



System Units & Accessories

Control and
Management System

The background is a dark blue technical drawing. It features various electrical symbols and wiring diagrams. In the top left, there's a schematic of a power supply or control unit with several circular components. To its right is a terminal block with six screw terminals. The center of the page is dominated by a large, complex wiring diagram with multiple loops and connections. At the bottom left, there are two terminal blocks, each with four terminals. The overall style is that of a professional engineering or electrical manual.

Contents - System Units & Accessories

Contents – System Units & Accessories

Introduction to C-Bus System & Accessory Units

Power Supply 350mA, 5500PS Series

PC Interface, 5500PC

Pascal Automation Controller, 5300PACA

Network Interface, 5500CN

Network Bridge, 5500NB

Telephone Interface, 5100TAU

2 Channel DALI Interface, 5502DAL Series

Category 5 UTP Data Cable, 5005C305B

Network Analyser, 5100NA

Infra-red Reader, 5100RP

High Speed Programming Cable, 5100HSC

2
4
6
8
10
12
14
16

18
20
22
24
26

Introduction to C-Bus System Units

C-Bus System Units provide system wide facilities to a C-Bus network. For example, a C-Bus Power Supply provides C-Bus power and data synchronisation clock pulses to a network, and a C-Bus Pascal Automation Controller provides extended logic functions to a C-Bus network.

system units & accessories



5100HSC



5100NA



5100TAU



5005C305B



5100TAU



C-Bus System Units



C-Bus Power Supply - 350mA 5500PS Series

The C-Bus Power Supply unit supplies C-Bus power to passive C-Bus units such as wall switches and Occupancy Sensors. For ease of installation, the units are DIN rail mounted measuring 4 DIN modules wide.

Capable of supplying the power needs of up to 18 standard passive C-Bus units, the Power Supply can source up to 350mA to the C-Bus network.

The power supply is a switched mode type specifically designed to operate with the C-Bus system. The advantages of the switched mode design include its smaller volume, higher efficiencies and low power dissipation.

Designed to operate in parallel with other C-Bus Power Supply units, up to 5 DIN rail Power Supplies may be connected to a single C-Bus Network. Under these circumstances, each power supply unit shares the load equally. To enhance maximum efficiency, the Power Supplies should be distributed equally along the C-Bus Network.

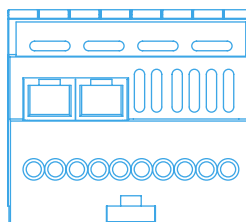
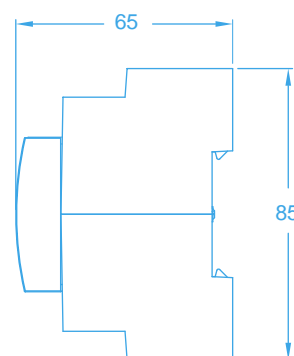
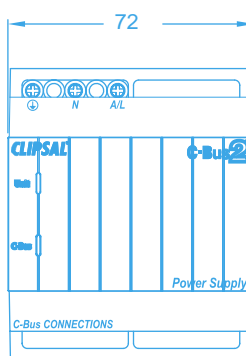
They also feature two status indicators, a C-Bus Network Indicator and a Mains Voltage Indicator. The C-Bus Network Indicator reports on the state of the C-Bus voltage level and the presence or otherwise of a system clock. The Mains Voltage Indicator reports on the presence of a mains voltage to the unit.

The unit incorporates short circuit and reverse polarity protection and the line voltage is galvanically isolated from the output.



Features

- automatically compensates for line voltage and frequency variations to ensure the output remains constant
- incorporates short circuit and reverse polarity protection
- line voltage is galvanically isolated from the output
- the power supply is a switched mode type, specifically designed to operate with the C-Bus system
- low DC impedance of approximately 20 ohms and a high AC impedance, which is a requirement for the C-Bus network as the data is superimposed on the DC voltage
- units feature 2 x RJ45 connections to the C-Bus network and a 300mm mains rated patch lead is supplied
- incorporates a C-Bus Network Indicator and a Mains Voltage Indicator
- incorporates thermal and overload protection
- DIN rail mounted measuring 4M wide.



Product Specifications

Catalogue Number	5500PS	E5500TPS																					
Nominal Supply Voltage	220 - 240V~	110-120V~																					
Frequency Range(s)	47 - 53Hz	57 - 63Hz																					
C-Bus Supply Voltage	15-36V @ 350mA																						
C-Bus Current Output	Sources 350mA to the C-Bus network with mains power connected																						
DC Output Resistance	~20Ω																						
AC Output Impedance	>60kΩ @ 1kHz																						
Electrical Isolation	3.75kV RMS. from C-Bus to mains																						
Status Indicators	<table> <tr> <td>C-Bus Status</td><td><i>Clock Present</i></td><td><i>No Clock Present</i></td></tr> <tr> <td>Voltage > 20V d.c</td><td>On</td><td>Off</td></tr> <tr> <td>Voltage < 20V d.c</td><td>Flashing</td><td>Off</td></tr> <tr> <td>Voltage < 15V d.c</td><td>Off</td><td>Off</td></tr> <tr> <td>Unit Status</td><td><i>Mains Power</i></td><td><i>Conditions</i></td></tr> <tr> <td>On</td><td>Present</td><td>Normal Operation</td></tr> <tr> <td>Off</td><td>Fail</td><td>Mains power not available</td></tr> </table>		C-Bus Status	<i>Clock Present</i>	<i>No Clock Present</i>	Voltage > 20V d.c	On	Off	Voltage < 20V d.c	Flashing	Off	Voltage < 15V d.c	Off	Off	Unit Status	<i>Mains Power</i>	<i>Conditions</i>	On	Present	Normal Operation	Off	Fail	Mains power not available
C-Bus Status	<i>Clock Present</i>	<i>No Clock Present</i>																					
Voltage > 20V d.c	On	Off																					
Voltage < 20V d.c	Flashing	Off																					
Voltage < 15V d.c	Off	Off																					
Unit Status	<i>Mains Power</i>	<i>Conditions</i>																					
On	Present	Normal Operation																					
Off	Fail	Mains power not available																					
Maximum Number of Units on a single C-Bus Network	5 (limited by C-Bus network cable current rating). Please consult the C-Bus Calculator (network design verification tool) for further details.																						
Load Rating	350mA Able to support up to 18 units (@18mA each) on the C-Bus Network. Please consult the C-Bus Calculator (network design verification tool) for further details																						
Power Supply Type	High Impedance Switch Mode Power Supply																						
Maximum Power	15 Watts @350mA loading																						
Quiescent Power	2 Watts																						
Warm Up Time	3 seconds																						
Dimensions	72 x 85 x 65mm																						
Mains Terminals	Accommodates 2 x 1.5mm ² or 1 x 2.5mm ²																						
Weight	200g																						
C-Bus Connection	2 x RJ45 socket																						
Operating Temperature Range	0 - 45°C																						
Operating Humidity Range	10 - 95% RH																						

Product Range

Catalogue Number	Description
5500PS	C-Bus Power Supply - 350mA, DIN Rial (220-240V, 50-60Hz)
E5500TPS	C-Bus Power Supply - 350mA, DIN Rial (110-120V, 50-60Hz)

C-Bus System Units



C-Bus PC Interface 5500PC

The DIN rail mounted C-Bus PC Interface (or C-Bus PCI) is a C-Bus system device designed to provide a gateway between a PC and a C-Bus network. Through the C-Bus PC interface, C-Bus Units can be programmed, commands can be issued to the C-Bus network and activity on the C-Bus Network can be monitored.

The C-Bus PC Interface uses a standard RS232 serial port connection and allows an external device with RS232 output to be interfaced to a C-Bus system.

Clipsal Integrated Systems offers a PCI Development Kit (5000DK), which enables third party developers to integrate their systems with C-Bus. Please contact your local sales office for more information.

The PC Interface can be programmed to generate the C-Bus system clock for communications data synchronisation on the C-Bus network and provides a software selectable Network Burden.

Installation of the C-Bus PC Interface on the C-Bus network requires connection to the Category 5 unshielded twisted pair C-Bus network Cable. The connection to a personal computer is via the on-board 9-pin D type serial connector or 8-pin RJ45 connector.

The unit incorporates C-Bus and Unit/Communications LED indicators. These LEDs indicate if the unit is powered and functional, if sufficient C-Bus network voltage is available, if a valid C-Bus clock signal is present and if data transfer is currently taking place.

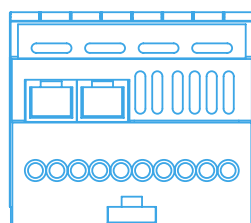
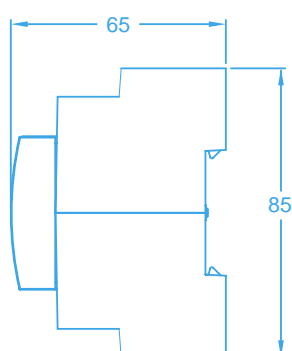
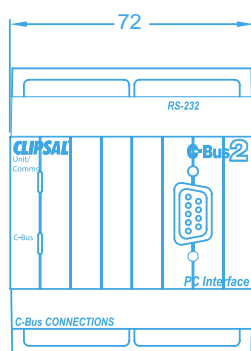
Features

- connection to a personal computer via a 9-pin D type serial connector or an 8-pin RJ45 connector
- capable of generating a C-Bus system clock for communications data synchronization
- incorporates a Unit/Communications LED Indicator
- incorporates a C-Bus LED Indicator
- supplied with a data cable with a DB9 socket and a DB9 plug
- DIN rail mounted measuring 4M wide.



Product Specifications

Catalogue Number	5500PC
C-Bus Input Voltage	15 – 36V d.c.
Current Drawn	32mA
Electrical Isolation Rating	500 Vrms continuous C-Bus / RS232
Communications Protocol PC / PC Interface	RS-232
Operating Temperature	0 - 45°C
Operating Humidity Range	10 - 95% RH
C-Bus Input Terminals PC Input	2 x RJ45 Connectors + 1 x DB9 Socket Connector
Weight	104g
Dimensions (L x W x D)	72 x 85 x 65mm



Product Range

Catalogue Number	Description
5500PC	C-Bus PC Interface

C-Bus System Units



C-Bus Pascal Automation Controller™ 5500PACA

The Pascal Automation Controller™ (PAC) is a DIN rail mounted C-Bus device which provides sophisticated and affordable control of a Clipsal C-Bus system. The PAC can perform operations in response to monitored events by executing custom written embedded programs. These programs are written by installers to suit individual application needs using the Microsoft Windows™ based Programming Interface for C-Bus Embedded Devices or 'PICED' software.

The PAC provides control based on conditional logic, time scheduling, scene control, RS-232 strings or combinations of these. The unit is programmed using a combination of software GUIs, wizards and an extended version of the standard 'Pascal' computer language.

One of the primary uses of the PAC is for installers to develop custom programs which utilise conditional logic. Conditional logic is based on conditions such as time values and C-Bus Group Address levels. The PAC is then programmed to perform actions based on these conditions.

The unit includes a built-in real-time clock and 192Kb of user memory. The built-in EEPROM memory retains program information; there is no need for a backup battery or a separate memory unit to back up this information in the event of a power loss. An additional backup battery is only required for backing up the real-time clock following a power loss of more than 24 hours.

The PAC only requires a C-Bus connection to operate. It is powered from a C-Bus network and is connected to the C-Bus Cat-5 UTP data bus.

The PAC provides a USB interface through which programs are downloaded. The USB connection can also be used to communicate directly with a C-Bus installation via a PC. This allows the PAC to function as a PC Interface and can be used by the C-Bus Toolkit software when configuring a C-Bus installation.

It is possible to read from and write to RS-232 serial ports from the PAC. This enables interfaces to many automation and audio/visual products to be created. The two serial ports included can be used simultaneously.

Features

- conditional and real-time events programming for C-Bus
- dedicated scheduling, logic and scene programming modules
- download programs from a PC to the unit
- connects directly to C-Bus
- powered from C-Bus
- compact size, 4M DIN modules wide
- 2 x RS-232 ports for third party device control
- easy to understand and learn programming language
- Microsoft Windows™ based programming GUI's and wizards
- command line programming for advanced programmers.



Product Specifications

Catalogue Number	5500PACA
Enclosure	DIN rail mounted, 4M Modules wide
Dimensions (WxHxD)	72 x 92 x 63 mm
Programming connector	USB for PAC program downloading and C-Bus Communication (PC Interface functionality)
C-Bus connectors	2 x RJ45 sockets (in parallel)
RS-232 port connectors	Port #1 1 x RJ45 Port #2 1 x RJ45
Weight	150g
C-Bus Input Terminals PC Input	RJ45 Connectors (2 off) DB9 Socket connector + RJ45 Connectors (2 off)
Weight	104g
Dimensions (L x W x D)	72 x 85 x 65mm

Product Range

Catalogue Number	Description
5500PACA	C-Bus Pascal Automation Controller™ (PAC)

C-Bus System Units



C-Bus Network Interface 5500CN

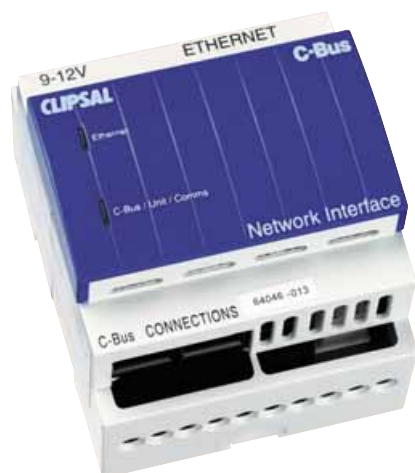
The C-Bus Network Interface (CNI) is a C-Bus system device designed to provide an isolated communications path between an Ethernet 10 Base-T network and a C-Bus network. This allows high-speed control and monitoring of a C-Bus installation via the TCP/IP protocols used in computer networks and by the Internet.

The CNI is a nearly instantaneous connection to a C-Bus network. It provides a gateway between high-speed, high bandwidth Ethernet communication and the robust; time - tested Clipsal C-Bus System.

System Integrators and installers can program a C-Bus network remotely without the need for transporting a PC to the local C-Bus Network and connecting via the serial port. With the CNI, the network can be as close as the nearest Ethernet connection. In addition to programming, the CNI provides similar convenience for third party applications to issue commands to a C-Bus network and monitor the behaviour of units on the network.

The C-Bus Network Interface is assigned an IP address, just like a PC on a computer network. Once an IP address is assigned it is possible for a myriad of applications, applets and third party systems to send C-Bus commands to the C-Bus network - all remotely, across buildings or across the country.

In addition to all these features, the CNI is a native C-Bus device that utilises the C-Bus protocol. The CNI can provide a system clock to synchronise all units on the network. The CNI can also ensure reliable communications on the network via the software selectable burden. The CNI does everything the C-Bus PC Interface does and more.



Features

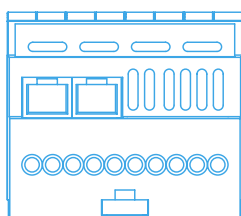
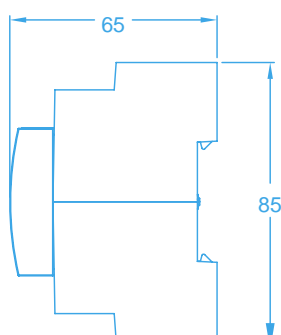
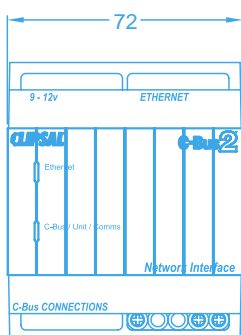
- connects directly to the C-Bus network via the C-Bus Category 5 data cable
- provides an isolated communications path between an Ethernet 10 Base -T network and a C-Bus network
- can be used to program C-Bus Units
- capable of issuing commands to a C-Bus network, including scheduled activities
- capable of monitoring and data logging of activities on a C-Bus network
- capable of generating a C-Bus system clock for communications data
- capable of providing a software selectable network Burden
- Ethernet LED indicator shows the status of the Ethernet side of the Network Interface
- C-Bus LED indicator shows the status of the C-Bus side of the Network Interface. Installation on to a C-Bus network requires connection to the unshielded twisted pair C-Bus Network Cable
- incorporates a C-Bus PC Interface Module for communications to the C-Bus network. Programming of the C-Bus side can be done in the same manner as programming a standard PC Interface
- must be supplied with power, 12V d.c. $\pm 10\%$ at the terminal for programming of either the C-Bus or Ethernet sides of the unit
- when connected to an Ethernet network the CNI may be configured with standard TCP/IP commands
- DIN rail mounted measuring 4M wide.

Product Specifications

Catalogue Number	5500CN
C-Bus Input Voltage	15 - 36V d.c.
Current Drawn	0mA
Operating Temperature	0 - 45°C
Operating Humidity Range	10 - 95% RH
C-Bus Input Terminals	2 x RJ45 Connectors
Ethernet Connection	1 x RJ45 Connector
Weight	130g
Dimensions (L x W x D)	72 x 85 x 65mm

Product Range

Catalogue Number	Description
5500CN	C-Bus Ethernet Network Interface



C-Bus System Units



C-Bus Network Bridge 5500NB

The C-Bus DIN Rail mounted Network Bridge, is a network device that provides a communication channel between C-Bus units on separate networks. This makes programming and monitoring of C-Bus devices on remote networks possible from a single point. For ease of installation, the unit is DIN rail mounted measuring 4M wide.

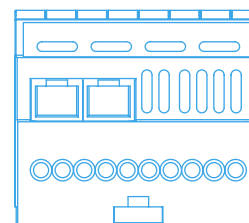
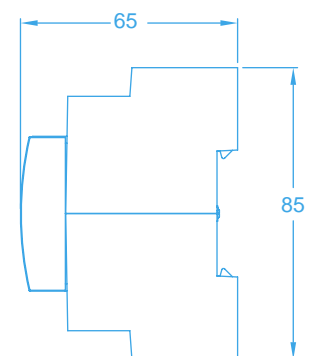
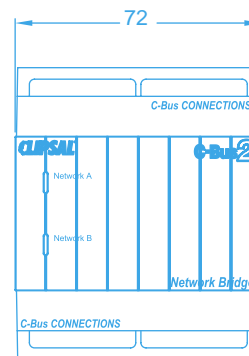
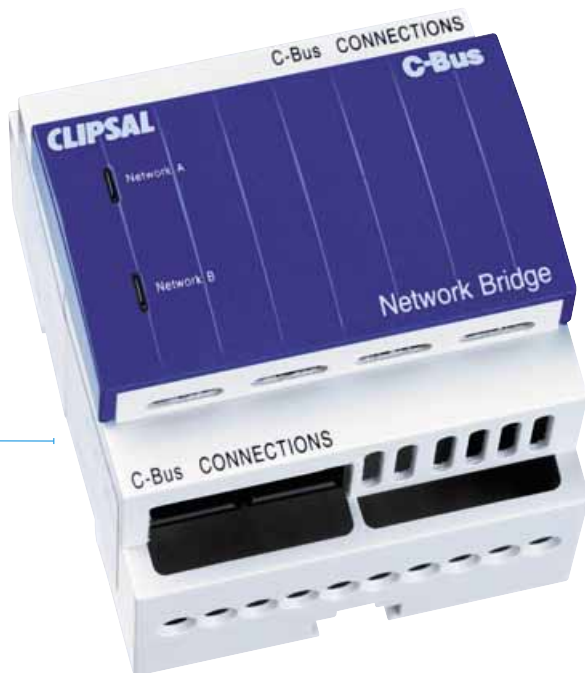
Both sides of the C-Bus Network Bridge are optically isolated, providing electrical isolation between each network.

The C-Bus Network Bridge is required when the single network limitations of a system have been reached. Such as when the total number of C-Bus units exceeds 100 and/or when the total length of unshielded twisted pair (UTP) cable exceeds 1000 metres.

C-Bus Network Bridges may also be used between each floor in a multi-storey building to provide isolation from one network to another.

Features

- DIN rail mounted measuring 4M wide
- provides a communication channel between C-Bus units on separate C-Bus networks
- allows programming and monitoring of C-Bus devices on remote networks from a single point
- optical isolation between each side, providing electrical isolation between networks.



Product Specifications

Catalogue Number	5500NB
C-Bus Supply Voltage	15-36V d.c.
Current Drawn	18mA (per network connected)
AC Input Impedance	50kΩ @ 1kHz
Electrical Isolation Rating	3.5kV RMS for 1 minute (between networks)
Maximum Number of Units on a Single C-Bus Network	50 Units
Propagation Delay	250ms (minimum delay for message transfer between two adjacent C-Bus networks)
Interconnect Capacity	Topology Width - 50 Networks (50 parallel Bridges) Topology Depth - 7 Networks (6 Bridges in series)
Communications Capacity	1 Network per Bridge 2 Applications per Bridge (Unit allows for communication with one or two other networks only per Bridge, in each direction)
C-Bus Unit Type	BRIDGE2N (Near Side) BRIDGE2F (Far Side)
C-Bus System Clock	Software Selectable
C-Bus Network Burden	Software Selectable
C-Bus Input Terminals	RJ45 Connectors (2 off per Network Bridge)
Shipping Weight	95g
Storage Temperature Range	-10 - 60°C
Operating Temperature Range	0 - 45°C
Operating Humidity Range	10 - 95% RH
Dimensions (L x W x H)	72 x 85 x 65mm

Product Range

Catalogue Number	Description
5500NB	C-Bus Network Bridge



C-Bus System Units



C-Bus Telephone Interface 5100TAU

The C-Bus Telephone Interface Unit allows control and monitoring of a Clipsal C-Bus system via a telephone dial in and dial out facility. An audio output is also included, allowing C-Bus events to be audibly announced via any standard audio amplifier.

The C-Bus Telephone Interface connects either to the Public Switched Telephone Network or to a local PABX. The C-Bus Telephone Interface unit includes the facility to issue voice prompts, send commands, and report C-Bus status and to obtain operator responses using DTMF tones. The operator responses are turned into actions on a C-Bus network. The C-Bus Telephone Interface permits control of any pre-programmed C-Bus Application and Group Address (on, off or ramp to level).

For added security, the C-Bus Telephone Interface requires the telephone user to enter a user profile number and password to access the voice prompt menus. Upon receipt of the correct password, the C-Bus Telephone Interface activates a voice prompt menu and directs the user to available actions or more menus.

Any touch-tone phone can be used to access the unit, including house telephones (by dialling a special access code that causes exchange tones to be muted when active).

The C-Bus Telephone Interface operates in either "Home" or "Away" mode. The mode to use can be determined by a C-Bus message. The number of rings before the C-Bus Telephone Interface picks up the line is programmable separately for "Home" and "Away" modes.

The unit allows a data connection to be made using a standard remote modem connected to a PC. This data connection mode allows existing C-Bus installation software to be used for remote changes to a C-Bus installation.

The C-Bus Telephone Interface incorporates a history log, is supplied pre-loaded with a standard library of words and phrases and supports multiple languages.

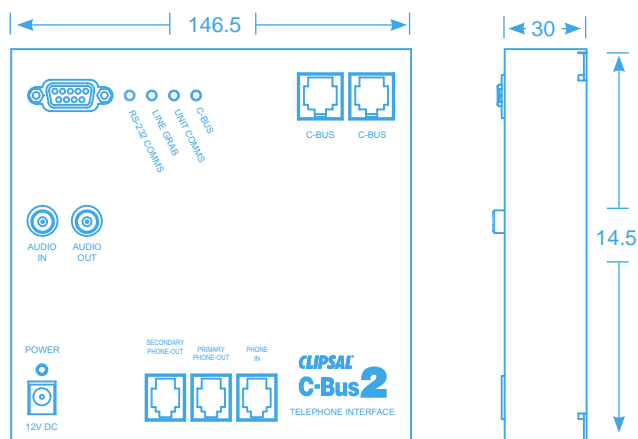
The Telephone Interface is programmed using a PC running the C-Bus Telephone Interface configuration software under Microsoft Windows™.

Features

- offers a dial in and dial out facility to control and monitor a Clipsal C-Bus system
- includes an audio output, so C-Bus events can be audibly announced
- data connection mode allows existing C-Bus installation software to be used for remote changes to a C-Bus installation
- issue voice prompts, report C-Bus status, and allows and operator to send commands and set options using standard telephone DTMF tones
- connects to either the Public Switched Telephone Network (PSTN) or a Private Automatic Branch Exchange (PABX)
- includes three RJ12 sockets for telephone connections, designated "Phone In", "Primary Phone Out" and "Secondary Phone Out"
- supports communication over multiple networks through C-Bus bridges
- operates in "Home" or "Away" modes and determines operation in these modes in response to a C-Bus message and the auto answer to monitor or control the C-Bus system
- permits dial-in or local telephone control of any pre-programmed C-Bus Application and Group Address (on, off or ramp to level)
- the number of rings before line pick up is programmable, separately, for "Home" and "Away" modes
- includes a user profile number and password to access the voice prompt menus
- able to dial-out or announce in response to a programmed set of C-Bus messages
- incorporates LED indicators for C-Bus network status, internal communication, RS-232 communications and telephone "Line Grab"
- incorporates a history log, which records details of incoming and outgoing calls
- pre-loaded with a standard library of words and phrases
- supports multiple languages
- optional mounting bracket, 5100TMB, allows unit to be mounted directly into Clipsal StarServe Home Networking Units

Product Specifications

Catalogue Number	5100TAU
C-Bus Supply Voltage	15-36V d.c. @ 18mA nominal
DC Plug Pack	12V d.c. @ 300 – 500mA, 2.1mm plug with centre pin +VE
Ringer Equivalence Number	1
Audio Output	Line output, 1 Vp-p (nominal) into 10K Ohms
C-Bus Unit Type	PC_CBTI
Control Functions	Dial In and Dial Out facility, control and status monitoring for a C-Bus system. Audio output. Standard C-Bus PCI allowing remote Dial In and operation as a PCI with modem connection for remote operation of installation software
Status Indicators	Green LED - Power Orange LED - RS232 Comms, Line Grab, Unit Comms and C-Bus
Start Up Time	10 seconds nominal after Power Up
Storage Temperature	0° to 60°C
Operating Temperature Range	0° to 45°C
Operating Humidity Range	0 - 95% RH (non-condensing)
C-Bus Input Terminals	RJ45 sockets
Colour	White with black lettering and markings
Dimensions	146.5 x 145 x 30mm
Weight	580g
Mounting Centres	80mm



Product Range

Catalogue Number	Description
5100TAU	C-Bus Telephone Interface
5100TMB	Mounting bracket to suit StarServe grid



C-Bus System Units



C-Bus 2 Channel DALI Interface 5502DAL Series

The 5502DAL C-Bus DALI Interface unit is a C-Bus system support device designed to provide an isolated communications path between a C-Bus network and two DALI networks. For ease of installation the unit is DIN rail mounted, measuring 4M wide (1M = 17.5 +0.5/-0.0 mm).

The DALI Interface provides two-way communication, i.e. selected C-Bus messages are routed to an appropriate DALI network, and DALI lighting messages are routed to the C-Bus network. The DALI Interface constantly monitors both DALI networks. It is capable of detecting and reporting faulty lamps in fluorescent ballasts or failed DALI units to C-Bus.

Each DALI network can have up to 64 addressable DALI devices, such as fluorescent ballasts and low voltage transformers. The DALI Interface does not have its own DALI addresses, i.e. it is transparent and is not "visible" for other DALI devices.

The DALI Interface unit incorporates a C-Bus PC Interface Module for communications to the C-Bus network. Programming of the C-Bus side of the Network Interface can be done in the same manner as programming a standard PC Interface.



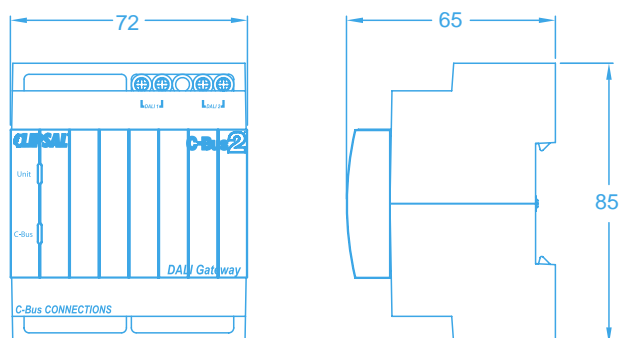
Features

- provides an isolated communications path between a C-Bus network and two DALI networks
- provides two-way communication, i.e. selected C-Bus messages are routed to an appropriate DALI network, and DALI lighting messages are routed to the C-Bus Network
- constantly monitors both DALI Networks
- capable of detecting and reporting to C-Bus faulty lamps in fluorescent ballasts or failed DALI units
- incorporates a C-Bus PC Interface Module for communications to the C-Bus network
- programming of the C-Bus side of the Network Interface can be done in the same manner as programming a standard PC Interface
- contains a pre-programmed C-Bus to DALI and DALI to C-Bus addressing structure
- incorporates a C-Bus and Unit indicator, showing the status of the C-Bus network and the status of the individual unit
- incorporates an onboard non-volatile memory, which is used to store the operating state of the unit in the case of a power loss
- capable of being programmed via the installation software without the need for a mains connection
- a maximum of 50 units may be connected to a single C-Bus network
- configured via the C-Bus Installation Software or the Learn Enabled Features
- DIN rail mounted measuring 4M wide

Note: Clipsal Integrated Systems Pty Ltd does not manufacture DALI ballasts or transformers, power supplies, commissioning software or any other product or service associated with DALI, aside from the C-Bus DALI Interface itself. Check individual DALI component requirements.

Product Specifications

Catalogue Number	5502DAL
C-Bus Supply Voltage	15-36V d.c.
Current Drawn	32mA
AC Input Impedance	50kW @ 1kHz
Electrical Isolation Rating	3.5kV RMS for 1 minute
Maximum Number of Units on a Single C-Bus Network	50 Units
C-Bus System Clock	Software Selectable
C-Bus Network Burden	Software Selectable
C-Bus Input Terminals	2 x RJ45 Connector
DALI Terminals	Accommodates 2 x 1.5mm ² or 1 x 2.5mm ²
Shipping Weight	130g
Storage Temperature Range	-10 - 60°C
Operating Temperature Range	0 - 45°C
Operating Humidity Range	10 - 95% RH
Dimensions (L x W x H)	72 x 85 x 65mm



Product Range

Catalogue Number	Description
5502DAL	2 Channel C-Bus to DALI Interface

C-Bus Accessories



C-Bus Category 5 UTP Data Cable 5005C305B

C-Bus Data Cable is a unique colour coded 4 pair Category 5 UTP LAN cable for use with the C-Bus Control and Management System.

The cable has a mains rated pink outer sheath making it easy to distinguish from other voice and data cables in the installation, thus preventing mis-wiring between systems. The inner cable consists of four unshielded twisted pairs (UTP) providing a high data rate capability, immunity to induced noise from external sources and superior crosstalk performance.

The C-Bus Data Cable is fully compliant with the category 5 standard (AS3080-96) and the applicable standards in TS-008.

C-Bus Category 5 UTP Data Cable is recommended for use in all C-Bus installations, especially projects where large cable runs are used on single C-Bus networks.

Features

- suitable for use with C-Bus Control and Management System
- mains rated pink outer sheath
- unshielded Twisted Pair (UTP) inner cables providing:
 - high data rate capability
 - immunity to induced noise from external sources
 - superior cross-talk performance
- compliant with category 5 standard (AS3080-96) and the applicable standards in TS-008
- suitable for large cable runs on C-Bus networks.



Product Specifications

Catalogue Number	5005C305B
Description	4 pair 1/0.51 (0.2mm ²), 24AWG, Data grade insulation, 100±15W telecommunication building cable, unscreened
Length	305m boxed
DC Resistance	<93.8V/1000m, at 208C max
SRL	24.69dB at 33.11MHz
Power Sum	
NEXT	53.84dB at 7.59MHz
Lay Up	4 pairs twisted, individual pairs having staggered lays to minimise crosstalk
Pair 1	Blue + white with blue stripe
Pair 2	Orange + white with orange stripe
Pair 3	Green + white with green stripe
Pair 4	Brown + white with brown stripe
Sheath	Coloured PVC (pink), type V75 C, nominal diameter 5.2mm
Electrical	Per EIA/TIA

Product Range

Catalogue Number	Description
5005C305B	C-Bus Category 5 UTP Data Cable

C-Bus Accessories



C-Bus Network Analyser 5100NA

The C-Bus Network Analyser is a C-Bus diagnostic tool used in the field for quickly identifying faults in a C-Bus network. The Network Analyser is connected to the C-Bus network and is used to measure:

- excessive or insufficient network voltage
- presence or absence of a system clock
- presence or absence of a network burden
- excessive network impedance.

The device analyses these network parameters and prompts the user for appropriate actions via the LED (Light Emitting Diode) indicators located on the front of the unit.

Features

- quickly identifies faults in a C-Bus network
- measures for:
 - excessive or insufficient network voltage
 - presence or absence of a system clock
 - presence or absence of a network burden
 - excessive network impedance
- prompts for appropriate actions via the LED (Light Emitting Diode) indicators located on the front of the unit
- supplied with 2 x 815mm banana plug to alligator clip leads (red and black)

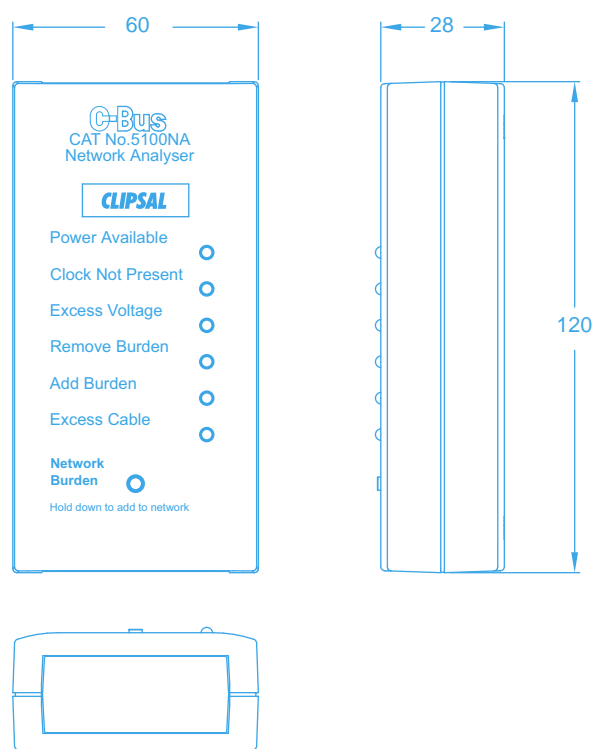


Product Specifications

Catalogue Number	5100NA
Input Voltage	10 – 43V d.c.
Input Current	20mA
Operating Temperature	0 - 45°C
Connections	2 x banana plug to alligator clip lead
Dimensions (L x W x H)	120mm x 60mm x 28mm

Product Range

Catalogue Number	Description
5101NA	C-Bus Network Analyser



C-Bus Accessories



C-Bus Infrared Reader 5100RP

The C-Bus Infrared Reader is an accessory to the 5034NIRT Infra-red Transmitter series of devices. It allows the learning of Infrared codes from third party remote controls. Such devices may include televisions, video cassette recorders, motorised blinds, air-conditioning and other IR controlled devices.

Specialised software tools are provided for control of the unit. The software allows the user to create XML files that can be imported into the CIRCA software, which is used for programming of the 5034NIRT series of devices. The software tools also provide for visual exploration of IR codes.

The Infra-red Reader software must be used on a computer running Windows 98™, Windows ME™, Windows 2000™ or Windows XP™ operating system. Note, Windows 95™ and Windows NT™ do not support USB and are consequently not supported.

The Infrared Reader is supplied with a USB lead for easy connection to a laptop computer or PC and a CD-ROM containing the specialised software tools.

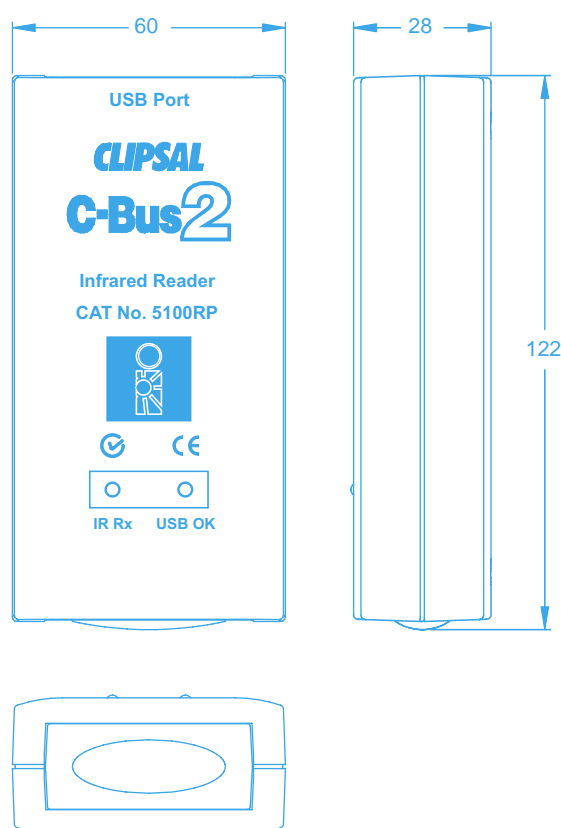
Features

- allows learning of infrared codes from 3rd party remote controls e.g. TV, VCR, air-conditioning
- specialised software tools allow creation of XML files that can be imported into the CIRCA software, which is used for programming of the 5034NIRT series of devices. The software tools also provide for visual exploration of IR codes
- supplied with a USB cable for easy connection to a laptop or a PC and a CD-ROM containing the specialised software tools.



Product Specifications

Catalogue No.	5100RP Series
Communication Format	USB 1.1 Specification Compliant
IR Receiver Frequencies	0 – 455kHz, Pulsed (i.e. carrier less)
Shipping Weight	110g
Storage Temperature Range	-10 – 60°C
Operating Temperature Range	0 – 45°C
Operating Humidity Range	10 – 95% RH
Dimensions (L x W x H)	122 x 61 x 34mm



Product Range

Catalogue Number	Description
5100RP	C-Bus Infrared Reader



C-Bus Accessories



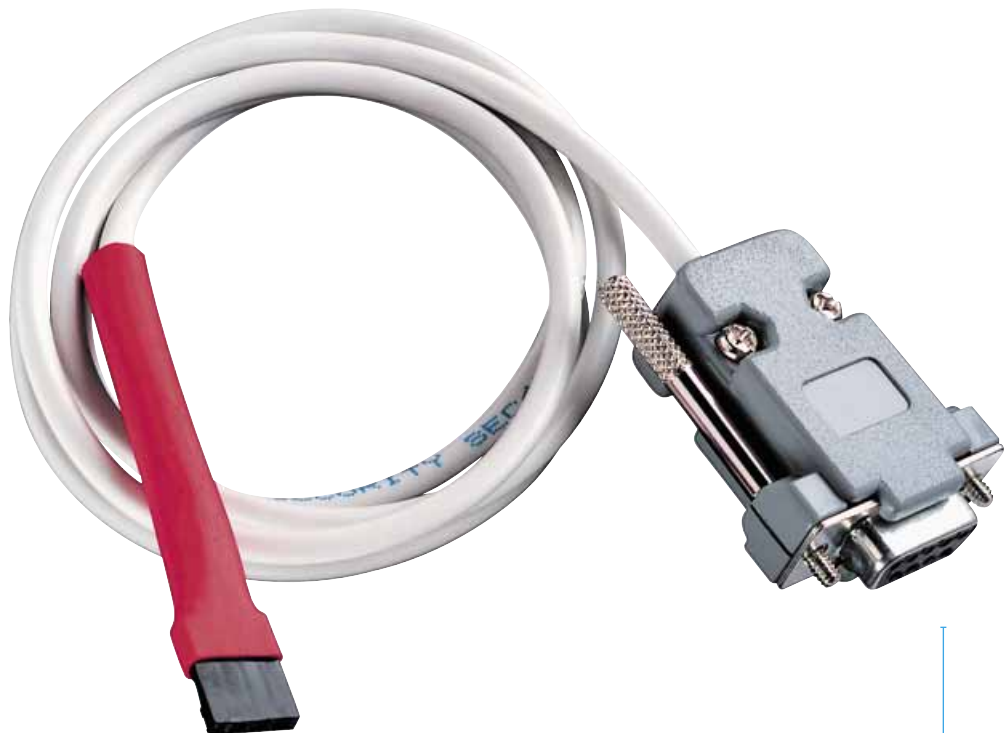
C-Bus High Speed Programming Cable 5100HSC

The C-Bus High Speed Programming Cable is used in conjunction with the C-Bus 5034NIRT Infrared Transmitter series of devices. It enables rapid download of IR codes from a laptop PC directly to the Infrared Transmitter unit. Depending upon the size and number of IR codes, the cable can enable downloads in approximately two minutes.

Measuring approximately one meter in length, the cable incorporates a DB9 serial connector on one end for connection to computer and a 4-pin connector on the other end for connection to a C-Bus Infrared Transmitter unit.

Features

- incorporates a DB9 serial connector for connection to a laptop computer or PC
- 4-pin connector for connection to the Infrared Transmitter Unit
- enables rapid download of IR codes, approximately two minutes
- length: 1 metre.



Product Range

Catalogue Number	Description
5100HSC	High Speed Programming Cable



Clipsal Integrated Systems

A Division of Clipsal Australia Pty Ltd
ABN 27 007 873 529

Head Office

12 Park Terrace, Bowden
South Australia 5007

PO Box 103 Hindmarsh

South Australia 5007

Telephone (08) 8345 9500

International +61 8 8345 9500

Facsimile (08) 8346 0845

International +61 8 8346 0845

Internet www.clipsal.com/cis

E-Mail cis@clipsal.com.au

CIS Technical Support Hotline:

1300 722 247

National Customer Service Enquiries:

1300 2025 25

National Customer Service Facsimile:

1300 2025 56

International Enquiries

International Sales and Marketing

Telephone +61 8 8269 0587

Facsimile +61 8 8340 7350

E-Mail export@clipsal.com.au

New Zealand

Clipsal Industries (NZ) Ltd

Telephone +64 9 576 3403

Facsimile +64 9 576 1015

E-Mail headoffice@clipsal.co.nz

Customer Service

Free Facsimile (0508) 250 305

Auckland/Mobile Phone (09) 572 0014

Free Phone (0508) CLIPSAL
2547725

Malaysia

Clipsal Integrated Systems (M) Sdn Bhd
Unit 3-2, Level 3, C P Tower

No.11, Jalan 16/11, Seksyen 16,

46350 Petaling Jaya, Selangor, Malaysia

Telephone +60 3 7665 3555

Facsimile +60 3 7665 3155

E-Mail sales@cisasia.com.my

Singapore

Clipsal Integrated Systems Pte Ltd

5, Fourth Chin Bee Road

619 699 Singapore

Telephone +65 6415 3232/3233

Facsimile +65 6415 3289

E-Mail sales@cisasia.com.sg

International Representatives

China

Clipsal China Limited

Telephone +86 755 8237 5959

Greece

Schneider Electric AE

Telephone +30 69 4646 3200

Hong Kong

Clipsal Integrated Systems (HK) Limited

Telephone +852 2487 0261

India

Schneider Electric India Pvt Ltd

Telephone +91 11 5159 0000

Indonesia

PT Clipsal Graha Nusa

Telephone +62 21 630 6430

Korea

Clipsal Korea Co. Ltd

Telephone +822 549 5550

Pakistan

Clipsal Pakistan (Pvt) Ltd

Telephone +92 21 506 7278

Philippines

Clipsal Philippines Inc.

Telephone +632 683 0275-78

South Africa

Clipsal South Africa (Pty) Ltd

Telephone +27 11 314 5200

Taiwan

Clipsal (Taiwan) Co Ltd

Telephone +886 2 2558 3456

Thailand

Clipsal Thailand Ltd

Telephone +66 2 952 5338-42

United Arab Emirates

Clipsal Middle East

Telephone +971 6 5570 777

United Kingdom

Clipsal Integrated Systems

C/o Schneider Electric

Telephone +44 870 608 8 608

Vietnam

Clipsal - VTEC

Telephone +848 856 3002



C-Bus

Control and Management System

You can find this brochure and many others online in PDF format at:

clipsal.com

Follow the links off the home page or access the following page directly:

clipsal.com/wat_lib_pdf.cfm

clipsal.com/cis

Clipsal Australia Pty Ltd reserves the right to change specifications, modify designs and discontinue items without incurring obligation and whilst every effort is made to ensure that descriptions, specifications and other information in this catalogue are correct, no warranty is given in respect thereof and the company shall not be liable for any error therein.

© Clipsal Australia Pty Ltd 2006.

All rights reserved.

This material is copyright under Australian and international laws. Except as permitted under the relevant law, no part of this work may be reproduced by any process without prior written permission of and acknowledgement to Clipsal Integrated Systems Pty Ltd.