

**Aqua Drum™**



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# Introduction

## Welcome

Welcome to the Aqua Drum and Aqua Driver from Acclaim Lighting. This range of high output, submersible LED flood fixtures offer IP68 submersible properties thanks to their 316 marine grade stainless steel housings and fully sealed joints.

There are three sizes of fixture:

- Aqua Drum EO with 8 LED emitters
- Aqua Drum SO with 18 LED emitters
- Aqua Drum HO with 36 LED emitters

With a comprehensive choice of emitter types:

- 2700K, 3000K, 3500K or 4000K white
- RGBW
- RGBA

And an appropriate range of lens options:

- 10° x 10°
- 25° x 25°
- 40° x 40°
- 10° x 35°

The accompanying Aqua Driver controllers (Aqua Driver 150 to control up to four fixtures; Aqua Driver 400 to control up to eight fixtures) operate from mains inputs ranging from 100 to 277VAC, 50/60Hz (autosensing) and provide constant current PWM drive to the output ports. The Aqua Driver units can either operate independently to provide static dimming or multiple chases, or can accept a DMX input for inclusion into an external control system.

The Aqua Driver 400 is housed within black power-coated steel enclosures with IP20 rating for dry indoor locations. The driver units are designed to be wall mounted.

## Safety

- Ensure that the power input is supplied from a correctly fused, earthed and environmentally protected location.
- While Aqua Drum fixtures are rated to IP68\* for submersible operation, the Aqua Driver units have IP20 ratings, for dry location installations only.

## 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.

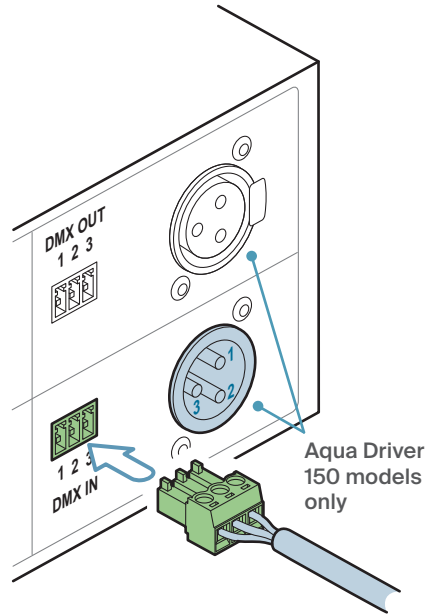
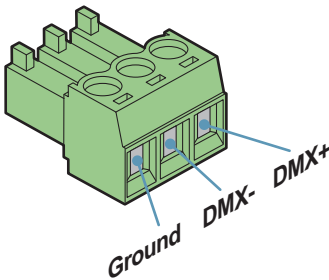
# Installation

## Aqua Driver mounting

Both Aqua Driver models can be wall mounted either vertically or horizontally as required. Two slotted holes (Ø 0.23" x 0.47" / Ø 6 x 12mm) are available on each side for mounting purposes – see “Dimensions” on pages 22 and 23.

## Control input connections

Both Aqua Driver models can either operate in a standalone manner or be controlled by DMX. Three-pin terminal block IN and OUT ports are located on the front panel. In addition, the Aqua Driver 150 also provides 3-pin XLR IN and OUT sockets. See below for useful DMX tips. Connect your DMX cables to the terminal blocks as shown here:



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

## Tips for achieving successful DMX control

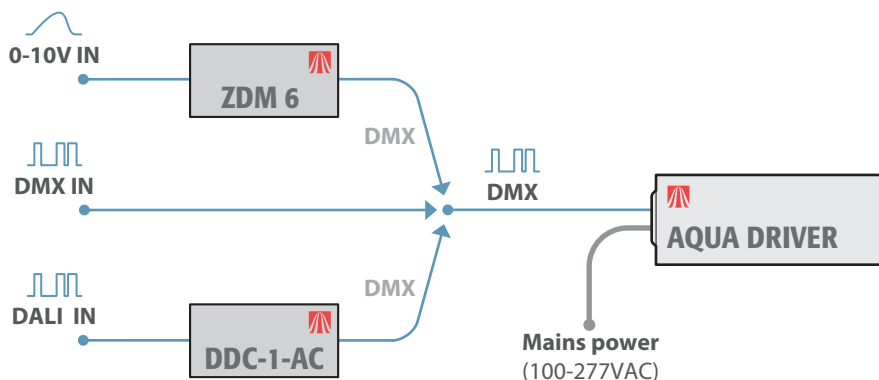
- Do not exceed a total cable length of 3,900 ft (1200m) without buffering.
- Do not exceed a total of 32 devices/fixtures on a single line without buffering.
- Use only connection cables with a characteristic impedance of 120Ω, preferably where the DMX + and DMX – data lines are twisted around each 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.

## Alternative control inputs

Aqua Drivers use DMX as their native control method, however, it is possible to use other common control protocols when required, such as 0-10V (source or sink) or DALI.

### Control inputs via converters

- DMX – connect a DMX input directly to the Aqua Driver.
- 0-10V – use an Acclaim Lighting ZDM 6 (or similar) to convert one or more analog control feeds into a combined DMX feed<sup>†</sup>.
- DALI – use an Acclaim Lighting DDC-1-AC (or similar) to convert one or more DALI channels into a combined DMX feed<sup>†</sup>.

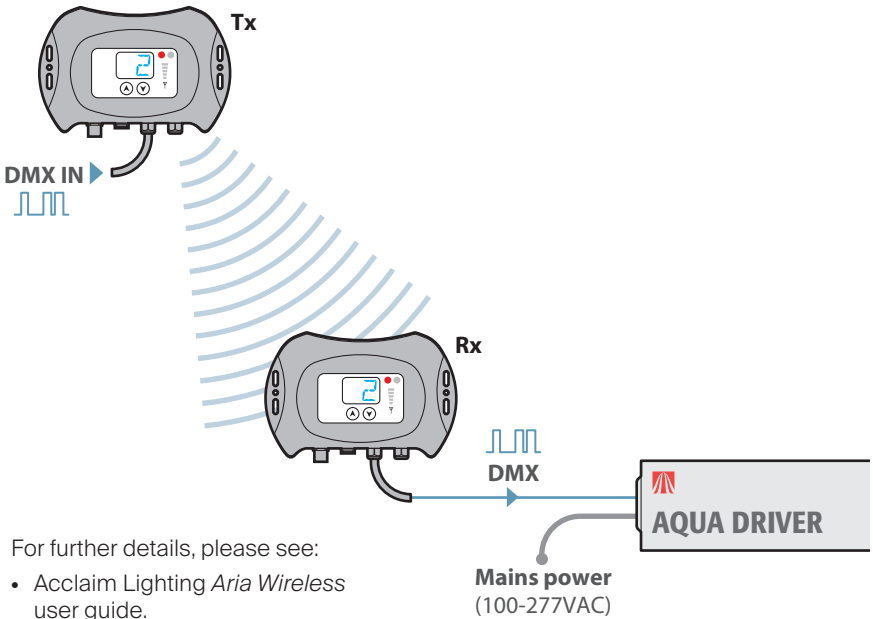


### Notes:

<sup>†</sup> When using Acclaim Lighting ZDM 6 or DDC-1-AC modules it is possible to convert multiple inputs into separate DMX channels within a consolidated feed. The ZDM 6 can convert up to six 0-10V inputs into DMX channels, whereas the DDC-1-AC can convert a maximum of 64 DALI channels (although large numbers of channels are not recommended due to the timing limitations of the DALI standard).

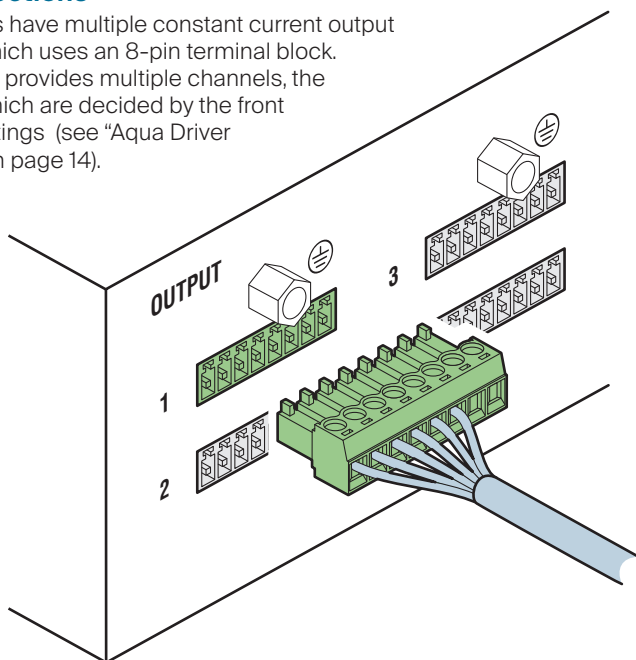
## Optional wireless control

Using optional Acclaim Lighting Aria modules it is possible to wirelessly transmit a DMX signal to an Aqua Driver over distances up to 2600 feet (792m).



## Output connections

The Aqua Drivers have multiple constant current output ports, each of which uses an 8-pin terminal block. Each output port provides multiple channels, the addressing of which are decided by the front panel switch settings (see "Aqua Driver mode control" on page 14).



## Port connection cables

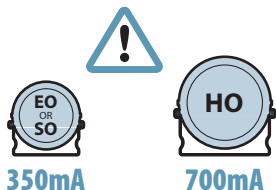
Each Aqua Drum fixture is supplied with a 100' (30m) cable terminated in an 8-pin terminal connector. In situations where this supplied cable is shortened and then wired into a separate supply cable, ensure the conductors of the supply cable are of sufficient size and that the total cable length (including that which remains of the Aqua Drum cable) is not exceeded:

### Conductor size

- 18 AWG (0.823mm<sup>2</sup>)
- 14 AWG (2.081mm<sup>2</sup>)
- 12 AWG (3.309mm<sup>2</sup>)

### Maximum length (including Aqua Drum cable)

- Up to 100' (30m)
- Up to 125' (38m)
- Up to 150' (45m)



**IMPORTANT:** EO and SO fixtures require a different drive current setting to the larger HO fixtures - it is vitally important to select the correct setting to avoid damage to the fixtures. The drive current setting affects all outputs equally, so while it is possible to mix EO and SO fixtures, it is not possible to mix either of those sizes with the larger HO fixtures. See "Fixture drive current selection" on page 9.

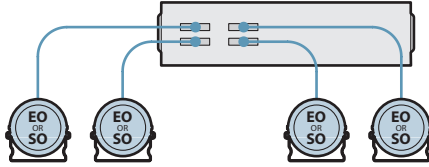


## Fixture support with Aqua Driver 150

The Aqua Driver 150 can support up to four Aqua Drum fixtures:

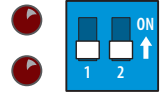
### Four Aqua Drum EO and/or SO fixtures

Up to four EO and/or SO fixtures can be mixed as required. Any of the port grouping options (1 Group, 2 Group or 4 Group - see page 10) are appropriate for these fixtures.



#### EO and SO fixtures require a 350mA drive current

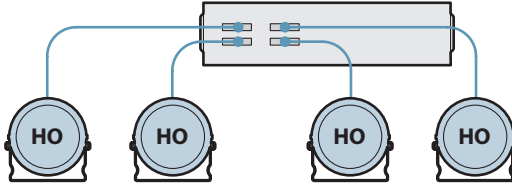
On the 2-way switch block, ensure both switches are in the OFF position. Both of the adjacent indicators will be OFF during operation.



### Four Aqua Drum HO fixtures

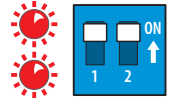
Up to four HO fixtures can be used on a single driver. Any of the port grouping options (1 Group, 2 Group or 4 Group - page 10) are appropriate for these fixtures.

*Note: HO fixtures cannot be mixed with EO or SO fixtures.*



#### HO fixtures require a 700mA drive current

On the 2-way switch block, ensure both switches are in the ON position. Both of the adjacent indicators will be ON during operation.

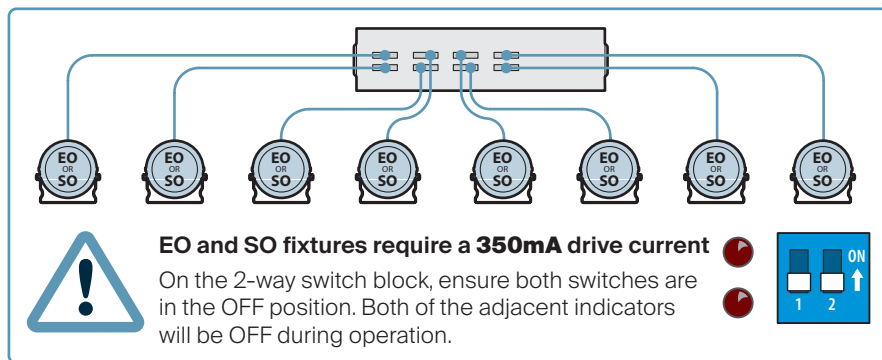


## Fixture support with Aqua Driver 400

The Aqua Driver 400 can support up to eight Aqua Drum fixtures:

### Eight Aqua Drum EO and/or SO fixtures

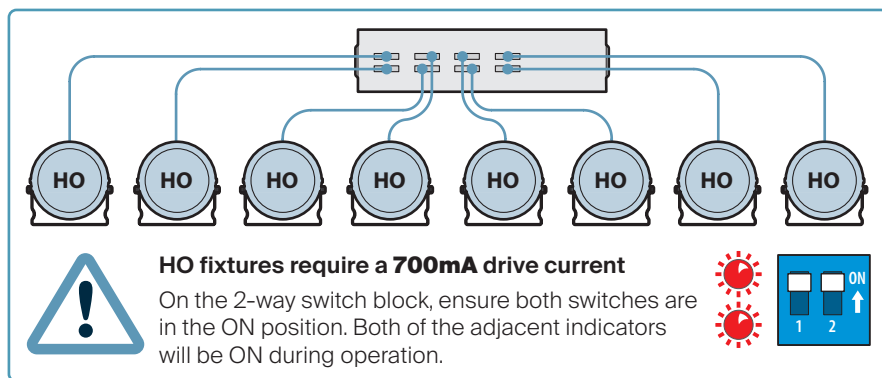
Up to eight EO and/or SO fixtures can be mixed as required. Any of the port grouping options (1 Group, 2 Group, 4 Group or 8 Group - see page 10) are appropriate for these fixtures.



### Eight Aqua Drum HO fixtures

Up to eight HO fixtures can be used on a single driver. Any of the port grouping options (1 Group, 2 Group, 4 Group or 8 Group - page 10) are appropriate for these fixtures.

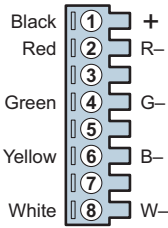
*Note: HO fixtures cannot be mixed with EO or SO fixtures.*



## Connector pin outs

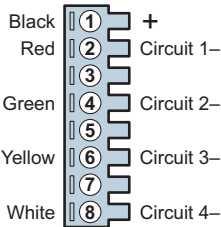
### Aqua Drum RGBW/A

These connections are used for RGBW/A versions of the EO, SO and HO Aqua Drum fixtures:



### Aqua Drum WHITE

These connections are used for White versions of the EO, SO and HO Aqua Drum fixtures:



## Fixture drive current selection

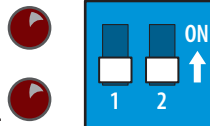


The smaller EO and SO fixtures require a different drive current setting to the larger HO fixtures - **it is vitally important to select the correct setting to avoid damage to the fixtures**. The drive current setting affects all outputs equally, so while it is possible to mix EO and SO fixtures on the same Aqua Driver unit, it is not possible to mix either of those sizes with the larger HO fixtures.

*Note: Changes to the drive current must be made while the Aqua Driver unit is powered down.*

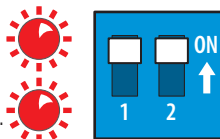
### EO and SO fixtures (350mA)

On the 2-way switch block, ensure both switches are in the OFF position. Both of the adjacent indicators will be OFF during operation.



### HO fixtures (700mA)

On the 2-way switch block, ensure both switches are in the ON position. Both of the adjacent indicators will be ON during operation.



## Port grouping

### Aqua Driver 150

The four output ports can either be used individually under separate control or grouped in either pairs, or grouped all as one control block. The grouping status is determined by switches 1 and 2 of the 6-way switch block (see page 14).

#### 4 Group

All four ports are controlled individually:

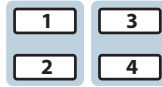


#### DMX channels required

White: 4 channels  
RGBW/A: 16 channels

#### 2 Group

Ports 1 and 2 are controlled together as one group. Ports 3 and 4 are controlled as a separate group:

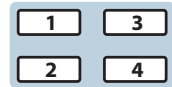


#### DMX channels required

White: 2 channels  
RGBW/A: 8 channels

#### 1 Group

All four ports are controlled collectively:



#### DMX channels required

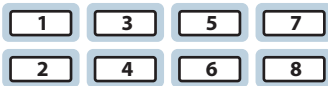
White: 1 channel  
RGBW/A: 4 channels

### Aqua Driver 400

The eight output ports can either be used individually under separate control or grouped in either pairs, fours or grouped all as one control block. The grouping status is determined by switches 1 and 2 of the 6-way switch block (see page 14).

#### 8 Group

All eight ports are controlled individually:

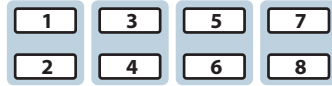


#### DMX channels required

White: 8 channels  
RGBW/A: 32 channels

#### 4 Group

The eight ports are paired and jointly controlled as follows: Ports 1 and 2, ports 3 and 4, ports 5 and 6, ports 7 and 8:



#### DMX channels required

White: 4 channels  
RGBW/A: 16 channels

#### 2 Group

Ports 1, 2, 3 and 4 are controlled together as one group. Ports 5, 6, 7 and 8 are controlled as a separate group:

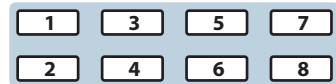


#### DMX channels required

White: 2 channels  
RGBW/A: 8 channels

#### 1 Group

All eight ports are controlled collectively:



#### DMX channels required

White: 1 channel  
RGBW/A: 4 channels

### DMX channel layouts

The number of DMX channels required to control the connected fixtures depends upon the following settings, which are configured using the 6-way switch block:

- Port grouping, and
- Fixture type

### Aqua Driver 150

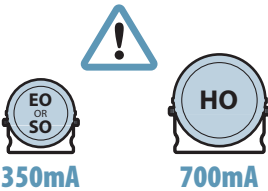
The various DMX channel requirements for the various port grouping and fixture type combinations on the Aqua Driver 150 are listed here:

DMX address	RGBW/A 4 Group	RGBW/A 2 Group	RGBW/A 1 Group
1	<i>Port 1: Red</i>	<i>Ports 1 &amp; 2: Red</i>	<i>All: Red</i>
2	<i>Port 1: Green</i>	<i>Ports 1 &amp; 2: Green</i>	<i>All: Green</i>
3	<i>Port 1: Blue</i>	<i>Ports 1 &amp; 2: Blue</i>	<i>All: Blue</i>
4	<i>Port 1: White</i>	<i>Ports 1 &amp; 2: White</i>	<i>All: White</i>
5	<i>Port 2: Red</i>	<i>Ports 3 &amp; 4: Red</i>	
6	<i>Port 2: Green</i>	<i>Ports 3 &amp; 4: Green</i>	
7	<i>Port 2: Blue</i>	<i>Ports 3 &amp; 4: Blue</i>	
8	<i>Port 2: White</i>	<i>Ports 3 &amp; 4: White</i>	
9	<i>Port 3: Red</i>		
10	<i>Port 3: Green</i>		
11	<i>Port 3: Blue</i>		
12	<i>Port 3: White</i>		
13	<i>Port 4: Red</i>		
14	<i>Port 4: Green</i>		
15	<i>Port 4: Blue</i>		
16	<i>Port 4: White</i>		

DMX address	White 4 Group	White 2 Group	White 1 Group
1	<i>Port 1: White</i>	<i>Ports 1 &amp; 2: White</i>	<i>All: White</i>
2	<i>Port 2: White</i>	<i>Ports 3 &amp; 4: White</i>	
3	<i>Port 3: White</i>		
4	<i>Port 4: White</i>		

See “Port grouping” on page 10 and “Aqua Driver mode control” on page 14 for DMX address configuration details.



**IMPORTANT:** EO and SO fixtures require a different drive current setting to the larger HO fixtures - it is vitally important to select the correct setting to avoid damage to the fixtures. The drive current setting affects all outputs equally, so while it is possible to mix EO and SO fixtures, it is not possible to mix either of those sizes with the larger HO fixtures. See “Fixture drive current selection” on page 9.

# Aqua Driver 400

The various DMX channel requirements for the various port grouping and fixture type combinations on the Aqua Driver 400 are listed here:

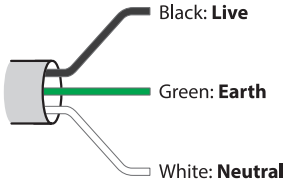
DMX address	RGBW/A 8 Group	RGBW/A 4 Group	RGBW/A 2 Group	RGBW/A 1 Group
1	<i>Port 1: Red</i>	<i>Ports 1 &amp; 2: Red</i>	<i>Ports 1 to 4: Red</i>	<i>All: Red</i>
2	<i>Port 1: Green</i>	<i>Ports 1 &amp; 2: Green</i>	<i>Ports 1 to 4: Green</i>	<i>All: Green</i>
3	<i>Port 1: Blue</i>	<i>Ports 1 &amp; 2: Blue</i>	<i>Ports 1 to 4: Blue</i>	<i>All: Blue</i>
4	<i>Port 1: White</i>	<i>Ports 1 &amp; 2: White</i>	<i>Ports 1 to 4: White</i>	<i>All: White</i>
5	<i>Port 2: Red</i>	<i>Ports 3 &amp; 4: Red</i>	<i>Ports 5 to 8: Red</i>	
6	<i>Port 2: Green</i>	<i>Ports 3 &amp; 4: Green</i>	<i>Ports 5 to 8: Green</i>	
7	<i>Port 2: Blue</i>	<i>Ports 3 &amp; 4: Blue</i>	<i>Ports 5 to 8: Blue</i>	
8	<i>Port 2: White</i>	<i>Ports 3 &amp; 4: White</i>	<i>Ports 5 to 8: White</i>	
9	<i>Port 3: Red</i>	<i>Ports 5 &amp; 6: Red</i>		
10	<i>Port 3: Green</i>	<i>Ports 5 &amp; 6: Green</i>		
11	<i>Port 3: Blue</i>	<i>Ports 5 &amp; 6: Blue</i>		
12	<i>Port 3: White</i>	<i>Ports 5 &amp; 6: White</i>		
13	<i>Port 4: Red</i>	<i>Ports 7 &amp; 8: Red</i>		
14	<i>Port 4: Green</i>	<i>Ports 7 &amp; 8: Green</i>		
15	<i>Port 4: Blue</i>	<i>Ports 7 &amp; 8: Blue</i>		
16	<i>Port 4: White</i>	<i>Ports 7 &amp; 8: White</i>		
17	<i>Port 5: Red</i>			
18	<i>Port 5: Green</i>			
19	<i>Port 5: Blue</i>			
20	<i>Port 5: White</i>			
21	<i>Port 6: Red</i>			
22	<i>Port 6: Green</i>			
23	<i>Port 6: Blue</i>			
24	<i>Port 6: White</i>			
25	<i>Port 7: Red</i>			
26	<i>Port 7: Green</i>			
27	<i>Port 7: Blue</i>			
28	<i>Port 7: White</i>			
29	<i>Port 8: Red</i>			
30	<i>Port 8: Green</i>			
31	<i>Port 8: Blue</i>			
32	<i>Port 8: White</i>			

See “Port grouping” on page 10 and “Aqua Driver mode control” on page 14 for DMX address configuration details.

DMX address	White 8 Group	White 4 Group	White 2 Group	White 1 Group
1	<i>Port 1: White</i>	<i>Ports 1 &amp; 2: White</i>	<i>Ports 1 to 4: White</i>	<i>All: White</i>
2	<i>Port 2: White</i>	<i>Ports 3 &amp; 4: White</i>	<i>Ports 5 to 8: White</i>	
3	<i>Port 3: White</i>	<i>Ports 5 &amp; 6: White</i>		
4	<i>Port 4: White</i>	<i>Ports 7 &amp; 8: White</i>		
5	<i>Port 5: White</i>			
6	<i>Port 6: White</i>			
7	<i>Port 7: White</i>			
8	<i>Port 8: White</i>			

## Power input

The fixed power cord is supplied as standard with US color coding and bare tails. For international installations, wire according to local codes.



The Aqua Driver power requirements are as follows:

- Voltage: 100-277VAC 50/60Hz

Power cord colors

The red front panel indicator will illuminate when power is applied. The other two indicators located just below the power indicator are not used.

## In-rush current

The Aqua Drivers 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.

## Aqua Driver mode control

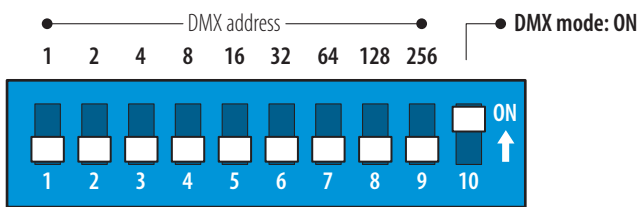
The manner in which the Aqua Driver output ports are grouped and operate is determined by the settings of the three switch blocks located on the front panel. There are three main ways to use the Aqua Driver:

- External DMX control mode,
- Standalone mode using internal chase programs,
- Standalone mode using adjustable static dimming.

### External DMX control mode

To allow DMX control you need to:

- 1 Set switch 10 of the 10-way switch block ON to choose DMX mode.



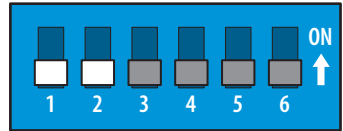
- 2 Select the required DMX base address using switches 1 to 9 of the 10-way switch block. Each of the nine switches is 'weighted' with a value as shown here. Numerous apps are available to assist you with configuring the correct switch combinations for a given DMX address. *Note: The total number of DMX channels required for control will depend upon the chosen port grouping and fixture types (see "DMX channel layouts" on page 11).*

of the nine switches is 'weighted' with a value as shown here. Numerous apps are available to assist you with configuring the correct switch combinations for a given DMX address. *Note: The total number of DMX channels required for control will depend upon the chosen port grouping and fixture types (see "DMX channel layouts" on page 11).*

- 3 Use switches 1 and 2 of the 6-way switch block to choose the required grouping of channel outputs as required by the Aqua Drums being connected and their required functions.

1	2	Port grouping	
		Driver 150	Driver 400
OFF	OFF	1 group	1 group
ON	OFF	2 group	2 group
OFF	ON	4 group	4 group
ON	ON	4 group	8 group

Port grouping



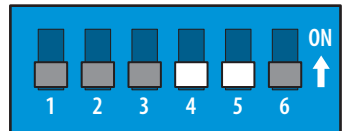
*Note: Ensure the correct fixture current is selected - see page 9.*

See "Port grouping" on page 10 for more details.

- 4 Use switches 4 and 5 of the 6-way switch block to set the type of Aqua Drum fixtures being used:

4	5	Fixture type
ON	OFF	White
ON	ON	RGBW/A

Fixture type



*Note: The chosen fixture type (RGBW/A or White) is applied globally to all ports. However, the electrical characteristics of the ports do not change (only their logical addressing configuration), so it is possible to mix white fixtures into an RGBW set up. As such, the various white emitters of the fixture would respond individually to the separate RGBW channel addresses.*

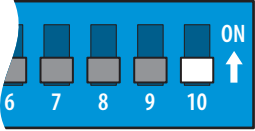


# Standalone mode using internal chase programs

In standalone mode, all ports are treated as one group. *Note: all switch settings can be changed when the driver is off or on.* To configure the Aqua Driver for standalone chase mode you need to:

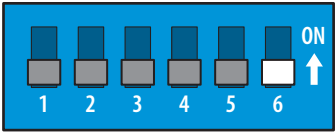
- 1 On the 10-way switch block, set switch 10 OFF to choose standalone mode.

Standalone mode: OFF ●



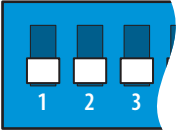
- 2 On the 6-way switch block, set switch 6 OFF to use chase programs, instead of dimming.

Manual dimming mode: OFF ●



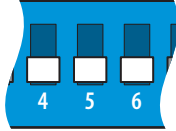
- 3 On the 10-way switch block, use switches 1 to 3 to choose the required fade time between chase steps. If all three switches are OFF, the chase states will snap between each other. All three switches ON will produce the smoothest fade (*Note: switch 3 is weighted as the most significant bit*).

Fade time ●



- 4 Use switches 4 to 6 of the 10-way switch block to choose the required speed of chase. If all three switches are OFF, the chase will run at its fastest speed, with 0.1 seconds between steps.

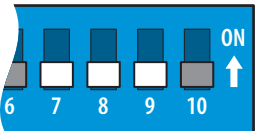
Speed ●



4	5	6	Speed
OFF	OFF	OFF	0.1 seconds
ON	OFF	OFF	0.2 seconds
OFF	ON	OFF	0.5 seconds
ON	ON	OFF	1 second
OFF	OFF	ON	5 seconds
ON	OFF	ON	10 seconds
OFF	ON	ON	20 seconds
ON	ON	ON	30 seconds

- 5 Use switches 7 to 9 of the 10-way switch block to choose the required program. If all three switches are ON, an Auto mode will cycle between all of the available programs.

Program ●

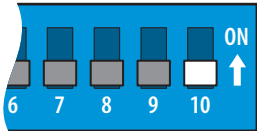


**Standalone mode using adjustable static dimming**

In standalone mode, all ports are treated as one group. *Note: all switch settings can be changed when the driver is off or on.* To configure the Aqua Driver for standalone static dimming you need to:

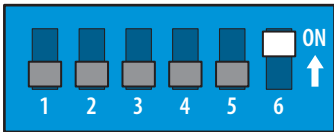
- 1 On the 10-way switch block, set switch 10 OFF to choose standalone mode.

Standalone mode: OFF ●



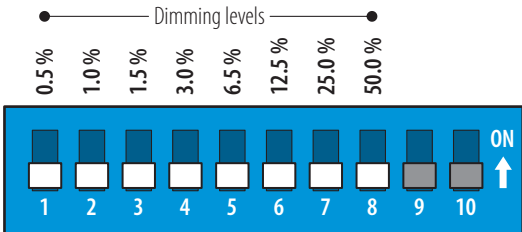
- 2 On the 6-way switch block, set switch 6 ON to choose manual dimming mode.

Manual dimming mode: ON ●



- 3 On the 10-way switch block, use switches 1 to 8 to choose the overall dimmed output for every connected Aqua Drum fixture.

Each of the 8 switches represents a particular dimming level. When a switch is ON, its corresponding dimming level is added to the overall output of all emitters; allowing stepped outputs from 0 through to 100% to be selected. For 100%, place all 8 of the switches in the ON position.

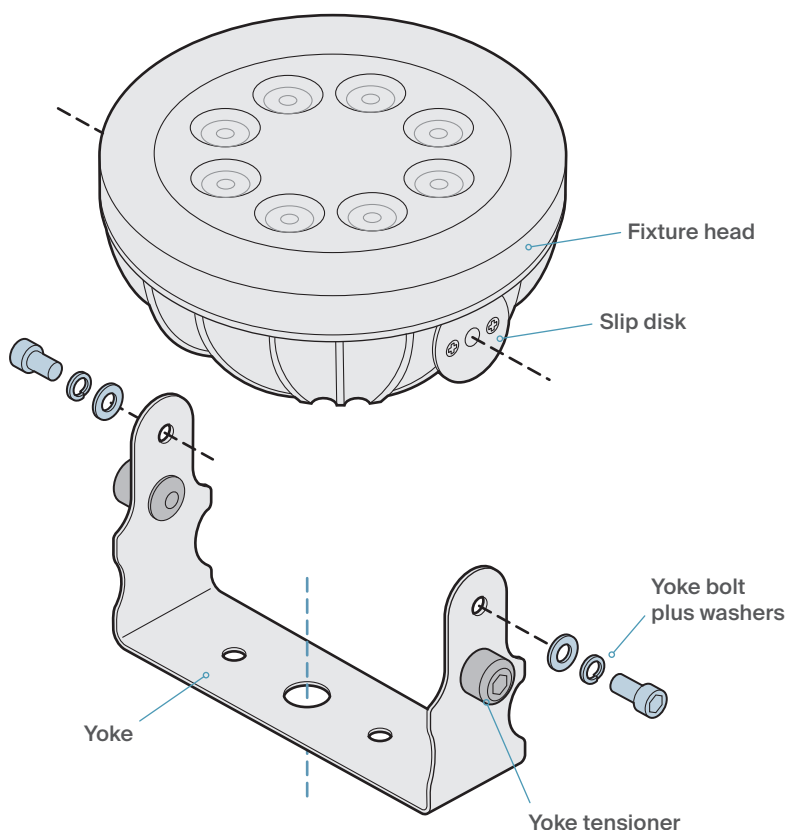


## Mounting

### Surface installation

To mount an Aqua Drum onto a surface may require you to first remove the yoke in order to gain full access to the mounting holes.

- 1 Using a 3/16 (5mm) Allen wrench, loosen the two yoke tensioners; it is not necessary to remove them completely.
- 2 Using the 3/16 (5mm) Allen wrench, remove the two yoke bolts plus their flat and spring washers.
- 3 Slide the fixture head out from the yoke:



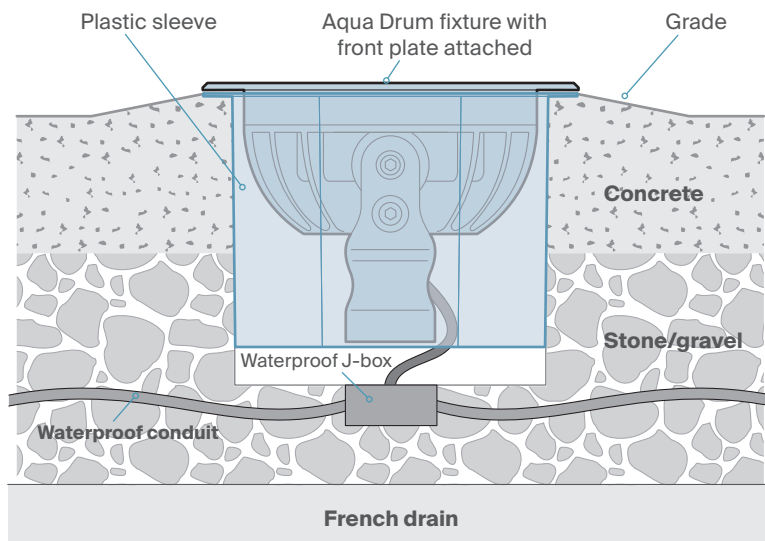
- 4 Securely fix the yoke to the required surface using fixings appropriate to both the surface and the weight of the Aqua drum. Each Aqua Drum yoke has a center hole plus two offset holes. The diameters of these vary depending on the model. See the dimension diagrams starting on page 22 for details.
- 5 Once the yoke is fully secured, slide the fixture head back in, align the threads and insert the yoke bolts plus washers. Ensure the inner lip of each yoke tensioner overlaps the slip disks on the fixture head.
- 6 Place the fixture into the required orientation and tighten both yoke bolts and both tensioners.

## Ground installation

Use an optional In-grade housing kit when installing an Aqua Drum in-ground; three sizes of sleeve kit are available to fit the various Aqua Drum models. Each kit consists of a durable plastic sleeve, a replacement die cast trim ring for the fixture, plus four screws.

### Ground installation overview

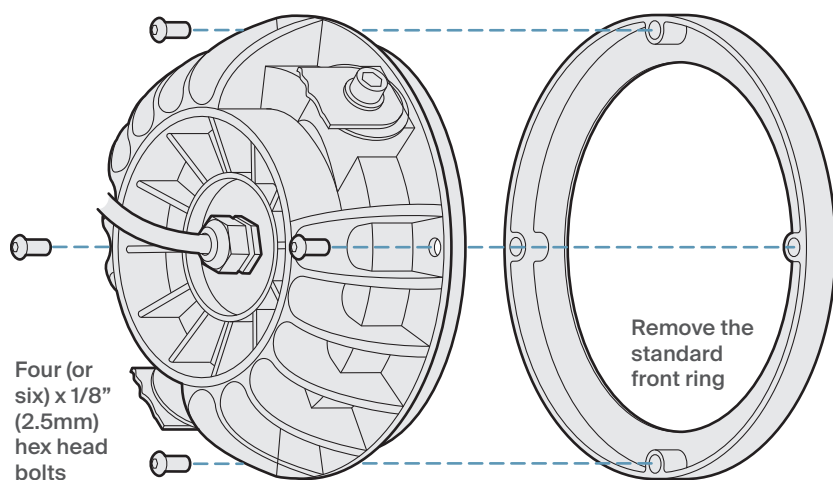
- 1 Where necessary, ensure power to the installation site has been fully isolated.
- 2 Ensure the installation area has suitable drainage to prevent the well from accumulating water. The base should be formed from permeable stone/gravel plus the use of a *French Drain* is recommended in clay soils:



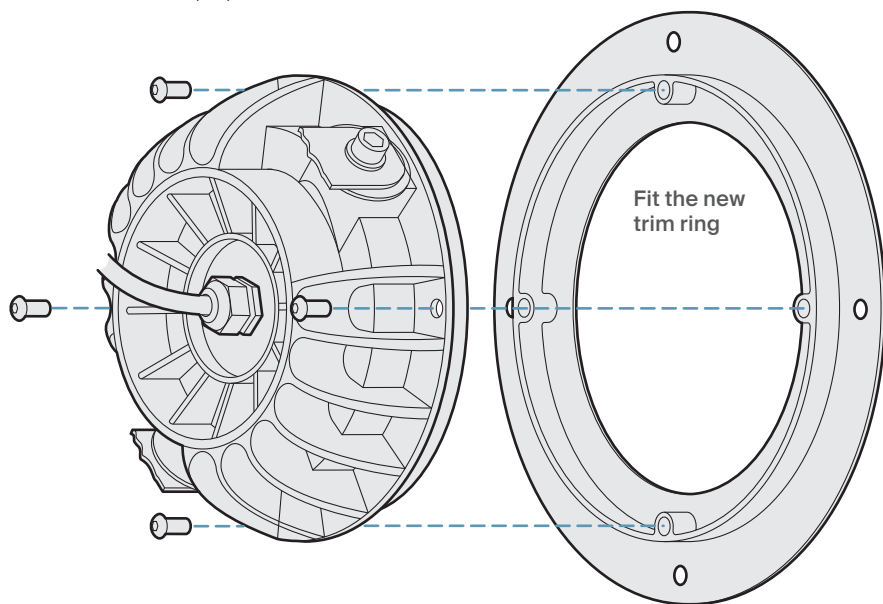
- 3 Install suitable cabling from the Aqua Driver controller to the well via *Waterproof Conduit* and use a waterproof *Junction Box* at the base of the well. *Note: Between six and twelve conductors (see "Port connection cables" on page 6 for appropriate wire gauges) will be required, depending on the model of Aqua Drum being used.*
- 4 Insert the plastic sleeve and pour the concrete so that the top level of the sleeve is within 0.8" (20mm) above grade in order to promote water run-off on the finished ground surface.
- 5 Prepare the Aqua Drum for insertion - see "Preparing the Aqua Drum for ground installation" on page 19 for details.
- 6 Carefully shorten the fixed Aqua Drum cable and connect it to the supply circuit(s) within the waterproof junction box - see "Connector pin outs" on page 9.
- 7 Place the Aqua Drum into the well and secure it using the supplied four screws. The supplied screws require a TA2.3mm triangular driver (to assist with tamper resistance).

## Preparing the Aqua Drum for ground installation

- 1 On the underside of the Aqua Drum fixture, use a 1/8" (2.5mm) Allen wrench to remove the four (six on HO models) bolts which secure the front ring:

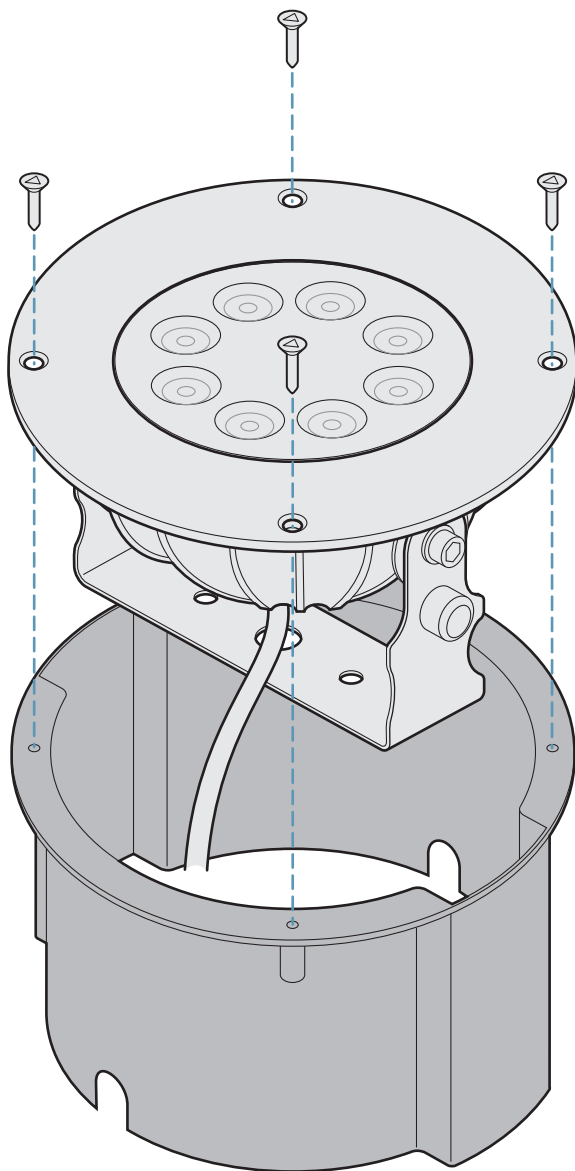


- 2 Replace the front ring with the trim ring supplied with the optional In-grade housing kit. Use the four (six) bolts removed earlier to secure it:



- 3 Arrange the yoke of the fixture so that it stands perpendicular to the front face.

- 4 Make the necessary connections within the well and test.
- 5 Lower the Aqua Drum fixture into the well and align the four countersunk screw holes with the pilot holes in the top lip of the plastic sleeve:



- 6 Insert the four supplied screws and use a TA2.3mm triangular driver to tighten them.

# Further information

## Aqua Drum and Driver specifications

### Aqua Drum fixtures

Emitters	EO: 8 LEDs SO: 18 LEDs HO: 36 LEDs
Photometrics (4000K)	EO: 700 lm SO: 1600 lm HO: 3259 lm
Power consumption	EO: 8W SO: 18W HO: 36W
Lumen maintenance (L <sub>70</sub> )	150,000 hours (25°C)
Operating temperature	-40°F to 122°F (-40°C to 50°C)
Housing	316 marine grade stainless steel, sealed glass lens
IP rating	IP68, submersible up to 20' (6m)
IK rating	IK08, protection against 5 joule impact, walk-over rated
Certifications	

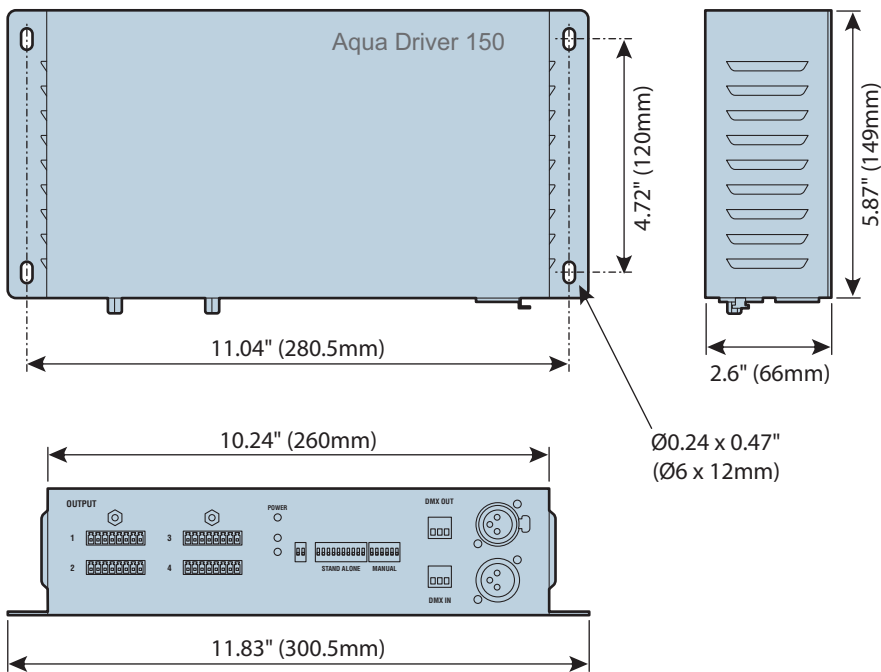


### Aqua Driver 150 and 400 controllers

Control	DMX plus internal standalone chases and dimming
Input voltage	100 to 277VAC (50/60Hz) - auto sensing
Output	350 to 700mA constant current
Output ports	Aqua Driver 150: 4 Aqua Driver 400: 8
Operating temperature	0°F to 158°F (-20°C to 70°C)
Housing	Aluminum
IP rating	IP20, indoor dry location
IK rating	IK06, protection against 1 joule impact

Dimensions

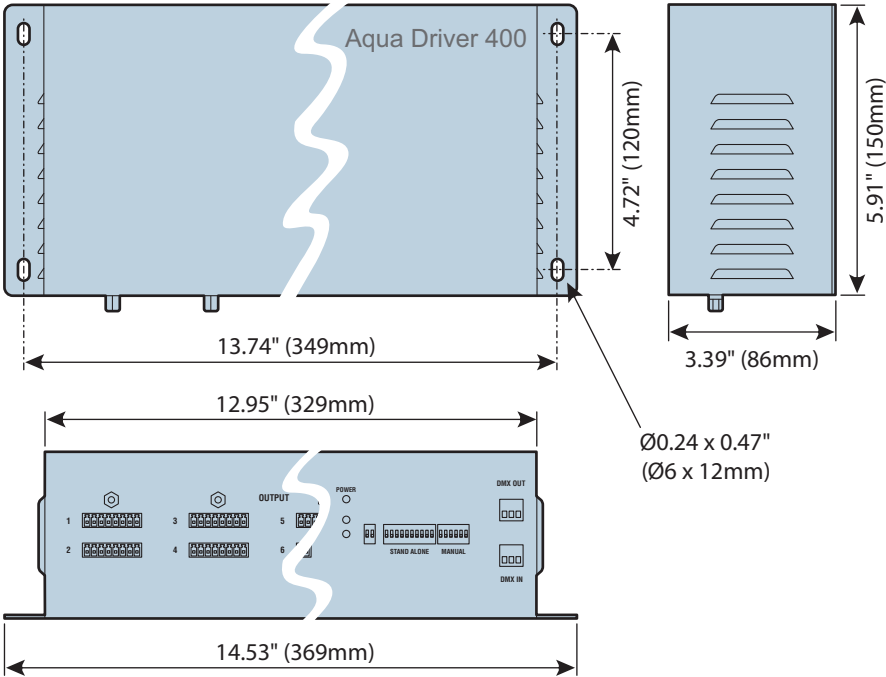
Aqua Driver 150



Weight: 2.6 lbs (1.18 kg)

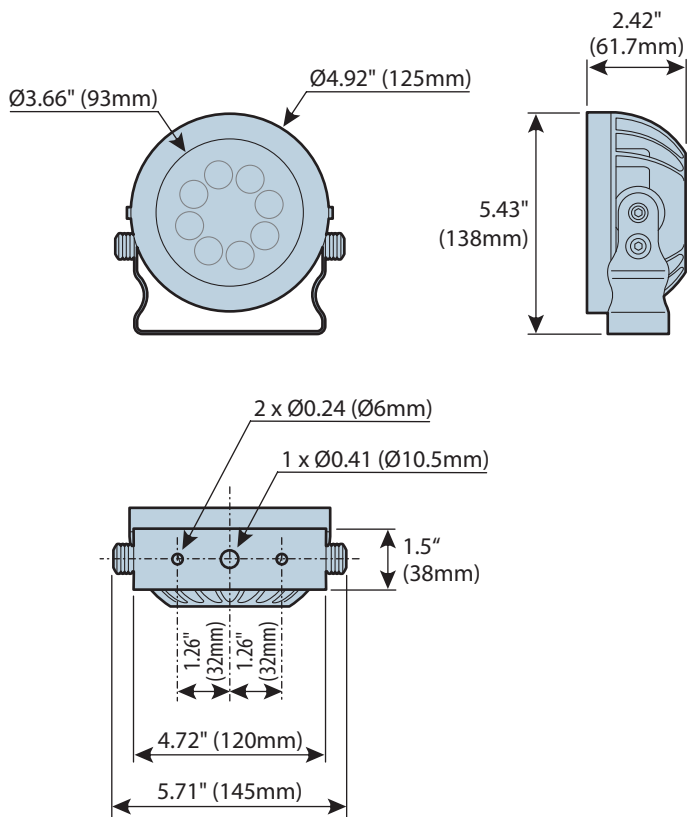


Aqua Driver 400



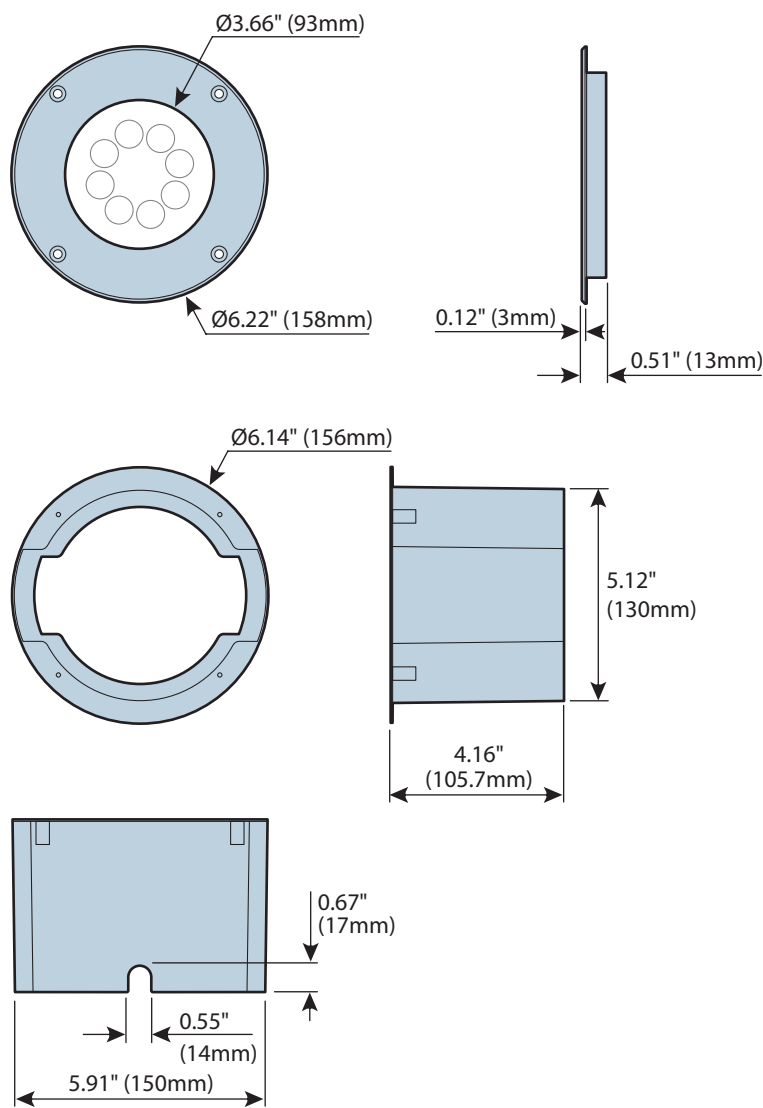
Weight: 4.4 lbs (1.99 kg)

Aqua Drum EO

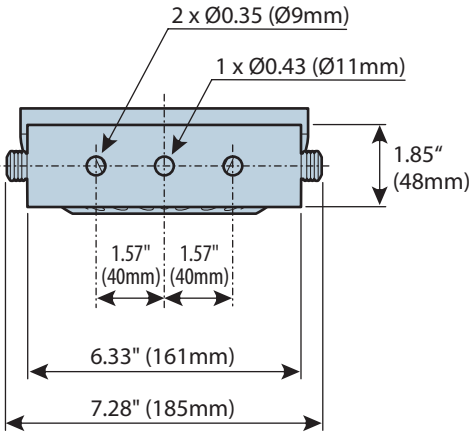
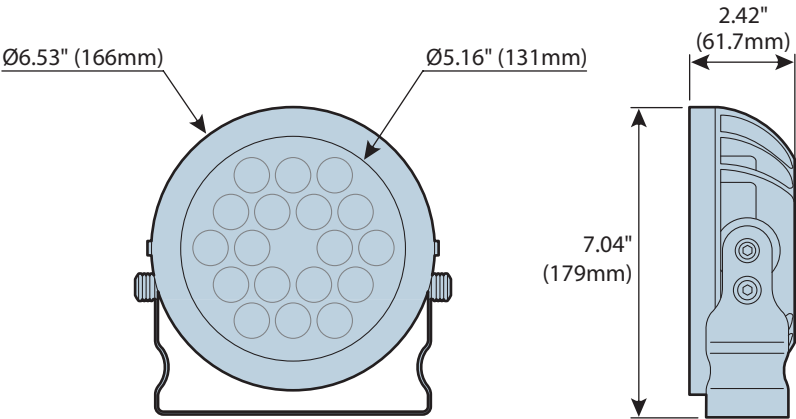


Fixture weight: 4 lbs (1.8 kg)

Aqua Drum EO In-grade housing kit

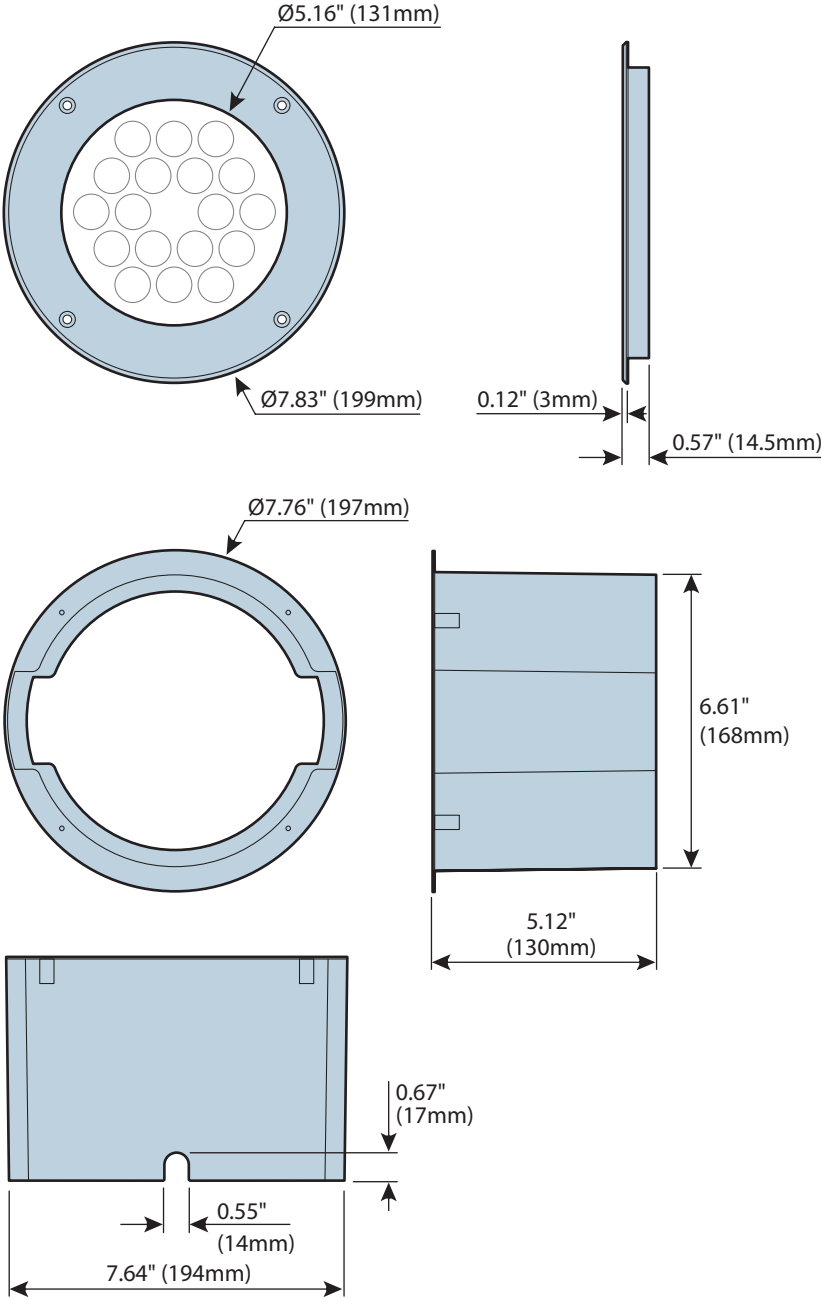


Aqua Drum SO

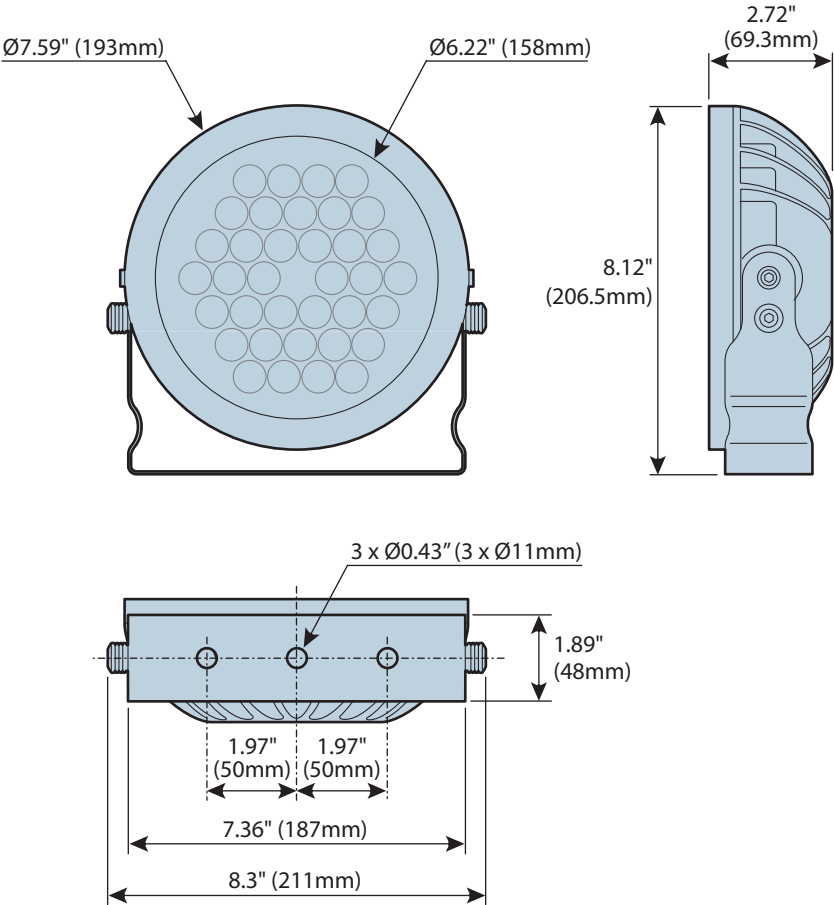


Fixture weight: 6.6 lbs (3 kg)

Aqua Drum SO In-grade housing kit

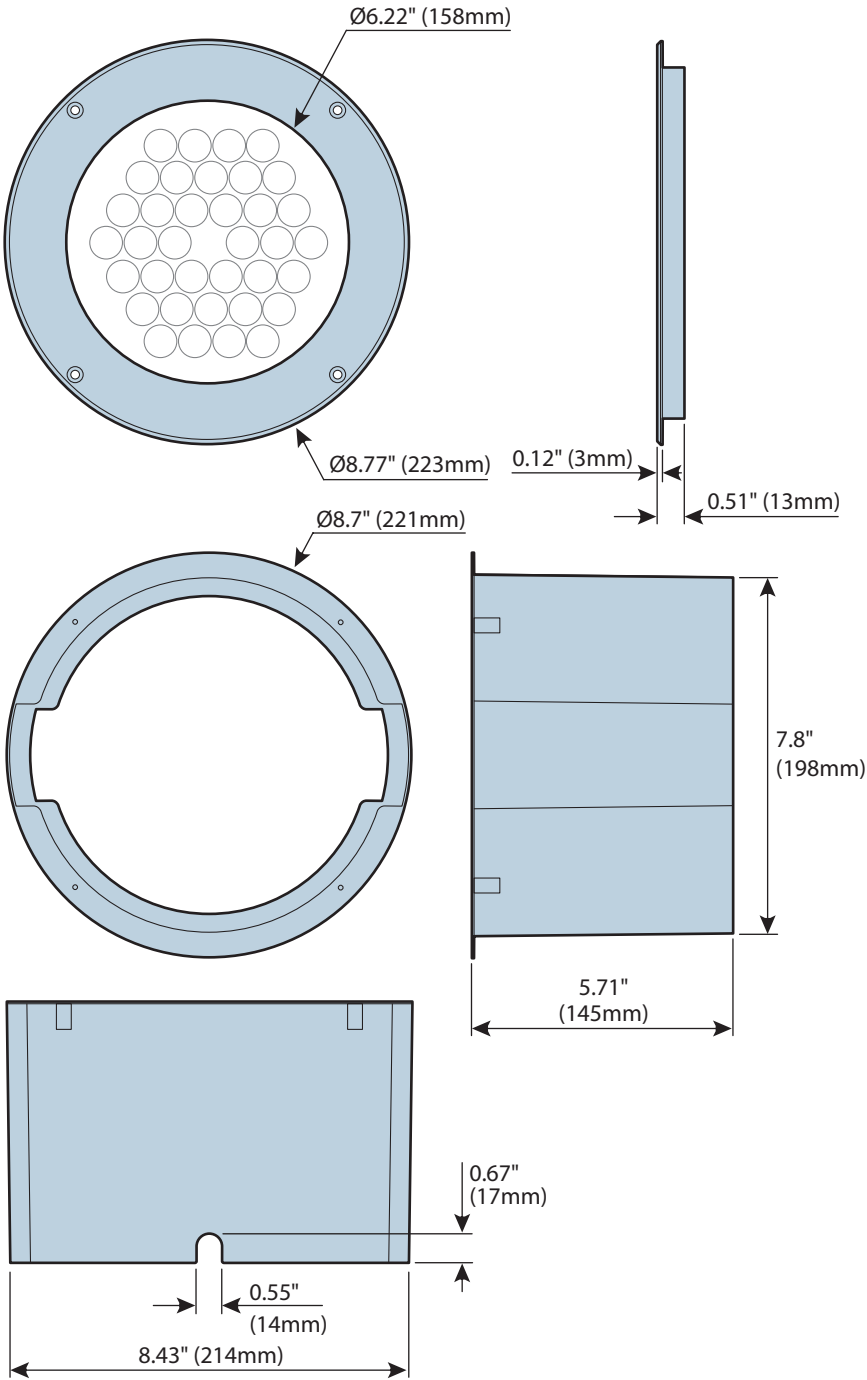


Aqua Drum HO



Fixture weight: 8 lbs (3.6 kg)

Aqua Drum HO In-grade housing kit



## 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 thereof. 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 manufactured 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.





