

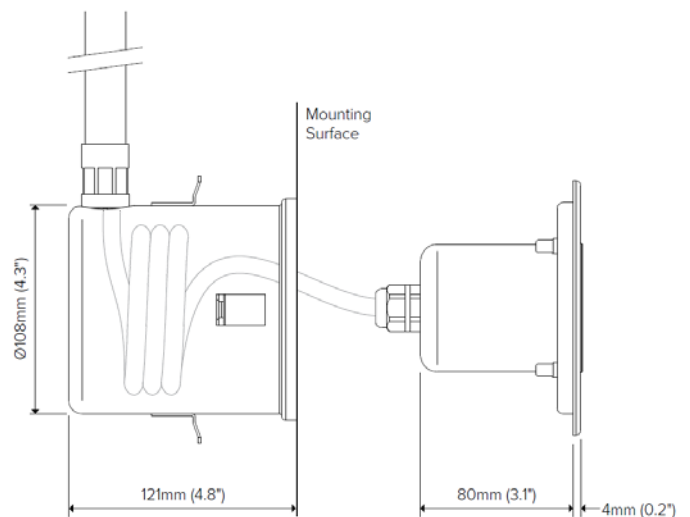


Fixture Type In-Ground  
 Materials Stainless Steel  
 Finish Stainless Steel

Lamp Type LED  
 Lamp Quantity 1  
 Lamp Included Yes  
 Wattage 6 W  
 Input Voltage 24 VDC  
 Delivered Lumens 479  
 Kelvin 3000K  
 CRI 80  
 Power S Type Driver  
 Power S Quantity Up to 29 fixtures  
 Power S Location Remote  
 Dimming Type 1-10V

Designer Lumascape

Listings ETL  
 WET



The LS333ANS-2LED is a swimming pool rated luminaire and is one of Lumascope's most popular. It is constructed entirely of 316 marine grade stainless steel and utilises a special alignment feature to ensure the beam of light is perpendicular to the installation surface, even if the pre-installation blackout niche is not. The use of LEDs allows for the creative introduction of colour and improved energy efficiency.

### Performance

Static White & Colour	Lumen Output (lm)	Efficacy (lm/W)	Peak Intensity (cd)
3,000 K (80 CRI)	479	67	6,847
4,000 K (80 CRI)	592	82	7,420

● Blue (470nm)

Static white lumen output values are based on a 6W luminaire with 14° lens.

Dynamic Colour	Lumen Output (lm)	Efficacy (lm/W)	Peak Intensity (cd)
RGB	149	19.4	313

Dynamic colour lumen output values are based on a 6W luminaire with 40° lens.

**Beam Angles** 14°, 20°, 25°, 40°  
Not available with all light engines. Refer to Specification Matrix.

### Electrical

**LED Power** 3W, 6W or 9W

**Consumption** 7.2W (nominal for 6W)

**Input Voltage** Low Voltage 24V DC (International Market)  
12-15V AC, 12-24V DC (North American Market)

**Equivalent Rating** 6W/450lm LED is approximately equivalent to 40W incandescent lamp  
9W/700lm LED is approximately equivalent to 60W incandescent lamp

### Control

**Protocols** PWM (0-10V to PWM and DMX to PWM converters available)

### Physical

**Housing** 316 Marine Grade Stainless Steel with Teflon coated cover screws

**Installation** Pre-installation niche included

**Water Temperature Rating** 5°C to 40°C (41°F to 104°F)



Power	Code
3W	3
6W	6
9W	9

Static White & Colour	Code
3,000 K (80 CRI)	H6
4,000 K (80 CRI)	W4
Blue (470nm typical)	B4

Dynamic Colour	Code
RGB	M4

Beam	Code
Narrow	14° NR <sup>(1)(2)</sup>
Narrow Medium	20° NM
Medium	25° ME
Wide	40° WD <sup>(2)</sup>

(1) Not available in RGB  
(2) Not available in 9W

Input Voltage (International)	Code
24V DC	07 <sup>(1)(2)</sup>
PWM Dimmable Driver, 24V DC	27 <sup>(1)</sup>

(1) Not available for RGB.  
(2) Requires appropriate power supply.

Input Voltage (North America)	Code
12-15V, 60 Hz, 12-24V DC	13 <sup>(1)(2)</sup>
PWM Dimmable Driver, 12-15V AC, 60Hz, 12-24V DC	23 <sup>(2)</sup>

(1) Not available for RGB.  
(2) Requires appropriate power supply.

Cable Length	Code
5m	05
8m	08
15m	15
20m	20
25m	25

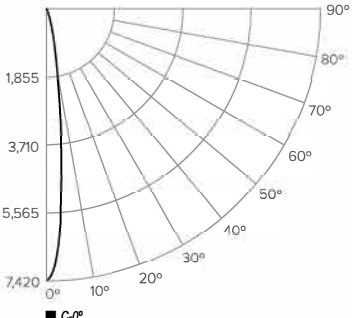
For custom cable length consult factory. Cable cannot be field installed.

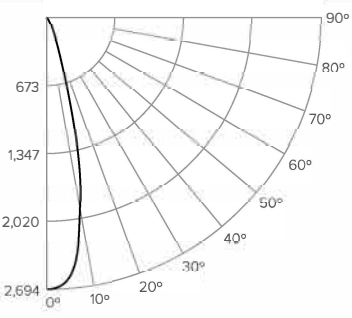
Cable Length	Code
16ft	016
26ft	026
48ft	048
65ft	065
82ft	082

For custom cable length consult factory. Cable cannot be field installed.

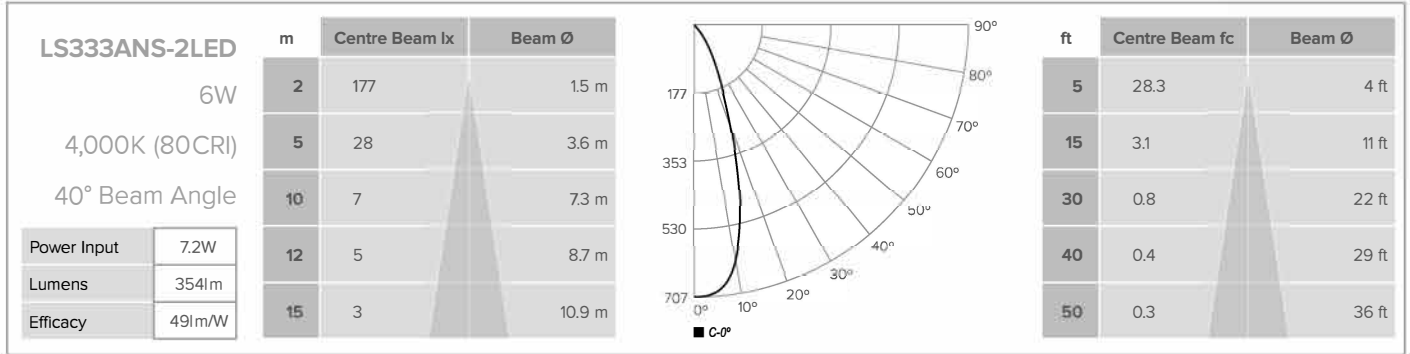
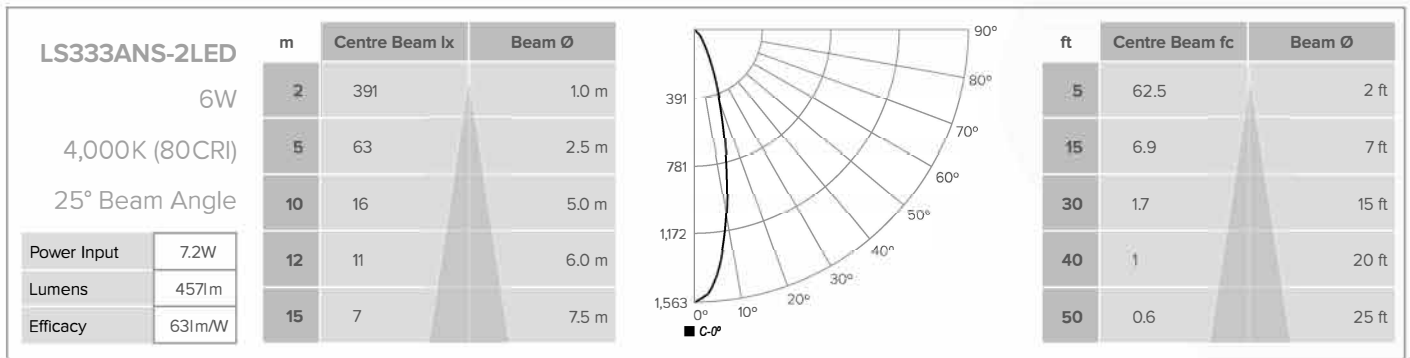
Photometric data is based on test results from a NIST traceable testing lab. IES data is available at [www.lumascap.com](http://www.lumascap.com)  
 Note: No depreciation factor is applied to the data shown.

LS333ANS-2LED		m	Centre Beam lx	Beam Ø		ft	Centre Beam fc	Beam Ø
6W	4,000K (80CRI)	2	1,855	0.5 m		5	296.8	1 ft
		5	297	1.2 m	15	33	4 ft	
		10	74	2.5 m	30	8.2	7 ft	
		12	52	2.9 m	40	4.6	10 ft	
		15	33	3.7 m	50	3	12 ft	

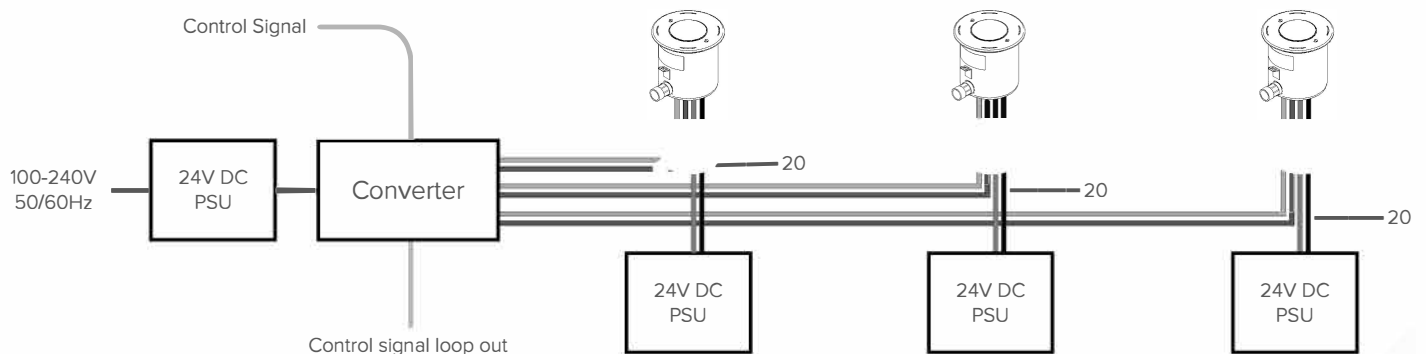
LS333ANS-2LED		m	Centre Beam lx	Beam Ø		ft	Centre Beam fc	Beam Ø
6W	4,000K (80CRI)	2	674	0.9 m		5	107.8	2 ft
		5	108	2.1 m	15	12	6 ft	
		10	27	4.3 m	30	3	13 ft	
		12	19	5.1 m	40	1.7	17 ft	
		15	12	6.4 m	50	1.1	21 ft	





### Wiring Diagram - Static Colour (DMX)

### International Market



### Control Protocols

DMX

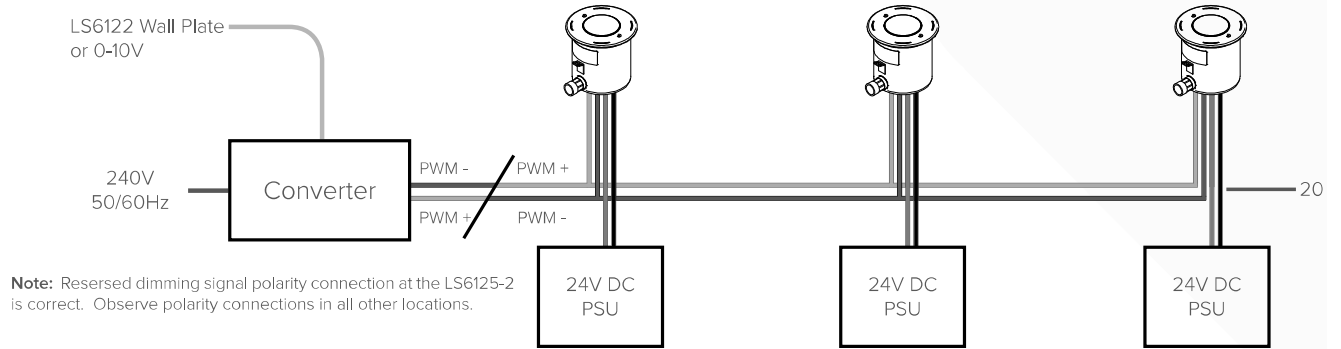
For DMX control signal, use LS67100 DMX to PWM converter

Up to 20 luminaires per run under the following conditions:

- Up to three (3) individually addressed dimmable channels
- Up to 20 luminaires per dimmable channel
- Luminaires driven by integral LED drivers
- Luminaires powered through individual power supplies
- Refer to 'Maximum Circuit Load' table for circuit limitations
- Always observe local electrical codes for branch circuit current limitations
- Suitable for installation into swimming pools in Australia



### Wiring Diagram - Static Colour (0-10V)



### Control Protocols

0-10V

For 0-10V control signal, use LS6125-2 0-10V to PWM converter

Up to 20 luminaires per run under the following conditions:

- Stand alone static colour dimming solution
- Up to 20 luminaires dimmed together
- Luminaires driven by integral LED drivers using LS6122 wall plate dimmer
- Luminaires powered through individual power supplies
- Refer to 'Maximum Circuit Load' table for circuit limitations
- Always observe local electrical codes for branch circuit current limitations
- Suitable for installation into swimming pools in Australia

### Maximum Circuit Load

Compatibility with each driver is indicated by the value shown in the table, representing the maximum number of luminaires that may be powered from each driver based on a maximum cable run of 100m (328ft) and a trunk cable size of 3.3mm<sup>2</sup>. Please note, this does not take into consideration voltage drop beyond a distance of 100m or ampacity limits of the branch circuit. For assistance, please consult factory.

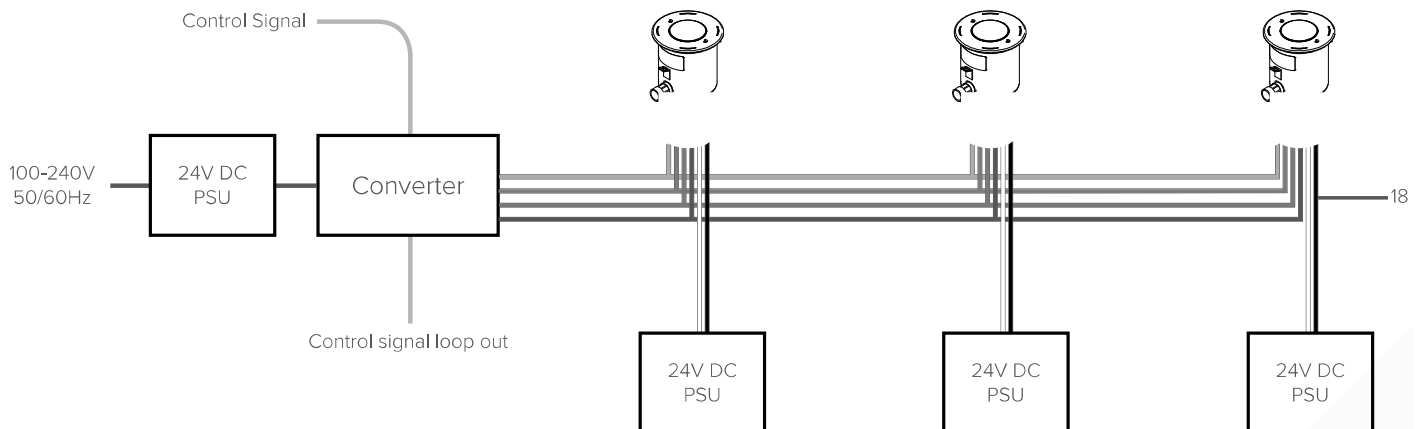
LSLED-24V Power Supplies

Input Voltage	100-240V, 50/60Hz		
Output Voltage	24V DC		
Wattage	40W	100W	150W
LS333ANS-2LED, 3W	5	18	23
LS333ANS-2LED, 6W	3	10	14
LS333ANS-2LED, 9W	-	6	9

NOTE: The above diagrams are intended to show electrical pathways between luminaires and ancillary device. These diagrams are not intended to show type or colour of cord / wire, luminaire input voltage rating, wire gauge or approved use of the cord / wire supplied with luminaires.

### International Market

### Wiring Diagram - Dynamic Colour (DMX)



### Control Protocols

DMX

For DMX control signal, use LS67100 DMX to PWM converter

Up to 18 luminaires per run under the following conditions:

- Up to 18 luminaires addressed and controlled together
- Luminaires driven by integral LED drivers
- Luminaires powered through individual power supplies
- Refer to 'Maximum Circuit Load' table for circuit limitations
- Always observe local electrical codes for branch circuit current limitations
- Suitable for installation into swimming pools in Australia

### Maximum Circuit Load

Compatibility with each driver is indicated by the value shown in the table, representing the maximum number of luminaires that may be powered from each driver based on a maximum cable run of 100m (328ft) and a trunk cable size of 3.3mm<sup>2</sup>. Please note, this does not take into consideration voltage drop beyond a distance of 100m or ampacity limits of the branch circuit. For assistance, please consult factory.

LSLED-24V Power Supplies

Input Voltage	100-240V, 50/60Hz		
Output Voltage	24V DC		
Wattage	40W	100W	150W
LS333ANS-2LED, 3W	5	18	23
LS333ANS-2LED, 6W	3	10	14
LS333ANS-2LED, 9W	-	6	9

### Power Supply Specifications

DC Power Supplies

#### LSLED-24V100W240

24V DC Ripple Free Power Supply

<b>Input</b>	170-250V AC, 50/60Hz
<b>Output</b>	100W, 24V DC, 4.2A
<b>Ambient Temperature Rating</b>	-10°C to 50°C
<b>Compliance</b>	IEC61347-2-13, CE
<b>IP Rating</b>	IP66
<b>Short Circuit Protection</b>	Yes
<b>Open Circuit Protection</b>	Yes
<b>Protection Class</b>	Class II CE

### International Market

#### LSLED-24V150W240

24V DC Ripple Free Power Supply

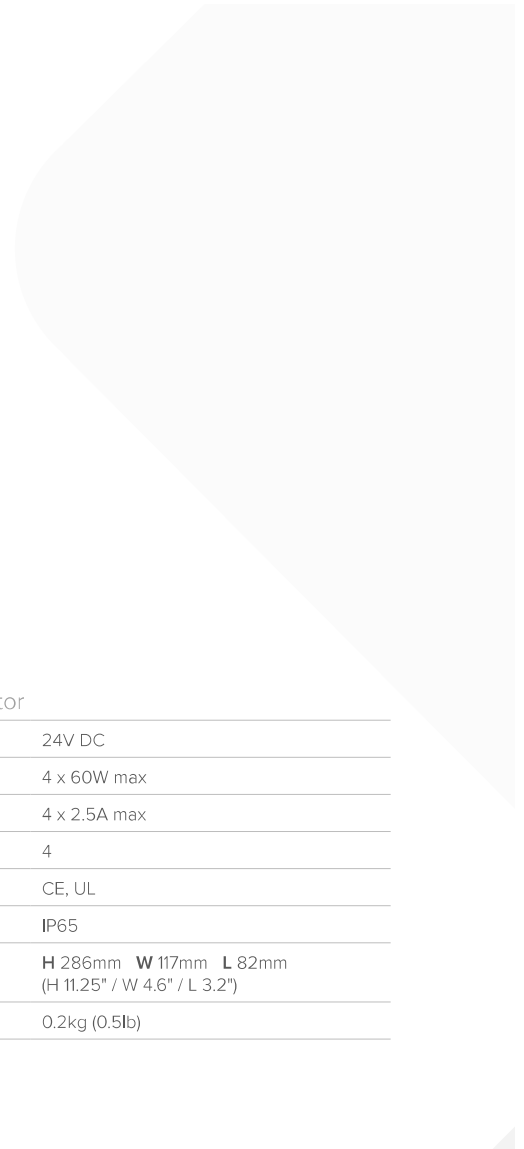
<b>Input</b>	90-305V AC, 50/60Hz
<b>Output</b>	150W, 24V DC, 6.3A
<b>Ambient Temperature Rating</b>	-10°C to 50°C
<b>Compliance</b>	IEC61347-2-13, CE
<b>IP Rating</b>	IP66
<b>Short Circuit Protection</b>	Yes
<b>Open Circuit Protection</b>	Yes
<b>Protection Class</b>	Class II CE



## LSLED-24V40W240

Electronic DC Power Supply - wall mounted

Input	100-240V AC, 50/60Hz
Rating	40W / 1.67A
Output	24V
Ambient Temperature Rating	-25°C to 60°C (-13°F to 140°F)
Output Circuits	1
Approvals	CE, EN60950-1, EN61347-2-13
IP Rating	IP65/67
Dimensions	H 171mm W 62mm L 37mm (H 6.7" / W 2.4" / L 1.5")
Weight	0.7kg (1.6lb)



## Control Related Equipment

### LS6125-2

0-10V to PWM translator - wall mounted

Input	100-240V AC, 50/60Hz
Rating	20W / 0.83A
Output	24V
Ambient Temperature Rating	-10°C to 50°C
Open Circuits	1
Control Protocol	0-10V
Approvals	CE
IP Rating	IP65/67
Dimensions	H 204mm W 166mm L 91mm (H 8.0" / W 6.5" / L 3.6")
Weight	0.5kg (1.1lb)

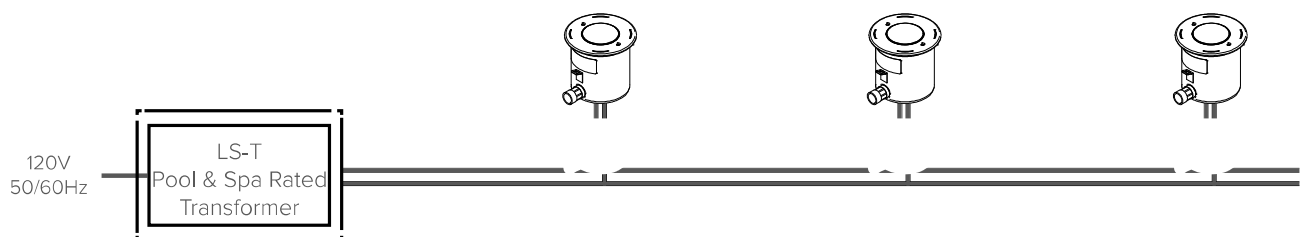
### LS67100

DMX to PWM translator

Input	24V DC
Rating	4 x 60W max
Output	4 x 2.5A max
Open Circuits	4
Approvals	CE, UL
IP Rating	IP65
Dimensions	H 286mm W 117mm L 82mm (H 11.25" / W 4.6" / L 3.2")
Weight	0.2kg (0.5lb)

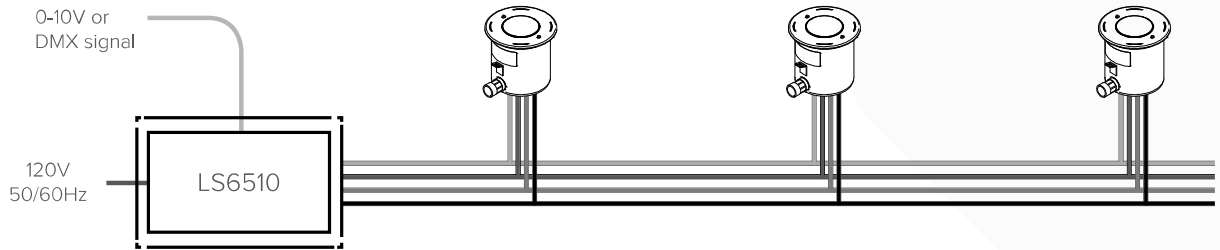
## Wiring Diagram - Static Colour - Non-Dimming 12-15V AC

## North American Market



### Wiring Diagram - Static Colour (0-10V / DMX) on 24V DC Circuit

Please note: The use of a GFCI may be required. Consult local wiring rules.



#### Control Protocols

0-10V

For 0-10V control signal, use LS6510 0-10V to PWM converter

DMX

For DMX control signal, use LS6510 converter

#### Maximum Circuit Load

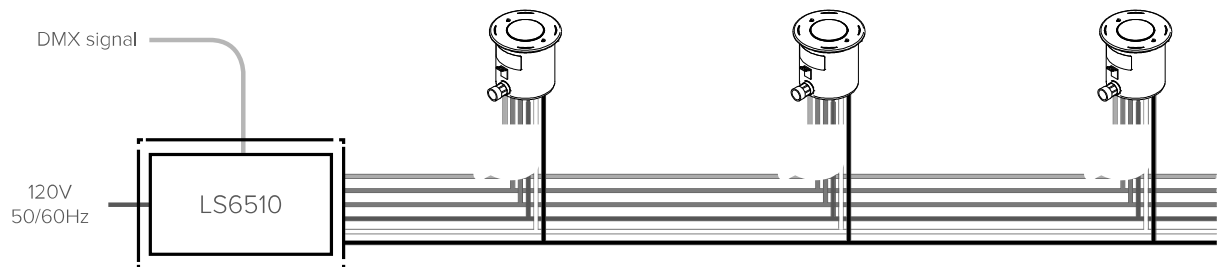
Compatibility with each transformer or power supply is indicated by the value shown in the table, representing the maximum number of luminaires that may be powered from each transformer or power supply. Please note, this does not take into consideration voltage drop or ampacity limits of the branch circuit. In addition, dimming circuit total wire length must be kept under 328' (100m). For assistance, please consult factory.

Pool, Spa & Fountain Power Supply				
	LS-T-100	LS-T-300	LS-T-500	LS6510
Input Voltage	120V, 60Hz			120V, 60Hz
Output Voltage	12/13/14V, 60Hz			24V DC
Wattage	100W	300W	500W	240W
LS333ANS-2LED, 3W	14	42	70	45
LS333ANS-2LED, 6W	7	23	38	29
LS333ANS-2LED, 9W	5	15	25	18

NOTE: The above diagrams are intended to show electrical pathways between luminaires and ancillary device. These diagrams are not intended to show type or colour of cord / wire, luminaire input voltage rating, wire gauge or approved use of the cord / wire supplied with luminaires.

### Wiring Diagram - Dynamic Colour (DMX) for 24V DC Circuit

North American Market



#### Control Protocols

DMX

For DMX control signal, use LS67100 DMX to PWM converter



## Maximum Circuit Load

Compatibility with each transformer or power supply is indicated by the value shown in the table, representing the maximum number of luminaires that may be powered from each transformer or power supply. Please note, this does not take into consideration voltage drop or ampacity limits of the branch circuit. In addition, dimming circuit total wire length must be kept under 328' (100m). For assistance, please consult factory.

Pool, Spa & Fountain Power Supply				
	LS-T-100	LS-T-300	LS-T-500	LS6510
Input Voltage	120V, 60Hz			120V, 60Hz
Output Voltage	12/13/14V, 60Hz			24V DC
Wattage	100W	300W	500W	240W
LS333ANS-2LED, 3W	14	42	70	45
LS333ANS-2LED, 6W	7	23	38	29
LS333ANS-2LED, 9W	5	15	25	18

NOTE: The above diagrams are intended to show electrical pathways between luminaires and ancillary device. These diagrams are not intended to show type or colour of cord / wire, luminaire input voltage rating, wire gauge or approved use of the cord / wire supplied with luminaires.

## Transformer / Power Supply Specifications

## North American Market

### Pool, Spa and Fountain Transformers

#### LS6510

Power Unit for Pool, Spa & Fountain Luminaires

<b>Input</b>	120V
<b>Rating</b>	240W
<b>Output</b>	24 or 30V DC
<b>Output Circuits</b>	1
<b>Approvals</b>	UL 379, CAN/CSA C22.2 No. 218.1, 218.2, CE
<b>IP Rating</b>	IP65, suitable for wet locations
<b>Dimensions</b>	H 5.3" W 13.4" D 9.3" (H 134mm / W 341mm / D 236mm)
<b>Weight</b>	13.2lb (6.0kg)

#### LS-T-100

Magnetic Transformer - wall mounted

<b>Input</b>	120V
<b>Rating</b>	100W
<b>Output</b>	12 / 13 / 14V
<b>Output Circuits</b>	1
<b>Protection</b>	Electrostatic shield, short circuit and over-voltage breaker
<b>Approvals</b>	UL, CUL
<b>NEMA Rating</b>	3R
<b>Construction</b>	Powder coated steel
<b>Dimensions</b>	H 9.06" W 5.06" D 4.59" (H 230mm / W 129mm / D 117mm)
<b>Weight</b>	12.5lb (5.7kg)

#### LS-T-300

Magnetic Transformer - wall mounted

<b>Input</b>	120V
<b>Rating</b>	300W
<b>Output</b>	12 / 13 / 14V
<b>Output Circuits</b>	1
<b>Protection</b>	Electrostatic shield, short circuit and over-voltage breaker
<b>Approvals</b>	UL, CUL
<b>NEMA Rating</b>	3R
<b>Construction</b>	Powder coated steel
<b>Dimensions</b>	H 9.06" W 5.06" D 4.59" (H 230mm / W 129mm / D 117mm)
<b>Weight</b>	13lb (5.9kg)

#### LS-T-500

Magnetic Transformer - wall mounted

<b>Input</b>	120V
<b>Rating</b>	500W
<b>Output</b>	12 / 13 / 14V
<b>Output Circuits</b>	1
<b>Protection</b>	Electrostatic shield, short circuit and over-voltage breaker
<b>Approvals</b>	UL, CUL
<b>NEMA Rating</b>	3R
<b>Construction</b>	Powder coated steel
<b>Dimensions</b>	H 9.06" W 5.06" D 4.59" (H 230mm / W 129mm / D 117mm)
<b>Weight</b>	14lb (6.4kg)





The LS6510 combines power and dimming control into a single convenient unit. Specifically approved for pool, spa and fountain luminaires up to 30V DC, the LS6510 accepts 0-10V or DMX protocols, with the ability to fine tune dimming output. This makes it easier to use with many other manufacturer's luminaires, as well as the complete suite of Lumascape underwater luminaires. The diecast aluminium housing features a 9-step surface treatment process, including two layers of powder coat, making the LS6510 perfect for poolside locations or other locations where corrosion/exposure is of concern. The LS6510 conforms to the UL379 pool, spa and fountain power unit standard, making it the ideal solution for a wide range of underwater lighting projects.

### Electrical

<b>Input Voltage</b>	110-240V, 50/60Hz (International Market) 120V, 50/60Hz (North American Market)
<b>Output Voltage</b>	24V DC 30V DC
<b>Output Power</b>	240W
<b>Efficiency (typ)</b>	92.5%
<b>Electrical Connections</b>	Line Voltage In (2+E), 1 x #10 (6mm <sup>2</sup> ), 2 x #16 (1.5mm <sup>2</sup> ) Low Voltage Out, 1 x #10 (6mm <sup>2</sup> ), 2 x #16 (1.5mm <sup>2</sup> )
<b>Entries (CE)</b>	2 x M20 (threaded) - Power in / out 2 x M20 (threaded) - Low Voltage out 2 x M12 - Data / control looping (dimnable models)
<b>Entries (UL / ETL)</b>	2 x 3/4" - Power in / out 2 x 3/4" (threaded) - Low Voltage out 2 x 1/2" - Data / control looping (dimnable models)

### Control

<b>Protocols</b>	0-10V - (10%) Input for controlling PWM or PowerSync™ luminaires. DMX / RDM Input for controlling PWM or PowerSync™ luminaires. Configurable PWM output orientation and frequency.
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### Physical

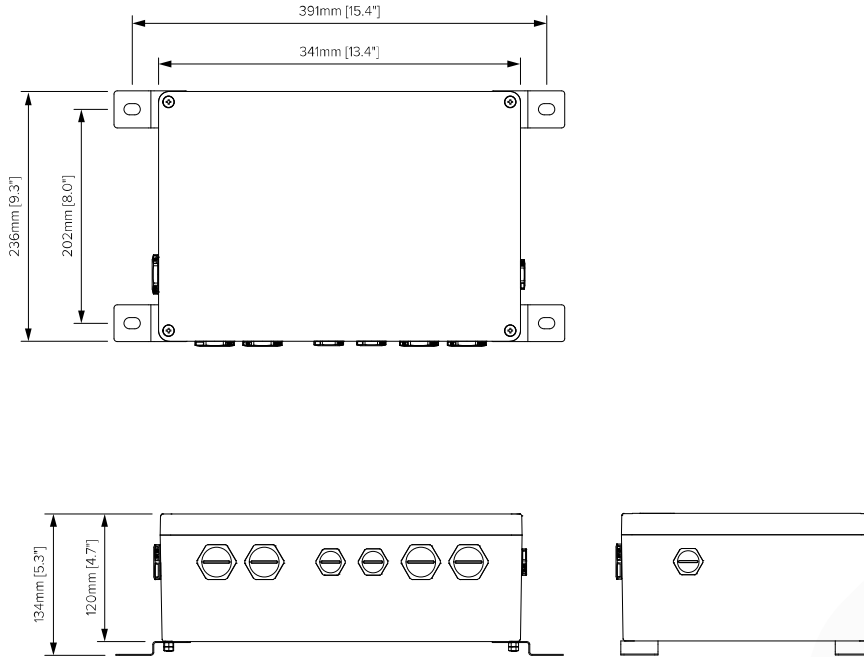
<b>Housing</b>	Diecast Aluminium, Stainless Steel hardware
<b>Finish</b>	Powder coated
<b>Installation</b>	Surface-mounted
<b>Ambient Operating Temperature</b>	-40°C to 50°C (-40°F to 122°F)
<b>Weight</b>	6.0kg (13.2lb)

### Certification & Compliance

<b>IP Rating</b>	IP65
<b>Environment</b>	Dry, Damp, Wet locations
<b>Certifications</b>	UL379 - Power Unit for Fountain, Swimming Pool and Spa CSA C22.2 No. 89-15 - Swimming-pool Luminaires, Submersible Luminaires, and Accessories CSA C22.2 No. 218.1-13 - Spas, Hot Tubs, and Associated Equipment CSA C22.2 No. 218.2-15 - Hydromassage Bathtub Appliances



### Dimensions



Power		Code	
24V		24V	
30V		30V	

Wattage		Code	
240W		240W	

Voltage		Code	
110-240V, 50/60 Hz		01 <sup>(1)</sup>	
120V, 50/60 Hz		04 <sup>(2)</sup>	

Control		Code	
DMX / RDM and 0-10V input. For controlling PWM luminaires		DX	
DMX / RDM and 0-10V input. For controlling PowerSync™ luminaires		PD	

Finish		Code	
Black		BL	
Anthracite Grey		AG	
Basalt Grey		BT	
Anodic Silver		SL	
White		WT	
Dark Bronze		DB	
Latte		LT	
Dark Aluminum		DA	
Custom RAL		CC <sup>(1)</sup>	

(1) Please provide RAL colour.

(1) International market  
(2) North American market

