

Dyna Drum HO™
Dyna Drum HO QW™

Contents

- Introduction2**
 - Welcome 2
 - Safety 2
 - Supplied items 3
 - Optional extras 3
- Installation.....4**
 - Mounting the unit 4
 - Using an optional tenon mount 5
 - Fitting an optional snoot 6
 - Fitting an optional spread lens 6
 - Power and control wiring 7
- Operation.....9**
 - Entering the menu 9
 - Menu navigation 9
 - Determining solo behavior 12
 - Programming and displaying a chase 12
 - Selecting and displaying a static color 13
 - Selecting and displaying a dimmed white 13
 - Setting the DMX address 14
 - Setting the keylock 14
 - Adjusting the user display 15
 - Setting a white balance 15
- Further information 16**
 - Troubleshooting 16
 - Dyna Drum HO specifications 17
 - Limited product warranty 18

Introduction

Welcome

Welcome to the Dyna Drum HO range from Acclaim Lighting. These ruggedized LED-powered fixtures are designed to replace traditional external flood lights while using a fraction of the power. Featuring a die-cast aluminum body throughout with full IP66 environmental rating, these fixtures are built to last.

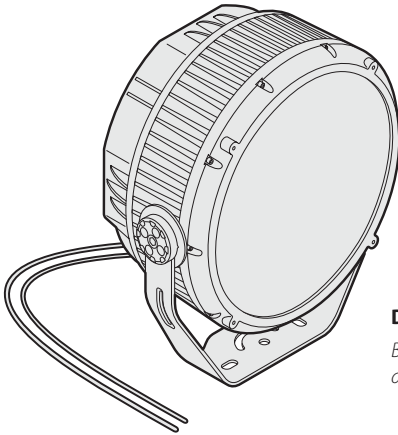
External control using the industry standard DMX-512A is supported or you can opt to create static or chasing color outputs internally using the intuitive user menu.

A range of spread lenses and snoots are available to widen and restrict the light output as required so that it perfectly matches your installation.

Safety

- When fixtures are mounted off-ground, ensure that a suitably rated safety wire is used to attach the fixture to a secure secondary point.
- Ensure that the power input is supplied from a correctly fused, earthed and environmentally protected location.

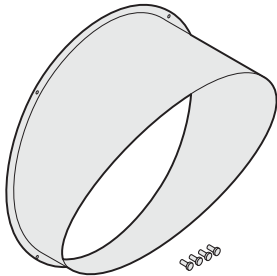
Supplied items



Dyna Drum HO or Dyna Drum HO QW

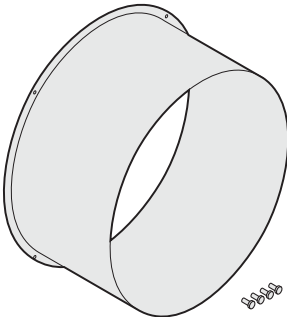
Both variants supplied with integral mounting yoke and 5 foot (1.5m) power/control tails.

Optional extras



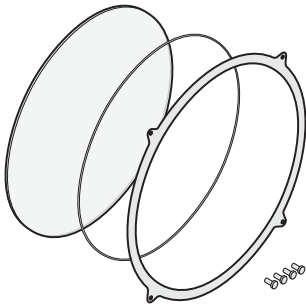
Half snoot (plus four M4 screws)

Gray [DDHOHSG]
Black [DDHOHSB]
White [DDHOHSW]



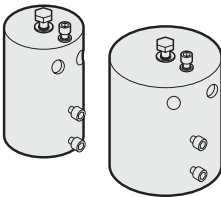
Full snoot (plus four M4 screws)

Gray [DDHOFSG]
Black [DDHOFBSB]
White [DDHOFWSW]



Spread lens kits

20° beam [DDHSL20]
40° beam [DDHSL40]
60° beam [DDHSL60]
10° x 60° beam [DDHSL1060]



Tenon mounts

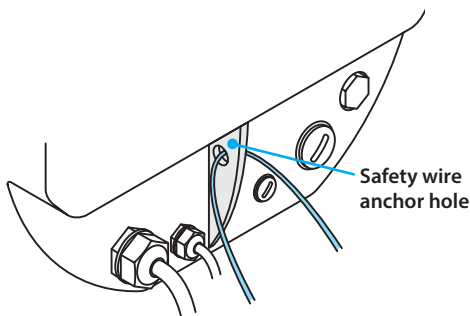
2" pole [TM2]
4" pole [TM4]

Installation

Mounting the unit

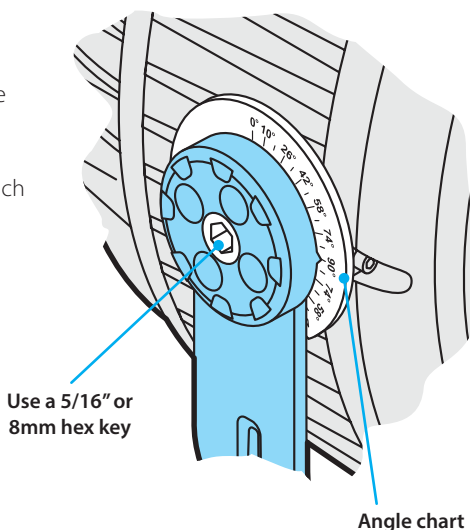
Each Dyna Drum HO fixture includes a sturdy yoke mount with multiple holes in its base for various fixing options. Dyna Drum HO fixtures weigh 30lbs (13.6Kg) - ensure that the mounting surface and the fixings used are sufficiently rated for the task (including wind shear forces).

IMPORTANT: When mounting a Dyna Drum HO fixture off ground, ensure that a safety wire (with a SWL rating of at least 30lbs (13.6Kg)) links the anchor hole at the rear of the Dyna Drum HO with a suitably sturdy secondary fixing point.



The yoke adjusters on each side of the Dyna Drum HO require a 5/16" (8mm) hex key to focus the fixture.

A useful angle chart is provided on each side to assist with initial adjustment.



When installing each Dyna Drum HO fixture, ensure that the surface is level and that nothing is protruding to damage the mounting yoke. The yoke has three mounting holes and is designed to be surface mounted. Approved mounting surfaces include steel, aluminum, concrete or wood structures. Bolts or screws (not supplied) should be suitable for the surface and ensure a secure mount for the fixture.

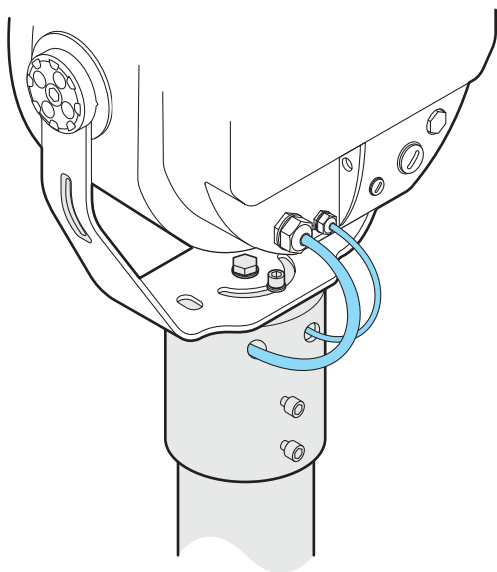
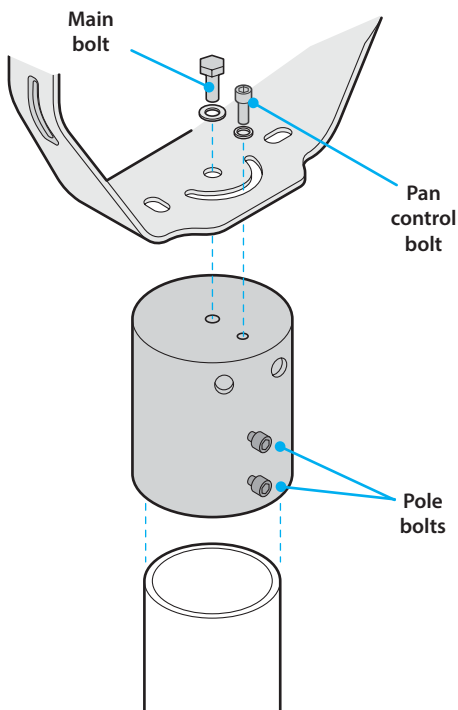
Using an optional tenon mount

Optional tenon mounts are available for use when a Dyna Drum HO needs to be mounted on top of a vertical pole. Tenon mounts are available for use with 2" and 4" poles of sufficient rigidity for the weight of the fixture.

IMPORTANT: Tenon mounts are suitable only for vertical pole mounts where the fixture sits on top of the pole. Tenon mounts must NEVER be used to hang a Dyna Drum HO below a pole. For pendant-type installations, please enquire about the Dyna Drum SO pendant model.

To use a tenon mount

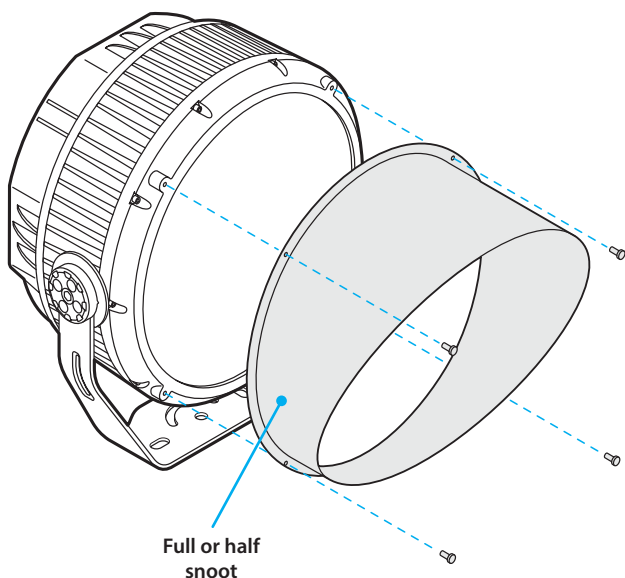
- 1 Slide the tenon mount onto the vertical pole and secure using the two bolts on the side (6mm hex key required).
- 2 Fix the Dyna Drum HO to the tenon mount using the supplied main bolt (17mm A/F wrench required) and pan control bolt (6mm hex key required) as shown right.



- 3 Where required, feed the mains and control cables into the 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.

Fitting an optional snoot

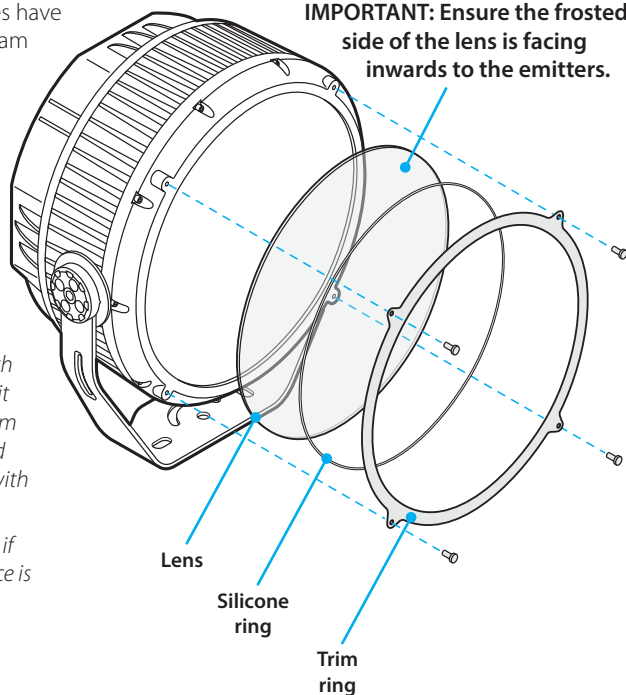
Snoots help to reduce or eliminate light spill into unwanted areas. The full and half snoots available from Acclaim Lighting are attached to the Dyna Drum HO units in the same way:



Fitting an optional spread lens

The Dyna Drum HO fixtures have a 6° or 10° (*QW models*) beam angle as standard. You can widen these using one of the optional spread lens kits.

IMPORTANT: Ensure the frosted side of the lens is facing inwards to the emitters.



Note: It is possible to use both a spread lens and a snoot. Fit the lens, silicone ring and trim ring, then add the snoot and then secure all these items with four screws.

Tip: All of this is much easier if the Dyna Drum HO front face is pointing vertically upwards.

Power and control wiring

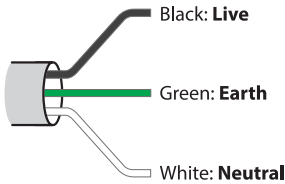
The power and control cords (roughly five feet, 1.5m in length) enter the casing via water-tight glands at the rear of the fixture. As standard the cords are supplied as bare tails.

Power

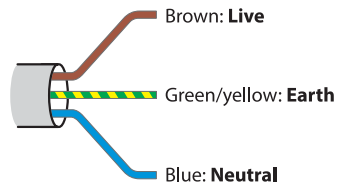
The power requirements are as follows:

- Voltage: 100-277VAC 50/60Hz
- Power: 228W at steady state

The power cord color designations are as follows:



Power cord colors
US version



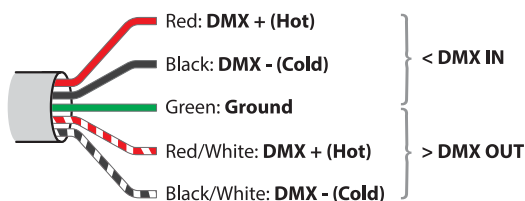
Power cord colors
European version

In-rush current

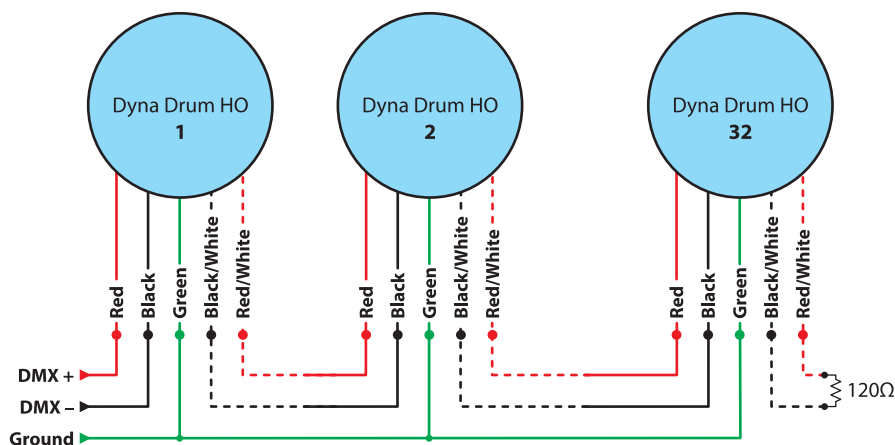
Although LED fixtures are low power devices compared to their incandescent equivalents, their power supplies exhibit a trait known as 'in-rush current' when they are first powered on. This is caused by the various components within the switching power supplies topping themselves up with power. The in-rush 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.

Control

The control cord has five cores to provide DMX512-A input and output connections:



When connecting multiple fixtures, connect the DMX control input lines to 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 the DMX + and DMX - lines:



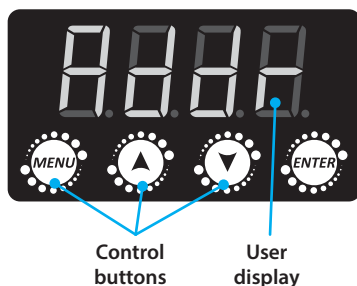
Tips for achieving successful DMX control

- 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.

Operation

Operation of the fixture will commence as soon as power is applied and the user display on the rear panel will first show **RECL** (Acclaim) and then either show **Addr** or a DMX address number (if a valid DMX input is present). The fixture may or may not immediately show output from its emitters - this will depend upon the settings within the menu and/or control input.

Note: The sealed control buttons use capacitive sensors similar to your smartphone screen and will not respond to touch if you are wearing gloves.



Entering the menu

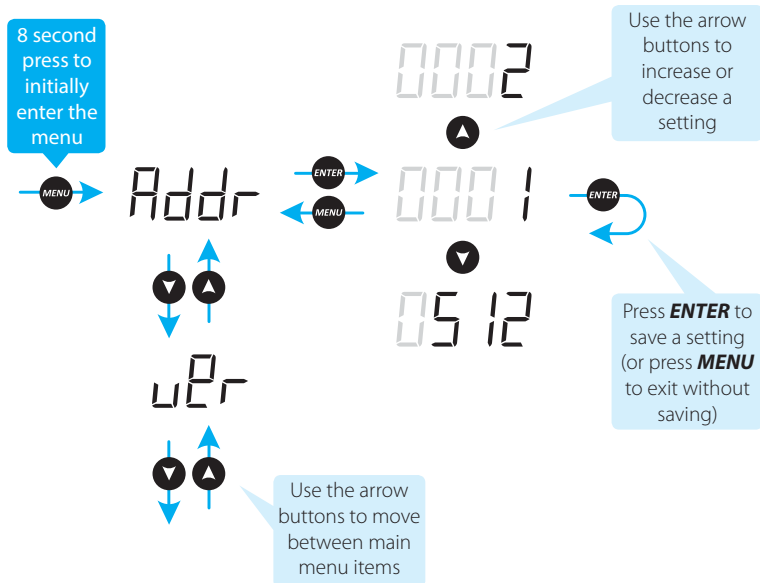
Press and hold the **MENU** button for roughly 8 seconds until the **Addr** entry flashes. You can now access the menu.

If the keylock feature has been enabled (see page 13), '0' will flash on the display. Enter the password (between 1 and 9999) using the **▲** and **▼** buttons and press the **ENTER** button.

Note: The menu will automatically exit one minute after the last button press. While the menu remains active, all emitter output will be suppressed.

Menu navigation

Once you have entered the menu you can use the four control buttons to navigate around the menu and alter settings as necessary. The next two pages list the main menu items.



The menu will automatically exit one minute after the last button press (all emitter output will be suppressed while the menu remains active). You can exit from the menu immediately by pressing and holding the **MENU** button until output is restored.

Main menu items (Dyna Drum HO color changing models)

Addr	Allows you to set the DMX start address for this fixture. This fixture uses four DMX channels (for Red, Green, Blue and White), beginning with the one chosen here. See page 13.
Ver	Displays the current firmware version for the fixture. No changes are possible within this entry.
Hrs	Displays the 'Fixture Hours' or total operating time (in hours) since the fixture was manufactured.
Temp	Displays the current internal temperature of the fixture (in degrees Centigrade).
LED	Determines whether the menu display should remain on when the fixture is in standby mode.
Test	Performs an auto test so you can check that all emitters are operating correctly.
Disp	Inverts the menu display so that it reads correctly when the fixture is inverted. See page 14.
Lock	Enables the keylock feature to restrict access to the menu. <i>Note: Be sure to set the lock number within the PASS entry before changing this option to on.</i> See page 13.
PASS	Allows you to set a password number between 0 and 9999 for use when the Loc feature is enabled. See page 13.
BLA	Allows you to bias the red, green and/or blue intensities in order to achieve a particular white balance that will be reproduced when RGB mixes are requested - either via internal or external control. See page 14.
Solo	Determines fixture solo behavior for when there is no external control input. Options are: IntL - displays static colors or chases. blnd - blacks out the emitters if control is lost. LAST - retains last state if control is lost. See page 11.
Prog	Allows you to create a color chase that will be displayed when the Solo item is set to IntL . First set the chase Speed (0 to 240) and then set the Fade time (0 to 240). The resulting out will be shown once the menu exits. See page 11.
Color	Allows you to choose from a pre-mixed static color palette (CL1 to CL32) or mix your own color using the nAnu (manual) option. See page 12.
ULCh	Determines the wireless channel that should be used when the optional wireless control system is fitted. Reserved for future use.

Main menu items (Dyna Drum HO single color models)

Addr	Allows you to set the DMX start address for this fixture. This fixture uses one DMX channel as chosen here. See page 13.
Ver	Displays the current firmware version for the fixture. No changes are possible within this entry.
Fhrs	Displays the 'Fixture Hours' or total operating time (in hours) since the fixture was manufactured.
Temp	Displays the current internal temperature of the fixture (in degrees Centigrade).
Led	Determines whether the menu display should remain on when the fixture is in standby mode.
Test	Performs an auto test so you can check that all emitters are operating correctly.
Disp	Inverts the menu display so that it reads correctly when the fixture is inverted. See page 14.
Loc	Enables the keylock feature to restrict access to the menu. <i>Note: Be sure to set the lock number within the PASS entry before changing this option to on.</i> See page 13.
PASS	Allows you to set a password number between 0 and 9999 for use when the Loc feature is enabled. See page 13.
Solo	Determines fixture solo behavior for when there is no external control input. Options are: IntL - displays static white. bLnd - blacks out the emitters if control is lost. LAST - retains last state if control is lost. See page 11.
LoLo	Allows you to choose an intensity setting using the dlnn (dimmer) option. This output will be shown when the SoLo > IntL option is set and the fixture does not have an external control input. See page 12
WLCh	Determines the wireless channel that should be used when the optional wireless control system is fitted. Reserved for future use.

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:

- Go dark (blind) - In this mode, when no external control is present, the emitter output will be extinguished.
- Show internal color/chase - In this mode, when no external control is present, the fixture can be made to show a pre-programmed color or chase (not all models). Further details about creating static color mixes and programming chases are given in the next two sections.
- Show last - In this mode, when no external control is present, the emitter output will remain as per the last received instruction.

To determine the solo behavior

- 1 Enter the user menu (see page 8).
- 2 Select the **SoLo** menu item. The currently set solo behavior mode will flash on the display.
- 3 Use the **▼** and **▲** buttons to choose the required solo behavior mode:
 - **bLnd** - blanks the emitters when no external control is present.
 - **IntL** - displays either the static color (or white intensity on WW models) or color chase (on color models only) that has been internally programmed (see the next two sections for details on programming colors and chases).

*Note: On color models, when a static color is programmed, it will take precedence over a programmed chase. You will need to ensure that the static color option is at zero in order for a chase to be shown when the **IntL** mode is chosen and no external input is present.*
 - **LASt** - continues to show the last received external instruction.
- 4 Press **ENTER** to save.

Programming and displaying a chase

Note: Chases are only possible on Dyna Drum HO color models.

The Dyna Drum HO fixture can be programmed to scroll through the full range of colors at a chosen speed and fade time. In order to view the chase, you will need to ensure the following:

- The **SoLo** behavior mode is set to the **IntL** option.
- The static color option (**CoLo**) is set to zero output.
- There is no external DMX control input.

To program a chase

- 1 Enter the user menu (see page 8).
- 2 Select the **ProG** menu item. The current speed setting will be shown (e.g. **S 1**).
- 3 Use the **▼** and **▲** buttons to set the required speed between 0 and 240 (in seconds).
- 4 Press **ENTER**. The current fade setting will be shown (e.g. **F 1**).
- 5 Use the **▼** and **▲** buttons to set the required fade time between 0 and 240 (in seconds).

Note: The fade time is limited by the speed setting - it's value cannot exceed that for the speed.
- 6 Press **ENTER** to save.

The chase will be shown once the fixture exits from the menu, providing the conditions mentioned above are met.

Selecting and displaying a static color

Note: Static colors are only possible on Dyna Drum HO color models.

You can choose from a preset palette of static colors or mix your own. In order to view the static color, you will need to ensure the following:

- The **SoLo** behavior mode is set to the **IntL** option.
- There is no external DMX control input.

To choose a static color

- 1 Enter the user menu (see page 8).
- 2 Select the **CoLo** menu item. The current color setting will be shown (e.g. **CL 1**, **CL32**, **nAnu**, etc.).
- 3 Either:
 - Use the **▼** and **▲** buttons to scroll through the existing color palette options (**CL 1** to **CL32**) and press **ENTER** to save, or
 - Use the **nAnu** (manual) option to mix your own color:
- 4 Use the **▼** and **▲** buttons to display the **nAnu** option and press **ENTER**.
- 5 Use the **▼** and **▲** buttons to change between the four emitter colours (**red**, **Green**, **blue** and **U-A** (white)). To edit a color, press **ENTER** and then use the **▼** and **▲** buttons to adjust the level for that color, between 0 and 255. Press **ENTER** to save and exit the setting.
- 6 Repeat step 5 for each required color.

The chosen color will be shown once the fixture exits from the menu, providing the conditions mentioned above are met.

Selecting and displaying a dimmed white

This section is applicable only to Dyna Drum HO white models.

You can set a dimmed white that will be shown providing the following conditions are met:

- The **SoLo** behavior mode is set to the **IntL** option.
- There is no external DMX control input.

To set a dimmed white

- 1 Enter the user menu (see page 8).
- 2 Select the **CoLo** menu item and then select the **dlwn** (dimmer) option. The current intensity setting will be shown.
- 3 Use the **▼** and **▲** buttons to set the output intensity to the required level, between 0 and 255.
- 4 Press **ENTER** to save.

The chosen output will be shown once the fixture exits from the menu, providing the conditions mentioned above are met.

Setting the DMX address

When external control is used, the DMX start address of the fixture needs to match the start address being used by the controlling device. Color fixtures use four DMX channels (for Red, Green, Blue and White), beginning with the one chosen here; white-only models use just one DMX channel.

To set the DMX address

- 1 Enter the user menu (see page 8).
- 2 Press **ENTER** to choose the **Addr** item.
- 3 Use the **▼** and **▲** buttons to choose a start address from 1 to 512.

Note: Do not set a DMX address higher than 509 for color models.

- 4 Press **ENTER** to save. The DMX start address is now fixed.

Note: When a valid DMX input is attached to the Dyna Drum HO fixture it will override any internal color/chase settings; additionally, the user display will show the configured DMX address.

Setting the keylock

The keylock can help to deter unauthorized access to the menu by requiring a passcode number to be entered. Two menu items are used to configure the keylock: **LoC** and **PASS**.

*Note: Be sure to set the **PASS** option before enabling the **LoC** so that you know the code.*

To set the keylock

- 1 Enter the user menu (see page 8).
- 2 Select the **PASS** menu item.
- 3 Use the **▼** and **▲** buttons to choose a passcode number between 0 and 9999.
- 4 Press **ENTER** to save.
- 5 Select the **LoC** menu item.
- 6 Use the **▼** or **▲** button to choose the **on** option.
- 7 Press **ENTER** to save. The keylock is now active.

*Note: To deactivate the keylock feature, enter the **Loc** menu item and choose the **off** option.*

To enter the menu when keylock is enabled

- 1 When you enter the user menu and keylock is enabled, the display will show **0**.
- 2 Use the **▼** and **▲** buttons to display the previously set passcode number.
- 3 Press **ENTER**. If the entered passcode is correct, the menu will show **ADDR**; if not, it will return to show **0** so that you can try again.

To gain backdoor access if the passcode is unknown

The backdoor passcode is **123**. If your passcode is unknown or forgotten, use the method above but enter **123** and press **ENTER** to gain access.

Adjusting the user display

You can make adjustments to the user display to suit your installation:

- You can invert the display so that it reads correctly when the fixture is mounted inverted.
- You can blackout the display when it is not in use - it will re-illuminate when you press a button.

To invert the display

- 1 Enter the user menu (see page 8).
- 2 Select the **dISP** menu item.
- 3 Use the **▼** or **▲** button to change to the inverted mode (it will read as **dSIP** when you view it normally).
- 4 Press **ENTER** to save.

To blackout the display

- 1 Enter the user menu (see page 8).
- 2 Select the **Led** menu item.
- 3 Use the **▼** or **▲** button to change to the **oFF** mode.
- 4 Press **ENTER** to save.

Setting a white balance

Note: White balance is only possible on Dyna Drum HO color models.

White balance is useful when your Dyna Drum HO installation will be required to regularly present particular shades of white using the R, G, B emitters, (plus the white emitters, if necessary). Using the white balance feature you can 'bias' particular colors so that when the R, G and B channels are all brought up, your pre-programmed bias will achieve, for example, a balanced warm white derived from a significant red output, with a moderate green output, while the blue is scaled back significantly.

White balance works with control from either the external DMX input or when running solo from the internal menu.

To achieve identical white balance across a collection of fixtures, you will need to program the same settings on each Dyna Drum HO unit.

To set a white balance

- 1 Enter the user menu (see page 8).
- 2 Select the **bALA** menu item. You now have access to the separate **red**, **Gree** and **bLue** options, which are all set to 255 by default.
- 3 Use the **▼** and **▲** buttons to choose a color and press **ENTER**.
- 4 Use the **▼** and **▲** buttons to reduce the chosen color from 255 down to a minimum of 125 to reduce the intensity of that color, and press **ENTER** to save.
- 5 Repeat step 4 for each color that needs to be biased to achieve the required balance.

To cancel a white balance

- 1 Enter the user menu (see page 8).
- 2 Select the **bALA** menu item. In turn visit each color and ensure that they are all returned to 255.

Further information

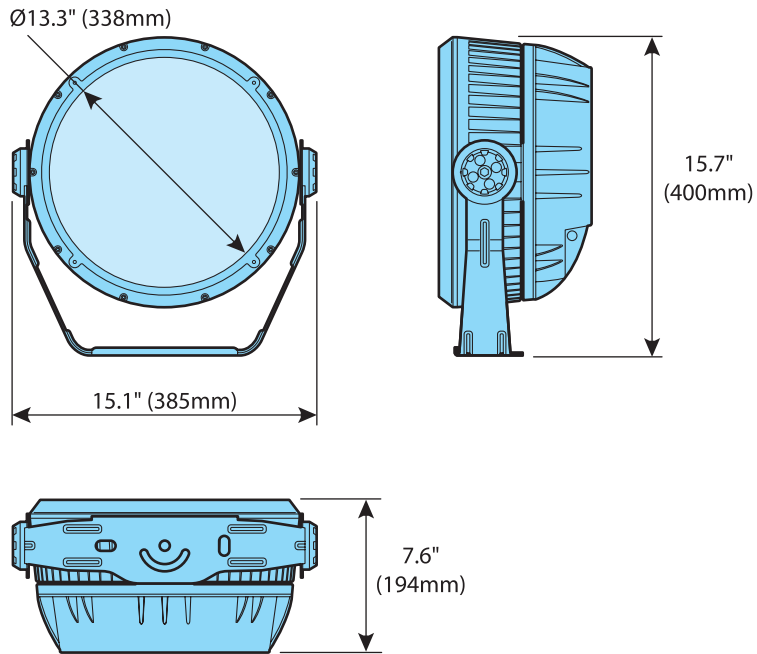
Troubleshooting

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 the menu to perform an emitter test.
- Use the menu to check the internal temperature of the fixture.
- If external DMX control is being used, check that the DMX address set within the fixture matches that being output by the controlling source device.
- If external DMX control is being used, check the DMX output near to the source to confirm a valid signal is being originated. When a valid DMX input is attached to the Dyna Drum HO fixture, the user display will show the configured DMX address.
- If external DMX control is being used, check that the DMX + (hot) and DMX - (cold) lines have not been crossed.
- If solo mode is being used, check that the static color, white-only output or color chase has been correctly programmed and that the appropriate solo mode is selected (see pages 11 and 12).

Dyna Drum HO specifications

Beam angle	6 degrees	(Dyna Drum HO)
	10 degrees	(Dyna Drum HO QW)
Total lumens	10,103 @ 5500K 6°	(Dyna Drum HO)
	5736 10°	(Dyna Drum HO QW)
Lumen maintenance (L ₇₀)	50,000 hours	
Housing	Die cast aluminum	
Ingress protection	IP66	
Power input	100 - 277VAC, 50/60Hz	
Power consumption	228W at steady state	(Dyna Drum HO)
	237W at steady state	(Dyna Drum HO QW)
Operating temperature	-40°F to 122°F (-40°C to 50°C)	
Dimensions	15.1" x 15.7" x 7.6" (385mm x 400mm x 194mm)	
Weight	30 lbs (13.6Kg)	



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.
- 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 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