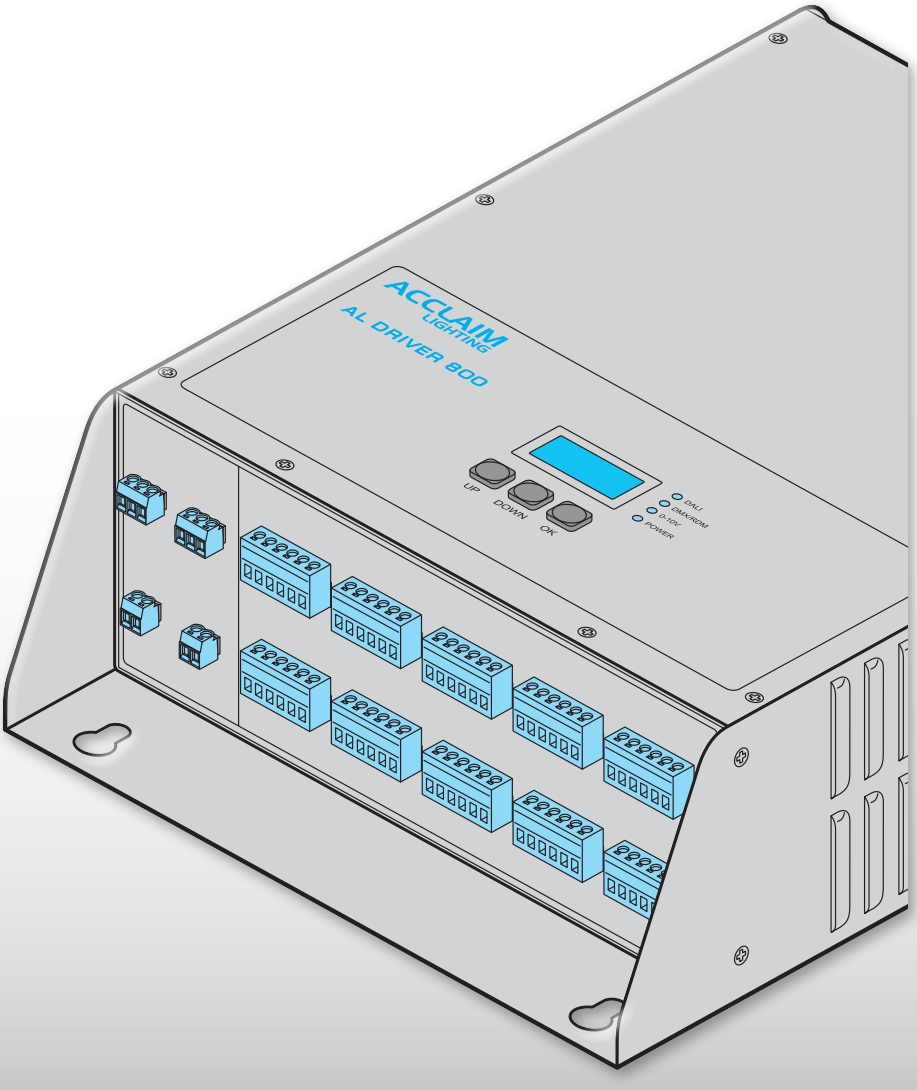
ACCLAIM LIGHTING




# AL Driver 800

User guide

# Contents

# Introduction

## Welcome

Welcome to the AL Driver 800 from Acclaim Lighting. This high power, constant voltage driver allows you to control multiple LED fixtures (RGBW, RGB, white or warm/cold white) across ten individual output ports. Those ten ports can either operate in unison or you can control them individually. To suit your installation, the AL Driver 800 can accept control inputs in the digital formats: DMX or DALI; or alternatively in the analog format: 0-10V (current source only*). Additionally, you can use the AL Driver 800 independently of any external control to create a static color mix, set a dimming level for white light or choose one of ten chase patterns. A clear LCD display and three buttons allow you to navigate the internal menu system. The AL Driver 800 also supports RDM (Remote Device Management) so that basic features can be remotely configured.

The AL Driver 800 can operate from mains inputs ranging from 100 to 277VAC, 50/60Hz (autosensing) and is available in a choice of two DC output formats: 12VDC or 24VDC. The unit can deliver a total of 33A across its ten output ports, with a maximum of 6.6A on any single port.

The AL Driver 800 is housed within a black power-coated steel enclosure with an IP22 rating for dry indoor locations. The unit is designed to be wall mounted and employs a combination of passive convection cooling with automatic dual fan assist when required.

## Safety

- Ensure the power input is supplied from a correctly fused, earthed and environmentally protected location.
- The AL Driver 800 unit has an IP22 rating for dry location installations only.

** Note: There are two forms of 0-10V analog control:* ***Current source*** *and* ***current sink****. The former was commonly used for theatrical dimming prior to the advent of digital techniques, such as DMX; the latter is used mainly as a control technique for fluorescent dimming ballasts. The primary difference between the two schemes lies with where the control voltage should be generated:* ***Current source*** *requires the controlling device to provide (source) the control voltage; whereas* ***Current sink*** *mandates that the controlled fixture must provide the voltage. The AL Driver 800 supports the* ***current source*** *variant (ESTA E1.3) only.*

*If you require* ***current sink*** *compatibility, you can use Acclaim Lighting's UDM (Universal Dimming Module) option between your 0-10V dimmer control and the AL Driver 800 unit.*

# Installation

## Mounting

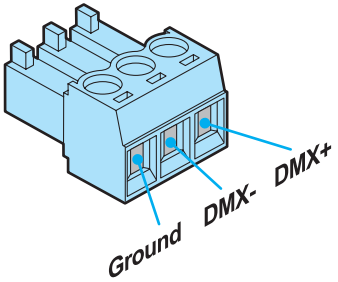
The AL Driver 800 can be wall mounted either vertically (with its output connectors facing downwards) or horizontally as required. Four slotted holes (Ø 0.55"/14mm leading to Ø 0.31"/8mm) are built into the backplane for mounting purposes - see page 21.

## Input connections

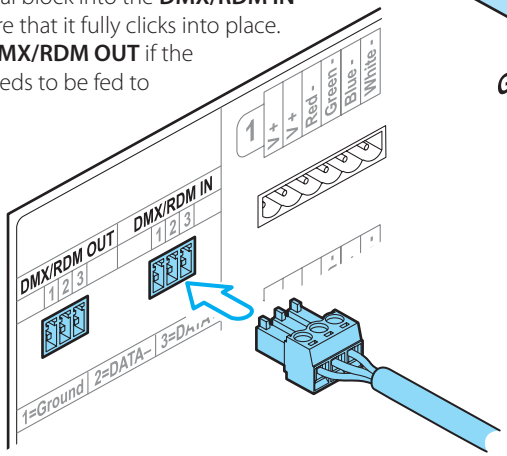
The AL Driver 800 can be controlled by any of three external signal types: DMX, DALI or 0-10V. DMX and DALI are digital signals that allow multiple channels to be addressed; 0-10V is a legacy analog signal that can control one channel only (all outputs will respond equally when 0-10V mode is used).

### DMX

The AL Driver 800 has a DMX IN port as well as a DMX OUT port. Each uses a 3-pin terminal block (supplied). See below for useful DMX tips. Connect your DMX cables to the terminal blocks as shown here:




Insert the terminal block into the **DMX/RDM IN** socket and ensure that it fully clicks into place. Repeat for the **DMX/RDM OUT** if the control signal needs to be fed to another device.

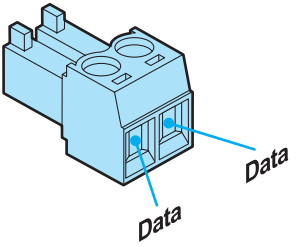



### Tips for achieving successful DMX control

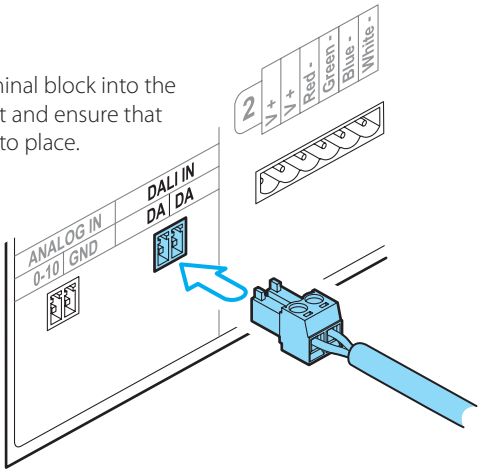
- Do not exceed a total cable length of 3,900 ft (1200m) without buffering.
- Do not exceed a total of 32 devices/fixtures on a single line without buffering.
- Use only connection cables with a characteristic impedance of 120Ω, preferably where the DMX + and DMX – data lines are twisted around each other and the ground link exists as a coaxial screen surrounding the inner cores, such as Belden® 9842 or equivalent.
- Connect a 120Ω terminating resistor between the DMX + and DMX – output connections of the final fixture.
- Do not introduce a passive Y-split into the control cabling. If it is necessary to split the control link in order feed fixtures located in different directions, use a powered DMX splitter/buffer.
- Ensure that the DMX + and DMX – connections do not become crossed at any point.

## DALI

The AL Driver 800 has a single DALI port that uses a 2-pin terminal block (supplied). For best results always use mains rated cables with 600V isolation and core with at least 1mm cross section. DALI signals are not polarity dependent and so can be connected either way round:

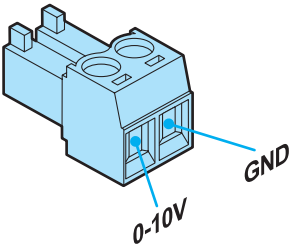



Insert the terminal block into the **DALI IN** socket and ensure that it fully clicks into place.

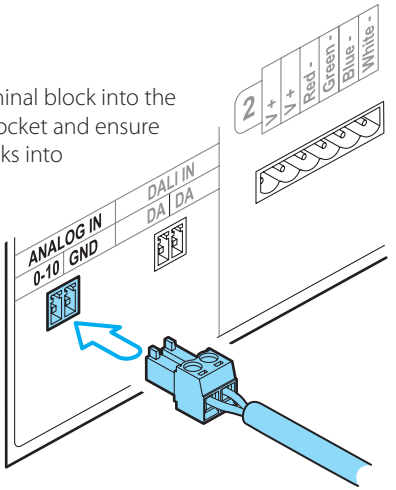



## 0-10V

The AL Driver 800 has a single analog 0-10V (current source only - see page 2) port that uses a 2-pin terminal block (supplied). For best results use shielded cables and connect as follows:

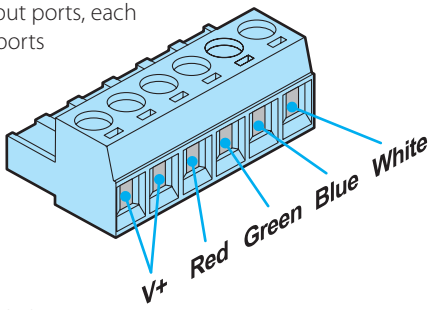



Insert the terminal block into the **ANALOG IN** socket and ensure that it fully clicks into place.



## Output connections

The AL Driver 800 has ten constant voltage output ports, each of which uses 6-pin terminal block. The output ports use a common anode supply and there are two V+ contacts to assist with multiple fixture connections (the two contacts are joined internally so either or both can be used, as required). The maximum **port load** of **6.6A** and total **maximum overall load** of **33A** for the whole AL Driver 800 must not be exceeded.




### Connection cables

The connection cables (not supplied) used to link the output ports to the fixtures should follow these guidelines (based on a maximum load of 6.6A):

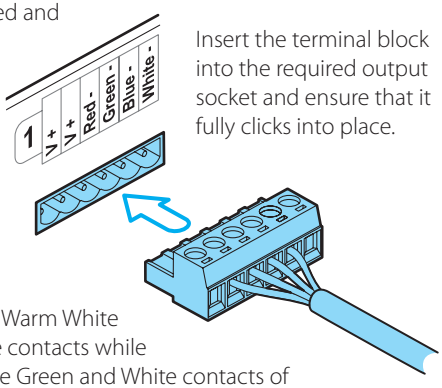
| Conductor size | 12V version | 24V version |
|---|---|---|
| • 18 AWG (0.823mm$^2$) | Up to 25 feet (7.6m) | Up to 40 feet (12m) |
| • 14 AWG (2.081mm$^2$) | Up to 60 feet (18.2m) | Up to 100 feet (30.4m) |
| • 12 AWG (3.309mm$^2$) | Up to 100 feet (30.4m) | Up to 180 feet (54.8m) |

In all cases, ensure the voltage drop at the fixture end is no greater than 9% of the original supply.

## Port control

The manner in which the ten ports are grouped and operate is determined primarily by the MODE setting (see page 12) and can also be affected by the LOAD and PIXEL settings (see page 13).

*Note: Whichever LOAD-type is chosen, that setting will be applied globally to all ports. For example, it is not possible to choose WW+CW operation for some ports and RGBW for others.*




Insert the terminal block into the required output socket and ensure that it fully clicks into place.

**LOAD: WW+CW**

When the LOAD option is set to WW+CW, the Warm White (WW) outputs are placed on the Red and Blue contacts while the Cold White (CW) outputs are placed on the Green and White contacts of each port. Along with the dual V+ connections, this allows you to distribute multiple fixtures between the contacts. The maximum 6.6A load limit for the port as a whole must not be exceeded.

**LOAD: WHITE**

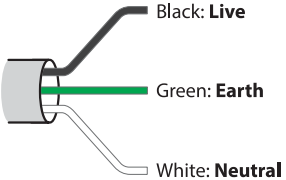
When the LOAD option is set to WHITE, all contacts (Red, Green, Blue and White) on each port are used together. Along with the dual V+ connections, this allows you to distribute multiple fixtures between the contacts. The maximum 6.6A load limit for the port as a whole must not be exceeded.

**MODE: 0-10V**

When the MODE option is set to 0-10V, all contacts (R, G, B and W) on every port are used together. Along with the dual V+ connections, this allows you to distribute multiple fixtures between the contacts, if required. The maximum 6.6A load limit for the port as a whole must not be exceeded.

## Power wiring

The fixed power cord is roughly 4.4 feet, 1.35m in length and is supplied as standard with US color coding and bare tails. For international installations, wire according to local codes.




Power cord colors

The AL Driver 800 power requirements are as follows:

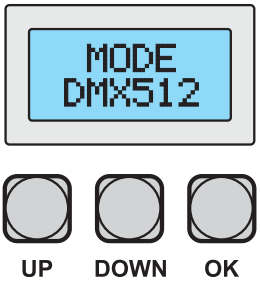
- Voltage: 100-277VAC 50/60Hz
- Power: 12W at standby
  900W maximum (steady state)

## In-rush current

The AL Driver 800 uses two switched mode power supplies which exhibit a trait known as 'in-rush current' when they are first powered on. This is caused by the various capacitive components initially topping themselves up with power. The in-rush current period lasts only milliseconds, however, if you are using multiple units on a single supply, ensure that the breakers used are rated to support inrush currents without tripping during startup.

# Operation

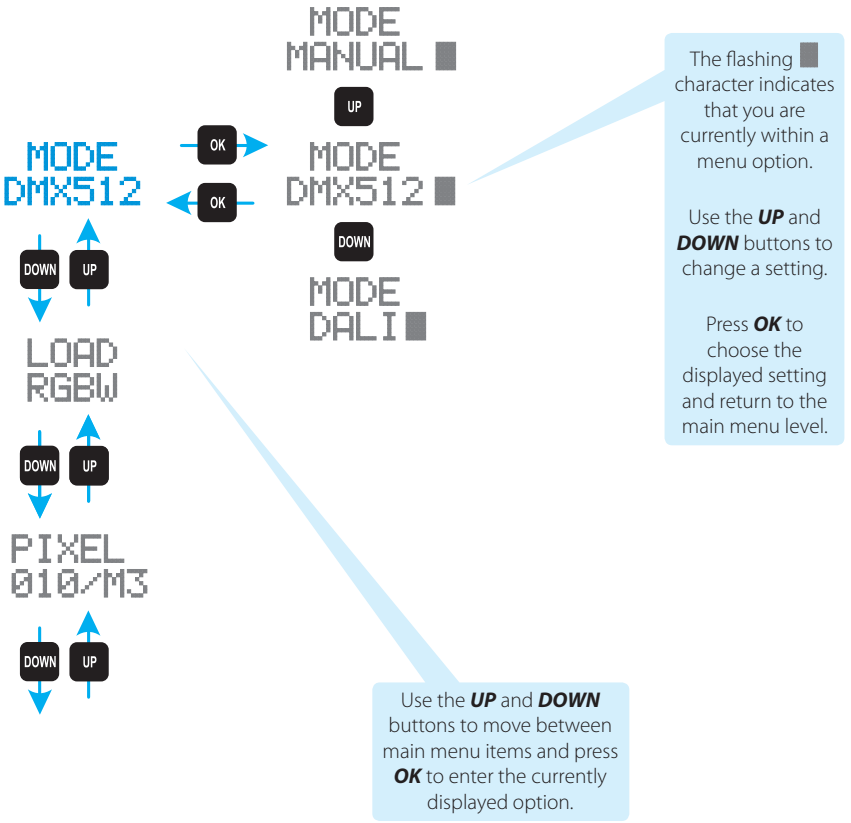
Operation of the AL Driver 800 will commence as soon as power is applied.




## Menu navigation

The menu is continually on display while power is applied to the unit. Use the three control buttons to navigate around the menu and alter settings as necessary.

The exact options available within the menu will alter depending on the setting of the MODE option (see page 12) in order to provide relevant options. The next four pages list the main menu items for each of the MODE settings.



## Main menu items (when MODE set to DMX512)


Determines the control method to be used. Options are: DMX512, DALI, 0-10V, MANUAL and AUTO. See page 12.

Selects the nature of the LED loads that will be placed on all of the ten output ports: Options are RGBW, RGB, WHITE, WW+CW. See page 13.

Determines how the ten output ports should be distributed between the chosen DMX address range. See page 13.

Allows you to set the DMX start address. The total number of DMX channels required depends on a combination of the LOAD and PIXEL settings. See page 14.

When set to ON, the last received set of DMX values will be latched and will remain on the outputs during instances of signal loss.

When set to YES, any rapid changes in the DMX input values will be smoothed to produce more gentle dimmed power outputs.

Displays the current status of the DMX input signal.

Displays the current internal firmware version.

Displays the maximum internal temperature that the unit has encountered during operation (in degrees Centigrade).

Displays the minimum internal temperature that the unit has encountered during operation (in degrees Centigrade).

Displays the current internal temperature of the fixture (in degrees Centigrade).

## Main menu items (when MODE set to DALI)


Determines the control method to be used. Options are: DMX512, DALI, 0-10V, MANUAL and AUTO. See page 12.

Selects the nature of the LED loads that will be placed on all of the ten output ports: Options are RGBW, RGB, WHITE, WW+CW. See page 13.

Determines how the ten output ports should be distributed between the chosen DALI address range. See page 13.

Allows you to set the DALI start address. The total number of DALI channels required depends on a combination of the LOAD and PIXEL settings. See page 14.

Displays the current internal firmware version.

Displays the maximum internal temperature that the unit has encountered during operation (in degrees Centigrade).

Displays the minimum internal temperature that the unit has encountered during operation (in degrees Centigrade).

Displays the current internal temperature of the fixture (in degrees Centigrade).

## Main menu items (when MODE set to 0-10V)


Determines the control method to be used. Options are: DMX512, DALI, 0-10V, MANUAL and AUTO. See page 12.

Displays the current status of the 0-10V input signal.

Displays the current internal firmware version.

Displays the maximum internal temperature that the unit has encountered during operation (in degrees Centigrade).

Displays the minimum internal temperature that the unit has encountered during operation (in degrees Centigrade).

Displays the current internal temperature of the fixture (in degrees Centigrade).

## Main menu items (when MODE set to MANUAL)


Determines the control method to be used. Other options are: DMX512, DALI, 0-10V, and AUTO. See page 12.

Selects the nature of the LED loads that will be placed on all of the ten output ports: Options are RGBW, RGB, WHITE, WW+CW. See page 14.

Determines the intensity of the RED channel*. See page 15.

Determines the intensity of the GREEN channel*. See page 15.

Determines the intensity of the BLUE channel*. See page 15.

Determines the intensity of the WHITE channel*. See page 15.

Displays the current internal firmware version.

Displays the maximum internal temperature that the unit has encountered during operation (in degrees Centigrade).

Displays the minimum internal temperature that the unit has encountered during operation (in degrees Centigrade).

Displays the current internal temperature of the fixture (in degrees Centigrade).

* When alternative LOAD settings are chosen, the available intensity options will change accordingly.

## Main menu items (when MODE set to AUTO)


Determines the control method to be used. Other options are: DMX512, DALI, 0-10V and MANUAL. See page 12.

Selects the nature of the LED loads that will be placed on all of the ten output ports: Options are RGBW, RGB, WHITE, WW+CW. See page 14.

Determines the pre-programmed chase pattern, from 01 to 10. An AUTO option is also available to automatically change between the ten pattern options. See page 15.

Determines the speed of the chase. See page 15.

Determines the crossfade time between the steps of each chase pattern. See page 15.

Displays the current internal firmware version.

Displays the maximum internal temperature that the unit has encountered during operation (in degrees Centigrade).

Displays the minimum internal temperature that the unit has encountered during operation (in degrees Centigrade).

Displays the current internal temperature of the fixture (in degrees Centigrade).

## Choosing a control mode

The AL Driver 800 has five control modes:

- **DMX512** - Port output levels are determined by the signal received at the DMX/RDM IN connector.
- **DALI** - Port output levels are determined by the signal received at the DALI IN connector.
- **0-10V** - Outputs (for all channels of all ports combined) are determined by the 0-10V signal received at the ANALOG IN connector.
- **MANUAL** - Allows you to mix emitter intensities (for all ports combined) directly from the menu, independently of any external control input. See page 15.
- **AUTO** - Allows you to choose from ten pre-programmed chase routines (for all ports combined) directly from the menu, independently of any external control input. See page 15.

*Note: The control mode and the DMX address for the AL Driver 800 can optionally be configured remotely using the RDM (Remote Device Management) protocol via a DMX connection.*

### To choose a control mode

1 In the menu display, ensure that the MODE option is showing.
   - If MODE is not showing, first check that the ▮ character is not flashing in the corner of the display. If it is, press ***OK*** to return to the main menu level.
   - Repeatedly press either the ***UP*** or ***DOWN*** buttons until the MODE option is displayed.

2 Press ***ENTER***. The ▮ character should begin flashing in the lower right corner of the display.

3 Use the ***UP*** and ***DOWN*** buttons to change between the various mode types: DMX512, DALI, 0-10V, MANUAL and AUTO.

4 When the required mode is shown, press the ***OK*** button to select it and return to the menu top level (the ▮ character will stop flashing).

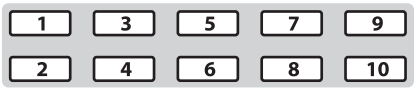
5 You can now continue to choose the other options within the chosen mode type using the ***UP***, ***DOWN*** and ***OK*** buttons.

## Choosing the load type and channel resolution (DMX and DALI)

When either the *DMX* or *DALI* modes are selected, the number of addresses required to control all of the ports depends on a combination of the *LOAD* type that is selected (e.g. *RGBW, RGB, WW+CW* or *WHITE*, to match the type of LED fixtures connected) as well as the setting of the *PIXEL* option. The *PIXEL* setting determines how the ten output ports are applied to the control addresses, i.e. it sets the channel resolution:

### PIXEL: Mode 0

Combines all of the ports into a single set of addresses




| LOAD: | Total # of channels |
|---|---|
| RGBW | 4 channels |
| RGB | 3 channels |
| WW+CW | 2 channels |
| WHITE | 1 channel |

### PIXEL: Mode 1

Arranges the ports into two groups of addresses


| LOAD: | Total # of channels |
|---|---|
| RGBW | 8 channels |
| RGB | 6 channels |
| WW+CW | 4 channels |
| WHITE | 2 channels |

### PIXEL: Mode 2

Creates pairs of ports, requiring five sets of addresses


| LOAD: | Total # of channels |
|---|---|
| RGBW | 20 channels |
| RGB | 15 channels |
| WW+CW | 10 channels |
| WHITE | 5 channels |

### PIXEL: Mode 3

Treats all of the ports individually, requiring ten sets of addresses


| LOAD: | Total # of channels |
|---|---|
| RGBW | 40 channels |
| RGB | 30 channels |
| WW+CW | 20 channels |
| WHITE | 10 channels |

**To choose the load type and channel (pixel) resolution**

1 Choose either the ***DMX512*** or ***DALI*** menu options, as required. See page 12 for details.

2 Use the ***DOWN*** button to show the LOAD option and press the ***OK*** button to enter.

3 Use the ***UP*** and ***DOWN*** buttons to change between the various LOAD types: RGBW, RGB, WW+CW and WHITE. Press the ***OK*** button to select the one that matches your connected fixture type.

4 Use the ***DOWN*** button to show the PIXEL option and press the ***OK*** button to enter.

5 Use the ***UP*** and ***DOWN*** buttons to change between the various PIXEL options: xxx/M0, xxx/M1, xxx/M2 and xxx/M3. *Where* xxx *is the stated number of addresses that are required to control all of the ports.*

6 Press the ***OK*** button to select the required mode.

7 You also need to set a base address, see page 14.

Pages 16 to 19 show how the channels of each port are distributed across the DMX or DALI addresses for each LOAD and PIXEL combination.

## Choosing a base address (DMX and DALI)

When DMX or DALI modes are chosen, you need to set a base address at which the AL Driver 800 should begin applying its various output channels.

- DMX addresses run from 1 to 512
- DALI addresses run from 0 to 63

In either case you need to ensure that there is sufficient 'head room' from the chosen base address to the final address that will be required, as determined by the LOAD and PIXEL settings (see page 13).

*Note: The control mode and the DMX address for the AL Driver 800 can optionally be configured remotely using the RDM (Remote Device Management) protocol via a DMX connection.*

**To choose a base address**

1 Choose either the ***DMX512*** or ***DALI*** menu options, as required. See page 12 for details.

2 Use the ***DOWN*** button to show the ADDRESS option and press the ***OK*** button to enter.

3 Use the ***UP*** and ***DOWN*** buttons to display the required base address and press the ***OK*** button to select it.

Pages 16 to 19 show you exactly how the channels of each port are distributed across the DMX or DALI addresses for each LOAD and PIXEL combination.

## Choosing the load type (Manual and Auto modes)

The Manual and Auto modes both allow you determine the port outputs directly from the control panel without need for external inputs. The options available to you will depend on the nature of the emitters that are connected and declared using the LOAD option (e.g. *RGBW, RGB, WW+CW* or *WHITE*).

**To choose the load type**

1 Choose either the ***MANUAL*** or ***AUTO*** menu options, as required. See page 12 for details.

2 Use the ***DOWN*** button to show the LOAD option and press the ***OK*** button to enter.

3 Use the ***UP*** and ***DOWN*** buttons to change between the various LOAD types: RGBW, RGB, WW+CW and WHITE. Press the ***OK*** button to select the one that matches your connected fixture type.

## Setting a static color mix (Manual mode)

Manual mode allows you to create a static color mix across all ports of the AL Driver 800, independently of any external control input. The available mix options will alter depending on the connected fixture type and the setting of the LOAD option within the Manual section.

**To set a static color mix**

1 Choose the ***MANUAL*** mode. See page 12 for details.

2 Use the ***DOWN*** button to show the LOAD option and press the ***OK*** button to enter.

3 Use the ***UP*** and ***DOWN*** buttons to choose the setting appropriate to the connected fixture type: RGBW, RGB, WW+CW or WHITE. Press the ***OK*** button to fix.

4 Use the ***UP*** and ***DOWN*** buttons to show your first color option (i.e. RED, GREEN, BLUE, WHITE, WARM or COOL - depending on the LOAD setting) and press the ***OK*** button to enter.

5 Use the ***UP*** and ***DOWN*** buttons to alter the intensity level between 0 and 255 (the emitters of the selected color will respond immediately) and press the ***OK*** button to set the required level.

6 Repeat steps 3 and 4 for the other colors until the required overall mix is achieved.

*Note: The AL Driver 800 will store your settings within non-volatile memory so that your chosen color mix will resume whenever the unit is re-powered.*

## Choosing a chase pattern (Auto mode)

Auto mode allows you to choose from ten different pre-programmed color chase patterns, independently of any external control input. The available chase programs are labeled 00 to 10 and there is also an AUTO setting which will randomly change between the ten patterns. The nature of the ten chase patterns will alter depending on the connected fixture type and the setting of the LOAD option within the AUTO section.

**To set a chase pattern**

1 Choose the ***AUTO*** mode. See page 12 for details.

2 Use the ***DOWN*** button to show the LOAD option and press the ***OK*** button to enter.

3 Use the ***UP*** and ***DOWN*** buttons to choose the setting appropriate to the connected fixture type: RGBW, RGB, WW+CW or WHITE. Press the ***OK*** button to fix.

4 Use the ***DOWN*** button to show the PATTERN option and press the ***OK*** button to enter.

5 Use the ***UP*** and ***DOWN*** buttons to choose the required chase pattern (between 01 and 10 plus AUTO) and press the ***OK*** button to fix.

6 Use the ***DOWN*** button to show the SPEED option and press the ***OK*** button to enter.

7 Use the ***UP*** and ***DOWN*** buttons to choose the appropriate chase speed and press the ***OK*** button to fix.

8 Use the ***DOWN*** button to show the FADETIME (crossfade) option and press the ***OK*** button to enter.

9 Use the ***UP*** and ***DOWN*** buttons to choose the appropriate cross fade speed and press the ***OK*** button to fix.

*Note: The AL Driver 800 will store your settings within non-volatile memory so that your chosen chase pattern will resume whenever the unit is re-powered.*

## DMX or DALI address layout (for LOAD: RGBW)

This chart shows how the channels of each port are distributed across the DMX or DALI addresses for each PIXEL setting when the LOAD is set to RGBW. In each case add your chosen DMX or DALI base address to the number shown for each channel.

| Base address + | PIXEL: 040/M3 | PIXEL: 020/M2 | PIXEL: 008/M1 | PIXEL: 004/M0 |
|---|---|---|---|---|
| 0 | Port **1** - Red | Ports **1** & **2**: Red | Ports **1** to **5**: Red | All ports: Red |
| 1 | Port **1** - Green | Ports **1** & **2**: Green | Ports **1** to **5**: Green | All ports: Green |
| 2 | Port **1** - Blue | Ports **1** & **2**: Blue | Ports **1** to **5**: Blue | All ports: Blue |
| 3 | Port **1** - White | Ports **1** & **2**: White | Ports **1** to **5**: White | All ports: White |
| 4 | Port **2** - Red | Ports **3** & **4**: Red | Ports **6** to **10**: Red | |
| 5 | Port **2** - Green | Ports **3** & **4**: Green | Ports **6** to **10**: Green | |
| 6 | Port **2** - Blue | Ports **3** & **4**: Blue | Ports **6** to **10**: Blue | |
| 7 | Port **2** - White | Ports **3** & **4**: White | Ports **6** to **10**: White | |
| 8 | Port **3** - Red | Ports **5** & **6**: Red | | |
| 9 | Port **3** - Green | Ports **5** & **6**: Green | | |
| 10 | Port **3** - Blue | Ports **5** & **6**: Blue | | |
| 11 | Port **3** - White | Ports **5** & **6**: White | | |
| 12 | Port **4** - Red | Ports **7** & **8**: Red | | |
| 13 | Port **4** - Green | Ports **7** & **8**: Green | | |
| 14 | Port **4** - Blue | Ports **7** & **8**: Blue | | |
| 15 | Port **4** - White | Ports **7** & **8**: White | | |
| 16 | Port **5** - Red | Ports **9** & **10**: Red | | |
| 17 | Port **5** - Green | Ports **9** & **10**: Green | | |
| 18 | Port **5** - Blue | Ports **9** & **10**: Blue | | |
| 19 | Port **5** - White | Ports **9** & **10**: White | | |
| 20 | Port **6** - Red | | | |
| 21 | Port **6** - Green | | | |
| 22 | Port **6** - Blue | | | |
| 23 | Port **6** - White | | | |
| 24 | Port **7** - Red | | | |
| 25 | Port **7** - Green | | | |
| 26 | Port **7** - Blue | | | |
| 27 | Port **7** - White | | | |
| 28 | Port **8** - Red | | | |
| 29 | Port **8** - Green | | | |
| 30 | Port **8** - Blue | | | |
| • | • | | | |
| 38 | Port **10** - Blue | | | |
| 39 | Port **10** - White | | | |

## DMX or DALI address layout (for LOAD: RGB)

This chart shows how the channels of each port are distributed across the DMX or DALI addresses for each PIXEL setting when the LOAD is set to RGB. In each case add your chosen DMX or DALI base address to the number shown for each channel.

| Base address + | PIXEL: 030/M3 | PIXEL: 015/M2 | PIXEL: 006/M1 | PIXEL: 003/M0 |
|---|---|---|---|---|
| 0 | Port **1** - Red | Ports **1** & **2**: Red | Ports **1** to **5**: Red | All ports: Red |
| 1 | Port **1** - Green | Ports **1** & **2**: Green | Ports **1** to **5**: Green | All ports: Green |
| 2 | Port **1** - Blue | Ports **1** & **2**: Blue | Ports **1** to **5**: Blue | All ports: Blue |
| 3 | Port **2** - Red | Ports **3** & **4**: Red | Ports **6** to **10**: Red | |
| 4 | Port **2** - Green | Ports **3** & **4**: Green | Ports **6** to **10**: Green | |
| 5 | Port **2** - Blue | Ports **3** & **4**: Blue | Ports **6** to **10**: Blue | |
| 6 | Port **3** - Red | Ports **5** & **6**: Red | | |
| 7 | Port **3** - Green | Ports **5** & **6**: Green | | |
| 8 | Port **3** - Blue | Ports **5** & **6**: Blue | | |
| 9 | Port **4** - Red | Ports **7** & **8**: Red | | |
| 10 | Port **4** - Green | Ports **7** & **8**: Green | | |
| 11 | Port **4** - Blue | Ports **7** & **8**: Blue | | |
| 12 | Port **5** - Red | Ports **9** & **10**: Red | | |
| 13 | Port **5** - Green | Ports **9** & **10**: Green | | |
| 14 | Port **5** - Blue | Ports **9** & **10**: Blue | | |
| 15 | Port **6** - Red | | | |
| 16 | Port **6** - Green | | | |
| 17 | Port **6** - Blue | | | |
| 18 | Port **7** - Red | | | |
| 19 | Port **7** - Green | | | |
| 20 | Port **7** - Blue | | | |
| 21 | Port **8** - Red | | | |
| 22 | Port **8** - Green | | | |
| 23 | Port **8** - Blue | | | |
| 24 | Port **9** - Red | | | |
| 25 | Port **9** - Green | | | |
| 26 | Port **9** - Blue | | | |
| 27 | Port **10** - Red | | | |
| 28 | Port **10** - Green | | | |
| 29 | Port **10** - Blue | | | |

## DMX or DALI address layout (for LOAD: WW+CW)

This chart shows how the channels of each port are distributed across the DMX or DALI addresses for each PIXEL setting when the LOAD is set to WW+CW (Warm White + Cold White). In each case add your chosen DMX or DALI base address to the number shown for each channel.

Note: *In **WW+CW** mode, for each port, the Warm White (WW) outputs are placed on the Red and Blue contacts while the Cold White (CW) outputs are placed on the Green and White contacts. Along with the dual V+ connections, this allows you to distribute multiple fixtures between the contacts, if required. The maximum port load of 6.6A and total maximum overall load of 33A for the whole AL Driver 800 must still be maintained.*

| Base address + | PIXEL: 020/M3 | PIXEL: 010/M2 | PIXEL: 004/M1 | PIXEL: 002/M0 |
|---|---|---|---|---|
| 0 | Port **1** - Warm | Ports **1** & **2**: Warm | Ports **1** to **5**: Warm | All ports: Warm |
| 1 | Port **1** - Cool | Ports **1** & **2**: Cool | Ports **1** to **5**: Cool | All ports: Cool |
| 2 | Port **2** - Warm | Ports **3** & **4**: Warm | Ports **6** to **10**: Warm | |
| 3 | Port **2** - Cool | Ports **3** & **4**: Cool | Ports **6** to **10**: Cool | |
| 4 | Port **3** - Warm | Ports **5** & **6**: Warm | | |
| 5 | Port **3** - Cool | Ports **5** & **6**: Cool | | |
| 6 | Port **4** - Warm | Ports **7** & **8**: Warm | | |
| 7 | Port **4** - Cool | Ports **7** & **8**: Cool | | |
| 8 | Port **5** - Warm | Ports **9** & **10**: Warm | | |
| 9 | Port **5** - Cool | Ports **9** & **10**: Cool | | |
| 10 | Port **6** - Warm | | | |
| 11 | Port **6** - Cool | | | |
| 12 | Port **7** - Warm | | | |
| 13 | Port **7** - Cool | | | |
| 14 | Port **8** - Warm | | | |
| 15 | Port **8** - Cool | | | |
| 16 | Port **9** - Warm | | | |
| 17 | Port **9** - Cool | | | |
| 18 | Port **10** - Warm | | | |
| 19 | Port **10** - Cool | | | |

## DMX or DALI address layout (for LOAD: WHITE)

This chart shows how the channels of each port are distributed across the DMX or DALI addresses for each PIXEL setting when the LOAD is set to WHITE. In each case add your chosen DMX or DALI base address to the number shown for each channel.

Note: *In **WHITE** mode, for each port, the White outputs are placed on all of the contacts (Red, Green, Blue and White). Along with the dual V+ connections, this allows you to distribute multiple fixtures between the contacts, if required. The maximum port load of 6.6A and total maximum overall load of 33A for the whole AL Driver 800 must still be maintained.*

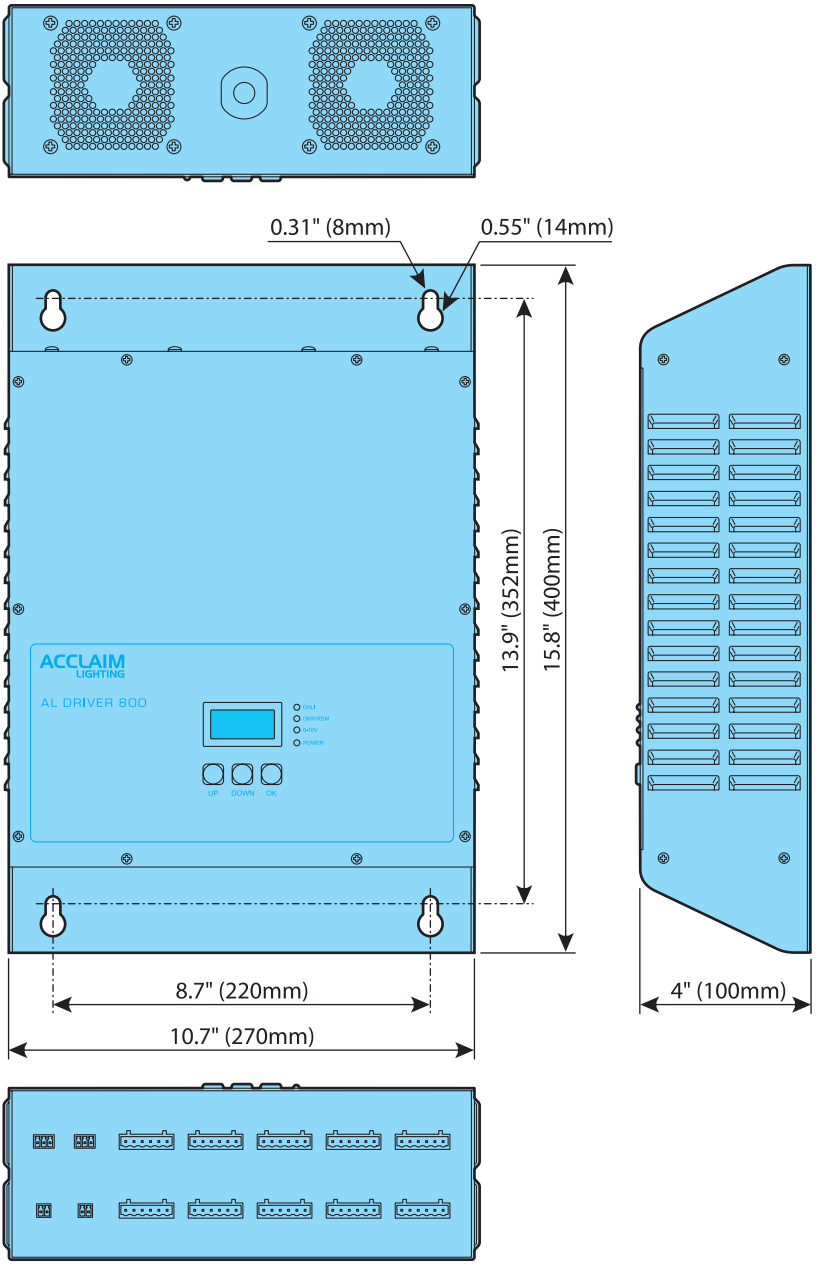
| Base address + | PIXEL: 010/M3 | PIXEL: 005/M2 | PIXEL: 002/M1 | PIXEL: 001/M0 |
|---|---|---|---|---|
| 0 | Port **1** - White | Ports **1** & **2**: White | Ports **1** to **5**: White | All ports: White |
| 1 | Port **2** - White | Ports **3** & **4**: White | Ports **6** to **10**: White | |
| 2 | Port **3** - White | Ports **5** & **6**: White | | |
| 3 | Port **4** - White | Ports **7** & **8**: White | | |
| 4 | Port **5** - White | Ports **9** & **10**: White | | |
| 5 | Port **6** - White | | | |
| 6 | Port **7** - White | | | |
| 7 | Port **8** - White | | | |
| 8 | Port **9** - White | | | |
| 9 | Port **10** - White | | | |

# Further information

## AL Driver 800 specifications

| | |
|---|---|
| Control input protocols | DMX (RDM), DALI, 0-10V (source only) |
| Control output protocol | Pulse width modulation (PWM) |
| Input voltage | 100 to 277VAC (50/60Hz) - auto sensing |
| Input power consumption | 12W at standby<br>900W maximum at steady state |
| Inrush current: | 10A (at 120VAC) |
| Output voltage | 12VDC or 24VDC models |
| Output wattage | 800W (2 x 400W) |
| Output ports | 10 |
| DC output current | 6.6A maximum per port, 33A maximum in total |
| Connectors | 10 x 6-pin terminals for output ports<br>2 x 3-pin terminals for DMX input and output<br>1 x 2-pin terminal for DALI input<br>1 x 2-pin terminal for 0-10V input |
| Dimensions (W x H x L) | 10.7" x 15.8" x 4'<br>270 x 400 x 100mm |
| Weight | 14.4 lbs<br>6.5 kg |
| Operating temperature | 14°F to 113°F<br>-10°C to 45°C |
| Housing | Black powder-coated steel |
| IP rating | IP22, indoor dry location |
| Certifications | ETL LISTED C US, CE, RoHS |

## Dimensions


0.31" (8mm)
0.55" (14mm)
13.9" (352mm)
15.8" (400mm)
ACCLAIM
LIGHTING
AL DRIVER 800
UP
DOWN
OK
8.7" (220mm)
10.7" (270mm)
4" (100mm)

## Limited product warranty

A. Acclaim Lighting™ hereby warrants, to the original purchaser, Acclaim Lighting finished products to be free of manufacturing defects in material and workmanship for a standard period of:

- Fixtures: 5 Years (1,825 days) from the date of purchase.
- Drivers, power supplies and accessories: 5 Years (1,825 days) from the date of purchase.
- Flex Products: 3 Years (1,095 days) from the date of purchase.
- Controllers: 2 Years (730 days) from the date of purchase.

It is the owner's responsibility to establish the date and place of purchase and warranty terms by acceptable evidence, at the time service is sought.

B. For warranty service, send the product only to the Acclaim factory. All shipping charges must be pre-paid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, Acclaim Lighting will pay return shipping charges only to a designated point within the United States. If the entire instrument is sent, it must be shipped in its original package. No accessories should be shipped with the product. If any accessories are shipped with the product, Acclaim Lighting shall have no liability whatsoever for loss of or damage to any such accessories, nor for the safe return there of. Acclaim reserves the right to replace the item with same or similar product at its discretion.

C. This warranty is void if the serial number has been altered or removed; if the product is modified in any manner which Acclaim concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the Acclaim Lighting factory unless prior written authorization was issued to purchaser by Acclaim Lighting; if the product is damaged because not properly maintained as set forth in the instruction manual.

D. This is not a service contract, and this warranty does not include maintenance, cleaning or periodic check-up nor do we guarantee as part of this warranty any lumen performance during period. Parts not covered by this warranty include: fuses, external power supplies, third party items not manufactures by Acclaim lighting. During the period specified above, Acclaim Lighting will replace defective parts at its expense, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of Acclaim Lighting under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of Acclaim Lighting. At no time will installation or re-installation or products labor or liability costs will be assumed by Acclaim Lighting. All products covered by this warranty were manufactured after January 1, 2012, and bear identifying serial number marks to that effect.

E. Acclaim Lighting reserves the right to make changes in design and/or improvements upon its products without any obligation to include these changes in any products theretofore manufactured No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products describe above. Except to the extent prohibited by applicable law, all implied warranties made by Acclaim Lighting in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired.

F. Marine or extreme weather location applications using Acclaim lighting products are subject to a 2 year limited warranty and Acclaim must be notified prior to delivery of units for such applications so that preventative treatment can be made to the products to ensure proper performance and product life with a special marine code coating / sealing process at an additional cost.

G. The consumer's and or dealer's sole remedy shall be such repair or replacement as is expressly provide above; and under no circumstances shall Acclaim Lighting be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product. This warranty is the only written warranty applicable to Acclaim Lighting products and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

www.acclaimlighting.com