##  <br> ULTRA LBI8



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 www.adj.com for the latest revision/update of this manual before beginning installation and/or programming.

| Date | Document <br> Version | Software <br> Version | DMX Channels | Notes |
| :---: | :---: | :---: | :---: | :--- |
| $04 / 26 / 2022$ | 1.0 | 1.0 | $5 / 8 / 10 / 13 / 16 / 30$ <br> $/ 33 / 38 / 41 / 60 / 71$ <br> Ch. | Initial Release. |
| $10 / 24 / 2022$ | 1.1 | N/C | No Change | Updated Specifications. |

## Europe Energy Saving Notice <br> Energy Saving Matters (EuP 2009/125/EC)

Saving electric energy is a key to help protecting the enviroment. 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 Ultra LB18 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 Ultra LB18 is a DMX intelligent, indoor-rated RGBAL LED linear bar. To optimize the performance of this product, please read these operating instructions carefully to familiarize yourself with the basic operation 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)

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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 checkup. 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 Ultra LB18 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

The ADJ Ultra LB18 is a versatile LED bar with fifteen (18) ultra-bright 10W 5-in-1 LEDs (Red, Green, Blue, Amber \& Lime) with pixel-grouping control capability, and a 17x40-degree beam angle. It is rated for indoor usage only. It offers smooth RGBAL color mixing, 11 DMX channel modes, and linear color temperature control from 2300 K - 9900 K .

## INCLUDED ITEMS

- Glare Shield (x1)
- UC IR Controller (x1)
- Power Cable (x1)


## 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 ANDIOR 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 RANGE IS $-4^{\circ} \mathrm{F}$ TO $113^{\circ} \mathrm{F}\left(-20^{\circ} \mathrm{C}\right.$ TO $\left.45^{\circ} \mathrm{C}\right)$. 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 " $(15 \mathrm{~cm})$ 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.
- 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


## INSTALLATION



## 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)


THIS DEVICE IS DESIGNED FOR INDOOR USE ONLY! DO NOT USE OUTDOORS OR EXPOSE TO RAIN OR MOISTURE! FAILURE TO FOLLOW THIS GUIDELINE WILL DAMAGE THE FIXTURE AND VOID YOUR MANUFACTURER'S WARRANTY!

## 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 $-4^{\circ} \mathrm{F}$ to $113^{\circ} \mathrm{F}\left(-20^{\circ} \mathrm{C}\right.$ to $\left.45^{\circ} \mathrm{C}\right)$. Do not use or 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.


## 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.

## INSTALLATION

## CLAMP INSTALLATION

This fixture features a mounting point on the foot of each bracket for the attachment of a mounting clamp. There is also a loop for the attachment of a safety cable located near the base of each 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 each bracket, and attach a separate SAFETY CABLE of the appropriate weight rating to each safety cable loop. Please note that this fixture requires the use of TWO mounting clamps and TWO safety cables that are secured to independent attachment points at all times.


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

External sources of light beams from direct sunlight, lighting moving head 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 happening, 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.


## 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, such as the DMX Address, DMX Channel Mode, and Temperature Sensors.

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 |

## REMOTE CONTROL GUIDELINES

## REMOTE USAGE

This device can be operated wirelessly using the ADJ UC IR 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).

NOTE: The unit can only be controlled remotely when it has been set to Primary mode. The unit will NOT respond to commands when it has been set to Secondary mode.

NOTE: In order to control multiple units with the remote, the user should set one unit as the primary unit, with all other units set as secondary units. The DMX and channel modes must also match for all units. Refer to Personality section of System Menu.


## REMOTE CONTROL GUIDELINES

## REMOTE FUNCTIONS

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

- Standby - Press once to black out the fixture, and press again to return the fixture to the original state.
- Full On - Press to fully illuminate the device.
- Fade/Gobo - Press to cycle between Color Fade, Color Change, and Auto Run Mode.
- "Dimmer+" and "Dimmer-" - Use to adjust color output intensity when running in Color Mode.
- Strobe - Press to activate the strobing function, then use the number keys 1-4 to select strobe speed. 1 is the slowest speed, and 4 is the fastest.
- Color - Press to activate Color Mode, then use numbered buttons to enter to number of the color macro you wish to use. Press the "Show 0" button for 0.
- Number Keys (1-9)
- In Strobe Mode, buttons 1-4 are used to select strobe speed.
- In Color Mode, buttons 1-9 are used to select the desired color.
- In Show Mode, buttons 1-9 are used to select the desired show.
- Sound On and Sound Off - Activate or deactivate sound active mode.
- Show 0 - Press to activate Show Mode, then use the number keys to select the desired show. Shows 1-9 are selected by pressing buttons 1-9, Show 10 by pressing button 1 followed by the Show 0 button, and Show 11 by pressing button 1 twice.


## 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 30s~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.

## SYSTEM MENU

| DMX SET | Address | 001-512 |  | Set DMX address <br> Select DMX channel mode |
| :---: | :---: | :---: | :---: | :---: |
|  | Ch. Mode | 5ch |  |  |
|  |  | 8ch |  |  |
|  |  | 10ch |  |  |
|  |  | 13ch |  |  |
|  |  | 16ch |  |  |
|  |  | 30ch |  |  |
|  |  | 33ch |  |  |
|  |  | 38ch |  |  |
|  |  | 41ch |  |  |
|  |  | 60ch |  |  |
|  |  | 71ch |  |  |
|  | No DMX | Hold |  | Unit holds last values received if DMX signal is lost |
|  |  | Blackout |  | All channels go to zero (0) if DMX signal is lost |
|  |  | Manual |  | Unit reverts to Manual settings if DMX signal is lost |
|  |  | Int. Prog |  | Unit reverts to last internal program selected if DMX signal is lost |
| PERSONALITY | Primary/ Secondary Mode | Primary / Secondary |  |  |
|  | IR Remote | On / Off |  |  |
|  | RDM | On / Off |  |  |
|  | Pixel Flip | Off = 1-6 |  |  |
|  |  | On = 6-1 |  |  |
|  | Dim Mode | Standard |  |  |
|  |  | Stage |  |  |
|  |  | TV |  |  |
|  |  | Archi. |  |  |
|  |  | Theatre |  |  |
|  |  | Stage 2 |  |  |
|  |  | Dim Speed | 0.1s-10.0s |  |
|  | Dim Curve | Linear |  |  |
|  |  | Square |  |  |
|  |  | Inv. Squa. |  |  |
|  |  | S. Curve |  |  |
| CONTINUED ON NEXT PAGE |  |  |  |  |

SYSTEM MENU

| PERSONALITY (continued) | LED Rfrsh | $900 \mathrm{~Hz}, 1000 \mathrm{~Hz}, 1100 \mathrm{~Hz}, 1200 \mathrm{~Hz}, 1300 \mathrm{~Hz}, 1400$ $\mathrm{Hz}, 1500 \mathrm{~Hz}, 2500 \mathrm{~Hz}, 4000 \mathrm{~Hz}, 5000 \mathrm{~Hz}, 10 \mathrm{KHz}, 15$ KHz, $20 \mathrm{KHz}, 25 \mathrm{KHz}$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Display | SaveDlay | 1-10 |  | Set inactive time before unit reverts to home screen |
|  |  | Lock | Off, 30s - 10min |  | Set inactive time before screen locks |
|  |  | Rotate Display$180$ | Yes |  |  |
|  |  |  | No |  |  |
|  |  |  | Auto |  | Screen automatically flips to keep display in upright orientation |
|  | Service | Passcode $=050$ | Calibrat | All Red $000-255$ |  |
|  |  |  |  | All Green 000-255 |  |
|  |  |  |  | $\begin{aligned} & \text { All Blue } \\ & 000-255 \end{aligned}$ |  |
|  |  |  |  | All Lime $000-255$ |  |
|  |  |  |  | $\begin{aligned} & \text { Red1 } \\ & 000-255 \end{aligned}$ |  |
|  |  |  |  | $\begin{aligned} & \text { Green1 } \\ & 000-255 \end{aligned}$ |  |
|  |  |  |  | Blue1 $000-255$ |  |
|  |  |  |  | Lime1 000-255 |  |
|  |  |  |  | ... |  |
|  |  |  |  | Red18 $000-255$ |  |
|  |  |  |  | $\begin{aligned} & \text { Green18 } \\ & 000-255 \end{aligned}$ |  |
|  |  |  |  | $\begin{array}{\|l\|} \hline \text { Blue18 } \\ 000-255 \\ \hline \end{array}$ |  |
|  |  |  |  | $\begin{array}{\|l\|} \hline \text { Lime18 } \\ 000-255 \end{array}$ |  |
|  |  |  | USB Powr | On / Off |  |
|  |  |  | S. Update | Yes / No |  |
|  |  |  | Restore | Yes / No | Restore unit to factory settings, passcode = 011 |
|  |  |  | Edit RDM UID | xxxxxx |  |
|  |  | CONTIN | D ON NEXT PAGE |  |  |

## SYSTEM MENU



SYSTEM MENU

| INFO (continued) | DMX Value | Red |  |  | Displays current DMX value for each parameter |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Green |  |  |  |
|  |  | $\ldots$ |  |  |  |
|  |  | Auto Prog |  |  |  |
|  | Error Logs | RDM UID | xxxxxx |  | Displays default RDM UID |
|  |  | Fixture Errors |  |  | Displays errors since last error reset one by one |
|  |  | Reset Error Log | Yes / No | Passcode $=050$ |  |
|  | 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 Ultra LB18 can be controlled via DMX-512 protocol, and features multiple DMX channel modes. Your unit and your DMX controller require a 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, $1 / 4 \mathrm{~W}$ 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 $1(1+5+5)$, and so on. (See the chart below for more details.)

| Channel Mode | Unit 1 Address | Unit 2 Address | Unit 3 Address | Unit 4 Address |
| :---: | :---: | :---: | :---: | :---: |
| 5Ch | 1 | 6 | 11 | 16 |
| 8Ch | 1 | 9 | 17 | 25 |
| 10Ch | 1 | 11 | 21 | 31 |
| 13Ch | 1 | 14 | 27 | 40 |
| 16Ch | 1 | 17 | 33 | 49 |
| 30Ch | 1 | 31 | 61 | 91 |
| 33Ch | 1 | 34 | 67 | 100 |
| 38Ch | 1 | 39 | 77 | 115 |
| $\mathbf{4 1 C h}$ | 1 | 42 | 83 | 124 |
| 60Ch | 1 | 61 | 121 | 181 |
| 71Ch | 1 | 72 | 143 | 214 |

## DMX TRAITS



## DMX TRAITS

| CHANNEL |  |  |  |  |  |  |  |  |  |  | DMXVALUES | FUNCTION |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 5 \\ \mathrm{CH} \end{gathered}$ | $\begin{gathered} 8 \\ \mathrm{CH} \end{gathered}$ | $\begin{aligned} & 10 \\ & \hline \end{aligned}$ | $\begin{aligned} & 13 \\ & \mathrm{CH} \end{aligned}$ | $\begin{aligned} & 16 \\ & \mathrm{CH} \end{aligned}$ | $\begin{aligned} & 30 \\ & \mathrm{CH} \end{aligned}$ | $\begin{aligned} & 33 \\ & \mathrm{CH} \end{aligned}$ | $\begin{aligned} & 38 \\ & \mathrm{CH} \end{aligned}$ | $\begin{aligned} & 41 \\ & \mathrm{CH} \end{aligned}$ | $\begin{aligned} & 60 \\ & \mathrm{CH} \end{aligned}$ | $71$ |  |  |
|  |  |  |  |  |  |  |  |  | 26 | 26 | 000-255 | Blue 3 Fine |
|  |  |  |  |  | 14 | 14 | 14 | 14 | 27 | 27 | 000-255 | Amber 3, 0\% to 100\% |
|  |  |  |  |  |  |  |  |  | 28 | 28 | 000-255 | Amber 3 Fine |
|  |  |  |  |  | 15 | 15 | 15 | 15 | 29 | 29 | 000-255 | Lime 3, 0\% to 100\% |
|  |  |  |  |  |  |  |  |  | 30 | 30 | 000-255 | Lime 3 Fine |
|  |  |  |  |  | 16 | 16 | 16 | 16 | 31 | 31 | 000-255 | Red 4, 0\% to 100\% |
|  |  |  |  |  |  |  |  |  | 32 | 32 | 000-255 | Red 4 Fine |
|  |  |  |  |  | 17 | 17 | 17 | 17 | 33 | 33 | 000-255 | Green 4, 0\% to 100\% |
|  |  |  |  |  |  |  |  |  | 34 | 34 | 000-255 | Green 4 Fine |
|  |  |  |  |  | 18 | 18 | 18 | 18 | 35 | 35 | 000-255 | Blue 4, 0\% to 100\% |
|  |  |  |  |  |  |  |  |  | 36 | 36 | 000-255 | Blue 4 Fine |
|  |  |  |  |  | 19 | 19 | 19 | 19 | 37 | 37 | 000-255 | Amber 4, 0\% to 100\% |
|  |  |  |  |  |  |  |  |  | 38 | 38 | 000-255 | Amber 4 Fine |
|  |  |  |  |  | 20 | 20 | 20 | 20 | 39 | 39 | 000-255 | Lime 4, 0\% to 100\% |
|  |  |  |  |  |  |  |  |  | 40 | 40 | 000-255 | Lime 4 Fine |
|  |  |  |  |  | 21 | 21 | 21 | 21 | 41 | 41 | 000-255 | Red 5, 0\% to 100\% |
|  |  |  |  |  |  |  |  |  | 42 | 42 | 000-255 | Red 5 Fine |
|  |  |  |  |  | 22 | 22 | 22 | 22 | 43 | 43 | 000-255 | Green 5, 0\% to 100\% |
|  |  |  |  |  |  |  |  |  | 44 | 44 | 000-255 | Green 5 Fine |
|  |  |  |  |  | 23 | 23 | 23 | 23 | 45 | 45 | 000-255 | Blue 5, 0\% to 100\% |
|  |  |  |  |  |  |  |  |  | 46 | 46 | 000-255 | Blue 5 Fine |
|  |  |  |  |  | 24 | 24 | 24 | 24 | 47 | 47 | 000-255 | Amber 5, 0\% to 100\% |
|  |  |  |  |  |  |  |  |  | 48 | 48 | 000-255 | Amber 5 Fine |
|  |  |  |  |  | 25 | 25 | 25 | 25 | 49 | 49 | 000-255 | Lime 5, 0\% to 100\% |
|  |  |  |  |  |  |  |  |  | 50 | 50 | 000-255 | Lime 5 Fine |
|  |  |  |  |  | 26 | 26 | 26 | 26 | 51 | 51 | 000-255 | Red 6, 0\% to 100\% |
|  |  |  |  |  |  |  |  |  | 52 | 52 | 000-255 | Red 6 Fine |
|  |  |  |  |  | 27 | 27 | 27 | 27 | 53 | 53 | 000-255 | Green 6, 0\% to 100\% |
|  |  |  |  |  |  |  |  |  | 54 | 54 | 000-255 | Green 6 Fine |
|  |  |  |  |  | 28 | 28 | 28 | 28 | 55 | 55 | 000-255 | Blue 6, 0\% to 100\% |
|  |  |  |  |  |  |  |  |  | 56 | 56 | 000-255 | Blue 6 Fine |
|  |  |  |  |  | 29 | 29 | 29 | 29 | 57 | 57 | 000-255 | Amber 6, 0\% to 100\% |
|  |  |  |  |  |  |  |  |  | 58 | 58 | 000-255 | Amber 6 Fine |
|  |  |  |  |  | 30 | 30 | 30 | 30 | 59 | 59 | 000-255 | Lime 6, 0\% to 100\% |
|  |  |  |  |  |  |  |  |  | 60 | 60 | 000-255 | Lime 6 Fine |
| CONTINUED ON NEXT PAGE |  |  |  |  |  |  |  |  |  |  |  |  |

DMX TRAITS

| CHANNEL |  |  |  |  |  |  |  |  |  |  | DMXVALUES | FUNCTION |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 5 \\ \mathrm{CH} \end{gathered}$ | $\begin{gathered} 8 \\ \mathrm{CH} \end{gathered}$ | $\begin{aligned} & 10 \\ & \mathrm{CH} \end{aligned}$ | $\begin{aligned} & 13 \\ & \mathrm{CH} \end{aligned}$ | $\begin{aligned} & 16 \\ & \mathrm{CH} \\ & \hline \end{aligned}$ | $\begin{aligned} & 30 \\ & \mathrm{CH} \end{aligned}$ | $\begin{aligned} & 33 \\ & \mathrm{CH} \end{aligned}$ | $\begin{array}{r} 38 \\ \mathrm{CH} \\ \hline \end{array}$ | $\begin{aligned} & 41 \\ & \mathrm{CH} \\ & \hline \end{aligned}$ | $\begin{aligned} & 60 \\ & \mathrm{CH} \\ & \hline \end{aligned}$ | $\begin{aligned} & 71 \\ & \mathrm{CH} \\ & \hline \end{aligned}$ |  |  |
|  |  |  | 6 | 6 |  |  | 31 | 31 |  | 61 | 000-255 | Color Macros, see Color Macros Chart section of this manual |
|  |  |  | 7 | 7 |  |  | 32 | 32 |  | 62 | 000-255 | Color Temperature, 2300K - 9900K Linear |
|  |  |  |  |  |  |  |  |  |  |  |  | Shutter, Strobe |
|  |  |  |  |  |  |  |  |  |  |  | 000-031 | LEDs Off |
|  |  |  |  |  |  |  |  |  |  |  | 032-063 | LEDs On |
|  |  |  |  |  |  |  |  |  |  |  | 064-095 | Strobe Effect, slow to fast |
|  | 6 |  | 8 | 8 |  | 31 | 33 | 33 |  | 63 | 096-127 | LEDs On |
|  |  |  |  |  |  |  |  |  |  |  | 128-159 | Pulse Effect in Sequences |
|  |  |  |  |  |  |  |  |  |  |  | 160-191 | LEDs On |
|  |  |  |  |  |  |  |  |  |  |  | 192-223 | Random Strobe Effect, slow to fast |
|  |  |  |  |  |  |  |  |  |  |  | 224-255 | LEDs On |
|  | 7 |  | 9 | 9 |  | 32 | 34 | 34 |  | 64 | 000-255 | Dimmer Intensity, 0\% to 100\% |
|  | 8 |  | 10 | 10 |  | 33 | 35 | 35 |  | 65 | 000-255 | Dimmer Fine |
|  |  |  |  |  |  |  |  |  |  |  |  | Auto Programs |
|  |  |  |  |  |  |  |  |  |  |  | 000-010 | Off |
|  |  |  |  |  |  |  |  |  |  |  | 011-026 | Auto Program 1 |
|  |  |  |  |  |  |  |  |  |  |  | 027-043 | Auto Program 2 |
|  |  |  |  |  |  |  |  |  |  |  | 044-060 | Auto Program 3 |
|  |  |  |  |  |  |  |  |  |  |  | 061-076 | Auto Program 4 |
|  |  |  |  |  |  |  |  |  |  |  | 077-093 | Auto Program 5 |
|  |  |  |  |  |  |  |  |  |  |  | 094-110 | Auto Program 6 |
|  |  |  |  |  |  |  |  |  |  |  | 111-126 | Auto Program 7 |
|  |  |  |  |  |  |  |  |  |  |  | 127-143 | Auto Program 8 |
|  |  |  |  |  |  |  |  |  |  |  | 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 |
|  |  |  |  | 12 |  |  |  | 37 |  | 67 | 000-255 | Auto Programs Speed, slow to fast |
|  |  |  |  | 13 |  |  |  | 38 |  | 68 | 000-255 | Auto Programs Fade, 0\% to 100\% |

CONTINUED ON NEXT PAGE

## DMX TRAITS

| CHANNEL |  |  |  |  |  |  |  |  |  |  | DMX VALUES | FUNCTION |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 5 \\ \mathrm{CH} \end{gathered}$ | $\begin{gathered} 8 \\ \mathrm{CH} \end{gathered}$ | $\begin{aligned} & 10 \\ & \mathrm{CH} \end{aligned}$ | $\begin{aligned} & 13 \\ & \mathrm{CH} \end{aligned}$ | $\begin{aligned} & 16 \\ & \text { CH } \end{aligned}$ | $\begin{aligned} & 30 \\ & \mathrm{CH} \end{aligned}$ | $\begin{aligned} & 33 \\ & \mathrm{CH} \end{aligned}$ | $\begin{aligned} & 38 \\ & \mathrm{CH} \end{aligned}$ | $\begin{aligned} & 41 \\ & \mathrm{CH} \end{aligned}$ | $\begin{aligned} & 60 \\ & \mathrm{CH} \end{aligned}$ | $\begin{aligned} & 71 \\ & \mathrm{CH} \end{aligned}$ |  |  |
|  |  |  | 11 | 14 |  |  | 36 | 39 |  | 69 |  | 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 |
|  |  |  |  |  |  |  |  |  |  |  | 141-160 | Dim Speed, 0.1s to 10.0s |
|  |  |  |  |  |  |  |  |  |  |  | 161-255 | Default to unit setting |
|  |  |  | 12 | 15 |  |  | 37 | 40 |  | 70 |  | Dim Curves |
|  |  |  |  |  |  |  |  |  |  |  | 000-020 | Square |
|  |  |  |  |  |  |  |  |  |  |  | 021-040 | Linear |
|  |  |  |  |  |  |  |  |  |  |  | 041-060 | Inv. Squa |
|  |  |  |  |  |  |  |  |  |  |  | 061-080 | S. Curve |
|  |  |  |  |  |  |  |  |  |  |  | 081-255 | No Function |
|  |  |  | 13 | 16 |  |  | 38 | 41 | 71 |  |  | 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 |
|  |  |  |  |  |  |  |  |  |  |  | 106-120 | 1500 Hz |
|  |  |  |  |  |  |  |  |  |  |  | 121-135 | 2500 Hz |
|  |  |  |  |  |  |  |  |  |  |  | 136-150 | 4000 Hz |
|  |  |  |  |  |  |  |  |  |  |  | 151-165 | 5000 Hz |
|  |  |  |  |  |  |  |  |  |  |  | 166-180 | $10,000 \mathrm{~Hz}$ |
|  |  |  |  |  |  |  |  |  |  |  | 181-195 | $15,000 \mathrm{~Hz}$ |
|  |  |  |  |  |  |  |  |  |  |  | 196-210 | $20,000 \mathrm{~Hz}$ |
|  |  |  |  |  |  |  |  |  |  |  | 211-225 | $25,000 \mathrm{~Hz}$ |
|  |  |  |  |  |  |  |  |  |  |  | 226-255 | No Function |

## PIXEL ZONES

In 30-, 33-, 38-, 41-, 60-, and 71-channel mode, the LED strip is divided into 6 separately controlled pixel zones, with each pixel zone consisting of 3 pixels as shown in the illustration below. Activating Pixel Flip in the system menu reverses the order of the arrangement of the pixel zones.

Please note that these pixel zones do not apply 5-, 8-, 10-, 13-, and 16-channel mode, as these modes effectively control all 18 pixels as a single group.

## PIXEL FLIP OFF



PIXEL FLIP ON

## COLOR MACROS CHART

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

## COLOR MACROS CHART

| COLOR MACRO NO. | DMX VALUE | COLOR TEMP | RED | GREEN | BLUE | LIME | AMBER |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 37 | 145-148 | N/A | 255 | 215 | 0 | 1 | 1 |
| 38 | 149-152 | N/A | 5 | 255 | 190 | 3 | 11 |
| 39 | 153-156 | N/A | 12 | 255 | 62 | 95 | 49 |
| 40 | 157-160 | N/A | 5 | 209 | 255 | 15 | 170 |
| 41 | 161-164 | N/A | 0 | 5 | 128 | 5 | 5 |
| 42 | 165-168 | N/A | 255 | 105 | 180 | 2 | 1 |
| 43 | 169-172 | N/A | 7 | 255 | 25 | 70 | 77 |
| 44 | 173-176 | N/A | 147 | 164 | 212 | 0 | 2 |
| 45 | 177-180 | N/A | 2 | 255 | 15 | 3 | 19 |
| 46 | 181-184 | N/A | 0 | 38 | 86 | 0 | 0 |
| 47 | 185-188 | N/A | 255 | 0 | 5 | 121 | 10 |
| 48 | 189-192 | N/A | 5 | 18 | 209 | 5 | 19 |
| 49 | 193-196 | N/A | 1 | 255 | 62 | 93 | 44 |
| 50 | 197-200 | $2300 \mathrm{~K}>90 \mathrm{CRI}$ | 190 | 10 | 10 | 255 | 190 |
| 51 | 201-204 | $2600 \mathrm{~K}>90 \mathrm{CRI}$ | 180 | 25 | 25 | 255 | 180 |
| 52 | 205-208 | $2800 \mathrm{~K}>90 \mathrm{CRI}$ | 165 | 50 | 28 | 255 | 165 |
| 53 | 209-212 | $3100 \mathrm{~K}>90 \mathrm{CRI}$ | 150 | 35 | 35 | 255 | 255 |
| 54 | 213-216 | $3400 \mathrm{~K}>90 \mathrm{CRI}$ | 135 | 45 | 45 | 255 | 135 |
| 55 | 217-220 | $7000 \mathrm{~K}>90 \mathrm{CRI}$ | 80 | 125 | 125 | 255 | 80 |
| 56 | 221-224 | $8000 \mathrm{~K}>90 \mathrm{CRI}$ | 75 | 145 | 145 | 255 | 75 |
| 57 | 225-228 | $3800 \mathrm{~K}>90 \mathrm{CRI}$ | 120 | 55 | 55 | 255 | 120 |
| 58 | 229-232 | $4100 \mathrm{~K}>90 \mathrm{CRI}$ | 120 | 65 | 65 | 255 | 120 |
| 59 | 233-236 | $4500 \mathrm{~K}>90 \mathrm{CRI}$ | 110 | 75 | 75 | 255 | 110 |
| 60 | 237-240 | $4900 \mathrm{~K}>90 \mathrm{CRI}$ | 105 | 85 | 85 | 255 | 105 |
| 61 | 241-244 | $5500 \mathrm{~K}>90 \mathrm{CRI}$ | 95 | 95 | 95 | 255 | 95 |
| 62 | 245-248 | $6000 \mathrm{~K}>90 \mathrm{CRI}$ | 90 | 105 | 105 | 255 | 90 |
| 63 | 249-252 | 9000K > 90 CRI | 75 | 165 | 165 | 255 | 75 |
| 64 | 253-255 | 9900K > 90 CRI | 75 | 185 | 185 | 255 | 75 |

## COLOR TEMPERATURE TABLE

| COLOR <br> TEMPERATURE | DMX <br> VALUES | RED | GREEN | BLUE | AMBER | LIME |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| N/A | $000-015$ | NO FUNCTION |  |  |  |  |
| 2300 K | $016-031$ | 160 | 10 | 10 | 160 | 255 |
| 2600 K | $032-047$ | 130 | 15 | 15 | 130 | 255 |
| 2800 K | $048-063$ | 120 | 20 | 20 | 120 | 255 |
| 3100 K | $064-079$ | 110 | 25 | 25 | 110 | 255 |
| 3400 K | $080-095$ | 100 | 30 | 30 | 100 | 255 |
| 3800 K | $096-111$ | 90 | 40 | 40 | 90 | 255 |
| 4100 K | $112-127$ | 80 | 40 | 40 | 80 | 255 |
| 4500 K | $128-143$ | 75 | 50 | 50 | 75 | 255 |
| 4900 K | $144-159$ | 65 | 55 | 55 | 65 | 255 |
| 5500 K | $160-175$ | 60 | 65 | 65 | 60 | 255 |
| 6000 K | $176-191$ | 60 | 75 | 75 | 60 | 255 |
| 7000 K | $192-207$ | 55 | 90 | 90 | 55 | 255 |
| 8000 K | $208-223$ | 55 | 108 | 108 | 55 | 255 |
| 9000 K | $224-239$ | 55 | 120 | 120 | 55 | 255 |
| 9900 K | $240-255$ | 55 | 132 | 132 | 55 | 255 |

## DIM SPEEDS

| DMX <br> VALUE | DELAY <br> TIME |
| :---: | :---: |
| 141 | 0.1 s |
| 142 | 0.2 s |
| 143 | 0.3 s |
| 144 | 0.4 s |
| 145 | 0.5 s |
| 146 | 0.6 s |
| 147 | 0.7 s |
| 148 | 0.8 s |
| 149 | 0.9 s |
| 150 | 1.0 s |
| 151 | 1.5 s |
| 152 | 2.0 s |
| 153 | 3.0 s |
| 154 | 4.0 s |
| 155 | 5.0 s |
| 156 | 6.0 s |
| 157 | 7.0 s |
| 158 | 8.0 s |
| 159 | 9.0 s |
| 160 | 10.0 s |

## DIM MODES



| Dimming Curve Ramp Effect | 0 sec Fade Time |  | 1 sec Fade Time |  |
| :---: | :---: | :---: | :---: | :---: |
|  | $0$ | - 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 |

## 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 together in this manner is as follows:

- 12 units maximum when running on 120 V power.
- 25 units maximum when running on 240 V power.


## 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

- Ultra bright, 39.3-inch, indoor Linear Bar with $18 \times 10 \mathrm{~W}$ Ultra bright (Red, Green, Blue, Amber \& Lime) LEDs
- 17x40 degree beam angle
- Smooth RGBAL color mixing
- 11 DMX Channel Modes: 5, 8, 10, 13, 16, 30, 33, 38, 41, 60 \& 71 Channels
- 6 Groups $\times 3$ RGBAL LED pixels controllable via DMX in $30,33,38,41,60 \& 71$ channel modes
- 6 operational modes: Auto Run, Program Mode, Sound Trigger, RGBAL Manual, Static Color and DMX-512 Mode
- Horizontal Magnetic Alignment feature (Built-In)
- Flicker Free operation (No flickering on camera)
- Refresh Rate: Selectable - $900 \mathrm{~Hz}, 1000 \mathrm{~Hz}, 1100 \mathrm{~Hz}, 1200 \mathrm{~Hz}, 1300 \mathrm{~Hz}, 1400 \mathrm{~Hz}, 1500 \mathrm{~Hz}, 2500$ $\mathrm{Hz}, 4000 \mathrm{~Hz}, 5000 \mathrm{~Hz}, 10 \mathrm{KHz}, 15 \mathrm{KHz}, 20 \mathrm{KHz}, 25 \mathrm{KHz}$
- 64 built-in Color Macros, including 15 white color temperature presets
- 5 selectable Dim Modes (Standard, Stage, TV, Architectural, Theatre \& Stage 2)
- 4 selectable Dim Curves (Square, Linear, Inv. Square \& S. Curve)
- Linear Color Temperature Control ( $2,300 \mathrm{~K}$ to $9,900 \mathrm{~K}$ )
- >90 CRI
- LED pulse and strobe effect
- OLED Display
- Built-In Microphone for sound trigger mode
- Linkable: DMX via 5-pin XLR cable
- Electronic Dimming: 0-100\%
- Includes mounting brackets to set on the ground or to mount a clamp to for truss mounting
- Long Life LEDs (Rated at approximately $50,000 \mathrm{hrs}$.)
- Multi-voltage operation: AC $100 \mathrm{~V}-240 \mathrm{~V} 50 / 60 \mathrm{~Hz}$
- Power Draw: 130W
- Power link via power locking connectors. Daisy-chain power link (Up to 12 Ultra LB18s can be linked @120V and up to 25 Ultra LB18s can be linked @240V
- Locking Power Cord (Included)
- Compatible with the ADJ UC IR remote. Operates at a distance of up to 32.8 feet ( 10 meters) (Included)
- Glare shield that blocks the LEDs from glare/view and protects LEDs during transport (Included)
- Dimensions (LxWxH): 3.39" x 39.3 " x $7.42^{\prime \prime}$ ( $86 \times 996 x 188.4 \mathrm{~mm}$ )
- Weight: 11.2 lbs./ 5.1 kg .

