



The Erden E4 is a medium-powered in-ground that combines technology and performance in a modern form factor. Packed with features including **EasyGlow™** visual comfort and **CoolDrive™** thermal management technologies. **PowerSync™** allows for highly granular digital control via common protocols using mains voltage. Available in white, color-changing and tunable white light engines.

Performance

Static White & Colour ¹	Lumen Output (lm)	Efficacy (lm/W)	Peak Intensity (cd)
● 2,700 K (80 CRI)	1,690	84	37,900
● 3,000 K (80 CRI)	1,740	86	39,600
○ 3,500 K (80 CRI)	1,920	96	42,000
● 4,000 K (80 CRI)	1,910	95	43,000
● 5,000 K (70 CRI)	1,700	84	38,500

¹ Lumen output is based on 10° lens.

Dynamic Colour ²	Lumen Output (lm)	Efficacy (lm/W)	Peak Intensity (cd)
● RGBA	990	50	17,200
● RGBW (4,000 K) with Royal Blue*	1,000	51	20,400

² Lumen output is based on 10° lens.

Tunable White ³	Lumen Output (lm)	Efficacy (lm/W)	Peak Intensity (cd)
● 2,700 K - 6,500 K	1,780	88	40,200

³ Lumen output is based on 10° lens.

Beam Angles	10°, 13°, 20°, 26°, 47°, 10° x 40°, 40° x 10°, 20° x 60°, 60° x 20°
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* NOTE:

The default RGBW colors have recently changed to the RGBW with Royal Blue (4BW code). These colors will not match existing products with the earlier RGBW with Mid-Blue (4CW code). Contact Lumascape for custom LED Colors.



Products and specifications are subject to change without notice. LS3040-221028

Electrical

LED Power	16 W
Consumption	≤20 W maximum
Lifetime	> 60,000hrs (B10, L70)
Input Voltage	International 220-240 Vac, 50 Hz North America 120/277 Vac, 60 Hz
Earth Leakage	0.3 mA @ 120 V, 0.4 mA @ 240 V, 0.6 mA @ 277 V
Thermal Management	CoolDrive™ onboard thermal monitoring and control.

Control

Interface	Lumascap PowerSync ™
Protocols ¹	DMX / RDM, ArtNet, PWM ² , 0 - 10V (sink or source) ²
PWM Frequency	2 kHz flicker-free dimming to 0.1%
Systems	Range of third-party controllers

¹ Some protocols require additional hardware. For more information contact Lumascap.

² Not available for color-changing.

Physical

Housing	Marine-grade 316 stainless-steel housing, high-strength glass, teflon coated cover screws, marine-grade 316 stainless-steel cover (polished or brushed finish).
Installation	Pre-Installation Blockout for concrete pour, drive-over and general use applications Mounting Collar for decks and grates Tall Tube for uplighting effect in vegetation areas Direct Burial for landscapes, planters and special applications
Mounting Accessories	LS644-K Pre-Installation Concrete Blockout LS644-2 Mounting Collar for decks and grates (International only)
Adjustable	-5° to +20° tilt, 360° rotation
Ambient Operating Temperature	-4°F to +122°F (-20°C to +50°C)
Surface Temperature	≤ 149°F (65°C)
Weight	8.8 lbs (4.0 kg)
Drive-Over	With OptiClear lens and pre-installation kit (LS644-K)

Certification & Compliance

IP Rating	IP68
IK Rating	IK10
Static Load Rating	3,968 lbs (1,800 kg)
Environment	Dry, Damp, Wet locations Inherently Protected Suitable for use in poured concrete
Certifications	ETL, CE, RCM

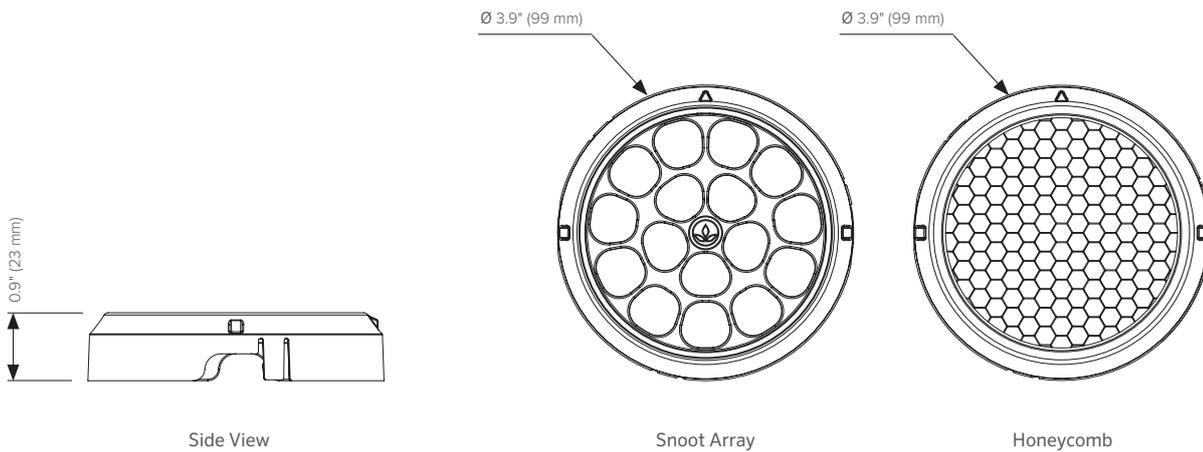
Accessories

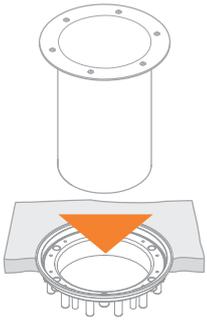
LS6248 Honeycomb Louver
Provides additional glare control. Available in black only. Order separately.

LS6247 Snoot Array Louver
Provides additional glare control. Available in black only. Order separately.



Technical Drawings





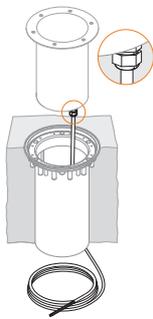
Mounting Collar for Decks and Grates

This type of installation requires the **LS644-2** Mounting Collar (ordered separately), which supports the installation in decks, grates and hollow floors with sufficient ventilation.

Not available in North America.

Used for	Decks and grates Hollow floors with sufficient ventilation
Benefits	Easy installation in decks, grates and hollow floors
Restrictions	Available for International market only
Accessories	LS644-2 Mounting Collar

Connection type '84'



Flexible Cable

For connections to the branch circuit via junction box (by others) or other approved method. 6.5' (2 m) length. For other length options, contact Lumascape.

Flush Cover Options

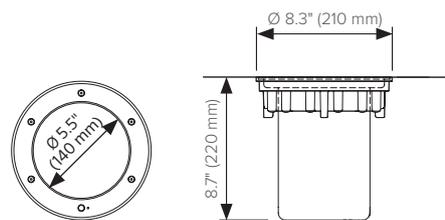
Flush covers for mounting collar use special seals and support brushes.

Not suitable for use in North America.



Pre-Installation Blockout Round Flush Cover

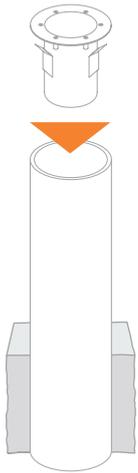
- SS316: Polished
- SS316: Brushed



Specification

Use the table below to specify your Mounting Collar. For more information and other cable options contact Lumascape.

	LS644-2
Connection Type	Code
Mounting Collar for use with hard wire connections only	LS644-2



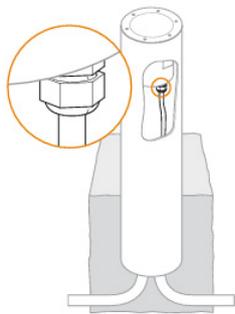
Tall Tube

This type of installation requires North American 8" schedule 40 conduit (not included), in situations where foliage may overgrow, flush in-ground luminaires over time, where a high water table is of concern or other scenarios where this type of mounting method is appropriate.

Suitable for use in North America Only

Benefits	Easy installation into concrete
Restrictions	Only available with Connection Type 84 in North America Only Not easy to remove for service (requires removal tool) Not suitable for drive-over applications

Connection type '84'



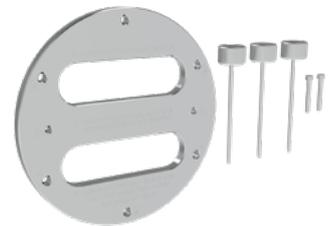
Flexible Cable

For connections to the branch circuit via junction box (by others) or other approved method. 6.5' (2 m) length. For other length options, contact Lumascape.

Luminaire Removal Tool

This removal tool allows for easy removal of the lid on the luminaire installed into a tall tube. Comes complete with plate, three (3) pins and two (2) screws. Ordered separately.

Suitable for use in North America Only



	LS6251
Accessory	Code
Luminaire Removal Tool	LS6251

Specification

For installation into North American 8" schedule 40 conduit (not included).

Suitable for use in North America Only

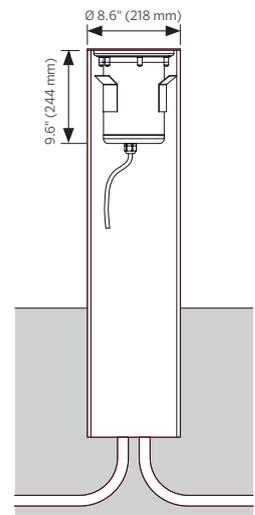
Flush Cover Options

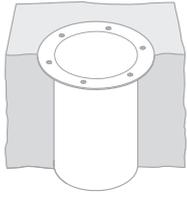
Flush covers for Tall Tube use special seals and support brushes.

Suitable for use in North America Only



- Tall Tube Round Flush Cover**
- SS316: Polished
 - SS316: Brushed
 - Powder-coat, Black



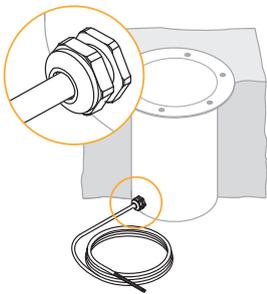


Direct Burial

Luminaire is put directly into soil or concrete.

Used for	Landscaping areas Applications where depth is restricted Rate for use in concrete pour applications Economical option
Benefits	Allows for maximum heat dissipation
Restrictions	Not as easy to remove for service as pre-install version Not suitable for drive-over (requires pre-installation) Not available with Connection Type 77 (requires pre-installation) Connection Type 82 only available for North American market.

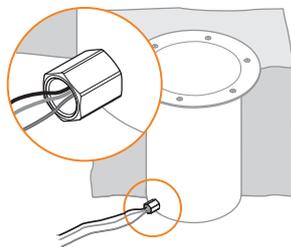
Connection type '84'



Flexible Cable

For connections to the branch circuit via junction box (by others) or other approved method. 6.5' (2 m) length. For other length options, contact Lumascape.

Connection type '82'
North American market only

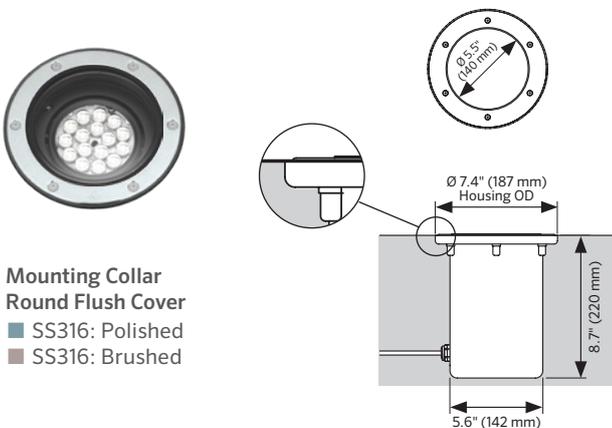


1/2" NPT Adapter

The luminaire is factory-fitted with 6.5' (2 m) hookup wire. Ensure terminations can be made within this length. For other length options, consult Lumascape.

Recessed Cover Options

Use recessed cover for installation in soil, grass, pavers and other uneven surfaces where no cover overhang is required.

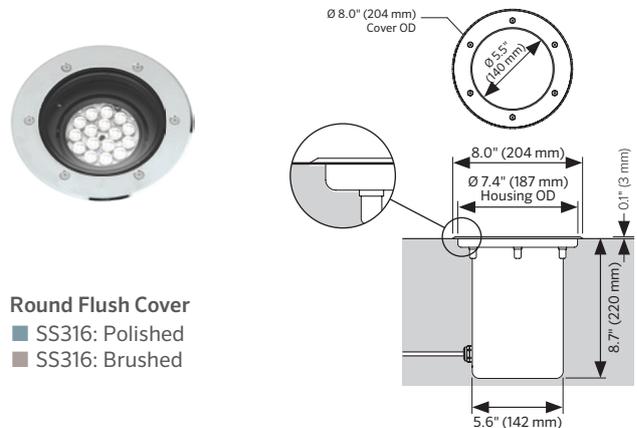


Mounting Collar Round Flush Cover

- SS316: Polished
- SS316: Brushed

Flush Cover Options

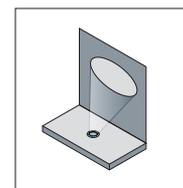
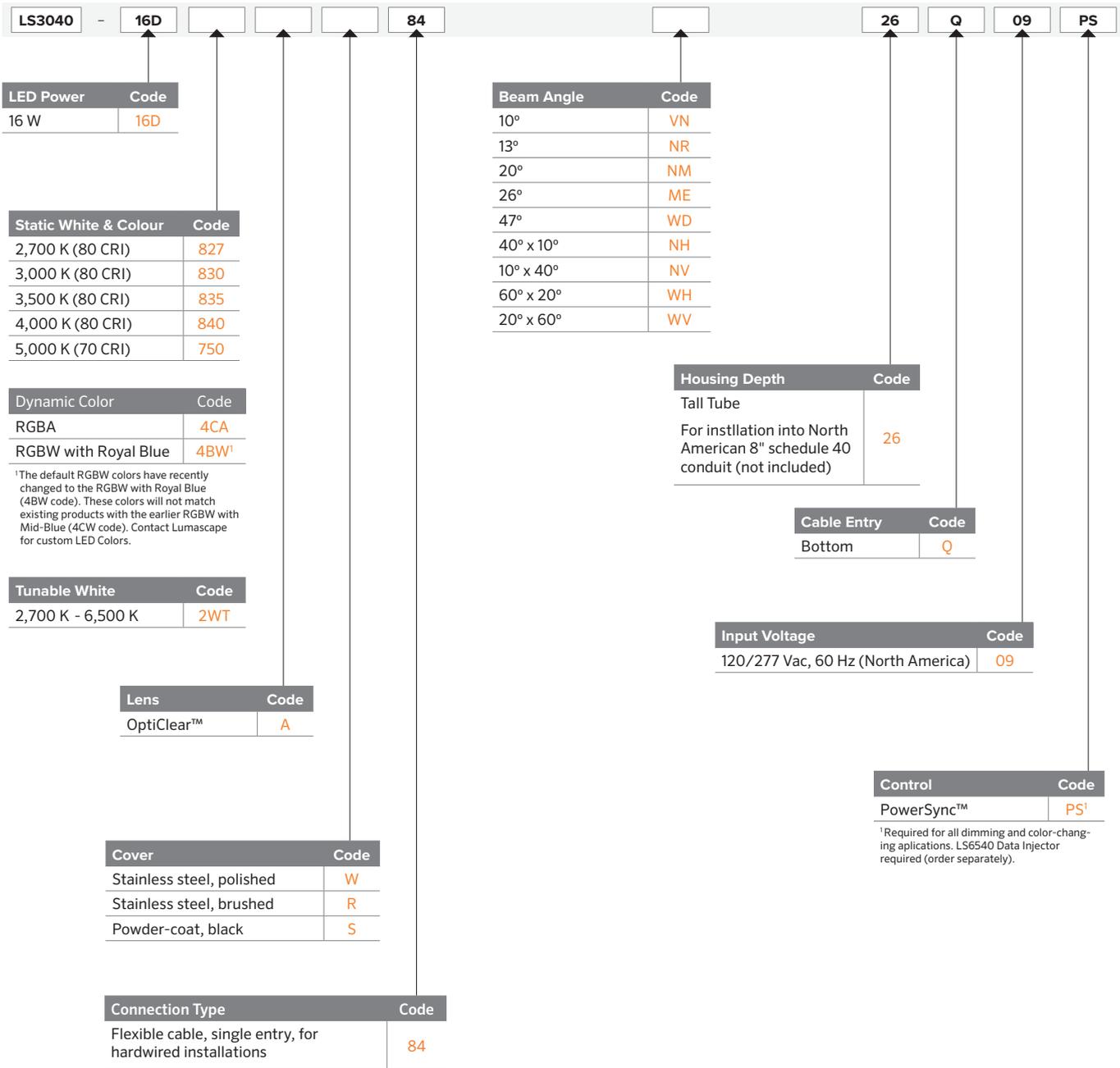
Use flush covers for installation in fine finished surfaces such as granite and marble. Can also be used in some suspended applications to conceal gaps between the luminaire and the surrounding surface.



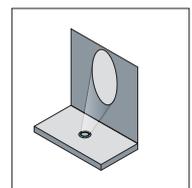
Round Flush Cover

- SS316: Polished
- SS316: Brushed

Tall Tube Specification – North American Only



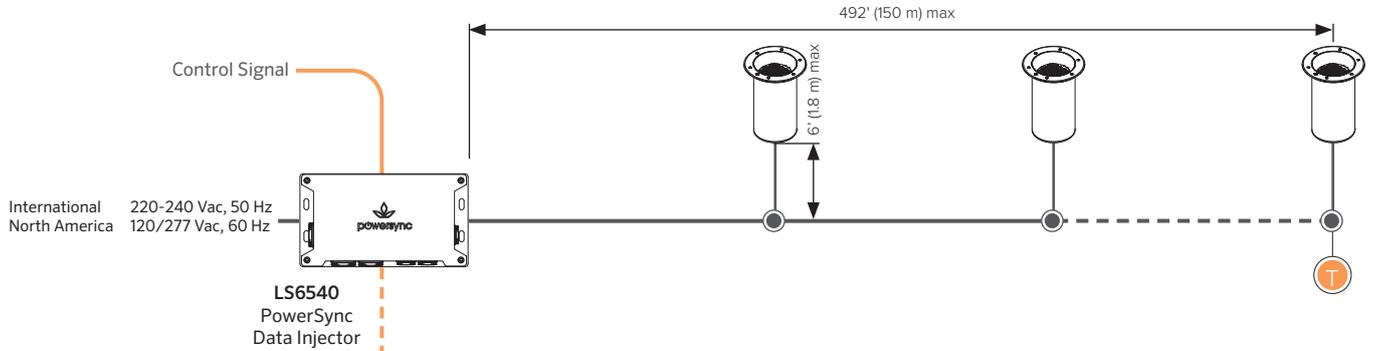
Beam Orientation for the "NH" and "WH" optical system



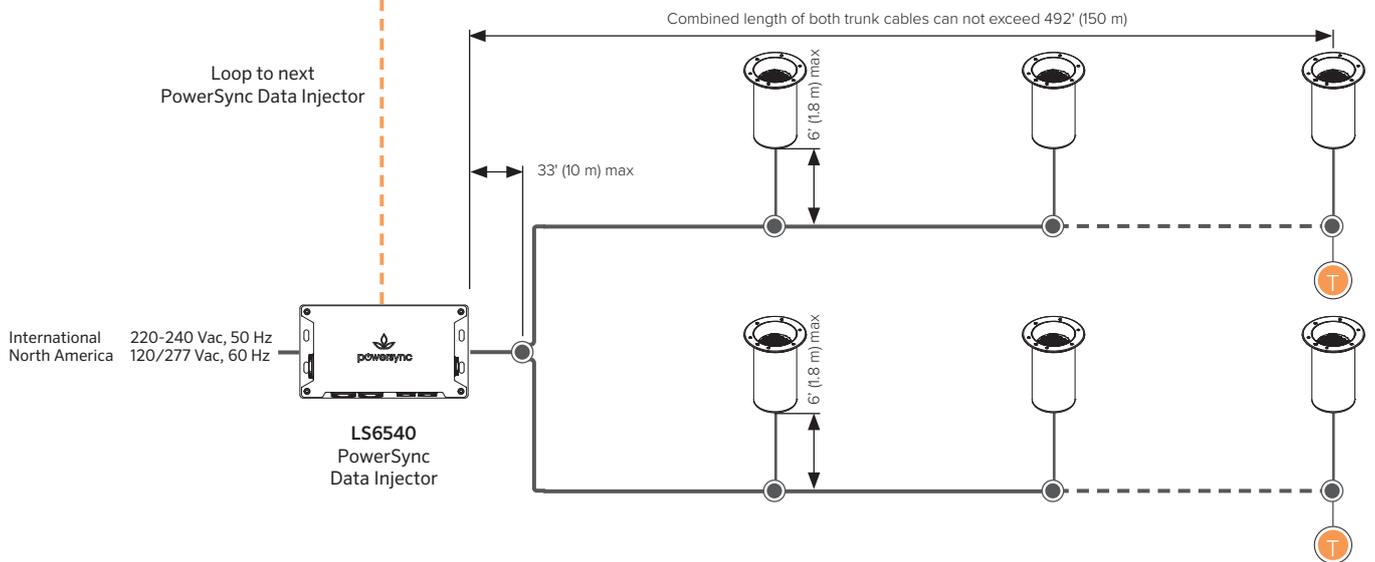
Beam Orientation for the "NV" and "WV" optical system

Network Topology – Line Voltage 220-240 Vac, 120/277 Vac Dimmable and Color-Changing via PowerSync® 4

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 492' (150 m) in up to two trunk cables
- For run lengths in excess of 100' (30 m), the *data* wire gauge cannot exceed 14 AWG (2.5 mm²)
- For run lengths up to 100' (30 m), 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 LS6540, to terminate last luminaire in chain at junction box.

● Connection Type

Circuits are configured as hardwired. For details consult installation instructions and comply with local electrical codes.

Maximum Circuit Load

Maximum Number of Interconnected Luminaires

Voltage	12 A	16 A
120 V	41	45
240 V	45	45
277 V	45	45

Refer to PowerSync™ installation instructions for maximum distance information and topology options.

Above circuit loading limits are based on maximum circuit current capacity. Cumulative earth leakage and voltage drop may need to be calculated.

For non-continuous runs contact Lumascope for more details.

Connectorized Accessories

Terminators

Product	Code
DMX Terminator Hardwired (CCC, CE, UL)	LS6407
PowerSync Terminator Hardwired, Line Voltage 220-240 Vac, (CE, CCC)	LS6406-01
PowerSync Terminator Hardwired, Line Voltage 120/277 Vac (UL)	LS6406-09
PowerSync Terminator Connectorized, Line Voltage 220-240 Vac, 120/277 Vac (CCC, CE, UL)	LS6417

* NOTE:

- DMX Terminators ship with PowerSync Data Injectors.
- Terminators for hardwired PowerSync installations ship with PowerSync Data Injectors.
- Terminators for connectorized PowerSync installations ship with Leader Cables.
- Order separately for spares only.

PowerSync Line Voltage 220-240 Vac, 120/277 Vac 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 and accepts a growing list of standard protocols (0-10V, DMX / RDM), for simple integration with a wide selection of control systems using these industry standard protocols.



LS6540

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2D

Product	Code	Input Voltage	Code	Control	Code	Finish	Code
Data Injector PS4	LS6540	220-240 Vac, 50 Hz (International)	01	DMX/RDM, 0-10 V Input	2D	Black	BL
		120/277 Vac, 60 Hz (North America)	09			Anthracite Gray	AG
						Basalt Gray	BT
						Graphite Gray	GH
						Anodic Silver	SL
						White	WT
						Dark Bronze	DB
						Latte	LT
						Dark Aluminum	DA
						Custom RAL	CC ¹

NOTE:

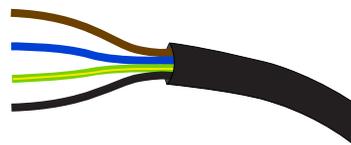
PowerSync Data Injector ships with three (3) hardwired terminators and one (1) hardwired DMX terminator.

¹RAL color required

Luminaire Wire Colors & Designations

Line Voltage 220-240 Vac - International

Designation	Color
Line	Brown
Neutral	Blue
Ground/Earth	Green / Yellow
Data	Black



Line Voltage 120/277 Vac - North America

Designation	Color
Line	Black
Neutral	White
Ground/Earth	Green / Yellow
Data	Orange or Red

