The Erden E8 is a high-powered, in-ground uplighter that combines technology and performance in a modern form factor. Packed with features including EasyGlow™ and CoolDrive™ thermal management technologies. PowerSync™ allows for highly granular digital control via common protocols. Available in white, color-changing and tunable white light engines.

Performance

Static White & Color[1]	Lumen Output (lm)	Efficacy (lm/W)	Peak Intensity (cd)
2,700 K (80 CRI)	3,360	83	139,500
3,000 K (80 CRI)	3,510	86	145,400
3,500 K (80 CRI)	3,880	92	176,300
4,000 K (80 CRI)	3,790	93	157,300
5,000 K (70 CRI)	3,510	86	145,400

[1] Lumen output values are based on a 6º lens.

Dynamic Color[2]	Lumen Output (lm)	Efficacy (lm/W)	Peak Intensity (cd)
RGBA	1,760	49	61,000
RGBW (4,000 K) with Royal Blue*	1,970	53	73,100

[2] Lumen output values are based on a 6º lens.

Tunable White[3]	Lumen Output (lm)	Efficacy (lm/W)	Peak Intensity (cd)
2,700 K - 6,500 K	3,580	88	148,400

[3] Lumen output values are based on a 6º lens.

Beam Angles	6º, 15º, 30º, 45º, 60º, 10º x 40º, 40º x 10º, 10º x 60º, 60º x 10º, 20º x 40º, 40º x 20º, 20º x 60º, 60º x 20º

* 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.

powersync®   easyglow™   cooldrive™   humantouch™   opticlear™
microantileach™   gripglass™   electropolish+™

Electrical

LED Power	30 W
Power Consumption	≤ 40 W
Lifetime	>60,000 hrs (B10, L70, TM21)
Input Voltage	International 220-240 Vac, 50 Hz North America 120/277 Vac, 60 Hz
Earth Leakage	0.3mA @ 120 Vac, 0.4mA @ 240 Vac, 0.6mA @ 277 Vac
Thermal Management	CoolDrive™ onboard thermal monitoring and control

Control

Interface	Lumascape **PowerSync®**
Protocols[1]	DMX/RDM, Artnet, PWM[2], 0-10 V (sink or source)[2]
PWM Frequency	2 kHz flicker-free dimming to 0.1%
RDM Functionality	PowerSync enabled Lumascape luminaires are shipped with a default RDM personality which provides smooth dimming control. For different dimming characteristics or to enable other special functionalities, the default personality can be changed through industry standard DMX/RDM.
Systems	Range of third-party controllers

[1] Some protocols require additional hardware. For more information and other available protocols contact Lumascape.
[2] Not available for color-changing or tunable white

Physical

Housing	Marine-grade 316 stainless steel housing, cover (polished or brushed finish), high-strength glass and teflon-coated cover screws.
Finish	Superior 9-step powder-coating process, including marine-grade epoxy undercoat and polyester top-coat
Installation	Pre-Installation blockout for concrete pour, drive-over and general use applications. Mounting collar for decks and grates. Direct burial for landscapes, planters and special applications.
Mounting Accessories	**LS640-K** Pre-installation concrete blockout **LS640-2** Mounting collar for decks and grates
Adjustable	-5º to +20° tilt, 360° rotation
Ambient Operating Temperature	-4ºF to 122ºF (-20°C to 50°C)
Surface Temperature	≤149 °F (65 °C)
Weight	15.0 lbs (6.8 kg)
Drive-Over	With OptiClear lens and pre-installation kit (LS640-K)

Certification & Compliance

IP Rating	IP68
IK Rating	IK10
Static Load Rating	9,259 lbs (4,200 kg)
Environment	Dry, Damp, Wet locations Inherently protected Suitable for use in poured concrete
Certifications	ETL, CE, UKCA, RCM, CCC

Accessories

Shielding & Glare Control
A range of shielding and glare control accessories are available to suit the Erden E8 In-ground.

LS6235 Diffusion Media

Modifies the harsh quality
of light being dispersed by the
luminaire by spreading the
beam. Order separately.

LS6234 Cross Hatch Louver

Provides additional glare
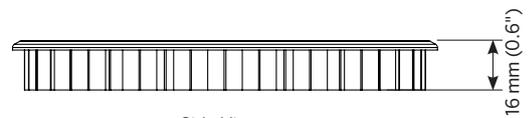control. Available in black only.
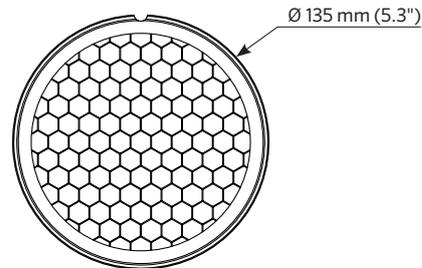Order separately.

OR

Specification Matrix

| LS6235 | – | |

Degree	Code
10°	10
20°	20
30°	30
40°	40

Technical Drawings

16 mm (0.6")

Side View

Ø 135 mm (5.3")
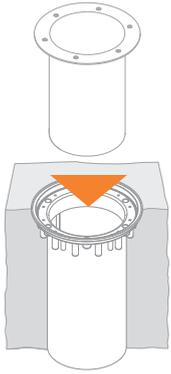
Top View

Pre-Installation

This type of installation requires the **LS640-K Pre-Installation Kit** (ordered separately), which acts as a concrete blockout and is intended for installation before the luminaire. This method ensures the luminaire itself is not damaged during concreting or other site works.

| Used for	Drive over applications General use applications Concrete pour applications where luminaire is to be installed after site work has been completed.
Benefits	Easy removal for servicing
Restrictions	Connection Type 82 only available for North American market
Accessories	**LS640-K** Pre-Installation Blockout

Connection type '84'
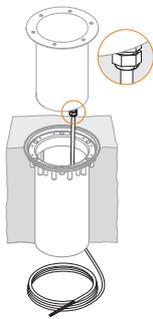
Flexible Cable
For connections to the branch circuit via junction box (by others) or other approved method. 6.5' (2 m) length. For other length options, contact Lumascape.
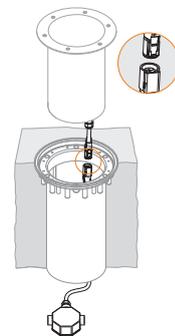
Connection type '82'
North American market only
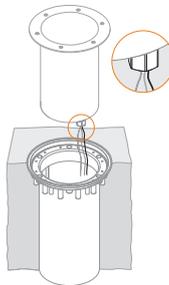
½" NPT Adapter
The luminaire is factory-fitted with 6.5' (2.0 m) hookup wire. Ensure terminations can be made within this length. For other length options, consult Lumascape.

Connection type '77/87'

IP68 Connector & Junction Box
The luminaire is fitted with an IP68 connector, which attaches directly to the cable supplied with LS640-K without the use of any tools. The cable is 3' (1 m) in length and is supplied with a junction box.

Flush Cover Options

Flush covers for pre-installation use special seals and support bushes to ensure static loads up to 9,259 lbs (4, 200 kg) are properly supported. In order to achieve this drive-over rating, OptiClear™ or GripGlass™ must be used.

Pre-Installation Blockout
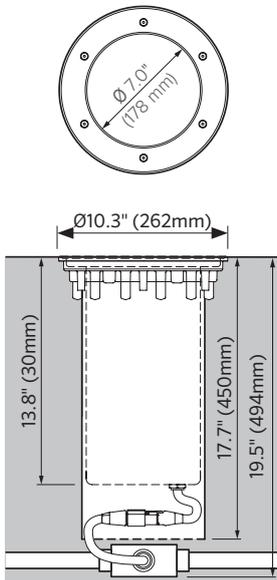**Round Flush Cover**
■ SS316: Polished
■ SS316: Brushed

Specification

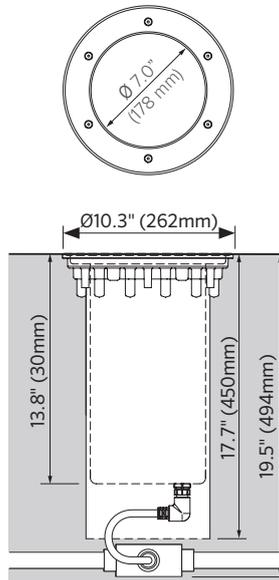Use the table below to specify your Pre-Installation Blockout.

LS640-K – [ ] [ ]

Connection Type	Code
Flexible cable, single entry, for hardwired installations (International) or Hookup wire and ½" NPT (82), single entry, for hard wired installations (North America only)	84
Flexible cable, single entry, for connectorized installations	77
Flexible cable, single entry for connectorized installations (non-dimmable applications only)	87

Input Voltage	Code
220-240 Vac, 50 Hz (International)	01
120/277 Vac, 60 Hz (North America)	09

Technical Drawings – Pre-Installation Kit

Connection type '77'

Ø 7.0" (178 mm)

Ø10.3" (262mm)

13.8" (30mm)

17.7" (450mm)

19.5" (494mm)

Connection type '87'

Ø 7.0" (178 mm)

Ø10.3" (262mm)

13.8" (30mm)

17.7" (450mm)

19.5" (494mm)

Connection type '82'
North American Market only

Ø 7.0" (178 mm)

Ø10.3" (262mm)

19.5" (494mm)

Connection type '84'

Ø 7.0" (178 mm)

Ø10.3" (262mm)

13.8" (30mm)

17.7" (450mm)

19.5" (494mm)
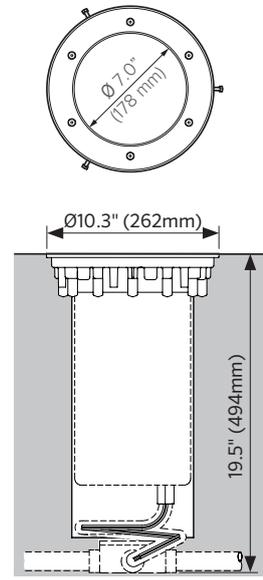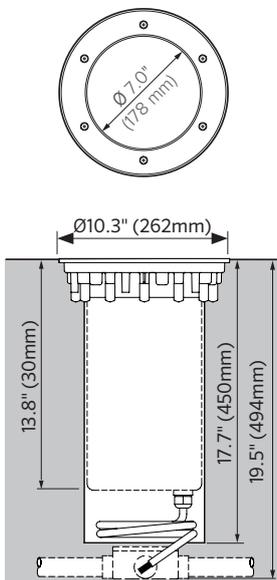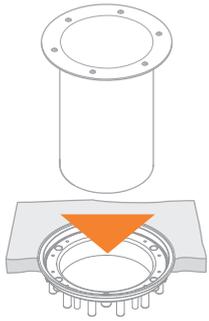
Mounting Collar for Decks and Grates

This type of installation requires the **LS640-2** 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	Connection Type 84 only available for International market
Accessories	**LS640-2** Mounting Collar

Connection type '84'
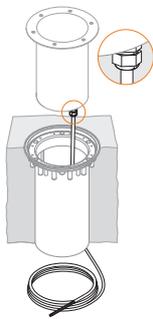
Flexible Cable

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.
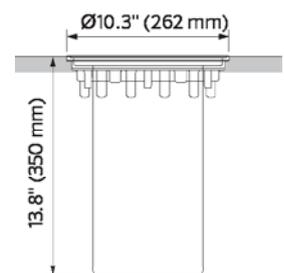
Flush Cover Options

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

Ø10.3" (262 mm)
Ø7.0" (178 mm)
13.8" (350 mm)

Specification

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

LS640-2	–	84

Connection Type	Code
Flexible cable, single entry, for hardwired installations	84

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 options
Benefits	Easy removal for servicing
Restrictions	Not as easy to remove for service as pre-installation version Not suitable for drive-over (requires pre-installation kit) Not available with Connection Type '97' (requires pre-installation kit) Connection Type '82' only available for North American market

Connection type '84'
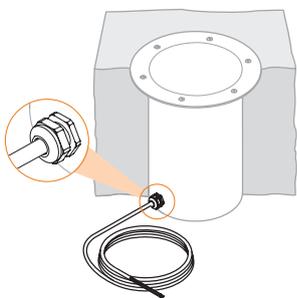
Flexible Cable
For connections to the branch circuit via junction box (by others) or other approved method. 6.5' (2.0 m) length. For other length options, contact Lumascape.
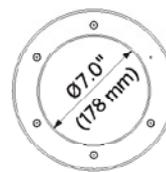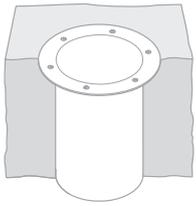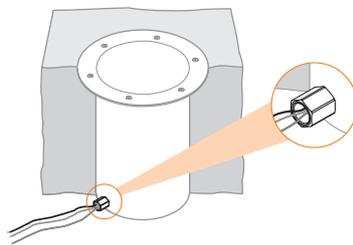
Connection type '82'
North American Market only

½" NPT Adapter
The luminaire is factory-fitted with 6.5' (2.0 m) hookup wire. Ensure terminations can be made within this length. For other length options, contact Lumascape.

Recessed Cover Options
Use recessed cover for installation in soil, grass, pavers and other uneven surfaces where no cover overhang is desired.

■ SS316: Polished
■ SS316: Brushed
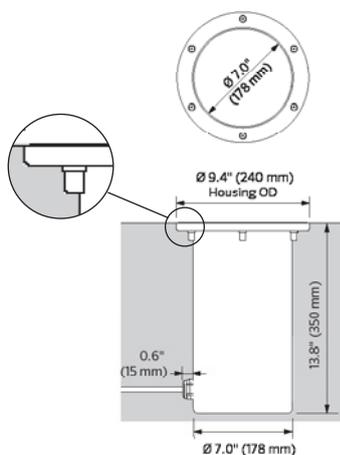
Flush Cover Options
Use flush covers for installation in fine finished surfaces such as granite and marble. They can also be used in some suspended applications. The flush cover will conceal gaps between the luminaire and the surrounding surface.

■ SS316: Polished
■ SS316: Brushed

Pre-Installation Specification Matrix

| LS3080 | – | 30D | | | | | | | 24 | Q | | |

Light Engine

Light Engine	Code
30 W	30D

Static White & Color

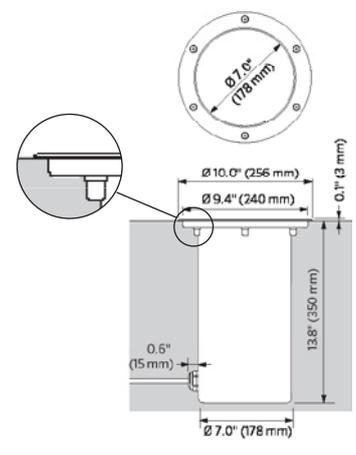| Static White & Color	Code
2,700 K (80 CRI)	827
3,000 K (80 CRI)	830
3,500 K (80 CRI)	835
4,000 K (80 CRI)	840
5,000 K (70 CRI)	750

Dynamic Color

Dynamic Color	Code
RGBA	4CA
RGBW with Royal Blue	4BW[1]

[1] 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 (4DW code). Contact Lumascape for custom LED Colors.

Tunable White

Tunable White	Code
2,700 K – 6,500 K	2WT

Lens

Lens	Code
OptiClear™	A
GripGlass™	G

Cover

Cover	Code
Stainless steel, polished	M
Stainless steel, brushed	N

Connection Type

Connection Type	Code
Flexible cable, single entry, for hardwired installations	84
Hookup wire and ½" NPT, single entry, for hard wired installations (North America only)	82
Flexible cable, single entry, for connectorized installations.	77
Flexible cable, single entry, for connectorized installations (non-dimming applications only)	87

Beam Angles

Beam Angles	Code
6°	VN
15°	NM
30°	ME
45°	WD
60°	WF
60° x 10°	LH
10° x 60°	LV
40° x 10°	NH
10° x 40°	NV
40° x 20°	MH
20° x 40°	MV
60° x 20°	WH
20° x 60°	WV

Housing Depth

Housing Depth	Code
Preinstall Blockout 17.7" [450 mm]	24
Mounting Collar 13.8" [350 mm] (International)	24

Cable Entry

Cable Entry	Code
Bottom	Q

Input Voltage

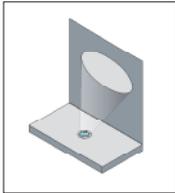| Input Voltage	Code
220-240 Vac, 50 Hz (International)	01
120/277 Vac, 60 Hz (North America)	09

Control

Control	Code
Non-Dimmable	ND[1]
PowerSync®	PS[2]

[1] For single colour, non-dimming applications only.
[2] Required for all dimming and colour changing applications. LS6540 Data Injector is required (order separately).

Beam Orientation for "NH" and "WH"

Beam Orientation for "NV" and "WV"

Direct Burial Specification Matrix

| LS3080 | – | 30D | ☐ | ☐ | ☐ | ☐ | ☐ | 25 | ☐ | ☐ | ☐ |

Light Engine	Code
30 W	30D

Static White & Color	Code
2,700 K (80 CRI)	827
3,000 K (80 CRI)	830
3,500 K (80 CRI)	835
4,000 K (80 CRI)	840
5,000 K (70 CRI)	750

Dynamic Color	Code
RGBA	4CA
RGBW with Royal Blue	4BW[1]

[1] 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 (4DW code). Contact Lumascape for custom LED Colors.

Tunable White	Code
2,700 K – 6,500 K	2WT

Lens	Code
OptiClear™	A
GripGlass™	G

Cover	Code
Round recessed, stainless steel, polished	B
Round recessed, stainless steel, brushed	H
Round flush, stainless steel, polished	D
Round flush, stainless steel, brushed	I

Connection Type	Code
Flexible cable, single entry, for hardwired installations	84
Hookup wire and ½" NPT, single entry, for hard wired installations (North America only)	82

Beam Angles	Code
6°	VN
15°	NM
30°	ME
45°	WD
60°	WF
60° x 10°	LH
10° x 60°	LV
40° x 10°	NH
10° x 40°	NV
40° x 20°	MH
20° x 40°	MV
60° x 20°	WH
20° x 60°	WV

Housing Depth	Code
Direct Burial 13.8" (350 mm)	25

Cable Entry	Code
Side	N
Bottom	Q

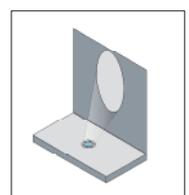| Input Voltage	Code
220-240 Vac, 50 Hz (International)	01
120/277 Vac, 60 Hz (North America)	09

Control	Code
Non-Dimmable	ND[1]
PowerSync®	PS[2]

[1] For single colour, non-dimming applications only.
[2] Required for all dimming and colour changing applications. LS6540 Data Injector is required (order separately).
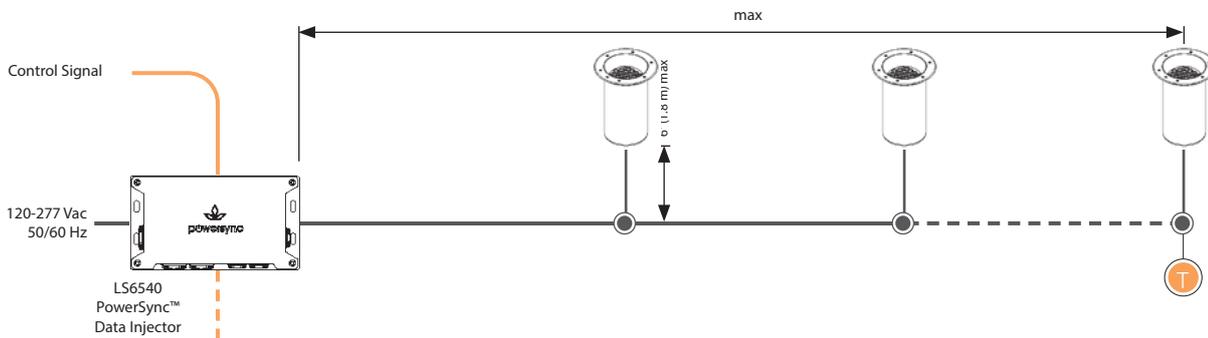

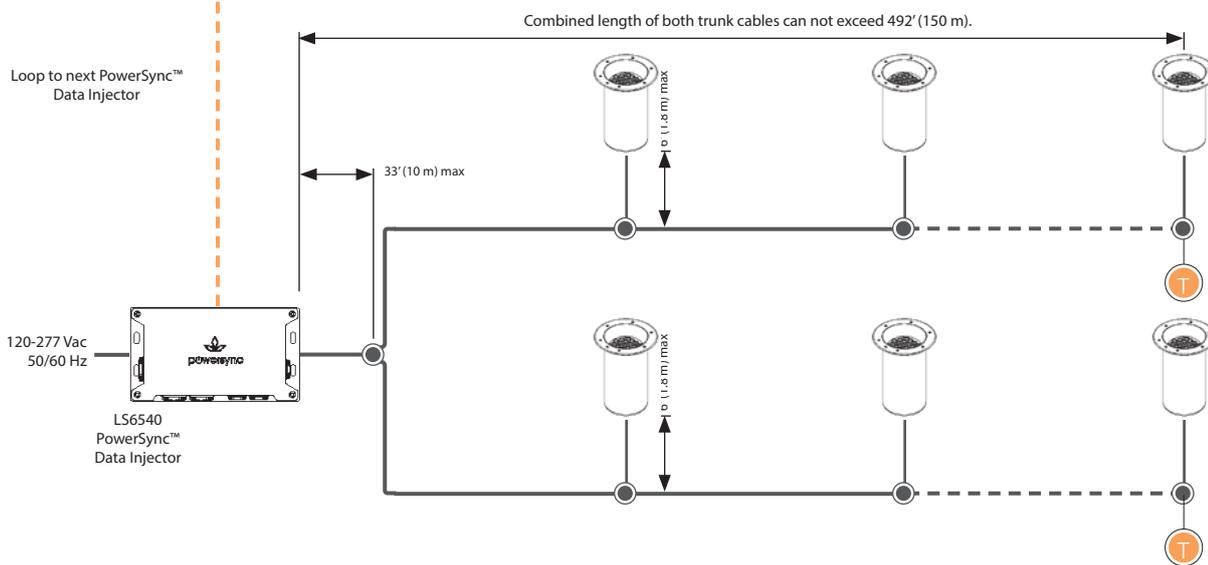Beam Orientation for "NH" and "WH"

Beam Orientation for "NV" and "WV"

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

PowerSync™ Topology 1 - Single Trunk Cable

Control Signal

120-277 Vac
50/60 Hz

LS6540
PowerSync™
Data Injector

max

6' (1.8 m) max

PowerSync™ Topology 2 - Split Trunk Cable

Combined length of both trunk cables can not exceed 492' (150 m).

Loop to next PowerSync™
Data Injector

33' (10 m) max

120-277 Vac
50/60 Hz

LS6540
PowerSync™
Data Injector

6' (1.8 m) max

6' (1.8 m) max

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), data wire gauge cannot exceed 14 AWG (2.5mm^2)
- 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 leader cable to terminate last luminaire in chain.
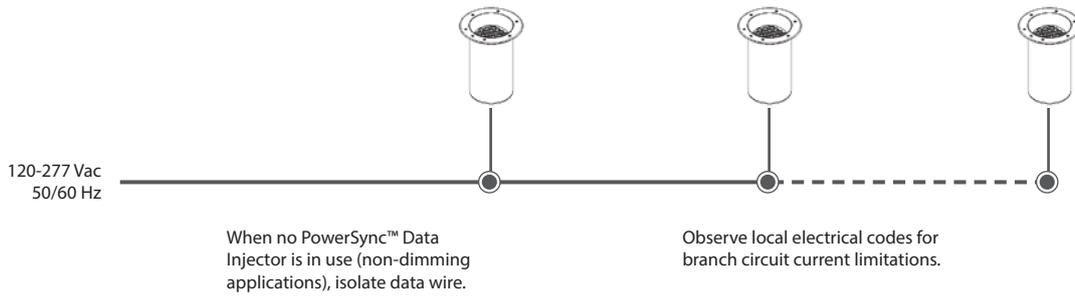
Connection Type
Circuits can be configured as either connectorized or hardwired. For details refer to installation instructions and comply with local electrical codes.

Maximum Circuit Load

Maximum Number of Inconnected Fixtures		
Voltage	**12A**	**16A**
120 V	30	45
240 V	45	45
277 V	45	45

Refer to PowerSync™ installation instructions for maximum distance information and typology options.
Above circuit loading limits are based on maximum circuit current capacity and PowerSync™ control capacity. Cumulative earth leakage and voltage drop may need to be calculated.
For non-continuous runs contact factory for details.
Local wiring rules and requirements may limit circuit loadings refer to relevant electrical parameters to calculate.

Network Topology - Non-Dimmable

120-277 Vac
50/60 Hz

When no PowerSync™ Data
Injector is in use (non-dimming
applications), isolate data wire.

Observe local electrical codes for
branch circuit current limitations.

Up to 45 luminaires per run under the following conditions:

- Refer to 'Maximum Circuit Load' table for circuit limitations
- Always observe local electrical codes for branch circuit current limitations

Connection Type

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

Maximum Circuit Load

Maximum Number of Inconnected Fixtures		
Voltage	12A	16A
120 V	30	45
240 V	45	45
277 V	45	45

Refer to PowerSync™ installation instructions for maximum distance
information and typology options.
Above circuit loading limits are based on maximum circuit current
capacity and PowerSync™ control capacity. Cumulative earth
leakage and voltage drop may need to be calculated.
For non-continuous runs contact factory for details.
Local wiring rules and requirements may limit circuit loadings refer
to relevant electrical parameters to calculate.

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	–		**2D**	

Product	Code
Data Injector PS4	LS6540

Input Voltage	Code
220-240 Vac, 50 Hz (International)	01
120/277 Vac, 60 Hz (North America)	09

Control	Code
DMX/RDM, 0-10 V Input	2D

| Finish	Code
Black	BL
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]

[1] RAL color required

NOTE:

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

Luminaire Wire Colors & Designations

Line Voltage 220-240 Vac – International

Designation	Color
Line	Brown
Neutral	Blue
Ground/Earth	Green / Yellow
Data	Black
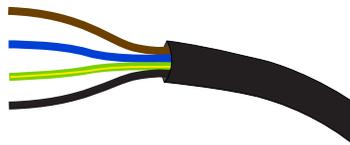
Line Voltage 120/277 Vac – North America

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