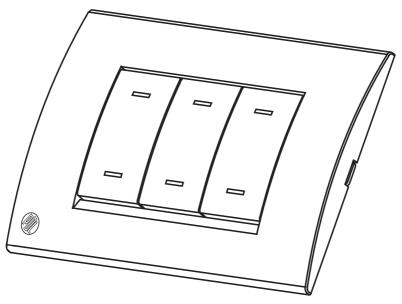


# LexCom Modena C-Bus Wall Switch

Installation Instructions

LHC88X Series





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### **1.0 Product Range**

This document applies to the LexCom Modena C-Bus Wall Switch models listed below.

Catalogue Number	Description
LHC882, WH	Modena C-Bus Wall Switch, white, 2 button
LHC882, BK	Modena C-Bus Wall Switch, black, 2 button
LHC884, WH	Modena C-Bus Wall Switch, white, 4 button
LHC884, BK	Modena C-Bus Wall Switch, black, 4 button
LHC886, WH	Modena C-Bus Wall Switch, white, 6 button
LHC886, BK	Modena C-Bus Wall Switch, black, 6 button

#### 2.0 Important Notes

Do not connect mains to the Modena C-Bus Wall Switch units. The C-Bus network uses CAT-5 network cables.

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**

The LexCom Modena C-Bus Wall Switch Series is a high-end range of C-Bus input units. Units feature multiple buttons, scene management and learn mode capability.

## **4.0 Installation Considerations**

It is important to select the right location to install LexCom Modena C-Bus 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.
- Units are designed for indoor use only.
- Units may be mounted vertically or horizontally.











no wet hands

no cleaner spray

no coverage

no direct sunshine

no dust

## **5.0 Mounting Instructions**

LexCom Modena C-Bus Wall Switches suit standard 84 mm centre mounting accessories, such as the PDL 146C and 147. It is recommended that 147 wall boxes be earthed.

Mounting accessories must be fitted a minimum distance of 10 mm back from the finished surface of the wall. When mounting vertically, fit the grid plate to the wall with the release locks at the bottom.



The following installation methods are suggestions only. All units must be installed within the local electrical authority guidelines.

## 5.1 Switch Orientation

Figure 1 shows the rear and front orientations of a 6 button LexCom Modena C-Bus Wall Switch.

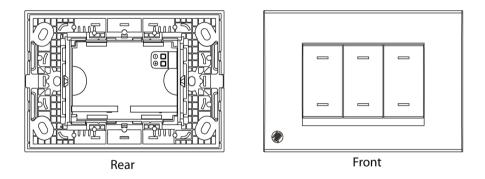


Figure 1. Rear and front views of a 6-button wall switch

#### 5.2 C-Clip Mounting

For a plasterboard installation, LexCom Modena C-Bus Wall Switches can be mounted in a horizontal or vertical orientation. Be sure to install the front cover with the PDL logo in the position shown in Figure 2 and Figure 3.

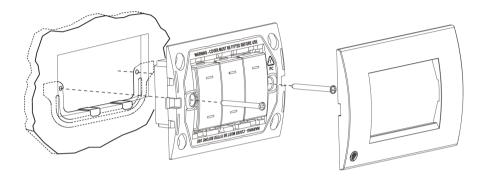


Figure 2. C-Clip mounting in the horizontal orientation

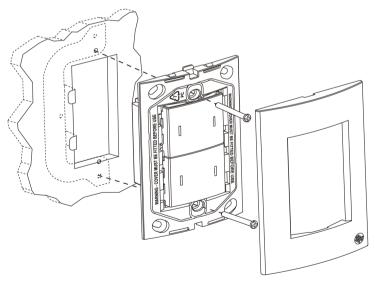


Figure 3. C-Clip mounting in the vertical orientation

#### 5.3 Wall Box Mounting

A Modena wall switch can be fitted to a wall box. This allows it to be easily mounted in a new or existing installation. A wall box may be fitted into suitably prepared masonry, or attached to a noggin fitted between studs in timber stud construction. Refer to the illustrations in Figure 4 and Figure 5.

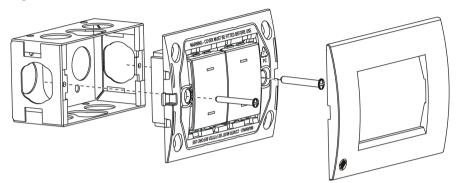


Figure 4. Wall box mounting in the horizontal orientation

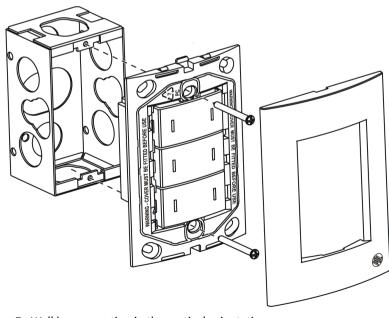


Figure 5. Wall box mounting in the vertical orientation

#### **5.4 Installing the Cover Plate**

- 1) Align cover plate over the buttons on the grid, with the PDL logo at the bottom left (horizontal mounting) or bottom right (vertical mounting).
- 2) With thumbs positioned over the release slots (Figure 6), press the cover plate onto the grid until it clips into place.

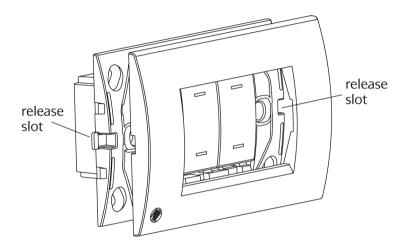


Figure 6. The release slots provide easy removal of the cover plate

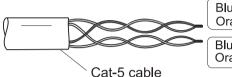
#### 5.5 Removing the Cover Plate

To remove a switch cover plate:

- 1) Insert the blade of a small flat head screwdriver into one of the release slots (Figure 6).
- 2) Lever the cover plate off the grid.

## 6.0 C-Bus Network Connection

Installation of a wall switch unit on the C-Bus network requires connection to the unshielded twisted pair C-Bus cable. Figure 7 identifies the connections required between the C-Bus Cat-5 cable and the wall switch unit. Terminal locations are shown in Figure 8. Connection should be made using Category 5 (Cat-5) data cable, Clipsal catalogue number 5005C305B.



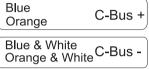
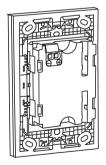


Figure 7. C-Bus cable conductor assignments

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



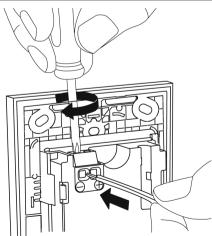


Figure 8. Terminal Wiring

#### 7.0 C-Bus Power Requirements

The LexCom Modena C-Bus Wall Switch unit draws 22 mA from the C-Bus network. Adequate C-Bus Power Supply Units must be installed to support the connected devices.

The Network window of a C-Bus Toolkit project provides a summary of a C-Bus network according to the units added to the Database. This can be helpful in determining the power supply requirements of a particular network.

## 8.0 Megger Testing

Megger testing of a mains electrical installation that has LexCom Modena C-Bus Wall Switch units connected will not damage the units. The wall switch units contain electronic components; this should be taken into account when interpreting megger readings. Never perform megger testing on the pink C-Bus cabling or terminals as this may degrade the performance of the network.

#### 9.0 **Programming Requirements**

LexCom Modena C-Bus Wall Switches are learn-enabled devices. This means you can create relationships between input and output units without a computer (using learn mode).

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 Modena C-Bus Wall Switch input unit, by touching the two units one after the other. Refer to the *Quick start guide to programming: C-Bus2 Learn Units* booklet 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 LHC88x Series unit)	
Maximum number 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 1.3 mm <sup>2</sup> (24 to 16 AWG)	
Operating temperature range	0 to 45 °C	
Operating humidity range	10 to 90% RH	

# **11.0 Mechanical Specifications**

Parameter	Description	
Mounting Centres	84 mm	
Dimensions (W x H x D)	124.2 × 84.0 × 15mm	

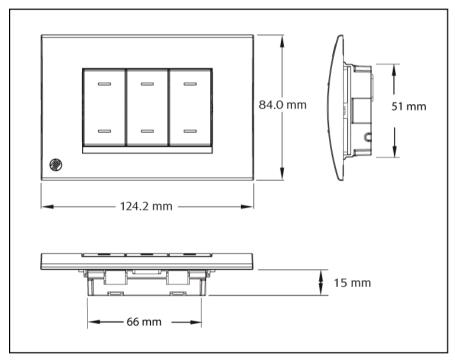


Figure 9. Wall Switch Dimensions

## 12.0 Standards Complied

# **DECLARATIONS OF CONFORMITY**

The LexCom Modena C-Bus Wall Switch series complies with the following:

#### Australian/New Zealand EMC & Electrical Safety Frameworks and Standards

Regulation	Standard	Title
EMC (c-tick)	AS/NZS CISPR 15	Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment
	IEC60669-2-1 Clause 26	Immunity and Emissions

#### 13.0 Warranty

The LexCom Modena C-Bus Wall Switch carries a two-year warranty against manufacturing defects.

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)	

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