INSTALLATION INSTRUCTIONS
LiveLED 100

MODEL NUMBER
ALS-LLED-100

ADVANCED
LIGHTING SYSTEMS
A NEXXUS LIGHTING COMPANY

Table of Contents

Thank you for purchasing the LiveLED™ 100 from Advanced Lighting Systems, Inc. This LED portable luminaire has been engineered and designed to be simple to operate, energy efficient and reliable. The LiveLED 100 is designed for architectural, entertainment and other applications where white and color light washing is required. The LiveLED 100 is a digital, full spectrum capable source comprised of 39.6 watts of Blue LEDs, 39.6 watts of Green LEDs, and 22 watts of Red LEDs. The LiveLED 100 features an integrated power supply and a DMX control panel with XLR in and out connectors.

This manual is intended to provide basic information for the use, installation, operation and maintenance of the LiveLED 100.

1.0 IMPORTANT SAFETY INSTRUCTIONS

READ & FOLLOW ALL INSTRUCTIONS

- SAVE THESE INSTRUCTIONS.

- WARNING: RISK OF INJURY.

- WARNING: THE HEAT SYNC COMPONENT OF THIS UNIT MAY BECOME HOT DURING OPERATION. TAKE CAUTION WHEN HANDLING UNIT DURING OPERATION.

- WARNING: RISK OF ELECTRIC SHOCK.

- CAUTION: CONNECT ONLY TO A CIRCUIT PROTECTED BY A CLASS A GROUND FAULT CIRCUIT INTERRUPTER

- DO NOT BURY POWER CORD
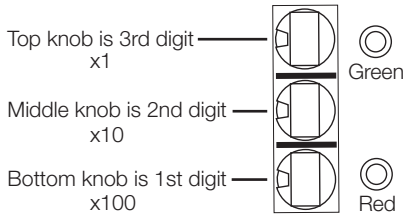
2.0 Placement & Mounting Requirements

The LiveLED 100, is designed to operate in an indoor or outdoor environment. The proper voltage required at the site is 110 - 240 VAC, 60/50 Hz. The unit draws 1 Amp at 120 volts. The LiveLED 100 is yoke mounted and is designed for operation in any orientation allowed by the yoke. The LiveLED 100 must be adequately ventilated. Recommended operating temperatures are from -30 degrees F (-35 degrees C) to 140 degrees F (60 degrees C). The illuminator should be placed with 6-8" inches clearance on the sides and 12" inches of back clearance if unit is placed in front of another unit. When more than one LiveLED is installed in the same location, provide each unit with the same minimum clearances as noted above. Proper ventilation is absolutely necessary to maintain LED life.

3.0 General Operating Instructions

With the unit properly installed, plug the illuminator power inlet cable into a suitable AC power source. The LED modules will immediately light. The DMX color control system will cycle and then stop on specific colors relative to whatever control settings the unit is currently set to. Unless otherwise specified, units are shipped with color controls not preset. Color control setup is required to achieve desired colors and effects. All color and effects control is activated using the 3 rotary knobs on the unit (see control panel picture). The unit may operated as a stand alone single unit, in master/slave configuration with other units or remotely using USITT DMX 512 control protocol generated by an external unit. Consult the instructions for the DMX controller or other signal processor that will be used for programming instructions. The DMX signal can be delivered through either of the XLR connectors located on the bottom left of the illuminator (see control panel picture). The remaining connector can be used as an output signal (in the case of a daisy chain) or left un-used (terminated).

3.0 General Operating Instructions

DMX Rotary Control
Knobs correspond to
DMX code as follows:

Top knob is 3rd digit
x1

Green

Middle knob is 2nd digit
x10

Bottom knob is 1st digit
x100

Red

CONTROL PANEL
Red LED light indicates DMX system has power.
Green indicates DMX system has signal.
Flashing Green indicates DMX operation is being executed

STAND ALONE OPERATION

To operate the LiveLED 100 as a stand alone unit, rotate the knobs on the Control Panel to activate the preset program desired (see preset program table below).

MASTER/SLAVE OPERATION

The master / slave control allows multiple units to operate in synchronization without an external controller. Using 3 pin XLR cables, link the units together to the XLR cables on the rear of each LiveLED. Either connector may be used as either the in or out. Choose a unit to be the Master. Set the rotary knobs of the Master to the desired preset program (see preset program table below). Set all other Slave units to 001. Be sure none of the units are connected to any other controller or DMX system. When the system power is turned on, all Slave units will follow the Master. Check the green indicator light on the control panel of the Slave units to insure that units are receiving a DMX signal from the Master unit.

Note: The rotary knob next to the red indicator light is the first digit for the preset programs (see control panel picture).

4.0 Preset Program Table

STATIC COLORS:

601	RED
602	BLUE
603	GREEN
604	MAGENTA
605	YELLOW
606	CYAN
607	WARM WHITE
608	COOL WHITE
609	BLUE MAGENTA
610	RED MAGENTA
611	TURQUOISE
612	ORANGE
613	LIGHT BLUE strobe
614	LIGHT YELLOW
615	LIGHT WARM PINK
616	LIGHT GREEN
617	LIGHT SALMON
618	LIGHT AMBER
619	LIGHT LAVENDER

COLOR SNAP CHANGE:
(white/salmon/red/blue/green/magenta/yellow/cyan)

640	8 Color snap change w/10 second pause
641	8 Color snap change w/5 second pause
642	8 Color snap change w/2 second pause
643	8 Color snap change w/1 second pause
644	8 Color snap change w/0.5 second pause
645	8 Color snap change w/0.25 second pause

COLOR STROBE:
(flash on/off & pause for time indicated)

650	Red strobe 0.5 second strobe
651	Red strobe 0.25 second strobe
652	Red strobe 0.1 second
660	Blue strobe 0.5 second strobe
661	Blue strobe 0.25 second strobe
662	Blue strobe 0.1 second strobe
670	Green strobe 0.5 second strobe
671	Green strobe 0.25 second strobe
672	Green strobe 0.1 second strobe
680	Cool White 0.5 second strobe
681	Cool White 0.25 second strobe
682	Cool White 0.1 second strobe

COLOR FADES:

620	Red/Blue/Green	30 second cross fade
621	Red/Blue/Green	20 second cross fade
622	Red/Blue/Green	15 second cross fade
623	Red/Blue/Green	10 second cross fade
624	Red/Blue/Green	5 second cross fade
625	Red/Blue/Green	1 second cross fade
630	Red/Magenta/Yellow	30 second cross fade
631	Red/Magenta/Yellow	20 second cross fade
632	Red/Magenta/Yellow	15 second cross fade
633	Red/Magenta/Yellow	10 second cross fade
634	Red/Magenta/Yellow	5 second cross fade
635	Red/Magenta/Yellow	1 second cross fade

5.0 DMX Control

If the unit is receiving a DMX signal, the green light on the control panel will illuminate.

Setting the Base DMX Address
As with all products that are DMX controlled, the LiveLED 100 requires that DMX channels be set to specific "addresses" in order that the unit will respond to a control unit. Using the adjustment knobs, set the desired DMX address on any address from 001 - 512.

The LiveLED 100 uses 5 DMX channels on a control board.
CHANNEL 1 - Red
CHANNEL 2 – Green
CHANNEL 3 – Blue
CHANNEL 4 – Preprogrammed effects
CHANNEL 5 – Preprogrammed effects

6.0 Quick Settings of Preset Colors & Effects

Channel:	Color Crossfades:	DMX Value (Min):	DMX Value (Max):
1	Red	0	255
2	Green	0	255
3	Blue	0	255
4	No Action	0	10
4	Magenta	11	21
4	Yellow	22	32
4	Cyan	33	43
4	Warm White	44	54
4	Cool White	55	65
4	Blue Magenta	66	76
4	Red Magenta	77	87
4	Turquoise	88	98
4	Orange	99	109
4	Light Blue	110	120
4	Light Yellow	121	131
4	Light Warm Pink	132	142
4	Light Green	143	153
4	Light Salmon	154	164
4	Light Amber	165	175
4	Light Lavender	176	186
4	RGB: 30 Crossfade	187	197
4	RGB: 20 Crossfade	198	208
4	RGB: 15 Crossfade	209	219
4	RGB: 10 Crossfade	220	230
4	RGB: 05 Crossfade	231	241
4	RGB: 01 Crossfade	242	252
5	No Action	0	9
5	RMY: 30 Crossfade	10	19
5	RMY: 20 Crossfade	20	29
5	RMY: 15 Crossfade	30	39
5	RMY: 10 Crossfade	40	49
5	RMY: 05 Crossfade	50	59
5	RMY: 01 Crossfade	60	69

Snap To Color (White/Salmon/Red/Blue/Green/Magenta/Yellow/Cyan)

Channel:		DMX Value (Min):	DMX Value (Max):
5	8 Color: 10 Snap	70	79
5	8 Color: 05 Snap	80	89
5	8 Color: 02 Snap	90	99
5	8 Color: 01 Snap	100	109
5	8 Color: 0.5 Snap	110	119
5	8 Color: 0.25 Snap	120	129

Snap To Color (White/Salmon/Red/Blue/Green/Magenta/Yellow/Cyan)

Channel:		DMX Value (Min):	DMX Value (Max):
5	8 Color: 10 Snap	70	79
5	8 Color: 05 Snap	80	89
5	8 Color: 02 Snap	90	99
5	8 Color: 01 Snap	100	109
5	8 Color: 0.5 Snap	110	119
5	8 Color: 0.25 Snap	120	129

6.0 Quick Settings of Preset Colors & Effects (Cont.)

Strobe: (Flash on/off & pause for time indicated)

5	Red Strobe: 0.5	130	139
5	Red Strobe: 0.25	140	149
5	Red Strobe: 0.1	150	159
5	Blue Strobe: 0.5	160	169
5	Blue Strobe: 0.25	170	179
5	Blue Strobe: 0.1	180	189
5	Green Strobe: 0.5	190	199
5	Green Strobe: 0.25	200	209
5	Green Strobe: 0.1	210	219
5	Cool White Strobe: 0.5	220	229
5	Cool White Strobe: 0.25	230	239
5	Cool White Strobe: 0.1	240	249

The DMX program allows a DMX controller to have complete control of color and effects. For custom cues, the programmer may use channels 1 through 5.

If DMX controlled pre-programmed sequences is required, the programmer should use a cue loop to send regular updates of the DMX values to the other unit(s). This will insure that all addressed SAVI™ Flare luminaires remain in sync with each other.

7.0 Resetting the DMX Programs:

Set the adjustment knob to a value of: 000 and disconnect the power (or turn the fixtures off). The fixtures will then reset themselves.

8.0 Troubleshooting

Symptom:	Probable Cause:	Suggested Remedy:
Unit does not light	No power to unit	Check power supply & cord
	Line voltage is <90 VAC	Use @ rated voltage
	Power supply failure	Contact Authorized Distributor
	Driver failure	Contact Authorized Distributor
One color won't light	Damaged driver	Contact Authorized Distributor
	LED board short	Contact Authorized Distributor
Low performance	Dirty Lens	Clean lens w/ soft dry cloth
	Damaged lens	Contact Authorized Distributor
	Damaged sub-optic board	Contact Authorized Distributor
No DMX response	Bad cable connection	Check cables
	DMX driver malfunction	Contact Authorized Distributor
	Address issues	Check for proper DMX address

9.0 Maintenance of Luminaire

Prior to any maintenance or service of the unit, always disconnect power cord and allow unit to cool for at least five (5) minutes.

Periodic Cleaning:
Clean the LiveLED at least once every 6 months. Dust exterior with a soft cloth. Make certain that lenses are free of obstructions and debris.

Fuse Replacement
In the event that the fuses need to be replaced, use only 250 volt 5 amp AC type of fuse. Turn the power OFF; remove the power cord from the power outlet. Locate the fuse holder on the rear of the fixture. Remove and replace the fuses if needed. Plug in the power cord and the unit is ready for continued operation.

For additional assistance or questions contact an authorized distributor or dealer for Advanced Lighting Systems, Inc. or contact the factory at:

Advanced Lighting Systems, Inc.
519 Lincoln Road
Sauk Centre, MN 56378
Tel: 320.352.0088
Fax: 320.352.0089

LIMITED WARRANTY

Nexxus Lighting, Inc. warranties its products, excluding lamps, to be free from defects in material and/or workmanship, under normal condition, use and service, for a period of two (2) years from the original invoice date (Five (5) Years for Red, Amber and Orange FlexLED and Border Light LED products and one (1) Year for Non-UL Listed Power Supplies). If proof of purchase is provided, Nexxus Lighting will warranty the product for two (2) years from date of the purchase (Five (5) Years for Red, Amber and Orange FlexLED and Border Light products and one (1) Year for Non-UL Listed Power Supplies).

TERMS AND CONDITIONS:
This warranty only applies when Nexxus Lighting products are properly wired and installed together as a system; and operated within the electrical values shown on the Nexxus Lighting specification sheets; used in lighting equipment designed and approved for the application and environmental conditions (temperature, humidity) within the normal specified operating range of the system. This warranty does not apply to any abnormal use in violation of any applicable standard, code or instructions for use in installations including those contained in the latest National Electrical Code (NEC), the Standards for Safety of Underwriters Laboratory, Inc. (UL), Standards for the American National Standards Institute (ANSI), in Canada, the Canadian Standards Association (CSA), Europe (CE), Australia (C-Tick). This warranty will not apply in the event of conditions demonstrating abnormal use or stress, including under/over voltage conditions, excessive switching cycles, excessive operating hours, alterations, accident, theft, misuse, abuse and damaged caused by negligent installation, improper maintenance or where adequate care has not been taken to prevent damage to the lighting system. Replacement of Nexxus Lighting components with any other manufacturer will void the entire warranty.

WARRANTY SERVICE CLAIMS:
Nexxus Lighting must issue a Return Material Authorization (RMA) number for all requests for warranty review. To expedite service, please contact Nexxus Lighting Customer Representative: 407-857-9900. If you are unsure whether a situation exists that is covered by this warranty, please contact Nexxus Lighting Customer Service for assistance. In the event of a defect in material or workmanship during the warranty period, Nexxus Lighting will repair or replace (at its own discretion) its products under the conditions of the warranty.

RETURN OF DEFECTIVE PRODUCT:
After contacting Nexxus Lighting, Inc. and receiving the RMA#, the purchaser / user shall promptly return the product after receiving instructions regarding if, when and where to ship product. Product must be returned within 30 days of receiving RMA#, Shipping box must be clearly marked with RMA#. Failure to follow this procedure shall void this warranty. Nexxus Lighting will cover expenses for material but will not cover shipping costs. Products returned without an RMA# will be refused and returned to sender at the senders expense.

REPLACEMENT OF PRODUCT, LIMITS OF LIABILITY:
The foregoing shall constitute the exclusive remedy of the purchaser and the sole liability of Nexxus Lighting, Inc. regarding its products and component warranty. NO WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS MADE OR IS TO BE IMPLIED. In no event shall Nexxus Lighting, Inc. be liable for any other costs or damages including labor charges, lost profits or revenues, incidental, special or consequential damages. Total liability shall not exceed the total extended purchase price for the product. Nexxus Lighting, Inc. reserves the right to examine all failed Nexxus Lighting, Inc. products and components to determine the cause of failure and patterns of usage and reserves the right to be the sole judge as to whether any product or component is defective and covered under this warranty.