



The PowerSync™ Data Injector combines the convenience of standard wiring methods to translate control signals into a digital format that can be transmitted over standard copper wire. This allows highly granular addressing and high speed digital control of every luminaire, using only four wires. The PowerSync™ Data Injector accepts a growing list of standard protocols (0-10 V, DMX/RDM), for simple integration with a wide selection of control systems using these industry standard protocols.

### Electrical

<b>Input Voltage</b>	110-240V, 50/60Hz (International Market) 120-277V, 50/60Hz (North American Market)
<b>Unit Power Consumption</b>	< 5W (max)
<b>Connected Current</b>	16A (max)
<b>Electrical Connections</b>	Line Voltage In (2+E) PowerSync™ Out (2+E+Data)
<b>Entries (North American Market)</b>	3 x ¾" clearance for Power In/PowerSync™ out 3 x ½" clearance for Data/control looping
<b>Entries (International Market)</b>	3 x M20 (threaded) for Power In/PowerSync™ out 3 x M12 (threaded) for Data/control looping

### Control

<b>Interface</b>	Lumascape PowerSync™
<b>Protocols</b>	DMX/RDM, ArtNet (Ethernet Based), PWM <sup>(1)</sup> , 0-10V (sink or source) <sup>(1)</sup> , Phase Dimming <sup>(1)</sup> Some protocols require additional hardware. For details and for other available protocols contact factory. 1. Not available for Colour Changing.
<b>Systems</b>	Range of third-party controllers

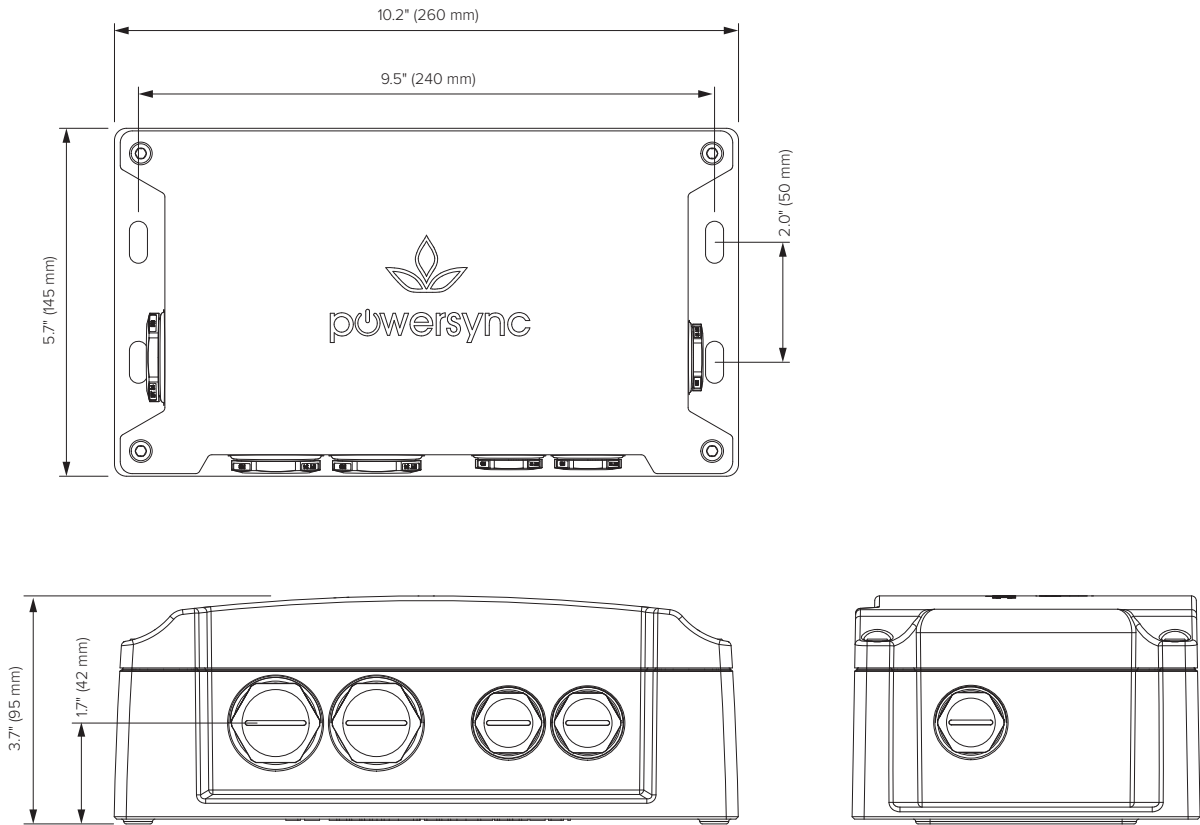
### Physical

<b>Housing</b>	Die cast marine grade aluminum
<b>Finish</b>	Superior 9-step powder-coating process, including marine epoxy undercoat and polyester top coat.
<b>Installation</b>	Surface-mounted
<b>Mounting Hole Pattern</b>	9.45" x 1.97" (240mm x 50mm)
<b>Mounting Hole Size</b>	Clearance for 1/4" (M6)
<b>Ambient Operating Temperature</b>	-40°C to 50°C (-40°F to 122°F)
<b>Weight</b>	3.6kg (8.0lb)

### Certification & Compliance

<b>IP Rating</b>	IP66
<b>Environment</b>	Dry, Damp, Wet locations
<b>Certifications</b>	UL, CE, RCM

Dimensions



Order Code

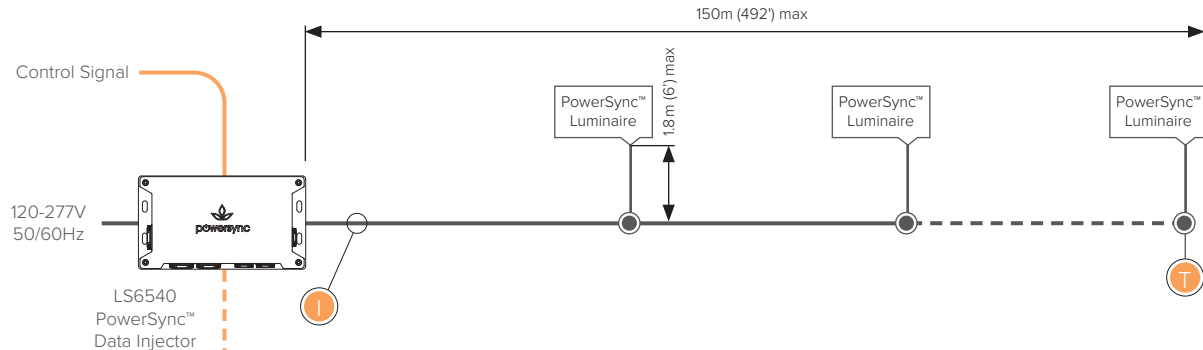
Input Voltage		Code	Control		Code	Finish		Code
110-240V, 50/60Hz		01 <sup>(1)</sup>	DMX / RDM			Black		BL
120-277V, 50/60Hz		09 <sup>(2)</sup>	Wireless DMX (CRMX)		PD	Anthracite Grey		AG
			0-10 V (sink or source) <sup>(1)</sup>			Basalt Grey		BT
			Phase Dimming <sup>(1)(2)(3)</sup>			Anodic Silver		SL
			For other protocols contact factory			White		WT
			(1) Not suitable for Dynamic Colour control			Dark Bronze		DB
			(2) Compatible with Crestron only			Latte		LT
			(3) Requires adaptor - order separately			Dark Aluminum		DA
						Custom RAL		CC <sup>(1)</sup>
						(1) Please provide RAL colour.		

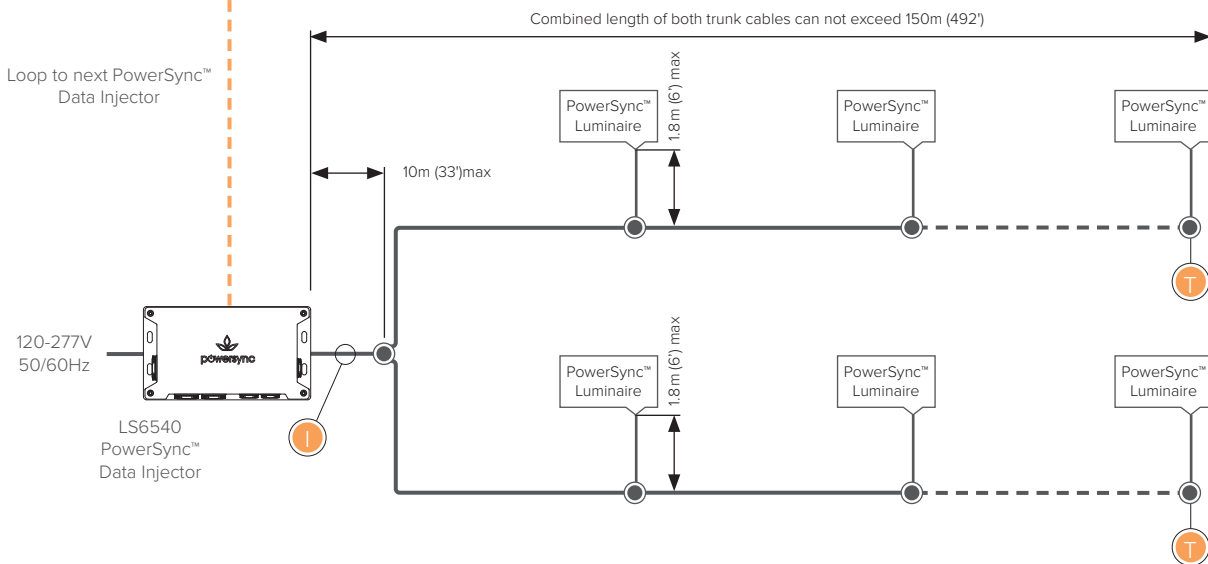
Input Voltage		Code
220-240V		01 <sup>(1)</sup>
120V		04 <sup>(2)</sup>
240-277V		09 <sup>(2)</sup>
Required for phase dimming applications only		
(1) International market		
(2) North American market		

Network Topology - PowerSync™ Dimmable

PowerSync™ Topology 1 - Single Trunk Cable



PowerSync™ Topology 2 - Split Trunk Cable



Up to 45 luminaires per run under the following conditions:

- Max total cable run length 150m (492') in up to two trunk cables
- For run lengths in excess of 30m (100'), the *data* wire gauge cannot exceed 14 AWG (2.5mm<sup>2</sup>)
- For run lengths up to 30m (100'), the *data* wire gauge is not governed
- Refer to 'Maximum Circuit Load' table for circuit limitations
- Always observe local electrical codes for branch circuit current limitations

**T** Terminator

Use PowerSync™ terminator, supplied with leader cable to terminate last luminaire in chain.

**I** Maximum Current

≤16.0A through LS6540 Data Injector.

**●** Connection Type

Circuits can be configured as either connectorised or hardwired. For details consult installation instructions and comply with local electrical codes.

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.



## Connectorised Accessories

### Cables & Connectors

Leader & Jumper Cables (1.5mm <sup>2</sup> ) - International Market	Code
Leader Cable 10m [32'] (4 x 1.5mm <sup>2</sup> )	LS6402C-032
Leader Cable custom length in feet - 30m [98'] max. (4 x 1.5mm <sup>2</sup> )	LS6402C-xxx
Jumper Cable 0.3m [1'] fixture gap spacing (4 x 1.5mm <sup>2</sup> )	LS6404C-001
Jumper Cable 0.6m [2'] fixture gap spacing (4 x 1.5mm <sup>2</sup> )	LS6404C-002
Jumper Cable 1.2m [4'] fixture gap spacing (4 x 1.5mm <sup>2</sup> )	LS6404C-004
Jumper Cable 3m [10'] fixture gap spacing (4 x 1.5mm <sup>2</sup> )	LS6404C-010
Jumper Cable custom fixture gap spacing in feet - 30m [98'] max. (4 x 1.5mm <sup>2</sup> )	LS6404C-xxx

Leader & Jumper Cables (2.5mm <sup>2</sup> ) - International Market	Code
Leader Cable 10m [32'] (4 x 2.5mm <sup>2</sup> )	LS6402C-2.5-032
Leader Cable custom length in feet - 30m [98'] max. (4 x 2.5mm <sup>2</sup> )	LS6402C-2.5-xxx
Jumper Cable 0.3m [1'] fixture gap spacing (4 x 2.5mm <sup>2</sup> )	LS6404C-2.5-001
Jumper Cable 0.6m [2'] fixture gap spacing (4 x 2.5mm <sup>2</sup> )	LS6404C-2.5-002
Jumper Cable 1.2m [4'] fixture gap spacing (4 x 2.5mm <sup>2</sup> )	LS6404C-2.5-004
Jumper Cable 3m [10'] fixture gap spacing (4 x 2.5mm <sup>2</sup> )	LS6404C-2.5-010
Jumper Cable custom fixture gap spacing in feet - 30m [98'] max. (4 x 2.5mm <sup>2</sup> )	LS6404C-2.5-xxx

Leader & Jumper Cables - North America Market	Code
Leader Cable 10m [32'] (4 x 14AWG)	LS6402U-032
Leader Cable 8m [26'] (4 x 14AWG)	LS6402U-026
Leader Cable 15m [50'] (4 x 14AWG)	LS6402U-050
Leader Cable specify custom length in feet - 30m [98'] max. (4 x 14AWG)	LS6402U-xxx
Jumper Cable 0.3m [1'] fixture gap spacing (4 x 14AWG)	LS6404U-001
Jumper Cable 0.6m [2'] fixture gap spacing (4 x 14AWG)	LS6404U-002
Jumper Cable 1.2m [4'] fixture gap spacing (4 x 14AWG)	LS6404U-004
Jumper Cable 3m [10'] fixture gap spacing (4 x 14AWG)	LS6404U-010
Jumper Cable specify custom fixture gap spacing in feet - 30m [100'] max. (4 x 14AWG)	LS6404U-xxx

All connectorised options in North America are limited to 12.8 A branch circuit load.

Terminator	Code
DMX Terminator Hardwired (CCC, CE, UL)	LS6407
PowerSync™ Terminator Hardwired, Mains / Low Voltage (CCC, CE)	LS6406-01
PowerSync™ Terminator Hardwired, Mains / Low Voltage (UL)	LS6406-09
PowerSync™ Terminator Connectorised, Mains Voltage (CCC, CE, UL)	LS6417

Note: A terminator ships with every leader cable. Order separately for spare parts and split runs only.

PowerSync™ Splitters	Code
PowerSync™ Y - Connector (4 x 1.5mm <sup>2</sup> ), Mains Voltage (CCC, CE)	LS6425C
PowerSync™ Y - Connector (4 x 2.5mm <sup>2</sup> ), Mains Voltage (CCC, CE)	LS6425C-2.5
PowerSync™ Y - Connector (4 x 14AWG), Mains Voltage (UL)	LS6425U

## Wire Colours & Designations

### Mains Voltage - International Market

Designation	Colour
Active	Brown
Neutral	Blue
Earth	Green / Yellow
Data	Black



### Mains Voltage - North American Market

Designation	Colour
Active	Black
Neutral	White
Earth	Green / Yellow
Data	Grey [or Red]

