrared Remote Control Unit

- Universal, hand-held, infrared remote control unit for control of electronic devices equipped with an infrared (IR) remote.
- Control of up to 16 devices including C-Bus, DVDs, TVs, satellite receivers, VCRs and CDs.
- > Large touch screen display.
- > Blue LED backlighting.
- > LED indicators provide information and feedback on:
 - Status of the beep feature (audible button press confirmation)
 - 'Battery low' warning
 - Confirmation of a successfully transmitted infrared code
 - Error warning
 - Touch screen page number.
- User programmable buttons for each device include 7 rubber buttons and 48 touch screen buttons.
- > Quick Control buttons.
- > Sleep button.
- > Page/date button.
- > Pre-programmed manufacturer codes for many models.
- Incorporates embedded C-Bus IR codes for the C-Bus 5038TX and 5035TX IR remote controls.
- > Easy to configure with new IR codes using the 'learning eye'.
- > Macro function (up to 60 commands per macro).
- > Learning IR codes from existing remote controls.



5030URC

Universal Infrared Remote Control Unit, with LCD touch screen

C-Bus Hand-held Infrared Transmitters

- > Designed for use with C-Bus Neo Wall Switches, C-Bus Multi Sensor and the 503xNIRL series wall switches.
- > 4 and 8 button version available.
- > Range of up to 15 metres (line of sight).
- > Features IR Bank selection switch with each group of four buttons assigned to either bank A/B or bank C/D.
- > The bank selection is changed by removing the back cover.



5084TX

4 button C-Bus Infrared Remote Control with holder



5088TX

8 button C-Bus Infrared Remote Control with holder



5080TXC C-Bus Remote Control Holder (spare)



Output Units – Wall Mount

Professional Series Dimmers

- > Leading edge dimmers suitable for incandescent and low voltage lighting.
- > Dimensions 240mm x 220mm x 75mm.
- Feature an emergency lighting output in case of loss of mains power to the unit.
- Incorporate a software selectable network burden and C-Bus system clock.
- > Dimmers incorporate a 60mA power supply.
- > Up to 30 units may be connected to any C-Bus network
- > C-Bus Learn Enabled.



L5104D5

4 Channel Dimmer 250V AC, 5A per channel, 20A total, 60mA inbuilt C-Bus power supply



L5102D10

2 Channel Dimmer 250V AC,10A per channel, 20A total,60mA inbuilt C-Bus power supply



L5101D20

Channel Dimmer 250V AC,
20A per channel, 20A total,
60mA inbuilt C-Bus power supply

Output Units – Din Rail Mount

Dimmer Units – Universal Phase Control



L5504D2U

4 Channel C-Bus Universal Dimmer 250V AC, 2.5A per channel, inbuilt 200mA C-Bus power supply

- > 4 Channel universal dimmer, DIN rail mounted.
- > 12M DIN modules wide.
- > Dimensions 215mm x 85mm x 65mm.
- > Features 4 Channels of 2.5A rating.
- > Suitable for use with leading edge or trailing edge compatible low voltage transformers.
- Suitable for low voltage electronic transformers, incandescent lamps and low voltage lamps with iron core transformers.
- > Features automatic load sensing.
- Features a software selectable network burden and C-Bus system clock.
- A maximum of 10 units may be connected to a C-Bus network.
- > Features an inbuilt 200mA C-Bus power supply
- > C-Bus Learn Enabled.



L5504D2UP

4 Channel C-Bus Universal Dimmer 250V AC, 2.5A per channel, no inbuilt C-Bus power supply

- > 4 Channel universal dimmer, DIN rail mounted.
- > 12M DIN modules wide.
- > Dimensions 215mm x 85mm x 65mm.
- > Features 4 Channels of 2.5A rating.
- > Suitable for use with leading edge or trailing edge compatible low voltage transformers.
- Suitable for low voltage electronic transformers, incandescent lamps and low voltage lamps with iron core transformers.
- > Features automatic load sensing.
- Features a software selectable network burden and C-Bus system clock.
- A maximum of 100 units may be connected to a C-Bus network.
- > Does not source current to the network.
- > Draws 18mA from C-Bus when mains is not connected.
- > C-Bus Learn Enabled.



Dimmer Units – Leading Edge Phase Control

L5508D1A

8 Channel Dimmer 250V AC, 1A per channel, inbuilt 200mA C-Bus power supply



- > 8 Channel Dimmer, DIN rail mounted.
- > 12M DIN modules wide.
- > Dimensions 215mm x 85mm x 65mm.
- > Features 8 channels of 1A output, suitable for incandescent and low voltage lighting.
- Features a software selectable network burden and C-Bus system clock.
- A maximum of 10 units may be connected to any C-Bus network.
- > Features an inbuilt 200mA C-Bus power supply.
- > C-Bus Learn Enabled.

L5504D2A

4 Channel Dimmer 250V AC, 2A per channel, inbuilt 200mA C-Bus power supply



- > 4 Channel Dimmer, DIN rail mounted.
- > 12M DIN modules wide.
- > Dimensions 215mm x 85mm x 65mm.
- > Features 4 Channels of 2A output, suitable for incandescent and low voltage lighting.
- Features a software selectable network burden and C-Bus system clock.
- A maximum of 10 units may be connected to any C-Bus network.
- > Features a 200mA C-Bus power supply.
- C-Bus Learn Enabled.

L5508D1AP

8 Channel Dimmer 250V AC, 1A per channel, no inbuilt C-Bus power supply



- > 8 Channel Dimmer, DIN rail mounted.
- > 12M DIN modules wide.
- > Dimensions 215mm x 85mm x 65mm.
- > Features 8 channels of 1A output, suitable for incandescent and low voltage lighting.
- Features a software selectable network burden and C-Bus system clock.
- A maximum of 100 units may be connected to any C-Bus network.
- > Does not source current to the network.
- Draws 18mA from the C-Bus when mains is not connected.
- > C-Bus Learn Enabled.

L5504D2AP

4 Channel Dimmer 250V AC, 2A per channel, no inbuilt C-Bus power supply



- > 4 Channel Dimmer, DIN rail mounted.
- > 12M DIN modules wide.
- > Dimensions 215mm x 85mm x 65mm.
- > Features 4 Channels of 2A output, suitable for incandescent and low voltage lighting.
- > Features a software selectable network burden and C-Bus system clock.
- A maximum of 100 units may be connected to any C-Bus network.
- > Does not source current to the network.
- Draws 18mA from the C-Bus when mains is not connected.
- > C-Bus Learn Enabled.

C-Bus DSI Gateway Range

L5508DSI

8 Channel Dimmer for DSI electronic ballasts 250V AC, inbuilt 200mA C-Bus power supply



- > 8 Channel Dimmer for DSI ballasts, DIN rail mounted.
- > 12M DIN modules wide.
- > Dimensions 215mm x 85mm x 65mm.
- > Provides C-Bus control of electronic DSI digital ballasts.
- > The module controls up to 100 DSI ballasts per channel.
- > Up to 10 units may be connected to any C-Bus network.
- > Used in conjunction with electronic DSI ballasts.
- > The dimmer features a 200mA C-Bus power supply.
- > C-Bus Learn Enabled.

Refer Page 69 for detailed application diagrams on this product.

L5508DSIP

8 Channel Dimmer for DSI electronic ballasts 250V AC, no inbuilt C-Bus power supply



- > 8 Channel Dimmer for DSI ballasts, DIN rail mounted.
- > 12M DIN modules wide.
- > Dimensions 215mm x 85mm x 65mm.
- > Provides C-Bus control of electronic DSI digital ballasts.
- > The module controls up to 100 DSI ballasts per channel.
- > Up to 100 units may be connected to any C-Bus network.
- > Used in conjunction with electronic DSI ballasts.
- Units draw 18mA from the C-Bus network when mains is not connected.
- > C-Bus Learn Enabled.

Refer Page 69 for detailed application diagrams on this product.

0-10V Analogue Output Unit

L5504AMP

4 Channel Analogue Output, 0-10V

- Analogue output module, DIN rail mounted.
- > 4M DIN modules wide.
- > Requires a 240V AC connection.
- > Dimensions 72mm x 85mm x 65mm.
- > Can either source or sink current and is used to drive most types of 0-10V electronic dimmable ballasts.
- > The unit provides 4 independent output channels.
- Powered from C-Bus and requires 18mA at 15 – 36V DC for correct operation.
- > The polarity of the signal may be selected so that OV corresponds to maximum or minimum brightness.
- > Units draw 18mA from the C-Bus when mains is not connected.
- > C-Bus Learn Enabled.

Refer page 68 for detailed application diagrams on this product.



Relay Units

10A Relay Units



L5512RVF/L5512RVFP

12 Channel Relay 250V AC, 10A inductive load per channel.

- > 12 Channel Relay module, DIN rail mounted.
- > 12M DIN modules wide.
- > Dimensions 215mm x 85mm x 65mm.
- > Featuring 12 channels of voltage free relay switching.
- Rated at 10A incandescent or 10A fluorescent load per channel.
- Incorporates a software selectable network burden and C-Bus system clock.
- > A maximum of 10 powered units may be connected to any C-Bus network.
- > C-Bus Learn Enabled.
- > Available with or without inbuilt 200mA power supply.



L5508RVF/L5508RVFP

8 Channel Relay 250V AC, 10A inductive load per channel

- > 8 Channel Relay module, DIN rail mounted.
- > 12M DIN modules wide.
- > Dimensions 215mm x 85mm x 65mm.
- > Featuring 8 channels of voltage free relay switching.
- Rated at 10A incandescent or 10A fluorescent load per channel.
- Incorporates a software selectable network burden and C-Bus system clock.
- A maximum of 100 units may be connected to any C-Bus network.
- > These units draw 18mA from C-Bus network when mains is not connected.
- > C-Bus Learn Enabled.
- > Available with or without inbuilt 200mA power supply.

Catalogue Number	Description
L5512RVF	C/W inbuilt 200mA power supply
L5512RVFP	No inbuilt power supply

Catalogue Number	Description
L5508RVF	C/W inbuilt 200mA power supply
L5508RVFP	No inbuilt power supply



L5504RVF/L5504RVFP

4 Channel Relay 250V AC, 10A inductive load per channel

- > 4 Channel Relay module, DIN rail mounted.
- > 8M DIN modules wide.
- > Dimensions 144mm x 85mm x 65mm.
- > Featuring 4 Channels of voltage free relay switching
- Rated at 10A incandescent or 10A fluorescent load per channel.
- Incorporates a software selectable network burden and C-Bus system clock.
- > A maximum of 10 powered units may be connected to any C-Bus network.
- > C-Bus Learn Enabled.
- > Available with or without inbuilt 200mA power supply.



L5504RVF20/L5504RVF20P

4 Channel Relay, 250V AC, 20A inductive load per channel

- > 4 Channel 20A relay module, DIN rail mounted.
- > 12M DIN modules wide.
- > Dimensions 215mm x 85mm x 65mm.
- > 4 Channels of voltage free relay switching.
- > Rated at 20A incandescent, 20A HID or 20A fluorescent load per channel.
- > Relays feature magnetic latching.
- > Built-in mechanical level for manual changeover of relay state.
- Incorporates a software selectable network burden and C-Bus system clock.
- A maximum of 10 powered units may be connected to any C-Bus network.
- > Incorporates an inbuilt 200mA C-Bus power supply.
- > C-Bus Learn Enabled.
- > Available with or without inbuilt 200mA power supply.

Catalogue Number	Description
L5504RVF	C/W inbuilt 200mA power supply
L5504RVFP	No inbuilt power supply

Catalogue Number	Description
L5504RVF20	C/W inbuilt 200mA power supply
L5504RVF20P	No inbuilt power supply



Relay Units

Changeover Relay Units



L5504RVFC/L5504RVFCP

4 Channel Changeover Relay, 250V AC, Learn Enabled

- > 4 Channel changeover relay modules with interlock features, DIN rail mounted.
- > 8M DIN modules wide.
- > Dimensions 144mm x 85mm x 65mm.
- Used for control of air conditioning systems (on/off, low, medium and high) and shutter or blind control (up/down).
- The unit can be simply wired to achieve electrical interlocking, for use where outputs are all mutually exclusive.
- Relays rated at 10A resistive, 5A incandescent/inductive, 1A fluorescent.
- Incorporates a software selectable network burden and C-Bus system clock.
- A maximum of 10 powered units may be connected to any C-Bus network.
- > These units draw 18mA from C-Bus when mains is not connected.
- > C-Bus Learn Enabled.
- > Available with or without inbuilt 200mA power supply.

Catalogue NumberDescriptionL5504RVFCC/W inbuilt 200mA power supplyL5504RVFCPNo inbuilt power supply

Motorised Blinds/Curtains/ Shutter Relay Unit



C-Bus Motorised Blinds/Curtains/Shutter Relay, 250V AC, no C-Bus Power Supply

- Single Channel Relay unit for the control of motorised blinds, curtains or shutters via C-Bus, DIN rail mounted.
- > 2M DIN modules wide.
- > Dimensions 36 x 85mm x 65mm.
- > Allows up/down and stop control.
- A maximum of 100 units may be connected to a C-Bus network.
- Units draw 18mA from C-Bus when mains is not connected.
- > C-Bus Learn Enabled.

Standard Relay Units



5101R

- 1 Channel Relay 250V AC 10A inductive load
- > Single C-Bus relay unit.
- > Dimensions 198mm x 42mm x 39mm.
- > Featuring 1 channel of 240V AC switching.
- > Suitable for incandescent, inductive and fluorescent switching up to a maximum load of 10A.
- > A maximum of 100 units may be connected to any C-Bus network.
- > These relays do not draw any current from C-Bus network when mains power is connected.



5102RVF

2 channel voltage free relay 250V AC, 10A inductive per channel

- > 2 channel C-Bus relay unit.
- > Dimensions 198mm x 42mm x 39mm.
- > Featuring 2 channels of 240V AC switching.
- Suitable for incandescent, inductive and fluorescent switching up to a maximum load of 10A per channel.
- A maximum of 100 units may be connected to any C-Bus network.
- These relays do not draw any current from C-Bus network when mains power is connected.



Commercial Dimming Solutions

Schneider Electric have designed and manufactured a range of commercial C-Bus dimmers specifically for commercial dimming applications. After thousands of hours of application testing and reliability endurance testing, Schneider Electric now offer two new full ranges of C-Bus enabled Commercial dimming hardware with a variant to suit any application.

Whether the C-Bus application requires high powered standard halogen leading or training edge applications or more complex 0-10volt, DSI or DALI solutions, the C-Bus Architectural or Professional dimmer range is ideal for any commercial environment.

With model options rated between 3 amps and 20 amps per channel* with individually replaceable output cards, these dimming solutions are at the forefront of commercial dimming standards and technology. $^{>}$



Features

- > High power multi-channel C-Bus dimmer units
- Suitable for the higher end commercial architectural dimming market
- > Utilises universal dimming technology #
- Interchangeable and field replaceable individual dimming channel modules
- > Support for onboard lighting scenes #
- > Three prioritised emergency auxiliary inputs #
- > Standby generator auxiliary input #
- > Emergency lighting output available on each channel
- > On-board MCB protection
- > C-Bus or DMX512 operation modes #
- > Soft start operation
- > Thermal overload protection
- > Over current protection
- > Short circuit protection
- Optional output module for DSI, DALI, 0-10VDC or relay output #
- Manual dimmer bypass switch included on channel modules
- > Local override switches
- > Supplied with easy-mount wall bracket
- > Generous mains supply terminals and load terminals
- > Selectable (predefined) dimming curves #
- > Installer definable dimming curves #
- > Cross fading scene functions #
- > Multiple external C-Bus connectors
- > RCD variants available on request

^{*} Maximum total unit ratings apply.

> All C-Bus Professional and Architectural dimmers are built, tested and comply with Australian/NZ Standard for lightdimmers AS/NZS CISPR 15:2002 # Features are only available on the Architectural range of dimmers.
The Art of dimming





Make every ceiling your canvas and every light a brushstroke with the new range of C-Bus High Powered Series Dimmers.

These dimmers will bring your lighting plans to life. Create a dramatic landscape one second or an intimate portrait the next.

Designed and manufactured by Schneider Electric there are two distinctive dimmer models available. The Architectural Dimmer is designed for museums, galleries and function centres while the Professional Dimmer is designed for restaurants, hotel bars and clubs.

Features:

- Modular individual dimming cards
- Manual by-pass switch
- Built in RCD for overload protection
- Meets AS3000 2008 Standards

Contact Schneider Electric for further information on the art of dimming: Ph 0508 2547725, or visit the website www.clipsal.co.nz

Image: space s

CLIPCOM15670

Commercial 🕁 Dimming

C-Bus Professional Dimmer Technical Data



L5112D10TP



L5106D10TP

	Trailing Edge Models										
	L5106D20TP	L5103D20TP	L5106D16TP	L5112D10TP	L5106D10TP	L5103D10TP	L5112D5TP	L5106D5TP	L5103D5TP	L5112D3TP	L5106D3TP
Supply Voltage	240V AC										
Frequency range	47 – 53Hz										
Single or three phase supply	3	3	3	3	3	1 or 3	3	1 or 3	1	2	1
Number of channels	6	3	6	12	6	3	12	6	3	12	6
C-Bus Learn Enabled	Yes										
Maximum incandescent load per channel	20A	20A	16A	10A	10A	10A	5A	5A	5A	3A	3A
Maximum iron core transformer load per channel	20A	20A	16A	10A	10A	10A	5A	5A	5A	ЗA	ЗA
Maximum electronic transformer load per channel	20A	20A	16A	10A	10A	10A	5A	5A	5A	3A	3A
Wall or DIN Mounted	Wall										
Controllable via Crestron®*and AMX®**	Yes										
Local channel overrides	Yes										
Remote channel overrides	Yes										
Scene control capable	Yes										
Mains terminals	Supply 1 x 25mm ² Load 1 x 6mm ² or 2 x 2.5mm ²	Supply 1 x 25mm ² Load 1 x 6mm ² or 2 x 2.5mm ²	Supply 1 x 25mm ² Load 1 x 6mm ² or 2 x 2.5mm ²	Supply 1 x 25mm ² Load 1 x 6mm ² or 2 x 2.5mm ²	Supply 1 x 25mm ² Load 1 x 6mm ² or 2 x 2.5mm ²	Supply 1 x 25mm ² Load 1 x 6mm ² or 2 x 2.5mm ²	Supply 1 x 25mm ² Load 1 x 6mm ² or 2 x 2.5mm ²	Supply 1 x 25mm ² Load 1 x 6mm ² or 2 x 2.5mm ²	Supply 1 x 25mm ² Load 1 x 6mm ² or 2 x 2.5mm ²	Supply 1 x 25mm ² Load 1 x 6mm ² or 2 x 2.5mm ²	Supply 1 x 25mm ² Load 1 x 6mm ² or 2 x 2.5mm ²
Dimensions	713 x 455 x 164mm	451 x 455 x 164mm	713 x 455 x 164mm	713 x 455 x 164mm	451 x 455 x 164mm	289 x 455 x 164mm	713 x 412 x 164mm	451 x 412 x 164mm	289 x 412 x 164mm	713 x 412 x 164mm	451 x 412 x 164mm
Maximum units on a network (255 Networks)	100	100	100	100	100	100	100	100	100	100	100
C-Bus connections	3 x RJ45 1 x terminal block										
Weight	17.5kg	15kg	17.5kg	25kg	19.5kg	9.5kg	23.6kg	17.5kg	9.6kg	23kg	16.6kg
Approvals	CE RCM										

Note: Professional Plus and Architectural Dimmers are indent items only.

Please contact Schneider Electric customer care on 0508 254 7725 regarding lead times.



L5106D10LP



L5103D5LP

٦

	Leading Edge Models										
L5112D20LP	L5106D20LP	L5103D20LP	L5112D16LP	L5112D10LP	L5106D10LP	L5103D10LP	L5112D5LP	L5106D5LP	L5103D5LP	L5112D3LP	L5106D3LP
240V AC											
47 – 53Hz											
3	3	3	3	3	3	1 or 3	3	1 or 3	1	2	1
12	6	3	12	12	6	3	12	6	3	12	6
Yes											
20A	20A	20A	16A	10A	10A	10A	5A	5A	5A	3A	ЗA
20A	20A	20A	16A	10A	10A	10A	5A	5A	5A	ЗA	ЗA
20A	20A	20A	16A	10A	10A	10A	5A	5A	5A	ЗA	ЗA
Wall											
Yes											
Yes											
Yes											
Yes											
Supply 1 x 25mm ² Load 1 x 6mm ² or 2 x 2.5mm ²	Supply 1 x 25mm ² Load 1 x 6mm ² or 2 x 2.5mm ²	Supply 1 x 25mm ² Load 1 x 6mm ² or 2 x 2.5mm ²	Supply 1 x 25mm ² Load 1 x 6mm ² or 2 x 2.5mm ²	Supply 1 x 25mm ² Load 1 x 6mm ² or 2 x 2.5mm ²	Supply 1 x 25mm ² Load 1 x 6mm ² or 2 x 2.5mm ²	Supply 1 x 25mm ² Load 1 x 6mm ² or 2 x 2.5mm ²	Supply 1 x 25mm ² Load 1 x 6mm ² or 2 x 2.5mm ²	Supply 1 x 25mm ² Load 1 x 6mm ² or 2 x 2.5mm ²	Supply 1 x 25mm ² Load 1 x 6mm ² or 2 x 2.5mm ²	Supply 1 x 25mm ² Load 1 x 6mm ² or 2 x 2.5mm ²	Supply 1 x 25mm ² Load 1 x 6mm ² or 2 x 2.5mm ²
713 x 455 x 164mm	451 x 455 x 164mm	289 x 455 x 164mm	713 x 455 x 164mm	713 x 412 x 164mm	451 x 412 x 164mm	289 x 412 x 164mm	713 x 405 x 115mm	451 x 405 x 115mm	289 x 405 x 115mm	602 x 405 x 115mm	358 x 405 x 115mm
100	100	100	100	100	100	100	100	100	100	100	100
3 x RJ45 1 x terminal block											
40kg	27kg	14.5kg	40kg	31kg	21kg	11.5kg	25.6kg	17.5kg	9.5kg	23kg	16kg
CE RCM											



Commercial 🕁 Dimming

C-Bus Architectural Dimmer Technical Data



L5112D10UA

L5106D10UA

	L5106D20UA	L5103D20UA	L5106D16UA	L5103D16UA	L5112D10UA	L5106D10UA
Supply Voltage	240V AC					
Frequency range	47 – 53Hz					
Single or three phase supply	3	3	3	3	3	3
Number of channels	6	3	6	3	12	6
C-Bus Learn Enabled	Yes	Yes	Yes	Yes	Yes	Yes
Maximum incandescent load per channel	20A	20A	16A	16A	10A	10A
Maximum iron core transformer load per channel	20A	20A	16A	16A	10A	10A
Maximum electronic transformer load per channel	20A	20A	16A	16A	10A	10A
DSI ballasts per channel	Via optional Ballast/ Relay Channel Module					
DALI Control	Via optional Ballast/ Relay Channel Module					
Wall or DIN Mounted	Wall	Wall	Wall	Wall	Wall	Wall
DMX512 capable	Yes	Yes	Yes	Yes	Yes	Yes
Controllable via Crestron®* and AMX®**	Yes	Yes	Yes	Yes	Yes	Yes
Local channel overrides	Yes	Yes	Yes	Yes	Yes	Yes
Remote channel overrides	Yes	Yes	Yes	Yes	Yes	Yes
Scene control capable	Yes	Yes	Yes	Yes	Yes	Yes
Mains terminals	Supply 1 x 25mm² Load 1 x 6mm² or 2 x 2.5mm²	Supply 1 x 25mm² Load 1 x 6mm² or 2 x 2.5mm²	Supply 1 x 25mm² Load 1 x 6mm² or 2 x 2.5mm²	Supply 1 x 25mm² Load 1 x 6mm² or 2 x 2.5mm²	Supply 1 x 25mm² Load 1 x 6mm² or 2 x 2.5mm²	Supply 1 x 25mm² Load 1 x 6mm² or 2 x 2.5mm²
Dimensions	713 x 455 x 164mm	451 x 455 x 164mm	713 x 455 x 164mm	451 x 455 x 164mm	713 x 455 x 164mm	451 x 455 x 164mm
Maximum units on a network (255 Networks)	100	100	100	100	100	100
C-Bus connections	3 x RJ45 1 x terminal block					
Weight	17.5kg	11kg	17.5kg	11kg	25kg	17.5kg
Approvais	CE RCM					

Note: Professional Plus and Architectural Dimmers are indent items only.

Please contact Schneider Electric customer care on 0508 254 7725 regarding lead times.







L5106D20UA

L5112D5UA

L5103L

L5103D10UA	L5112D5UA	L5106D5UA	L5103D5UA	
240V AC	240V AC	240V AC	240V AC	
47 – 53Hz	47 – 53Hz	47 – 53Hz	47 – 53Hz	
3	3	1 or 3	1	
3	12	6	3	
Yes	Yes	Yes	Yes	
10A	5A	5A	5A	
10A	5A	5A	5A	
10A	5A	5A 5A		
Via optional Ballast/ Relay Channel Module	Via optional Ballast/ Relay Channel Module	Via optional Ballast/ Relay Channel Module	Via optional Ballast/ Relay Channel Module	
Via optional Ballast/ Relay Channel Module	Via optional Ballast/ Relay Channel Module	Via optional Ballast/ Relay Channel Module	Via optional Ballast/ Relay Channel Module	
Wall	Wall	Wall	Wall	
Yes	Yes	Yes	Yes	
Yes	Yes	Yes	Yes	
Yes	Yes	Yes	Yes	
Yes	Yes	Yes	Yes	
Yes	Yes	Yes	Yes	
Supply 1 x 25mm² Load 1 x 6mm² or 2 x 2.5mm²	Supply 1 x 25mm² Load 1 x 6mm² or 2 x 2.5mm²	Supply 1 x 25mm ² Load 1 x 6mm ² or 2 x 2.5mm ²	Supply 1 x 25mm² Load 1 x 6mm² or 2 x 2.5mm²	
289 x 455 x 164mm	713 x 412 x 164mm	451 x 412 x 164mm	289 x 412 x 164mm	
100	100	100	100	
3 x RJ45 1 x terminal block	3 x RJ45 1 x terminal block	3 x RJ45 1 x terminal block	3 x RJ45 1 x terminal block	
9.5kg	23.6kg	17.5kg	9.6kg	
CE RCM	CE RCM	CE RCM	CE RCM	

Features

- > Utilises universal dimming technology with automatic choice of leading or trailing operation
- Interchangeable and field replaceable individual dimming channel modules
- > Support for onboard lighting scenes
- > Three prioritised emergency auxiliary inputs
- > Standby generator auxiliary input
- > Emergency lighting output available on each channel
- > On-board MCB protection
- > C-Bus or DMX512 operation modes
- > Soft start operation
- > Cool and quiet fanless operation
- > Thermal overload protection
- > Over current protection
- > Short circuit protection
- > Optional Relay output
- > Optional DSI output
- > Optional DALI output
- > Optional 0-10V DC output
- Manual dimmer bypass switch included on channel modules
- > Local override switches
- > Supplied with easy-mount wall bracket
- > Generous mains supply terminals and load terminals
- > Selectable (predefined) dimming curves
- > Installer definable dimming curves
- > Cross fading scene functions
- > Channel Status indicators visible from front control panel
- > Internal and external C-Bus connectors
- Tested to and comply with Australian Standard for light dimmers AS/NZS CISPR 15:2002



C-Bus System Units and Accessories

Pascal Automation Controller



5500PACA

C-Bus Pascal Automation Controller

- Provides extended conditional and real-time event programming for C-Bus.
- > Programs downloaded to the unit from a PC.
- > Connects directly to C-Bus.
- > Powered from C-Bus.
- > 4M DIN modules wide.
- > 2 x RS-232 ports for third-party device control.
- > A scheduling tool allows time based events to be programmed into the unit.
- > A scene programming tool allows installers to quickly and easily program scenes into the unit.
- > A programming wizard provides a GUI based method for creating basic logic programs.
- > More complex programs are produced by advanced users utilising the freeform text programming method.
- Programming language based on the standard Pascal computer language, enhanced with specific commands related to C-Bus control.
- > The language supports commands such as:
 - Conditional logic (if then, and, or, not etc)
 - Flow Control (for, repeat, while)
 - Variables (integer, real, Boolean, character, string)
 - Control and monitor C-Bus group addresses
 - Control and monitor C-Bus scenes
 - C-Bus tag names
 - Serial (RS-232) input/output.

Telephone Interface

5100TNZ-BT

Telephone Interface

Offers a dial in and dial out facility, permitting control and status monitoring for a C-Bus system via any touchtone phone.



- > Dimensions 146mm x 146mm x 30mm.
- It also includes an audio output, so that C-Bus events can be audibly announced.
- Programmed using a connection to a PC running the C-Bus telephone interface configuration software.
- > The unit can also act as a C-Bus PC interface.
- > Allows C-Bus to be programmed and configured either locally or from a remote site using a data modem.

5100TMB Bracket for mounting to a StarServe® enclosure



C-Bus to DALI Gateway



- 5502DAL DALI Gateway
- C-Bus to DALI Gateway, DIN rail mounted.
- > 4M DIN modules wide.
- > Dimensions 72mm x 85mm x 65mm.
- > Supports DALI lamp and ballast failure information to be available on the C-Bus network.
- > Capable of controlling up to two DALI networks.
- > The unit supports DALI group addresses, short addresses and scenes the DALI global (broadcast) address.
- A remote switch input is included to turn all DALI output channels to the ON or OFF states, irrespective of the current state of the C-Bus, including no C-Bus
- Incorporates the C-Bus clock signal and a network burden.
- > Up to 50 DALI Gateways can be connected to a single C-Bus network.
- > Units Draw 32mA from a C-Bus network.

NB: Refer page 70 for detailed application diagrams on this product.

C-Bus Power Supply

5500PS

Power Supply, 350mA

- C-Bus power supply, DIN rail mounted.
- > 4M DIN modules wide.
- > Dimensions 72mm x 85mm x 65mm.
- > Supplies 350mA at 18-36V DC to the C-Bus network.
- Each power supply supports approximately 18 standard C-Bus units.
- Up to 5 power supplies may be used on any single C-Bus network.

C-Bus PC Interface

5500PC

PC Interface

- C-Bus PC interface, DIN rail mounted.
- > 4M DIN modules wide.
- > Dimensions 72mm x 85mm x 65mm.
- > Features two connections to C-Bus (2 x RJ45 sockets).
- Features three connections to RS232 (2 x RJ45 and 1 x DB9 sockets).
- > Units Draw 32mA from a C-Bus network.
- > Available with USB port (5500PCU).





C-Bus System Units and Accessories

C-Bus Ethernet Network Interface



5500CN C-Bus Ethernet

Network Interface

- C-Bus Ethernet network interface, DIN rail mounted.
- > 4M DIN modules wide.
- > Dimensions 72mm x 85mm x 65mm.
- > Provides a two-way C-Bus to Ethernet network interface
- Allows C-Bus commands to be distributed via a 10 Base-T Ethernet (TCP/IP) network.
- Features 2 x C-Bus RJ45 connections and 1 x Ethernet RJ45 connection.
- The unit requires an external 9-12V DC power pack supplied.

C-Bus Network Bridge

5500NB

C-Bus Network Bridge

- > C-Bus network bridge, DIN rail mounted.
- Based on a 4M DIN module.
- > Dimensions 72mm x 85mm x 65mm.
- > Provides a two-way C-Bus to C-Bus network interface.
- > Units Draw 18mA from a C-Bus network.

C-Bus BACnet Gateway

The C-Bus BACnet Gateway is an embedded device that provides a field bridge between the C-Bus lighting control system and a building management system that support the BACnet open protocol.

About BACnet

BACnet is a communication protocol for a Building Management System (BMS). This protocol is a set of rules governing how data is exchanged over a network.

Connecting C-Bus to BACnet

When connecting the C-Bus system to a BACnet compliant building management system, the BMS user refers to a mapping table for the points that are connected between the two systems.

The BACnet Gateway contains the software that enables C-Bus and BACnet objects to interrelate. The pre-configured mapping table in the C-Bus BACnet Gateway provides one full C-Bus Lighting Application of 255 group addresses from a single application address.

If more than one application address is required, or more than 255 group addresses are required to be mapped, then additional gateway devices will be required.

The pre-configured mapping in the gateway provides the following connectivity.

- 255 BACnet analogue value objects allow BACnet to read analogue values from the C-Bus system.
- 255 BACnet analogue value objects allow BACnet to write analogue values to the C-Bus system.
- 255 BACnet binary value objects allow BACnet to read binary values from the C-Bus system.



C-Bus Wireless Gateway

5800WCGA

C-Bus Wireless Gateway

- > Allows seamless communication between a wired C-Bus network and a C-Bus Wireless Network.
- > Desktop or wall mounted.
- > A C-Bus Cat-5 cable connected to the wired C-Bus network is plugged into an RJ45 socket at the rear of the Gateway.
- > Power for the Gateway is provided by the wired C-Bus network, no additional power source is required.
- The connection to a C-Bus Wireless network is > accomplished by a C-Bus Learn Mode operation.
- > The connection to a C-Bus Cat-5 wired network requires the use of the C-Bus Toolkit software.
- The Gateway supports routing of messages into and > through both wired and wireless networks.
- > Messages on each network (such as button presses) can be passed through to the adjacent network.

C-Bus Cable

5005C305B

C-Bus Category 5, 4 pair, UTP cable. 305 metres

- > 4 pair, Category 5, unshielded cable with a unique outer colour sheath specifically designed for the C-Bus system.
- > A maximum of 1000 metres of cable is permitted on any one C-Bus network.
- > Two pairs are used for the C-Bus connection C-Bus positive (blue + orange) and C-Bus negative (blue/white + orange/white).
- > The C-Bus cable must be segregated from the mains cable in C-Bus installations.
- > C-Bus cable has a mains rated outer sheath and Standard Cat 5 cable does not have this rating.
- > Suitable for use inside electrical enclosures.

C-Bus Network Analyser 5100NA

C-Bus Network Analyser

The Network Analyser is a tool used to measure various C-Bus system parameters:

- Power Available
- Clock Signal Present
- Excess Voltage
- Add/Remove Burden
- Excess Cable Indication.
- Dimensions 60.5mm x 5 120mm x 30.3mm.
- > Measures capacitance, burden, clock signal and network voltage.
- The network analyser is powered from C-Bus and > is supplied with a pair of leads.

C-Bus Barcode Reader

5100BCS

Barcode Reader, USB connection, for use with C-Bus Toolkit software











Multi-Room Audio System System Overview

The C-Bus Multi-Room Audio System allows users to listen to and control audio sources from convenient locations around the home. The system is both simple to install and easy to use.

The system has been designed utilising new digital audio distribution technology, in conjunction with core technology for system communication and integration.

This digital audio distribution technology allows for noise and interference-free audio reproduction, whilst the C-Bus technology allows the audio products to be seamlessly integrated and used with all existing C-Bus products. For example, volume can be controlled from the same C-Bus switch or touch screen controlling lighting.

In addition, the system allows any input audio source to be made available in any audio zone. Changes to the input audio source can easily be made by the user from a local C-Bus device at any time, regardless of where the audio source equipment (e.g. CD player) is physically located. It is compatible with most audio sources and it accommodates standard stereo line level analogue inputs as well as digital audio TOS link inputs.

Infrared signals from hand-held remote controls can be routed through the system by connecting IR targets and emitters. IR commands can also be stored by the system and activated by programmed C-Bus commands. The C-Bus Multi-Room Audio System allows a number of different system layout options. This flexibility allows for a wide range of customer needs and installation requirements. Two example schematics are shown opposite.

Option A

This basic option allows a single audio source to be available to a number of C-Bus Audio Amplifiers and to be controlled from convenient locations around the home (via any combination of C-Bus input devices). This option requires one Cat-5 cable for the audio distribution. This cable is cascaded between each Audio Amplifier.

Option B

This option allows more flexibility. Multiple audio sources are made available to all audio zones, with all the audio sources selectable on a zone-by-zone basis via C-Bus Input Devices. This option requires a separate (star wired) Cat-5 audio cable to each Audio Amplifier in a zone.







Note 2

Adding a power supply (5600P24/3750AU) to each amplifier will change the output power rating from 10W to 25W RMS.



Multi-Room Audio System

Audio Matrix Switcher

560884

Audio Matrix Switcher, C-Bus enabled, four stereo audio input sources and 8 digital audio output sources.



- > Digital audio distribution technology, for noise-free audio reproduction.
- > Four stereo analogue audio source inputs.
- Audio sources switched via any C-Bus input device or via the control panel on the front of the Matrix switcher.
- Eight digital audio zone outputs (~45m for each star wired output).
- Cat-5 cable connection between Matrix switcher and amplifiers.
- > Two mono annunciation inputs.
- > Voice annunciation of channel changes (selectable).
- > One fibre-optic SPDIF input (digital audio compatible)
- One custom digital input to allow cascading of units or for connecting an Audio Distribution Unit giving 1 additional stereo analogue input.
- C-Bus infrared output (2 zones) for third-party equipment control.
- > Reticulated IR support.
- User interface consisting of LCD display and tactile feedback switches.
- C-Bus messages control selection of input/output routing.
- > Contains a C-Bus PC interface.
- > Internal C-Bus PSU.
- > Internal 4A PSU for the amplifiers.
- > Configuration set up through or USB.
- Control via C-Bus input devices, such as C-Bus wall switches, touch screens, etc.
- > Dimensions: 425mm x 289mm x 75mm.

Audio Distribution Unit

560011

Audio Distribution Unit, one stereo audio input source and one digital output source



- Distributes a single stereo audio source to C-Bus Audio Amplifiers via a digitised signal over Cat-5 cable.
- > Does not require any C-Bus programming.
- > One stereo analogue audio source input.
- > One digital audio output (cascadable to multiple zones).
- > Output can be looped between C-Bus Audio Amplifiers.
- > Dimensions: 165mm x 50mm x 40mm.

5600P24/500AU

External power supply for audio distribution unit, switch mode, 24V DC, 500mA (only required if 560011 used to provide an additional digital input for Matrix Switcher)



5600TEE

RJ45 Bypass Tee Connector for amplifiers with common digital feed that require individual control



Audio Amplifiers

560125D/2

25 Watt/channel (RMS) stereo audio amplifier, C-Bus enabled, desktop-mount version



>

25 Watt/channel (RMS) stereo audio amplifier, C-Bus enabled, remote-mount version



- > Controllable via C-Bus input devices, such as C-Bus wall switches and touch screens.
- Volume, bass, treble, balance controlled by C-Bus input devices.
- > Quiet digital audio design.
- Stereo 25W RMS per channel Remote and desktop mounted units (when power supply fitted).
- > Can be cascaded off one Digital Audio Cat 5 input.
- > Pre-amp output stage for connecting to a third-party power amplifier.
- Desktop Amplifier includes power on/off, mute, volume and source select buttons and an infrared target for remote control. Also includes 3.5mm stereo head phone jack.
- > Set up via C-Bus Toolkit software
- > Signal source either:
 - Distributed digital
 - Locally connected line-level analogue
 - Fibre-optic (TOSlink) SP/DIF (16bit, 48kHz).
- > IR Target connection for reticulated IR support.
- > High efficiency, ~70% at full power.
- > Dimensions (desktop): 181mm x 216mm x 75mm.
- > Dimensions (remote): 175mm x 209mm x 71mm.



5600P24/3750AU

External power supply for audio amplifier, switch mode, 24V DC, 3.75A





Multi-Room Audio System Speakers

In-wall and In-ceiling Speakers

- > Perfect for home theatre and multi-room audio applications.
- > Available with polypropylene or kevlar drivers, providing quality sound in all applications.
- Flush mount design ensures only the front face of the speaker is visible and is flush with the wall/ceiling – inside of the wall/ceiling acts as the enclosure.
- > Provide great sound without losing valuable floor space.

In-wall Speakers

5600IWP

Flush mounted speakers (pair), rectangular, in-wall, polypropylene drivers



5600IWK

Flush mounted speakers (pair), rectangular, in-wall, kevlar drivers



- > Sensitivity: <88dB (polypropylene), <91dB (kevlar).
- Frequency response: 50Hz 20KHz (polypropylene), 49Hz – 20KHz (kevlar).
- > Power output: 60W.
- > Impedance: 8 ohms.
- > Dimensions (rim): 305mm x 220mm.
- > Colour: white.

In-ceiling Speakers

5600ICP

Flush mounted speakers (pair), circular, in-ceiling, polypropylene drivers



5600ICK

Flush mounted speakers (pair), circular, in-ceiling, kevlar drivers



- > Sensitivity: <90dB.
- > Frequency response: 45Hz 20KHz.
- > Power output: 60W.
- > Impedance: 8 ohms.
- > Dimensions (rim diameter): 240mm.
- > Colour: white.

Outdoor Speakers

5600ODP

Outdoor/shelf top speakers (pair), polypropylene drivers



- > Designed to accurately reproduce high fidelity music in an outdoor environment.
- Long lasting design incorporating rigid, high-impact plastic cabinets, polypropylene drivers, and powder-coated metal grilles.
- > Sensitivity: <88dB.
- > Frequency response: 55Hz 20KHz.
- > Power output: 35W.
- > Impedance: 8 ohms.
- > Colour: white and black.
- > Water resistant*.

*Outdoor speakers are not waterproof. Never install outdoor speakers where they are directly hit by rain. Under a porch, eave, or overhang provides a more suitable environment.





Infrared Distribution System 8050 Series

The 8050 product series forms a flexible, cost effective multizone Infrared Distribution System, which can be used in isolation or as part of the StarServe Home Networking range.

Most homes have audio/visual systems that incorporate infrared control to operate source functions such as play, stop, channel up and down etc. The 8050 series Infrared Distribution System allows the control of source functions from different rooms or the control of source equipment located in solid cabinetry.

Additionally, the 8050 series Infrared Distribution system provides two independently controlled IR zones for installations where multiple set-top-boxes may be installed, with matching remotes.

This allows the homeowner to only control particular source equipment in certain areas of the home. For example, Set Top Box 1 can be controlled in the Bedrooms and Lounge; Set Top Box 2 can only be controlled in the Family Room and Kitchen.

IR emitter leads (8050LD or 8050/2LD) are connected to either Zone A (1st Zone) or Zone B (2nd Zone) of the 8050EJ and are run to the desired source equipment, where the head of the lead is positioned on or near the IR receiver.

A connection from the Zone A or Zone B connection point on a 8050EJ to a 8050TJ unit is made via Cat-5e cable, which terminates in the RJ45 sockets of both units. Both the 8050EJ (Zone B only) and 8050TJ junction boxes provide a further RJ45 socket to enable multiple junction boxes to be connected into the IR Distribution Network.

Targets can then be plugged into the 8050TJ and placed at desired locations around the home.

The system can be expanded to have more IR targets and IR emitters as required.

Typical System Diagram demonstrating how the individual components can be installed to form an IR Distribution System.





IR Distribution System Components IR Distribution System Components

IR Distribution System Emitter Junction Box

The 8050EJ has been designed to sit on top of or near the AV equipment. It is the main distribution hub of the IR Distribution Network.

The unit connects to the distribution system as follows.

IR Emitter Ports – There are five output connections for IR Emitter leads. Emitter Output 1 is dedicated for Zone A, Emitter Output 5 is dedicated to Zone B, Emitter Outputs 2,3 and 4 can be used by either zone.

RJ45 Connections – The Emitter Junction Box has three RJ45 connections, allowing Target Junction boxes to be networked via a Cat-5 connection. RJ45 Output 1 is dedicated to Zone A, while Zone B has the ability to supply two Target Junction Boxes, via RJ45 Outputs 2 and 3.

Local target connections – Both Zone A and B have the ability to power one locally placed target each directly.

IR Distribution System Target Junction Box



The 8050TJ acts as a termination point between an IR Target and the 8050EJ. It has the ability to enable the installation to loop to the next 8050TJ.

The 8050TJ can be mounted onto a standard Wall Plate as well as inside a cabinet or wall stud.

IR Targets

These targets contain an infrared receiver array, designed to receive and relay IR data from required locations to the centrally located Emitter Junction Box. An Infrared Target may be installed in each room of the house, allowing the user to control audio/visual equipment (such as VCRs, Cable TV Decoders, CD Players etc) from each required location.

There are three types of targets that can be used on the IR Distribution system.

8050ST - IR Distribution System Shelf Top Target

Suitable for use on top of TV's or inside Stereo cabinets

8050TT - IR Distribution System Tube Target

Suitable for use in speaker grills and air conditioning vents

8050FT - IR Distribution System Flat Target

Can be mounted behind Slimline, Classic and 2000 series grid plates

8050LD

IR Emitter Lead, single

8050/2LD IR Emitter Lead, dual











Product Range

Catalogue Number	Description
8050EJ	IR Distribution System Emitter Junction Box
8050TJ	IR Distribution System Target Junction Box
8050ST	IR Distribution System Shelf Top Target
8050TT	IR Distribution System Tube Target
8050FT	IR Distribution System Flat Target
8050LD	IR Emitter Lead, single
8050/2LD	IR Emmiter Lead, dual



C-Bus Software

C-Bus Toolkit Software

C-Bus Toolkit software is a PC-accessible C-Bus network configuration and programming utility. It allows the installer to:

- Connect directly to an installer C-Bus network via a C-Bus PC interface unit to synchronise logical and physical C-Bus customer site data.
- Configure the C-Bus network to define the C-Bus architecture of the customer site and ensure C-Bus units can communicate with each other.
- > Program and commission the customer solution.
- Save, backup and restore sites. C-Bus Toolkit has a database for creating and storing customer site programming as projects.



MARPA Software

Multi Room Audio Rapid Programming Application

MARPA software is used to configure the C-Bus Multi Room Audio Matrix Switcher unit and is freely available from the Integrated Systems website. It requires the use of a USB port on the PC to connect to the Matrix Switcher. MARPA software requires that the C-Bus Toolkit is installed.

anne with Anne Sandar Bader Bader 1 Stans Sandar Bader 1 Stans S		Project > Ger	nerāl
balantar	11	d daariadada d daariadada d daariadada d daariadada ha daariadada haan hadina haas	2 Saachariacidi

PICED Software

Programming Interface for C-Bus Embedded Devices

PICED is used to configure the following devices to meet the user's requirements:

- > C-Touch black and white touchscreen.
- > Colour C-Touch touchscreen.
- > Pascal Automation Controller (PAC).

The PICED software features include:

- > Display of many components on many pages.
- > Scenes for the control of many loads together.
- > Schedules for the automatic control of loads.
- > Access control to provide security.
- > Irrigation control.



TICA Software

Telephone Interface Commissioning Application

TICA software is used to configure the C-Bus Telephone Interface (CBTI). It requires the use of a RS232 serial port on the PC to connect to the CBTI. TICA software requires that C-Bus Toolkit is installed.



CIRCA Software

C-Bus Infrared Commissioning Application

CIRCA software is used to commission C-Bus Infrared Devices (5034NIRT). The software allows the user to select IR codes and assign them to particular output channels on an Infrared Device and make associations between IR codes and C-Bus events. The user can import IR device files created by the 5100RP Infrared Reader device. CIRCA software requires that C-Bus Toolkit is installed.





C-Bus Software

HomeGate Software

The HomeGate application software provides a powerful but simple-to-use interface to C-Bus via a standard PC. HomeGate provides scheduling, manual control and monitoring of a domestic C-Bus system from a PC running Windows 98, 2000, NT, ME or XP. HomeGate comprises of a project editor, real-time monitoring and control, a real-time scheduler, security and access control and internet access. It also includes help and support documentation.

5000SDHG2/4

HomeGate application V4 Software c/w USB dongle, 2 network licence



HomeGate application V4 Software c/w USB dongle, 10 network licence



Schedule Plus application software provides a powerful and easy to use interface to C-Bus via a standard PC. Schedule Plus has been developed specifically for commercial and industrial applications. It provides scheduling, manual control and monitoring of a C-Bus system from a PC running Windows 98, 2000, NT, ME or XP.

5000SPSP2/4

Schedule Plus application software V4 c/w USB dongle, 2 network licence

5000SPSP10/4

Schedule Plus application software V4 c/w USB dongle, 10 network licence

50000SPSPU/4

Schedule Plus application software V4 c/w USB dongle, unlimited network licence



C-Gate[®] Server Software

C-Gate[®] Server is a software suite that monitors and controls the C-Bus Control and Management System. It has been produced to allow third-party software developers and existing Building Management Systems to interface to C-Bus at a high level, allowing high-speed control and monitoring of C-Bus[®].

C-Bus OPC Server

The OPC server is a software package that enables communication between C-Bus networks and systems containing an OPC client, such as Citect Facilities.

The C-Bus OPC Server makes it possible to transmit lighting type application messaging between a C-Bus network and an OPC Client. The customer can:-

- > Transmit the lighting status and levels to the OPC Client from a C-Bus network.
- > Control lighting status and levels by sending commands from the OPC Client to the C-Bus network.

5000SDOPC2/1

2 network licence dongle for C-Bus OPC Server Software

5000SDOPC10/1

10 network licence dongle for C-Bus OPC Server Software

5000SDOPCU/1

Unlimited network licence dongle for C-Bus OPC Server Software

5000SDINST/1

Installer Dongle for C-Bus software, unlimited networks

Citect Facilities

Citect Facilities enables Property Owners and Facility Managers to lower operating costs, improve tenant services and protect existing and future facilities investments. This is achieved by providing centralized visibility to control all facilities systems from multiple vendors and sites, across a single building to very large multiple site applications.

Open architecture, system flexibility and unrivalled connectivity, combined with easy to-use configuration tools, allow end users and independent system integrators to rapidly develop and deploy applications of any size.

Open access delivers "Integrated systems"

Citect Facilities provides open interfaces to integrate the many systems required for a complete facilities monitoring system. While it is traditional for building automation projects to include different systems for HVAC, access control, fire detection or lighting, this leaves the user with a number of different systems that they need to manage and reconcile in order to get a complete picture of their facility. Citect Facilities' open interfaces enable information from all these systems to be combined and delivered through a single interface to the user resulting in a simpler and more manageable system.



Features

- > Time based Scheduler
- > Zero maintenance, fully functional web client
- > Option for mobile pocket technology
- Process analyst integrated display of trends and alarms
- > Industry specific symbols
- > Multiple screens (up to 6 screens per work station)
- Access to facilities-specific devices and an extensive range of PLC controllers

Please note that Citect Facilities is not a C-Bus product. Citect is part of Schneider Electric. For further details and training schedules, please contact Schneider Customer Care 0800 652 999.





C-Bus Wireless System

The C-Bus Wireless product range incorporates a family of C-Bus Radio Frequency (RF) devices, including wall plates, plug adaptors, remote control and a gateway to Cat-5 wired C-Bus units.

C-Bus Wireless wall switches are designed to easily replace standard, 240V wall switches. They incorporate patented C-Bus technology and are two wire devices requiring no neutral (240V AC active and load connections only).

All C-Bus Wireless units incorporate unique Learn Mode functions for programming devices. Wall switches, plug adaptors and the gateway unit can also be programmed via the C-Bus Toolkit software. Multiple C-Bus Wireless units can be linked into a common network using Learn Mode or the C-Bus Toolkit software.

Associations can be created between buttons on multiple units, so that a button pressed on one unit will operate a button on another (and the connected lights or other electrical devices).

C-Bus Wireless units include scene capabilities, which allow the user to perform a series of actions across multiple outputs by pressing a single button. For example, on arrival home a home owner could use a scene to switch on lights in the hallway, kitchen and lounge, and also switch on a heater.



Grouping C-Bus Wireless Units via Learn Mode



Programming a C-Bus Wireless unit via C-Bus Toolkit software

The diagrams below show two of the many possible basic C-Bus Wireless unit installations. Room A uses stand-alone units, which can be switched via the Wireless remote control. Room B uses networked units where buttons on one unit can operate other units or trigger scenes.



Stand-alone C-Bus Wireless Units



Room B -Networked C-Bus Wireless Units

Basic Operation

Buttons on a Wireless wall switch or plug adaptor are organised in pairs that control the output channels (local control buttons). Remaining pairs (free buttons) are used to control outputs on other units when multiple C-Bus Wireless units are configured as part of a network. For example, the figure to the right shows a 6 button, 2 channel Saturn Wireless dimmer wall switch. Its buttons perform the following functions:

- > Buttons 1 and 2 control the first channel. (A quick press on either button toggles the channel on or off. A long press on button 1 or 2 dims down or up respectively.)
- > Buttons 3 and 4 control the second channel.
- Buttons 5 and 6 are unused when the unit is used as a stand-alone unit. They may be used to control outputs on other units when part of a multi-unit network.

When a C-Bus Wireless wall switch or plug adaptor unit is first installed, it functions as a stand-alone unit. In this basic default mode, the unit functions as a dimmer or switch, depending on the model.

C-Bus Wireless plug adaptors have one output channel (a single, 240V AC socket) and two buttons. Wall Switch units are available in one or two output channel versions, with two, four, six buttons. Each channel controls one or more lights or other electrical devices connected to its output.

Two output channels







C-Bus Wireless System

C-Bus Wireless Networks

To experience the full capabilities of wireless operation, C-Bus Wireless units must be linked together to form a network.

To communicate with each other, units within the same network should be located within 15 to 20 metres of each other. This distance depends on building materials used.

Up to 30 units may be connected within the same C-Bus Wireless network.



C-Bus Wireless Network Security

C-Bus Wireless units can optionally use 128 bit-encrypted messages to communicate with each other. This results in a highly secure network.

Nearby C-Bus Wireless Networks

It is possible to have several separate networks present alongside each other without interfering, as each separate C-Bus Wireless network has an automatically assigned, unique 'House Code'.

C-Bus Wireless Modes of Operation

C-Bus Wireless units have five major modes of operation.

Mode 1 Stand-alone Mode

stand-alone Mode

In this mode, C-Bus Wireless wall switches and plug adaptors acts as stand-alone dimmers or switches and make no use of the inbuilt wireless capabilities. No setup is required for this mode, plug adaptors simply plug into the mains, and Wireless wall switches are installed by a licensed electrician in place of existing wall switches. The buttons on the units control the local dimming or switching channels of the unit only.

Mode 2

Simple Remote Controlled Mode

In this mode, a C-Bus Wireless wall switches acts as a stand-alone dimmer or switch and a C-Bus Wireless remote control operates the wall switch from a distance. This mode is simple to set up and is suitable for small installations where networking is not needed. C-Bus Wireless wall switch or plug adaptor units are controlled using a C-Bus Wireless remote: In this mode, the buttons on the Wireless wall plate control the local dimming or switching channels of the unit, and the remote control is linked to buttons on a wall switch using a Learn Mode operation. No PC is required.



Mode 3 Networked Mode

In this mode, a C-Bus Wireless wall switch acts as a dimmer or switch and multiple C-Bus Wireless units can be linked to each other with the C-Bus Wireless technology. This mode is simple to set up, and is suitable for more complex installations. In this mode, local control buttons control the dimming or switch channel of the unit, and may also control other C-Bus Wireless units. Free buttons can control the dimmer or switch channels of other units via a C-Bus Wireless network established using Learn Mode operations. The operation of buttons is set using Learn Mode operations or using the C-Bus Toolkit software.

Mode 4

Networked with Remote

In this mode, a C-Bus Wireless wall switch acts as a dimmer or switch and multiple C-Bus Wireless units can be linked to each other with the C-Bus Wireless technology. Local control buttons control the dimming or switch channel of the unit, and may also control other C-Bus Wireless units. Free buttons can control the dimmer or switch channels of other units via a C-Bus Wireless network established using Learn Mode operations or C-Bus Toolkit software. Buttons on the Wireless remote are linked to wall switch and plug adaptor buttons as desired.

Mode 5

Networked mode in combination with Cat-5 wired C-Bus units

The C-Bus Wireless gateway is used to link a C-Bus Wireless network to a C-Bus Cat-5 wired network. It is functionally equivalent to a C-Bus network bridge. Using the gateway, C-Bus Wireless and Cat-5 networks can communicate and interact with each other. Both Wireless and Cat-5 networks use the same command structure, and are 100% compatible.









C-Bus Wireless System

C-Bus Wireless Wall Switch Range

- > Allow existing, 240V AC operated wall switches to be replaced with C-Bus Wireless wall switches containing C-Bus Wireless technology.
- Communicate with other C-Bus Wireless devices using radio frequency wireless messaging and form a C-Bus Wireless network.
- Switch buttons enable control of the load/s directly connected to the wall switch and can also control loads connected to other C-Bus Wireless devices.
- Each switch button can be programmed to function as an on/off switch, a dimmer, or can issue a scene, as well as a number of other options.
- Can be controlled via C-Bus Cat-5 wired input units (via a gateway unit), such as touch screens.
- > Unique C-Bus Wireless house code.
- > 128-encrypted communications.
- 2-Wire connection active and load (no neutral required).
- Programmable via C-Bus Learn features or via C-Bus Toolkit software.
- > Available in 1 channel and 2 channel versions.
- Leading Edge and Trailing Edge dimming units,
 1 channel 500VA and 2 channel 250VA per channel.
- Relay unit, 1 channel 8A (fluorescent) rating and 2 channel 4A (fluorescent) per channel.
- > Available Saturn style, white glass only*.
- > Available in 2, 4 & 6 button configurations.

Saturn Style







6 Button





00

 $\odot \odot$

4 Button





C-Bus Wireless Selection Chart

	Relay	Dimmer – Leading Edge	Dimmer – Trailing Edge
2 Button 1 Channel	5882R8F1AA,GF	5886R8F1AA,GF	5882D2T1AA,GF
2 Button 2 Channel	N/A	N/A	N/A
4 Button 1 Channel	5884R8F1AA,GF	5884D2L1AA,GF	5884D2T1AA,GF
4 Button 2 Channel	5884R4F2AA,GF	5884D1L2AA,GF	5884D1T2AA,GF
6 Button 1 Channel	5886R8F1AA,GF	5886D2L1AA,GF	5886D2T1AA,GF
6 Button 2 Channel	5886R4F2AA,GF	5886D1L2AA,GF	5886D1T2AA,GF

1 Channel Relay variants are rated at 8 amps

2 Channel Relay variants are rated at 4 amps

1 Channel Dimmer variants are rated at 500 watts

2 Channel Dimmer variants are rated at 250 watts

- 5082F-680 - 5084F-680

Black replacement glass fascia's are available on request.

- 5084F-680 - 5086F-680
-

C-Bus Wireless wiring diagrams

Note: The LOAD terminals on 1 channel dimmer units are internally linked Total maximum load is 500 W, 2 A



1 Channel Dimmer

2 Channel Dimmer

Note: The LOAD terminals on 1 channel relay units are internally linked Total maximum load is 2000 W, 8 A



C-Bus 63

C-Bus Wireless System

C-Bus Wireless Plug Adaptors & Dimmers

- Allow devices normally plugged into 240V AC general purpose outlets (for example, lounge or bedside lamps) to be controlled using C-Bus Wireless technology.
- Communicate with other C-Bus Wireless devices (such as Wireless wall switches) using radio frequency wireless messaging and form a C-Bus Wireless network.
- C-Bus Wireless plug adaptors plug into existing power outlets, and the device to be controlled via C-Bus Wireless then piggybacks into the plug adaptor. No additions or alterations to existing wiring are required.
- > Plug into a standard general purpose electrical outlet.
- > Available in leading edge dimming and trailing edge dimming units, as well as a relay output version.
- Integral, easily accessible control/override/ programming buttons.
- Can be controlled via C-Bus Cat-5 wired input units (via a gateway unit), such as touch screens.
- > Unique C-Bus Wireless house code.
- > 128-encrypted communications.
- Programmable via C-Bus Learn features or via C-Bus Toolkit software.



5812D3L1AA

C-Bus Wireless plug adaptor, 1 channel leading edge dimmer, 3A



5812D2T1AA

C-Bus Wireless plug adaptor, 1 channel trailing edge dimmer, 2A

Relay



5812R10F1AA

C-Bus Wireless plug adaptor, 1 Channel Relay, 10A

C-Bus Wireless Remote Control Unit



5888TXBA

C-Bus Wireless hand-held remote control unit with holder

5080TXC

C-Bus remote control holder (spare)

- Allows control of buttons on C-Bus Wireless wall switch and plug adaptor units remotely.
- > Utilises radio frequency (RF) communication.
- Does not need to be pointed directly at the unit being controlled.
- Capable of controlling up to 10 separate wall switch or plug adaptor buttons.
- > A single button on a wall switch or plug adaptor can be controlled by up to two C-Bus Wireless remote controls.
- Buttons are organised in two banks of five buttons. Banks are alternately selected by pressing the 'Shift' button.
- 'Up' and 'Down' buttons allow dimming of the level associated with the last button selected (on dimmer units).
- 'All Off' button provides a convenient way to switch off all buttons associated with the remote control unit.
- > C-Bus Wireless Groups and Scenes can be controlled from the remote.
- > LCD screen and buttons incorporate a blue LED backlight.
- Each control button incorporates a clear window for button labelling.
- > Supplied with pre-labelled stickers for identification of common areas i.e. kitchen, lounge, dining etc.
- > 20-25m range (typical).



C-Bus Typical Schematics Residential





C-Bus

Analogue (0-10V) Control





DSI Control

C-Bus 69

DALI Control



Make the most of your energy

World energy consumption has risen 45% since 1980 and it is projected to be 70% higher by 2030. To limit energy cost and its impact on the environment, we must learn to adapt and manage energy consumption, costs and pollutants. Schneider Electric is committed to reducing the energy cost and CO₂ emission of its customers.

Our products, solutions and services are present at every link in the energy value chain for the building, infrastructure, industry and residential market to ensure your comfort and performance, while taking into account environmental issues.

This catalogue was printed at Blue Star Print Group (NZ) Ltd, who are FSC Chain of Custody certified, using FSC Chain of Custody paper. FSC (Forest Stewardship Council) is an international, not-forprofit membership-based organisation that brings people together to find solutions to problems created by bad forestry practices and to reward good management. The FSC Chain of Custody is the highest and most trustworthy international certification for paper and timber products. This catalogue was manufactured using mineral oil free ink (produced with renewable resources, unlike traditional mineral oil based inks). The mill where the paper is manufactured is ISO 14001, the paper is Elemental Chlorine Free (ECF) and the pulp is Mixed Sources FSC certified.





Schneider Gelectric

C-Bus Electrical Products are available through electrical wholesalers New Zealand wide. C-Bus Electrical Products are designed to ISO 9001 and ISO 9002. © 2009 Schneider Electric. As standards, specifications and designs change from time to time, always ask for confirmation of the information given in this publication.

Schneider Electric (NZ) Ltd.

14 Charann Place, Avondale, Auckland 1026 PO Box 15355, New Lynn, Waitakere 0640 Tel: +64 9 829 0490 Fax: +64 9 829 0491 www.schneider-electric.co.nz

Customer Care: 0508 254 7725 Freefax: 0508 250 305 Email: sales@clipsal.co.nz www.clipsal.co.nz