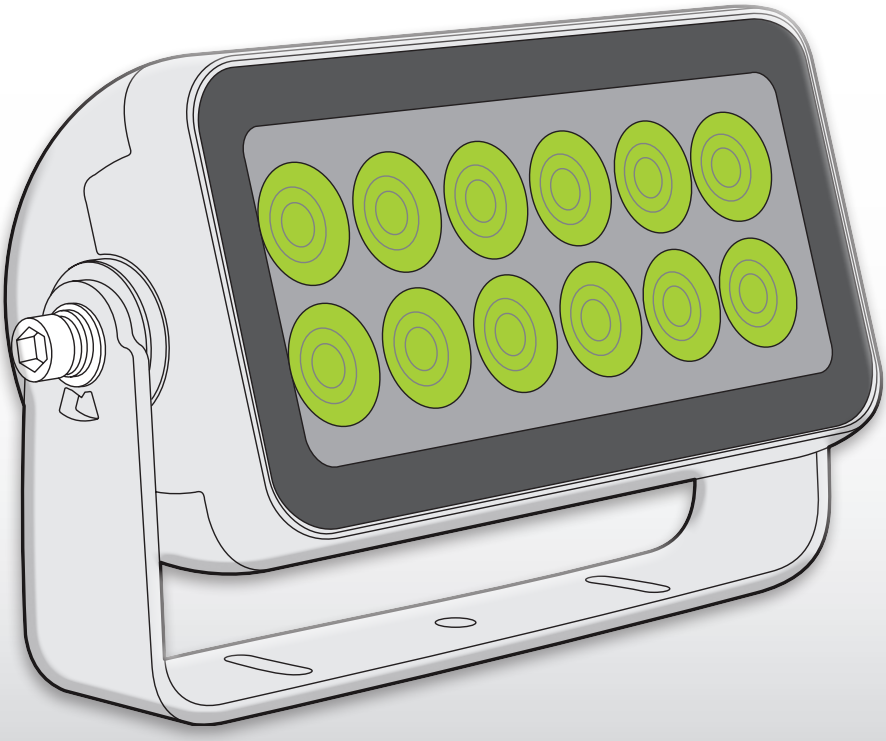
ACCLAIM LIGHTING

ACCLAIM MODULAR SYSTEMS



Flood One EO Color

User guide

CONTENTS

INTRODUCTION

WELCOME

Welcome to the Flood One EO Color range from Acclaim Lighting, a small family of aluminum bodied IP66-rated exterior LED flood fixtures.

The Flood One EO Color family fully embraces Acclaim Lighting's Modular Systems (AMS) design standard; AMS allows a wider choice of internal and external options to be configured in our Los Angeles headquarters and delivered in industry-leading time. There are numerous emitter options, together with a native beam angle of 10º, adjustable using a range of spread lens options to suit your installation:

- Three RGBW options with choices of either 6000K, 4000K or 3000K white.
- 10º standard with 20º, 40º, 70º, 90º or 10º x 60º optional spread lenses.

Additionally, factory fitted half and full snoots allow the light output to be shaped further.

Control is achieved using the industry standard DMX/RDM format and, with the addition of the optional Acclaim Lighting Aria units (see page 10), you can add remote wireless connectivity to the list of abilities within the Flood One EO Color range.

The internal auto-sensing power supply within each unit can accept mains inputs between 100 to 277VAC at 50 or 60Hz. Total power consumption is just 65W.

SAFETY

- When fixtures are mounted off-ground, ensure they are securely fitted to an appropriate mounting surface.
- Ensure that the power input is supplied from a correctly fused, earthed and environmentally protected location.

MAINTENANCE

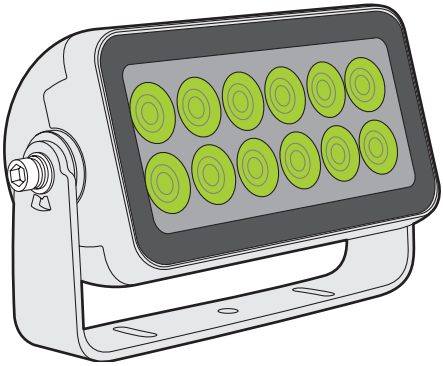
CAUTION: Always isolate mains power before starting maintenance operations.

- 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.

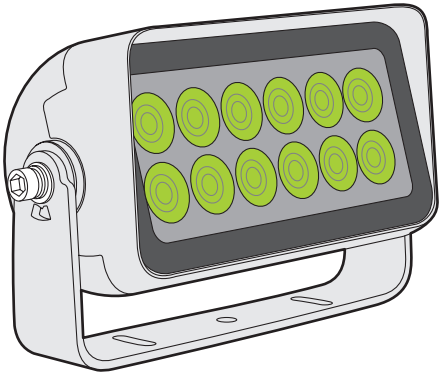
CLEANING

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

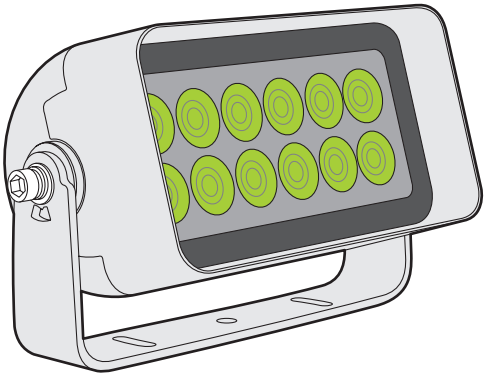
SUPPLIED ITEMS



Standard model

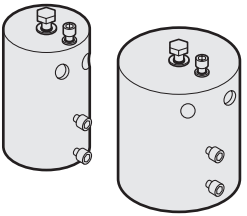


Half snoot model
standard model plus [FBHSG]



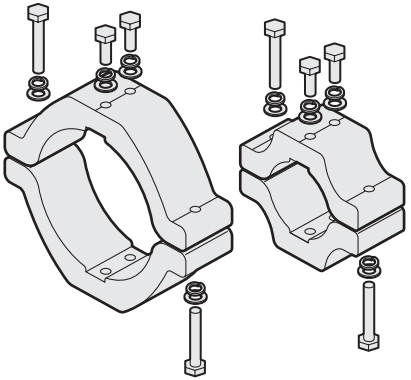
Full snoot model
standard model plus [FBFSG]

OPTIONAL ACCESSORIES



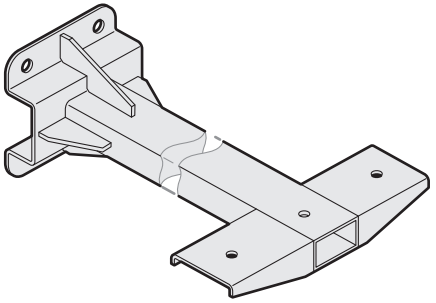
Tenon mounts

2" pipe (2.51", 56mm inner dia.)	[TM2]
4" pipe (4.13", 105mm inner dia.)	[TM4]



Pipe clamps (each can mount 1 or 2 fixtures)

2" pipe (2.51", 56mm inner dia.)	[PC2]
4" pipe (4.13", 105mm inner dia.)	[PC4]



Extender bars

12"	[FOEB12]
24"	[FOEB24]
36"	[FOEB36]

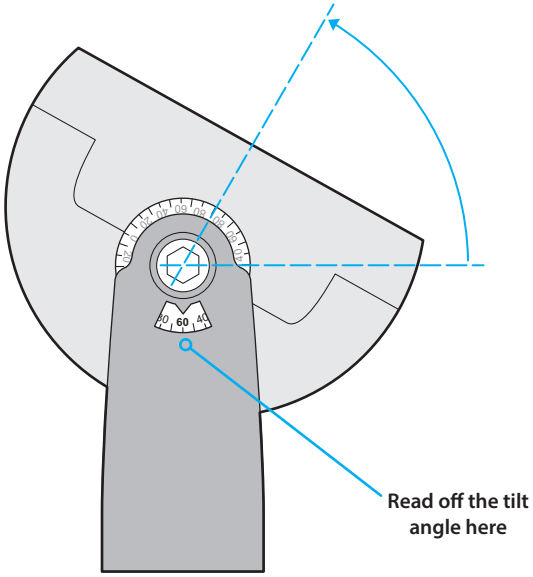
INSTALLATION

When installing each Flood One EO Color fixture, ensure that the surface is level and that nothing is protruding to damage the mounting yoke. Suitable mounting surfaces include steel, aluminum, concrete or wood structures.

Each Flood One EO Color fixture is fitted with a swivel yoke mount, which has a center hole of 0.47" (12mm) and also two lock-off slots spaced at 6.3" (160mm) around the center line (see page 17). The yoke has a thickness of 0.24" (6mm). Select bolts or screws (not supplied) that fit the yoke holes correctly and are particularly suited to the mounting surface. Optional tenon mounts and pipe clamps are available for mounting the fixture onto the top or sides of poles respectively (see page 4).

TILT ADJUSTMENT

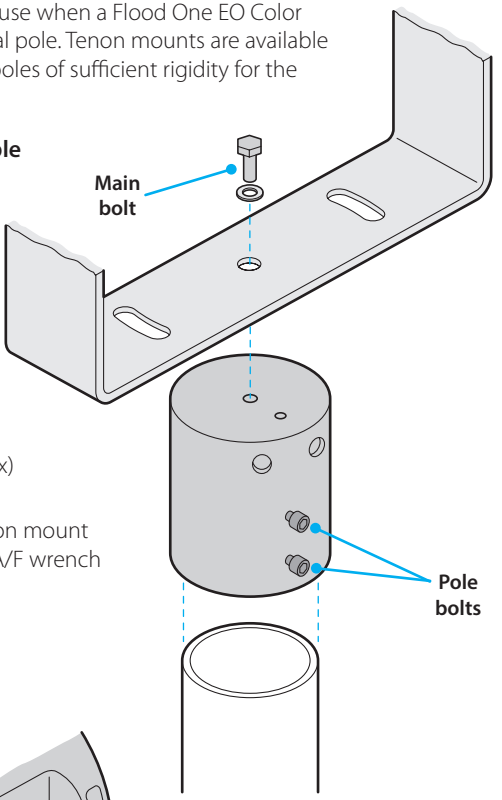
The yoke allows a tilt range of more than 180 degrees to be achieved. Use a 3/8" (10mm) Allen wrench to adjust the tilt angle. A useful tilt gauge is provided at each end of the fixture:



USING A TENON MOUNT

Optional tenon mounts are available for use when a Flood One EO Color needs to be mounted **on top** of a vertical pole. Tenon mounts are available for use with 2" (50mm) and 4" (100mm) poles of sufficient rigidity for the weight of the fixture.

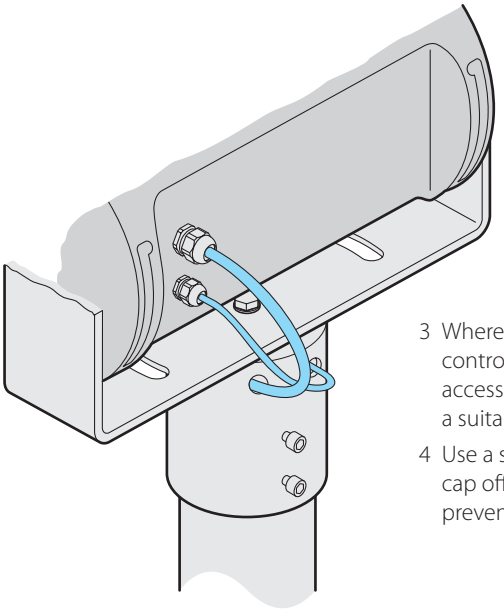
IMPORTANT: Tenon mounts are suitable only for vertical pole mounting where the fixture sits on top of the pole. Tenon mounts must NEVER be used to hang a Flood One EO Color below a pole.



TO USE A TENON MOUNT

1 Slide the tenon mount onto the vertical pole and secure using the two bolts on the side (1/4"/6mm Allen (hex) wrench required).

2 Fix the Flood One EO Color to the tenon mount using the supplied main bolt (17mm A/F wrench required) as shown right.



3 Where required, feed the mains/control cable into one of the two access holes and down the pole to a suitable exit point.

4 Use a suitable silicone sealant to cap off the cable access holes to prevent water ingress.

USING A PIPE CLAMP

Optional pipe clamps are available to mount Flood One EO Color fixtures on either 2" (50mm) or 4" (100mm) tubes and poles.

IMPORTANT: Ensure the pipe and its mountings have sufficient load capacity for the Flood One EO Color fixture(s) to be mounted.

TO USE A PIPE CLAMP

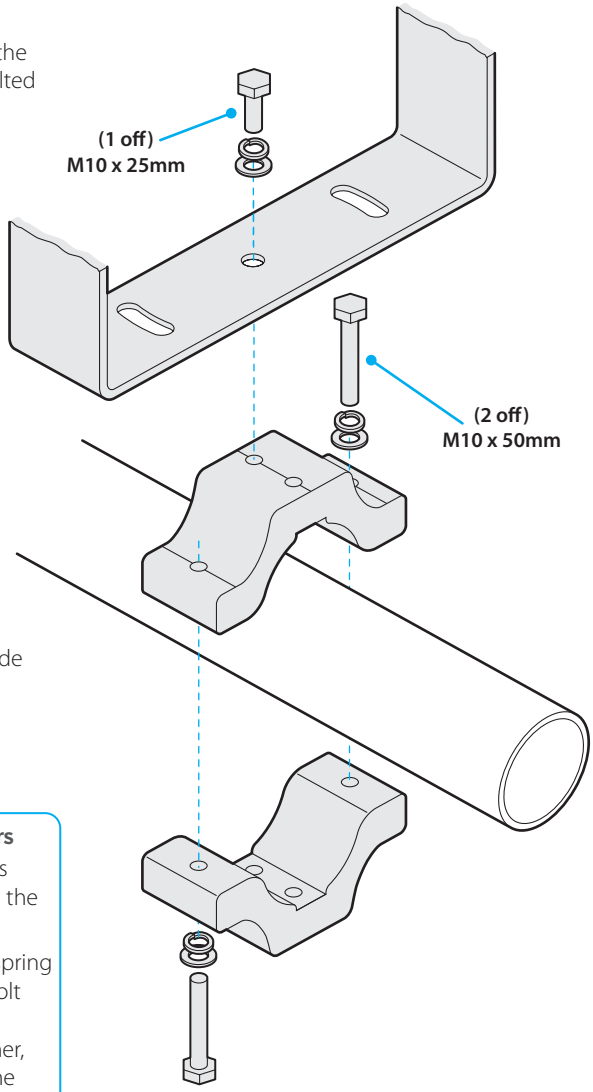
1 Separate the two halves of the clamp, if they are already bolted together.

2 Place the two halves of the clamp around the pipe.

3 Use the two longer bolts, one from each side to join the two halves - see below about the correct use of the supplied washers.

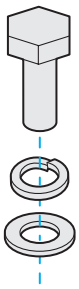
4 Tighten the two main bolts evenly until the clamp is held firmly in place.

5 Use one of the two smaller bolts (with spring and standard washers) to fix the Flood One EO Color yoke to one side of the clamp and tighten.



Using the supplied washers

The supplied spring washers help to maintain tension on the bolts to prevent loosening.



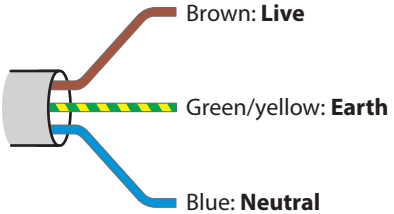
Always place the spring washer on each bolt first and then add the standard washer, before inserting the bolt into the clamp. This will prevent the steel spring washer from denting the softer aluminum body of the clamp.

POWER AND CONTROL WIRING

Power and control are arranged as separate bare-tail inputs via cords that are each 6.5' (2m) in length.

POWER

The power feed is as follows. The fixture must have a valid protective earth connection:

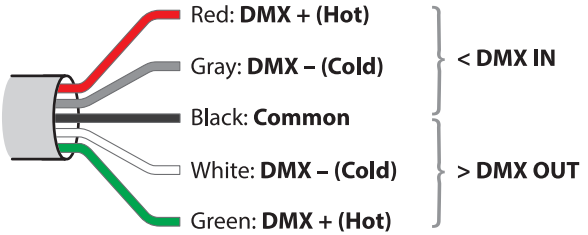


- Voltage: 100-277VAC 50/60Hz
- Power: 65W
- Feed cable: 16 AWG / 1.31mm^2

Note: Acclaim recommends taking proper precautions for external surge protection, as control and power electronics can be damaged by major events.

CONTROL

The DMX control cable has five cores:



- Feed cable: 18 AWG / 0.824mm^2

INPUT WIRING PROTECTION

Ensure that appropriate care is taken to protect the junction where the mains and control inputs are joined to the fixture's feed cables.

Ensure that:

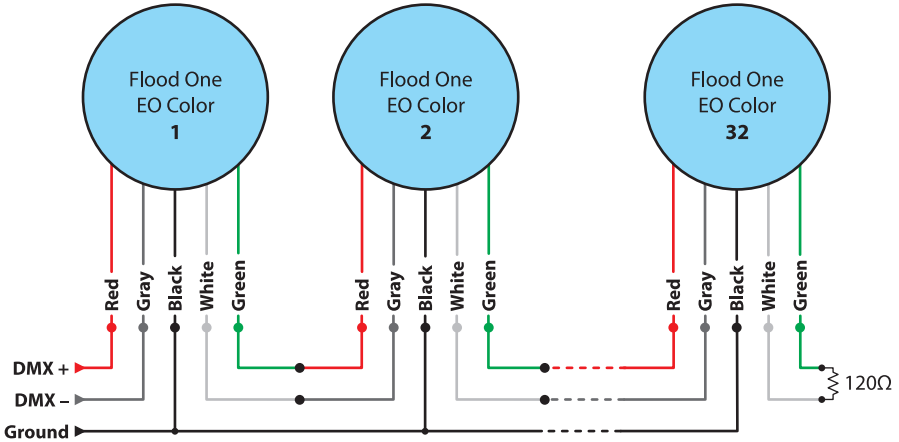
- the mains input is derived from a suitable overload-protected supply.
- the junction boxes have an environmental rating of at least IP66.
- all cable access points, plus the enclosure cover are correctly sealed and moisture proof.
- only suitable cable connectors are used within the junction boxes; Acclaim Lighting recommends Wago® 221-series splicing connectors.
- local codes are followed during planning and installation. Some municipalities have specific requirements when wiring low and high voltage cables in close proximity. Such requirements could include the use of a barrier within combined junction boxes (if used) or particular minimum spacings between the control and power cables.
- connections are made, inspected and certified by a qualified electrician.

IN-RUSH CURRENT

Although LED fixtures are low power devices compared to their incandescent equivalents, their power supplies exhibit a trait known as 'in-rush current' when they are first powered on. This is caused by the various components within the switching power supplies topping themselves up with power. The in-rush current period lasts only milliseconds and does not cause any effect when a handful of units are powered on at the exact same time. However, if many fixtures are linked to the same power input, they will momentarily pull a current that may greatly exceed their normal operating level. This may affect over-current trips when power is applied. For this reason it is advisable to limit the number of fixtures on any one power input.

WIRED DMX CONTROL

When connecting multiple fixtures, connect the DMX output of the controlling device to the input wires of the first fixture and feed the output of that fixture to the next. The final fixture in the line should have a 120Ω terminating resistor connected between its DMX + (white) and DMX – (green) output lines:



Note: Acclaim strongly recommends the following cables for various DMX wiring applications:

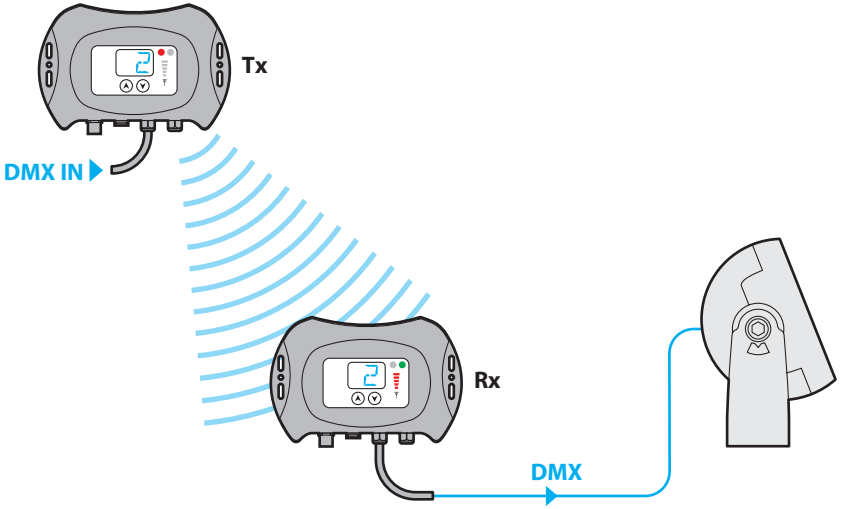
- *For indoor or in conduit, above grade* — *Belden 9842*
- *For indoor plenum* — *Belden 82842*
- *For outdoor exposed or direct burial* — *Belden 3107DB*

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 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.
- 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.

OPTIONAL WIRELESS DMX OPERATION (VIA ARIA)

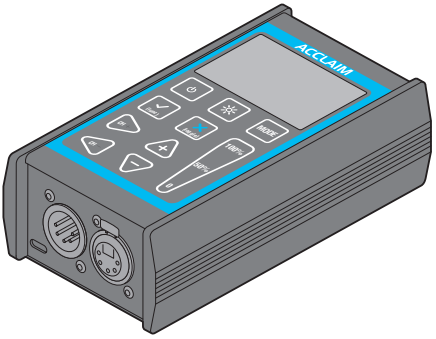
Where wireless control is required, use Acclaim Lighting Aria™ wireless linking over distances up to 2600 feet (792m) line of sight:



CONFIGURATION

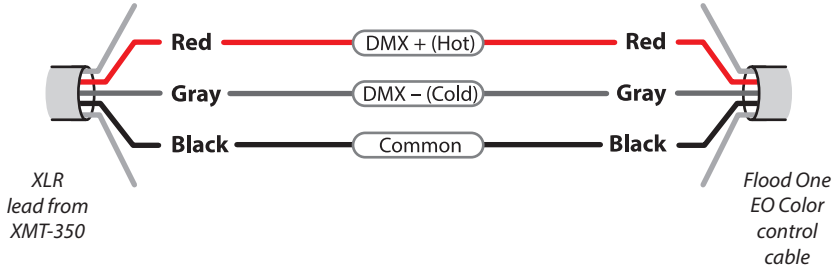
Flood One EO Color fixtures have no external controls and instead rely on RDM (Remote Device Management) for all configuration via the DMX interface. This allows multiple devices to be configured either before or after installation.

Various third party DMX/RDM tools are available; we recommend the Acclaim Lighting XMT-350 for this task.



MAKING A TEMPORARY CONTROL LINK WITH THE XMT-350

Each Acclaim lighting XMT-350 DMX/RDM tool is supplied with a 5-pin XLR lead that can be used to make a temporary control input link with the Flood One EO Color control cable. Use a 3-pin terminal block, wire nuts, conn blocks or Wago® connectors to temporarily join the two cables:



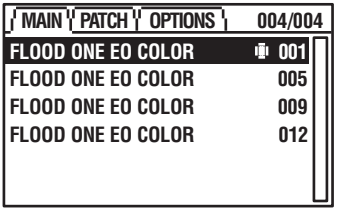
ADDRESSING FIXTURES

TO ADDRESS FIXTURES USING THE ACCLAIM LIGHTING XMT-350

1 Connect the XMT-350 to the DMX input line of either a single fixture or multiple fixtures in a pre-arranged daisy chain configuration (see page 9).

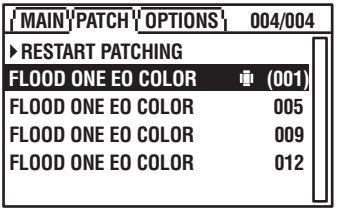
2 Power on the fixture(s) and the XMT-350.

3 On the XMT-350, press the **MODE** button, then use the arrow buttons to highlight the **RDM** function and press the ✓ button to select. The XMT-350 will search for RDM devices and after a short while the XMT-350 will display a list of all located fixtures:



The fixture that is highlighted within the list should begin flashing its emitters to identify itself.

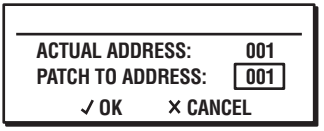
4 On the XMT-350, press the right arrow button to change to the **PATCH** tab:



Note: DMX addresses shown in brackets, e.g. (001), have been temporarily assigned by the XMT-350, but are not yet stored within the fixture(s).

5 If necessary, use the up/down buttons to choose an alternative fixture.

6 Press the ✓ button to set the address for the currently highlighted fixture:



7 Use the up/down buttons to set the required DMX address and then press the ✓ button to store it within the fixture.

8 The highlight will automatically move to the next fixture so that you can address it. Repeat steps 5 to 7 until all fixtures are addressed.

DMX CHANNELS

Each Flood One EO Color fixture requires 4 DMX channels:

- First channel: Red
- Second channel: Green
- Third channel: Blue
- Fourth channel: White

DETERMINING SOLO BEHAVIOR

You can choose how the fixture should behave when it is running solo, either because an external control input is not being used at all or because a connection has been temporarily lost. There are three SOLO BEHAVIOR choices:

- **BLACKOUT** - In this mode, when no external control is present, the emitter outputs will be extinguished.
- **LAST DMX VALUE** - In this mode, when no external control is present, the emitter outputs will remain as per the last received instruction.
- **INTERNAL PROGRAM** - In this mode, when no external control is present, the fixture can be made to show a pre-programmed static color.

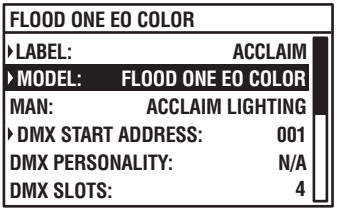
TO DETERMINE THE SOLO BEHAVIOR

1 Connect the XMT-350 to the DMX input line of the fixture installation.

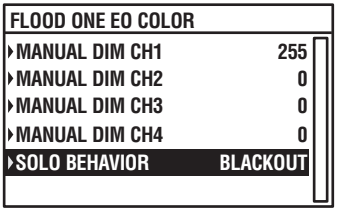
2 On the XMT-350, press the **MODE** button, then use the arrow buttons to highlight the **RDM** function and press the ✓ button to select. The XMT-350 will search for RDM devices and after a short while the XMT-350 will display a list of all located fixtures. The fixture highlighted in the list should show output from its emitters to identify itself.

3 If necessary, use the up/down buttons to highlight an alternative fixture.

4 Press the ✓ button to view details for the chosen fixture and then use the down button to highlight the **MODEL** entry:



5 Press the ✓ button to view the options:

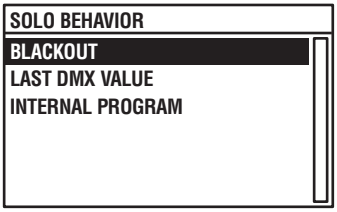


The first four entries allow you to set the intensity levels for all four channels (CH1 = red, CH2 = green, etc.). These will be used only if the SOLO BEHAVIOR mode is set to INTERNAL PROGRAM and the DMX signal is missing. To set a level: Highlight the required Dim Channel number, press the ✓ button and use the up/down buttons to choose the appropriate value; press the ✓ button to save the value.

6 If the Solo Behavior needs to be changed, highlight the SOLO BEHAVIOR option and press the ✓ button.

7 Highlight the required behavior option and press the ✓ button to save and return to the previous screen.

8 Press the ✕ button to return to the previous screen.



TESTING EMITTER OUTPUT

After you have addressed each Flood One EO Color fixture we recommend that you also test each one prior to installation. This can be achieved with your RDM (Remote Device Management) tool. Various third party DMX/RDM tools are available; we recommend the Acclaim Lighting XMT-350 for this task.

TO TEST EMITTER OUTPUT USING THE ACCLAIM LIGHTING XMT-350

1 Connect the XMT-350 to the DMX input line of either a single fixture or multiple fixtures in a pre-arranged daisy chain configuration.

2 Power on the fixture(s) and the XMT-350.

3 On the XMT-350, press the **MODE** button, then use the arrow buttons to highlight the **SEND** function and press the ✓ button to select.

4 Use the arrow buttons to determine the DMX output:

- Use the left and right buttons to choose the DMX address,
- Use the up and down buttons to increase/decrease the level at the chosen address.

Note: If you wish to send DMX values to all addresses simultaneously (rather than cycling through them individually), when the XMT-350 is showing address 001, press the left button once to change to **ALL CHANNELS**. *Now when you set the level it will affect all emitters equally.*

FURTHER INFORMATION

TROUBLESHOOTING

NO LIGHT OUTPUT IS VISIBLE WHEN EXPECTED.

- Check that power is correctly applied to the fixture and that there is no damage to the power input cord.
- Use an RDM tool to perform an emitter test.
- Check that the DMX address set within the fixture matches that being output by the controlling source device.
- Check the DMX output near to the source to confirm a valid signal is being originated.
- Check that the DMX + (hot) and DMX - (cold) lines have not been crossed.

DIMMING AND/OR CHASE CHANGES ARE JERKY WHEN USING ARIA.

- Check for WiFi sources near to the transmitter or receiver devices. Try changing the transmitter and receiving fixture(s) to different (but equal) wireless channels to check for clear space, from interference by other devices, in the radio spectrum.

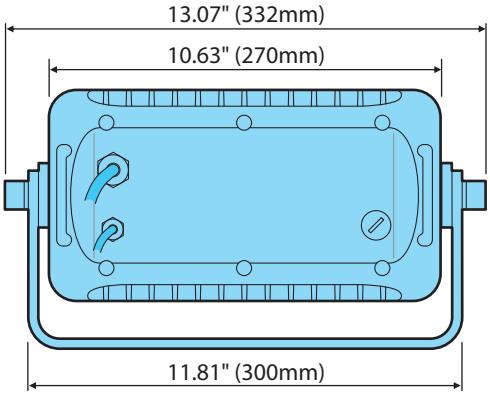
SPECIFICATIONS

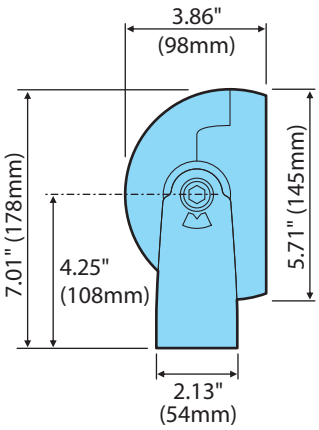
Emitters	QW6: RGBW (W=6000K) QW4: RGBW (W=4000K) QS: RGBW (W=3000K)
Optics	10º standard with 20º, 40º, 70º, 90º or 10º x 60º spread lens options
Output	Up to 2,560 lumens, 41,475 center candela
Lumen maintenance (L_{70})	150,000 hours (25ºC)
Control	DMX + RDM
Maximum lengths in series	32 via DMX, power local to each fixture
Power input	100 - 277VAC, 50/60Hz
Power consumption	65W
Housing	Die cast aluminum, glass lens, optional marine coating available
Mounting	Surface mount yoke included
Fixture connectors	Attached 6.5' (2m) AC cable, separate 6.5' (2m) DMX/RDM cable
Ingress protection	IP66, wet location
Impact protection	IK07, protection against 2 joule impact (40cm distance)
Vibration protection	ANSI C136.31, 3G-rated for high vibration & bridge applications
Operating temperature	-40ºF to 125ºF (-40ºC to 51ºC)
Weight	11 lbs/5kg
Certifications	Intertek, CE, FC, 3G LUMINAIRE VIBRATION, UK CA

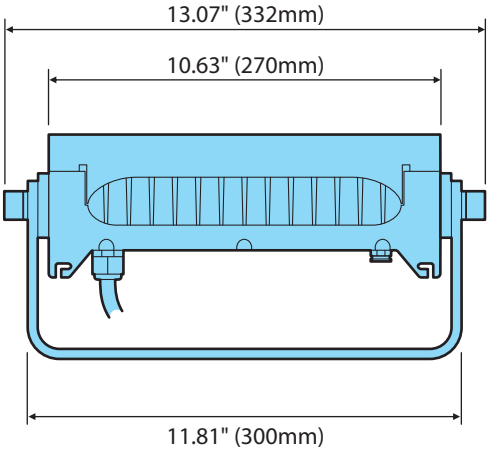
Release 1.1c

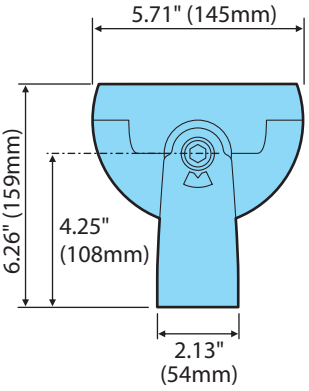
DIMENSIONS

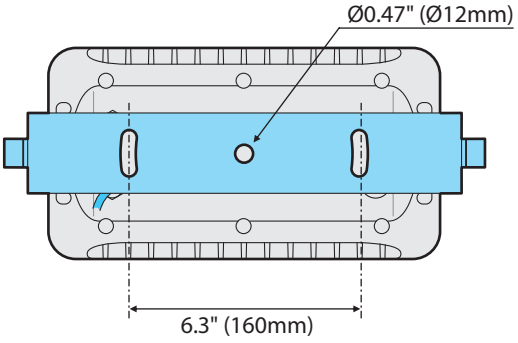
STANDARD MODEL

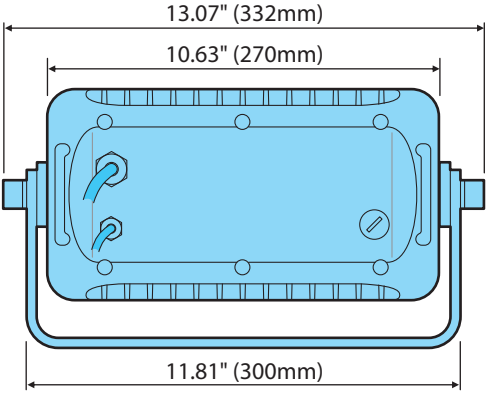


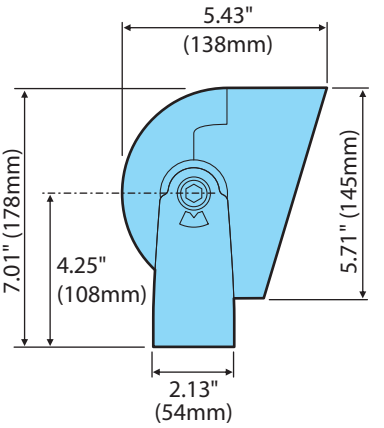


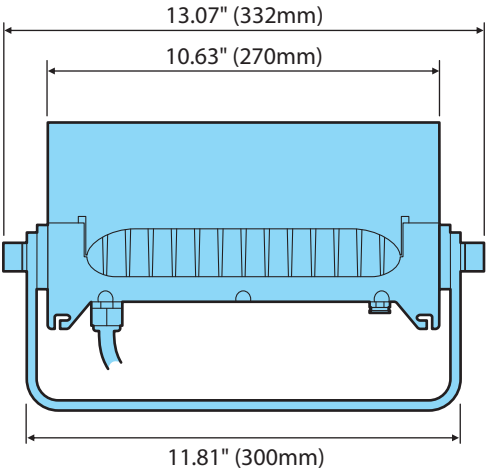


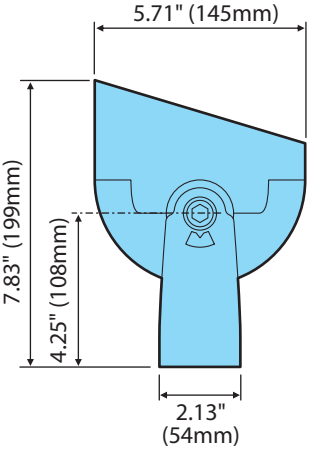


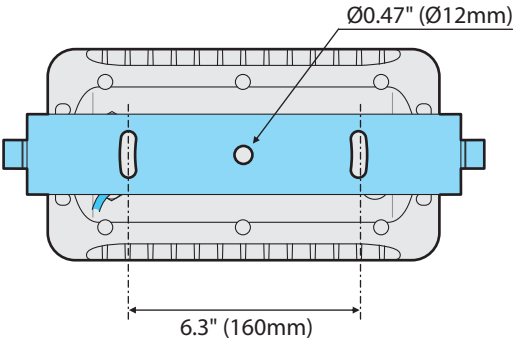


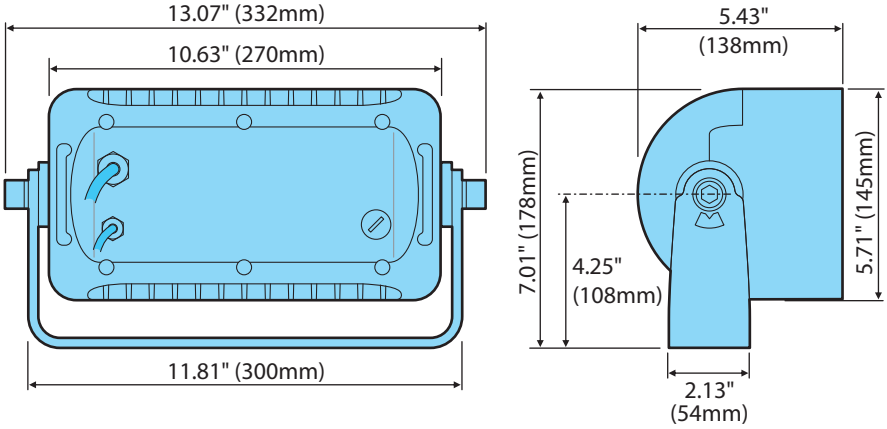

13.07" (332mm)
10.63" (270mm)
11.81" (300mm)

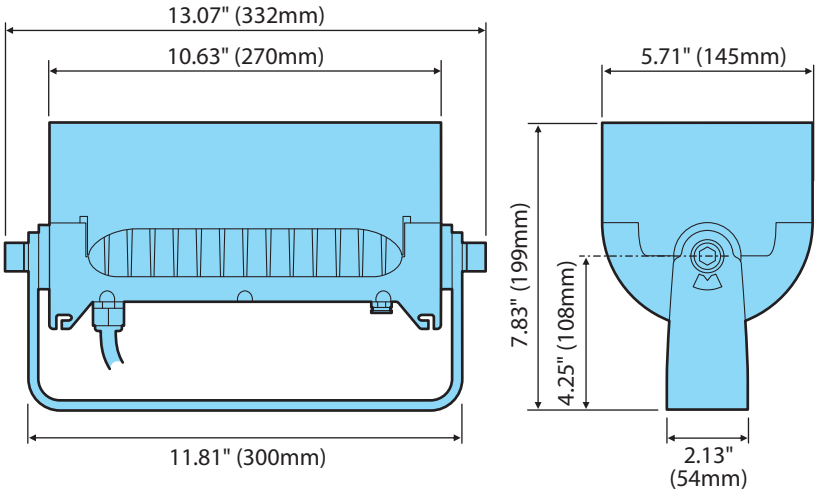

5.43"
(138mm)
7.01" (178mm)
4.25"
(108mm)
5.71" (145mm)
2.13"
(54mm)

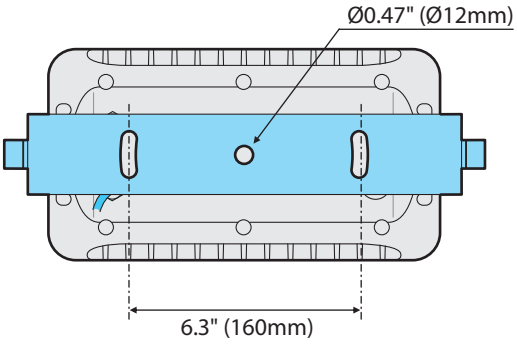

13.07" (332mm)
10.63" (270mm)
11.81" (300mm)


5.71" (145mm)
7.83" (199mm)
4.25" (108mm)
2.13"
(54mm)


Ø0.47" (Ø12mm)
6.3" (160mm)


13.07" (332mm)
10.63" (270mm)
11.81" (300mm)
5.43"
(138mm)
7.01" (178mm)
4.25"
(108mm)
5.71" (145mm)
2.13"
(54mm)


13.07" (332mm)
10.63" (270mm)
11.81" (300mm)
5.71" (145mm)
7.83" (199mm)
4.25" (108mm)
2.13"
(54mm)


Ø0.47" (Ø12mm)
6.3" (160mm)

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