



# COB CANNON LP2005T

User Manual

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# **DOCUMENT VERSION**



Due to additional product features and/or enhancements, an updated version of this document may be available online.

Please check <u>www.adj.com</u> for the latest revision/update of this manual before beginning installation and/or programming.

| Date       | Document<br>Version | Software<br>Version | DMX Channels   | Notes  |
|------------|---------------------|---------------------|--|--|
| 03/31/2022 | 1.0                 | 1.0                 | 5 / 8A / 8B / 9 / 10A /<br>10B / 12 / 13 / 16 / 20<br>channels | Initial Release.   |
| 08/24/2022 | 1.1                 | N/C                 | No Change  | Updated Specifications.  |
| 12/01/2022 | 1.2                 | N/C                 | No Change  | Updated RDM, Dim Modes.  |
| 02/09/2023 | 1.3                 | N/C                 | No Change  | Updated Overview, Installation, Dimensionals Drawings, Daisy Chain Power Linking, Specifications |
| 09/28/2023 | 1.4                 | 1.01                | No Change  | Unit is now UC IR24 Compatible   |
| 01/05/2024 | 1.5                 | N/C                 | No Change  | Updated Overview; added FCC Statement  |

Europe Energy Saving Notice

Energy Saving Matters (EuP 2009/125/EC)

Saving electric energy is a key to help protecting the environment. Please turn off all electrical products when they are not in use. To avoid power consumption in idle mode, disconnect all electrical equipment from power when not in use. Thank you!

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#### INTRODUCTION

**Unpacking:** Thank you for purchasing the COB Cannon LP200ST by ADJ Products, LLC. Every device has been thoroughly tested and has been shipped in perfect operating condition. Carefully check the shipping carton for damage that may have occurred during shipping. If the carton appears to have been damaged, carefully inspect your fixture for any damage and be sure all accessories necessary to operate the unit have arrived intact. In the event that damage has been found or parts are missing, please contact our toll free customer support number for further instructions. Do not return this unit to your dealer without first contacting customer support.

*Introduction:* The ADJ COB Cannon LP200ST is an RGBAL wash fixture. To optimize the performance of this product, please read these operating instructions carefully to familiarize yourself with the basic operations of this unit. These instructions contain important safety information regarding the use and maintenance of this unit. Please keep this manual with the unit for future reference.

**Customer Support:** Contact ADJ Service for any product related service and support needs. Also visit **forums.adj.com** with questions, comments or suggestions.

**Parts:** To purchase parts online visit:

http://parts.adj.com (US) http://www.adjparts.eu (EU)

ADJ SERVICE USA - Monday - Friday 8:00am to 4:30pm PST Voice: 800-322-6337 | Fax: 323-582-2941 | support@adj.com

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**Warning!** This unit is intended for indoor use only! Do not expose to rain or moisture!

**CAUTION!** There are no user serviceable parts inside this unit. Do not attempt any repairs yourself, as doing so will void your manufacturer's warranty. In the unlikely event your unit may require service, please contact ADJ Products, LLC.

Do not discard the shipping cartoon in the trash. Please recycle when ever possible.

# LIMITED WARRANTY (USA ONLY)

- A. ADJ Products, LLC hereby warrants, to the original purchaser, ADJ Products, LLC products to be free of manufacturing defects in material and workmanship for a prescribed period from the date of purchase (see specific warranty period on reverse). This warranty shall be valid only if the product is purchased within the United States of America, including possessions and territories. It is the owner's responsibility to establish the date and place of purchase by acceptable evidence, at the time service is sought.
- B. For warranty service, you must obtain a Return Authorization number (RA#) before sending the product back—please contact ADJ Products, LLC Service Department at 800-322-6337. Send the product only to the ADJ Products, LLC factory. All shipping charges must be prepaid. If the requested repairs or service (including parts replacement) are within the terms of this warranty, ADJ Products, LLC 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 and packaging material. No accessories should be shipped with the product. If any accessories are shipped with the product, ADJ Products, LLC shall incur no liability whatsoever for loss of or damage to any such accessories, nor for the safe return thereof.
- C. This warranty is void if the product serial number and/or labels are altered or removed; if the product is modified in any manner which ADJ Products, LLC concludes, after inspection, affects the reliability of the product; if the product has been repaired or serviced by anyone other than the ADJ Products, LLC factory unless prior written authorization was issued to purchaser by ADJ Products, LLC; if the product is damaged because it was not properly maintained as set forth in the product instructions, guidelines and/or user manual.
- D. This is not a service contract, and this warranty does not include maintenance, cleaning, or periodic check-up. During the period specified above, ADJ Products, LLC will replace defective parts at its expense with new or refurbished parts, and will absorb all expenses for warranty service and repair labor by reason of defects in material or workmanship. The sole responsibility of ADJ Products, LLC under this warranty shall be limited to the repair of the product, or replacement thereof, including parts, at the sole discretion of ADJ Products, LLC. All products covered by this warranty were manufactured after August 15, 2012, and bear identifying marks to that effect.
- E. ADJ Products, LLC 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.
- F. No warranty, whether expressed or implied, is given or made with respect to any accessory supplied with products described above. Except to the extent prohibited by applicable law, all implied warranties made by ADJ Products, LLC in connection with this product, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. And all warranties, whether expressed or implied, including warranties of merchantability or fitness, are limited in duration to the warranty period set forth above. The consumer's and/or dealer's sole remedy shall be such repair or replacement as is expressly provided above; and under no circumstances shall ADJ Product, LLC be liable for any loss and/or damage, direct and/or consequential arising out of the use of, and/or inability to use this product.
- G. This warranty is the only written warranty applicable to ADJ Products, LLC products, and supersedes all prior warranties and written descriptions of warranty terms and conditions heretofore published.

#### **MANUFACTURER'S LIMITED WARRANTY PERIODS:**

- Non-LED Lighting Products = 1-Year (365 Days) (Including Special Effect Lighting, Intelligent Lighting, UV lighting, Strobes, Fog Machines, Bubble Machines, Mirror Balls, Par Cans, Trussing, Lighting Stands, Power/Data Distribution, etc. excluding LED and lamps)
- Laser Products = 1-Year (365 Days) (excluding laser diodes which have a 6-Month Limited Warranty)
- LED Products = 2-Year (730 Days) (excluding batteries which have a 180 Day Limited Warranty)
- NOTE: 2-Year (730 Days) Limited Warranty ONLY applies to product purchased within the United States. StarTec Series = 1-Year (365 Days) (excluding batteries which have a 180 Day Limited Warranty)
- ADJ DMX Controllers = 2 Year (730 Days)
- American Audio Products = 1 Year (365 Days)

## WARRANTY REGISTRATION

The COB Cannon LP200ST carries a 2 year limited warranty. Please fill out the enclosed warranty card to validate your purchase. All returned service items, whether under warranty or not, must be freight pre-paid and accompanied by a return authorization (R.A.) number. The R.A. number must be clearly written on the outside of the return package. A brief description of the problem as well as the R.A. number must also be written down on a piece of paper included in the shipping carton. If the unit is under warranty, you must provide a copy of your proof of purchase invoice. You may obtain an R.A. number by contacting our customer support team on our customer support number. All packages returned to the service department not displaying an R.A. number on the outside of the package will be returned to the shipper.

## **FEATURES**

Featuring a high output 200-Watt COB (Chip On Board) LED engine, the ADJ COB Cannon LP200ST is a potent color mixing wash lighting fixture. It's 5-in-1 light source combines red, green, blue, amber and lime LED chips to allow the creation of a huge gamut of colors as well as a high CRI. A compact and versatile fixture, it offers a wide 80-degree native beam angle but is also supplied with both 40-degree and 50-degree lens options.

#### **INCLUDED ITEMS**

- Locking Power Cable (x1)
- 40-degree Lens (x1)
- 50-degree Lens (x1)
- Frost Filter (x1)
- UC IR 24 Controller (x1)

#### **IP RATING**

An IP rated lighting fixture has been designed with an enclosure that effectively protects the ingress (entry) of external foreign objects such as dust and/or water. The Ingress Protection (IP) rating system is commonly expressed as "IP" followed by two numbers (i.e. IP20), where the numbers define the degree of protection. The first digit (Foreign Bodies Protection) indicates the extent of protection against particles entering the fixture and the second digit (Water Protection) indicates the extent of protection against water entering the fixture.

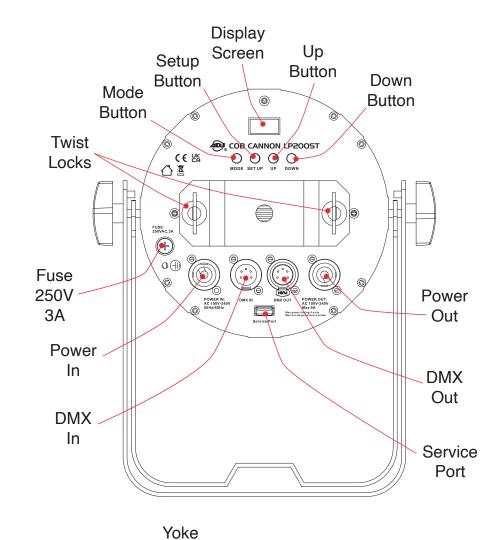
An IP20 rated lighting fixture, such as this one, has been designed and tested to protect against the ingress of solids as small as the size of an adult finger (approximately 12.5mm), but is NOT protected against liquid intrusion of any kind.

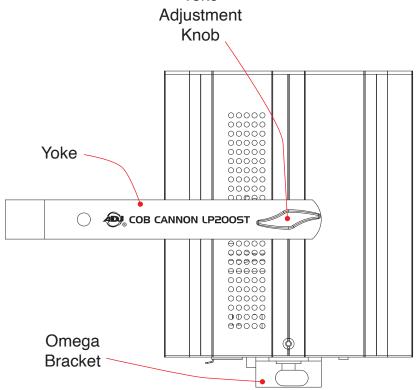
#### SAFETY GUIDELINES

THIS FIXTURE IS COMPOSED OF SOPHISTICATED ELECTRONIC COMPONENTS. TO GUARANTEE SMOOTH OPERATION, IT IS IMPORTANT TO FOLLOW ALL INSTRUCTIONS AND GUIDELINES IN THIS MANUAL. ADJ PRODUCTS, LLC IS NOT RESPONSIBLE FOR INJURY AND/OR DAMAGES RESULTING FROM THE MISUSE OF THIS FIXTURE DUE TO THE DISREGARD OF THE INFORMATION PRINTED IN THIS MANUAL. ONLY QUALIFIED AND/OR CERTIFIED PERSONNEL SHOULD PERFORM INSTALLATION OF THIS FIXTURE AND ONLY THE ORIGINAL RIGGING PARTS INCLUDED WITH THIS FIXTURE SHOULD BE USED FOR INSTALLATION. ANY MODIFICATIONS TO THE FIXTURE AND/OR THE INCLUDED MOUNTING HARDWARE WILL VOID THE ORIGINAL MANUFACTURER'S WARRANTY AND INCREASE THE RISK OF DAMAGE AND/OR PERSONAL INJURY. ONLY CERTIFIED PERSONNEL SHOULD PERFORM INSTALLATION OF THIS FIXTURE.

- PROTECTION CLASS 1 FIXTURE MUST BE PROPERLY GROUNDED.
- · THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT.
- DO NOT ATTEMPT ANY REPAIRS YOURSELF; DOING SO WILL VOID YOUR MANUFACTURER'S WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS FIXTURE AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURER'S WARRANTY AND ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS.
- DO NOT PLUG FIXTURE INTO A DIMMER PACK!
- NEVER OPEN THIS FIXTURE WHILE IN USE!
- UNPLUG POWER BEFORE SERVICING FIXTURE!
- NEVER TOUCH FIXTURE DURING OPERATION, AS IT MAY BE HOT!
- KEEP FLAMMABLE MATERIALS AWAY FROM FIXTURE!
- NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE!
- RETINA INJURY RISK MAY INDUCE BLINDNESS!
- SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK!
- MINIMUM DISTANCE TO OBJECTS/SURFACES IS 6.6 FEET (2 METERS)
- AMBIENT OPERATING TEMPERATURE RANGES FROM -4°F to 113°F (-20°C TO 45°C). DO NOT OPERATE THE DEVICE WHEN AMBIENT TEMPERATURE FALLS OUTSIDE OF THIS RANGE.
- MINIMUM DISTANCE TO FLAMMABLE MATERIALS FROM THE SURFACE IS 1.6 FEET (0.5 METER).
- DO NOT TOUCH the fixture housing during operation. Turn OFF the power and allow approximately 60 minutes for the fixture to cool down before servicing.
- DO NOT shake fixture, and avoid brute force when installing and/or operating fixture.
- DO NOT operate fixture if the power cord is frayed, crimped, damaged and/or if any of the power cord connectors are damaged and do not insert into the fixture securely with ease. NEVER force a power cord connector into the fixture. If the power cord or any of its connectors are damaged, replace it immediately with a new one of the same power rating.
- DO NOT block any air ventilation slots. All fan and air inlets must remain clean and never blocked. Allow approx. 6" (15cm) between fixture and other devices or a wall for proper cooling.
- When installing fixture in a suspended environment, always use mounting hardware that is no less than M10 x 25 mm, and always install fixture with an appropriately rated safety cable.
- Always disconnect fixture from main power source before performing any type of service and/or cleaning procedure.
- Only handle the power cord by the plug end. Never pull out the plug by tugging the wire portion of the cord.
- During the initial operation of this fixture, a light smoke or smell may emit from the interior of the fixture.
   This is a normal process and is caused by excess paint in the interior of the casing burning off from the heat associated with the lamp and will decrease gradually over time.
- · Consistent operational breaks will ensure fixture will function properly for many years.
- ONLY use original packaging and materials to transport the fixture for service.

# OVERVIEW







## FLAMMABLE MATERIAL WARNING

Keep fixture minimum 5.0 feet (1.5m) away from flammable materials and/or pyrotechnics.



## **ELECTRICAL CONNECTIONS**

A qualified electrician should be used for all electrical connections and/or installations.



MINIMUM DISTANCE TO OBJECTS/SURFACES IS 6.6 FEET (2 METERS).
MINIMUM DISTANCE OF FLAMMABLE MATERIALS FROM THE SURFACE IS 1.6
FEET (0.5 METER)

#### DO NOT INSTALL THE FIXTURE IF YOU ARE NOT QUALIFIED TO DO SO!

- Fixture MUST be installed following all local, national, and country commercial electrical and construction codes and regulations.
- Before rigging/mounting a single fixture or multiple fixtures to any metal truss/structure or placing the fixture(s) on any surface, a professional equipment installer MUST be consulted to determine if the metal truss/structure or surface is properly certified to safely hold the combined weight of the fixture(s), clamps, cables, and accessories.
- Ambient operating temperature range is -4°F to 113°F (-20°C TO 45°C). Do not operate the fixture when ambient temperature falls outside of this range!
- Fixture(s) should be installed outside walking paths, seating areas, or areas were unauthorized personnel might reach the fixture by hand.
- NEVER stand directly below the fixture(s) when rigging, removing, or servicing.
- Overhead fixture installation must always be secured with a secondary safety attachment, such as an appropriately rated safety cable.
- Allow approximately 60 minutes for the fixture to cool down before servicing.

#### INDOOR USE ONLY!

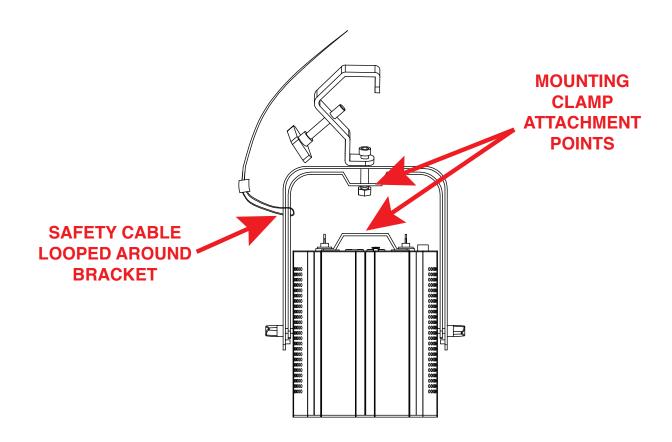
This device is not intended for outdoor usage, or exposure to rain or moisture! Use of this device outdoors voids your manufacturer's warranty!

#### **RIGGING**

Overhead rigging requires extensive experience, including calculating working load limits, knowledge about installation materials being used, and periodic safety inspection of all installation material and the fixture, among other skills. If you lack these qualifications, do not attempt the installation yourself. Improper installation can result in bodily injury.

## **CLAMP INSTALLATION**

This fixture features attachment points for a mounting clamp located at the top the mounting bracket or on the Omega bracket (see the illustration below). When mounting the fixture to a truss or any other suspended or overhead installation, be sure to secure an appropriately rated clamp (not included) to the mounting bracket. Additionally, it is also necessary to attach a separate **SAFETY CABLE** of the appropriate weight rating to the fixture, with one end of the safety cable secured around the mounting bracket and the other end secured to a suitable mounting point on the truss or mounting surface.



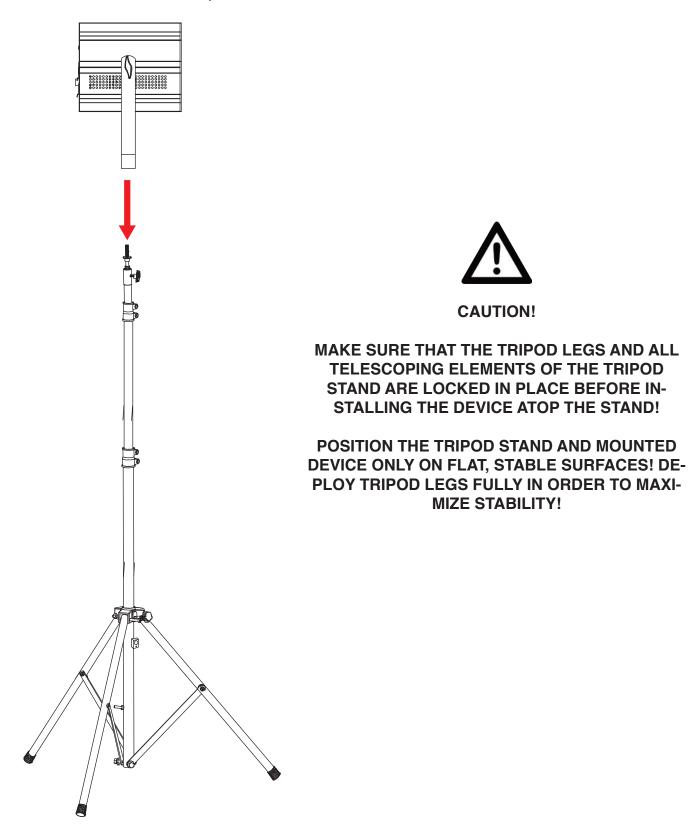


# **SAFETY CABLE:**

ALWAYS ATTACH A SAFETY CABLE WHENEVER INSTALLING THIS FIXTURE IN A SUSPENDED ENVIRONMENT TO ENSURE THAT THE FIXTURE WILL NOT FALL IF THE CLAMP FAILS.

## STAND MOUNTING

This unit can also be installed atop a tripod stand. Simply insert the threaded bolt on the top of the tripod stand through the hole in the top of the mounting yoke. Tighten the nut onto the threaded bolt to secure the mounted device in place.

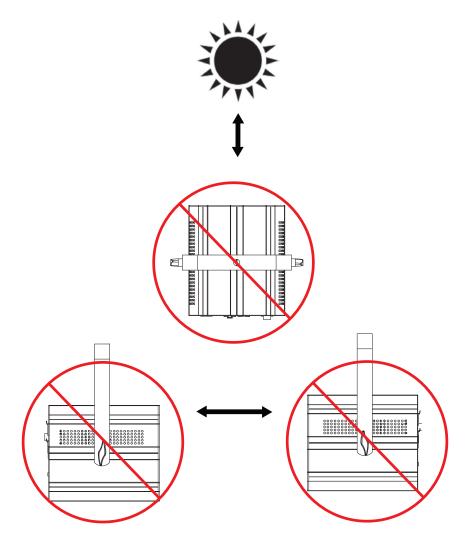


## POTENTIAL INTERNAL FIXTURE DAMAGE FROM EXTERNAL SOURCES OF LIGHT BEAMS

External sources of light beams from direct sunlight, moving head lighting fixtures, and lasers which are focused directly towards the exterior housing and/or penetrate the front lens opening of ADJ lighting fixtures can cause severe internal damage, including burning of optics, dichroic color filters, glass and metal gobos, prisms, animation wheels, frost filters, irises, shutters, motors, belts, wiring, discharge lamps, and LEDs.

This issue is not unique to ADJ lighting fixtures, but rather it is a common issue with lighting fixtures from all manufacturers. Although there is no true way to completely prevent this issue from occurring, the guidelines below can reduce the risk of any potential damage if followed. Contact ADJ Service for more details.

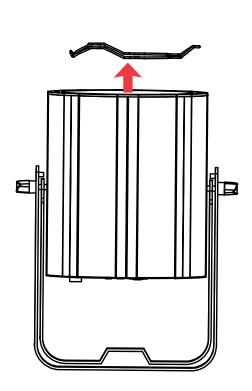
DO NOT EXPOSE THE FIXTURE AND/OR FRONT LENS OPENING TO LIGHT BEAMS FROM DIRECT SUNLIGHT, OTHER LIGHTING OR MOVING HEAD FIXTURES, AND LASERS DURING UNPACKING, INSTALLATION, USE, AND EXTENDED IDLE TIMES OUTDOORS. DO NOT FOCUS A LIGHT BEAM FROM ONE LIGHTING FIXTURE DIRECTLY TOWARDS ANOTHER.

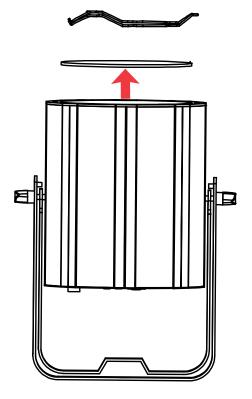


# **ACCESSORY INSTALLATION**

# **40- AND 50-DEGREE LENSES**

Included with this unit are additional 40- and 50-degree lenses. To install these accessories, simply remove the lens retainer ring located inside the lens housing, as shown in the below left image. Then, carefully remove the standard lens, as shown in the below right image, and replace with the desired lens. Replace the lens retainer ring to secure in place.





# REMOTE DEVICE MANAGEMENT (RDM)

NOTE: In order for RDM to work properly, RDM enabled equipment must be used throughout the entire system, including DMX data splitters and wireless systems.

Remote Device Management (RDM) is a protocol that sits on top of the DMX512 data standard for lighting, allowing the DMX systems of the fixtures to be modified and monitored remotely. This protocol is ideal for instances in which a unit is installed in a location that is not easily accessible.

With RDM, the DMX512 system becomes bi-directional, allowing a compatible RDM enabled controller to send out a signal to devices on the wire, as well as allowing the fixture to respond (known as a GET command). The controller can then use its SET command to modify settings that would typically have to be changed or viewed directly via the unit's display screen, including the DMX Address, DMX Channel Mode, and Temperature Sensors.

#### FIXTURE RDM INFORMATION

| RDM Code | Device ID | Device Model ID | Personality ID   |
|----------|-----------|-----------------|--|
| 0x1900   | 88a46     | 4               | 5ch (1), 8ch-A (2), 8ch-B (3), 9ch (4),<br>10ch-A (5), 10ch-B (6), 12ch (7), 13ch (8),<br>16ch (9), 20ch (a) |

Please be aware that **not all RDM devices support all RDM features**, and therefore it is important to check beforehand to ensure that the equipment that you are considering includes all of the features that you require.

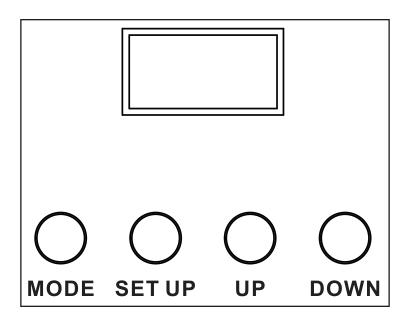
The following parameters are accessible in RDM on this device:

| Device Info                             |
|---|
| Manufacturer Label                      |
| Device Label                            |
| Software Version Label                  |
| DMX Personality                         |
| DMX Personality Description             |
| DMX Start Address                       |
| Sensor Definition                       |
| Sensor Value                            |
| Curve (Dim Curve)                       |
| Curve Description                       |
| Modulation Frequency (Led Refresh Rate) |
| Modulation Frequency Description        |
| Output Response Time (Dim Mode)         |
| Output Response Time Description        |

# CONTROL PANEL

The fixture includes an easy to navigate system menu control panel display where all necessary settings and adjustments are made. (See image below)

- MODE: Cycles through the main menu options and/or return to previous menu without making changes.
- DOWN/UP: Scroll through options in the selected menu.
- **SETUP:** Select highlighted option and/or confirm selection.



#### **DISPLAY SCREEN LOCK**

When the Display Lock setting is set to 1~10min, the display screen will automatically lock if there is no activity for the specified length of time. To unlock the display screen, simply press and hold the MODE button for 3 seconds. Alternately, when the Display Lock setting is set to OFF, the display screen will never automatically lock. However, it can still be manually locked by pressing and holding the MODE button for 2 seconds. To unlock, press and hold the MODE button for 3 seconds.

# SYSTEM MENU

|             | Address                     | <b>001</b> - 512  |               | ,  | Set DMX address  |  |
|-------------|-----------------------------|---|---------------|--|--|--|
|             |                             | 5ch   |               |  |  |  |
|             |                             | 8ch-A   |               |  |  |  |
|             |                             | 8ch-B   |               |  | 1  |  |
|             |                             | 9ch   |               |  | 1  |  |
|             |                             | 10ch-A  |               | 1  |  |  |
|             | Ch. Mode                    | 10ch-B  |               |  | Select DMX mode  |  |
|             |                             | 12ch  |               |  |  |  |
|             |                             | 13ch  |               |  |  |  |
|             |                             | 16ch  |               |  |  |  |
| DMX SET     |                             | 20ch  |               |  |  |  |
|             |                             | Hold  |               |  | Holds last used DMX setup in the event that DMX signal is lost   |  |
|             | No DMX                      | Blackout  |               |  | Takes all DMX channels to 0 in the event that DMX signal is lost |  |
|             |                             | Manual  |               | Defaults to manual settings when DMX signal is lost                |  |  |
|             |                             | Int. Prog   |               | Run last set internal program in the event that DMX signal is lost |  |  |
|             | Primary/Second-<br>ary Mode | Primary / <b>Second</b>                                 | lary          |  |  |  |
|             | RDM                         | On / <i>Off</i>   |               |  |  |  |
|             |                             | Standard  |               |  |  |  |
|             |                             | Stage   |               |  |  |  |
|             |                             | TV  |               |  |  |  |
|             | Dim Mode                    | Archi.  |               |  |  |  |
|             |                             | Theatre   |               |  |  |  |
|             |                             | Stage 2   | _             |  |  |  |
|             |                             | Dim Speed   | 0.1s - 10.0s  |  |  |  |
| DEDOGNALITY |                             | Linear  |               |  |  |  |
| PERSONALITY | Dim Curve                   | Square  |               | ,  |  |  |
|             |                             | Inv. Squa   |               |  | <u> </u>   |  |
|             |                             | S. Curve  | 10011 10011   | 400011   |  |  |
|             | LED Rfrsh                   | 900Hz, 1000Hz, 1<br>1400Hz, 1500Hz,<br>10KHz, 15KHz, 20 | 2500Hz, 4000H |  | LED Refresh Rate   |  |
|             | IR Function                 | On / Off  |               |  | Unit is IR Controllable  |  |
|             |                             |   | Red           | 000-255  |  |  |
|             |                             |   | Green         | 000-255  |  |  |
|             | IR Button Colors            | Button 0  | Blue          | 000-255  |  |  |
|             |                             |   | Amber         | 000-255<br>000-255   |  |  |
|             |                             |   | Lime          |  |  |  |
|             |                             | CONTINUE  | ED ON NEXT PA | AGE  |  |  |

# SYSTEM MENU

|             |                  |                 |                         | ,                              | ,   |
|-------------|------------------|-----------------|-------------------------|--------------------------------|---|
|             |                  |                 | Red                     | 000-255                        |   |
|             |                  |                 | Green                   | 000-255                        |   |
|             |                  | Button 1        | Blue                    | 000-255                        |   |
|             |                  |                 | Amber                   | 000-255                        |   |
|             |                  |                 | Lime                    | 000-255                        |   |
|             |                  |                 | Red                     | 000-255                        |   |
|             |                  |                 | Green                   | 000-255                        |   |
|             | ID Dutton Colore | Button 2        | Blue                    | 000-255                        |   |
|             | IR Button Colors |                 | Amber                   | 000-255                        |   |
|             |                  |                 | Lime                    | 000-255                        |   |
|             |                  |                 |                         |                                |   |
|             |                  |                 | Red                     | 000-255                        |   |
|             |                  |                 | Green                   | 000-255                        |   |
|             |                  | Button 15       | Blue                    | 000-255                        |   |
|             |                  |                 | Amber                   | 000-255                        |   |
| PERSONALITY |                  |                 | Lime                    | 000-255                        |   |
| (continued) | Display          | Save Dlay       | 1 - <b>10</b>           |                                |   |
|             |                  | Lock            | Off, <b>30s</b> - 10min |                                |   |
|             |                  |                 | Yes                     | ,                              | Display flipped                                       |
|             | -                | Rotate Display  | No                      |                                | Display in normal orientation                         |
|             |                  | 180             | Auto                    |                                | Display automatically rotates to keep readout upright |
|             |                  |                 |                         | Red<br>000 - 255               |   |
|             |                  |                 |                         | Green<br>000 - 255             |   |
|             |                  |                 | Calibrat                | Blue<br>000 - 255              |   |
|             | Service          | Passcode = 050  |                         | Amber                          |   |
|             | Service          | asscode = 050   |                         | 000 - 255                      |   |
|             | Service          | 1 asscode = 000 |                         | 000 - 255<br>Lime<br>000 - 255 |   |
|             | Service          | 1 asscode = 030 | USB Powr                | Lime                           |   |
|             | Service          | 1 asscode = 030 | USB Powr<br>S. Update   | Lime<br>000 - 255              | Software update                                       |

CONTINUED ONTO NEXT PAGE

# SYSTEM MENU

|           | Red         | 000 - 255            |                 |   | Manually adjust red  |  |  |
|-----------|-------------|----------------------|-----------------|---|--|--|--|
|           | Green       | 000 - 255            |                 | Manually adjust green                   |  |  |  |
|           | Blue        | 000 - 255            |                 |   | Manually adjust blue   |  |  |
|           | Amber       | 000 - 255            |                 |   | Manually adjust amber  |  |  |
|           | Lime        | 000 - 255            |                 | 1                                       | , ,  |  |  |
|           | Clr Macro   | 000 - 255            |                 | Manually adjust lime Select color macro |  |  |  |
|           |             |                      |                 | ļ                                       |  |  |  |
| MANUAL    | Clr Temp    | 000 - 255            |                 | Manually adjust color temp              |  |  |  |
|           | Clr Temp Pr | 000 - 255            |                 |   | Select color temp preset   |  |  |
|           | Strobe      | 000 - 255            |                 |   | Manually adjust strobe   |  |  |
|           | Mastr Dim   | 000 - 255            |                 |   | Manually adjust master dimmer  |  |  |
|           | Auto Prog   | 000 - 255            |                 |   | Select auto program  |  |  |
|           | Prog Spd    | 000 - 255            |                 |   | Manually adjust program speed  |  |  |
|           | Prof Fade   | 000 - 255            |                 |   | Manually adjust program fade   |  |  |
|           |             | Speed                | 000 - 255       |   |  |  |  |
|           | Prog 0      | Fade                 | 000 - 255       | ,                                       |  |  |  |
|           |             | Sound                | On / <i>Off</i> | 000 - 255                               |  |  |  |
|           |             | Speed                | 000 - 255       |   |  |  |  |
| INT PROGS | Prog 1      | Fade                 | 000 - 255       |   |  |  |  |
| INT PROGS |             | Sound                | On / <i>Off</i> | 000 - 255                               |  |  |  |
|           |             |                      |                 |   |  |  |  |
|           | Prog 13     | Speed                | 000 - 255       |   |  |  |  |
|           |             | Fade                 | 000 - 255       |   |  |  |  |
|           |             | Sound                | On / <i>Off</i> | 000 - 255                               |  |  |  |
|           |             | PwrOnHr1             | xxxxxx Hours    |   | Total hours fixture has been powered on, non resettable              |  |  |
|           | Hours       | PwrOnHr2             | xxxxxx Hours    |   | Hours since fixture has been powered on since last reset, resettable |  |  |
|           |             | PwrOnRst             | Passcode = 050  |   | Reset power on time  |  |  |
|           |             | xxx F / xxx C        |                 |   | Display current temp   |  |  |
|           |             | MaxTemp1             | xxx F / xxx C   |   | Max temp since last reset, resettable                                |  |  |
|           | Temp        | MaxTemp2             | xxx F / xxx C   |   | All time max temp, non reset-table                                   |  |  |
| INFO      |             | Temp Rst             | Yes / No        | Passcode<br>= 050                       | Reset max temp   |  |  |
|           |             | Red                  |                 | •                                       |  |  |  |
|           | DMY         | Green                |                 |   | Display current value for each                                       |  |  |
|           | DMX Values  |                      |                 |   | DMX channel  |  |  |
|           |             | Auto Prog            |                 |   | 1  |  |  |
|           | RDM UID     | xxxxxx               |                 |   |  |  |  |
|           |             | Fixture errors (list | one by one)     |   |  |  |  |
|           | Error Logs  | Reset Error Log      | Yes / No        | Passcode<br>= 050                       | Reset error log  |  |  |
|           | Soft Vers   | x.xx                 |                 |   |  |  |  |
| ·         |             |                      |                 |   |  |  |  |

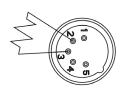
## **DMX SETUP**

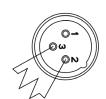
**DMX-512:** DMX is short for Digital Multiplex. This is a universal protocol used as a form of communication between intelligent fixtures and controllers. A DMX controller sends DMX data instructions from the controller to the fixture. DMX data is sent as serial data that travels from fixture to fixture via the DATA "IN" and DATA "OUT" XLR terminals located on all DMX fixtures (most controllers only have a DATA "OUT" terminal).

**DMX Linking:** DMX is a language allowing all makes and models of different manufacturers to be linked together and operate from a single controller, as long as all fixtures and the controller are DMX compliant. To ensure proper DMX data transmission, try to use the shortest cable path possible when using several DMX fixtures. The order in which fixtures are connected in a DMX line does not influence the DMX addressing. For example, a fixture assigned a DMX address of 1 may be placed anywhere in a DMX line: at the beginning, at the end, or anywhere in the middle. When a fixture is assigned a DMX address of 1, the DMX controller knows to send DATA assigned to address 1 to that unit, no matter where it is located in the DMX chain.

Data Cable (DMX Cable) Requirements (For DMX Operation): The COB Cannon LP200ST can be controlled via DMX-512 protocol, and features multiple DMX channel modes. Your unit and your DMX controller can operate with either a 3-pin or 5-pin XLR connector for data input and data output. If you are making your own cables, be sure to use standard 110-120 Ohm shielded cable (This cable may be purchased at almost all professional lighting stores). Your cables should be made with a male XLR connector at one end and a female XLR connector at the other. Also remember that DMX cable must be daisy chained and cannot be split.

**Special Note:** Line Termination. When longer runs of cable are used, you may need to use a terminator on the last unit to avoid erratic behavior. A terminator is a 110-120 ohm 1/4 watt resistor which is connected between pins 2 and 3 of a male XLR connector (DATA + and DATA -). This unit is inserted in the female XLR connector of the last unit in your daisy chain to terminate the line. Using a cable terminator (ADJ part number Z-DMX/T) will decrease the chances of erratic behavior.





A DMX512 terminator reduces signal errors, avoiding most signal reflection interference. Connect PIN 2 (DMX-) and PIN 3 (DMX+) of the last fixture in series with a 120 Ohm, 1/4 W Resistor to terminate the DMX512.

# **DMX SETUP**

#### **DMX ADDRESSING**

All fixtures should be given a DMX starting address when operating with a DMX controller, in order to ensure that the correct fixture responds to the correct control signal. This digital starting address is the channel number from which the fixture starts to "listen" to the digital control signal sent out from the DMX controller. The starting DMX address is configured by setting the correct DMX address on the control panel display on the fixture.

You can set the same starting address for multiple fixtures, or set different addresses for each individual fixture. Setting multiple fixtures to the same DMX address will cause all those fixtures to react in the same way. In this case, please note that changing the settings of one channel will affect all the fixtures simultaneously.

If you set each fixture to a different DMX address, each unit will start to "listen" to the channel number you have set, based on the quantity of DMX channels of each fixture. That means changing the settings of one channel will only affect the selected fixture.

As an example, when operating this device in 5 channel mode, you should set the starting DMX address of the first unit to 1, the second unit to 6 (1 + 5), the third unit to 11 (1 + 5 + 5), and so on. (See the chart below for more details.)

| Channel Mode         | Unit 1 Address | Unit 2 Address | Unit 3 Address | Unit 4 Address |
|----------------------|----------------|----------------|----------------|----------------|
| 5-channel            | 1              | 6              | 11             | 16             |
| 8A / 8B-channel      | 1              | 9              | 17             | 25             |
| 9-channel            | 1              | 10             | 19             | 28             |
| 10A / 10B<br>channel | 1              | 11             | 21             | 31             |
| 12-channel           | 1              | 13             | 25             | 37             |
| 13-channel           | 1              | 14             | 27             | 40             |
| 16-channel           | 1              | 17             | 33             | 49             |
| 20-channel           | 1              | 21             | 41             | 61             |

# **DMX TRAITS**

|     |          |          |     | CHAI      | NNEL      |      |      |      |      |              |   |
|-----|----------|----------|-----|-----------|-----------|------|------|------|------|--------------|---|
| 5CH | 8CH<br>A | 8CH<br>B | 9СН | 10CH<br>A | 10CH<br>B | 12CH | 13CH | 16CH | 20CH | DMX<br>VALUE | FUNCTION  |
| 1   | 1        |          | 1   | 1         | 1         | 1    | 1    | 1    | 1    | 000 - 255    | <i>Red</i> , 0% to 100%   |
|     |          |          |     | 2         |           |      |      |      | 2    | 000 - 255    | Red Fine  |
| 2   | 2        |          | 2   | 3         | 2         | 2    | 2    | 2    | 3    | 000 - 255    | Green, 0% to 100%   |
|     |          |          |     | 4         |           |      |      |      | 4    | 000 - 255    | Green Fine  |
| 3   | 3        |          | 3   | 5         | 3         | 3    | 3    | 3    | 5    | 000 - 255    | <i>Blue,</i> 0% to 100%   |
|     |          |          |     | 6         |           |      |      |      | 6    | 000 - 255    | Blue Fine   |
| 4   | 4        |          | 4   | 7         | 4         | 4    | 4    | 4    | 7    | 000 - 255    | <b>Amber</b> , 0% to 100%   |
|     |          |          |     | 8         |           |      |      |      | 8    | 000 - 255    | Amber Fine  |
| 5   | 5        |          | 5   | 9         | 5         | 5    | 5    | 5    | 9    | 000 - 255    | <i>Lime</i> , 0% to 100%  |
|     |          |          |     | 10        |           |      |      |      | 10   | 000 - 255    | Lime Fine   |
|     |          | 1        |     |           | 6         | 6    | 6    | 6    | 11   | 000 - 255    | Color Macros, please<br>see Color Macros<br>Chart section of this<br>manual |
|     |          | 2        | 6   |           | 7         |      | 7    | 7    | 12   | 000 - 255    | Color Temperature,<br>2300K - 9900K linear                                  |
|     |          |          |     |           |           |      |      |      |      |              | Shutter / Strobe  |
|     |          |          |     |           |           |      |      |      |      | 000 - 031    | LEDs off  |
|     |          |          |     |           |           |      |      |      |      | 032 - 063    | LEDs On   |
|     |          |          |     |           |           |      |      |      |      | 064 - 095    | Strobe Effect, slow to fast   |
|     | 6        | 3        | 7   |           | 8         | 7    | 8    | 8    | 13   | 096 - 127    | LEDs On   |
|     | U        | 3        | ,   |           | 0         | ,    | U    | U    | 10   | 128 - 159    | Pulse Effect in Sequences   |
|     |          |          |     |           |           |      |      |      |      | 160 - 191    | LEDs On   |
|     |          |          |     |           |           |      |      |      |      | 192 - 223    | Random Strobe Effect, slow to fast  |
|     |          |          |     |           |           |      |      |      |      | 224 - 255    | LEDs On   |
|     | 7        | 4        | 8   |           | 9         | 8    | 9    | 9    | 14   | 000 - 255    | Dimmer Intensity, 0% to 100%  |
|     | 8        | 5        | 9   |           | 10        | 9    | 10   | 10   |      | 000 - 255    | Dimmer Fine   |
|     |          |          |     |           |           |      |      |      |      |              | Auto Programs   |
|     |          |          |     |           |           |      |      |      |      | 000 - 010    | Off   |
|     |          |          |     |           |           | 10   |      | 11   | 15   | 011 - 026    | Auto Program 1  |
|     |          |          |     |           |           | 10   |      | 11   | 15   | 027 - 043    | Auto Program 2  |
|     |          |          |     |           |           |      |      |      |      | 044 - 060    | Auto Program 3  |
|     |          |          |     |           |           |      |      |      |      | 061 - 076    | Auto Program 4  |

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# **DMX TRAITS**

|     | CHANNEL  |          |     |           |           |      |      |      | <b></b> |               |                                      |  |           |    |  |  |  |  |  |  |  |  |           |       |
|-----|----------|----------|-----|-----------|-----------|------|------|------|---------|---------------|--------------------------------------|--|-----------|----|--|--|--|--|--|--|--|--|-----------|-------|
| 5CH | 8CH<br>A | 8CH<br>B | 9СН | 10CH<br>A | 10CH<br>B | 12CH | 13CH | 16CH | 20CH    | DMX<br>VALUES | FUNCTION                             |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      |         |               | Auto Programs (continued)            |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      |         | 077 - 093     | Auto Program 5                       |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      |         | 094 - 110     | Auto Program 6                       |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      |         | 111 - 126     | Auto Program 7                       |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      | l    |         | 127 - 143     | Auto Program 8                       |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           | 10   |      | 11   | 11   15 | 144 - 160     | Auto Program 9                       |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      |         | 161 - 176     | Auto Program 10                      |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      |         | 177 - 193     | Auto Program 11                      |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      |         | 194 - 210     | Auto Program 12                      |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      |         | 211 - 226     | Auto Program 13                      |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      |         | 227 - 255     | No Function                          |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           | 11   |      | 12   | 16      | 000 - 255     | Auto Programs Speed, slow to fast    |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           | 12   |      | 13   | 17      | 000 - 255     | Auto Programs Fade,<br>least to most |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      |         |               | Dim Mode                             |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      |         | 000 - 020     | Default to unit setting              |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      |         | 021 - 040     | Standard                             |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      |         |               |                                      |  |           |    |  |  |  |  |  |  |  |  | 041 - 060 | Stage |
|     |          |          |     |           |           |      |      |      |         |               |                                      |  | 061 - 080 | TV |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      |         | 081 - 100     | Architectural                        |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      |         | 101 - 120     | Theatre                              |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      |         | 121 - 140     | Stage 2                              |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      |         |               | Dim Speed                            |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          | 6        |     |           |           |      | 11   | 14   | 18      | 141           | 0.1s                                 |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          | ١        |     |           |           |      | ''   | 14   | 10      | 142           | 0.2s                                 |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      |         | 143           | 0.3s                                 |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      |         | 144           | 0.4s                                 |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           | 145       | 0.5s |      |      |         |               |                                      |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      | 146     | 0.6s          |                                      |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      |         | 147           | 0.7s                                 |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      |         | 148           | 0.8s                                 |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      |         | 149           | 0.9s                                 |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      |         | 150           | 1.0s                                 |  |           |    |  |  |  |  |  |  |  |  |           |       |
|     |          |          |     |           |           |      |      |      |         | 151           | 1.5s                                 |  |           |    |  |  |  |  |  |  |  |  |           |       |

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# **DMX TRAITS**

|     | CHANNEL  |          |     |           |           |      |      |      | D1*** |               |                         |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|-----|----------|----------|-----|-----------|-----------|------|------|------|-------|---------------|-------------------------|-----------|-----------------------|--|--|--|-----------|----------|--|--|--|--|--|--|--|--|--|--|--|-----------|--------|
| 5CH | 8CH<br>A | 8CH<br>B | 9CH | 10CH<br>A | 10CH<br>B | 12CH | 13CH | 16CH | 20CH  | DMX<br>VALUES | FUNCTION                |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       |               |                         |           | Dim Speed (continued) |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       |               | 152                     | 2.0s      |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       | 153           | 3.0s                    |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       | 154           | 4.0s                    |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       | 155           | 5.0s                    |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          | 6        |     |           |           |      | 11   | 14   | 18    | 156           | 6.0s                    |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       | 157           | 7.0s                    |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       | 158           | 8.0s                    |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       | 159           | 9.0s                    |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       | 160           | 10.0s                   |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       | 161 - 255     | Default to unit setting |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       |               | Dim Curves              |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       | 000 - 020     | Square                  |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          | 7        |     |           |           |      | 12   | 15   | 1.5   | 4.5           | 19                      | 021 - 040 | Linear                |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          | <b>'</b> |     |           |           |      | 12   | 15   | 19    | 041 - 060     | Inv. Squa.              |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       |               |                         |           |                       |  |  |  | 061 - 080 | S. Curve |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       | 081 - 255     | No function             |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       |               | Refresh Rates           |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       | 000 - 015     | Default to unit setting |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       |               |                         |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  | 016 - 030 | 900 Hz |
|     |          |          |     |           |           |      |      |      |       | 031 - 045     | 1000 Hz                 |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       | 046 - 060     | 1100 Hz                 |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       | 061 - 075     | 1200 Hz                 |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       | 076 - 090     | 1300 Hz                 |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       | 091 - 105     | 1400 Hz                 |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          | 8        |     |           |           |      | 13   | 16   | 20    | 106 - 120     | 1500 Hz                 |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       | 121 - 135     | 2500 Hz                 |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       | 136 - 150     | 4000 Hz                 |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       | 151 - 165     | 5000 Hz                 |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       | 166 - 180     | 10,000 Hz               |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       | 181 - 195     | 15,000 Hz               |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       | 196 - 210     | 20,000 Hz               |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       | 211 - 225     | 25,000 Hz               |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |
|     |          |          |     |           |           |      |      |      |       | 226 - 255     | No function             |           |                       |  |  |  |           |          |  |  |  |  |  |  |  |  |  |  |  |           |        |

# **COLOR TEMPERATURE PRESETS**

| COLOR TEMP | DMX VALUE | R   | G   | В   | Α   | L   |
|------------|-----------|-----|-----|-----|-----|-----|
| Off        | 000 - 015 | 0   | 0   | 0   | 0   | 0   |
| 2300K      | 016 - 031 | 150 | 4   | 4   | 255 | 255 |
| 2600K      | 032 - 047 | 130 | 20  | 10  | 255 | 255 |
| 2800K      | 048 - 063 | 120 | 30  | 15  | 255 | 255 |
| 3100K      | 064 - 079 | 110 | 45  | 15  | 255 | 255 |
| 3400K      | 080 - 095 | 100 | 55  | 20  | 255 | 255 |
| 3800K      | 096 - 111 | 90  | 70  | 25  | 255 | 255 |
| 4100K      | 112 - 127 | 80  | 80  | 30  | 255 | 255 |
| 4500K      | 128 - 143 | 80  | 85  | 40  | 255 | 255 |
| 4900K      | 144 - 159 | 80  | 95  | 50  | 255 | 255 |
| 5500K      | 160 - 175 | 75  | 110 | 60  | 255 | 255 |
| 6000K      | 176 - 191 | 75  | 110 | 70  | 255 | 255 |
| 7000K      | 192 - 207 | 75  | 125 | 87  | 255 | 255 |
| 8000K      | 208 - 223 | 60  | 135 | 95  | 255 | 255 |
| 9000K      | 224 - 239 | 55  | 150 | 103 | 255 | 255 |
| 9900K      | 240 - 255 | 55  | 165 | 117 | 255 | 255 |

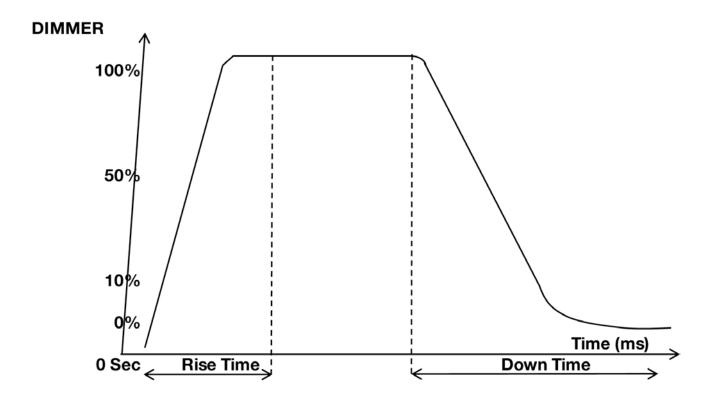
# **COLOR MACROS CHART**

| COLOR MACRO<br>NO.     | DMX VALUE | COLOR TEMP | RED | GREEN | BLUE | AMBER | LIME |
|------------------------|-----------|------------|-----|-------|------|-------|------|
| Off                    | 000       | n/a        | 0   | 0     | 0    | 0     | 0    |
| Macro 1                | 001 - 004 | n/a        | 0   | 255   | 255  | 1     | 116  |
| Macro 2                | 005 - 008 | n/a        | 127 | 255   | 212  | 1     | 124  |
| Macro 3                | 009 - 012 | n/a        | 151 | 125   | 3    | 255   | 43   |
| Macro 4                | 013 - 016 | n/a        | 0   | 0     | 255  | 1     | 0    |
| Macro 5                | 017 - 020 | n/a        | 138 | 43    | 226  | 1     | 177  |
| Macro 6                | 021 - 024 | n/a        | 223 | 108   | 7    | 255   | 77   |
| Macro 7                | 025 - 028 | n/a        | 165 | 42    | 42   | 1     | 200  |
| Macro 8                | 029 - 032 | n/a        | 95  | 158   | 160  | 44    | 71   |
| Macro 9                | 033 - 036 | n/a        | 171 | 36    | 0    | 120   | 255  |
| Macro 10               | 037 - 040 | n/a        | 127 | 255   | 0    | 1     | 255  |
| Macro 11               | 041 - 044 | n/a        | 210 | 105   | 30   | 1     | 22   |
| Macro 12               | 045 - 048 | n/a        | 255 | 15    | 18   | 255   | 174  |
| Macro 13               | 049 - 052 | n/a        | 100 | 149   | 237  | 3     | 0    |
| Macro 14               | 053 - 056 | n/a        | 255 | 0     | 10   | 255   | 144  |
| Macro 15               | 057 - 060 | n/a        | 220 | 20    | 60   | 1     | 0    |
| Macro 16               | 061 - 064 | n/a        | 0   | 255   | 255  | 0     | 12   |
| Macro 17               | 065 - 068 | n/a        | 6   | 0     | 139  | 1     | 3    |
| Macro 18               | 069 - 072 | n/a        | 0   | 139   | 139  | 2     | 5    |
| Macro 19               | 073 - 076 | n/a        | 0   | 111   | 0    | 1     | 24   |
| Macro 20               | 077 - 080 | n/a        | 255 | 0     | 2    | 21    | 3    |
| Macro 21               | 081 - 084 | n/a        | 188 | 0     | 3    | 255   | 44   |
| Macro 22               | 085 - 088 | n/a        | 255 | 12    | 0    | 77    | 62   |
| Macro 23               | 089 - 092 | n/a        | 255 | 130   | 25   | 229   | 30   |
| Macro 24               | 093 - 096 | n/a        | 140 | 0     | 139  | 2     | 135  |
| Macro 25               | 097 - 100 | n/a        | 255 | 140   | 0    | 1     | 0    |
| Macro 26               | 101 - 104 | n/a        | 153 | 50    | 204  | 1     | 5    |
| Macro 27               | 105 - 108 | n/a        | 143 | 188   | 143  | 1     | 35   |
| Macro 28               | 109 - 112 | n/a        | 72  | 61    | 139  | 4     | 2    |
| Macro 29               | 113 - 116 | n/a        | 0   | 206   | 209  | 2     | 2    |
| Macro 30               | 117 - 120 | n/a        | 255 | 0     | 4    | 11    | 8    |
| Macro 31               | 121 - 124 | n/a        | 148 | 0     | 211  | 5     | 2    |
| Macro 32               | 125 - 128 | n/a        | 255 | 20    | 147  | 1     | 0    |
| Macro 33               | 129 - 132 | n/a        | 0   | 191   | 255  | 2     | 3    |
| Macro 34               | 133 - 136 | n/a        | 160 | 0     | 26   | 0     | 4    |
| Macro 35               | 137 - 140 | n/a        | 34  | 139   | 34   | 1     | 1    |
| Macro 36               | 141 - 144 | n/a        | 255 | 0     | 255  | 2     | 0    |
| Macro 37               | 145 - 148 | n/a        | 255 | 215   | 0    | 1     | 1    |
| Macro 38               | 149 - 152 | n/a        | 5   | 255   | 190  | 3     | 11   |
| Macro 39               | 153 - 156 | n/a        | 12  | 255   | 62   | 95    | 49   |
| Macro 40               | 157 - 160 | n/a        | 5   | 209   | 255  | 15    | 170  |
| CONTINUED ON NEXT PAGE |           |            |     |       |      |       |      |

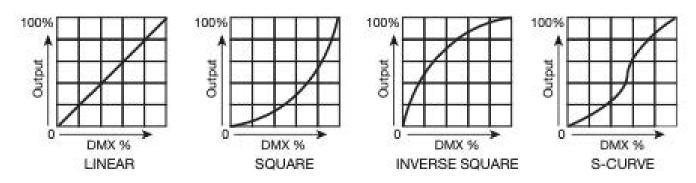
# **COLOR MACROS CHART**

| COLOR MACRO<br>NO. | DMX VALUE | COLOR TEMP     | RED | GREEN | BLUE | AMBER | LIME |
|--------------------|-----------|----------------|-----|-------|------|-------|------|
| Macro 41           | 161 - 164 | n/a            | 0   | 5     | 128  | 5     | 5    |
| Macro 42           | 165 - 168 | n/a            | 255 | 105   | 180  | 2     | 1    |
| Macro 43           | 169 - 172 | n/a            | 7   | 255   | 25   | 70    | 77   |
| Macro 44           | 173 - 176 | n/a            | 147 | 164   | 212  | 0     | 2    |
| Macro 45           | 177 - 180 | n/a            | 2   | 255   | 15   | 3     | 19   |
| Macro 46           | 181 - 184 | n/a            | 0   | 38    | 86   | 0     | 0    |
| Macro 47           | 185 - 188 | n/a            | 255 | 0     | 5    | 121   | 10   |
| Macro 48           | 189 - 192 | n/a            | 5   | 148   | 209  | 5     | 19   |
| Macro 49           | 193 - 196 | n/a            | 1   | 255   | 62   | 93    | 44   |
| Macro 50           | 197 - 200 | 2300K > 90 CRI | 150 | 4     | 4    | 255   | 255  |
| Macro 51           | 201 - 204 | 2600K > 90 CRI | 140 | 15    | 8    | 255   | 255  |
| Macro 52           | 205 - 208 | 2800K > 90 CRI | 130 | 25    | 10   | 255   | 255  |
| Macro 53           | 209 - 212 | 3100K > 90 CRI | 110 | 30    | 15   | 255   | 255  |
| Macro 54           | 213 - 216 | 3400K > 90 CRI | 100 | 50    | 20   | 255   | 255  |
| Macro 55           | 217 - 220 | 7000K > 90 CRI | 75  | 110   | 70   | 255   | 255  |
| Macro 56           | 221 - 224 | 8000K > 90 CRI | 75  | 125   | 85   | 255   | 255  |
| Macro 57           | 225 - 228 | 3800K > 90 CRI | 90  | 60    | 25   | 255   | 255  |
| Macro 58           | 229 - 232 | 4100K > 90 CRI | 80  | 71    | 30   | 255   | 255  |
| Macro 59           | 233 - 236 | 4500K > 90 CRI | 80  | 85    | 38   | 255   | 255  |
| Macro 60           | 237 - 240 | 4900K > 90 CRI | 80  | 95    | 46   | 255   | 255  |
| Macro 61           | 241 - 244 | 5500K > 90 CRI | 75  | 110   | 55   | 255   | 255  |
| Macro 62           | 245 - 248 | 6000K > 90 CRI | 75  | 110   | 70   | 255   | 255  |
| Macro 63           | 249 - 252 | 9000K > 90 CRI | 65  | 45    | 97   | 255   | 255  |
| Macro 64           | 253 - 255 | 9900K > 90 CRI | 55  | 165   | 117  | 255   | 255  |

# DIM MODES / DIM CURVES



|                              | 0 sec F        | ade Time       | 1 sec Fade Time |                |  |
|------------------------------|----------------|----------------|-----------------|----------------|--|
| Dimming Curve<br>Ramp Effect | o ———          | 255            | o               | 255            |  |
|                              | Rise Time (ms) | Down Time (ms) | Rise Time (ms)  | Down Time (ms) |  |
| Standard (default)           | 0              | 0              | 0               | 0              |  |
| Stage                        | 780            | 1100           | 1540            | 1660           |  |
| TV                           | 1180           | 1520           | 1860            | 1940           |  |
| Architectural                | 1380           | 1730           | 2040            | 2120           |  |
| Theatre                      | 1580           | 1940           | 2230            | 2280           |  |
| Stage 2                      | 0              | 1100           | 0               | 1660           |  |



# REMOTE CONTROL GUIDELINES

#### WIRELESS SETUP

There are many factors that can affect and/or interrupt a wireless signal, including walls, glass, metal, objects, and people. Therefore, the following guidelines are recommended in order to maximize the chances of having a clear path for the wireless signal to reach the device:

- Install the device a minimum of 9.8 ft (3m) above audiences and/or ground level.
- Arrange the wireless antenna in an upright, vertical position.
- Position devices in direct line of sight of the transmitting controller.

Careful planning and testing of the selected installation location is critical in order to ensure optimized, reliable wireless operation.



## **REMOTE USAGE**

This device can be operated wirelessly using the ADJ UC IR24 remote unit. In order to control the device, the IR Remote setting in the system menu's Personality sub-menu must be set to the "On" configuration, and the handheld remote must be aimed at the front of the fixture. Maximum effective range is 30 feet (9 meters).

Please note that the unit can only be controlled when it has been set to Primary mode. The unit will NOT respond to commands when it has been set to Secondary mode.

# REMOTE CONTROL GUIDELINES

#### REMOTE FUNCTIONS

The functions available on the ADJ UC IR24 remote unit are detailed below:

- ON: Activates the fixture.
- **OFF:** Fixture goes into stand by mode in a blackout state.
- STROBE: Fixture strobes the most recently selected color or program. Strobe rate can be adjusted by degrees using the + / buttons, or preset strobe speeds can directly be selected using number keys 1-15. 1 is the slowest flash speed, and 15 is the fastest.
- **SOUND:** The fixture responds to microphone inputs with the most recently selected program. Microphone sensitivity can then be adjusted using the +/- buttons.
- **COLOR:** Activates color mode. Preset static colors can now be selected by using the number keys 0-15. The intensity for the set color can then be adjusted using the +/- buttons.
- **PROGRAM:** Activates program mode. Internal programs can be selected by using the number keys 0-13. The selected program run speed can be adjusted with the +/- buttons.
- + and buttons: These buttons are used to increase/decrease strobe rate when the STROBE button is active, increase/decrease mic sensitivity when the SOUND button is active, increase/decrease brightness intensity when the COLOR button is active, and increase/decrease program run speed when the PROGRAM button is active. The +/- buttons can be repeatedly pressed to make adjustments in single-step increments, or they can be pressed and held down to quickly scroll to the desired value.
- 0-15 buttons: These buttons are used to select preset strobe speeds when the STROBE button
  is active, to select preset static colors when the COLOR button is active, and to select internal programs when the PROGRAM button is active. Colors stored in buttons 0-15 can be edited from the
  units menu if desired by the user.



## IR DEFAULT VALUES

| BUTTON | RED | GREEN | BLUE | AMBER | LIME |
|--------|-----|-------|------|-------|------|
| 0      | 0   | 0     | 0    | 0     | 255  |
| 1      | 255 | 0     | 0    | 0     | 0    |
| 2      | 0   | 255   | 0    | 0     | 0    |
| 3      | 0   | 0     | 255  | 0     | 0    |
| 4      | 231 | 68    | 0    | 0     | 0    |
| 5      | 0   | 117   | 58   | 0     | 0    |
| 6      | 17  | 0     | 75   | 0     | 0    |
| 7      | 255 | 83    | 0    | 63    | 0    |
| 8      | 0   | 109   | 70   | 0     | 0    |
| 9      | 32  | 0     | 75   | 22    | 0    |
| 10     | 0   | 0     | 0    | 255   | 0    |
| 11     | 0   | 114   | 160  | 0     | 0    |
| 12     | 82  | 0     | 35   | 0     | 0    |
| 13     | 255 | 255   | 0    | 255   | 0    |
| 14     | 0   | 75    | 136  | 0     | 0    |
| 15     | 81  | 0     | 35   | 0     | 0    |

# **EDITING IR BUTTON VALUES**

These fixtures allow the user to create custom RGBA values and assign them to the numbered keys (0-15) on the remote control. Follow the steps below:

- 1. In the main system menu, press MODE to navigate to "Personality," then press ENTER. Use the UP and DOWN buttons to scroll to "IR Button Colors," then press ENTER again.
- 2. Use the UP and DOWN buttons to scroll to the number of the remote button that you would like to use. Options range from "Button 0" to "Button 15." Press ENTER to select the button shown on the display screen.
- 3. Create a custom color for the button you have selected by using the UP and DOWN buttons to scroll through the color component options (Red, Green, Blue, Amber, Lime). Press ENTER to select a color component option, then use the UP and DOWN buttons to adjust the intensity of that color component option. Selectable values range from 000 to 255. Repeat this process until you have set the desired Red, Green, Blue, and Amber intensities to create your custom color.

NOTE: Once you have created and assigned a custom RGBA value to a remote button, the default color for the remote button will be overridden. This means that the output color of the fixture may no longer resemble the color shown on the remote button. The only way to return to the default RGBA value is to reset the unit to the default factory settings by navigating to Personality > Service > Factory Restore.

NOTE: If multiple units have been linked in a primary-secondary set up, the custom RGBA values only need to be set up on the primary unit. The custom RGBA settings will carry over automatically to any secondary units in the system.

## DAISY CHAIN POWER LINKING

These units have the capability to be daisy chained together via the power in/out ports. The maximum number of units that can be linked in this manner is as follows:

- 5 units maximum @ 120V.
- 10 units maximum @ 230V.

#### DO NOT EXCEED THE NUMBER OF UNITS LISTED ABOVE.

**DO NOT MIX MAKE AND MODEL TYPES WHEN DAISY CHAINING!** All units that are connected in this manner must be of the same make and model type.

## CLEANING AND MAINTENANCE

## DISCONNECT POWER BEFORE PERFORMING ANY MAINTENANCE!

#### **CLEANING**

Frequent cleaning is recommended to ensure proper function, optimized light output, and an extended life. The frequency of cleaning depends on the environment in which the fixture operates: damp, smoky, or particularly dirty environments can cause greater accumulation of dirt on the fixture's optics. Clean the external lens surface periodically with a soft cloth to avoid dirt/debris accumulation.

**NEVER** use alcohol, solvents, or ammonia-based cleaners.

#### **MAINTENANCE**

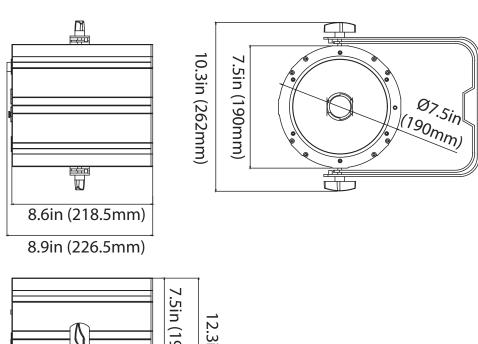
Regular inspections are recommended to ensure proper function and extended life. There are no user serviceable parts inside this fixture. Please refer all other service issues to an authorized ADJ service technician. Should you need any spare parts, please order genuine parts from your local ADJ dealer.

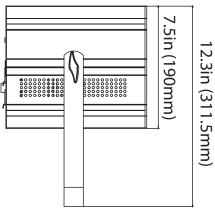
Please refer to the following points during routine inspections:

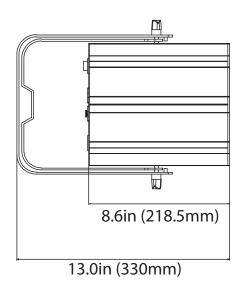
- A detailed electrical check by an approved electrical engineer every three months, to make sure the circuit contacts are in good condition and prevent overheating.
- Be sure all screws and fasteners are securely tightened at all times. Loose screws may fall out during normal operation, resulting in damage or injury as larger parts could fall.
- Check for any deformations on the housing, color lenses, rigging hardware, and rigging points (ceiling, suspension, trussing). Deformations in the housing could allow for dust or liquids to enter into the fixture. Damaged rigging points or unsecured rigging could cause fixture to fall and seriously injure a person(s).
- Electric power supply cables must not show any damage, material fatigue, or sediments.

**NEVER** remove the ground prong from the power cable.

# **DIMENSIONAL DRAWINGS**







# SPECIFICATIONS

#### **OPTICAL:**

- Light Source: 1x 200-Watt COB (Chip on Board), RGBAL (Red, Green, Blue, Amber & Lime), LED Engine
- LED Engine Life Rating: Approximately 50,000 hrs
- CRI: >90
- Color Temperature: 2300~9900K
- · 80-degree beam angle
- · Includes lens kit to change to 40-degrees or 50-degrees beam angle

#### **FEATURES:**

- · Primary / Secondary Mode
- Flicker Free operation (No flickering on camera)
- Produces powerful, smooth RGBAL color mixing with rich palettes of color
- · Scissor yoke allows fixture to be mounted on truss or set on the ground
- Optional Barn Doors (BAR001) sold separately

#### CONTROL:

- 10 DMX Channel modes (5Ch, 8Ch-A, 8Ch-B, 9Ch, 10Ch-A, 10Ch-B, 12Ch, 13Ch, 16Ch, 20Ch)
- · Linear color temperature control via DMX
- · Built-in color temperature presets accessible via DMX
- · 64 built-in color macros
- · 4-button OLED digital DMX display on rear panel
- Compatible with the ADJ UC IR24 remote control (included)
- · LED pulse and strobe effect
- Electronic Dimming: 0 100%
- 6 selectable Dim Modes (Standard, Stage, TV, Architectural, Theatre, & Stage 2)
- 4 selectable Dim Curves (Square, Linear, Inv. Squa & S.Curve)
- Adjustable Selectable Refresh Rate: 14 presets from 900-25,000 Hz

#### **CONNECTIONS:**

- · 5-pin XLR connectors for DMX data linking
- Indoor locking power In & Out connections to daisy chain power
- USB Service Port

#### **ELECTRICAL:**

- Auto sensing power supply: AC 100V/60Hz 240V/50Hz
- Power Draw: 175W max
- · Daisy chain up to 5 fixtures (120V) or 10 fixtures (230V) maximum

#### **DIMENSIONS / WEIGHT:**

- Dimensions (LxWxH) with Bracket: 13" x 10.3" x 7.5" / 330x261x190mm
- Dimensions (LxWxH) without Bracket: 8.6" x 7.5" x 7.5" / 218.5x190x190mm
- Weight: 9.45 lbs. / 4.30 kg.

#### **ACCESSORIES:**

· BAR001 - COB Cannon Wash Barn Doors

#### **RATING / APPROVALS:**

cETLus Approved (#4002034)



Specifications and manual are subject to improvement without prior written notice.

# FCC STATEMENT

Please note that changes or modifications made to this product which are not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference, in which case the user will be required to correct the interference at his own expense.



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