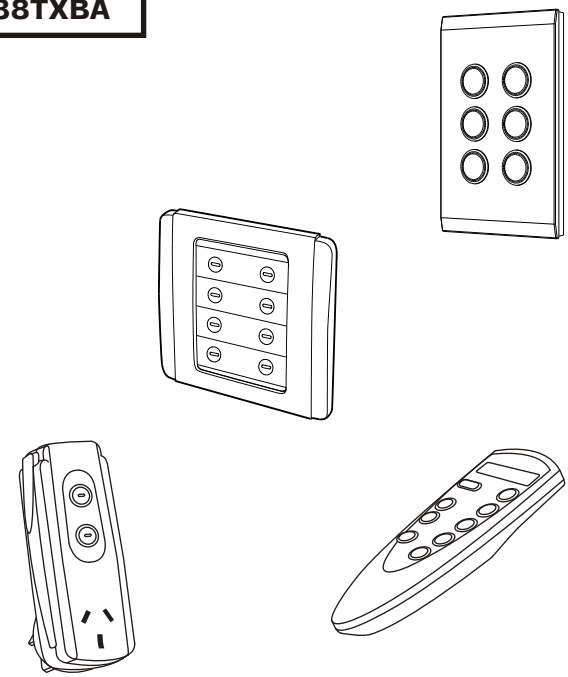
CLIPSAL

CLIPSAL C-Bus Control and Management System

C-Bus Wireless Series

User's Guide

585x Series
588x Series
5812 Series
5888TXBA



V1.1 Nov 2004

Contents

1.0 Product Range

This manual applies to the C-Bus Wireless units listed below. All units (apart from the Remote Control) are rated at 240 V AC @ 50 Hz.

Wall Plate Dimmer Units

Channels	Type	Current	Part Number		
Neo			**2 Button**	**4 Button**	**8 Button**
1	Leading Edge	2 A	5852D2L1AA	5854D2L1AA	5858D2L1AA
2	Leading Edge	1 A	–	5854D1L2AA	5858D1L2AA
1	Trailing Edge	2 A	5852D2T1AA	5854D2T1AA	5858D2T1AA
2	Trailing Edge	1 A	–	5854D1T2AA	5858D1T2AA
1 *	Leading Edge	2 A	E5852D2L1TA	E5854D2L1TA	E5858D2L1TA
2 *	Leading Edge	1 A	–	E5854D1L2TA	E5858D1L2TA
1 *	Trailing Edge	2 A	E5852D2T1TA	E5854D2T1TA	E5858D2T1TA
2 *	Trailing Edge	1 A	–	E5854D1T2TA	E5858D1T2TA
Saturn			**2 Button**	**4 Button**	**6 Button**
1	Leading Edge	2 A	5882D2L1AA	5884D2L1AA	5886D2L1AA
2	Leading Edge	1 A	–	5884D1L2AA	5886D1L2AA
1	Trailing Edge	2 A	5882D2T1AA	5884D2T1AA	5886D2T1AA
2	Trailing Edge	1 A	–	5884D1T2AA	5886D1T2AA
1 *	Leading Edge	2 A	EA5882D2L1TA	EA5884D2L1TA	EA5886D2L1TA
2 *	Leading Edge	1 A	–	EA5884D1L2TA	EA5886D1L2TA
1 *	Trailing Edge	2 A	EA5882D2T1TA	EA5884D2T1TA	EA5886D2T1TA

Wall Plate Switch Units (also known as relay units)

Channels	Current	Part Number		
Neo		**2 Button**	**4 Button**	**8 Button**
1	8 A	5852R8F1AA	5854R8F1AA	5858R8F1AA
2	4 A	–	5854R4F2AA	5858R4F2AA
1 *	8 A	E5852R8F1TA	E5854R8F1TA	E5858R8F1TA
2 *	4 A	–	E5854R4F2TA	E5858R4F2TA
Saturn		**2 Button**	**4 Button**	**6 Button**
1	8 A	5882R8F1AA	5884R8F1AA	5886R8F1AA
2	4 A	–	5884R4F2AA	5886R4F2AA
1 *	8 A	EA5882R8F1TA	EA5884R8F1TA	EA5886R8F1TA

Other Units

Description	Part Number
Plug Adaptor Dimmer Unit (Leading Edge)	5812D3L1AA
Plug Adaptor Dimmer Unit (Trailing Edge)	5812D2T1AA
Plug Adaptor Switch Unit	5812R10F1AA
Remote Control	5888TXBA

* European style EA Series square plate

2.0 Important Notes

- An Electrician's Licence is required to install C-Bus Wireless wall plate units.
- Wall plate units must be connected to circuits that incorporate 10 A rated circuit breaker protection.
- All two channel switch units require both channels to have loads connected for proper unit operation.
- Some load types such as most compact fluorescent (CF) lamps (also known as energy saver lamps), are incompatible with dimmer units and electronic switches. Do not use these with C-Bus Wireless switch units (unless specially modified by your installer), or C-Bus Wireless dimmer units.
- When using fluorescent lamps with C-Bus Wireless wall plate switch units, ensure they meet the unit's minimum load rating (25 W).

No isolation is provided by wall plate units. Hazardous voltage exists at the load terminals and lamp sockets in the unit's "off" state. Ensure that the circuit breaker is switched off before changing light bulbs, etc.

3.0 Description

C-Bus Wireless wall plate units are a two-wire retrofit range of C-Bus radio frequency (RF) devices, designed to replace standard wall switches and dimmers. Both wall plate and plug adapter units can be operated by remote control, and have learn and scene capability.

The learn capability allows you to link multiple units into a common network. You can create associations between buttons on multiple units, so that a button press on one unit will operate a button on another (activating connected lights or other appliances). C-Bus Wireless learn is used to:

- link the remote control to a wall plate or plug adaptor unit
- link wall plate and plug adaptor units into a network.

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.

The figures below show possible C-Bus Wireless unit installations. The room in Figure 1 uses stand-alone units which can be operated by remote control. The room in Figure 2 uses networked units where buttons on one unit can operate other units or trigger scenes.

This User's Guide describes how to program C-Bus Wireless units using Wireless learn. Step by step instructions are provided for common learn tasks.

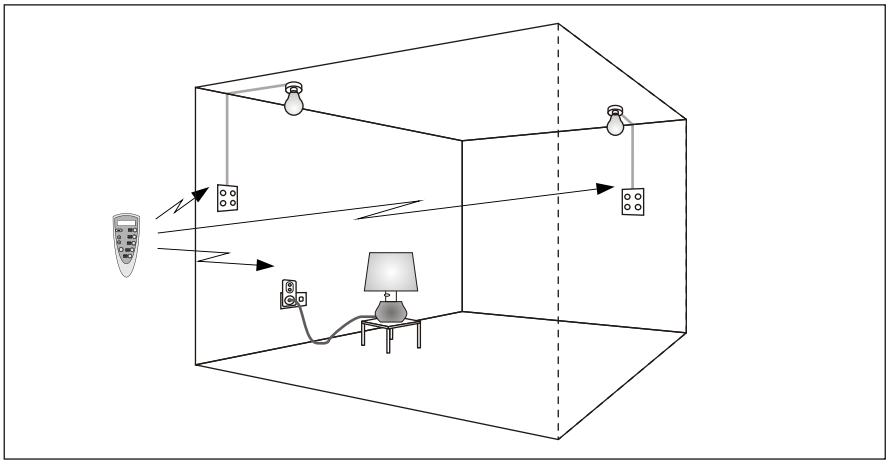


Figure 1 – Stand-alone units switched by remote control

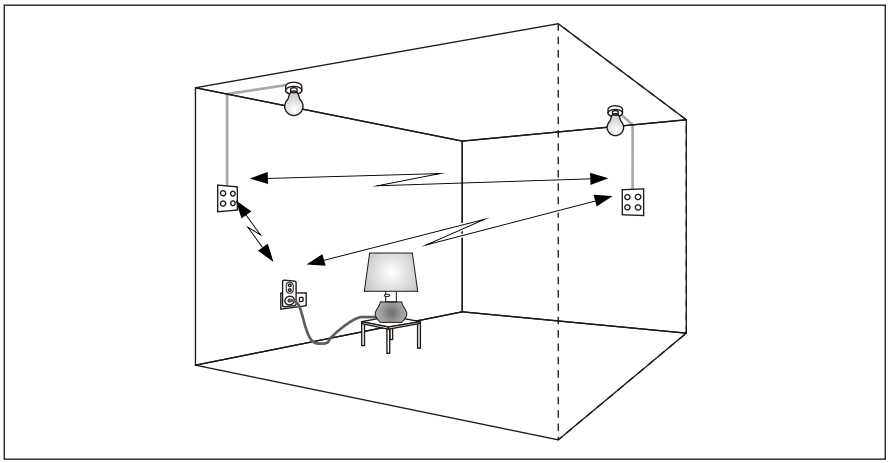


Figure 2 – Networked units (buttons on one unit can operate other units)

4.0 Definitions

The definitions in Table 1 are used in discussing C-Bus Wireless units. Button types are shown in Figure 3.

Term	Definition
load	An electrical device connected to mains voltage via a C-Bus output unit. Examples include lights, AC power points, heaters and electric motors.
scene	A series of actions across multiple outputs, triggered by 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.
local control button	A button on a Wireless C-Bus unit that is linked to an output channel of the same unit. Wireless C-Bus devices have one pair of local control buttons for each of their output channels (the topmost buttons).
free button	Any button on a Wireless C-Bus unit that is NOT a local control button. Plug adapters do not have any free buttons.
learn mode	A configuration state of C-Bus Wireless. Learn mode enables you to create associations between buttons on units, and add functionality such as timers and remote control. Learn mode is entered by pressing and holding a local control button pair for 10 seconds (until the unit's indicator lights start flashing alternately). Once in learn mode, the local control button indicators of all units in the same network continue to flash alternately, except for buttons which are grouped to the local control button pair from which you entered learn mode. Note that learn mode may be disabled by special software.
quick-press	A brief button press (pressed for a fraction of a second).
double quick-press	Two quick-presses in quick succession.

Table 1 – Definitions

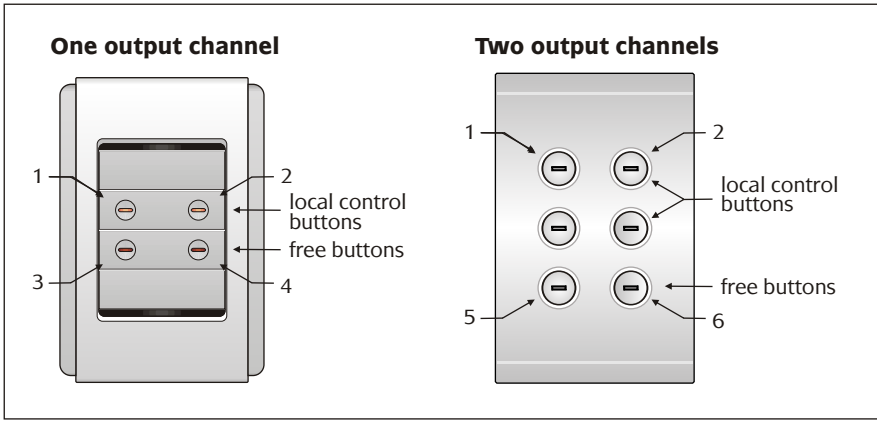


Figure 3 – Neo (left) and Saturn (right) Wireless Dimmer units

5.0 Basic Operation

When a C-Bus Wireless wall plate or plug adapter unit is first installed, it functions as a stand-alone unit. In this basic default mode, the unit functions as a dimmer or switch. The advantages of wireless operation are not utilised.

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

Buttons on a Wireless wall plate or plug adapter are organised in pairs that control the output channels, (local control buttons). Remaining buttons (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, Figure 3 shows a 6 button, 2 channel Saturn Wireless Dimmer unit. 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 either button dims the unit in alternate directions.
  - If the channel is set to an intermediate dim level, button 1 commences with dim down, and button 2 commences with dim up. (When a channel has not been adjusted for 15 seconds or more, the highest numbered button always gives preference to dim up).

- Buttons 3 and 4 control the second channel in the same way as buttons 1 and 2 control the first.
- 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.

6.0 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 successfully, units within the same network must be located no further than 15 to 20 metres from each other (Figure 4). This distance is conservative, and depends on building materials used.

A network may consist of dozens of units. For best results however, it is recommended that no more than 30 units be placed within the same network. You may have multiple networks within the same building. As a general rule, units in one network cannot control units in another (there are exceptions to this when using special hardware and software).

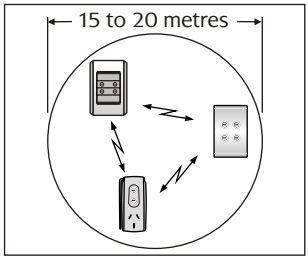


Figure 4 – Network range

6.1 Creating a Network

When a C-Bus Wireless wall plate or plug adapter unit is first installed, it operates as a stand-alone unit. Before it can communicate with other units, it must be configured to be part of a C-Bus Wireless network.

The steps below are illustrated in Figure 5. To create a network of units:

1) Select a unit to be networked to. (If all units are new, this can be any unit. If you are adding a new unit to an existing network, this must be a unit on your existing network).
2) Press and hold the top two buttons for 10 seconds (until the unit's indicator lights start flashing alternately). This activates learn mode.
3) On each unit you are adding to the network, perform the following steps within five seconds of each other,
   a) Press and hold the top two buttons for 10 seconds (activate learn mode as you did for the unit in step 2.

b) While the indicators are flashing quickly, press and hold the top two buttons again*, for 2 seconds. The indicator lights start flashing simultaneously.

4) Go back to the unit to be networked to. Hold down the left topmost button and, while continuing to hold, quickly double-press the right topmost button.

5) Check the units added to the network. They will return to learn mode after flashing quickly for several seconds. If the lights of a unit remain flashing slowly and simultaneously, the unit has not been added to the network (probably due to radio frequency (RF) interference or the unit being out of range). Try repeating step 4 on the unit to be networked to.

6) After networking the units together, they remain in learn mode ready for further learn activities (such as grouping buttons together, explained in the next chapter). To exit learn mode and return the units to normal switch or dimmer operation, press and hold the top two buttons for 1 second.

*If you do not perform step b) within 5 seconds of step a) (before the alternate flashing slows down), pressing the top two buttons will exit learn mode.

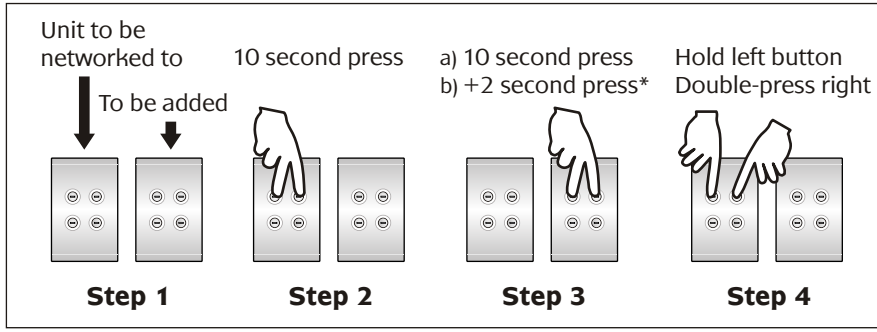


Figure 5 – Creating a network of units

7.0 Grouping Buttons Together

When C-Bus Wireless units are linked together in a network, you can associate buttons on one wall plate or plug adapter unit, with buttons on other units. This is called grouping buttons.

Before you group buttons together, there are some rules you should be aware of:

- You cannot group a free button to a local control button on the same wall plate unit (see page 8 for definitions).
- After grouping one free button on a wall plate unit with a local control button on another unit, the free button,
  - toggles on/off for quick presses
  - dims up/down for long presses (on dimmer units).
- After grouping two free buttons on a wall plate unit with a local control button on another unit,
  - both free buttons toggle on/off for quick presses
  - either button dims the unit in alternate directions for long presses. If the channel is set to an intermediate dim level, the highest numbered button commences with dim up, and the other commences with dim down. (When a channel has not been adjusted for 15 seconds or more, the highest numbered button always gives preference to dim up).
- Up to two free buttons per wall plate unit can be included in any group.

To group buttons together:

1) Go to a unit that has a local control button pair you want to group with one or more other buttons. Press and hold the pair for 10 seconds, to activate learn mode. The indicator lights on all units in the same network will flash alternately. After 5 seconds, if the pair is already part of a group, all buttons belonging to the group will be selected (their indicators and loads will switch on).
2) Press the buttons on the units you want to add to the group. Use quick presses. The indicator of each selected button will remain lit. To remove a button from the group, simply press to deselect it. Note that local control buttons work in pairs (pressing either local control button will select or deselect both).
3) When you have selected all the buttons you want in a group, press and hold the top two buttons for 1 second, to exit learn mode.

In the example in Figure 6, button 1 of the Saturn unit on the left is grouped with button 3 of the unit on the right. This means that pressing button 3 of the right unit will activate buttons 1 and 2 of the left unit, which operate as a pair. (A light or other appliance connected to button 1's channel output can be operated from button 3).

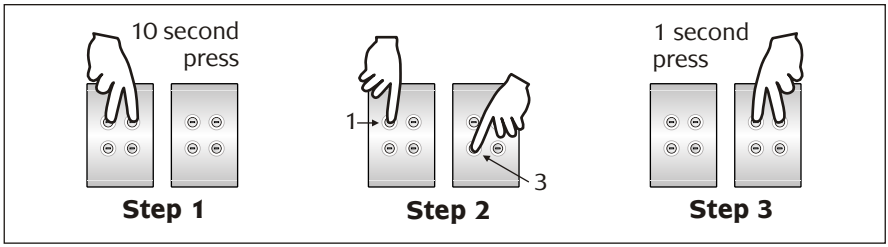


Figure 6 – Grouping

7.1 Using Timers

When using learn mode to add buttons to a group, you can set a button to work as a timer. You do this by holding the button down instead of using a quick press (as in Step 3 of Figure 7). After about 1 second, the indicator light double-flashes, signifying that the button has been set as a timer. As you continue to hold the button, the indicator light continues to double-flash. The timer is incremented by 5 minutes for each double-flash.

To group buttons together and make one a timer:

1) Go to a unit which has the local control button pair you want to group with a timer button. Press and hold the button pair for 10 seconds, to activate learn mode. The indicator lights on all units in the same network will flash alternately. After 5 seconds, if the pair is already part of a group, all buttons belonging to the group will be selected (their indicators will remain lit).
2) Press the buttons you want to add to the group. Use quick presses.
3) Press and hold the button you want to use as a timer. Ensure you can see the button's indicator light. Count the double-flashes, and release the button once the count corresponds with the timer period you want (one double-flash for each 5 minutes).
4) Press and hold the top two buttons for 1 second, to exit learn mode.

In the example in Figure 7, button 3 of the Saturn unit on the right is set as a timer for button 1 of the unit on the left. Step 3 is where the button is set as a timer. If the button is held for 4 seconds, the indicator light will double-flash after 1 second, and again after each of the following 3 seconds. The timer period will be set for 20 minutes (4 × 5 minutes).

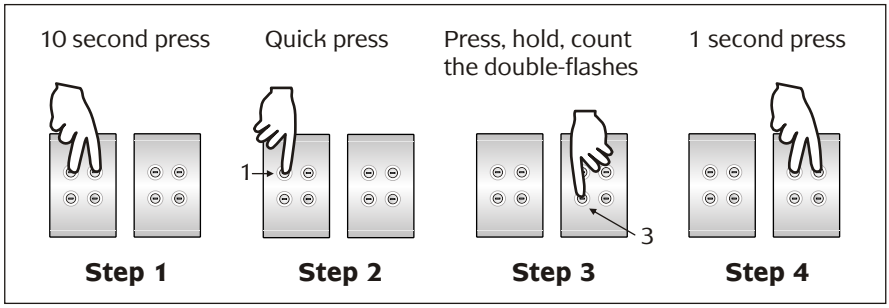


Figure 7 – Grouping a local control button with a single-button timer

You can select either a single button or a pair of buttons on the same wall plate unit, to function as a timer (local control buttons work in pairs):

- A single button timer will switch a light (or other appliance) on, and automatically switch it off after the timer period.
- When a pair of buttons work as a timer, the highest numbered button will switch the light on with a timer. The other button will switch it on or off with no timer.

To group buttons together with a timer button pair:

1) Go to a unit which has a local control button pair you want to group with a timer button. Press and hold the button pair for 10 seconds, to activate learn mode. The indicator lights on all units in the same network will flash alternately. After 5 seconds, if the pair is already part of a group, all buttons belonging to the group will be selected (their indicators will remain lit).
2) Press the buttons you want to add to the group. Also press the first free button you want to use as a timer. Use quick presses.
3) Hold down the second free button you want to use as a timer (on the same unit). Ensure you can see the button's indicator light. Count the double-flashes, and release the button once the count corresponds with the timer period you want (one double-flash for each 5 minutes).

4) Press and hold the top two buttons for 1 second, to exit learn mode.

In the example in Figure 8, buttons 3 and 4 of the Saturn unit on the right will work as a timer pair for button 1 of the unit on the left. Button 4 will switch button 1 on with the timer (to switch off after the timer period expires). Button 3 will switch button 1 on or off with no timer.

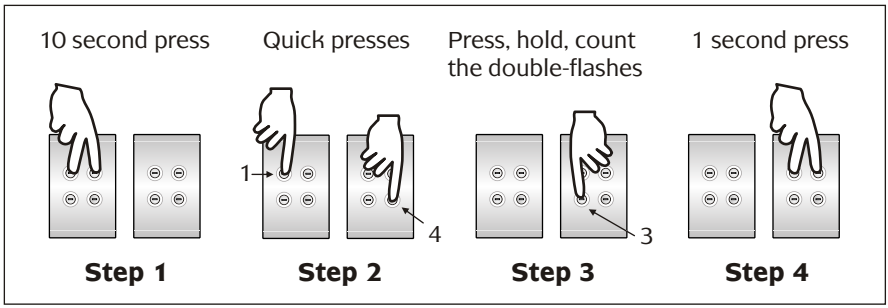


Figure 8 – Grouping a local control button with a timer button pair

8.0 The Remote Control

The C-Bus Wireless Remote Control allows you to control buttons on C-Bus Wireless wall plate and plug adapter units. It is a radio frequency (RF) remote that works up to 15 to 20 metres from a device it controls. Unlike an infrared (IR) remote, you do not need to point it at the unit you want to control.

Up to 10 separate wall plate or plug adapter buttons can be controlled by the remote control unit. These can be on various units on different networks. A single button on a wall plate or plug adapter unit can be controlled by up to two remote controls.

Remote buttons are organised in two banks of five. Banks are alternately selected by pressing the Shift button (Figure 9).

Up and Down buttons allow you to dim the level associated with the last button selected (on dimmer units). An All Off button provides a convenient way to switch every unit that has been associated with the remote control.

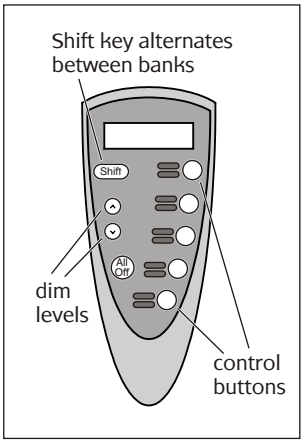


Figure 9 – Button layout

8.1 Installing the Batteries

The C-Bus Wireless Remote Control uses 2 × AAA batteries. Alkaline batteries are recommended. To install the batteries:

1) Turn the remote upside down.
2) Press the tab and slide the back cover down to release (refer to Figure 10).
3) Insert the batteries. Ensure the ⊕ and ⊖ terminals match the symbols inside the battery compartment.
4) Replace the back cover (position and slide up).

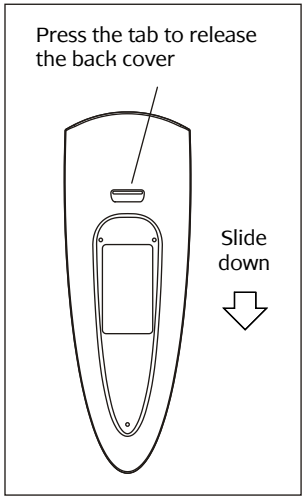


Figure 10 – Removing the back cover

8.2 Programming the Remote

Before the Wireless Remote Control can be used, C-Bus Wireless units must be programmed to recognise the remote's buttons. The remote, wall plate and plug adapter units do this in learn mode.

Learn mode is activated on the remote by removing the back cover (as when installing batteries), and sliding the switch across to the Learn position. The remote's learn mode switch is shown in Figure 11.

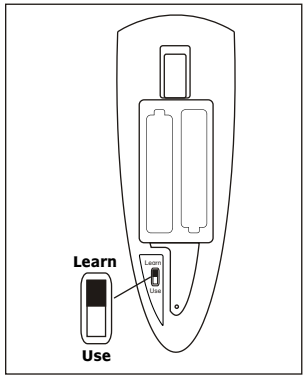


Figure 11 – Activating the remote's learn mode

The following procedure is used to assign a button on the remote to a button on a C-Bus Wireless wall plate or plug adapter unit:

1) Set the C-Bus Wireless Remote Control to learn mode, as described above (slide the switch across to the Learn position).
2) On the wall plate or plug adapter unit, press and hold the top two buttons for 10 seconds, to activate learn mode. (The indicator lights on all units in the same network will flash alternately).
3) On the remote, press and release the button you want to assign. (The indicator lights on all wall plate and plug adapter units in the same network will flash simultaneously).
4) On the wall plate or plug adapter unit, quick-press the button you want the remote to control. Do this within 30 seconds of pressing the remote button in the step above (while the indicator lights are flashing).
5) Repeat steps 3 and 4 for any additional remote buttons you want to assign.
6) When you have finished programming remote buttons, press and hold the top two buttons on a wall plate or plug adapter unit for 1 second, to exit learn mode.
7) Slide the learn mode switch on the remote back to the Use position.

In the example provided in Figure 12, the third assignable remote button is assigned to button 1 of the Saturn wall plate unit.

NOTE Assigning a button on the remote to a button on a C-Bus Wireless unit does not unlearn any previous assignments to other units. To do this you need to clear the previous remote assignments (section 8.3).

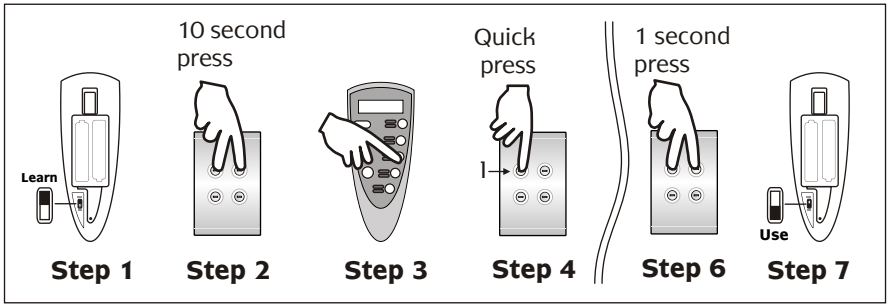


Figure 12 – Assigning a remote button to a wall plate unit button

8.3 Clearing Remote Assignments

You can clear an individual remote assignment learned by a specific button on a wall plate or plug adapter unit. You do this by re-assigning the remote button to the wall plate or plug adapter button, (assigning a button once learns it, assigning it again clears it).

You can clear all remote assignments (from all remote controls) learned by an individual wall plate or plug adapter unit (Figure 13). To do this:

1) Set the C-Bus Wireless Remote Control to learn mode, as described on page 17 (slide the switch across to the Learn position).
2) On the wall plate or plug adapter unit, press and hold the top two buttons for 10 seconds, to activate learn mode.
3) Press and release one of the five assignable buttons on the right side of the remote control.
4) Double quick-press one of the buttons on the wall plate or plug adapter unit.
5) Wait until the indicator lights return to a slow alternating flash. Then

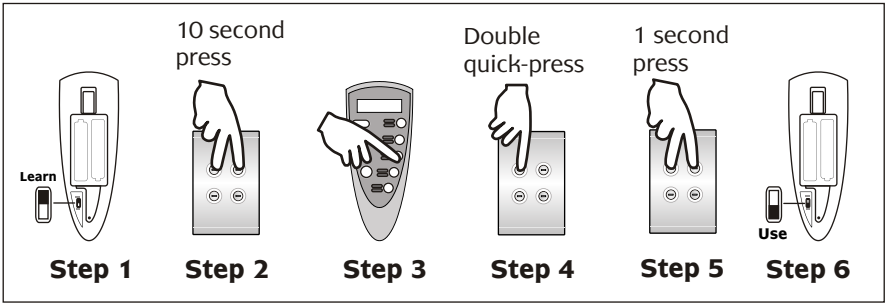


Figure 13 – Clearing all remote assignments in a wall plate unit

press and hold the top two buttons on the wall plate or plug adapter unit for 1 second, to exit learn mode.

6) Slide the learn mode switch on the remote control back to the Use position.

9.0 Scenes

A scene allows you to perform a series of actions across multiple outputs by pressing a 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.

A unit can have as many scenes as it has buttons, depending on how many groups of buttons the scenes control. The total number of button groups that scenes in a unit may control is between 46 and 49, depending on organisation. For example, a unit may contain one scene which controls 49 button groups, or three which control 16 button groups each.

There are two stages of creating a scene:

1) You must create a scene button. This is a button that will be used to trigger the scene. Any button can be used as a scene button (it is normally best to use a free button, however).
2) You must learn the scene. This involves setting states of the buttons you want to be recalled, and assigning these to the scene button. A local control button must be grouped to another button (or to itself) before it can be included in a scene. (To group a local control button to itself, enter learn mode from the local control button pair, select the local control button and exit learn mode).

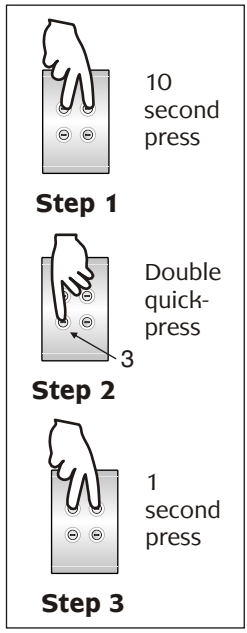


Figure 14 – Creating a scene button

9.1 Creating a Scene Button

A scene button is created by double quick-pressing a button in learn mode:

1) Go to the unit on which you want to create a scene button. Press and hold the top two buttons for 10 seconds, to activate learn mode.

2) Double quick-press the button you want to set as a scene button (it will begin flashing quickly).
3) Press and hold the top two buttons for 1 second, to exit learn mode.

In the example in Figure 14, button 3 is set as a scene button. It can then be used to learn a scene (as described in the following section).

9.2 Learning a Scene

Once a scene button has been created, you can use it to capture the states of grouped buttons within the same network. These states can then be recalled by pressing the scene button. (You can group an ungrouped local control button to itself, so it can be included in a scene. To do this, enter learn mode from the local control button pair, select the local control button and exit learn mode.)

To capture the states of other buttons (learn a scene):

1) Press and hold the scene button for 10 seconds (until it starts flashing).
2) Use grouped buttons on any units within the same network, to set the states of your lighting levels and other electrical appliances that you want to capture as part of the scene. You can switch buttons on, or set them to a specific level (in the case of dimmers). To capture an off state, switch a button on and then off.
3) Press and hold the scene button for 1 second (until it stops flashing), to exit scene learn mode.

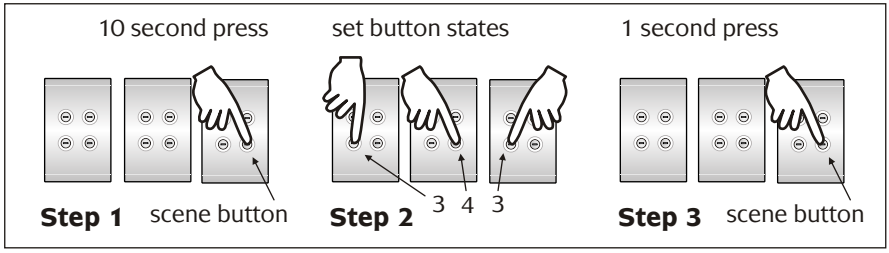


Figure 15 – Learning a scene

In the example in Figure 15, three button states are captured and stored in a scene. Each state may consist of on, off or a particular lighting level (depending on what appliance is connected, and whether the unit is a switch or dimmer). Buttons 3, 4 and 3 of the first, second and third respective Saturn units, are added to the scene button in the third unit.

10.0 Factory Resets

10.1 Button Reset

The button reset allows you to clear a button on a C-Bus Wireless wall plate or plug adapter unit to its original factory default state. This allows you to:

- delete a scene button
- remove any special button programming made by software.

The following steps are illustrated in Figure 16. To reset a button back to its factory default state:

1) Press and hold the top two buttons for 10 seconds, to activate learn mode. (The indicator lights will flash alternately).
2) Double quick-press any button on the unit.
3) Double quick-press the same button again.
4) Press and hold the button you want to reset for 2 seconds (until the indicator lights turn off).
5) Press and hold the top two buttons for 1 second to exit learn mode.

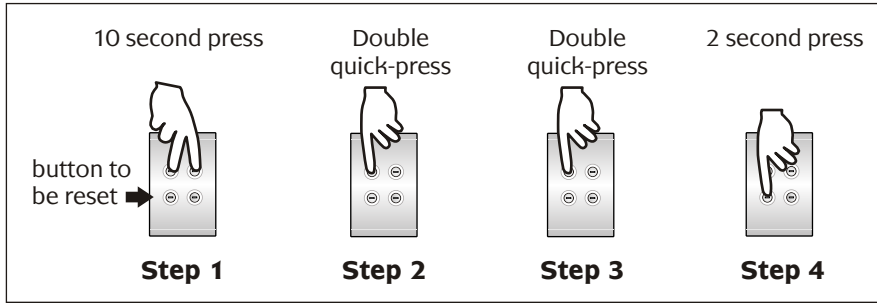


Figure 16 – Performing a button reset

10.2 Unit Reset

The unit reset allows you to clear a C-Bus Wireless wall plate or plug adapter unit to its original factory default settings. This is recommended under the following circumstances:

- when making the unit part of a new network (when changing from a single to multiple network installation)
- if you lose track of where you are up to when programming a unit.

The following steps are illustrated in Figure 17. To reset a unit back to its factory default settings:

1) Press and hold the top two buttons for 10 seconds, to activate learn mode. (The indicator lights will flash alternately).
2) Double quick-press any button on the unit.
3) Double quick-press the same button again.
4) Press and hold the top two buttons for 2 seconds, then release.
5) Press and hold the top two buttons once again for 1 second to exit learn mode.

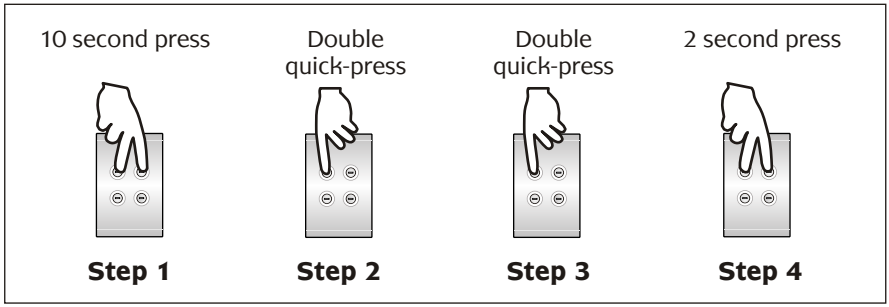


Figure 17 – Performing a unit reset

11.0 Power Failure

All C-Bus units have on-board non-volatile memory, which is used to store the operating state in case of mains power loss. After a power failure, the on/off and dimmer level states of wall plate and plug adapter units, are restored according to the states before the power failure. Restoration occurs approximately 10 to 20 seconds after power resumes.

12.0 Care Instructions

C-Bus Wireless units contains electrical and electronic parts to support their functions. Be sure to note the following precautions.

- Clean regularly using a soft lint free cloth.
- Do not use chemicals or spray cleaners when cleaning.
- Do not operate with wet hands.
- Do not use hard, sharp objects to select the controls.
- Allow adequate ventilation. Do not cover the unit.
- C-Bus Wireless units are designed for indoor use only.
- Do not expose to direct sunlight for extended periods.


no wet hand


no cleaner spray


no coverage


no direct sunshine


no dust

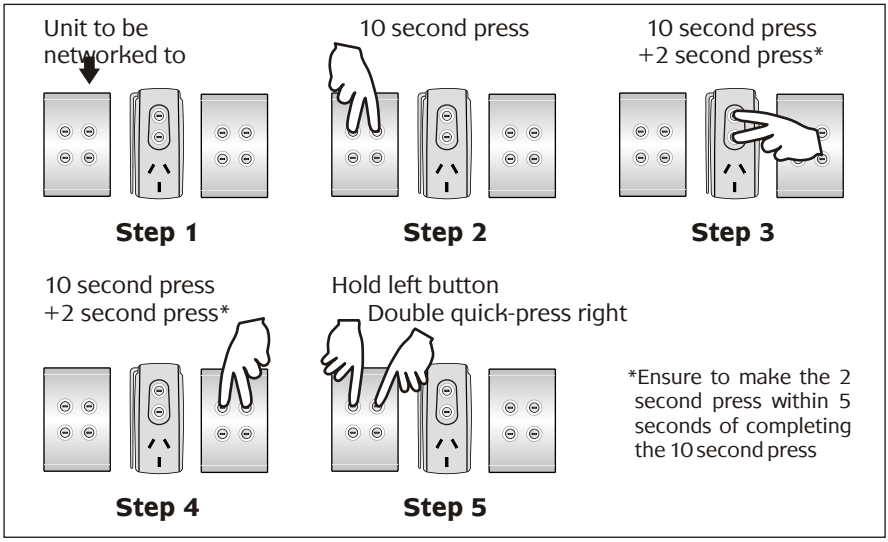
13.0 Limitations

- C-Bus Wireless switch units may sometimes switch the indicators off momentarily. This usually occurs when a load has been switched off, and is normal behaviour.
- Wireless wall plate units include a thermal overload protection mechanism. If excessive load is connected to a C-Bus Wireless unit, dimmers will dim down and switches will not operate. This can only be corrected by switching the mains power off and on. If this condition is observed, the load on the unit should be reduced.
- It is recommended that no more than 30 units be placed in a single network.
- This equipment uses radio communication for its operation. Communication between units requires a clear radio path. Some types of installation and building materials can severely disrupt radio communication. The range quoted is typical and not guaranteed. The range will be severely reduced if this equipment is placed inside metal enclosures.

14.0 Learn Mode Programming Examples

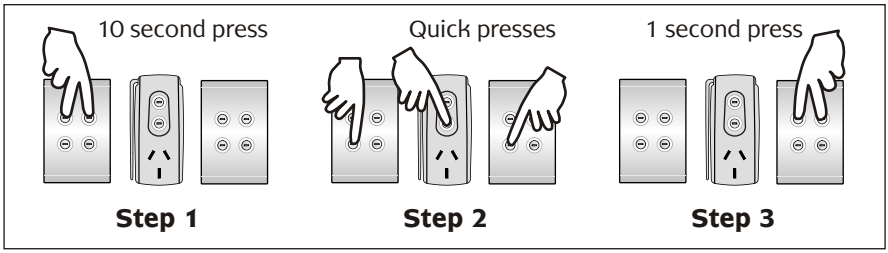
14.1 Networking Two Units Together

To link a plug adapter and wall plate unit to another wall plate unit:



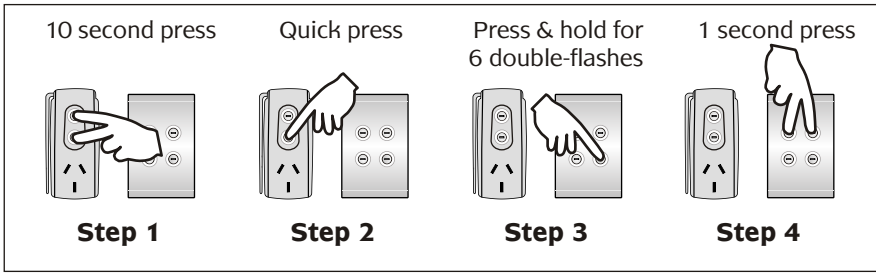
14.2 Grouping Three Buttons Together

To group buttons on three networked units:



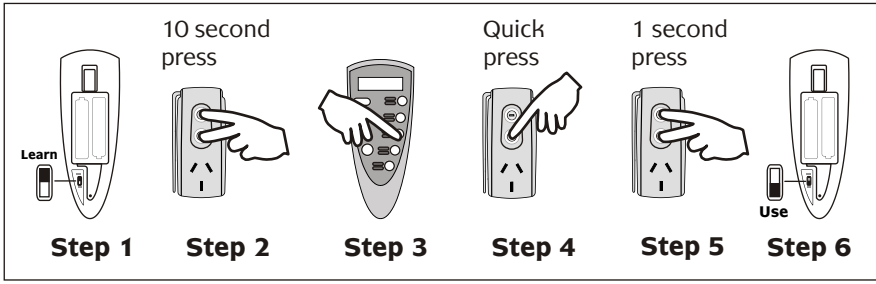
14.3 Grouping Buttons with a Timer

To group a 30 minute single button timer to a button on a networked unit:



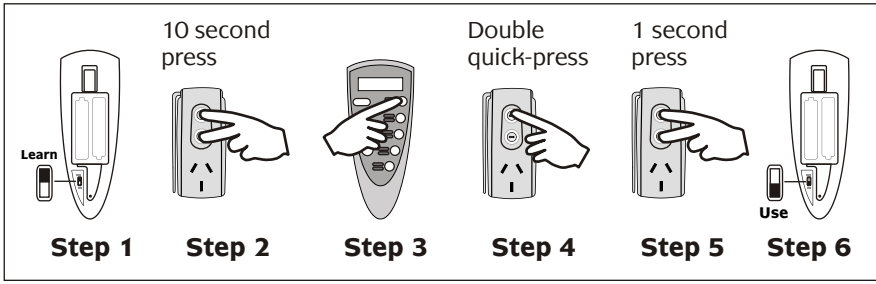
14.4 Assigning a Remote Control Button

To assign a remote control button to a button on a unit:



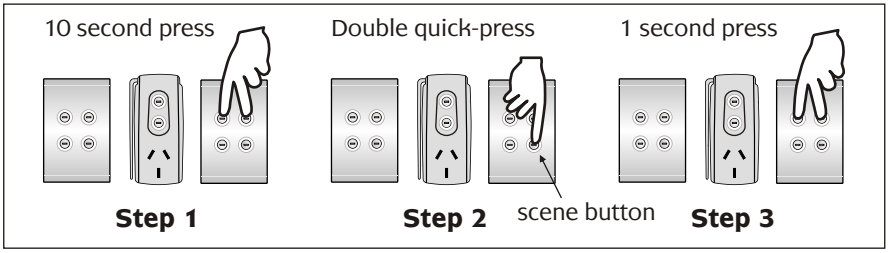
14.5 Clearing a Unit's Remote Assignments

To delete all the remote control button assignments in a unit:



14.6 Creating a Scene Button

To create a scene button:

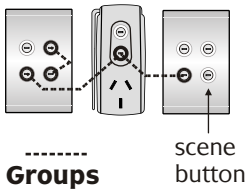


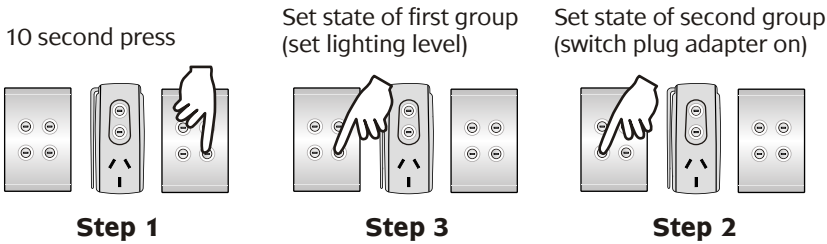
14.7 Learning a Scene

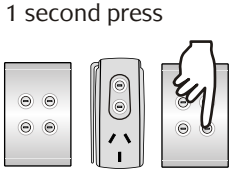
To learn a scene (after creating a scene button):

This example assumes that units are on the same network, and two groups and a scene button have been created.

Each group associates one or more free buttons with a local control button.







After learning the scene, pressing the scene button will fade lights to the learnt level (first group), and switch the plug adapter on (second group).

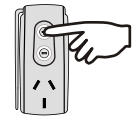
14.8 Button Reset

To clear a button to its original factory default state:

10 second press	Double quick-press	Double quick-press	2 second press
			
Step 1	**Step 2**	**Step 3**	**Step 4**

14.9 Unit Reset

To reset a unit back to its original factory default settings:

10 second press	Double quick-press	Double quick-press	2 second press
			
Step 1	**Step 2**	**Step 3**	**Step 4**

15.0 Troubleshooting

"My wall plate unit won't work."

A globe may have blown. Wall plate units need a functioning light or other appliance connected to the first output channel for the unit to work. (The first output channel is connected to the first button pair).

"My switch wall plate unit makes a clicking sound every 3 seconds or so."

A globe may have blown (as in above problem).

"My unit won't enter learn mode. When I hold the top two buttons down, one of the lights starts flashing."

The flashing button indicates it has been set as a scene button. Ensure you press the non-scene button first, when entering learn mode.

"My unit won't enter learn mode."

Learn mode capability may have been disabled by special software.

"I can't group buttons on different units together."

The units must belong to the same network before you can group their buttons together. You can confirm that the units are networked together by entering learn mode on one unit (press and hold the top two buttons for 10 seconds). All units in the same network enter learn mode simultaneously, and begin flashing. (To exit learn mode, press and hold the top two buttons again for 1 second). Refer to section 6.1, Creating a Network.

"When I switch something on it switches off again after 5 seconds."

You may have accidentally set a button as a 5 second timer. This is a special mode used for testing purposes. It is activated while in learn mode by holding a button down for just under 1 second. To fix this, enter learn mode from a local control button pair that the 5 second timer is grouped to. Deselect and then reselect the 5 second timer button, and then exit learn mode. Refer to section 7.0, Grouping Buttons Together.

"All indicators on my unit flash unusually for one minute (a quick flash about once per second)."

This is a special flash pattern indicating that there has been a transmission failure. You can press a button on the unit to stop it flashing immediately.

"All indicators on my unit continue to flash every 4 seconds."

This is a special flash pattern indicating that the unit is offline. The unit is most likely only barely in range of other units, and has shut itself down to prevent it from causing network radio frequency (RF) traffic congestion. The unit will place itself back online after an hour.

"Sometimes I cannot control a light or other appliance from a grouped button on a another unit."

C-Bus Wireless uses an encryption system for added security. As a consequence of this, if a unit misses transmissions from other units (due to RF interference or being out of range), the unit may lose its ability to control other units.

The solution is to operate a grouped button on any unit nearby. This will re-synchronise the unit that is not transmitting. Sometimes simply operating the local control buttons a few times on the unit which is not transmitting will be sufficient. Note that the local control buttons will always operate the local load, even if the encryption system has lost synchronisation.

If this proves to be insurmountable because of a marginal installation (perhaps due to the building materials used), encryption can be turned off using the C-Bus Toolkit software.

16.0 Electrical Specifications

All Units

Parameter	Description
Supply voltage	240 V AC @ 50 Hz
Radio frequency	433.92 MHz
Transmitting power	1 mW
Typical range	15 to 20 m
Maximum range	50 m (open air)
Control functions	Load switching, dimming (LE/TE only), timer, relay
Status indicator colour	Orange
Warm-up time	5 seconds
Operating temperature range	0 to 40 °C
Operating humidity range	10 to 95% RH

Wall Plate Switch Unit

Parameter	Description	
Min. load per channel	25 W, 0.1 A	
Max. total load*	2000 W, 8 A	
Compatible loads/rating‡ Incandescent/halogen Fluorescent† Iron core LV lighting Electronic LV Lighting Fan motors	**IEC** 8A 4AX 8A 8A 2A	**Australia/NZ** 8A 4AX 8A 8A 3M
Off state power consumption	0.25 W	
Off state leakage current	10 mA (channel 1) 0 mA (channel 2)	

* Total loading connected to 2 channel model is the sum of load 1 and load 2. Refer to Compatible loads / ratings for individual channel switch ratings for each load type.

† Fluorescent luminare requires Power Factor Correction (PFC) capacitor fitted in order for a switch unit to function correctly.

‡ See Important Notes (page 6).

Wall Plate Leading Edge Dimmer Unit

Parameter	Description	
Min. load per channel	25 W lamp or 0.25 A fan motor	
Max. load per channel	500 W, 2 A (one channel unit) 250 W, 1 A (two channel unit)	
Compatible loads/rating‡ Incandescent/halogen Iron core LV lighting Fan motors	**IEC** 2 A 2 A 2 A	**Australia/NZ** 2 A 2 A 3 M
Off state power consumption	0.5 W	
Off state leakage current	12 mA (channel 1) 5 mA (channel 2)	

Wall Plate Trailing Edge Dimmer Unit

Parameter	Description	
Min. load per channel	25 W lamp	
Max. load per channel	500 W, 2 A (one channel unit) 250 W, 1 A (two channel unit)	
Compatible loads/rating‡ Electronic LV lighting	**IEC** 2 A	**Australia/NZ** 2 A
Off state power consumption	0.5 W	
Off state leakage current	15 mA (channel 1) 10 mA (channel 2)	

Plug Adapter Mechanical Specifications

Parameter	Description
Dimensions (W×H×D)	50 × 123 × 64 mm
Weight	118 g

* Total loading connected to 2 channel model is the sum of load 1 and load 2. Refer to Compatible loads / ratings for individual channel switch ratings for each load type.

† Fluorescent luminare must include a Power Factor Correction (PFC) capacitor in order for a switch unit to function correctly.

‡ See Important Notes (page 6).

Plug Adapter Switch Unit

Parameter	Description	
Max. total load	2400 W, 10 A	
Compatible loads/rating‡ Incandescent/halogen Fluorescent† Iron core LV lighting Electronic LV Lighting Fan motors	**IEC** 10A 4AX 10A 10A 2A	**Australia/NZ** 10A 4AX 10A 10A 3M

Plug Adapter Leading Edge Dimmer Unit

Parameter	Description	
Max. total load	750 W, 3 A	
Compatible loads/rating‡ Incandescent/halogen Iron core LV lighting	**IEC** 3 A 3 A	**Australia/NZ** 3 A 3 A

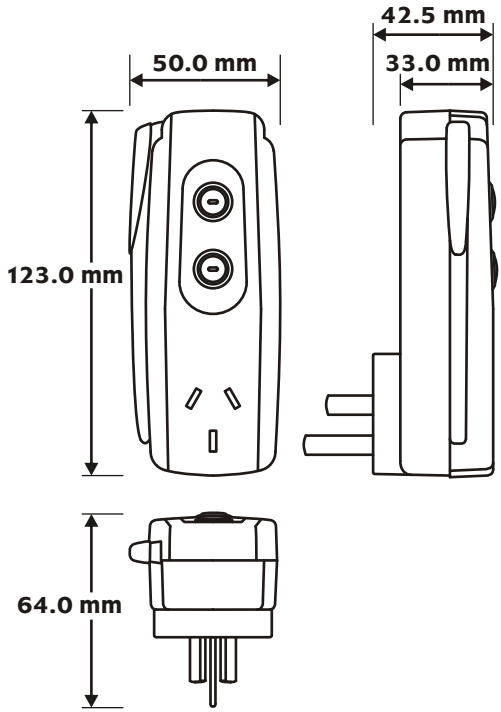
Plug Adapter Trailing Edge Dimmer Unit

Parameter	Description	
Max. total load	500 W, 2 A	
Compatible loads/rating‡ Electronic LV Lighting	**IEC** 2 A	**Australia/NZ** 2 A

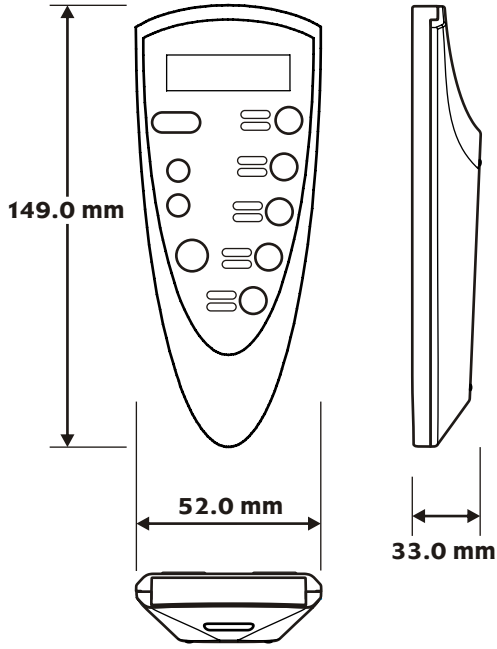
17.0 Mechanical Specifications

Please refer to the C-Bus Wireless Wall Plate Series Installation Instructions for wall plate unit mechanical specifications.

C-Bus Wireless Plug Adapter



C-Bus Wireless Remote Control



17.0 Limited Warranty

C-Bus Wireless wall plate, plug adapter and remote control 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 Sales Representative or Technical Support Officer.

Technical Support Hotline:	1300 722 247 (Australia) 0800 888 219 (New Zealand)
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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