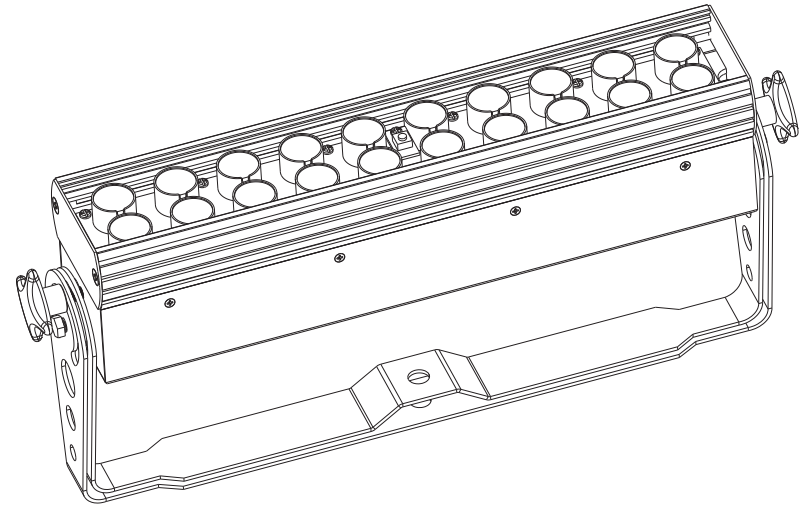




UV LED BAR20 IR



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User Instructions

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ADJ Products, LLC and all affiliated companies hereby disclaim any and all liabilities for property, equipment, building, and electrical damages, injuries to any persons, and direct or indirect economic loss associated with the use or reliance of any information contained within this document, and/or as a result of the improper, unsafe, insufficient and negligent assembly, installation, rigging, and operation of this product.

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!

UV LED Bar20 IR

Specifications

Model: UV LED Bar20 IR

Working Position:	Any safe working position
Voltage:	100V ~ 240V, 50/60Hz
LEDs:	20 x 1W LEDs
Power Draw:	30W
Power Cord Daisy Chain:	10 Fixtures Max. (120V) 20 Fixtures Max. (230V)
Beam Angle:	10 Degrees Vertical 40 Degrees Horizontal
Wavelength:	390-410 Nanometers
Fuse:	2Amp
Weight:	5lbs./ 2.45Kgs.
Dimensions:	13.25" (L) x 2.5" (W) x 7" (H) 334 x 61 x 175mm
Colors:	UV
DMX Channels:	3 DMX Channel Modes: 1 Channel Mode, 2 Channel Mode, & 3 Channel Mode
Warranty:	2 Year (730 days)

Auto Sensing Voltage: *This fixture contains a electronic voltage switch, which will auto sense the voltage when it is plugged into the power source.*

Please Note: Specifications and improvements in the design of this unit and this manual are subject to change without any prior written notice.

Unpacking: Thank you for purchasing the UV LED Bar20 IR by ADJ Products, LLC. Every UV LED Bar20 IR 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 be damaged, carefully inspect your fixture for any damage and be sure all accessories necessary to operate the unit has arrived intact. In the case 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 UV LED Bar20 IR is part of ADJ's continuing pursuit for creating high quality affordable intelligent fixtures. The UV LED Bar20 IR is a DMX intelligent LED color wash. This wash can be used in a stand alone mode or connected in a Master/Slave configuration. The unit can also be controlled via DMX controller. This unit has four operating modes: Static mode, strobing mode, sound active mode, and DMX controlled.

Customer Support: ADJ Products, LLC provides a toll free customer support line, to provide set up help and to answer any question should you encounter problems during your set up or initial operation. You may also visit us on the web at www.adj.com for any comments or suggestions. Service Hours are Monday through Friday 8:00 a.m. to 4:30 p.m. Pacific Standard Time.

Voice: (800) 322-6337

Fax: (323) 582-2941

E-mail: support@americandj.com

To purchase parts online visit <http://parts.americandj.com>

Warning! To prevent or reduce the risk of electrical shock or fire, do not expose this unit to rain or moisture.

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

PLEASE recycle the shipping carton when ever possible.

To optimize the performance of this product, please read these operating instructions carefully to familiarize yourself with the basic operations of this unit. These instructions contain important safety information regarding the use and maintenance of this unit. Please keep this manual with the unit, for future reference.

- 4 Operating Modes
- Electronic Dimming 0-100%
- Built in Microphone
- DMX-512 protocol
- 3 DMX Channel Modes: 1 Channel Mode, 2 Channel Mode, & 3 Channel Mode
- Power Cord Daisy Chain (See page 13 for more info)
- UC IR Compatible (Not Included) & Airstream IR Compatible (transmitter not included)

The UV LED Bar20 IR carries a 2 year (730 days) limited warranty. Please fill out the enclosed warranty card to validate your purchase and warranty. You may also register your product online at www.americandj.com. All returned service items whether under warranty or not, must be freight pre-paid and accompany a return authorization (R.A.) number. If the unit is under warranty you must provide a copy of your proof of purchase invoice. Please contact ADJ customer support for a R.A. number.

Due to fog residue, smoke, and dust cleaning the internal and external optical lenses must be carried out periodically to optimize light output.

1. Use normal glass cleaner and a soft cloth to wipe down the outside casing.
2. Clean the external optics with glass cleaner and a soft cloth every 20 days.
3. Always be sure to dry all parts completely before plugging the unit back in.

Cleaning frequency depends on the environment in which the fixture operates (i.e. smoke, fog residue, dust, dew).

MANUFACTURER'S LIMITED WARRANTY

- 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 back the product—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 pre-paid. 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. No accessories should be shipped with the product. If any accessories are shipped with the product, ADJ Products, LLC shall have 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 serial number has been 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 not properly maintained as set forth in the instruction manual.
- D. This is not a service contract, and this warranty does not include maintenance, cleaning or periodic check up. 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 indentifying 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.

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 no warranties, whether expressed or implied, including warranties of merchantability or fitness, shall apply to this product after said period has expired. 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 Products, LLC be liable for any loss or damage, direct or consequential, arising out of the use of, or inability to use, this product.

This warranty is the only written warranty applicable to 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 L.E.D. Lighting Products = 1-year (365 days) Limited Warranty** (Such as: Special Effect Lighting, Intelligent Lighting, UV lighting, Strobes, Fog Machines, Bubble Machines, Mirror Balls, Par Cans, Trussing, Lighting Stands etc. excluding LED and lamps)
- **Laser Products = 1 Year (365 Days) Limited Warranty** (excluding laser diodes which have a 6 month limited warranty)
- **L.E.D. Products = 2-year (730 days) Limited Warranty** (excluding batteries which have a 180 day limited warranty). **Note: 2 Year Warranty only applies to purchases within the United States.**
- **StarTec Series = 1 Year Limited Warranty** (excluding batteries which have a 180 day limited warranty).
- **ADJ DMX Controllers = 2 Year (730 Days) Limited Warranty**

- To reduce the risk of electrical shock or fire, do not expose this unit rain or moisture
- Do not spill water or other liquids into or on to your unit.
- Be sure that the local power outlet match that of the required voltage for your unit.
- Do not attempt to operate this unit if the power cord has been frayed or broken. 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.
- Disconnect from main power before making any type of connection.
- Do not remove the cover under any conditions. There are no user serviceable parts inside.
- Never operate this unit when it's cover is removed.
- Never plug this unit in to a dimmer pack
- 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.
- Do not attempt to operate this unit, if it becomes damaged.
- This unit is intended for indoor use only, use of this product outdoors voids all warranties.
- 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 they exit from the unit.
- **Cleaning** -The fixture should be cleaned only as recommended by the manufacturer. See page 3 for cleaning details.
- **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 has been damaged.
 - B. Objects have fallen, or liquid has been spilled into the appliance.
 - C. The appliance has been exposed to rain or water.
 - D. The appliance does not appear to operate normally or exhibits a marked change in performance.

Power Supply: The ADJ UV LED Bar20 IR contains a automatic voltage switch, which will auto sense the voltage when it is plugged into the power source. With this switch there is no need to worry about the correct power voltage, this unit can be plugged in anywhere.

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 manufactures 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, when using several DMX fixtures try to use the shortest cable path possible. 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 UV LED Bar20 IR can be controlled via DMX-512 protocol. The UV LED Bar20 IR has 3 DMX channel modes; 1 channel mode, 2 channel mode, & 3 channel mode. The DMX address is set on the rear panel of the UV LED Bar20 IR. Your unit and your DMX controller require a approved DMX-512 110 Ohm Data cable for data input and data output (Figure 1). 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 professional sound and lighting stores). Your cables should be made with a male and female XLR connector on either end of the cable. Also remember that DMX cable must be daisy chained and cannot be split.



Figure 1

With this feature you can connect the fixtures to one another using the powerCON input and output sockets. The quantity that can be connected is 10 fixtures maximum for 120V and 20 fixtures maximum for 230V. After the maximum fixtures has been reached you will need to use a new power outlet. They must be the same fixtures. DO NOT mix fixtures.

First unplug the power. Locate and remove the unit’s power cord. Once the cord has been removed the fuse holder is located underneath the On/Off switch. Using a flat head screwdriver unscre the fuse holder. Remove the bad fuse and replace with a new one.

Listed below are a few common problems the user may encounter, with solutions.

Unit not responding to DMX:

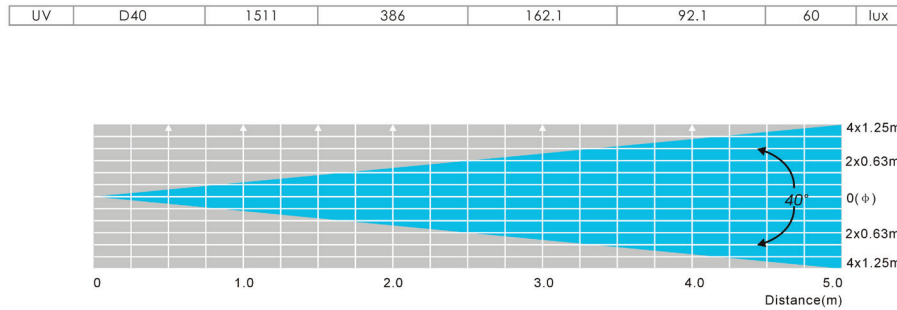
1. Check that the DMX cables are connected properly and are wired correctly (pin 3 is “hot”; on some other DMX devices pin 2 may be ‘hot’). Also, check that all cables are connected to the right connectors; it does matter which way the inputs and outputs are connected.

Unit does not respond to sound:

1. Quiet or high pitched sounds will not activate the unit.

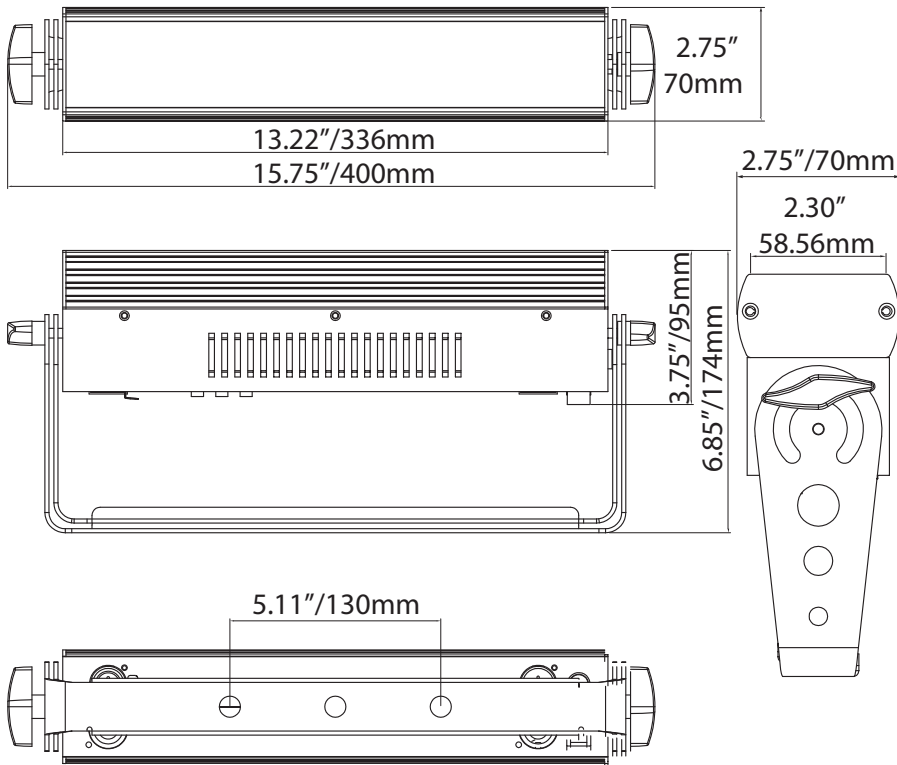
UV LED Bar20 IR

Photometric Chart



UV LED Bar20 IR

CAD Drawing



UV LED Bar20 IR

Set Up

Notice: Be sure to follow figures two and three 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.

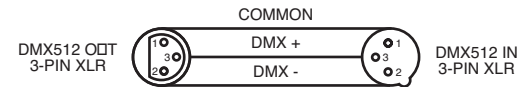


Figure 2

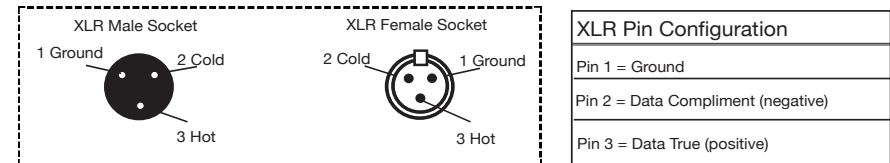


Figure 3

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 possibilities of erratic behavior.



Termination reduces signal errors and avoids signal transmission problems and interference. It is always advisable to connect a DMX terminal, (Resistance 120 Ohm 1/4 W) between PIN 2 (DMX-) and PIN 3 (DMX +) of the last fixture.

Figure 4

5-Pin XLR DMX Connectors. Some manufactures use 5-pin XLR connectors for DATA transmission in place of 3-pin. 5-pin XLR fixtures may be implemented in a 3-pin XLR DMX line. When inserting standard 5-pin XLR connectors in to a 3-pin line a cable adaptor must be used, these adaptors are readily available at most electric stores. The chart below details a proper cable conversion.

3-Pin XLR to 5-Pin XLR Conversion		
Conductor	3-Pin XLR Female (Out)	5-Pin XLR Male (In)
Ground/Shield	Pin 1	Pin 1
Data Compliment (- signal)	Pin 2	Pin 2
Data True (+ signal)	Pin 3	Pin 3
Not Used		Do Not Use
Not Used		Do Not Use

The display will lock after 30 seconds, press the MODE button for 3 seconds to unlock.

LED Display On/Off: To make the display stay ON all of the time press the MODE until “ds-X” is displayed. Press the UP button so that “ds-1” is displayed. The LED display will stay ON all of the time. To make the display turn OFF after 10 seconds, press the UP button so that “ds-2” is displayed. When the LED display turns OFF after 10 seconds, press any button for at least 3 seconds to turn the display on again.

DMX Mode:

Operating through a DMX controller give the user the freedom to create their own programs tailored to their own individual needs. The UV LED Bar20 IR has 3 DMX modes: 1 Channel Mode, 2 Channel Mode, and 3 Channel Mode.

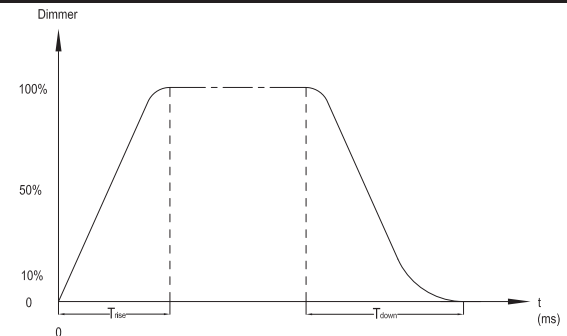
1. This function will allow you to control each individual fixture’s traits with a DMX controller.
2. Use the MODE button to scroll through the DMX Channel modes. The Channel modes are listed below:
 - To run the 1 Channel Mode, press the MODE button until “1XXX” is displayed. “XXX” is the current displayed DMX address. Use the UP or DOWN buttons to find your desired DMX address.
 - To run the 2 Channel Mode, press the MODE button until “2XXX” is displayed. “XXX” is the current displayed DMX address. Use the UP or DOWN buttons to find your desired DMX address.
 - To run the 3 Channel Mode, press the MODE button until “3XXX” is displayed. “XXX” is the current displayed DMX address. Use the UP or DOWN buttons to find your desired DMX address.
3. Once you have found your desired DMX Channel mode and address, plug in the fixture via the XLR connections to any standard DMX controller.
4. Please see pages 11-12 for DMX values and traits.

Static Mode:

In this mode the UV light will remain static. You can adjust the intensity in this mode as well.

1. Plug the fixture in and press the MODE button until “4XXX” is displayed.

Channel	Value	Function
1	0 - 255	DIMMER 0% - 100%
2	0 - 31 32 - 63 64 - 95 96 - 127 128 - 159 160 - 191 192 - 223 224 - 255	STROBING LED OFF LED ON STROBING SLOW - FAST LED ON PULSE STROBE SLOW - FAST LED ON RANDOM STROBE SLOW - FAST SOUND ACTIVE STROBING
3	0 - 20 21 - 40 41 - 60 61 - 80 81 - 100 101 - 255	DIMMER CURVES STANDARD STAGE TV ARCHTECTORIAL THEATRE DEFAULT TO UNIT CURRENT SETTING



Ramp Effect	0S (Fade Time)		1S (Fade Time)	
	T _{rise} (ms)	T _{down} (ms)	T _{rise} (ms)	T _{down} (ms)
Standard	0	0	0	0
Stage	780	1100	1540	1660
TV	1180	1520	1860	1940
Architectural	1380	1730	2040	2120
Theatre	1580	1940	2230	2280

UV LED Bar20 IR		1 Channel Mode
Channel	Value	Function
1	0 - 255	DIMMER 0% - 100%

UV LED Bar20 IR		2 Channel Mode
Channel	Value	Function
1	0 - 255	DIMMER 0% - 100%
2	0 - 31 32 - 63 64 - 95 96 - 127 128 - 159 160 - 191 192 - 223 224 - 255	STROBING LED OFF LED ON STROBING SLOW - FAST LED ON PULSE STROBE SLOW - FAST LED ON RANDOM STROBE SLOW - FAST SOUND ACTIVE STROBING

UV LED Bar20 IR **Operating Instructions**

2. Press the UP or DOWN buttons to adjust the intensity of the light.

Strobing:

In this mode you can choose one of 3 shows to run or you can choose a sound active mode.

1. Plug the fixture in and press the MODE button until “5-XX” is displayed. “XX” represents the current strobe style.
2. Using the UP or DOWN buttons select one of the three programs. If you want to run sound active mode, press the UP or DOWN buttons until “S-So” is displayed.
3. To adjust the speed of your selected program, press the MODE button once more so that “SP-X” is displayed. Now use the UP or DOWN buttons to adjust the speed. One being the slowest, nine being the fastest.

Dimming Curve:

This is used to set the dimming curve used with DMX mode. See page 12 for the dimming curves diagram. The dimming curves are in the order they appear in the diagram.

1. Plug the fixture in and press the MODE button until “dr-X” is displayed. This is the dimmer setting. “X” represents the current dimming setting.
2. Use the UP and DOWN buttons to find your desired dimming curve. Press the MODE button when you are finished.

Master-Slave Configuration:

This function will allow you to link units together to run in a Master-Slave mode. In Master-Slave configuration one unit will act as the controlling unit and the others will react to the controlling units built-in programs. Any unit can act as a Master or as a Slave however, only one unit can be programmed to act as the “Master.”

Master-Slave Connections and Settings:

1. Daisy chain your units via the XLR connector on the rear of the unit. Use standard XLR microphone 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 (master) will use the female XLR connector only. The last unit in the chain will use the male XLR connector only.
2. Using the Master unit, choose your desired mode or program and connect the “Slave” unit or units.
3. On the “Slave” unit(s) press the MODE button until a DMX setting is displayed. They will now follow the “Master” unit.

The **UC IR (sold separately)** infrared remote gives you control of various functions (See below). To control the fixture you must aim the remote at the front of the fixture and be no more than 30 feet away.

The **Airstream IR (sold separately)** remote transmitter plugs into the headphone jack of your iOS phone or tablet. To control your IR fixture you must raise the volume to the maximum on your iOS phone or tablet and aim the transmitter at the fixture sensor and be no more than 15 feet away. After you have purchased the Airstream IR transmitters, the app is a free download from the app store for your iOS phone or tablet. The app comes with 3 pages of control depending on the fixture you are using. Please see below for IR functions including the corresponding app page.

Works with App page 1.

STAND BY - Pressing this button will blackout the fixture. Press the button again to return to the initial state.

FULL ON - Hold this button down to fully light up the unit and stay full on.

FADE/GOBO - This button activates strobe mode. Press button 1 to activate random strobe, button 2 will activate pulse strobe, and button 3 will activate normal strobe.

“DIMMER +” and “DIMMER -” - These buttons are used to adjust the UV output intensity in UV color mode.

STROBE - Press this button to activate strobing. Use buttons 1-4 to select your desired strobe speed. 1 being the slowest strobe speed and 4 being the fastest strobe speed.

COLOR - Press this button to activate UV color mode.

1-4 - Use buttons 1-4 to select your desired strobe speed in strobe mode. Use buttons 1-3 to select your desired strobe modes.

SOUND ON & OFF - Use the buttons to activate and deactivate sound active mode.