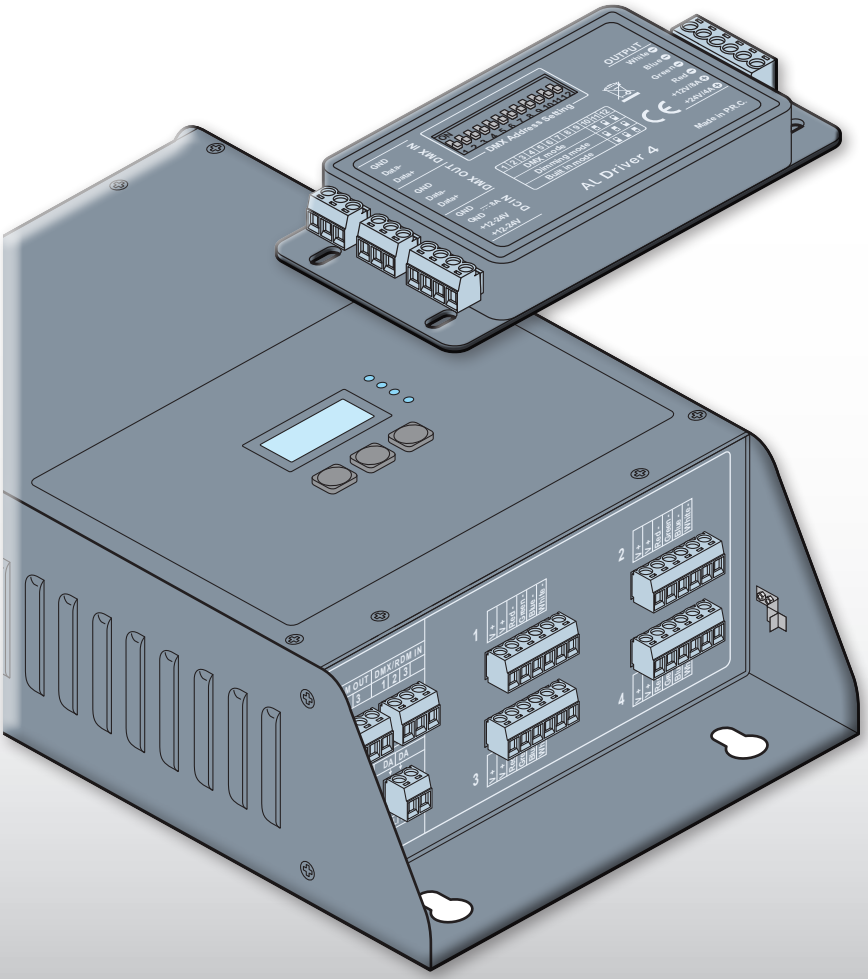
Acclaim™



AL Driver C2 Series™

User guide

Contents

Introduction

Welcome

Welcome to the AL Driver series from Acclaim Lighting, a comprehensive range of constant voltage drivers which support a variety of LED fixture types: RGBW, RGB, Ai Dim, single color or Dynamic White. The entry level to the range is fulfilled by the highly compact AL Driver 1 with its single-port to drive one-color LED tapes. The AL Driver 4 is also a compact single-port unit but with the ability to drive RGB or RGBW tapes. The AL Driver 200, 400 and 800 offer a considerable step up in capacity as they feature integral power supplies and offer multiple ports which can be configured to support a range of 24VDC LED fixture types.

The multiple ports of the AL Driver 200, 400 and 800 units can either operate in unison or you can control them individually. To suit your installation, these AL Driver models can accept control inputs in the digital formats: DMX or DALI; or alternatively in the analog formats 0-10V (current source) or 1-10V (current sink). AL Driver 1 units also support DMX plus 0-10V/1-10V, while the AL Driver 4 accepts DMX only.

The AL Driver 200, 400 and 800 units allow you to choose between 8-bit and 16-bit control, with the latter allowing much finer control over the dimming of each color by using dual 8-bit DMX channels instead of the single channels used in standard mode. This results in dimming resolutions being raised from the usual 256 steps to a considerable 65,536 steps.

Additionally, you can use all AL Drivers independently of any external control. Depending on the model, they can create static color mixes, set dimming levels for single color or apply dynamic chase patterns. On AL Driver 200, 400 and 800 models, a clear LCD display and three buttons allow you to navigate the internal menu system; plus these models also support RDM (Remote Device Management) so that basic features can be remotely configured.

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 1, 200, 400 and 800 models support both variants.*

Safety

- Ensure that the power input is supplied from a correctly fused, earthed and environmentally protected location.

Maintenance

CAUTION: Always isolate mains power before starting maintenance operations.

- Ensure that all mounting (and device) screws/bolts are fully tight and free of corrosion.
- Ensure there is no deformation to the housing, lenses or fixing points.
- Check that all power supply cables are free from physical damage or material fatigue.
- Use only genuine spare parts supplied by Acclaim Lighting.

Cleaning

- Use a moist, lint-free cloth when cleaning each fixture.
- Never use alcohol or solvents.

Installation

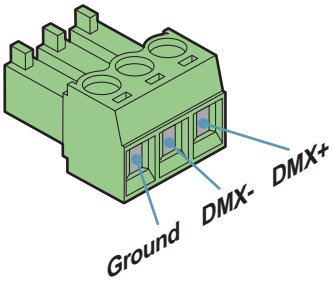
The majority of this guide covers the multi-port **AL Driver 200**, **AL Driver 400** and **AL Driver 800** models. For details about the single port **AL Driver 1** and **AL Driver 4** models, please see pages 9 and 11 respectively.

Input connections

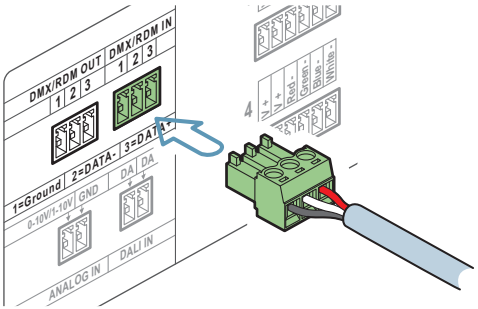
AL Drivers can be controlled by any of four external signal types: DMX, DALI, 1-10V or 0-10V. DMX and DALI are digital signals that allow multiple channels to be addressed; 0-10V and 1-10V are analog signals that can control one channel only (all outputs will respond equally when 0-10V/1-10V modes are used).

DMX

AL Drivers have 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.



DMX cable recommendations

- Indoor exposed or inside conduit above grade: Belden 9842
- Indoor plenum: Belden 82842
- Outdoor exposed, direct burial, or inside conduit below grade: Belden 3107DB

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.

DMX cable preparation

1 Strip away roughly 3" (75mm) of the outer cable coating.

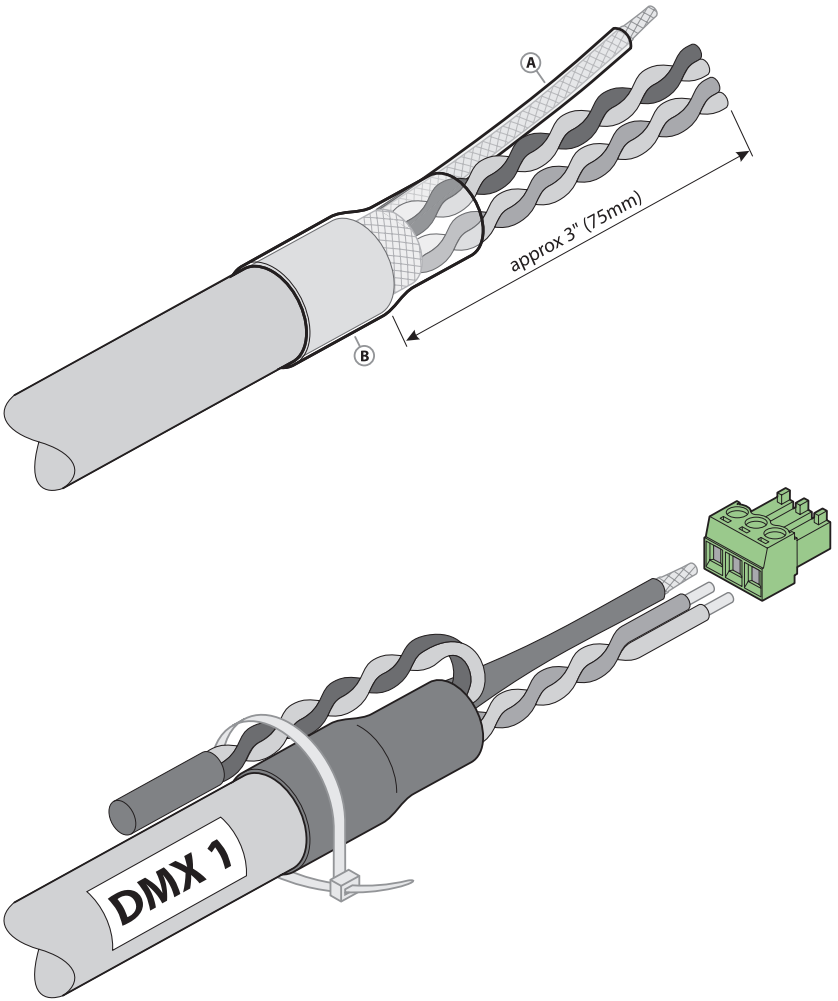
2 Prep the ground wire:

- If the cable has a bare drain wire in addition to foil or braided shielding, cut away the shielding and leave the drain wire intact.
- If there is no drain wire, unravel the braided (or foil) shielding and then twist it into a usable ground connection.

3 Apply thin heat shrink tubing (**A**) to the full length of the twisted shield (or drain wire) so that only about 3/8"(10mm) is exposed at the end.

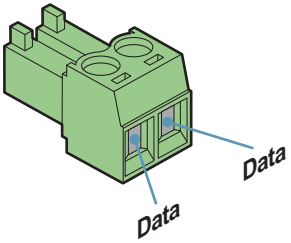
4 Apply a 2" (50mm) length of 3/8" (10mm) heat shrink (**B**) and center it over the end of the outer cable coating where the individual wires emerge.

5 If the cable has two sets of twisted pairs, cap the unused pair with heat shrink and then use a cable tie to secure the pair back onto the main cable.

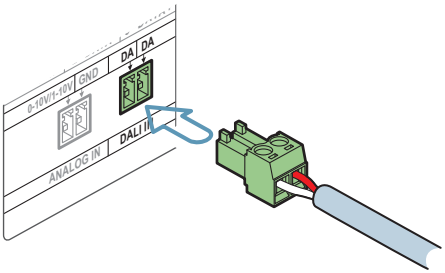


DALI

AL Drivers have 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:

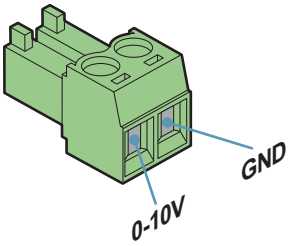


Insert the terminal block into the **DALI IN** socket and ensure that it fully clicks into place.

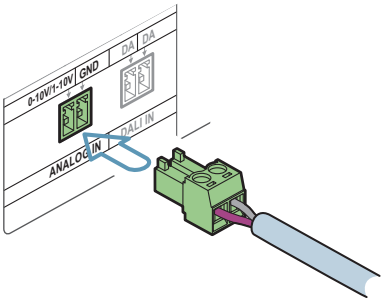


0-10V and 1-10V

AL Drivers have a single analog input port 0-10V or 1-10V (current sink or source - 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.



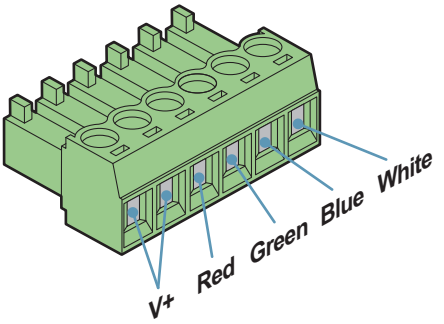
Output port connections

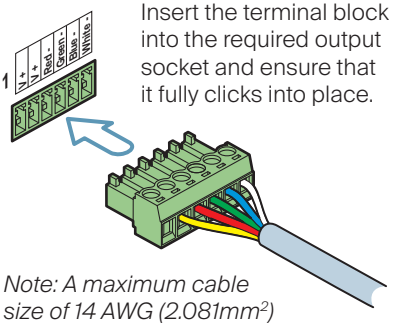
AL Drivers have multiple constant voltage output ports, each of which uses a 6-pin terminal block. The output ports use a common anode supply and there are two V+ contacts to assist with multiple fixture connections (the two contacts are joined internally so either or both can be used, as required).

Each port can support a maximum of **4A**.

However, the maximum overall load across all ports must not exceed the following:

- AL Driver 200 **8A**
- AL Driver 400 **16.5A**
- AL Driver 800 **33A**





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

Note: A maximum cable size of 14 AWG (2.081mm²) can be used directly within the terminal block contacts.

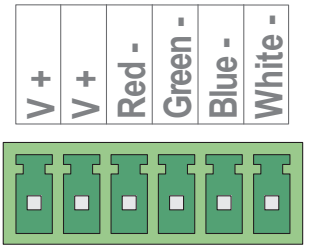
Overload protection

The AL Driver C2 series benefits from electronic output regulation. If more than 4A is detected on any single port, the red Power indicator will blink three times while the display shows **Output Overload**, and will then shutoff in order to protect the driver and connected fixture(s).

Output port control

The manner in which the various ports are grouped and operate is determined primarily by three important menu settings:

- **MODE** - determines the control method: DMX, DALI, 0-10V, etc. (page 19)
- **CHANNEL** - determines how ports are assigned to the control method (pgs 21 to 23)
- **LOAD** - determines the functions of each contact on every port (pages 21 to 23):



LOAD = **RGB**	V+	V+	Red	Green	Blue	
LOAD = **RGBW**	V+	V+	Red	Green	Blue	White
LOAD = **AID**	V+	V+	W1	W2	W3	W4
LOAD = **DW**	V+	V+	Warm	Cold	Warm	Cold
LOAD = **WHITE**	V+	V+	White	White	White	White

Notes:

- *Whichever LOAD-type is chosen, that setting will be applied globally to all ports. For example, it is not possible to choose Ai Dim operation for some ports and RGBW for others.*
- *The maximum **4A** load limit for each port (and the maximum overall load for the whole device) must not be exceeded.*
- *In AID (Ai Dim) mode, the W1 to W4 connections align with the four marked wires of products such as Ai Flex.*

Output port 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 ratings):

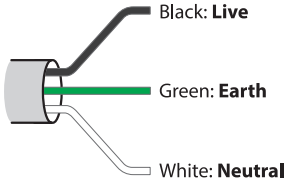
Conductor size

- 18 AWG (0.823mm^2) Up to 40 feet (12m)
- 14 AWG (2.081mm^2) Up to 100 feet (30.4m)

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

Input 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

AL Driver 200, 400 and 800 models operate from supplies in the range: 100-277VAC 50/60Hz

Power consumption:

- **AL Driver 200**: 230W maximum
- **AL Driver 400**: 480W maximum
- **AL Driver 800**: 960W maximum

In-rush current

The AL Driver 200, 400 and 800 models use 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.

Mounting

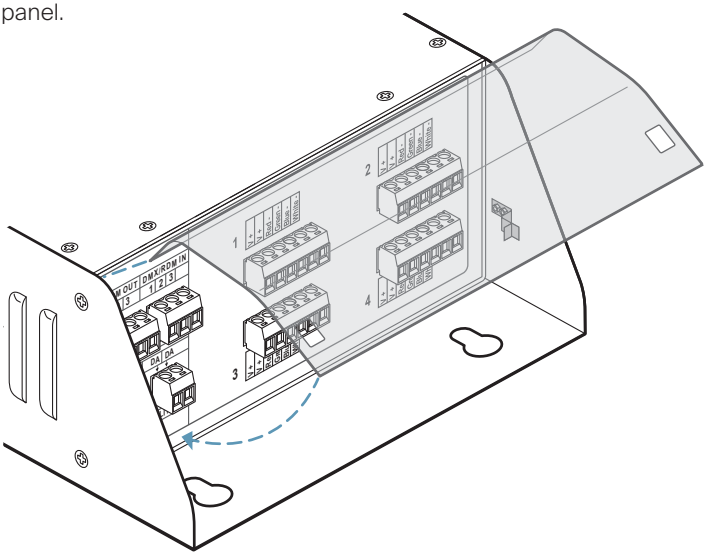
The AL Driver 200, 400 and 800 models can be wall mounted either vertically (with the output connectors facing downwards) or horizontally as required. Four slotted holes (Ø 0.55"/14mm leading to Ø 0.31"/8mm) are built into the backplane for mounting purposes.

Connector cover

Each AL Driver unit is supplied with a transparent plastic cover to provide protection to the control inputs and port output connections.

To fit the connector cover

1 Insert the angled upper lip of the cover into the slot at the top of the connector panel.

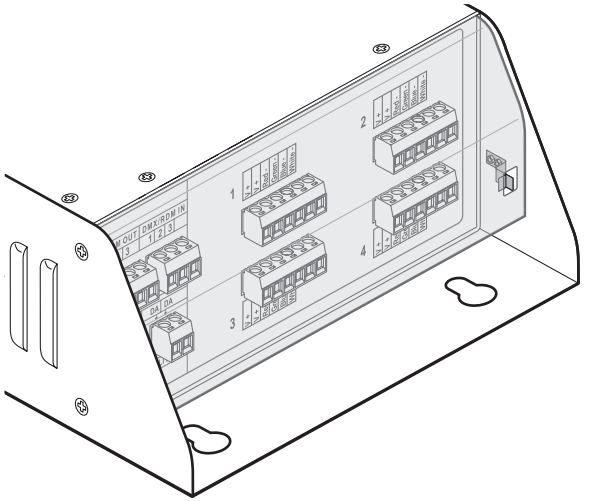


2 Lower the lower edge of the cover down so that the two holes align with the two clips located on the driver side walls.

3 Carefully clip the cover into place.

To remove the connector cover

1 Carefully release the two clips and swing the lower edge of the cover up.



2 Disengage the upper lip of the cover from the AL Driver frame.

AL Driver 1

The AL Driver 1 module controls one circuit of single color LED tape, either under control of an external DMX digital signal, an external 0-10V/1-10V analog signal or using standalone intensity mixes. The AL Driver 1 is a constant voltage device and can operate from DC power supplies ranging from 6 to 24VDC (5A maximum); the controlled LED tape must be compatible with the voltage level being fed to AL Driver 1.

Connections

*Note: The DMX and analog (0-10V/1-10V) inputs are both active when switch 10 is set to ON, so it is important that only one set of inputs are connected at any one time: either DMX **OR** analog.*

DMX control

See page 3 for tips on successfully using DMX.

DMX IN: GND, Data -, Data +

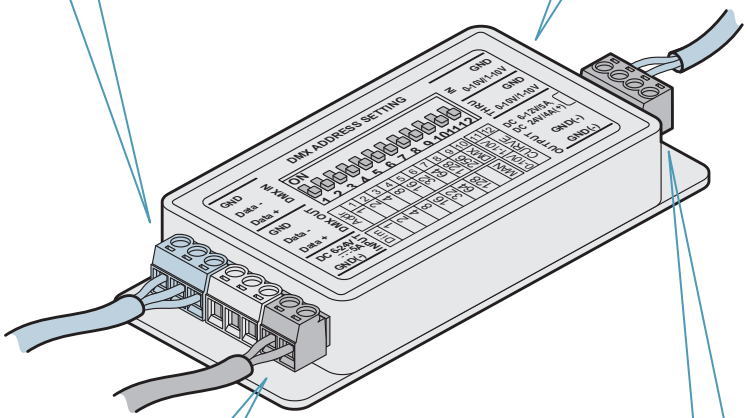
DMX OUT: GND, Data -, Data +

0-10V/1-10V control

The module supports 1-10V current sink (passive) or 0-10V current source (active) analog control inputs - see page 10 about the setting of switch 11. The *Thru* contacts allow for daisy chaining of drivers.

IN: GND, 0-10V/1-10V

THRU: GND, 0-10V/1-10V



Power input

The module requires a DC power input in the range 6 to 24VDC.

DC 6-24V ⎓ 5A INPUT

GND(-)

5A max.

Output to LEDs

Ensure that voltage rating of the LED device to be connected matches that of the supply voltage used by the module. You can use either of the + terminals.

OUTPUT: DC 6-12V/5A, DC 24V/4A(+), GND(-), GND(-)

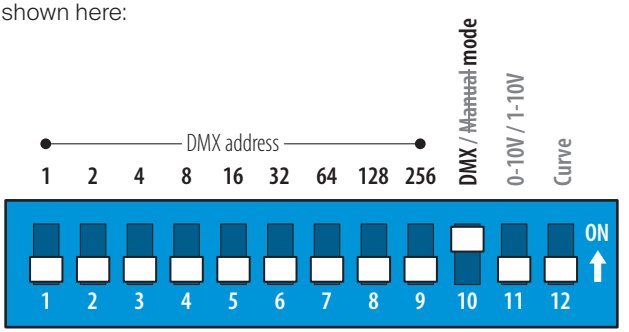
Configuration

The AL Driver 1 is configured using its 12 way switch block. The two main modes of operation are external control or standalone dimming.

External control

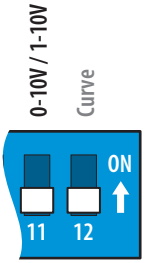
To select external control, ensure that switch 10 is ON. *Note: The DMX and analog (0-10V/1-10V) inputs are both active in this mode, so it is important that only one set of inputs are connected at any one time: either DMX* ***OR*** *analog.* When DMX is used, switches 1 to 9 are then used to set the DMX start address. Switches 1 to 9 are 'weighted' with a value as shown here:

Note: Numerous apps are available to assist you with configuring the correct switch combinations for a given DMX address.



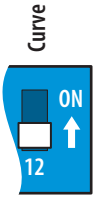
0-10V / 1-10V selection

Using switch 11, you can choose between 0-10V current source (active) or 1-10V current sink (passive) control inputs. 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.



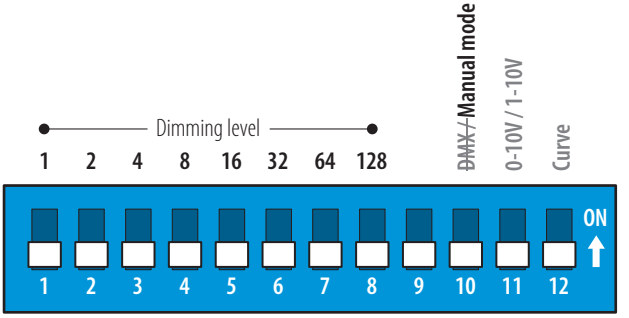
Optional curve smoothing

When switch 12 is set to ON, additional intermediate steps are added to the response curve to help eradicate any visible stepping between the usual 256 (8-bit) dimming levels.



Standalone dimming

To select standalone dimming, ensure that switch 10 is OFF. Switches 1 to 8 are then used to set the overall dimming level: 0 to 255 (100%).



AL Driver 4

The AL Driver 4 module controls a single circuit of RGB or RGBW LED tape, either under control of an external DMX signal or using standalone color mixes or chase patterns. The AL Driver 4 is a constant voltage device and can operate from DC power supplies ranging from 12 to 24VDC; the controlled LED tape must be compatible with the voltage level being fed to AL Driver 4.

Note: AL Driver 4 is not able to provide the progressive dimming patterns required by Ai Dim products such as Ai Flex tape - use AL Driver 200, 400 or 800 for Ai Dim devices.

Connections

Control input

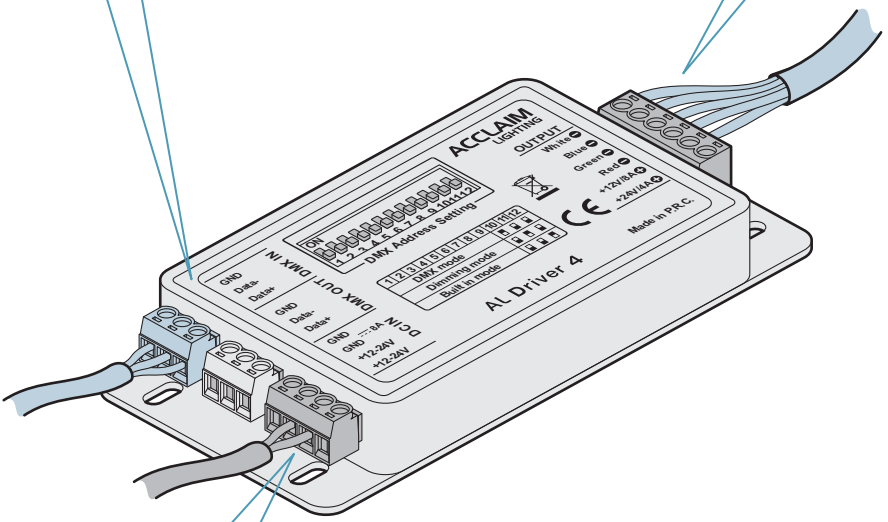
See page 3 for tips on successfully using DMX.

GND	DMX IN
Data-	
Data+	
GND	DMX OUT
Data-	
Data+	

Output to LEDs

The module output uses a common anode. Ensure that voltage rating of the LED device to be connected matches that of the supply voltage used by the module. You can use either of the + terminals.

OUTPUT
White ⊖
Blue ⊖
Green ⊖
Red ⊖
+12V/8A ⊕
+24V/4A ⊕



Power input

The module requires a DC power input in the range 12 to 24VDC. At 12V, the maximum permissible draw by the load is 8A (and requirement from the power supply), whereas at 24V, the maximum is 4A. You can use either or both pairs of GND and V+ terminals.

GND	DC IN
GND ⎓ 8A	
+12-24V	
+12-24V	

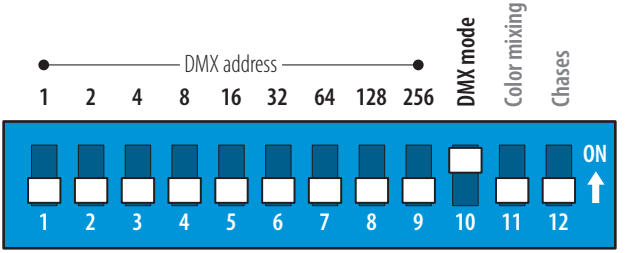
Configuration

The AL Driver 4 is configured using its 12 way switch block. The three modes of operation are external DMX control, standalone color mixing or standalone chases.

DMX control

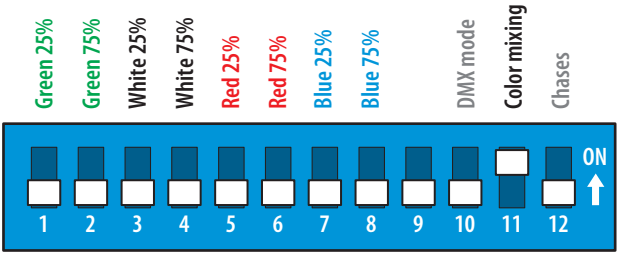
To select DMX control, ensure that switch 10 is ON, while 11 and 12 are OFF. Switches 1 to 9 are then used to set the DMX start address. Switches 1 to 9 are 'weighted' with a value as shown here:

Note: Numerous apps are available to assist you with configuring the correct switch combinations for a given DMX address.



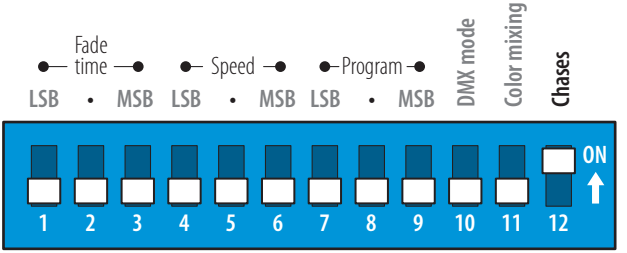
Standalone color mixing

To select standalone color mixing, ensure that switch 11 is ON, while 10 and 12 are OFF. Switches 1 to 8 are then used to set the overall color mix. If both the 25% and 75% switches for any one color are set to ON, that color will be shown at 100%:



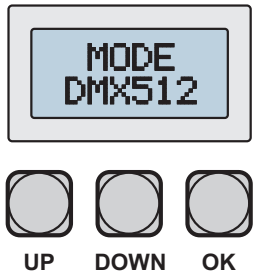
Standalone chases

To select standalone chases, ensure that switch 12 is ON, while 10 and 11 are OFF. Switches 1 to 3 select the *Fade time* (0 to 100%); switches 4 to 6 adjust the *Speed* (0 to 30s) and 7 to 9 select the *Chase program* (9 chases).



Operation (200/400/800)

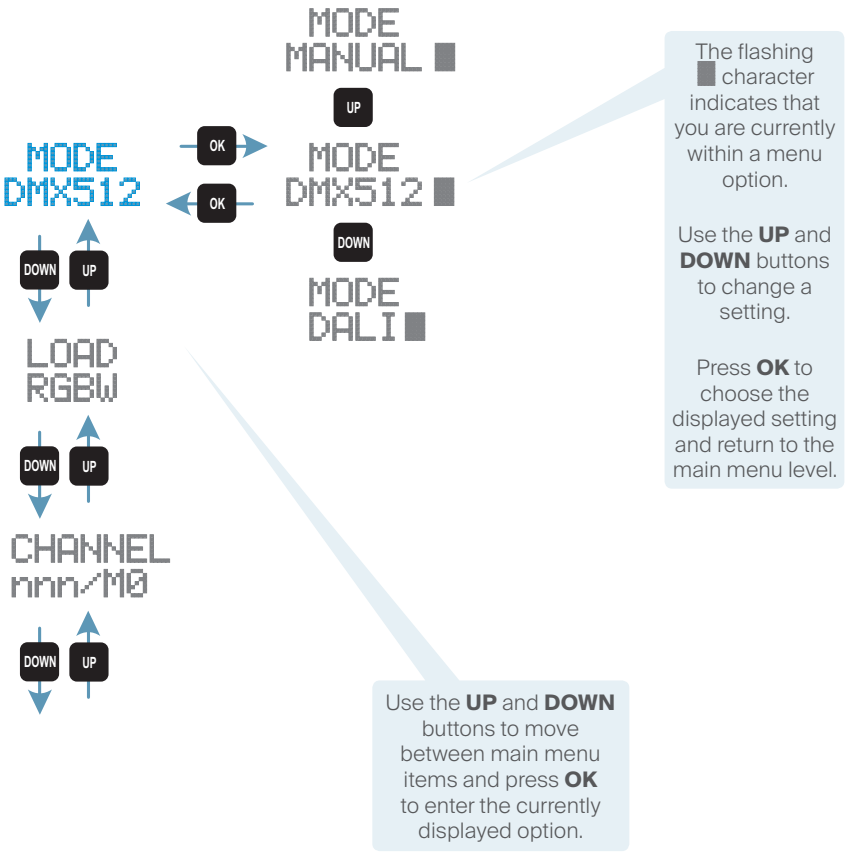
AL Drivers begin operating as soon as power is applied, there are no power switches.



Menu navigation

Use the three control buttons to navigate around the menu and alter settings as necessary. The display has a backlight timeout and will go dark roughly 30 seconds after the last button press - tap any key to restore.

The exact options available within the menu will alter depending on the setting of the ***MODE*** option (see page 19) in order to provide relevant options. The next four pages list the main menu items for each of the ***MODE*** settings.



Overload protection

The AL Driver C2 series benefits from electronic output regulation. If more than 4A is detected on any single port, the red Power indicator will blink three times while the display shows **Output Overload**, and will then shutoff in order to protect the driver and connected fixture(s).

Main menu items (when MODE set to DMX512)

Determines the control method to be used. Options are: DMX512, DALI, 1-10V, 0-10V, MANUAL and AUTO. See page 19.

Selects the nature of the LED loads that will be placed on the output ports: Options are RGB, RGBW, AID, WHITE and DW (with 8- and 16-bit versions of each). See pages 21 to 23.

Determines how the output ports should be distributed between the chosen DMX address range. See page 20.

Allows you to set the DMX start address. The total number of DMX channels required depends on a combination of the LOAD and CHANNEL settings. See page 20.

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).

If the OK button is pressed, the logged maximum and minimum temperature levels are cleared.

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

Main menu items (when MODE set to DALI)

Determines the control method to be used. Options are: DMX512, DALI, 1-10V, 0-10V, MANUAL and AUTO. See page 19.

Selects the nature of the LED loads that will be placed on the output ports: Options are RGB, RGBW, AID, WHITE and DW (with 8- and 16-bit versions of each). See pages 21 to 23.

Determines how the output ports should be distributed between the chosen DMX address range. See page 20.

Allows you to set the DMX start address. The total number of DMX channels required depends on a combination of the LOAD and CHANNEL settings. See page 20.

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).

If the OK button is pressed, the logged maximum and minimum temperature levels are cleared.

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

Main menu items (when MODE set to 0-10V or 1-10V)

Determines the control method to be used. Options are: DMX512, DALI, 1-10V, 0-10V, MANUAL and AUTO. See page 19.

Selects the nature of the LED loads that will be placed on the output ports: Options are WHITE, AID and DW. See pages 21 to 23.

Displays the current status of the 0-10V (or 1-10V) 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).

If the OK button is pressed, the logged maximum and minimum temperature levels are cleared.

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

Note: In the 0-10V and 1-10V modes, all ports react in the same way to the single control input signal.

Main menu items (when MODE set to MANUAL)

Determines the control method to be used. Other options are: DMX512, DALI, 1-10V, 0-10V, and AUTO. See page 19.

Selects the nature of the LED loads that will be placed on the output ports: Options are RGB, RGBW, AID, WHITE and DW. See page 24.

Determines the intensity of the RED channel*. See page 24.

Determines the intensity of the GREEN channel*. See page 24.

Determines the intensity of the BLUE channel*. See page 24.

Determines the intensity of the WHITE channel*. See page 24.

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).

If the OK button is pressed, the logged maximum and minimum temperature levels are cleared.

Displays the current internal temperature of the driver (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, 1-10V, 0-10V and MANUAL. See page 19.

Selects the nature of the LED loads that will be placed on the output ports: Options are RGB, RGBW, Ai Dim, WHITE and DW. See page 24.

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 25.

Determines the speed of the chase. See page 25.

Determines the crossfade time between the steps of each chase pattern. See page 25.

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).

If the OK button is pressed, the logged maximum and minimum temperature levels are cleared.

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

Choosing a control mode

AL Driver 200/400/800 models have six 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.
- **1-10V** - Outputs (for all ports combined) are determined by the 1-10V signal received at the ANALOG IN connector.
- **0-10V** - Outputs (for 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 24.
- **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 25.

Note: The control mode and the DMX address 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, 1-10V, 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 a base address (DMX and DALI)

When DMX or DALI control modes are chosen, you need to set a base address from which the AL Driver 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 CHANNEL settings (see pages 21 to 23).

Notes:

- *In DMX mode, if a 16-bit load option is chosen (eg RGB16B, RGBW16B, AID16B, etc), then twice as many 8-bit control channels will be required.*
- *The control mode and the DMX address for the AL Driver 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. See page 19 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.

4 You also need to configure the LOAD and CHANNEL settings, see below.

Note: Pages 28 to 36 show you exactly how the channels of each port are distributed across the DMX or DALI addresses for each LOAD and CHANNEL combination.

Choosing the load and channel settings (DMX and DALI)

When DMX or DALI control modes are chosen, you need to inform the AL Driver what kind of loads are attached to the output ports and how the incoming control channels should be applied to them.

To choose the channel and LOAD settings

1 Choose either the **DMX512** or **DALI** menu options. See page 19 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, AID, WHITE* and *DW*. Press the **OK** button to select the one that matches your connected fixture type. See pages 21 to 23.

Note: In DMX mode, the LOAD types also have 8B and 16B suffix options - these choose between 8-bit and 16-bit control respectively; the latter requiring two DMX channels per color (the first byte of each dual channel is always the most significant (high) byte).

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

5 Use the **UP** and **DOWN** buttons to change between the various *CHANNEL* groupings: *xx/M0, xx/M1, xx/M2* and *xx/M3*. *Where xx is the stated total number of addresses that are required to control all of the ports (these stated totals change dynamically depending on the chosen LOAD setting).*

6 Press the **OK** button to select the required channel grouping.

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

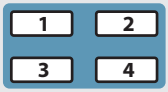
Note: Pages 28 to 36 show you exactly how the channels of each port are distributed across the DMX or DALI addresses for each LOAD and CHANNEL combination.

AL Driver 200 - Load and Channel settings (DMX and DALI)

When either the *DMX* or *DALI* modes are selected, you can determine how the four ports are grouped and applied to the control addresses using the CHANNEL setting. Together with the LOAD setting (which determines how the contacts of each port are used: RGB, RGBW, AID, WHITE, DW, etc. as well as whether 8- or 16-bit addressing is used for DMX mode), these key settings determine the total number of control addresses required. See page 20 for details about choosing the channel and load settings.

CHANNEL: M00

Combines all of the ports into a single set of addresses:



8-bit addressing

LOAD:	CHANNEL:	Total addresses
RGBW8B	04/M00	**4** addresses
RGB8B	03/M00	**3** addresses
AID8B	01/M00	**1** address
WHITE8B	01/M00	**1** address
DW8B	01/M00	**1** address

16-bit addressing (DMX only)

LOAD:	CHANNEL:	Total addresses
RGBW16B	08/M00	**8** addresses
RGB16B	06/M00	**6** addresses
AID16B	02/M00	**2** addresses
WHITE16B	02/M00	**2** addresses
DW16B	02/M00	**2** addresses

CHANNEL: M01

Arranges the ports into two sets of addresses:

8-bit addressing

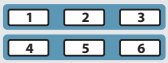
LOAD:	CHANNEL:	Total addresses
RGBW8B	08/M01	**8** addresses
RGB8B	06/M01	**6** addresses
AID8B	02/M01	**2** addresses
WHITE8B	02/M01	**2** addresses
DW8B	02/M01	**2** addresses

16-bit addressing (DMX only)

LOAD:	CHANNEL:	Total addresses
RGBW16B	16/M01	**16** addresses
RGB16B	12/M01	**12** addresses
AID16B	04/M01	**4** addresses
WHITE16B	04/M01	**4** addresses
DW16B	04/M01	**4** addresses

CHANNEL: M02

Treats all of the ports individually, requiring four separate sets of addresses:



8-bit addressing

LOAD:	CHANNEL:	Total addresses
RGBW8B	16/M02	**16** addresses
RGB8B	12/M02	**12** addresses
AID8B	04/M02	**4** addresses
WHITE8B	04/M02	**4** addresses
DW8B	04/M02	**4** addresses

16-bit addressing (DMX only)

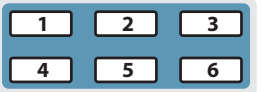
LOAD:	CHANNEL:	Total addresses
RGBW16B	32/M02	**32** addresses
RGB16B	24/M02	**24** addresses
AID16B	08/M02	**8** addresses
WHITE16B	08/M02	**8** addresses
DW16B	08/M02	**8** addresses

AL Driver 400 - Load and Channel settings (DMX and DALI)

When either the *DMX* or *DALI* modes are selected, you can determine how the six ports are grouped and applied to the control addresses using the CHANNEL setting. Together with the LOAD setting (which determines how the contacts of each port are used: RGB, RGBW, AID, WHITE, DW, etc. as well as whether 8- or 16-bit addressing is used for DMX mode), these key settings determine the total number of control addresses required. See page 20 for details about choosing the channel and load settings.

CHANNEL: M00

Combines all of the ports into a single set of addresses:



8-bit addressing

LOAD:	CHANNEL:	Total addresses
RGBW8B	04/M00	**4** addresses
RGB8B	03/M00	**3** addresses
AID8B	01/M00	**1** address
WHITE8B	01/M00	**1** address
DW8B	01/M00	**1** address

16-bit addressing (DMX only)

LOAD:	CHANNEL:	Total addresses
RGBW16B	08/M00	**8** addresses
RGB16B	06/M00	**6** addresses
AID16B	02/M00	**2** addresses
WHITE16B	02/M00	**2** addresses
DW16B	02/M00	**2** addresses

CHANNEL: M01

Arranges the ports into two sets of addresses:

8-bit addressing

LOAD:	CHANNEL:	Total addresses
RGBW8B	08/M01	**8** addresses
RGB8B	06/M01	**6** addresses
AID8B	02/M01	**2** addresses
WHITE8B	02/M01	**2** addresses
DW8B	02/M01	**2** addresses

16-bit addressing (DMX only)

LOAD:	CHANNEL:	Total addresses
RGBW16B	16/M01	**16** addresses
RGB16B	12/M01	**12** addresses
AID16B	04/M01	**4** addresses
WHITE16B	04/M01	**4** addresses
DW16B	04/M01	**4** addresses

CHANNEL: M02

Creates pairs of ports, requiring three sets of addresses:

8-bit addressing

LOAD:	CHANNEL:	Total addresses
RGBW8B	12/M02	**12** addresses
RGB8B	09/M02	**9** addresses
AID8B	03/M02	**3** addresses
WHITE8B	03/M02	**3** addresses
DW8B	03/M02	**3** addresses

16-bit addressing (DMX only)

LOAD:	CHANNEL:	Total addresses
RGBW16B	24/M02	**24** addresses
RGB16B	18/M02	**18** addresses
AID16B	06/M02	**6** addresses
WHITE16B	06/M02	**6** addresses
DW16B	06/M02	**6** addresses

CHANNEL: M03

Treats all of the ports individually, requiring six separate sets of addresses:

8-bit addressing

LOAD:	CHANNEL:	Total addresses
RGBW8B	24/M03	**24** addresses
RGB8B	18/M03	**18** addresses
AID8B	6/M03	**6** addresses
WHITE8B	6/M03	**6** addresses
DW8B	6/M03	**6** addresses

16-bit addressing (DMX only)

LOAD:	CHANNEL:	Total addresses
RGBW16B	48/M03	**48** addresses
RGB16B	36/M03	**36** addresses
AID16B	12/M03	**12** addresses
WHITE16B	12/M03	**12** addresses
DW16B	12/M03	**12** addresses

AL Driver 800 - Load and Channel settings (DMX and DALI)

When either the *DMX* or *DALI* modes are selected, you can determine how the ten ports are grouped and applied to the control addresses using the CHANNEL setting. Together with the LOAD setting (which determines how the contacts of each port are used: RGB, RGBW, AID, WHITE, DW, etc. as well as whether 8- or 16-bit addressing is used for DMX mode), these key settings determine the total number of control addresses required. See page 20 for details about choosing the channel and load settings.

CHANNEL: M00

Combines all of the ports into a single set of addresses:

8-bit addressing

LOAD:	CHANNEL:	Total addresses
RGBW8B	04/M00	**4** addresses
RGB8B	03/M00	**3** addresses
AID8B	01/M00	**1** address
WHITE8B	01/M00	**1** address
DW8B	01/M00	**1** address

16-bit addressing (DMX only)

LOAD:	CHANNEL:	Total addresses
RGBW16B	08/M00	**8** addresses
RGB16B	06/M00	**6** addresses
AID16B	02/M00	**2** addresses
WHITE16B	02/M00	**2** addresses
DW16B	02/M00	**2** addresses

CHANNEL: M01

Arranges the ports into two sets of addresses:

8-bit addressing

LOAD:	CHANNEL:	Total addresses
RGBW8B	08/M01	**8** addresses
RGB8B	06/M01	**6** addresses
AID8B	02/M01	**2** addresses
WHITE8B	02/M01	**2** addresses
DW8B	02/M01	**2** addresses

16-bit addressing (DMX only)

LOAD:	CHANNEL:	Total addresses
RGBW16B	16/M01	**16** addresses
RGB16B	12/M01	**12** addresses
AID16B	04/M01	**4** addresses
WHITE16B	04/M01	**4** addresses
DW16B	04/M01	**4** addresses

CHANNEL: M02

Creates pairs of ports, requiring five sets of addresses:

8-bit addressing

LOAD:	CHANNEL:	Total addresses
RGBW8B	20/M02	**20** addresses
RGB8B	15/M02	**15** addresses
AID8B	05/M02	**5** addresses
WHITE8B	05/M02	**5** addresses
DW8B	05/M02	**5** addresses

16-bit addressing (DMX only)

LOAD:	CHANNEL:	Total addresses
RGBW16B	40/M02	**40** addresses
RGB16B	30/M02	**30** addresses
AID16B	10/M02	**10** addresses
WHITE16B	10/M02	**10** addresses
DW16B	10/M02	**10** addresses

CHANNEL: M03

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

8-bit addressing

LOAD:	CHANNEL:	Total addresses
RGBW8B	40/M03	**40** addresses
RGB8B	30/M03	**30** addresses
AID8B	10/M03	**10** addresses
WHITE8B	10/M03	**10** addresses
DW8B	10/M03	**10** addresses

16-bit addressing (DMX only)

LOAD:	CHANNEL:	Total addresses
RGBW16B	80/M03	**80** addresses
RGB16B	60/M03	**60** addresses
AID16B	20/M03	**20** addresses
WHITE16B	20/M03	**20** addresses
DW16B	20/M03	**20** addresses

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. RGB, RGBW, AID (Ai Dim), etc.).

To choose the load type

1 Choose either the **MANUAL** or **AUTO** menu options, as required. See page 19 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: *RGB*, *RGBW*, *AID, WHITE* or *DW*. Press the **OK** button to select the one that matches your connected fixture type.

4 You can now create static color mixes or chase patterns using either the Manual (see below) or Auto (see page 25) modes respectively.

Setting a static color mix (Manual mode)

Manual mode allows you to create a static color mix across all ports of the AL Driver, 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 (see above).

To set a static color mix

1 Choose the **MANUAL** mode. See page 19 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: *RGB, RGBW, AID, WHITE* or *DW*. 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 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 (see page 24).

To set a chase pattern

1 Choose the **AUTO** mode. See page 19 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: ***RGB, RGBW, AID, WHITE*** or ***DW***. 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 will store your settings within non-volatile memory so that your chosen chase pattern will resume whenever the unit is re-powered.

Configuration via RDM

The use of RDM (Remote Device Management) with AL Driver 200, 400 and 800 models is optional and allows the following tasks to be completed remotely without having to visit each fixture:

- Configure the DMX address,
- Set the control mode.

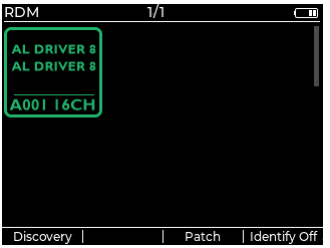
Various third party DMX/RDM tools are available; Acclaim Lighting recommends the XMT-500.

Configuring the DMX address via RDM

To configure the DMX address using the XMT-500

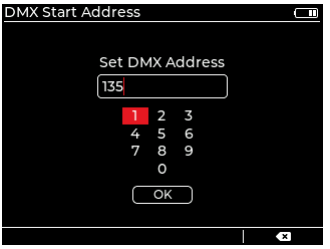
1 Connect the XMT-500 to the DMX input line of the AL Driver installation.

2 On the XMT-500 main menu, highlight the RDM app and press ☑ - the XMT-500 will search for RDM devices and after a short while it will display a list of all located fixtures:



3 Highlight the AL Driver fixture and press ☑ to view the fixture details:

4 Press the • [Start Addr] softkey to set the address:



- Use the arrow buttons to move the red highlight between digits.
- Press ☑ to enter a digit into the address box.
- Use the • [⌫] softkey to delete a digit.

5 When the address is complete, either long press ☑ or highlight **OK** and press ☑.

6 Press ↩ to return to the RDM app.

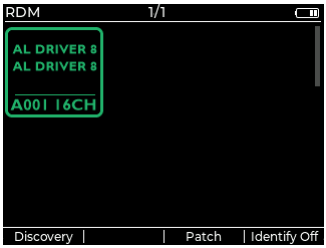
Setting the control mode via RDM

Using RDM you can change the control mode.

To set the cell mode using the XMT-500

1 Connect the XMT-500 to the DMX input line of the AL Driver installation.

2 On the XMT-500 main menu, highlight the RDM app and press ☑ - the XMT-500 will search for RDM devices and after a short while it will display a list of all located fixtures:



3 Highlight the AL Driver fixture and press ☑ to view the fixture details:

4 Press the • **[Personality]** softkey:

5 Use the ⊕⊖ buttons to highlight the control mode.

6 Press ☑ to set the highlighted mode and return to the previous page.

7 Press ↩ to return to the RDM app.

AL Driver 200 - DMX/DALI Address layout (LOAD: RGBW)

This chart shows how the channels of each port are distributed across the DMX or DALI addresses for each CHANNEL setting when the LOAD is set to RGBW. The first port(s) (shown in the table below against address 1) will be placed at the base address determined by the DMX or DALI menu options (see page 20). The remaining ports will be placed at successive DMX/DALI addresses.

(8-BIT) Address	CHANNEL: 16/M02	CHANNEL: 08/M01	CHANNEL: 04/M00
1	Port **1** - Red	Ports **1** & **2**: Red	All ports: Red
2	Port **1** - Green	Ports **1** & **2**: Green	All ports: Green
3	Port **1** - Blue	Ports **1** & **2**: Blue	All ports: Blue
4	Port **1** - White	Ports **1** & **2**: White	All ports: White
5	Port **2** - Red	Ports **3** & **4**: Red	
6	Port **2** - Green	Ports **3** & **4**: Green	
7	Port **2** - Blue	Ports **3** & **4**: Blue	
8	Port **2** - White	Ports **3** & **4**: White	
9	Port **3** - Red		
10	Port **3** - Green		
11	Port **3** - Blue		
12	Port **3** - White		
13	Port **4** - Red		
14	Port **4** - Green		
15	Port **4** - Blue		
16	Port **4** - White		

RGBW16B (16-bit - DMX only)

Address	CHANNEL: 32/M02	CHANNEL: 16/M01	CHANNEL: 08/M00
1	P**1** - Red (Hi)	P**1** & **2**: Red (Hi)	All: Red (Hi)
2	P**1** - Red (Lo)	P**1** & **2**: Red (Lo)	All: Red (Lo)
3	P**1** - Green (Hi)	P**1** & **2**: Green (Hi)	All: Green (Hi)
4	P**1** - Green (Lo)	P**1** & **2**: Green (Lo)	All: Green (Lo)
5	P**1** - Blue (Hi)	P**1** & **2**: Blue (Hi)	All: Blue (Hi)
6	P**1** - Blue (Lo)	P**1** & **2**: Blue (Lo)	All: Blue (Lo)
7	P**1** - White (Hi)	P**1** & **2**: White (Hi)	All: White (Hi)
8	P**1** - White (Lo)	P**1** & **2**: White (Lo)	All: White (Lo)
9	P**2** - Red (Hi)	P**3** & **4**: Red (Hi)	
•	• •		
15	P**2** - White (Hi)	P**3** & **4**: White (Hi)	
16	P**2** - White (Lo)	P**3** & **4**: White (Lo)	
•	•		
31	P**4** - White (Hi)		
32	P**4** - White (Lo)		

(Hi) = High byte [MSB]
(Lo) = Low byte [LSB]

AL Driver 200 - DMX/DALI Address layout (LOAD: RGB)

This chart shows how the channels of each port are distributed across the DMX or DALI addresses for each CHANNEL setting when the LOAD is set to RGB. The first port(s) (shown in the table below against address 1) will be placed at the base address determined by the DMX or DALI menu options (see page 20). The remaining ports will be placed at successive DMX/DALI addresses.

(8-BIT) Address	CHANNEL: 12/M02	CHANNEL: 06/M01	CHANNEL: 03/M00
1	Port **1** - Red	Ports **1** & **2**: Red	All ports: Red
2	Port **1** - Green	Ports **1** & **2**: Green	All ports: Green
3	Port **1** - Blue	Ports **1** & **2**: Blue	All ports: Blue
4	Port **2** - Red	Ports **3** & **4**: Red	
5	Port **2** - Green	Ports **3** & **4**: Green	
6	Port **2** - Blue	Ports **3** & **4**: Blue	
7	Port **3** - Red		
8	Port **3** - Green		
9	Port **3** - Blue		
10	Port **4** - Red		
11	Port **4** - Green		
12	Port **4** - Blue		

RGB16B (16-bit - DMX only)

Address	CHANNEL: 24/M02	CHANNEL: 12/M01	CHANNEL: 06/M00
1	P**1** - Red (Hi)	P**1** & **2**: Red (Hi)	All: Red (Hi)
2	P**1** - Red (Lo)	P**1** & **2**: Red (Lo)	All: Red (Lo)
3	P**1** - Green (Hi)	P**1** & **2**: Green (Hi)	All: Green (Hi)
4	P**1** - Green (Lo)	P**1** & **2**: Green (Lo)	All: Green (Lo)
5	P**1** - Blue (Hi)	P**1** & **2**: Blue (Hi)	All: Blue (Hi)
6	P**1** - Blue (Lo)	P**1** & **2**: Blue (Lo)	All: Blue (Lo)
7	P**2** - Red (Hi)	P**3** & **4**: Red (Hi)	
8	P**2** - Red (Lo)	P**3** & **4**: Red (Lo)	
9	P**2** - Green (Hi)	P**3** & **4**: Green (Hi)	
10	P**2** - Green (Lo)	P**3** & **4**: Green (Lo)	
11	P**2** - Blue (Hi)	P**3** & **4**: Blue (Hi)	
12	P**2** - Blue (Lo)	P**3** & **4**: Blue (Lo)	
•	•		
23	P**4** - Blue (Hi)		
24	P**4** - Blue (Lo)		

(Hi) = High byte [MSB]
(Lo) = Low byte [LSB]

AL Driver 200 - DMX/DALI Address layout (for LOAD: Ai Dim, WHITE & DW)

This chart shows how the channels of each port are distributed across the DMX or DALI addresses for each CHANNEL setting when the LOAD is set to Ai Dim, WHITE or DW. The first port(s) (shown in the table below against address 1) will be placed at the base address determined by the DMX or DALI menu options (see page 20). The remaining ports will be placed at successive DMX/DALI addresses.

Notes:

- *In **AID** mode, the Red, Green, Blue and White contacts equate to the W1, W2, W3 and W4 emitters on the Ai Dim product (such as Ai Flex), respectively.*
- *In **WHITE** mode, for each port, the White outputs are placed on all of the contacts (Red, Green, Blue and White). Together with the dual V+ connections, this allows you to distribute multiple fixtures between the contacts, if required.*
- *In **DW** mode, the Red and Blue contacts equate to the Warm emitters while the Green and White contacts drive the Cold emitters.*
- *In all cases, the maximum port load of 4A and total maximum overall load of 8A for the whole AL Driver 200 must be observed.*

(8-BIT) Address	CHANNEL: 04/M02	CHANNEL: 02/M01	CHANNEL: 01/M00
1	Port **1** - Intensity	Ports **1** & **2**: Intensity	All ports: Intensity
2	Port **2** - Intensity	Ports **3** & **4**: Intensity	
3	Port **3** - Intensity		
4	Port **4** - Intensity		

AID16B, WHITE16B or DW16B (16-bit - DMX only)

Address	CHANNEL: 08/M02	CHANNEL: 04/M01	CHANNEL: 02/M00
1	P**1** - Intensity (Hi)	P**1** & **2**: Intensity (Hi)	All: Intensity (Hi)
2	P**1** - Intensity (Lo)	P**1** & **2**: Intensity (Lo)	All: Intensity (Lo)
3	P**2** - Intensity (Hi)	P**3** & **4**: Intensity (Hi)	
4	P**2** - Intensity (Lo)	P**3** & **4**: Intensity (Lo)	
5	P**3** - Intensity (Hi)		
6	P**3** - Intensity (Lo)		
7	P**4** - Intensity (Hi)		
8	P**4** - Intensity (Lo)		

(Hi) = High byte [MSB]
(Lo) = Low byte [LSB]

AL Driver 400 - DMX/DALI Address layout (LOAD: RGBW)

This chart shows how the channels of each port are distributed across the DMX or DALI addresses for each CHANNEL setting when the LOAD is set to RGBW. The first port(s) (shown in the table below against address 1) will be placed at the base address determined by the DMX or DALI menu options (see page 20). The remaining ports will be placed at successive DMX/DALI addresses.

(8-BIT) Address	CHANNEL: 24/M03	CHANNEL: 12/M02	CHANNEL: 08/M01	CHANNEL: 04/M00
1	Port **1** - Red	Ports **1** & **2**: Red	Ports **1** to **3**: Red	All ports: Red
2	Port **1** - Green	Ports **1** & **2**: Green	Ports **1** to **3**: Green	All ports: Green
3	Port **1** - Blue	Ports **1** & **2**: Blue	Ports **1** to **3**: Blue	All ports: Blue
4	Port **1** - White	Ports **1** & **2**: White	Ports **1** to **3**: White	All ports: White
5	Port **2** - Red	Ports **3** & **4**: Red	Ports **4** to **6**: Red	
•	•	•	•	
8	Port **2** - White	Ports **3** & **4**: White	Ports **4** to **6**: White	
9	Port **3** - Red	Ports **5** & **6**: Red		
•	•	•		
12	Port **3** - White	Ports **5** & **6**: White		
13	Port **4** - Red			
•	•			
24	Port **6** - White			

RGBW16B (16-bit - DMX only)

Address	CHANNEL: 48/M03	CHANNEL: 24/M02	CHANNEL: 16/M01	CHANNEL: 08/M00
1	P**1** - Red (Hi)	P**1** & **2**: Red (Hi)	P**1** to **3**: Red (Hi)	All: Red (Hi)
2	P**1** - Red (Lo)	P**1** & **2**: Red (Lo)	P**1** to **3**: Red (Lo)	All: Red (Lo)
3	P**1** - Green (Hi)	P**1** & **2**: Green (Hi)	P**1** to **3**: Green (Hi)	All: Green (Hi)
4	P**1** - Green (Lo)	P**1** & **2**: Green (Lo)	P**1** to **3**: Green (Lo)	All: Green (Lo)
5	P**1** - Blue (Hi)	P**1** & **2**: Blue (Hi)	P**1** to **3**: Blue (Hi)	All: Blue (Hi)
6	P**1** - Blue (Lo)	P**1** & **2**: Blue (Lo)	P**1** to **3**: Blue (Lo)	All: Blue (Lo)
7	P**1** - White (Hi)	P**1** & **2**: White (Hi)	P**1** to **3**: White (Hi)	All: White (Hi)
8	P**1** - White (Lo)	P**1** & **2**: White (Lo)	P**1** to **3**: White (Lo)	All: White (Lo)
9	P**2** - Red (Hi)	P**3** & **4**: Red (Hi)	P**4** to **6**: Red (Hi)	
•	•	•	•	
15	P**2** - White (Hi)	P**3** & **4**: White (Hi)	P**4** to **6**: White (Hi)	
16	P**2** - White (Lo)	P**3** & **4**: White (Lo)	P**4** to **6**: White (Lo)	
•	•	•		
23	P**3** - White (Hi)	P**5** & **6**: White (Hi)		
24	P**3** - White (Lo)	P**5** & **6**: White (Lo)		
•	•			
47	P**6** - White (Hi)			
48	P**6** - White (Lo)			

(Hi) = High byte [MSB]
(Lo) = Low byte [LSB]

AL Driver 400 - DMX/DALI Address layout (LOAD: RGB)

This chart shows how the channels of each port are distributed across the DMX or DALI addresses for each CHANNEL setting when the LOAD is set to RGB. The first port(s) (shown in the table below against address 1) will be placed at the base address determined by the DMX or DALI menu options (see page 20). The remaining ports will be placed at successive DMX/DALI addresses.

(8-BIT) Address	CHANNEL: 18/M03	CHANNEL: 09/M02	CHANNEL: 06/M01	CHANNEL: 03/M00
1	Port **1** - Red	Ports **1** & **2**: Red	Ports **1** to **3**: Red	All ports: Red
2	Port **1** - Green	Ports **1** & **2**: Green	Ports **1** to **3**: Green	All ports: Green
3	Port **1** - Blue	Ports **1** & **2**: Blue	Ports **1** to **3**: Blue	All ports: Blue
4	Port **2** - Red	Ports **3** & **4**: Red	Ports **4** to **6**: Red	
5	Port **2** - Green	Ports **3** & **4**: Green	Ports **4** to **6**: Green	
6	Port **2** - Blue	Ports **3** & **4**: Blue	Ports **4** to **6**: Blue	
7	Port **3** - Red	Ports **5** & **6**: Red		
8	Port **3** - Green	Ports **5** & **6**: Green		
9	Port **3** - Blue	Ports **5** & **6**: Blue		
10	Port **4** - Red			
11	Port **4** - Green			
•	•			
18	Port **6** - Blue			

RGB16B (16-bit - DMX only)

Address	CHANNEL: 36/M03	CHANNEL: 18/M02	CHANNEL: 12/M01	CHANNEL: 06/M00
1	P**1** - Red (Hi)	P**1** & **2**: Red (Hi)	P**1** to **3**: Red (Hi)	All: Red (Hi)
2	P**1** - Red (Lo)	P**1** & **2**: Red (Lo)	P**1** to **3**: Red (Lo)	All: Red (Lo)
3	P**1** - Green (Hi)	P**1** & **2**: Green (Hi)	P**1** to **3**: Green (Hi)	All: Green (Hi)
4	P**1** - Green (Lo)	P**1** & **2**: Green (Lo)	P**1** to **3**: Green (Lo)	All: Green (Lo)
5	P**1** - Blue (Hi)	P**1** & **2**: Blue (Hi)	P**1** to **3**: Blue (Hi)	All: Blue (Hi)
6	P**1** - Blue (Lo)	P**1** & **2**: Blue (Lo)	P**1** to **3**: Blue (Lo)	All: Blue (Lo)
7	P**2** - Red (Hi)	P**3** & **4**: Red (Hi)	P**4** to **6**: Red (Hi)	
8	P**2** - Red (Lo)	P**3** & **4**: Red (Lo)	P**4** to **6**: Red (Lo)	
•	•	•	•	
11	P**2** - Blue (Hi)	P**3** & **4**: Blue (Hi)	P**4** to **6**: Blue (Hi)	
12	P**2** - Blue (Lo)	P**3** & **4**: Blue (Lo)	P**4** to **6**: Blue (Lo)	
•	•	•		
17	P**3** - Blue (Hi)	P**5** & **6**: Blue (Hi)		
18	P**3** - Blue (Lo)	P**5** & **6**: Blue (Lo)		
•	•			
35	P**6** - Blue (Hi)			
36	P**6** - Blue (Lo)			

(Hi) = High byte [MSB]
(Lo) = Low byte [LSB]

AL Driver 400 - DMX/DALI Address layout (for LOAD: Ai Dim, WHITE & DW)

This chart shows how the channels of each port are distributed across the DMX or DALI addresses for each CHANNEL setting when the LOAD is set to Ai Dim, WHITE or DW. The first port(s) (shown in the table below against address 1) will be placed at the base address determined by the DMX or DALI menu options (see page 20). The remaining ports will be placed at successive DMX/DALI addresses.

Notes:

- *In **AID** mode, the Red, Green, Blue and White contacts equate to the W1, W2, W3 and W4 emitters on the Ai Dim product (such as Ai Flex), respectively.*
- *In **WHITE** mode, for each port, the White outputs are placed on all of the contacts (Red, Green, Blue and White). Together with the dual V+ connections, this allows you to distribute multiple fixtures between the contacts, if required.*
- *In **DW** mode, the Red and Blue contacts equate to the Warm emitters while the Green and White contacts drive the Cold emitters.*
- *In all cases, the maximum port load of 4A and total maximum overall load of 16.5A for the whole AL Driver 400 must be observed.*

(8-BIT) Address	CHANNEL: 06/M03	CHANNEL: 03/M02	CHANNEL: 02/M01	CHANNEL: 01/M00
1	Port **1** - Intensity	Ports **1** & **2**: Intensity	Ports **1** to **3**: Intensity	All ports: Intensity
2	Port **2** - Intensity	Ports **3** & **4**: Intensity	Ports **4** to **6**: Intensity	
3	Port **3** - Intensity	Ports **5** & **6**: Intensity		
4	Port **4** - Intensity			
5	Port **5** - Intensity			
6	Port **6** - Intensity			

AID16B, WHITE16B or DW16B (16-bit - DMX only)

Address	CHANNEL: 12/M03	CHANNEL: 06/M02	CHANNEL: 04/M01	CHANNEL: 02/M00
1	P**1** - Intensity (Hi)	P**1** & **2**: Intensity (Hi)	P**1** to **3**: Intensity (Hi)	All: Intensity (Hi)
2	P**1** - Intensity (Lo)	P**1** & **2**: Intensity (Lo)	P**1** to **3**: Intensity (Lo)	All: Intensity (Lo)
3	P**2** - Intensity (Hi)	P**3** & **4**: Intensity (Hi)	P**4** to **6**: Intensity (Hi)	
4	P**2** - Intensity (Lo)	P**3** & **4**: Intensity (Lo)	P**4** to **6**: Intensity (Lo)	
5	P**3** - Intensity (Hi)	P**5** & **6**: Intensity (Hi)		
6	P**3** - Intensity (Lo)	P**5** & **6**: Intensity (Lo)		
•	•			
9	P**5** - Intensity (Hi)			
10	P**5** - Intensity (Lo)			
11	P**6** - Intensity (Hi)			
12	P**6** - Intensity (Lo)			

(Hi) = High byte [MSB]
(Lo) = Low byte [LSB]

AL Driver 800 - DMX/DALI Address layout (LOAD: RGBW)

This chart shows how the channels of each port are distributed across the DMX or DALI addresses for each CHANNEL setting when the LOAD is set to RGBW. The first port(s) (shown in the table below against address 1) will be placed at the base address determined by the DMX or DALI menu options (see page 20). The remaining ports will be placed at successive DMX/DALI addresses.

(8-BIT) Address	CHANNEL: 40/M03	CHANNEL: 20/M02	CHANNEL: 08/M01	CHANNEL: 04/M00
1	Port **1** - Red	Ports **1** & **2**: Red	Ports **1** to **5**: Red	All ports: Red
2	Port **1** - Green	Ports **1** & **2**: Green	Ports **1** to **5**: Green	All ports: Green
3	Port **1** - Blue	Ports **1** & **2**: Blue	Ports **1** to **5**: Blue	All ports: Blue
4	Port **1** - White	Ports **1** & **2**: White	Ports **1** to **5**: White	All ports: White
5	Port **2** - Red	Ports **3** & **4**: Red	Ports **6** to **10**: Red	
6	Port **2** - Green	Ports **3** & **4**: Green	Ports **6** to **10**: Green	
7	Port **2** - Blue	Ports **3** & **4**: Blue	Ports **6** to **10**: Blue	
8	Port **2** - White	Ports **3** & **4**: White	Ports **6** to **10**: White	
•	•	•		
19	Port **5** - Blue	Ports **9** & **10**: Blue		
20	Port **5** - White	Ports **9** & **10**: White		
•	•			
39	Port **10** - Blue			
40	Port **10** - White			

RGBW16B (16-bit - DMX only)

Address	CHANNEL: 80/M03	CHANNEL: 40/M02	CHANNEL: 16/M01	CHANNEL: 08/M00
1	P**1** - Red (Hi)	P**1** & **2**: Red (Hi)	P**1** to **5**: Red (Hi)	All: Red (Hi)
2	P**1** - Red (Lo)	P**1** & **2**: Red (Lo)	P**1** to **5**: Red (Lo)	All: Red (Lo)
3	P**1** - Green (Hi)	P**1** & **2**: Green (Hi)	P**1** to **5**: Green (Hi)	All: Green (Hi)
4	P**1** - Green (Lo)	P**1** & **2**: Green (Lo)	P**1** to **5**: Green (Lo)	All: Green (Lo)
5	P**1** - Blue (Hi)	P**1** & **2**: Blue (Hi)	P**1** to **5**: Blue (Hi)	All: Blue (Hi)
6	P**1** - Blue (Lo)	P**1** & **2**: Blue (Lo)	P**1** to **5**: Blue (Lo)	All: Blue (Lo)
7	P**1** - White (Hi)	P**1** & **2**: White (Hi)	P**1** to **5**: White (Hi)	All: White (Hi)
8	P**1** - White (Lo)	P**1** & **2**: White (Lo)	P**1** to **5**: White (Lo)	All: White (Lo)
9	P**2** - Red (Hi)	P**3** & **4**: Red (Hi)	P**6** to **10**: Red (Hi)	
•	•	•	•	
15	P**2** - White (Hi)	P**3** & **4**: White (Hi)	P**6** to **10**: White (Hi)	
16	P**2** - White (Lo)	P**3** & **4**: White (Lo)	P**6** to **10**: White (Lo)	
•	•	•		
39	P**5** - White (Hi)	P**9** & **10**: White (Hi)		
40	P**5** - White (Lo)	P**9** & **10**: White (Lo)		
•	•			
79	P**10** - White (Hi)			
80	P**10** - White (Lo)			

(Hi) = High byte [MSB]
(Lo) = Low byte [LSB]

AL Driver 800 - DMX/DALI Address layout (LOAD: RGB)

This chart shows how the channels of each port are distributed across the DMX or DALI addresses for each CHANNEL setting when the LOAD is set to RGB. The first port(s) (shown in the table below against address 1) will be placed at the base address determined by the DMX or DALI menu options (see page 20). The remaining ports will be placed at successive DMX/DALI addresses.

(8-BIT) Address	CHANNEL: 30/M03	CHANNEL: 15/M02	CHANNEL: 06/M01	CHANNEL: 03/M00
1	Port **1** - Red	Ports **1** & **2**: Red	Ports **1** to **5**: Red	All ports: Red
2	Port **1** - Green	Ports **1** & **2**: Green	Ports **1** to **5**: Green	All ports: Green
3	Port **1** - Blue	Ports **1** & **2**: Blue	Ports **1** to **5**: Blue	All ports: Blue
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 **3** - Red	Ports **5** & **6**: Red		
8	Port **3** - Green	Ports **5** & **6**: Green		
•	•	•		
14	Port **5** - Green	Ports **9** & **10**: Green		
15	Port **5** - Blue	Ports **9** & **10**: Blue		
•	•			
29	Port **10** - Green			
30	Port **10** - Blue			

RGB16B (16-bit - DMX only)

Address	CHANNEL: 60/M03	CHANNEL: 30/M02	CHANNEL: 12/M01	CHANNEL: 06/M00
1	P**1** - Red (Hi)	P**1** & **2**: Red (Hi)	P**1** to **5**: Red (Hi)	All: Red (Hi)
2	P**1** - Red (Lo)	P**1** & **2**: Red (Lo)	P**1** to **5**: Red (Lo)	All: Red (Lo)
3	P**1** - Green (Hi)	P**1** & **2**: Green (Hi)	P**1** to **5**: Green (Hi)	All: Green (Hi)
4	P**1** - Green (Lo)	P**1** & **2**: Green (Lo)	P**1** to **5**: Green (Lo)	All: Green (Lo)
5	P**1** - Blue (Hi)	P**1** & **2**: Blue (Hi)	P**1** to **5**: Blue (Hi)	All: Blue (Hi)
6	P**1** - Blue (Lo)	P**1** & **2**: Blue (Lo)	P**1** to **5**: Blue (Lo)	All: Blue (Lo)
7	P**2** - Red (Hi)	P**3** & **4**: Red (Hi)	P**6** to **10**: Red (Hi)	
8	P**2** - Red (Lo)	P**3** & **4**: Red (Lo)	P**6** to **10**: Red (Lo)	
•	•	•	•	
11	P**2** - Blue (Hi)	P**3** & **4**: Blue (Hi)	P**6** to **10**: Blue (Hi)	
12	P**2** - Blue (Lo)	P**3** & **4**: Blue (Lo)	P**6** to **10**: Blue (Lo)	
•	•	•		
29	P**5** - Blue (Hi)	P**9** & **10**: Blue (Hi)		
30	P**5** - Blue (Lo)	P**9** & **10**: Blue (Lo)		
•	•			
59	P**10** - Blue (Hi)			
60	P**10** - Blue (Lo)			

(Hi) = High byte [MSB]
(Lo) = Low byte [LSB]

AL Driver 800 - DMX/DALI Address layout (for LOAD: Ai Dim, WHITE & DW)

This chart shows how the channels of each port are distributed across the DMX or DALI addresses for each CHANNEL setting when the LOAD is set to Ai Dim, WHITE or DW. The first port(s) (shown in the table below against address 1) will be placed at the base address determined by the DMX or DALI menu options (see page 20). The remaining ports will be placed at successive DMX/DALI addresses.

Notes:

- *In **AID** mode, the Red, Green, Blue and White contacts equate to the W1, W2, W3 and W4 emitters on the Ai Dim product (such as Ai Flex), respectively.*
- *In **WHITE** mode, for each port, the White outputs are placed on all of the contacts (Red, Green, Blue and White). Together with the dual V+ connections, this allows you to distribute multiple fixtures between the contacts, if required.*
- *In **DW** mode, the Red and Blue contacts equate to the Warm emitters while the Green and White contacts drive the Cold emitters.*
- *In all cases, the maximum port load of 4A and total maximum overall load of 33A for the whole AL Driver 800 must be observed.*

(8-BIT) Address	CHANNEL: 10/M03	CHANNEL: 05/M02	CHANNEL: 02/M01	CHANNEL: 01/M00
1	Port **1** - Intensity	Ports **1** & **2**: Intensity	Ports **1** to **5**: Intensity	All ports: Intensity
2	Port **2** - Intensity	Ports **3** & **4**: Intensity	Ports **6** to **10**: Intensity	
•	•	•		
4	Port **4** - Intensity	Ports **7** & **8**: Intensity		
5	Port **5** - Intensity	Ports **9** & **10**: Intensity		
•	•			
10	Port **10** - Intensity			

AID16B, WHITE16B or DW16B (16-bit - DMX only)

Address	CHANNEL: 20/M03	CHANNEL: 10/M02	CHANNEL: 04/M01	CHANNEL: 02/M00
1	P**1** - Intensity (Hi)	P**1** & **2**: Intensity (Hi)	P**1** to **5**: Intensity (Hi)	All: Intensity (Hi)
2	P**1** - Intensity (Lo)	P**1** & **2**: Intensity (Lo)	P**1** to **5**: Intensity (Lo)	All: Intensity (Lo)
3	P**2** - Intensity (Hi)	P**3** & **4**: Intensity (Hi)	P**6** to **10**: Intensity (Hi)	
4	P**2** - Intensity (Lo)	P**3** & **4**: Intensity (Lo)	P**6** to **10**: Intensity (Lo)	
5	P**3** - Intensity (Hi)	P**5** & **6**: Intensity (Hi)		
6	P**3** - Intensity (Lo)	P**5** & **6**: Intensity (Lo)		
•	•			
9	P**5** - Intensity (Hi)	P**9** & **10**: Intensity (Hi)		
10	P**5** - Intensity (Lo)	P**9** & **10**: Intensity (Lo)		
11	P**6** - Intensity (Hi)			
12	P**6** - Intensity (Lo)			
•	•			
19	P**10** - Intensity (Hi)			
20	P**10** - Intensity (Lo)			

Further information

Specifications

AL Driver 1 and 4

Control input protocols	DMX (or 0-10V/1-10V - AL Driver 1 only)
Control output protocol	Pulse width modulation (PWM)
Input voltage/current	AL Driver 1: 6 to 24VDC (5A maximum) AL Driver 4: 12VDC (8A max.) to 24VDC (4A max.)
Output voltage	As per input voltage
Operating temperature	14°F to 122°F (-10°C to 50°C)
Housing	Polycarbonate
IP rating	IP20, indoor dry location
Certifications	

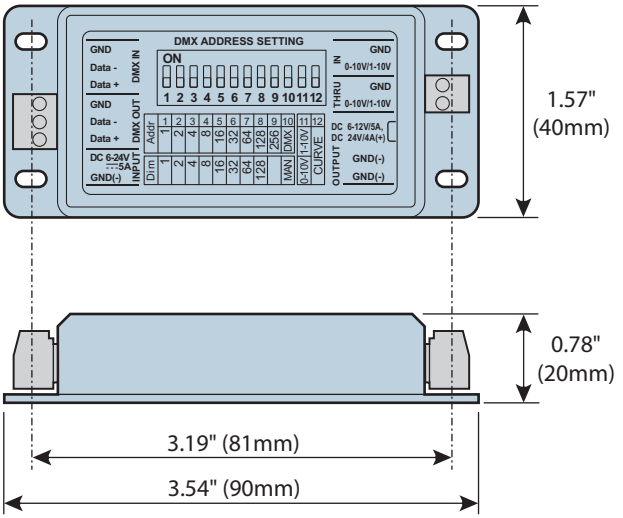
AL Driver 200, 400 and 800

Control input protocols	DMX (RDM), DALI, 1-10V (sink) or 0-10V (source)
Control output protocol	Pulse width modulation (PWM)
Input voltage	100 to 277VAC (50/60Hz) - auto sensing
Input power consumption	AL Driver 200: 230W maximum AL Driver 400: 480W maximum AL Driver 800: 960W maximum
Output voltage	24VDC
Output current (per port)	4A maximum
Output current (overall)	AL Driver 200: 8A maximum AL Driver 400: 16.5A maximum AL Driver 800: 33A maximum
Output ports	4 to 10 (model specific)
Operating temperature	14°F to 113°F (-10°C to 45°C)
Housing	Black powder-coated steel
IP rating	IP22, indoor dry location
Certifications	

Release 3.0b

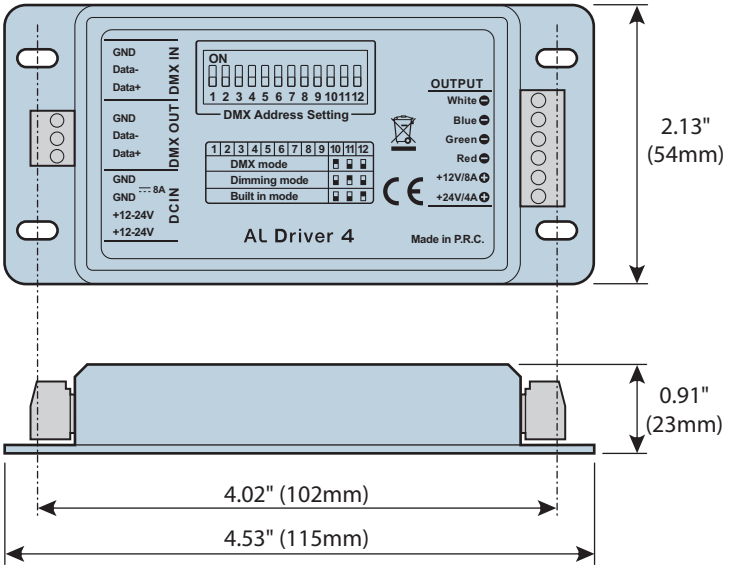
Dimensions

AL Driver 1



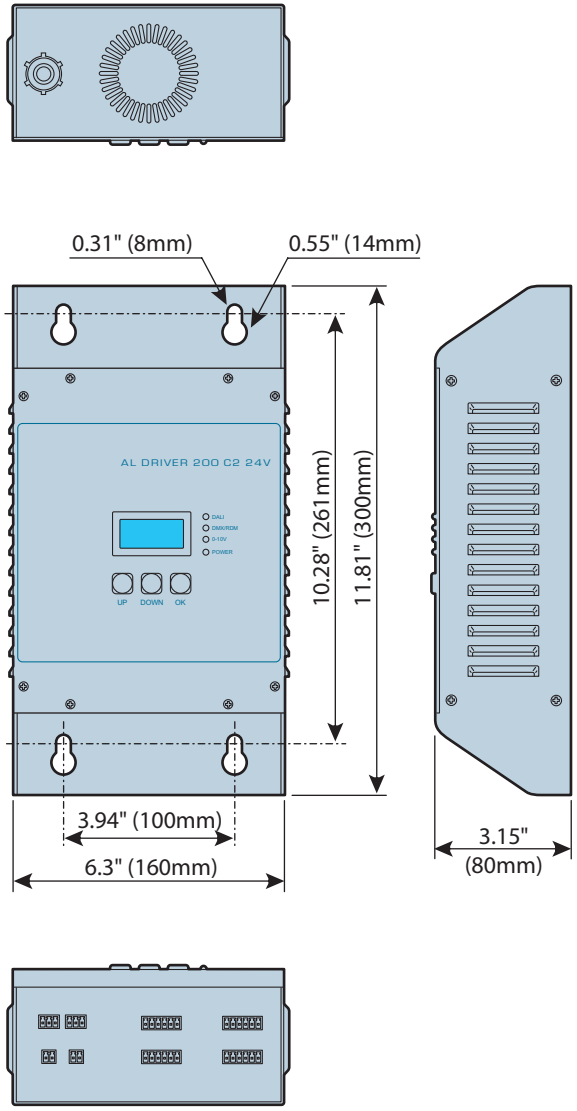
Weight: 0.1 lbs (45g)

AL Driver 4



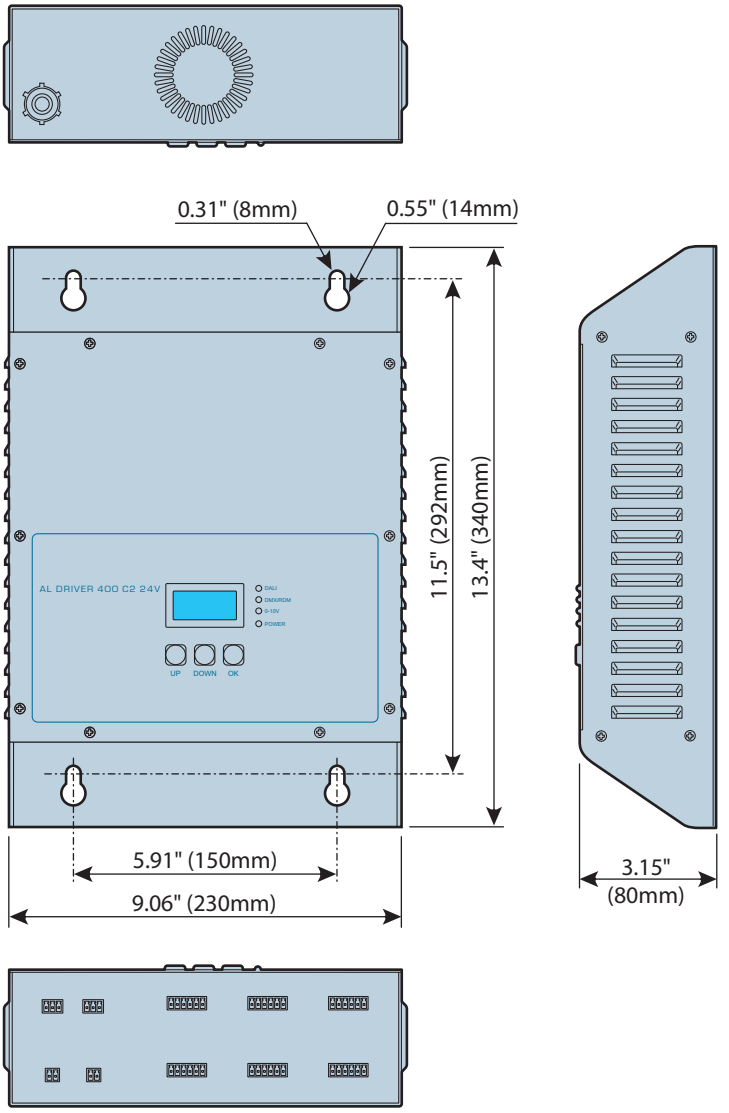
Weight: 0.1 lbs (45g)

AL Driver 200



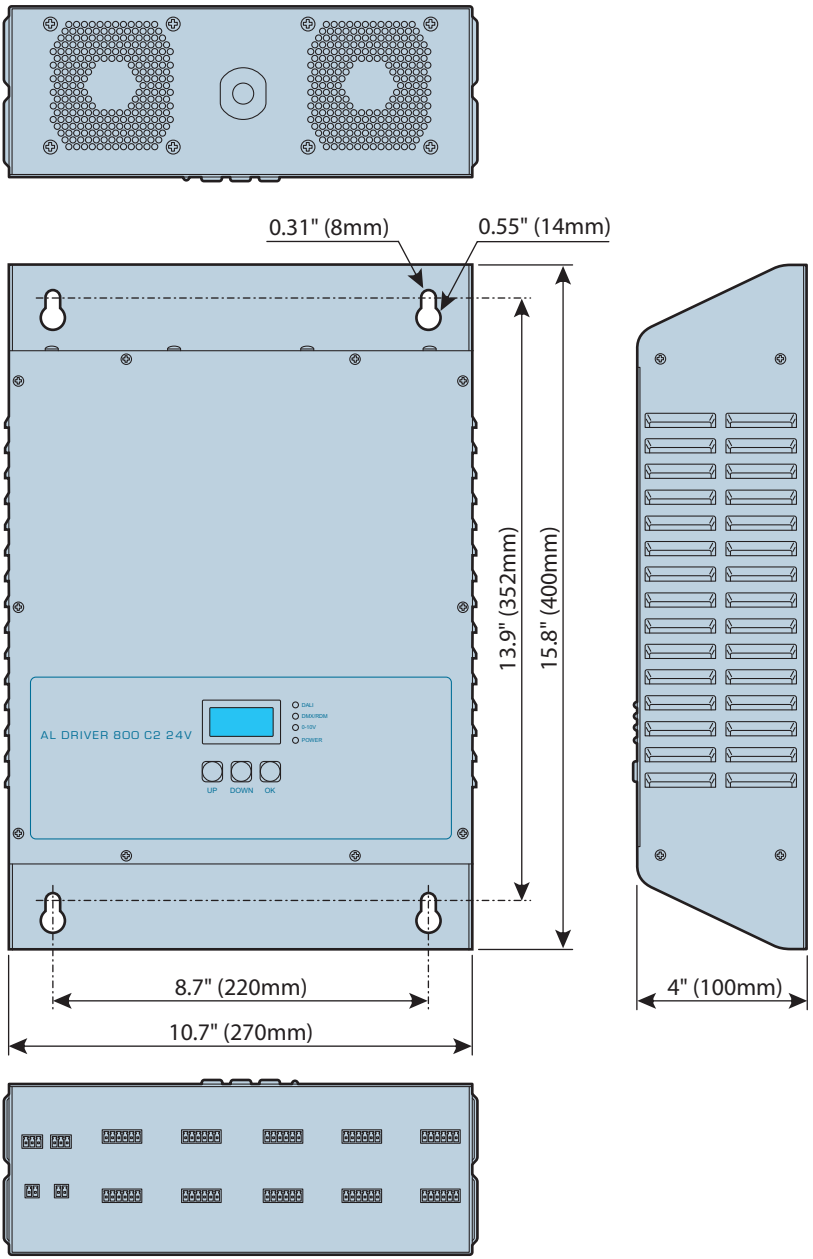
Weight: 5.29 lbs (2.4kg)

AL Driver 400



Weight: 8.4 lbs (3.8kg)

AL Driver 800



Weight: 12.1 lbs (5.5kg)

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