

# **UBLI2H**

## **User Instructions**

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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!

## 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](http://www.adj.com) for the latest revision/update of this manual before beginning installation and/or programming.

Date	Document Version	Software Version	DMX Channels	Notes
12/01/2023	1.0	1.0	6/11/13/16/36/43/46	Initial release
03/23/2024	1.1	N/C	No Change	Updated Dimensional Drawings
02/06/2025	1.2	N/C	No Change	Update Wireless Operation
05/18/2026	1.3	N/C	No Change	Updated Specifications

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# INFORMATION

## INTRODUCTION

Please read and understand the instructions in this manual carefully and thoroughly before attempting to operate this device. These instructions contain important safety and use information.

**This product is intended for use by professionally trained personnel only, and is not suitable for private use.**

## Unpacking

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 is damaged, carefully inspect the device for damage, and be sure all accessories necessary to install and operate the device have arrived intact. In the event damage has been found or parts are missing, please contact our customer support team for further instructions. Please do not return this device to your dealer without first contacting customer support. Please do not discard the shipping carton in the trash. Please recycle whenever possible.

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

<http://parts.adj.com> (US)

<http://www.adjparts.eu> (EU)

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## LIMITED WARRANTY

For up-to-date warranty information regarding your device, please visit ADJ's warranty information page online or scan the QR codes below.



**USA:** <https://www.adj.com/pages/warranty-information>



**EU:** [https://www.adj.eu/terms\\_and\\_conditions](https://www.adj.eu/terms_and_conditions)

It is strongly recommended to power the fixture down completely when not in use. Doing so will reduce wear on the fixture due to sustained or extended operational periods, thereby maximizing its operational lifespan.

# FEATURES

Building on the success of the UBL12H, the UBL12HB redefines event lighting as a 1-meter, battery-powered linear LED wash luminaire. Designed for professional use, this lime-infused HEX LED fixture sets a new standard in performance. Powered by twelve ultra-bright 20-Watt HEX LEDs (Red, Green, Blue, Amber, Lime, and UV), it is a versatile powerhouse that delivers seamless and precise color blending.

This fixture excels with its high CRI output and adjustable linear color temperature range from 2,300K to 9,900K. The inclusion of the lime chip enhances color accuracy, achieving a CRI exceeding 90 for an exceptional visual experience. It empowers lighting designers and event producers to create striking displays on walls, floors, and ceilings.

The UBL12HB features a 17° beam angle, an 85.5mm pixel pitch, and smooth RGBAL+UV color mixing. Its innovative Horizontal Magnetic Alignment ensures seamless color consistency across multiple fixtures. Control is intuitive with an OLED display and 4-button interface, supporting linear color temperature adjustment and compatibility with the ADJ UC-IR24 remote. The fixture offers seven DMX channel modes and five operational modes, including Auto Run, Program Mode, Sound Trigger, RGBAL+UV Manual, and DMX-512 Mode. It is also RDM compatible.

With advanced features such as a 1.9kHz LED refresh rate, 64 built-in color macros, and selectable dimming modes and curves, the UBL12HB offers exceptional versatility. It supports DMX daisy-chaining for up to 17 units (120V) or 32 units (230V). Certified for safety and reliability, the UBL12HB is cETLus (pending), CE, and FCC compliant, with an IP20 rating.

The UBL12HB includes an indoor locking power cord, UC-IR24 remote, and a 20° diffusion filter. Expand its capabilities with the optional UBL912 linear diffusion lens kit (sold separately), which broadens the beam angle to 1x40 degrees. Whether mounted on the ground or truss with the included brackets, the UBL12HB delivers innovation and versatility for unforgettable lighting displays.

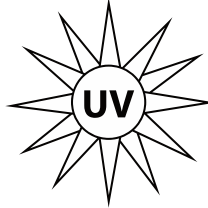
## INCLUDED ITEMS

- Power Cable (x1)
- UC-IR24 Remote Control (x1)
- 20° Diffusion Filter (x1)

# SAFETY PRECAUTIONS



## HIGH INTENSITY ULTRAVIOLET LIGHT



**AVOID DIRECT EYE & SKIN EXPOSURE.  
WEAR PROPER EYE & SKIN PROTECTION.  
SEE MANUAL FOR SAFETY INSTRUCTIONS.**

**RISK GROUP 3 - RISK OF EXPOSURE TO ULTRAVIOLET UV RADIATION!**

**FIXTURE EMITS HIGH INTENSITY WAVELENGTH OF ULTRAVIOLET UV LIGHT FROM THE UV COLOR FILTER.**

**WEAR PROPER EYE AND SKIN PROTECTION. AVOID PROLONGED PERIODS OF EXPOSURE TO UV COLOR FILTER.**

**AVOID WEARING WHITE COLOR CLOTHING AND/OR USING UV PAINTS ON SKIN. AVOID DIRECT EYE AND/OR SKIN EXPOSURE AT DISTANCES LESS THAN 11 feet (3.3m).**

**DO NOT OPERATE FIXTURE WITH DAMAGED/MISSING EXTERNAL COVERS.**

**DO NOT LOOK DIRECTLY INTO THE UV LIGHT AND/OR VIEW UV LIGHT DIRECTLY WITH OPTICAL INSTRUMENTS THAT MAY CONCENTRATE THE LIGHT/RADIATION OUTPUT.**

**INDIVIDUALS SUFFERING FROM A RANGE OF EYE CONDITIONS, SUNLIGHT EXPOSURE DISORDERS, OR INDIVIDUALS USING PHOTSENSITIVE MEDICATION, MAY EXPERIENCE DISCOMFORT IF EXPOSED TO THE ULTRAVIOLET UV LIGHT EMITTED FROM THE UV LED.**

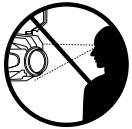
# SAFETY PRECAUTIONS



**PROTECTION CLASS 1 - FIXTURE MUST BE PROPERLY GROUNDED.**



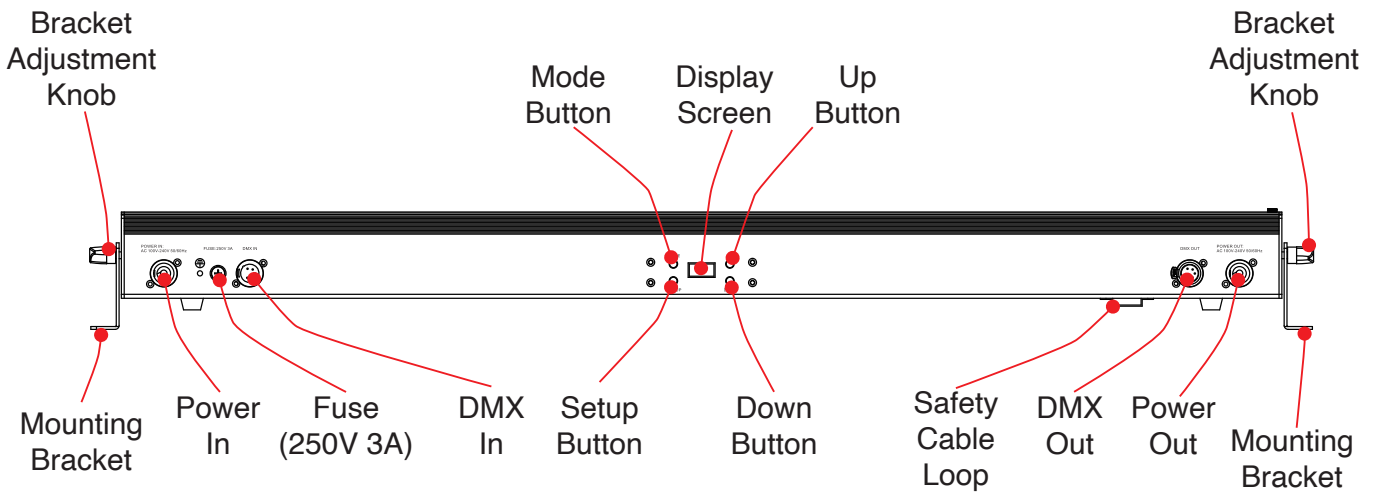
**THERE ARE NO USER SERVICEABLE PARTS INSIDE THIS UNIT. DO NOT ATTEMPT ANY REPAIRS YOURSELF, AS DOING SO WILL VOID YOUR MANUFACTURER'S WARRANTY. DAMAGES RESULTING FROM MODIFICATIONS TO THIS FIXTURE AND/OR THE DISREGARD OF SAFETY INSTRUCTIONS AND GUIDELINES IN THIS MANUAL VOID THE MANUFACTURER'S WARRANTY AND ARE NOT SUBJECT TO ANY WARRANTY CLAIMS AND/OR REPAIRS.**



**NEVER LOOK DIRECTLY INTO THE LIGHT SOURCE!  
RETINA INJURY RISK - MAY INDUCE BLINDNESS!  
SENSITIVE PERSONS MAY SUFFER AN EPILEPTIC SHOCK!**

- **Ambient operating temperature is -4°F to 113°F (-20°C to 45°C)!**
- **DO NOT TOUCH** the fixture housing during operation. Disconnect the power and allow approximately 15 minutes for the fixture to cool down before servicing.
- **DO NOT** shake the fixture, and avoid brute force when installing and/or operating the fixture.
- **DO NOT** operate the fixture if the power cord has become frayed, crimped and/or damaged. If the power cord is damaged, replace immediately with a new one of the same power rating.
- **DO NOT** attempt to remove or break off the ground prong from the electrical cord. This prong is used to reduce the risk of electrical shock and fire in case of an internal short.
- **DO NOT** attempt to operate this unit if it has been damaged in any way.
- Disconnect from main power before making any type of connection.
- **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.
- Always be sure to mount this unit in an area that will allow proper ventilation. Allow about 6" (15cm) between this device and a wall.
- This device is intended for indoor use only! Outdoors usage voids all manufacturer's warranties.
- **DO NOT** remove the cover for any reason.
- When installing fixture in a suspended environment, always use mounting hardware that is no less than M10 x 25mm, and always install fixture with an appropriately rated safety cable.
- Never plug this unit in to a dimmer pack.
- During long periods of non-use, disconnect the unit's main power.
- Always mount this unit in safe and stable matter.
- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to the point where they exit from the unit.
- Cleaning - The fixture should be cleaned only as recommended by the manufacturer.
- Heat - The appliance should be situated away from heat sources such as radiators, heat registers, stoves, or other appliances (including amplifiers) that produce heat.
- The fixture should be serviced by qualified service personnel when:
  - A. The power-supply cord or the plug have been damaged.
  - B. Objects have fallen onto, or liquids have been spilled into, the fixture.
  - C. The fixture does not appear to operate normally or exhibits a marked change in performance.
  - D. The fixture has fallen and/or has been subjected to extreme handling.

# OVERVIEW



# INSTALLATION



**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.

When installing the unit, the trussing or area of installation must be able to hold 10 times the weight of the unit and any attached accessories without any deformation. The unit must be secured with a secondary safety attachment, e.g. an appropriately-rated safety cable.

Before rigging/mounting a single fixture 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 is range **-4°F to 113°F (-20°C to 45°C)**. Do not operate this device when ambient temperature falls outside of this range.

Fixture(s) should be installed away from walking paths, seating areas, or areas where 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 that can hold 10 times the weight of the fixture.

Overhead mounting requires extensive experience, including calculating working load limits, knowledge of installation material being used, and periodic safety inspection of all installation material as well as the unit itself. If you lack these qualifications, do not attempt the installation yourself.

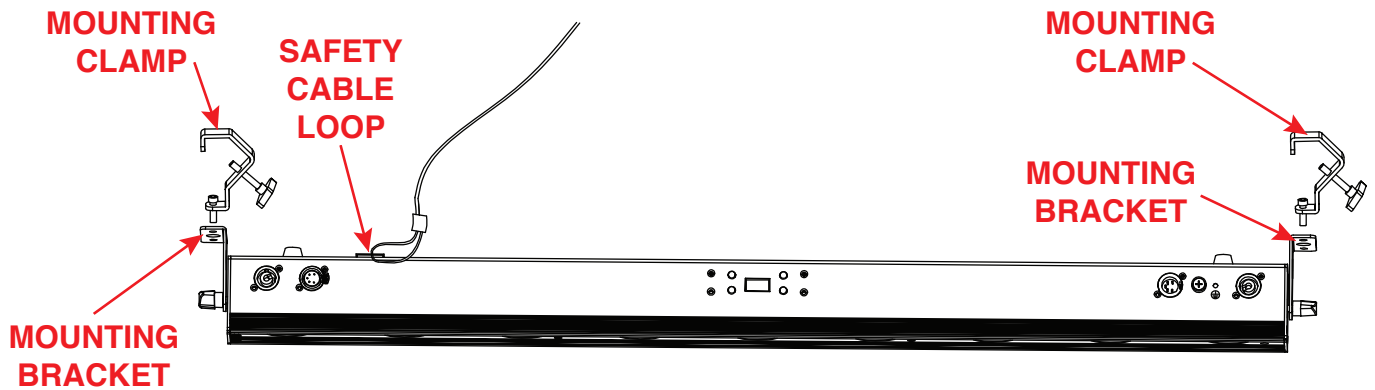
The installation should be checked by a skilled person once a year.

It is strongly recommended to power the fixture down completely when not in use. Doing so will reduce wear on the fixture due to sustained or extended operational periods, thereby maximizing the fixture's operational lifespan.

# INSTALLATION

## CLAMP MOUNTING

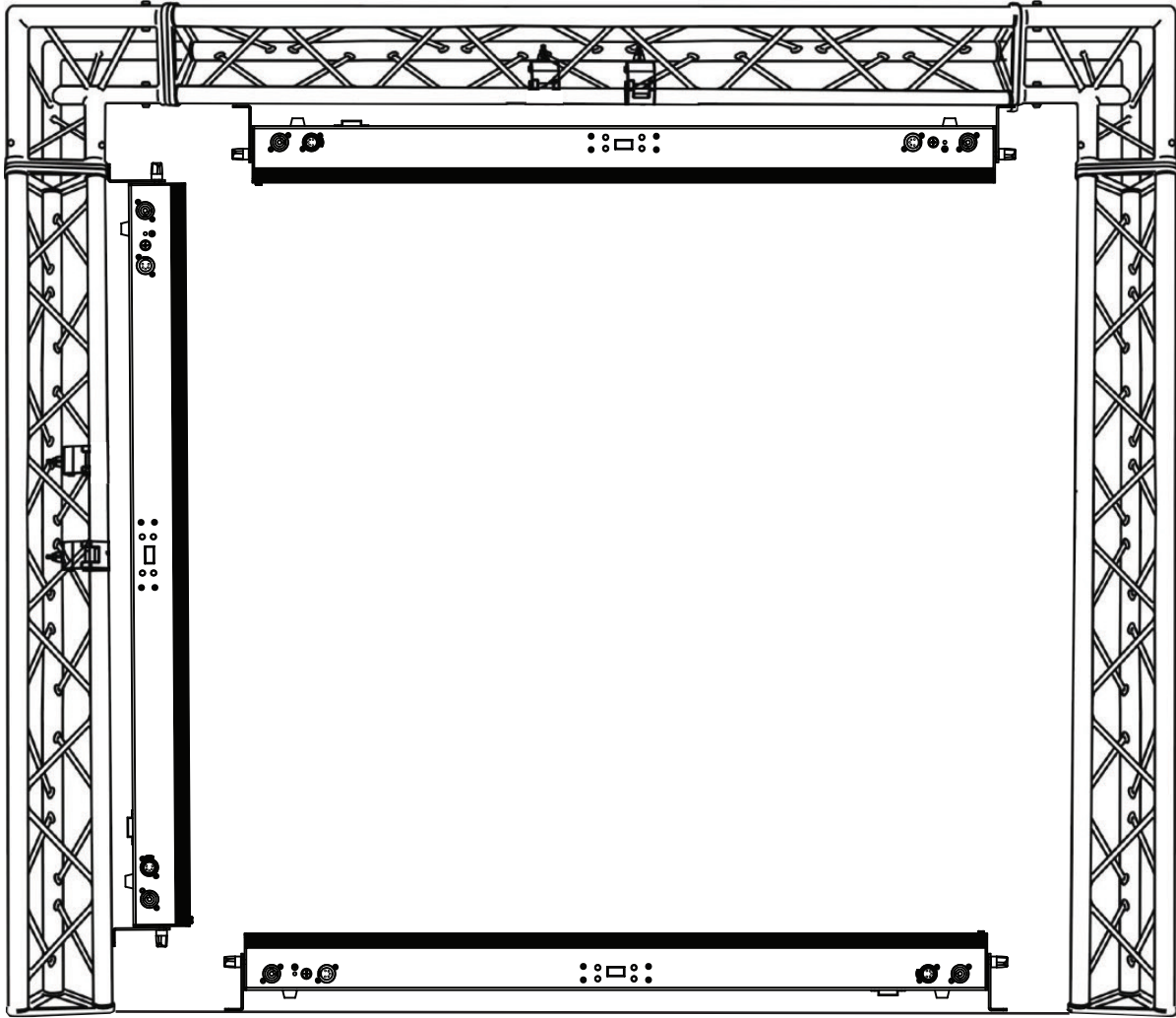
This fixture features two mounting brackets for the attachment of mounting clamps. When mounting the fixture to a truss or any other suspended structure, be sure to secure an appropriate rated clamp (not included) to each mounting bracket. Insert a bolt of appropriate size through the bottom of the mounting clamp and the central hole on the mounting bracket, and secure them together with a matching nut. Additionally, the unit also features a safety cable loop on the top of the fixture (see the illustration below). Attach a separate **SAFETY CABLE** of the appropriate weight rating to the provided safety cable loop, then secure the other end to a suitable anchor point. Please note that two mounting clamps must be used to safely and securely install this fixture in a suspended environment.



### 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.**

# INSTALLATION

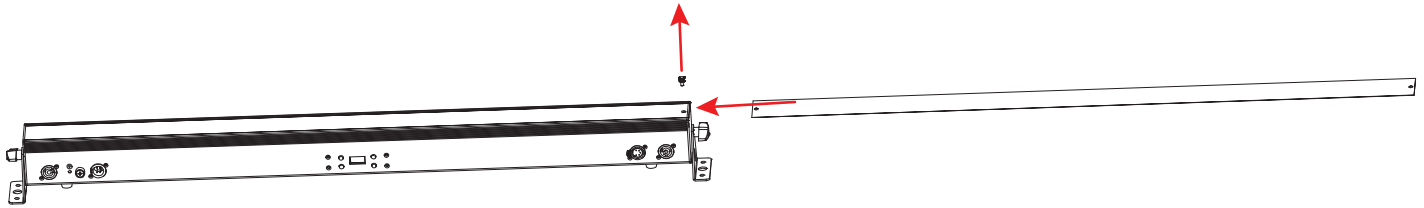


The unit is fully operational in three different mounting positions: hanging upside-down from the ceiling or trussing, sideways on trussing, or set on a flat level surface. Be sure this fixture is kept at least 12m (40ft) away from any flammable materials (decorations, etc). Always use and install a safety cable (not included) as a safety measure to prevent accidental damage and/or injury in the event the clamp fails. Never use the carrying handles for secondary attachment.

# ACCESSORY INSTALLATION

## DIFFUSION FILTER

A removeable 20-degree diffusion filter is included with the fixture. To install this filter, simply remove the retaining screw on the side of the fixture's lens and slide the diffusion filter into the slot located in front of the lens. Align the hole in the diffusion filter with the retaining screw hole, then re-install and tighten the retaining screw to secure the filter in place. **Please note that the diffusion filter has holes at both ends to allow the filter to be installed facing either direction.**



In addition, a 1x40-degree diffusion filter is offered as an optional accessory that is sold separately. Please refer to the **Ordering Information** section of this manual.

# WIRELESS OPERATION

To set up wireless control, follow the steps below:

1. Navigate to Personality > IR Remote in the system menu. Press SETUP to select this menu.
2. Use UP and DOWN to scroll to the “On” option, then press SETUP to confirm.

**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.**

## UC IR24 CONTROLS

- **On:** Fixture turns on and reverts to the last running state
- **Off:** Fixture goes into stand by mode in a blackout state.
- **Strobe:** Activates strobe mode, using the currently selected color or program. The strobe rate can be adjusted using the + / - buttons, or one of the 15 pre-set strobe speeds can be selected using the number keys. 1 is the slowest strobe speed, and 15 is the fastest.
- **Sound:** Activates sound mode, with displays triggered by microphone inputs. Microphone sensitivity can be adjusted using the + / - buttons.
- **Color:** Activates color mode. Select a static color (0-15) using the number keys. The intensity for the set color can then be adjusted with the +/- buttons. Refer to the **Color Mode Programs** section of this manual for detailed information.
- **Program:** Activates internal program mode. Select an internal program (0-15) using the number keys. The selected program run speed can be adjusted with the + / - buttons. **Note: 13 of the 15 buttons will activate a program for this unit.**
- **+ and - buttons:** Adjusts strobe rate, mic sensitivity, intensity, brightness intensity, or program run speed. The + / - buttons can be repeatedly pressed to increase or decrease by individual level increments, or pressed and held to quickly make large adjustments at once.
- **Number Keys (0-15):** These buttons are used to select preset strobe speeds, static colors, and internal programs. Colors stored in the number keys can be edited from the units menu if desired.



# IR BUTTON COLOR

## IR DEFAULT VALUES

BUTTON	RED	GREEN	BLUE	LIME	AMBER	UV
0	0	0	0	255	0	0
1	255	0	0	0	0	0
2	0	255	0	0	0	0
3	0	0	255	0	0	0
4	231	68	0	0	0	0
5	0	117	58	0	0	0
6	17	0	75	0	0	44
7	255	83	0	0	63	0
8	0	109	70	0	0	0
9	32	0	75	0	22	35
10	0	0	0	0	255	0
11	0	114	160	0	0	0
12	82	0	35	0	0	74
13	255	255	0	0	255	0
14	0	75	136	0	0	0
15	81	0	35	0	0	115

## EDITING IR BUTTON VALUES

These fixtures allow the user to create custom RGBAL 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 SETUP. Use the UP and DOWN buttons to scroll to “IR Button Colors,” then press SETUP 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 SETUP 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, Lime, Amber, UV). Press SETUP 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, Lime, Amber, and UV intensities to create your custom color.

**NOTE:** Once you have created and assigned a custom color 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. To return to the default color values, 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 color values only need to be set up on the primary unit. The custom color settings will carry over automatically to any secondary units in the system.

# 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
1900	0000-FFFF	7812	6Ch (1); 11Ch (2); 13Ch (3); 16Ch (4); 36Ch (5); 43Ch (6); 46Ch (7)

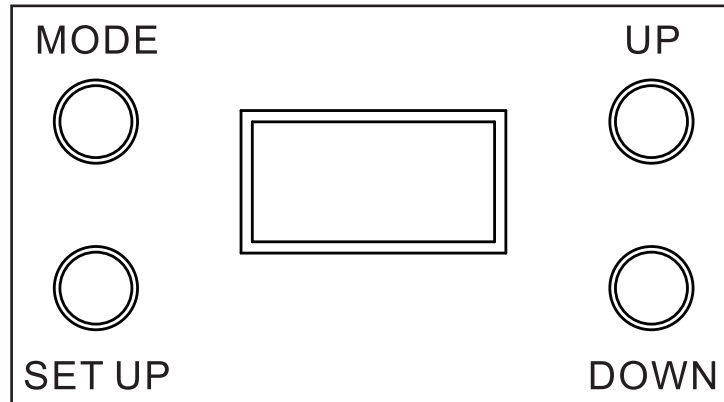
**Please be aware that not all RDM devices support all RDM features**, and therefore it is important to check beforehand to ensure that the equipment that you are considering includes all of the features that you require.

Disc Unique Branch [0x0001]
Disc Mute [0x0002]
Disc Un Mute [0x0003]
Supported Parameters [0x0050]
Device Info [0x0060]
Manufacturer Label [0x0081]
Device Label [0x0082]
Software Version Label [0x00C0]
DMX Personality [0x00E0]
DMX Start Address [0x00F0]
Sensor Value [0x0201c]
Curve [0x0343]
Curve Description [0x0344]
Identify Device [0x1000]
DMX Fail Mode [0x0141]

# SYSTEM MENU

This unit features a display screen with a 4-button control pad, which can be used to easily adjust any device settings.

Pressing the MODE button will cycle through the various Main Menu options. When the desired Main Menu option is displayed on the screen, press the SETUP button to enter the sub-menu, then use the UP and DOWN buttons to scroll through sub-menu options. In some cases, there will be a second sub-menu that can be navigated in the same way.



## SCREEN LOCK

The control panel screen will lock after a period of inactivity which can be set by navigating to Personality > Display > Lock. Default time is 30 seconds. To unlock the screen, press and hold the MODE button for 10 seconds.

# SYSTEM MENU

SYSTEM MENU	OPTIONS/VALUES (Default settings in <b>bold</b> )		DESCRIPTION		
<b>DMX SET</b>	Address	<b>001</b> - 512	Set DMX starting address		
	Ch. Mode	<b>6Ch</b> , 11Ch, 13Ch, 16Ch, 18Ch, 25Ch, 28Ch	Select DMX channel mode		
	No DMX	<b>Hold</b>		Holds last settings if DMX signal is lost or interrupted	
		Blackout		Defaults to blackout mode if DMX signal lost / interrupted	
		Manual		Defaults to manual if DMX signal lost / interrupted	
Internal Programs			Defaults to selected internal program if DMX signal lost / interrupted		
<b>PERSONALITY</b>	Primary/ Secondary Mode	Primary / <b>Secondary</b>	Set unit as a primary or a secondary		
	IR Remote	<b>On</b> / Off	Activate/deactivate remote control function		
	RDM	On / <b>Off</b>	Activate or deactivate RDM		
	Pixel Flip	<b>Off = 1-3</b>		Set pixel assignment configuration; refer to <b>Pixel Grouping</b> section	
		On = 3-1			
	Dim Mode	<b>Standard</b>		Select dim mode	
		Stage			
		TV			
		Archi			
		Theatre			
		Stage 2			
	Dim Speed	0.1s - 10s			
	Dim Curve	Linear, <b>Square</b> , Inv. Squa., S. Curve		Select dim curve	
	Display	Save Dlay	<b>1 - 10</b>	Display goes into screen saver mode after set period of inactivity	
		Lock	<b>Off</b> , 1min - 10min	Dispaly controls lock after set period of inactivity; to unlock press & hold MODE for 10 sec	
		Rotate Display 180°	Yes		Inverted display orientation
			No		Standard display orientation
<b>Auto</b>				Keep display upright	
IR Button Colors	Button 0	Red	000 - 255	Configure color mix for each remote button	
		Green	000 - 255		
		Blue	000 - 255		
		Amber	000 - 255		
		Lime	000 - 255		
		UV	000 - 255		
	Button 1	Red	000 - 255		
		Green	000 - 255		
		Blue	000 - 255		
		Amber	000 - 255		
		Lime	000 - 255		
		UV	000 - 255		
	...	...	...		
	Button 15	Red	000 - 255		
		Green	000 - 255		
		Blue	000 - 255		
		Amber	000 - 255		
		Lime	000 - 255		
UV		000 - 255			
Service	Passcode = 011	Restore	Yes / <b>No</b>	Default factory settings	

# SYSTEM MENU

SYSTEM MENU	OPTIONS/VALUES (Default settings in <b>bold</b> )			DESCRIPTION	
<b>MANUAL</b>	Red	000 - 255		Manually set each system parameter; please note that these settings take precedent when no DMX signal is present	
	Green	000 - 255			
	Blue	000 - 255			
	Amber	000 - 255			
	Lime	000 - 255			
	UV	000 - 255			
	Clr Macro	000 - 063			
	Clr Temp	No Function, 2300K - 9900K			
	Clr Temp Pr	No Function, 2300K, 2600K, 2900K, 3200K, 3600K, 3900K, 4200K, 4500K, 4900K, 5500K, 6000K, 7000K, 8000K, 9000K, 9900K			
	Strobe	000 - 255			
	Mastr Dim	000 - 255			
<b>INT PROGS</b>	Program 0	Speed	000 - 255		Adjust parameters for each internal program
		Fade	000 - 255		
		Sound	On / <b>Off</b>	001 - 016	
	Program 1	Speed	000 - 255		
		Fade	000 - 255		
		Sound	On / <b>Off</b>	001 - 016	
	...	...	...	...	
	Program 13	Speed	000 - 255		
		Fade	000 - 255		
		Sound	On / <b>Off</b>	001 - 016	
<b>INFO</b>	LED Temperature	xxx	F / C		Current LED temperature
	RDM UID	xxxxxx			Displays RDM UID
	Software Version	x.xx			Displays software version

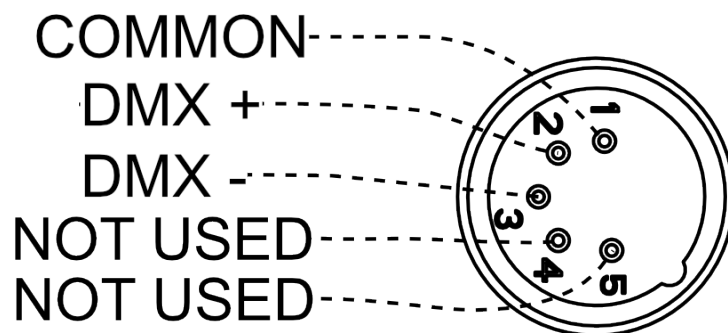
# DMX SETUP

**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 linking 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.

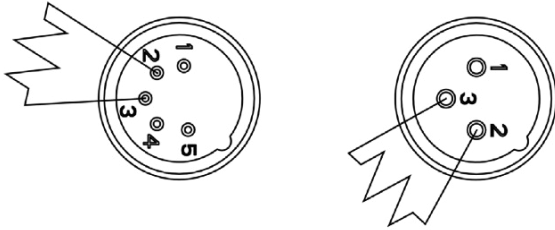
**Data Cable (DMX Cable) Requirements (For DMX Operation):** This unit can be controlled via DMX-512 protocol. The DMX address is set on the rear panel of the unit. Your unit and your DMX controller require a standard 5-pin XLR connector for data input and data output. We recommend Accu-Cable DMX cables. 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 pro 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.

**Notice:** Be sure to follow the illustration below when making your own cables. Do not use the ground lug on the XLR connector. Do not connect the cable’s shield conductor to the ground lug or allow the shield conductor to come in contact with the XLR’s outer casing. Grounding the shield could cause a short circuit and erratic behavior.



# DMX SETUP

**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 reduce the risk 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 ADDRESSING.

All fixtures should be given a DMX starting address when using a DMX controller, so 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 assignment of this starting DMX address is achieved by setting the correct DMX address on the digital control display on the fixture.

You can set the same starting address for all fixtures or a group of fixtures, or set different addresses for each individual fixture. Setting all fixtures to the same DMX address will cause all fixtures to react in the same way. In other words, 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.

For example, when this unit is operating in 6 channel mode, you should set the starting DMX address of the first unit to 1, the second unit to 7 (1 + 6), the third unit to 13 (1 + 6 + 6), and so on. See the chart below for more details.

CHANNEL MODE	UNIT 1 ADDRESS	UNIT 2 ADDRESS	UNIT 3 ADDRESS	UNIT 4 ADDRESS
6Ch	1	7	13	19
11Ch	1	12	23	34
13Ch	1	14	27	40
16Ch	1	17	33	49
36Ch	1	37	73	109
43CH	1	44	87	130
46Ch	1	47	93	139

# DMX TRAITS

CHANNEL							DMX VALUES	FUNCTION
6Ch	11Ch	13Ch	16Ch	36Ch	43Ch	46Ch		
1	1	1	1				000 - 255	<b>All Red</b> , 0% to 100%
2	2	2	2				000 - 255	<b>All Green</b> , 0% to 100%
3	3	3	3				000 - 255	<b>All Blue</b> , 0% to 100%
4	4	4	4				000 - 255	<b>All Amber</b> , 0% to 100%
5	5	5	5				000 - 255	<b>All Lime</b> , 0% to 100%
6	6	6	6				000 - 255	<b>All UV</b> , 0% to 100%
				1	1	1	000 - 255	<b>Red 1</b> , 0% to 100%
				2	2	2	000 - 255	<b>Green 1</b> , 0% to 100%
				3	3	3	000 - 255	<b>Blue 1</b> , 0% to 100%
				4	4	4	000 - 255	<b>Amber1</b> , 0% to 100%
				5	5	5	000 - 255	<b>Lime 1</b> , 0% to 100%
				6	6	6	000 - 255	<b>UV 1</b> , 0% to 100%
				7	7	7	000 - 255	<b>Red 2</b> , 0% to 100%
				8	8	8	000 - 255	<b>Green 2</b> , 0% to 100%
				9	9	9	000 - 255	<b>Blue 2</b> , 0% to 100%
				10	10	10	000 - 255	<b>Amber 2</b> , 0% to 100%
				11	11	11	000 - 255	<b>Lime 2</b> , 0% to 100%
				12	12	12	000 - 255	<b>UV 2</b> , 0% to 100%
				13	13	13	000 - 255	<b>Red 3</b> , 0% to 100%
				14	14	14	000 - 255	<b>Green 3</b> , 0% to 100%
				15	15	15	000 - 255	<b>Blue 3</b> , 0% to 100%
				16	16	16	000 - 255	<b>Amber 3</b> , 0% to 100%
				17	17	17	000 - 255	<b>Lime 3</b> , 0% to 100%
				18	18	18	000 - 255	<b>UV 3</b> , 0% to 100%
				19	19	19	000 - 255	<b>Red 4</b> , 0% to 100%
				20	20	20	000 - 255	<b>Green 4</b> , 0% to 100%
				21	21	21	000 - 255	<b>Blue 4</b> , 0% to 100%
				22	22	22	000 - 255	<b>Amber 4</b> , 0% to 100%
				23	23	23	000 - 255	<b>Lime 4</b> , 0% to 100%
				24	24	24	000 - 255	<b>UV 4</b> , 0% to 100%
				25	25	25	000 - 255	<b>Red 5</b> , 0% to 100%
				26	26	26	000 - 255	<b>Green 5</b> , 0% to 100%
				27	27	27	000 - 255	<b>Blue 5</b> , 0% to 100%
				28	28	28	000 - 255	<b>Amber 5</b> , 0% to 100%
				29	29	29	000 - 255	<b>Lime 5</b> , 0% to 100%
				30	30	30	000 - 255	<b>UV 5</b> , 0% to 100%
				31	31	31	000 - 255	<b>Red 6</b> , 0% to 100%
				32	32	32	000 - 255	<b>Green 6</b> , 0% to 100%
				33	33	33	000 - 255	<b>Blue 6</b> , 0% to 100%
				34	34	34	000 - 255	<b>Amber 6</b> , 0% to 100%
				35	35	35	000 - 255	<b>Lime 6</b> , 0% to 100%
				36	36	36	000 - 255	<b>UV 6</b> , 0% to 100%

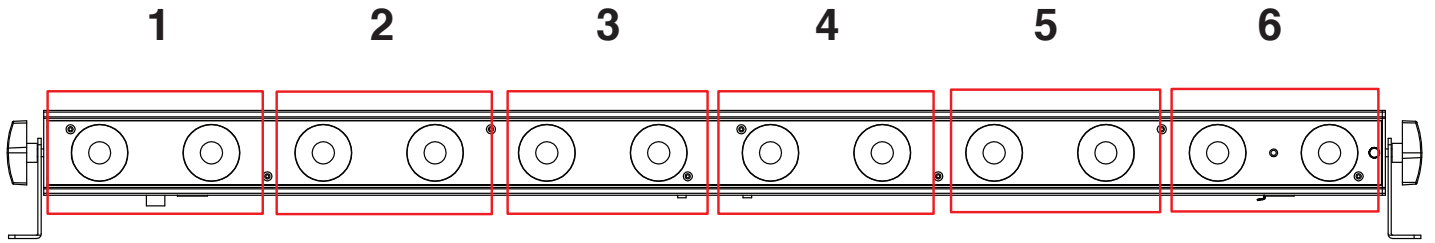
# DMX TRAITS

CHANNEL							DMX VALUES	FUNCTION
6Ch	11Ch	13Ch	16Ch	36Ch	43Ch	46Ch		
	7	7	7		37	37	000 - 255	<b>Color Macros</b> , see Color Macros Chart pg. 25
	8	8	8		38	38	000 - 255	<b>Color Temperature</b> , 2300K - 9900K Linear
								<b>Color Temperature Presets</b>
							000 - 010	No Function
							011 - 026	2300K
							027 - 043	2700K
							044 - 060	3000K
							061 - 076	3200K
							077 - 093	4000K
	9	9	9		39	39	094 - 110	4500K
							111 - 126	5000K
							127 - 143	5600K
							144 - 160	6500K
							161 - 176	7000K
							177 - 193	7500K
							194 - 210	8000K
							211 - 226	8500K
							227 - 255	9900K
								<b>Shutter / Strobe</b>
							000 - 031	LEDs Off
							032 - 063	LEDs On
							064 - 095	Strobe Effect, slow to fast
	10	10	10		40	40	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
	11	11	11		41	41	000 - 255	<b>Dimmer Intensity</b> , 0% to 100%
								<b>Auto Programs</b>
							000 - 010	Off
							011 - 026	Program 1
							027 - 043	Program 2
							044 - 060	Program 3
							061 - 076	Program 4
							077 - 093	Program 5
			12			42	094 - 110	Program 6
							111 - 126	Program 7
							127 - 143	Program 8
							144 - 160	Program 9
							161 - 176	Program 10
							177 - 193	Program 11
							194 - 210	Program 12
							211 - 226	Program 13
							227 - 255	No Function
			13			43	000 - 255	<b>Auto Program Speed</b> , slow to fast
			14			44	000 - 255	<b>Auto Program Fade</b> , 0% to 100%

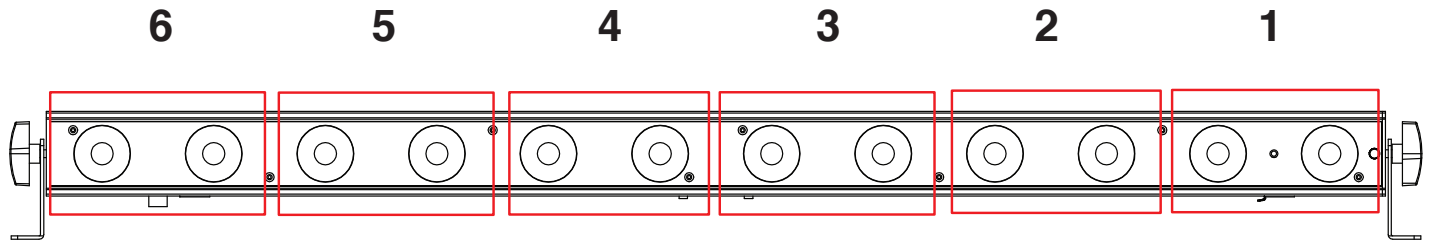
CHANNEL							DMX VALUES	FUNCTION
6Ch	11Ch	13Ch	16Ch	36Ch	43Ch	46Ch		
		12	15		42	45		<b>Dim Mode</b>
							000 - 020	Default to Unit Setting
							021 - 040	Standard
							041 - 060	Stage
							061 - 080	TV
							081 - 100	Architectural
							101 - 120	Theatre
							121 - 140	Stage 2
							140 - 160	Dim Speed, fast to slow (0.1s to 10s)
							161 - 255	Default to Unit Setting
		13	16		43	46		<b>Dim Curves</b>
							000 - 020	Square
							021 - 040	Linear
							041 - 060	Inv. Squa
							061 - 080	S. Curve
							081 - 255	No Function

# PIXEL GROUPING

PIXEL FLIP OFF



PIXEL FLIP ON



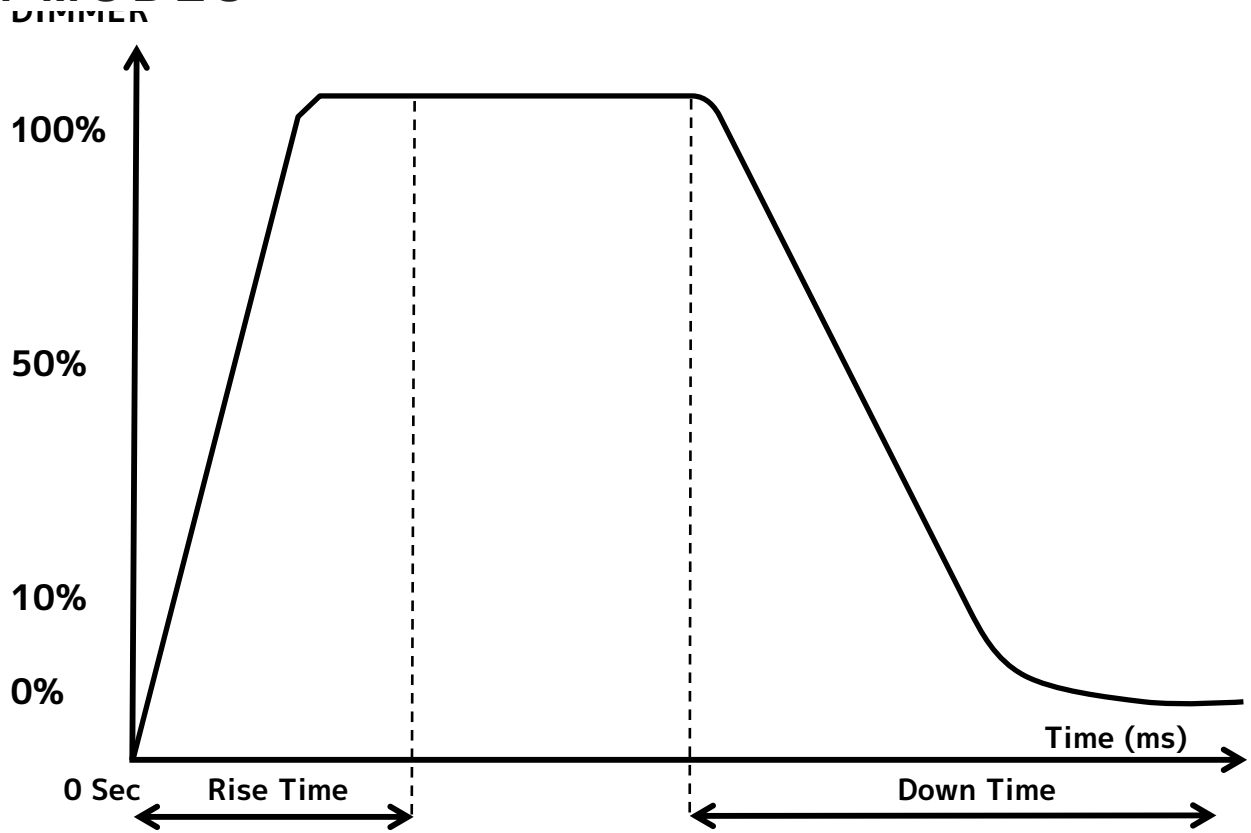
# COLOR MACROS CHART

DMX VALUES	COLORS	DMX VALUES	COLORS
000 - 003	Off	128 - 131	G+B+L
004 - 007	Red	132 - 135	G+B+A
008 - 011	Green	136 - 139	G+B+UV
012 - 015	Blue	140 - 143	G+L+A
016 - 019	Lime	144 - 147	G+L+UV
020 - 023	Amber	148 - 151	G+A+UV
024 - 027	UV	152 - 155	B+L+A
028 - 031	R+G	156 - 159	B+L+UV
032 - 035	R+B	160 - 163	B+A+UV
036 - 039	R+L	164 - 167	L+A+UV
040 - 043	R+A	168 - 171	R+G+B+L
044 - 047	R+UV	172 - 175	R+G+B+A
048 - 051	G+B	176 - 179	R+G+B+UV
052 - 055	G+L	180 - 183	R+G+L+A
056 - 059	G+A	184 - 187	R+G+L+UV
060 - 063	G+UV	188 - 191	R+G+A+UV
064 - 067	B+L	192 - 195	R+B+L+A
068 - 071	B+A	196 - 199	R+B+L+UV
072 - 075	B+UV	200 - 203	R+B+A+UV
076 - 079	L+A	204 - 207	R+L+A+UV
080 - 083	L+UV	208 - 211	G+B+L+A
084 - 087	A+UV	212 - 215	G+B+L+UV
088 - 091	R+G+B	216 - 219	G+B+A+UV
092 - 095	R+G+L	220 - 223	G+L+A+UV
096 - 099	R+G+A	224 - 227	B+L+A+UV
100 - 103	R+G+UV	228 - 231	R+G+B+L+A
104 - 107	R+B+L	232 - 235	R+G+B+L+UV
108 - 111	R+B+A	236 - 239	R+G+B+A+UV
112 - 115	R+B+UV	240 - 243	R+G+L+A+UV
116 - 119	R+L+A	244 - 247	R+B+L+A+UV
120 - 123	R+L+UV	248 - 251	G+B+L+A+UV
124 - 127	R+A+UV	252 - 255	R+G+B+L+A+UV

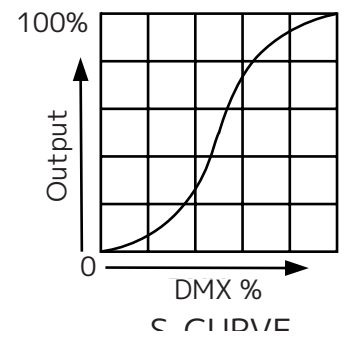
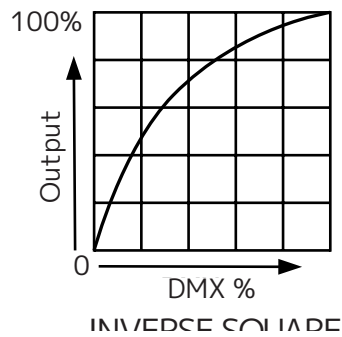
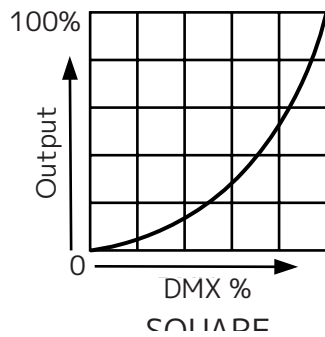
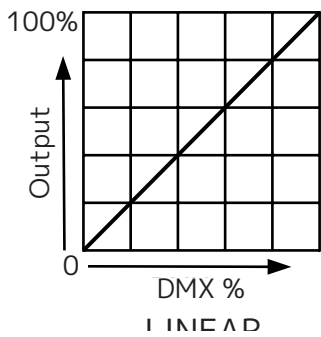
# DIM SPEEDS

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

# DIM MODES



Dimming Curve Ramp Effect	0 sec Fade Time		1 sec Fade Time	
	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



# PRIMARY-SECONDARY SETUP

This function allows you to link units together to run in a Primary-Secondary set-up, in which one unit will act as the controlling unit and the others will react to the controlling unit's built-in programs. Any unit can be configured to act as a Primary or as a Secondary, but only one unit in a given system can be programmed to act as the Primary.

## Primary-Secondary Connections and Settings:

1. Daisy chain your units via the XLR connectors on the rear panels of each unit. Use standard XLR data cables to link your units together. Remember that the male XLR connector is the input and the female XLR connector is the output. The first unit in the chain (primary) will use the female XLR connector only. The last unit in the chain will use the male XLR connector only.
2. Use the display screen and control panel to navigate to Personality > Primary/Secondary Mode. Select this sub-menu using the SETUP button, and use the UP and DOWN buttons to toggle between "Primary" and "Secondary". Press SETUP to confirm your selection.
3. Repeat Step 2 for each unit in the system. Make sure that only one unit is designated as the Primary, while all other units are designated as Secondaries.
4. The secondary units will now follow the behavior of the primary unit.

## NOTES:

- Only one unit should be configured as the primary, while all the other units should be configured as secondaries.
- All units should be set to the same DMX channel mode.
- If fixtures fail to sync, verify that all settings mentioned above are the same, then power all devices off, then switch them on again to re-establish the link.

# MULTI-UNIT POWER LINKING

This feature allows you to connect the fixtures to one another using the power cable input and output sockets.

**The maximum number of units that can be linked in this manner is as follows:**

- 17 units when running on 120V power.
- 32 units when running on 230V power.

**DO NOT EXCEED THIS MAXIMUM NUMBER WHEN POWER LINKING UNITS!**

All linked units must be of the same make and model type. Do not mix and match units!

# MAINTENANCE GUIDELINES



**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 regularly with a soft cloth to avoid dirt/debris accumulation.

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

## **MAINTENANCE**

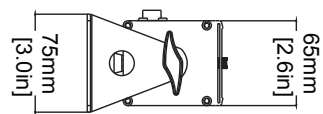
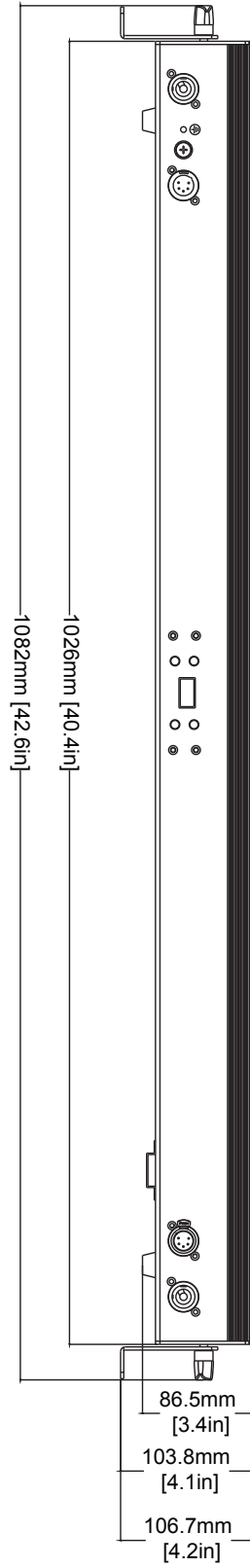
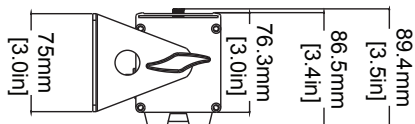
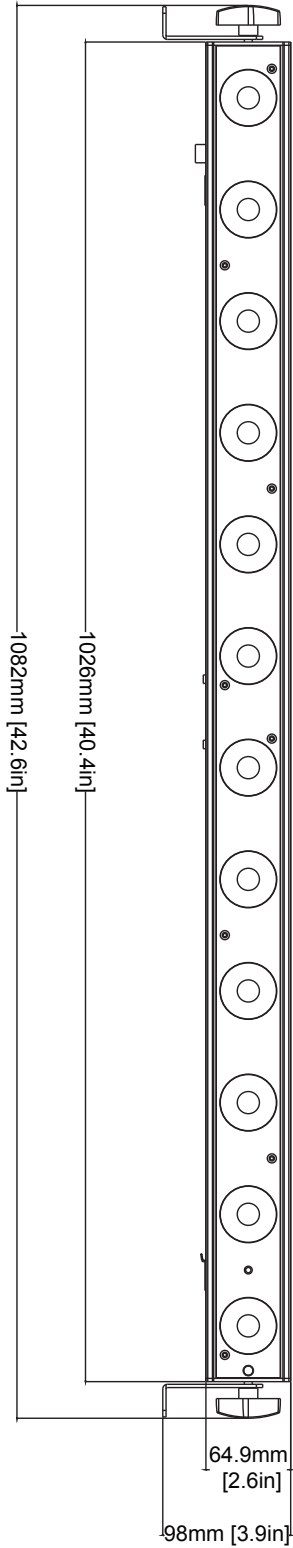
Regular inspections are recommended to ensure proper function and extended life. There are no user serviceable parts inside this fixture. Please refer all other service issues to an authorized ADJ service technician. Should you need any spare parts, please order genuine parts from your local ADJ dealer.

Please refer to the following points during routine inspections:

- A. 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.
- B. 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.
- C. 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 to enter into the fixture. Damaged rigging points or unsecured rigging could cause the fixture to fall and seriously injure a person(s).
- D. 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

## Light Source:

- 12 x 20W Ultra bright (Red, Green, Blue, Amber, Lime and UV) LEDs
- Long Life LEDs (Rated at approximately 50,000 hrs.)
- 17° beam angle
- CRI >90
- Pixel Pitch: 85.5mm

## Features:

- Linear Color Temperature Control (2,300K to 9,900K)
- Smooth RGBAL+UV color mixing
- Horizontal Magnetic Alignment feature (Built-In)
- Compatible with the ADJ UC-IR24 remote. Operates at a distance of up to 32.8 feet (10 meters)
- RDM Compatible

## Control:

- Linear Color Temperature Control (2,300K to 9,900K)
- OLED Display with 4-buttons
- 7 DMX Channel Modes: 6, 11, 13, 16, 36, 43, & 46 Channels
- 6 Groups x2 RGBAL+UV LED pixels controllable via DMX in 36, 43 & 46 channel modes
- 5 operational modes: Auto Run, Program Mode, Sound Trigger, RGBAL+UV Manual, and DMX-512 Mode
- LED Refresh Rate: 1.9KHz
- 64 built-in Color Macros
- 6 selectable Dim Modes (Standard, Stage, TV, Architectural, Theatre & Stage 2)
- 4 selectable Dim Curves (Square, Linear, Inv. Square & S. Curve)
- Built-In Microphone for sound trigger
- LED pulse and strobe effect
- Electronic Dimming: 0-100

## Connections:

- Linkable: DMX via 5-pin XLR cable
- Indoor Locking power In/Out to daisy chain power

## Electrical:

- Multi-voltage operation: AC 100V-240V 50/60Hz
- Power Draw: 61W
- Daisy-chain power link (Up to 17 UBL12H's can be linked @120V and up to 32 UBL12H's can be linked @230V)

## Dimensions / Weight:

- Dimensions (LxWxH): 2.96" x 42.60" x 4.2" (75x1082x106.7mm)
- Weight: 7.50 lbs./ 3.4kg.

## Certifications / IP Rating:

- cETLus (Control # 4002034), CE, FCC, IP20

## Environment:

- Operational Temperature Range: -1°F ~ 113°F (-20°C ~ 45°C)
- Storage Temperature: -22°F ~ 113°F (-20°C ~ 45°C)

## What's Included:

- (1) Indoor Locking Power Cord
- (1) UC-IR24
- (1) 20° Diffusion Filter
- Includes mounting brackets to set on the ground or to mount a clamp to for truss mounting

## Optional Accessories:

- (1) 1x40° Linear Diffusion Lens (SKU: UBL912)



# OPTIONAL ACCESSORIES

ORDER CODE (US)	ORDER CODE (EU)	DESCRIPTION
UBL912	TBD	1x40° Linear Diffusion Lens

## FCC STATEMENT

Please note that changes or modifications of this product is 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.

