



C-Bus 'E' Series DLT Range

Installation Instructions

E5054DL Neo Series

E5084DL Ulti Saturn Series



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1.0 Product Range

E5054DL C-Bus 'E' Series Neo DLT (square plate)

E5084DL C-Bus 'E' Series Ulti Saturn DLT (square plate, single bevel)

2.0 Important Notes

- Do not connect mains to C-Bus DLT units.
- Only connect C-Bus 'E' Series DLT units to a Clipsal C-Bus system.
- The use of any software not provided by Clipsal Integrated Systems (CIS) in conjunction with the installation of this product may void any warranties applicable to the hardware.

3.0 Description

C-Bus 'E' Series Neo and Ulti Saturn DLT wall switches are a range of high end C-Bus switches with Dynamic Labelling Technology (DLT). The units feature 4 physical buttons which control up to 8 control groups. The LCD interface displays labels and status information for each button/control group. Units have scene management and learn mode capability.

Labels can consist of text (in several languages) or graphics. They may also be changed dynamically by other C-Bus devices, (such as the C-Bus Multi Room Audio System), to reflect a change in functionality.

Learn mode enables you to create associations between buttons on input units such as the DLT wall switch, and loads on output units such as dimmers. It allows you to add functionality such as timers and scenes without using the C-Bus Toolkit software.

Scene capability allows you to perform a series of actions across multiple outputs by pressing a single button. For example, on arrival home you could use a scene to switch on lights in the hallway and kitchen, dim lights in the lounge, and switch on a heater.

Using the C-Bus Toolkit software, C-Bus DLT wall switches can be programmed so their controls can be enabled and disabled (locked) from another C-Bus unit.

4.0 Installation Considerations

It is important to select the right location to install C-Bus DLT wall switches. Some considerations are listed below:

- Provide easy access to the unit for switching lights and selecting scenes.
- Choose a location free of water, humidity, direct sunlight and heavy dust.
- Allow adequate ventilation.
- Do not cover the unit.
- C-Bus DLT wall switches are designed for indoor use only.
- Units are designed to be mounted vertically (portrait). If mounting horizontally (landscape), graphical labels must be used to avoid labels being displayed at 90°.



no wet hands



no cleaner spray



no coverage



no direct sunshine



no dust

5.0 Mounting Instructions

C-Bus 'E' Series DLT wall switches suit standard 60.3 mm centre mounting accessories, such as the Clipsal E157. Figures 1 and 2 show the mounting of 'E' Series Neo and Ulti Saturn DLT units using E157 series wall boxes.



Mounting accessories must be fitted a minimum distance of 10 mm back from the finished surface of the wall. Fit the grid plate to the wall with its rear connector cut-out at the top (when mounting vertically). Do not over tighten.

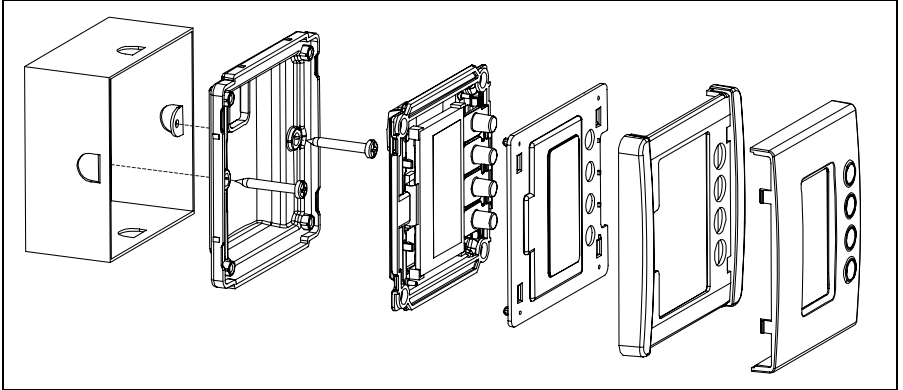


Figure 1 - Mounting an 'E' Series Neo DLT using an E157 Series wall box

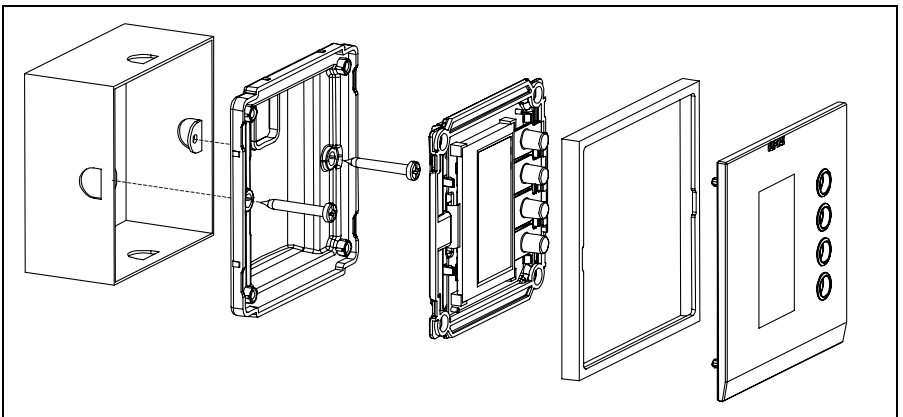


Figure 2 - Mounting an 'E' Series Ulti Saturn DLT using an E157 Series wall box

5.1 The Neo Facia

The Neo facia consists of three sections (the three front-most sections of Figure 1) which are shipped ready assembled as one piece. To install the Neo facia, align it over the grid plate and snap it into place. To remove the facia, pull it off from the base.

5.2 The Ulti Saturn Facia

To install the Ulti Saturn facia:

- 1) Place the frame over the grid plate.
- 2) Hold the facia over the grid plate and align the four plugs with the holes in the corners of the grid plate.
- 3) Press the facia into the grid plate, applying pressure evenly.

To remove the Ulti Saturn facia:

- 1) Insert the head of a flat head screwdriver between the facia and the grid frame at one corner of the unit. Gently pry the facia away from the grid plate by about 1 mm. Take care not to scratch the glass or frame.
- 2) Repeat Step 1 for the other three corners.
- 3) Hold the facia with your hand and carefully pull it off the grid plate, as shown in Figure 3.

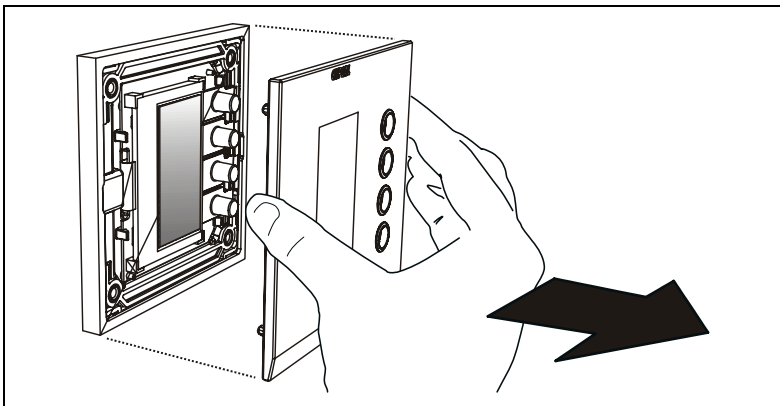


Figure 3 – Removing the facia on an Ulti Saturn 'E' Series DLT unit

6.0 C-Bus Network Connection

Installation of a DLT unit on the C-Bus network requires connection to the unshielded twisted pair C-Bus cable. Connection should be made using Category 5 (Cat-5) data cable, Clipsal catalogue number 5005C305B.

Figure 4 and Table 1 identify the connections required between the C-Bus Cat-5 cable and the DLT unit. Terminal locations are illustrated in Figure 5.

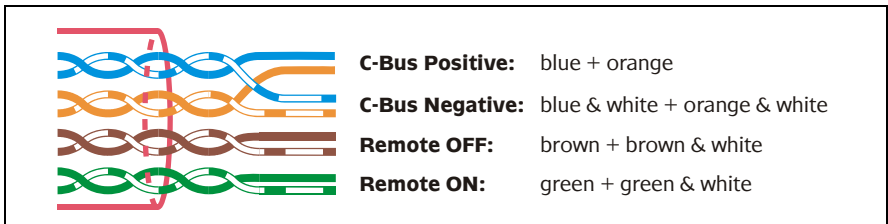


Figure 4 – C-Bus cable conductor assignments

C-Bus Connection	Colour	DLT Connection
Remote ON	green & white	no
Remote ON	green	no
C-Bus Negative (-)	orange & white	yes
C-Bus Positive (+)	blue	yes
C-Bus Negative (-)	blue & white	yes
C-Bus Positive (+)	orange	yes
Remote OFF	brown & white	no
Remote OFF	brown	no

Table 1 – C-Bus cable connections

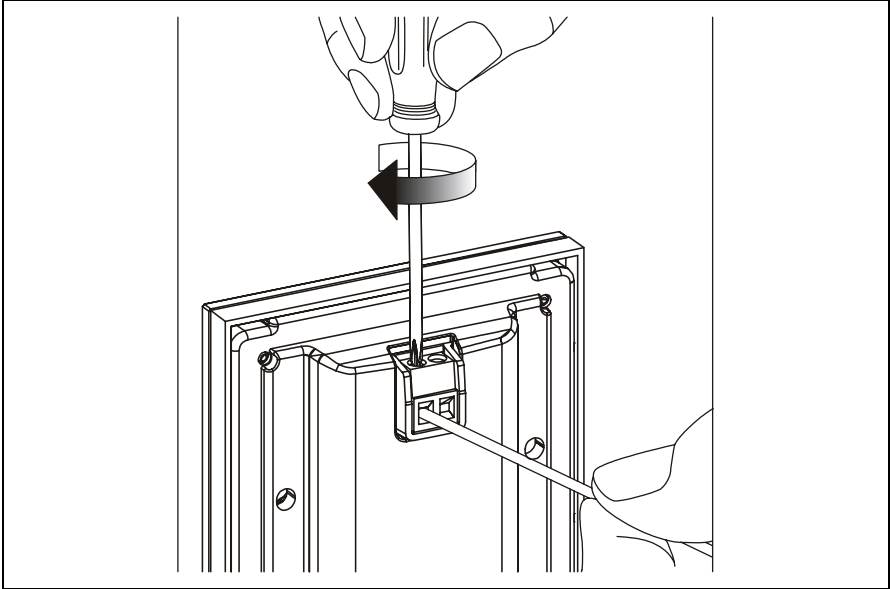


Figure 5 – Connecting an 'E' Series DLT unit to the C-Bus network

7.0 C-Bus Power Requirements

'E' Series DLT units draw 22 mA from the C-Bus network. Adequate C-Bus Power Supply Units must be installed to support the connected devices. If in doubt, use the C-Bus Calculator software.

8.0 Megger Testing

Never perform megger testing on the pink C-Bus data cabling or terminals, as this may degrade the performance of the network.

Megger testing of a mains electrical installation that has C-Bus units connected, will not damage the units. Since C-Bus units contain electronic components, this should be taken into account when interpreting megger readings.

9.0 Programming Requirements

C-Bus DLT units are learn enabled devices. Learn enabled is the latest generation of Clipsal C-Bus, which allows you to create relationships between units without a computer.

Learn mode allows you to link multiple units into a common network. You can assign a load such as a light on a dimmer unit, with a controller such as a DLT unit, by touching the two units one after the other. Refer to the C-Bus 'E' Series DLT Range User's Guide for more information.

In a sophisticated installation, some of the basic settings created by learn mode may need to be overridden to create a particular effect. The latest C-Bus Toolkit software may be downloaded from the Clipsal Integrated Systems website (www.clipsal.com/cis).

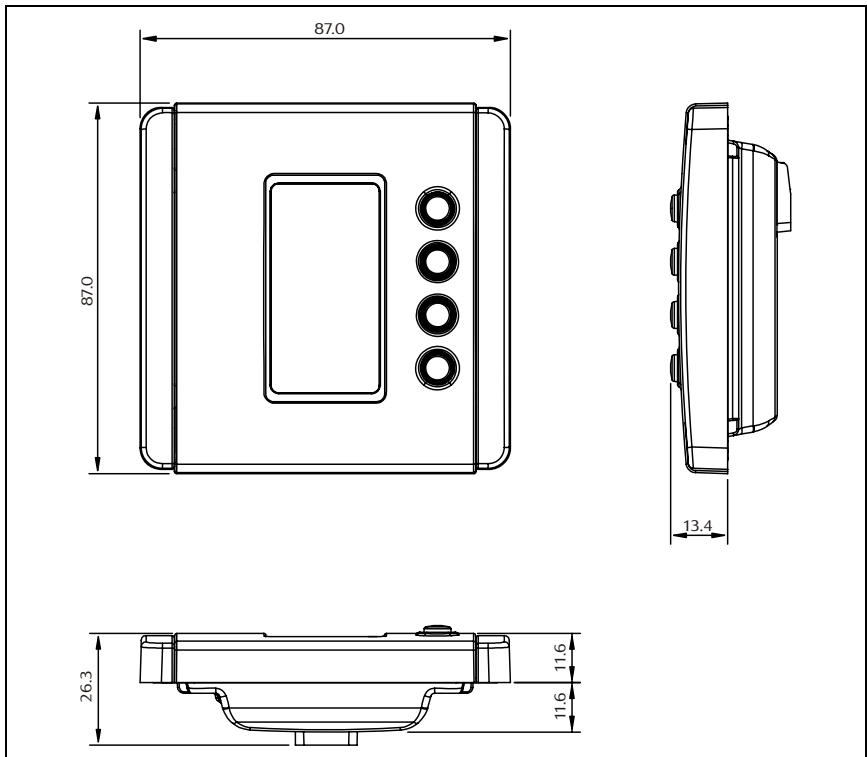
10.0 Electrical Specifications

Parameter	Description
C-Bus supply voltage	15 to 36 V DC, 22 mA for normal operation. Does not provide current to the C-Bus network
C-Bus AC input impedance	50 kΩ @ 1 kHz
Electrical isolation	3.75 kV RMS from C-Bus to mains (provided externally to the unit)
Maximum number of units on network	50
Control functions	Load switching, dimming, timers, scene control
Status indicators	Blue, one indicator per button (dimnable)
Backlight	White, user configurable (dimnable)
Warm-up time	5 seconds
C-Bus connection	One terminal block to accommodate 0.2 to 15 mm (24 to 16 AWG)
Clock accuracy	± 30 seconds per week (on a C-Bus network without a time keeping device such as a C-Touch or PAC unit)
Operating temperature range	0 to 45 °C
Operating humidity range	10 to 95% RH

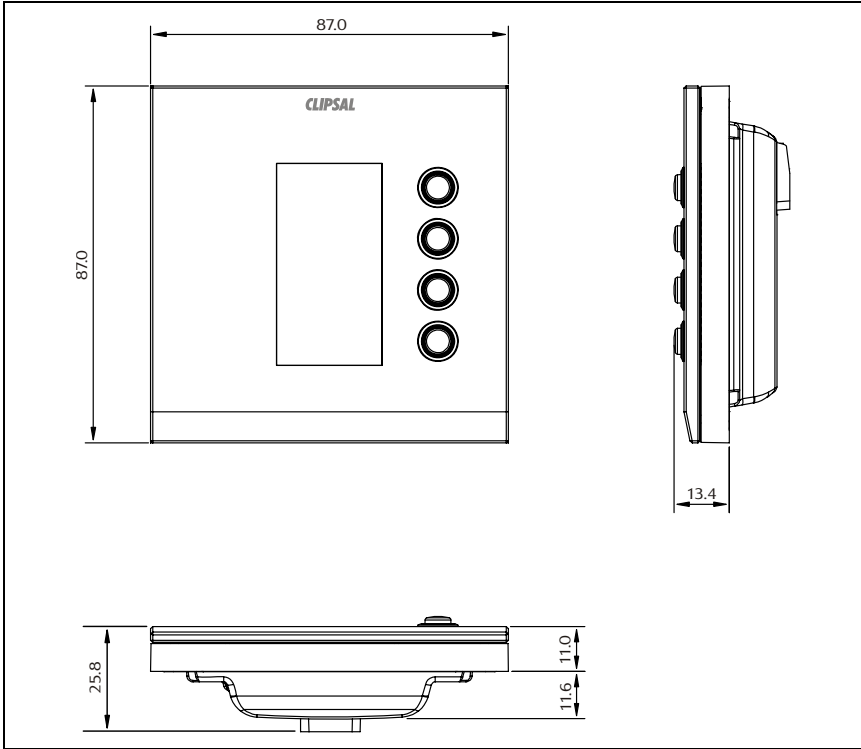
11.0 Mechanical Specifications

Parameter	'E' Series Neo	'E' Series Ulti Saturn
Dimensions (W×H×D)	87 × 87 × 27 mm	87 × 87 × 26.5 mm
Protrusion from wall	13.4 mm	13.4 mm
Mounting depth (into wall)	15 mm	15 mm
Mounting centres	60.3 mm	60.3 mm
Weight	101 g	148 g

11.1 'E' Series Neo DLT



11.2 'E' Series Ulti Saturn DLT



12.0 Standards Complied

DECLARATIONS OF CONFORMITY

Australian/New Zealand EMC & Electrical Safety Frameworks and Standards

C-Bus 'E' Series DLT models comply with the following:



C-Tick Framework	Standard	Title
EMC	AS/NZS1044; IEC/CISPR14-1	RFI Emissions Standard

European Directives and Standards

C-Bus 'E' Series DLT models comply with the following:



European Council Directive		Standard	Title
89/336/EEC	EMC Directive	EN60669-2-1; IEC 60669-2-1	RFI Emissions Standard
		EN61000-3-2; IEC61000-3-2	RFI Emissions Standard
		EN55014-1; CISPR14-1	RFI Emissions Standard
		IEC 61000-4-2	Immunity to ESD
		IEC 61000-4-3	Immunity to RF EM Field
		IEC 61000-4-4	Immunity to EFT
		IEC 61000-4-5	Immunity to Surge Voltages
		IEC 61000-4-11	Immunity to Voltage Dips and Interruptions

13.0 Limited Warranty

C-Bus 'E' Series DLT products carry a two year warranty against manufacturing defects (refer to the Warranty Statement).



Technical Support and Troubleshooting

For further assistance in using this product, consult your nearest Clipsal Integrated Systems (CIS) Sales Representative or Technical Support Officer.

Technical Support Contact Numbers	
Australia	1300 722 247 (CIS Technical Support Hotline)
New Zealand	0800 888 219 (CIS Technical Support Hotline)
Northern Asia	852 2484 4157 (Clipsal Hong Kong)
South Africa	(011) 314 5200 (C-Bus Technical Support)
Southern Asia	603 7665 3555 Ext. 236 or 242 (CIS Malaysia)
United Kingdom	0870 608 8 608 (Schneider Electric Support)

Technical Support email: techsupport.cis@clipsal.com.au

Sales support email: sales.cis@clipsal.com.au

A list of worldwide contacts, additional product information and technical resources is provided at <http://www.clipsal.com/cis/>

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