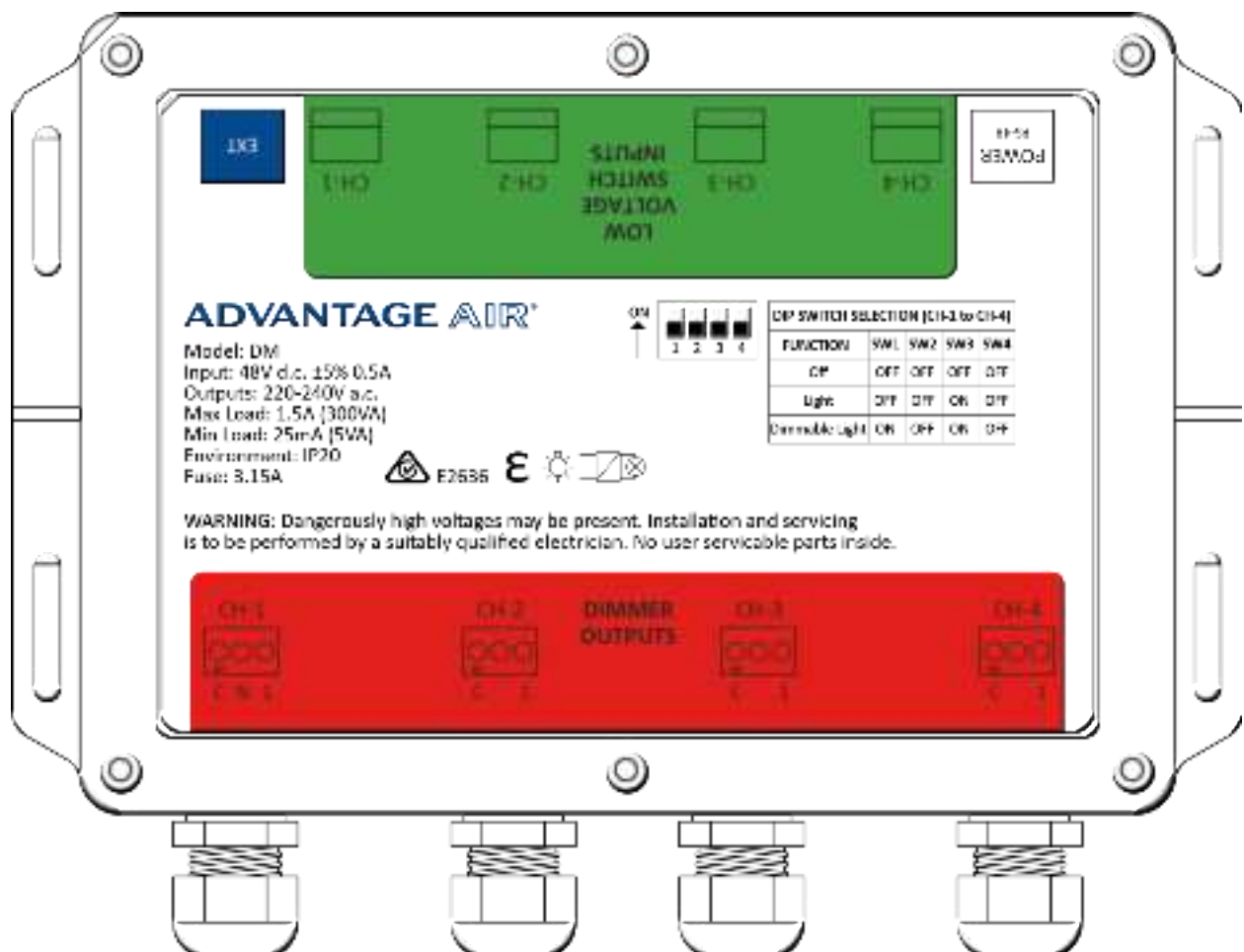


ADVANTAGE AIR®

DM (Dimmer Module)

Installation Manual



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1. Electrical Safety

1.1 General

The Dimmer Module must be installed and/or used in accordance with your current local electrical codes and regulations.

If you are unsure about any part of this installation contact a licensed electrician before proceeding.



Some steps of the installation process are required to be completed only by a licensed electrician; these steps are marked with this symbol

The Dimmer Module conforms to the AS/NZS 60669.2.1:2013 safety standard.



The Dimmer Module has Safety Extra Low Voltage (SELV) section. Installations may have a mix of 240V and SELV wiring and switches. Always ensure the MAIN POWER breaker is OFF before connecting, configuring or modifying the Dimmer Module.



The Dimmer Module system runs at Safety Extra Low Voltage (SELV). Mega (aka megger) tests do not apply.

The PS-48 and the CB PSU-ACDC MUST be physically unplugged from their GPO's before Mega testing an electrical installation.

Please also note that all Dimmer Module switches and their wiring are not part of the 240V electrical install. The switch wiring and dimmer inputs are SELV and must NOT be subject to any Mega testing.

Mega testing the Dimmer Module outputs must not be done as the Dimmer Module uses solid state output devices that may be permanently damaged if subjected to the voltages used during these tests. Warranty will be void if this is not observed.

1.2 Specifications

Input voltage	48VDC $\pm 5\%$, 0.2A
Output voltage	220-240VAC 50 Hz
Max output load	1.5A (300VA)
Environmental	IP20

TIP: See Load Guidelines section.

2. Installation

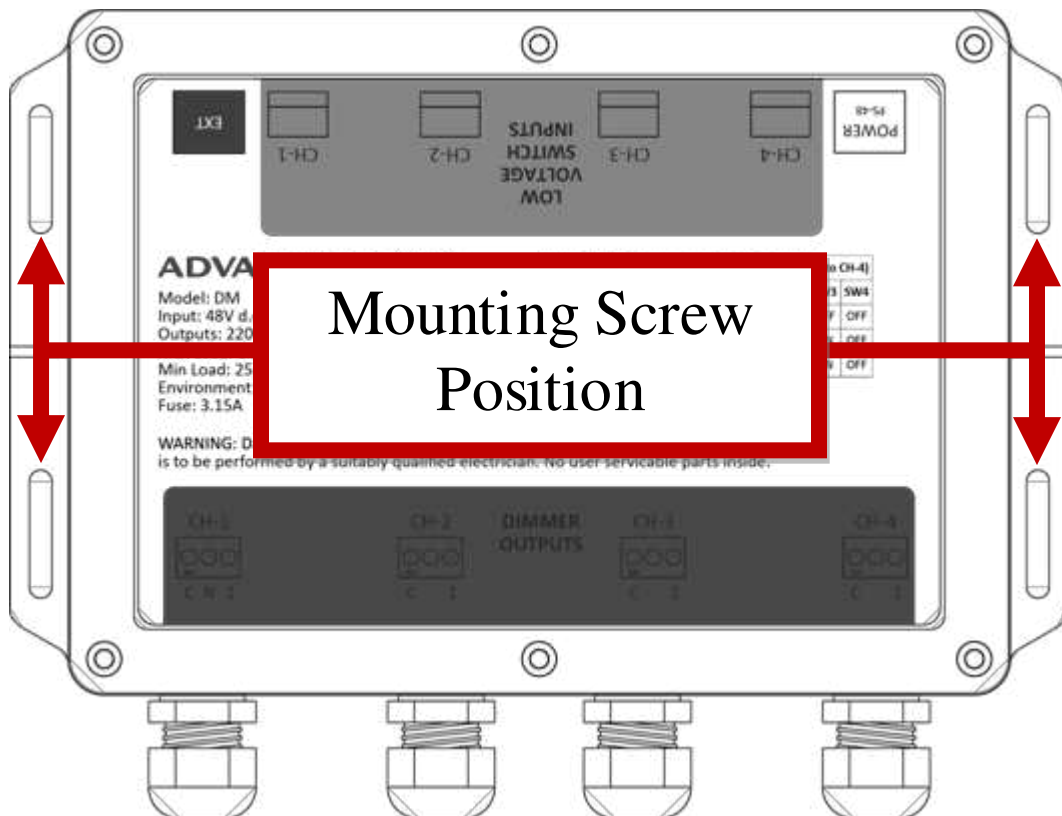
2.1 Mounting

The Dimmer Module can be installed onto any flat surface using screws:

- 1) use thread diameter 4 - 5mm
- 2) use head size 9 - 11mm diameter.
- 3) minimum thread length of 15mm.

Example for screwing into timber: 8Gx15mm button head screw.

Care must be taken to ensure that the internal PCB is totally free of any foreign objects such as stray wire strands before applying power. Failure to ensure this may result in permanent damage to the DM that is not covered under warranty.





Connection example

2.2 System Size

A maximum of 72 switch circuits can be controlled by a MyPlace system with up to 12 MyPlace modules. A mix of DM's, LM's, RM's and RM2's can be used but there is a maximum of 12 modules in total. The type of MyPlace module can affect the maximum number of switch circuits in a system. ie. 12 x DM dimmer modules can control a maximum of 48 lighting circuits compared to 12 x RM2 modules and 72 available circuits.

2.2.1 Load Guidelines

The max load is 300VA per channel.

What you can connect to each channel depends upon its VA rating and inrush current.

For example, as a guideline, one DM channel can control:

- 150W of low voltage lighting - where electronic transformers are used. This includes all 240V powered LED lights, and low voltage halogen lighting.
- 300W of 240V halogen or other filament lighting.

2.3 Power Points

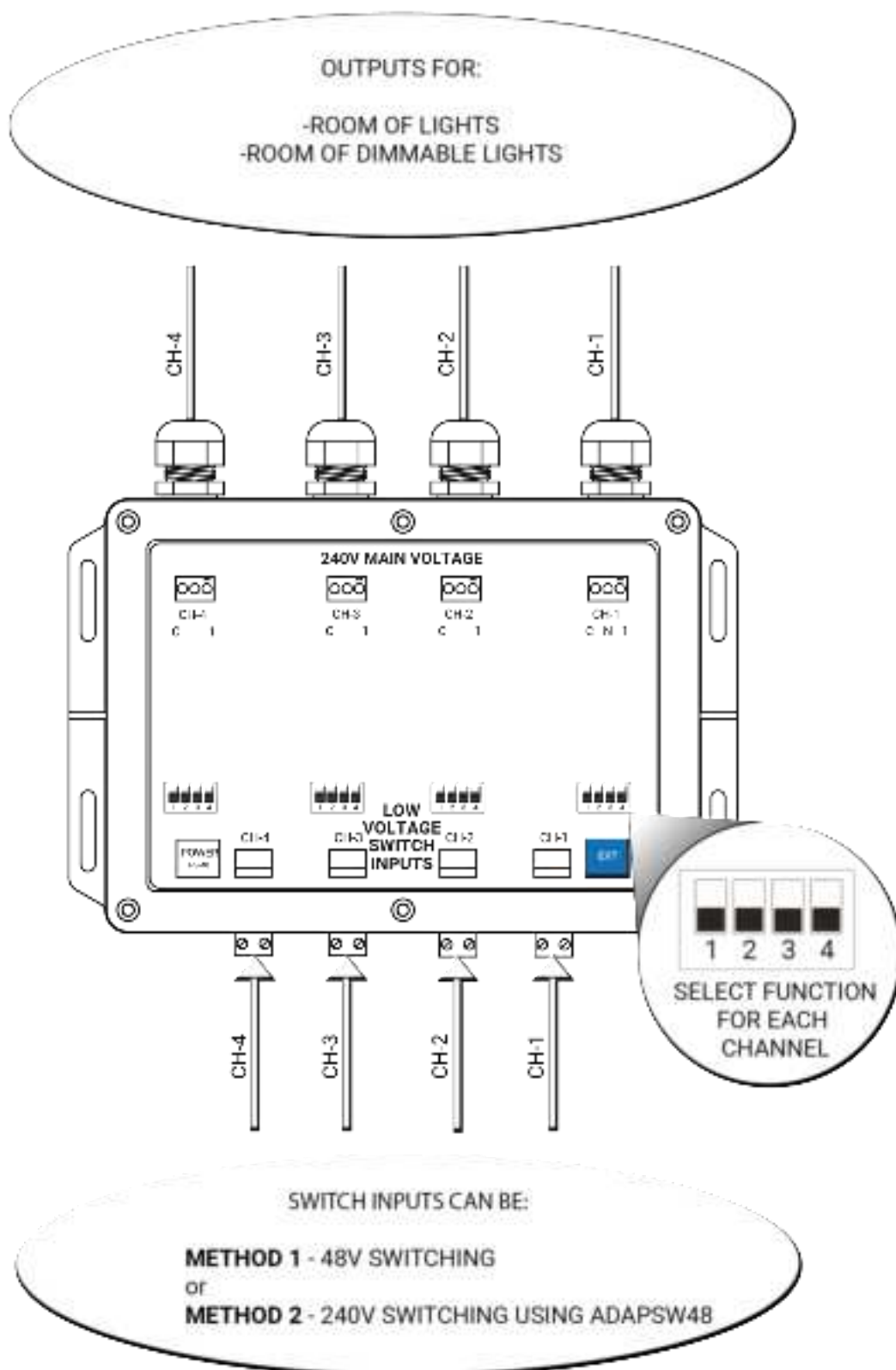
Install a surge protected power circuit ensuring you have one power point for each PS-48 and CB PSU-ACDC power supply unit.



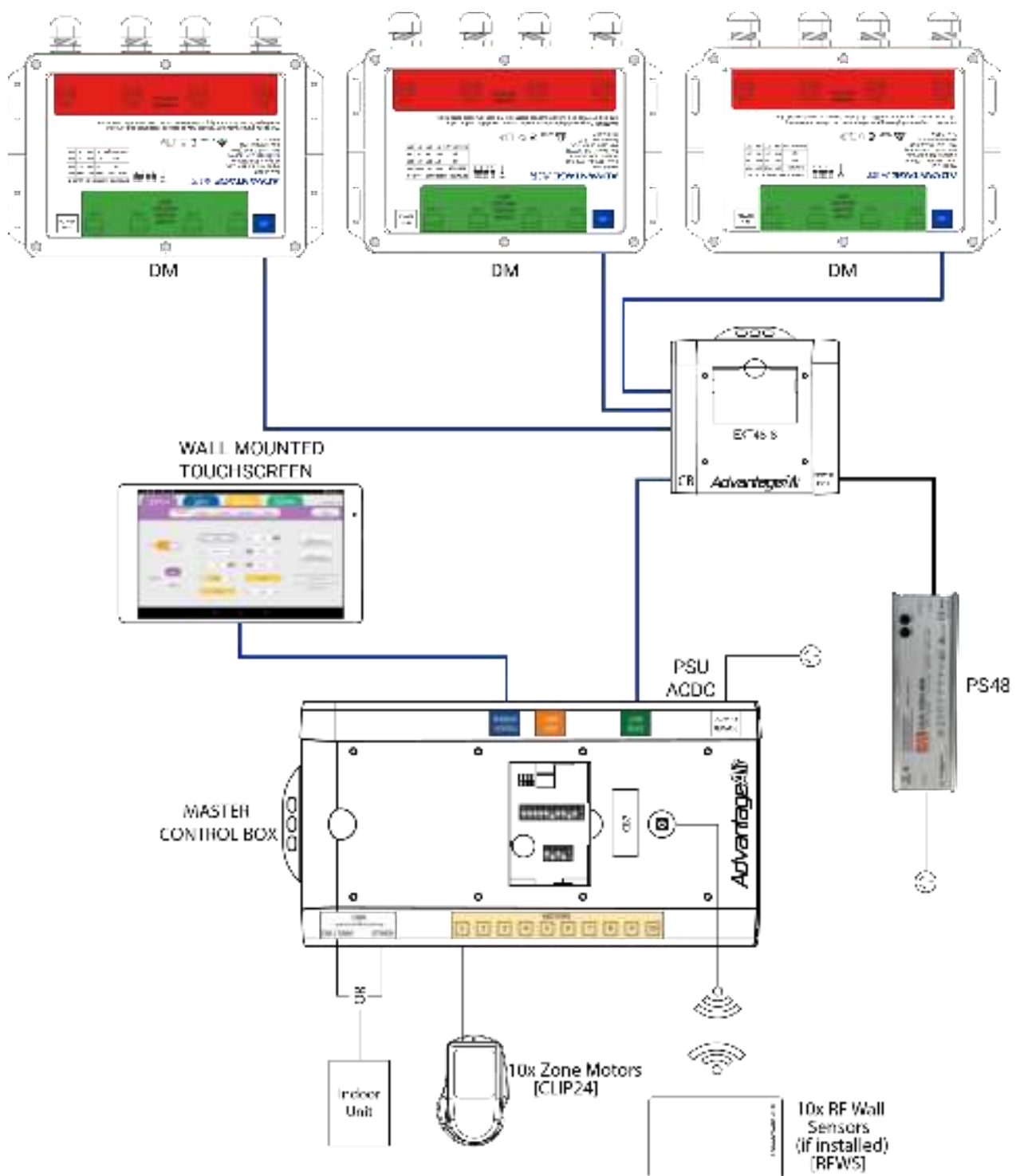
Installation of power circuits and power points must be completed by a licensed electrician.

3. Overviews

3.1 DM Overview



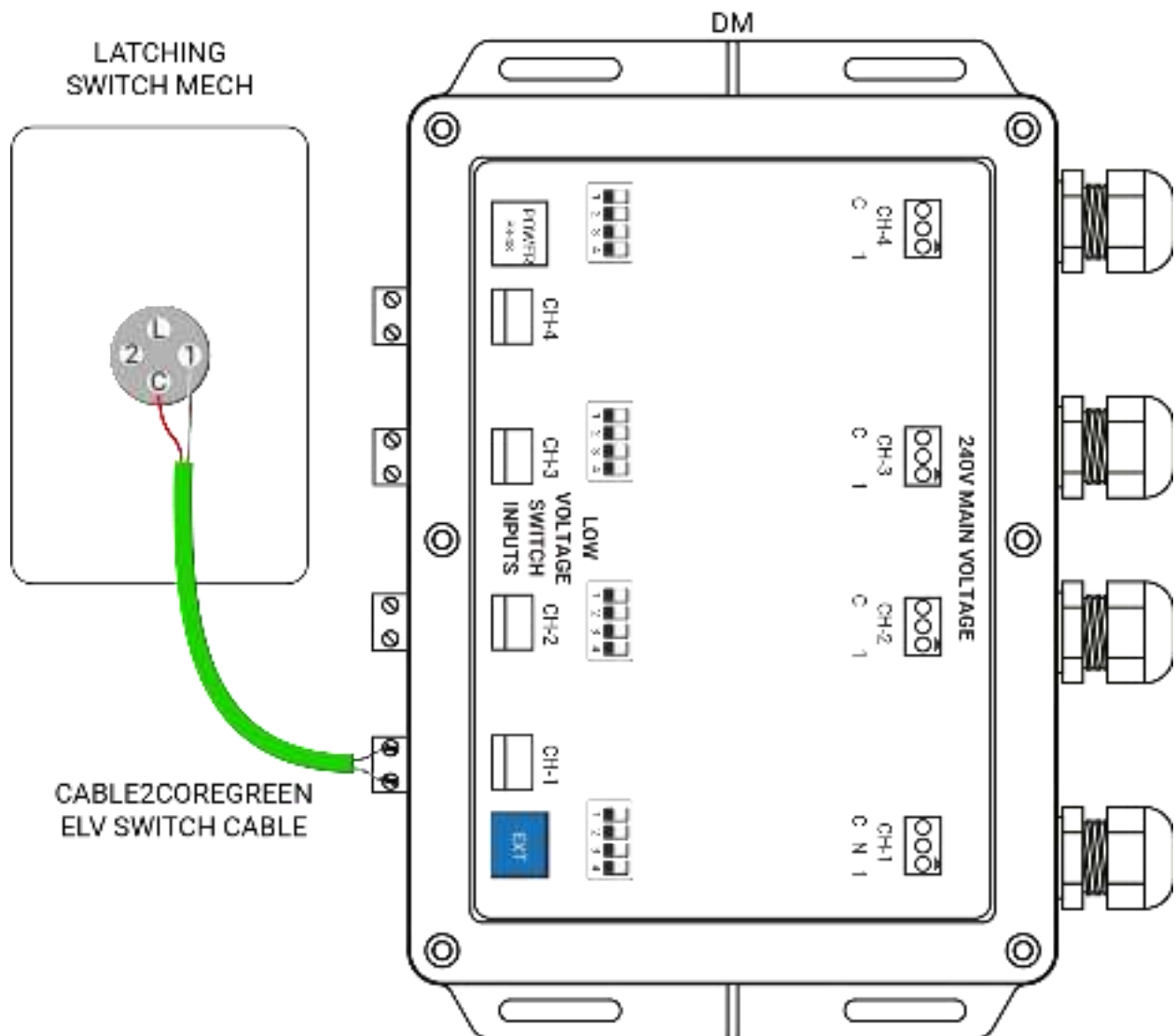
3.2 System Overview



4. Switch Wiring Options

4.1 48V Switching – Method 1

Low voltage wiring to the wall switch. Connects to “LOW VOLTAGE SWITCH INPUT” on the DM.



Note: Wall Switches should be fitted for each channel of lights.

Recommended: use latching push button type wall switches.

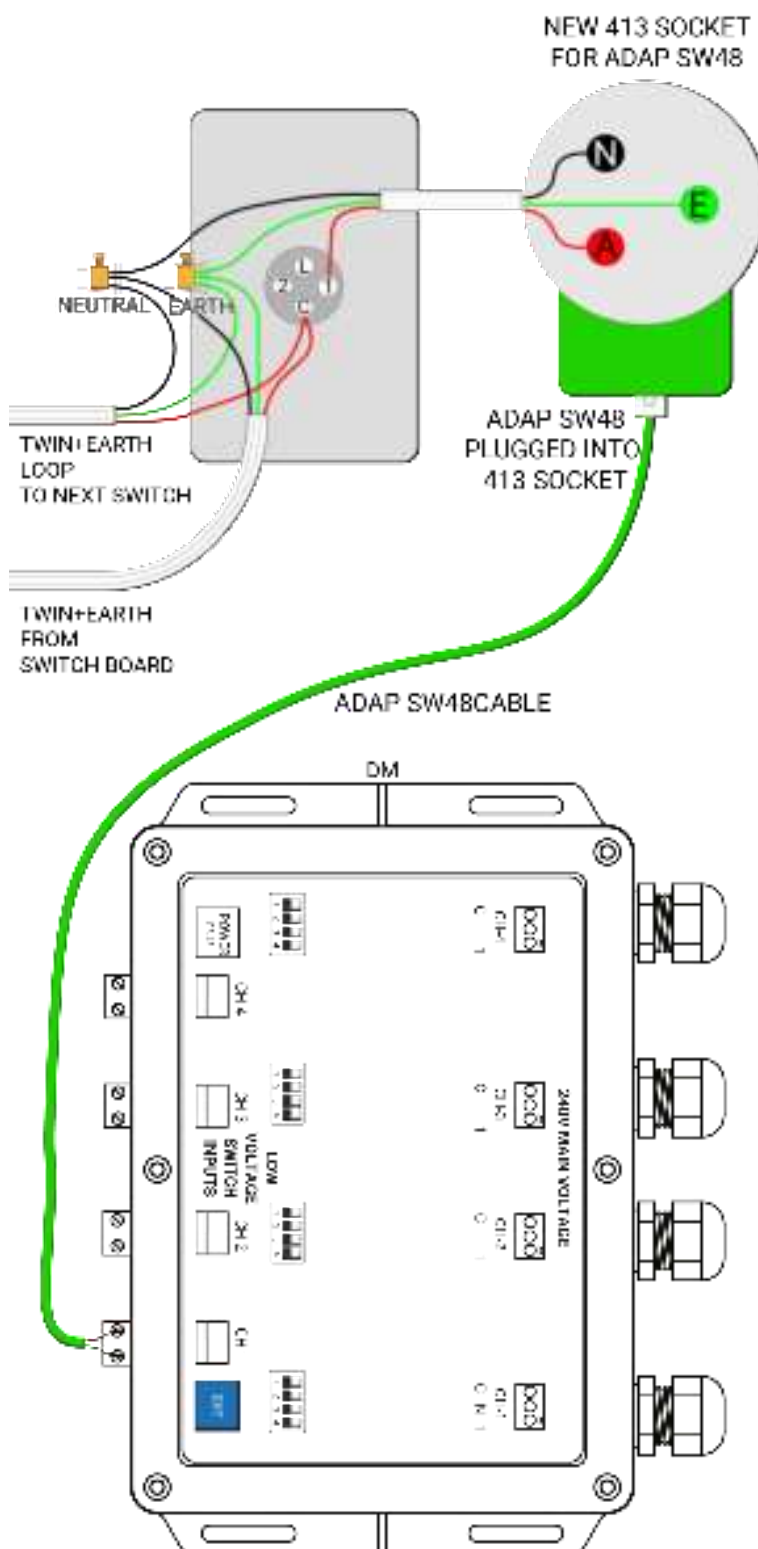
Example: Use Clipsal 30PB (not bell press). Regular switches can also be used for lights (Clipsal 30M).

OR

4.2 240V Switching (using ADAP SW48) – Method 2

Leave the existing house wiring in place and use the ADAP SW48.

When using the ADAP SW48, ensure you use the ADAP SW48CABLE10 or ADAP SW48CABLE20 to connect to the “LOW VOLTAGE SWITCH INPUT” on the DM.



4.3 Polarity Sensitive ADAP 48SWCABLE10/20



4.4 Using the ADAP SW48 with Clipsal Saturn or similar LED lit switches

If you require Clipsal Saturn (and similar other types) light switches that have a LED indicator light, then 240V will be required at the switches to operate the LED. The 48V switch wire coming off the DM is unable to control the LED.

Please refer to the wiring instructions provided by the switch manufacturer for recommended configurations.

5. Lights 240V Wiring

5.1 Important introduction

To install the cables going to their respective loads, perform the following steps.

Note: Channel 1 is a special case and requires a neutral connection.

- 1) Ensure all power is turned off.
- 2) Remove the lid of the Dimmer Module.
- 3) Pass the load cable through the cable gland.
Note: The cable diameter needs to be between 5 and 10mm.
- 4) Screw the cables to the appropriate channel terminals as depicted in the table below.
Note:
 - a) At a minimum, channel 1 must be installed with a neutral connection.
 - b) The strip length is 6mm.

Channel	'C' Terminal	Centre Terminal	'1'
1	Active	Neutral	Load
2-4	Active	Not used	Load

- 5) Tighten the cable glands.
- 6) Set the DIP switches (in the next section).
- 7) Replace the lid with 6 screws.

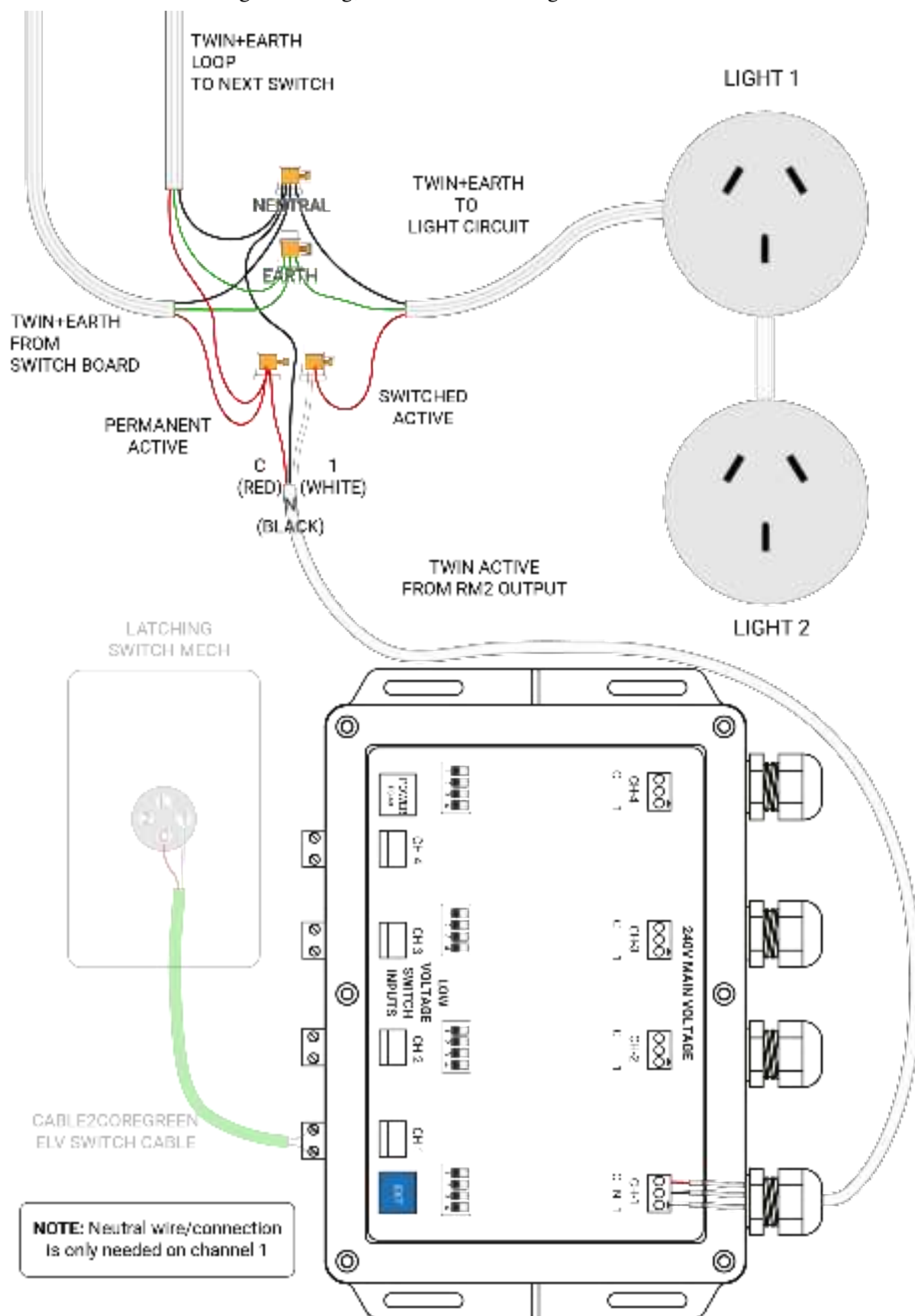


The dimmer outputs must be wired and housed in accordance with the applicable wiring rules, regulations and standards.

All 240V mains wiring must be done by a licensed electrician.

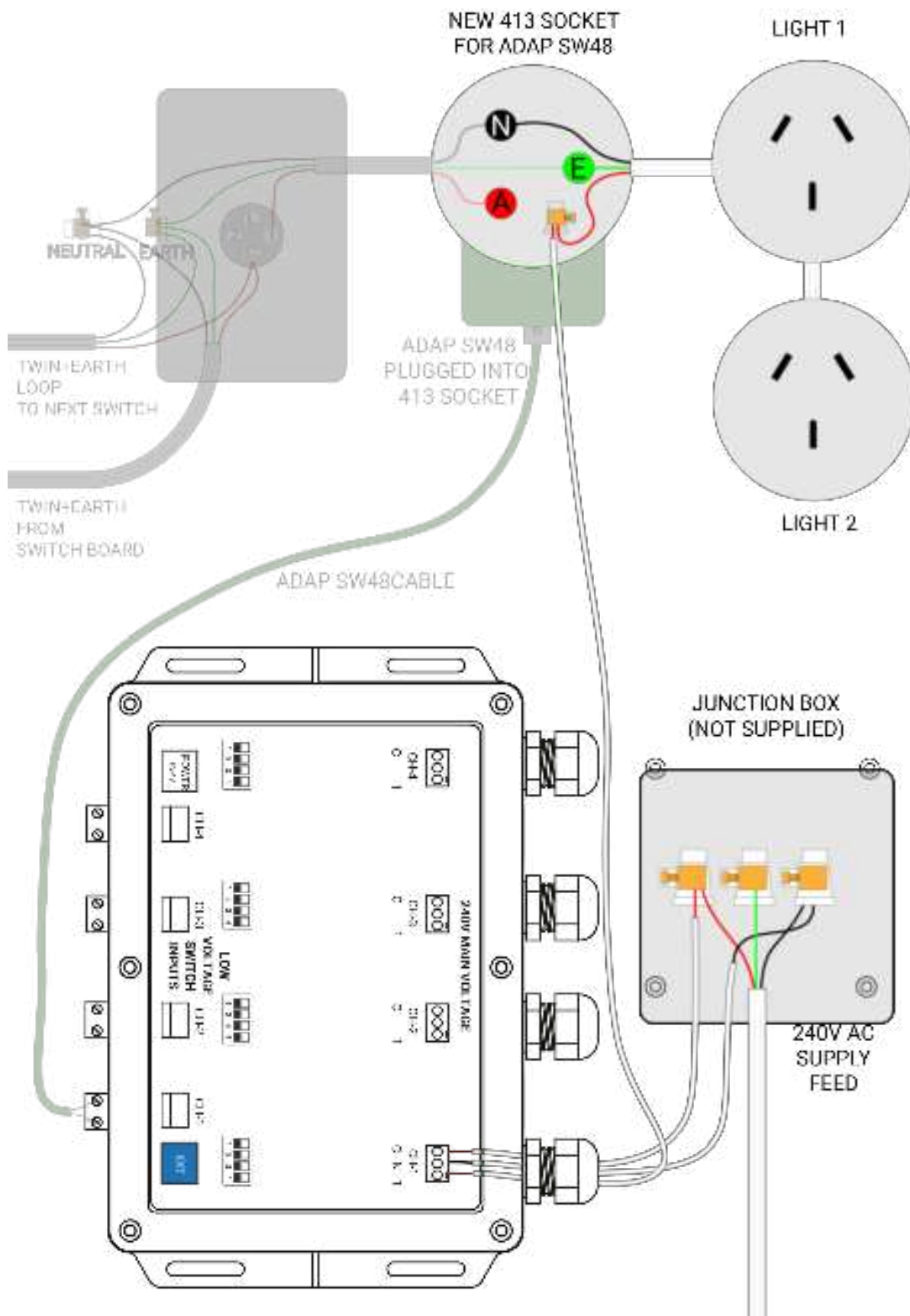
5.2 240V Wiring - Method 1 (using 48V switching on inputs)

This method uses low voltage switching, and controls 240V lights.



5.3 240V Wiring – Method 2 (using 240V switching [using ADAP SW48] on inputs)

This method uses 240V switching, and controls 240V lights.



6. Channel Setup

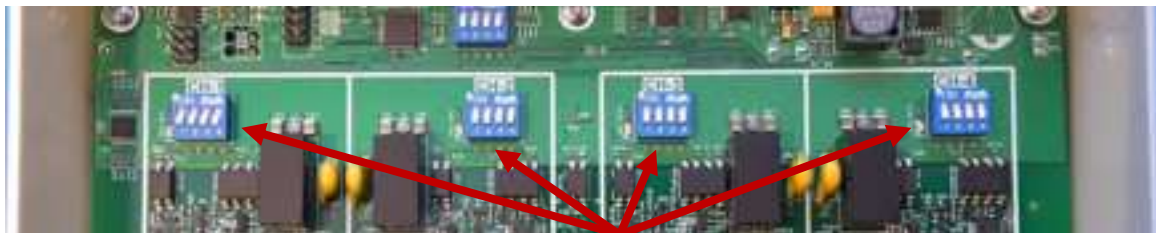
6.1 DIP Switch Setup

- 1) Remove the DM lid
- 2) Set the DIP switch for each channel according to what will be operated by the channel (see the table below for DIP settings)
- 3) Close the lid

DIP SWITCH SELECTION (CH-1 to CH-4)				
FUNCTION	SW1	SW2	SW3	SW4
Off	OFF	OFF	OFF	OFF
Light	OFF	OFF	ON	OFF
Dimmable Light	ON	OFF	ON	OFF



Ensure mains power is turned off before removing the lid.



Channel DIP Switches

6.2 Rename each channel / button

Rename each button on the Wall Mounted Touch Screen

- 1) Go to: MyLights (yellow tab) > Setup > Light wizard
- 2) Flick the switch of the lights you want to rename

6.3 Set Dim Offset

The Dim Offset adjustment sets the lowest dimming level for mains voltage lights. Adjust this level so the light connected remains on, doesn't flash or go out. Different types of lights may need a different offset setting.

NOTE: Some dimmable LED lights only offer a small range of dimming.

- 1) Go to the MyLights Tech Setup (Dealer Password: 22369)
- 2) Select the "Set Dim Offset" button from the menu
- 3) Select the light to be adjusted from the list on the left of the screen
- 4) Tap the "ON/OFF" button to toggle the light on
- 5) Adjust the Dim Offset level using the "+" or "-" buttons as required. The range of value is from minimum of 1 and maximum of 10
- 6) Select another light to adjust and repeat step 4-5 or tap "BACK" when you are finished

6.4 Purple Blue Yellow – which tabs will be shown

Please see the table of Tabs below that the end user will see on their MyPlace wall mounted touch screen, based on what they have installed – and what modules are used for the install.

Acronyms:

ELV Lights = 48V extra low voltage lights.

BOG = Blinds, Other, Garage Door.

If MyAir is installed:				
no Lights and no BOG	✓	✗	✗	CB8
System has BOG	✓	✓	✗	CB8 + RM2
System has Lights (240V or ELV), no BOG	✓	✓	✓	CB8 + LM/RM (or RM2)
System has Lights (240V or ELV) and also has some BOG	✓	✓	✓	CB8 + LM/RM and RM2

If No MyAir is installed:				
System has BOG	✗	✓	✗	CB9Z MYP + RM2
System has Lights (240V or ELV), no BOG	✗	✗	✓	CB9Z MYP + LM/RM (or RM2)
System has Lights (240V or ELV) and also has some BOG	✗	✓	✓	CB9Z MYP + LM/RM and RM2

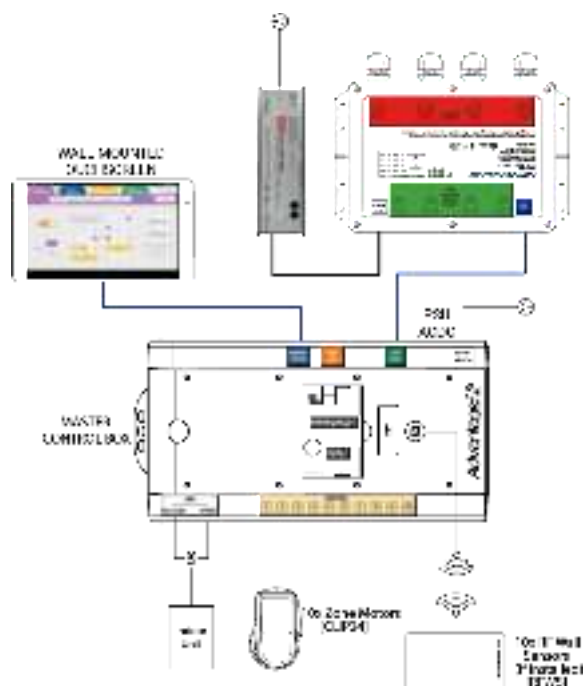
(or CB ZL)

7. Power Supply Options

The Dimmer Module has two power supply connection options:

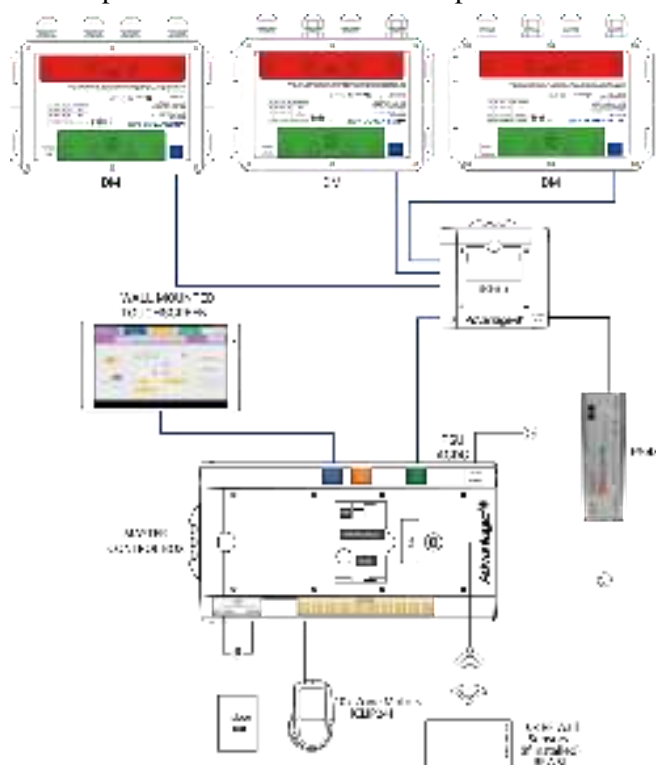
7.1 Single Dimmer Module

Connect the PS-48 directly into the RM2 module.



7.2 Multiple Dimmer Modules

An EXT-48 can be used to share power from each PSU48 for up to 8x DMs.



8. More than 8x DMs

