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LIGHTING



S-AURA

USER MANUAL

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1. INTRODUCTION

Thank you for choosing our product! Please consult this manual for any safety reasons, to ensure a painless and trouble-free operation, as well as for any reference needed.

We encourage you to check out our other products at our website: <http://slservice.pl/> !

2. SAFETY INFORMATION

To maintain this device's condition and to ensure a safe operation, it is absolutely necessary for the user to follow these safety instructions and warning notes written in this user manual.

- This device falls under protection-class I. Therefore it is essential that the device should be earthed.
- The electric connection and installation should be done by qualified personnel in order to minimize the risk of accidental electric shock and damaging the device.
- Always disconnect from the mains, when the device is not in use or before cleaning it. Only handle the power cord by the plug. Never pull out the plug by tugging the power cord.
- Make sure the power cord is never crimped or damaged by sharp edges - if this would be the case, immediately replace the cable for the exact same type.
- Before connecting the unit to the mains, make sure it is not damaged mechanically. If you notice any signs of damage, you should contact your dealer immediately. In this case do not connect the device to the mains.
- Make sure that the available voltage is not higher than 240V.
- Never look directly into the light source (especially if you have any epileptic past)!
- The device must be installed on a stable structure. Always use steel security cable to attach the device to a stable structure.
- Do not use this device in high humidity conditions and at temperatures above 40°C.
- Do not cover the ventilation slots when operating to avoid internal overheating.

- CAUTION: This product's housing may be hot when lights are operating.
- DO NOT connect this product to a dimmer or rheostat.

In case of a serious operating problem stop using this product immediately!

Important:

Damages caused by a disregard of this user manual are not subject to warranty or any liability.

3. PRODUCT INFORMATION

3.1 SPECIFICATION

Power supply voltage: 100-240V

Power consumption: 250W

Voltage frequency: 50/60Hz

Diode type and power: 12W RGBW OSRAM 4in1 LED

Number of diodes: 19pcs

Beam angle: 8°-58°

Pan: 540°

Tilt: 240°

Scan rate: 7000 Hz

Dimming: 16-bit dimmer

DMX standard: DMX 512

DMX channels: 14/25

AC IN: powerCON

AC OUT: powerCON

DMX IN: XLR - 3 pin

DMX OUT: XLR - 3 pin

IP Rating: IP20

Cooling: Active

Height [cm]: 38

Width [cm]: 32

Depth [cm]: 21

Weight [kg]: 8

3.2 CLEANING AND MAINTENANCE

We recommend a frequent cleaning of the device, as dust, smoke and other debris will build up on the optics and housing. After disconnecting the power wipe the device with a soft, lint-free and damp cloth. Never use alcohol or solvents, as these may damage the finish. A dry paint brush is an excellent tool to remove surface dust.

Be sure to periodically check for loose parts that could damage the device or potentially allow the device to cause injury. Make sure all overhead and wall installations have a secondary safety accessory installed, such as safety cable rated for your device type and size. Check the power cord as well, make sure there is no damage that could cause electrical shock, never remove the ground pin. There are no user-servicable parts in this device. Do not attempt to open and repair the fixture.



CAUTION! Always disconnect from mains before starting any maintenance operation!

There are no servicable parts inside the device. Maintenance and service operations are only to be carried out by authorized dealers. If you need any spare parts, please use only genuine parts. If the power supply cable of this device becomes damaged, it has to be replaced by authorized dealers only, in order to avoid hazards.

Never remove the ground pins from power cord nor spin any cooling fan with compressed air, as this can damage the components in your fixture.

If you have further questions, please contact your dealer.



Before replacing a fuse, disconnect the power cord! Always replace with the same type and rating of fuse!

Mounting & rigging

This device can be mounted in any orientation (vertical, horizontal). Always make sure there is adequate ventilation and no flammable surfaces within 2 feet (0.6 meters) of the device. You can mount the device using clamps or with threaded bolt type hardware. Always install the included safety eyebolt and cable when mounting in overhead or wall locations.



Warning: Do not mount the fixture in the ventilation path of a nearby heating supply duct. The heated airflow will cause device failure due to overheating.

Expected LED lifespan

LEDs gradually decline in brightness over time, mostly because of heat. Packaged in clusters, LEDs exhibit higher operating temperatures than in ideal, single LED conditions. For this reason, using clustered LEDs at their fullest intensity significantly reduces the LEDs' lifespan. Under normal conditions, this lifespan can be 40'000 to 50'000 hours.

If extending this lifespan is vital, lower the operating temperature by improving the ventilation around the product and reducing the ambient temperature to an optimal operating range. In addition, limiting the overall projection intensity may also help to extend the LEDs' lifespan.

3.3 DMX-512

To link devices together you'll need data cables. You should use data grade cables that can carry a high quality signal and are less prone to electromagnetic interference. For instance, Belden© 9841 meets the specifications for EIA RS-485 applications. Standard microphone cables will **probably** be OK, but note that they cannot transmit DMX data as reliably over long distances. In any event, the cable should have the following characteristics:

- 2-conductor twisted pair plus a shield,
- maximum capacitance between conductors - **30pF/ft**,
- maximum capacitance between conductor & shield - **55 pF/ft**,
- maximum resistance of **20 ohms / 1000 ft** (304.8m in normal),
- nominal impedance **100 - 140 ohms**.

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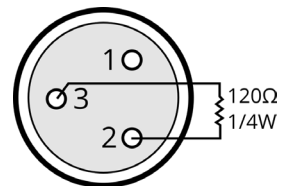
Cable connectors:

Cables must have a male XLR connector on one end and a female XLR connector on the other end (duh!).

A word on termination: DMX is a resilient communication protocol, however errors still occasionally occur. Termination reduces signal errors, and therefore best practises include the use of terminator in all circumstances. If you are experiencing problems with erratic device behavior, especially over long cable runs, a terminator may help improve performance.

To build your own DMX Terminator:

Obtain a 120-ohm, 1/4-watt resistor and wire it between pins 2 & 3 of the last fixture. They are also readily available from specialty retailers.



A DMX terminator

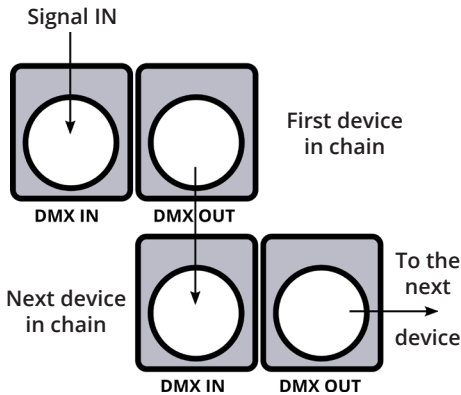
CAUTION: Do not allow contact between the common and the device's chassis ground. Grounding the common may cause a ground loop, and your device may perform erratically. Test cables with an ohm meter to verify correct polarity and to make sure the pins are not grounded or shorted to the shield or each other.

3-Pin / 5-Pin

If you use a controller with a 5 pin DMX output connector, you will need to use a 5 pin to 3 pin adapter. They are widely available over the Internet and from specialty retailers, but if you'd like to build your own, the table below details a proper cable conversion:

Conductor	3-Pin female (Output)	5-Pin male (Input)
Ground/Shield	Pin 1	Pin 1
DMX Data (-)	Pin 2	Pin 2
DMX Data (+)	Pin 3	Pin 3
Not used.	no connector	Pin 4
Not used.	no connector	Pin 5

Setting up DMX control



Step 1: Connect the male connector of the DMX cable to the female connector (output) on the controller.

Step 2: Connect the female connector of the DMX cable to the first device's male connector (input).

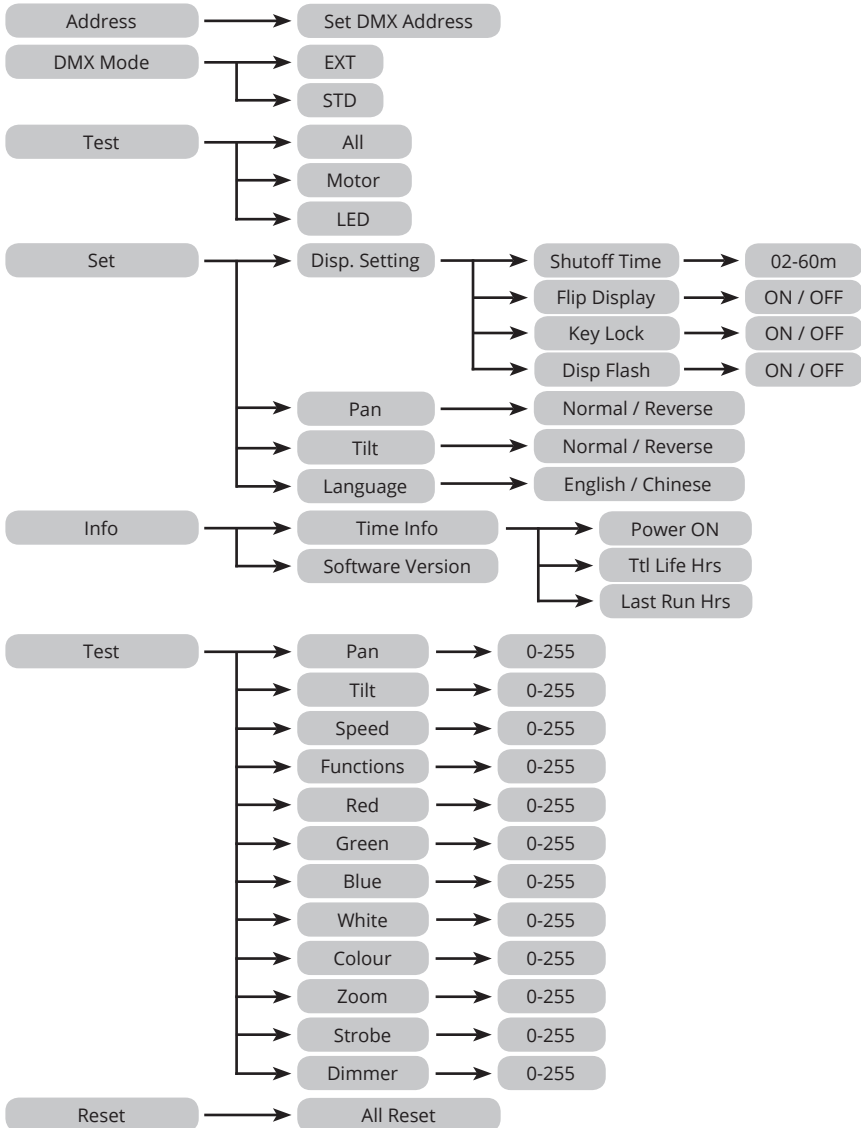
Note: It doesn't matter which device address is the first one connected. We recommend connecting the device in terms of their proximity to the controller, rather than connecting the lowest device number first, and so on.

Step 3: Connect other devices in the chain from output to input as above. Place a DMX terminator on the output of the final device to ensure the best communication.

Fixture linking (Master/Slave Mode)

1. Connect the (male) 3-pin connector side of the DMX cable to the output (female) 3-pin connector of the first device.
2. Connect the end of the cable coming from the first device, which will have a (female) 3-pin connector to the input connector of the next device consisting of a (male) 3-pin connector. Then, proceed to connect from the output as stated above, to the input of the following device (and so on).

4. DISPLAY MENU



5. DMX FUNCTIONS AND VALUES

STD	EXT	Value	Function	Description
1		0-019	Shutter	Shutter closed
		20-024		Shutter open
		25-064		Strobe 1 (fast <--> slow)
		65-069		Shutter open
		70-084		Strobe 2: opening pulse (fast <--> slow)
		85-089		Shutter open
		90-104		Strobe 3: closing pulse (fast <--> slow)
		105-109		Shutter open
		110-124		Strobe 4: random strobe (fast <--> slow)
		125-129		Shutter open
		130-144		Strobe 5: random opening pulse (fast <--> slow)
		145-149		Shutter open
		150-164		Strobe 6: random closing pulse (fast <--> slow)
		165-169		Shutter open
		170-184		Strobe 7: burst pulse (fast <--> slow)
		185-189		Shutter open
		190-204		Strobe 8: random burst pulse (fast <--> slow)
		205-209		Shutter open
		210-224		Strobe 9: sine wave (fast <--> slow)
		225-229		Shutter open
230-244	Strobe 10: burst (fast <--> slow)			
245-255	Shutter open			
2		0-255	Dimmer	Intensity (0 <--> 100%)
3		0-255	Zoom	Zoom adjustment (wide <--> narrow)
4		0-255	Pan	Pan adjustment (0° <--> 540°)
5		0-255	Pan fine	Pan fine adjustment
6		0-255	Tilt	Tilt adjustment (0° <--> 240°)
7		0-255	Tilt fine	Tilt fine adjustment
8		0-009	Function	No function
		10-014		Reset entire fixture
		15-039		No function
		40-044		PTSP = NORM2
		45-049		PTSP = FAST2
		50-054		PTSP = SLOW2

STD	EXT	Value	Function	Description
8		55-059	Function	No function
		60-064		Fan mode FULL2
		65-069		No function
		70-074		Fan mode REGULATED2
		75-089		No function
		90-094		Calibrated color output mode COLOR CALIB = ON3
		95-099		No function
		100-104		RAW color output mode COLOR CALIB = OFF3
		105-109		No function
		110-114		Fast dimming, speed of changes unrestricted2
		115-119		No function
		120-124		Smooth dimming, speed of changes restricted slightly2
		125-249		No function
		250-255		Illuminate display
9		0-009	Macros	Open. RGBW color mixing enabled
		10-014		LEE 790 - Moroccan Pink
		15-019		LEE 157 - Pink
		20-024		LEE 332 - Special Rose Pink
		25-029		LEE 328 - Follies Pink
		30-034		LEE 345 - Fuchsia Pink
		35-039		LEE 194 - Surprise Pink
		40-044		LEE 181 - Congo Blue
		45-049		LEE 071 - Tokio Blue
		50-054		LEE 120 - Deep Blue
		55-059		LEE 079 - Just Blue
		60-064		LEE 132 - Medium Blue
		65-069		LEE 200 - Double CT Blue
		70-074		LEE 161 - Slate Blue
		75-079		LEE 201 - Full CT Blue
		80-084		LEE 202 - Half CT Blue
		85-089		LEE 117 - Steel Blue
		90-094		LEE 353 - Lighter Blue
		95-099		LEE 118 - Light Blue
		100-104		LEE 116 - Medium Blue Green
105-109	LEE 124 - Dark Green			
110-114	LEE 139 - Primary Green			

STD	EXT	Value	Function	Description
9		115-119	Macros	LEE 089 - Moss Green
		120-124		LEE 122 - Fern Green
		125-129		LEE 738 - JAS Green
		130-134		LEE 088 - Lime Green
		135-139		LEE 100 - Spring Yellow
		140-144		LEE 104 - Deep Amber
		145-149		LEE 179 - Crome Orange
		150-154		LEE 105 - Orange
		155-159		LEE 021 - Gold Amber
		160-164		LEE 778 - Millennium Gold
		165-169		LEE 135 - Deep Golden Amber
		170-174		LEE 164 - Flame Red
		175-179		Open
				Color wheel rotation effect
		180-201		Clockwise (fast <--> slow)
		202-207		
		208-229		Counter-clockwise (fast <--> slow)
		230-234		Open
		235-239		Fast
		240-244		Medium
245-249	Slow			
250-255	Open			
10		0-255	Red	Red (0 <--> 100%)
11		0-255	Green	Green (0 <--> 100%)
12		0-255	Blue	Blue (0 <--> 100%)
13		0-255	White	White (0 <--> 100%)
14		0-019	CTC	CTC disabled
		20-255		CTC (10'000K <--> 2'500K)
*	15	0-255	Pre-program 1	Effect selection (FX1)
*	16	0-255	Speed of FX1	Pre-program 1 (CH15) speed (0 <--> max)
*	17	181-244	Pre-program 2	Effect selection (FX2)
*	18	245-255	Speed of FX2	Pre-program 2 (CH17) speed (0 <--> max)
*	19	0-049	Settings of FX	No sync <ul style="list-style-type: none"> FX1 and FX2 run through cycles independently Cycle duration is regular CH16 and CH18 adjust FX1 and FX2 independently

STD	EXT	Value	Function	Description
*	19	050	Settings of FX	Sync <ul style="list-style-type: none"> FX1 and FX2 run through cycles in sync Cycle duration is regular CH16 adjusts overall speed, CH18 has no effect
		51-169		Sync shift <ul style="list-style-type: none"> FX1 and FX2 run through cycles in sync FX2 is offset (delayed) relative to FX1 Offset is adjustable (0 <--> max) CH16 adjusts overall speed, CH18 has no effect
		170-209		Sync random <ul style="list-style-type: none"> FX1 and FX2 run through cycles in sync Cycle duration for synchronized FX1 and FX2 is made shorter and longer at random CH16 adjusts overall speed, CH18 has no effect
		210-255		No sync, random <ul style="list-style-type: none"> FX1 and FX2 run through cycles independently Cycle duration for FX1 and FX2 is made shorter and longer at random CH16 and CH18 adjust FX1 and FX2 independently
*	20	0-019	Aura shutter and strobe effect	Shutter closed
		20-024		Shutter open
		25-064		Strobe 1 (fast <--> slow)
		65-069		Shutter open
		70-084		Strobe 2: opening pulse (fast <--> slow)
		85-089		Shutter open
		90-104		Strobe 3: closing pulse (fast <--> slow)
		105-109		Shutter open
		110-124		Strobe 4: random strobe (fast <--> slow)
		125-129		Shutter open
		130-144		Strobe 5: random opening pulse (fast <--> slow)
		145-149		Shutter open
		150-164		Strobe 6: random closing pulse (fast <--> slow)
		165-169		Shutter open
		170-184		Strobe 7: burst pulse (fast <--> slow)
		185-189		Shutter open
		190-204		Strobe 8: random burst pulse (fast <--> slow)
		205-209		Shutter open
210-224	Strobe 9: sine wave (fast <--> slow)			
225-229	Shutter open			
230-244	Strobe 10: burst (fast <--> slow)			
245-255	Shutter open			
*	21	0-255	Aura dimmer	Aura intensity (0 <--> 100%)

STD	EXT	Value	Function	Description
		0-009		Open. RGB color mixing enabled
		10-014		LEE 790 - Moroccan Pink
		15-019		LEE 157 - Pink
		20-024		LEE 332 - Special Rose Pink
		25-029		LEE 328 - Follies Pink
		30-034		LEE 345 - Fuchsia Pink
		35-039		LEE 194 - Surprise Pink
		40-044		LEE 181 - Congo Blue
		45-049		LEE 071 - Tokyo Blue
		50-054		LEE 120 - Deep Blue
		55-059		LEE 079 - Just Blue
		60-064		LEE 132 - Medium Blue
		65-069		LEE 200 - Double CT Blue
		70-074		LEE 161 - Slate Blue
		75-079		LEE 201 - Full CT Blue
		80-084		LEE 202 - Half CT Blue
		85-089		LEE 117 - Steel Blue
		90-094		LEE 353 - Lighter Blue
*	22	95-099	Aura macro	LEE 118 - Light Blue
		100-104		LEE 116 - Medium Blue Green
		105-109		LEE 124 - Dark Green
		110-114		LEE 139 - Primary Green
		115-119		LEE 089 - Moss Green
		120-124		LEE 122 - Fern Green
		125-129		LEE 738 - JAS Green
		130-134		LEE 088 - Lime Green
		135-139		LEE 100 - Spring Yellow
		140-144		LEE 104 - Deep Amber
		145-149		LEE 179 - Chrome Orange
		150-154		LEE 105 - Orange
		155-159		LEE 021 - Gold Amber
		160-164		LEE 778 - Millenium Gold
		165-169		LEE 135 - Deep Golden Amber
		170-174		LEE 164 - Flame Red
		175-179		Open Color wheel rotation effect
		180-201		Clockwise (fast <--> slow)

STD	EXT	Value	Function	Description
*	22	202-207	Aura macro	Stop (this will stop whatever color is at the time)
		208-229		Counter-clockwise (slow <--> fast)
		230-234		Open Random color
		235-239		Fast
		240-244		Medium
		245-249		Slow
		250-255		Open
*	23	0-255	Aura red	Red aura color intensity (0 <--> 100%)
*	24	0-255	Aura green	Green aura color intensity (0 <--> 100%)
*	25	0-255	Aura blue	Blue aura color intensity (0 <--> 100%)

FX: pre-programmed effects

Type	Value	FX Name	FX Adjust
Aura Sync	0-009	Dimmer sync Idle	n/a
	10-012	Dimmer sync	n/a
	13-015	Strobe sync	n/a
	16-018	Dimmer + strobe sync	n/a
	19-021	Aura color sync	n/a
	22-024	Aura all sync	n/a
	25-039	Reserved	n/a
Intensity FX	40-042	Aura strobe delay Aura strobe delay	Trigger Delay
	43-045	Strobe alternate single	Speed
	46-048	Strobe alternate dual	Speed
	49-051	Strobe alternate triple	Speed
	52-054	3-step strobe	Speed
	55-060	Reserved	n/a
	61-063	Intensity random alternate	Speed
	64-066	Aura ramp, Beam flash	Speed
	67-069	Beam ramp, Aura flash	Speed
	70-072	Intensity Aura, Beam ramp	Speed
	73-075	Intensity Beam, Aura ramp	Speed
76-099	Reserved	n/a	
Color FX	100-102	Aura color offset Aura color offset	Color offset
	103-108	Reserved	n/a
	109-111	Hue shimmer	Amount
	112-114	Saturation shimmer	Amount
	115-126	Reserved	n/a
	127-129	Color strobe	n/a
	130-132	Color offset strobe	Color offset on strobe
	133-135	Aura color strobe	n/a
	136-138	Aura color offset strobe	Aura color offset on strobe
	139-141	Color spikes	Strenght
142-159	Reserved	n/a	
Zoom FX	160-162	Zoom / color offset Color zoom ramp in	Speed
	163-165	Color zoom ramp out	Speed
	165-168	Color zoom fade in	Speed
	169-171	Color zoom fade out	Speed
	172-174	Reserved	n/a
	175-177	Zoom ramp up	Speed
	178-180	Zoom ramp down	Speed
181-219	Reserved	n/a	
Reserved	220-255	Reserved	n/a