

# C-Bus<sup>2</sup>

2 easy to program



**CLIPSAL**<sup>®</sup>  
INTEGRATED SYSTEMS

Quick start guide to programming  
*C-Bus2 Learn Units*



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## What is C-Bus2?

C-Bus2 is a micro-processor controlled wiring system that uses unshielded twisted pair data cable (or 'bus') as its communication medium to control lighting, airconditioning, fire detection systems, access control systems, security and other applications in any building.

The system is highly flexible in the way it operates because each device communicating on the bus cable has its own inbuilt micro-processor. These devices can be programmed to provide optimum control in any installation.

Information comes from Input Units such as Keys, Touchscreens, Occupancy Sensors, and messages are sent via the C-Bus to appropriate Output Units such as Relays and Dimmers. Messages are used to control the loads connected to the Output Units.

## What is C-Bus2 *Learn Mode*?

C-Bus2 is the latest generation of Clipsal C-Bus, which allows users to set relationships between Output Units and Input Units without a computer.

C-Bus2 can be programmed by simply pressing keys in a sequence, much as you program a video recorder. As long as you know the sequence, which is explained in this booklet, you can decide which switches are going to control which lights, or airconditioners, or pool pumps, for example.

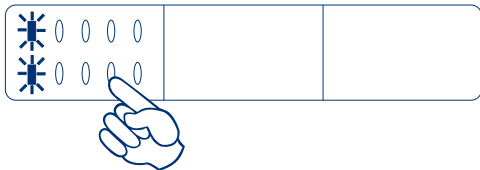
C-Bus2



# 1. Entering Learn Mode

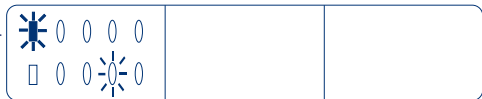
## Action

Hold down a toggle key on any output unit for 10 seconds.

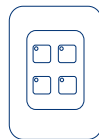


## Result

Unit and C-Bus indicators On Output Units will flash alternately.  
(Note: These two indicators may initially flash together for up to 20 seconds before flashing alternately.)



All loads and indicators will turn off except the one pressed which will turn on.



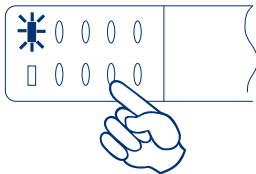
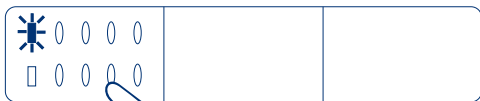
All indicators on Input Units will turn off.



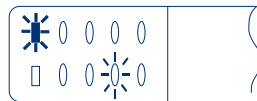
## 2. Choosing the Electrical Loads to be controlled

### Action

Press the toggle key switches on the Output Units which turn on the desired lights.

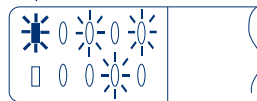


### Result



Unit and C-Bus indicators continue to flash alternately.

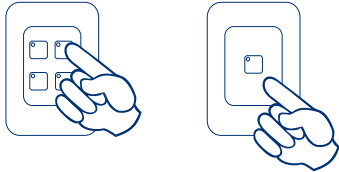
The selected lights and indicators are switched on.



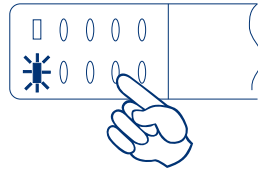
### 3. Selecting the Key Input Switches to control the chosen loads

#### 3A. Setting Input Keys as On/Off Switches

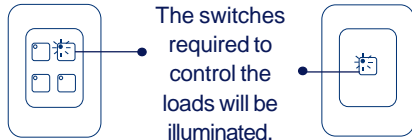
**Action 1.** Press the Key Inputs required to control the selected loads.



**Action 2.** Exit Learn Mode by pressing any toggle switch on a Relay Output Unit for 2 seconds.

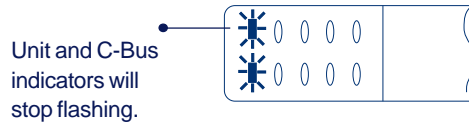


**Result 1.**



The switches required to control the loads will be illuminated.

**Result 2.** C-Bus2 will now Learn the relationship and will return to normal operation.

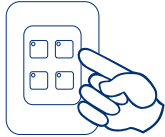


Unit and C-Bus indicators will stop flashing.

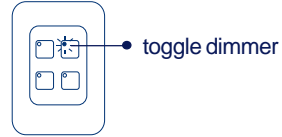


### 3B. Setting Input Units as Dimmer Switches

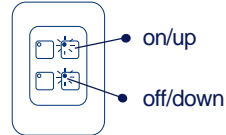
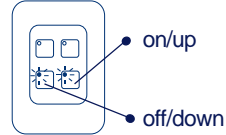
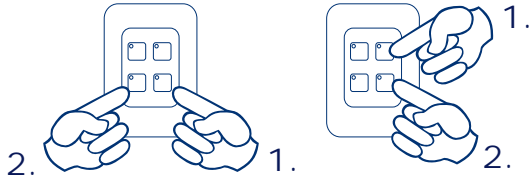
Action 1. Press one key for a single key operated dimmer.



Result 1.



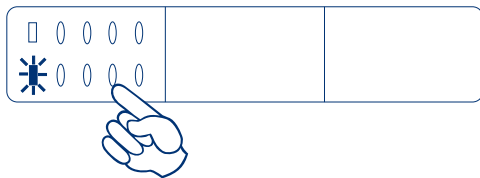
OR Press two keys on the same unit for two key operated dimmer. The first key pressed will be an on/up key and the second key pressed will be the off/down button.



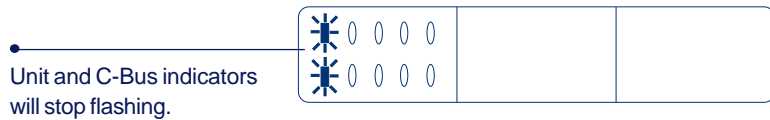


## Dimmer Switches continued...

- Action 2.** Exit Learn Mode by pressing any toggle switch on a Dimmer Output Unit for 2 seconds.



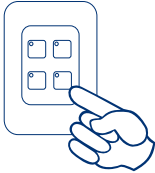
- Result 2.** C-Bus2 will now Learn the relationship and will return to normal operation.



## 3C Setting Input Units as Timer Switches

### Action 1.

Hold down a key until the indicator comes on, then release the key.



### Result 1.

The key switch will flash at one second intervals. *(Note: Exiting Learn Mode at this point will make the key a 5 second timer.)*

### Action 2.

Continuing to hold down the key will cause the indicator to double flash every one second.

### Result 2.

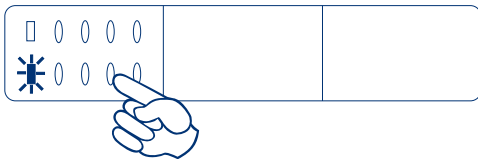
Each double flash represents 5 minutes.

For example, releasing the key after 4 double flashes gives a 20 minute timer.

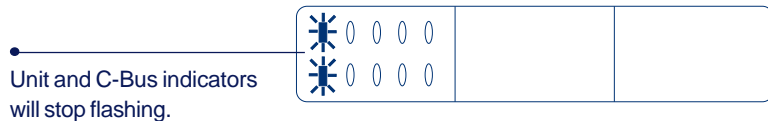


## Timer Switches continued...

- Action 3.** Exit Learn Mode by pressing and holding down any toggle switch on a Relay or Dimmer Output Unit for 2 seconds.



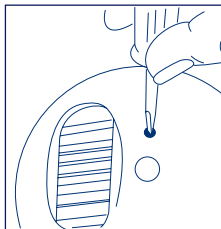
- Result 3.** C-Bus2 will now Learn the relationship and will return to normal operation.



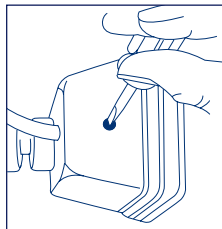


## 4. Setting C-Bus2 Movement Sensors to control the chosen Electrical Loads

**Action 1.** Using a screwdriver, change the light level setting on the bottom of the C-Bus2 Movement Sensor.



Indoor sensor



Outdoor sensor

**Result 1.** The red indicator behind the Sensor window will **flash once**.

**Action 2.**

Wait for the indicator to **double flash** (after 5 seconds) then immediately (within 1 second) turn the adjusting trimpot back the other way.

**Result 2.**

The red indicator behind the Sensor window will then come on and stay on. The unit is now ready to learn its time out. *(Note: If the indicator stays off then go back to Action 1.)*



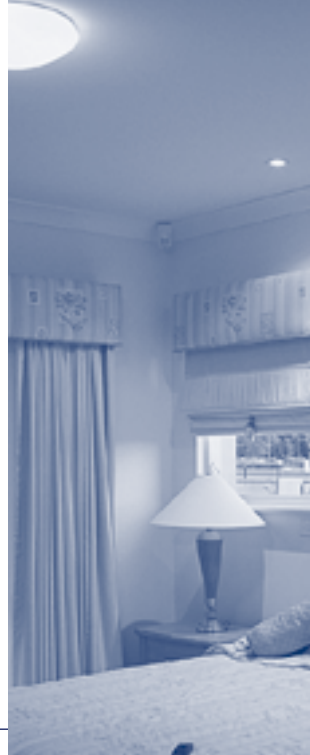
## Movement Sensors continued...

**Action 3.** Changing the setting again will cause the indicator to begin double flashes.

**Result 3.** Each double flash represents a 5 minute timer duration.

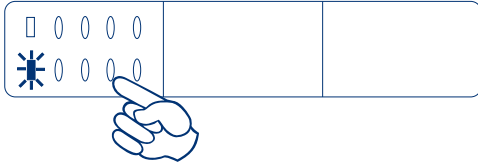
**Action 4.** Turn the adjusting trimpot back the other way.

**Result 4.** The indicator will single flash showing that a timer function has been set.



## Movement Sensors continued...

**Action 5.** Exit Learn Mode by pressing any toggle switch on a Relay or Dimmer Output Unit for 2 seconds.



**Result 5.** C-Bus2 will now Learn the relationship and will return to normal operation.



# C-Bus2<sup>™</sup>

2 easy to program



## Disclaimer

Making any changes to any C-Bus2 system using the Learn Mode features described in this booklet are carried out at your own risk. Clipsal Integrated Systems Pty Ltd is not liable for indirect, special, incidental or consequential damages arising out of the use or inability to use C-Bus2 Learn Mode features.

For service on your C-Bus2 Learn  
Enabled System *contact*

Company:

Telephone:

Installed Date: