



LUMASCAPE
USA INC.

MODELS LS162A (50W), LS172A (50W),
(Max. Wattage)

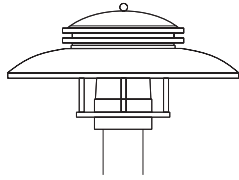
UL available

A START HERE IMPORTANT INSTRUCTIONS

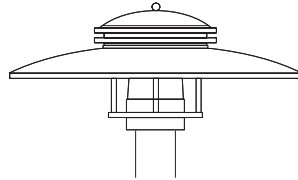
For Installation: LS162, LS172

Warning: The Luminaire should only be used complete with its protective shield (cover)

LumascapE USA Inc.
1300 Industrial Rd., Unit #19
San Carlos, CA 94070, USA
T 1-(650)-595-LUMA(5862)
F 1-(650)-595-5820
E info@lumascapE.com
W www.lumascapE.com
Free Call 1-866-695-LUMA(5862) US & Canada



LS162



LS172

1 INSTALLATION

- Select a suitable 12 volt isolating type transformer and locate centrally in relation to fixtures.
- Mark Actual locations of fixtures to be installed. Calculate the voltage drop on each run of cable (refer Voltage Drop section). Note that fixtures should not be installed within 10 feet (3.1m) of a pool, spa or fountain.
- Lay cable from transformer to each fixture (refer Voltage Drop section for Order Codes of Direct Burial Cables).
- When installing each fixture, leave enough cable at each fixture location to allow for future re-positioning as your garden matures (1 metre or 3 feet is plenty).
- Push the spike into the ground at the desired location. If the ground is very hard, drive the spike using a hammer and a block of wood to protect the spike top.
- Insert the stem of the fixture into the spike and secure with the stainless steel screw supplied. The cable should be pushed through the supplied disk, and then the opening in the top of the spike as shown in Fig. B.
- At the point of attachment to the main burial cable, split the burial cable with a knife, and separate the 2 strands for a distance of 3" or 76mm. Be careful not to cut the insulation around the wiring (refer Fig. C).
- Take the cable from the fixture, and connect each strand to a strand of the main burial cable, using the 2 supplied connectors (refer Fig. C) Place the both strands in the connector, close the cover and press down firmly. Complete the connection by compressing with pliers until the contacts are fully de-pressed. Snap cover into place.
- Fit the supplied lamp and secure the fixture head to the stem with the supplied stainless steel screw. (Fig. D)
- Repeat for each light fixture.
- Connect burial cables to transformer making sure indexed legs are grouped with indexed and non-indexed with non-indexed legs.
- Plug transformer into power point, switch on and each fixture is operating.
- At night adjust and aim your fixtures to achieve the desired effect.(Adjustable fittings only.)

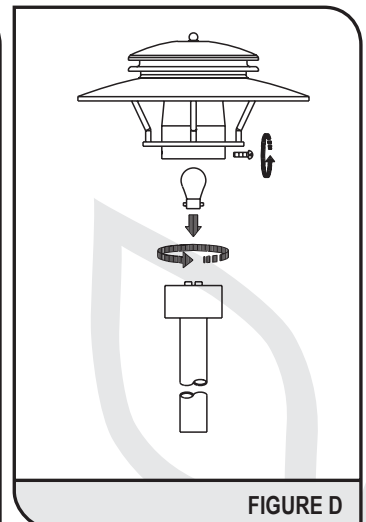
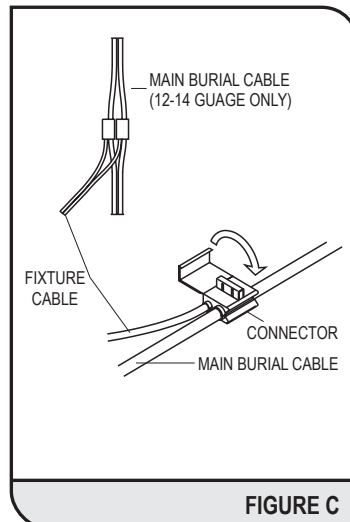
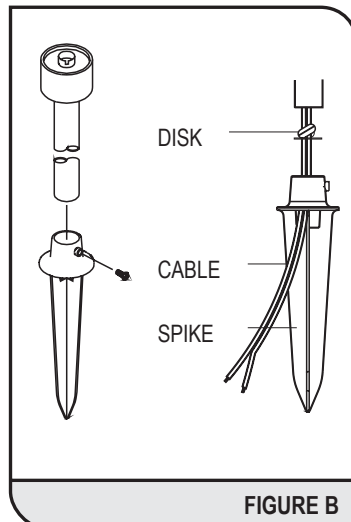
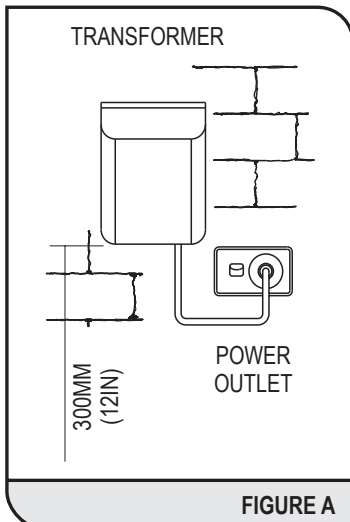
These installation instructions are accepted in most areas. Some supply authorities may require alternative installation methods. Should you experience any difficulty please contact your supplier.

WARNING

Overcurrent protection for the secondary circuit must be provided at the supply transformer in accordance with the National Electric Code.

IMPORTANT - Use type UF burial cable approved by the National Electric Code. Fixture cable and supply cable (ordered separately) is intended for shallow burial - less than 6 inches.

Further information over page



www.lumascapE.com

LUMASCAPE
HEAD OFFICE
T 07 3286 2299 F 07 3286 6599

LUMASCAPE
SYDNEY - NSW
T 02 9519 6860 F 02 9519 8834

LUMASCAPE
MELBOURNE - VIC
T 03 9686 1900 F 03 9686 1700

H.I. LIGHTING
LUMASCAPE AGENT - WA
T 08 9321 5422 F 08 9321 5881

LIGHTING PARTNERS AUSTRALIA
LUMASCAPE AGENT - SA
T 08 8232 0074 F 08 8232 0076

NQ LIGHTING
LUMASCAPE AGENT - NTH QLD
T 07 4031 4490 F 07 4031 5933

ECC LIGHTING
LUMASCAPE AGENT - NZ
T 09 379 9680 F 09 308 9328

LUMASCAPE USA INC
Free Call 1-866-695-LUMA(5862)
T 1-(650)-595-LUMA(5862) 1-(650)-595-5820



LUMASCAPE
USA INC.

MODELS LS162A (50W), LS172A (50W),
(Max. Wattage)

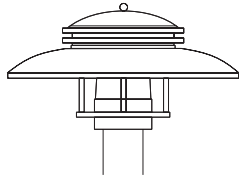
UL available

B IMPORTANT INSTRUCTIONS

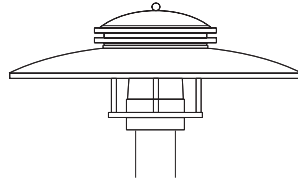
For Installation: LS162, LS172 BI-PIN KIT (refer over for luminaire installation)

Warning: The Luminaire should only be used complete with its protective shield (cover)

LumascapE USA Inc.
1300 Industrial Rd., Unit #19
San Carlos, CA 94070, USA
T 1-(650)-595-LUMA(5862)
F 1-(650)-595-5820
E info@lumascapE.com
W www.lumascapE.com
Free Call 1-866-695-LUMA(5862) US & Canada



LS162



LS172

1 OPTIONAL INSTALLATION - BI-PIN KIT RETRO FIT INSTALLATION

1. Turn power off to the fitting.
2. Loosen the retaining screw that holds the upper body in position. (See Fig A.)
3. Lift the upper body off the hub.
4. Remove the incandescent lamp and the two screws that hold the lamp holder in place.
5. Pull the lampholder out to reveal the connection point. Cut the two wires and restrip the burial cable.
6. Connect the new bi-pin lampholder to the burial cable by soldering or using crimps and then insulate the joints.
7. Push the wire back into the fitting and screw the lamp holder base into the hub using the supplied screws.
8. Place the supplied o-ring in position and lubricate slightly.
9. Push bi-pin lamp into holder.
10. Push domed glass into hub using a screwing motion. Do not use excessive force.
11. Replace upper body and tighten retaining screw.
12. Turn power on to test fitting.

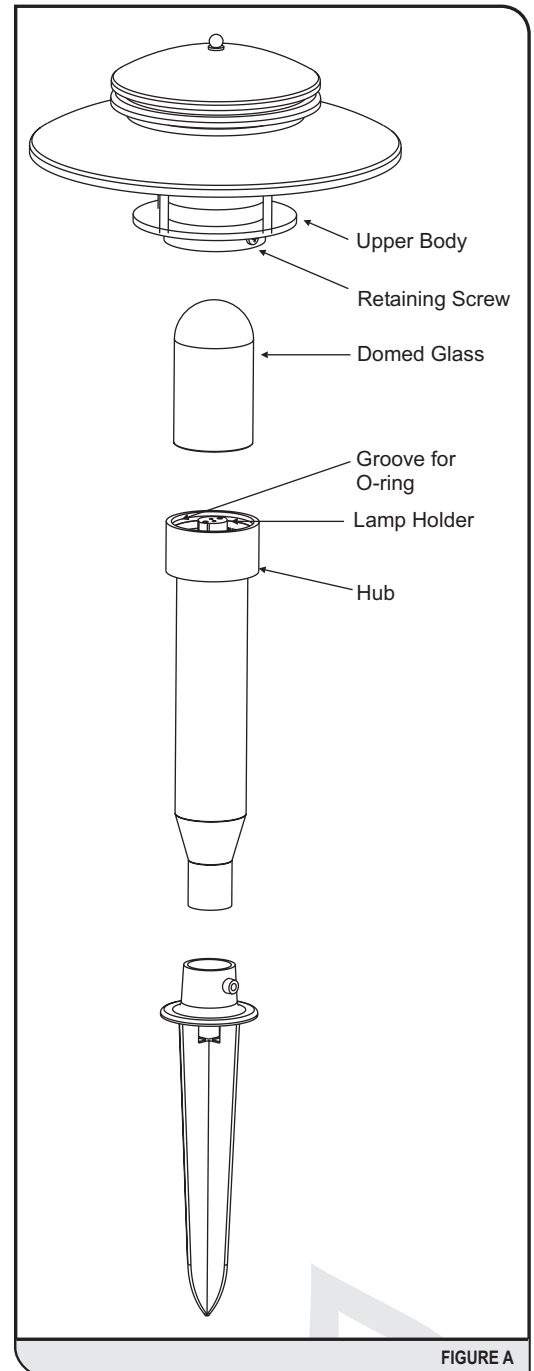


FIGURE A

2 BI-PIN RELAMPING

1. Turn power off to the fitting.
2. Loosen the retaining screw that holds the upper body in position. (See Fig A.)
3. Lift the upper body off the hub.
4. Pull domed glass off hub using a screwing motion. Do not use excessive force.
5. Pull bi-pin lamp out of holder and replace with new lamp.
6. Check o-ring for damage and replace if necessary.
7. Apply slight lubrication to o-ring.
6. Push domed glass into hub using a screwing motion. Do not use excessive force.
7. Replace upper body and tighten retaining screw.
8. Turn power on to test fitting.

NOTE:

20W max. Recommended where fixture may be touched whilst operating.

WARNING

Overcurrent protection for the secondary circuit must be provided at the supply transformer in accordance with the National Electric Code.

www.lumascapE.com

LUMASCAPE
HEAD OFFICE
T 07 3286 2299 F 07 3286 6599

LUMASCAPE
SYDNEY - NSW
T 02 9519 8860 F 02 9519 8834

LUMASCAPE
MELBOURNE - VIC
T 03 9686 1900 F 03 9686 1700

H.I. LIGHTING
LUMASCAPE AGENT - WA
T 08 9321 5422 F 08 9321 5881

LIGHTING PARTNERS AUSTRALIA
LUMASCAPE AGENT - SA
T 08 8232 0074 F 08 8232 0076

NQ LIGHTING
LUMASCAPE AGENT - NTH QLD
T 07 4031 4490 F 07 4031 5933

ECC LIGHTING
LUMASCAPE AGENT - NZ
T 09 379 9680 F 09 308 9328

LUMASCAPE USA INC
Free Call 1-866-695-LUMA(5862)
T 1-(650)-595-LUMA(5862) 1-(650)-595-5820



IMPORTANT SAFETY INSTRUCTIONS

WARNING - To reduce the risk of FIRE or INJURY:

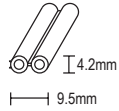
1. Luminaires and transformers to be installed by qualified installers only.
2. Luminaires to be used for intended purpose only. e.g Wall Mount fittings must be wall mounted.
3. Luminaires can become very hot. Use discretion in placement.
4. Do not touch hot lens, guard, or enclosure.
5. CAUTION - HOT SURFACE. Keep away from curtains and other combustible material.
6. Turn Off/Unplug and allow to cool before replacing lamp.
7. Keep lamp away from materials that may burn.
8. Never touch lamp with bare fingers. Oil from skin may damage lamp. Hold lamp with soft cloth when installing or replacing.
9. Do not operate the luminaires with a missing or damaged parts.
10. Replace any cracked protective shield
11. Use only lamp type, voltage and wattage as specified by LumascapE on the product label.
12. Use only genuine LumascapE parts to replace damaged or missing components.
13. Luminaires supplied with Loctite Silver Grade Anti Seize lubricant on threads. Reapply if needed.
14. Refer to instructions for installation and operating requirements.
15. Ensure installation complies with local regulations

SAVE THESE INSTRUCTIONS.



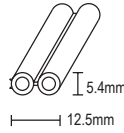
CABLES

3.3mm² Figure 8 PVC Cable



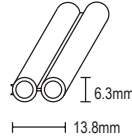
LS604

6mm² Figure 8 PVC Cable



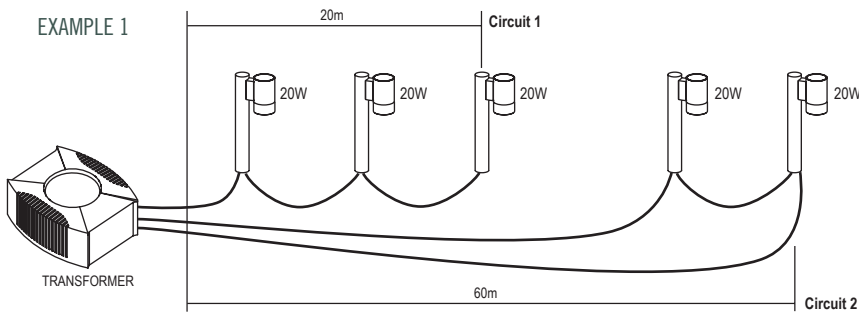
LS604-6

10mm² Figure 8 PVC Cable

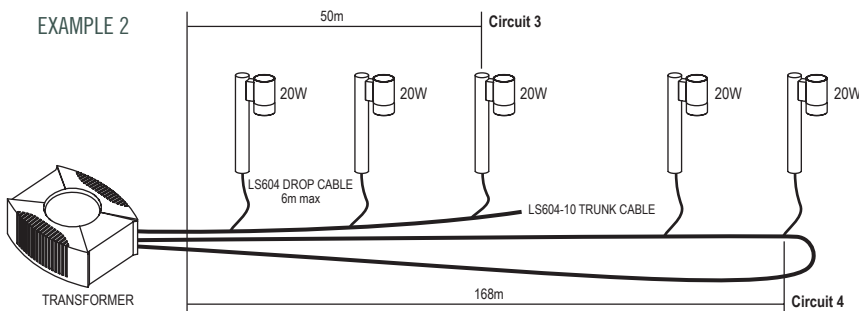


LS604-10

EXAMPLE 1



EXAMPLE 2



CABLE VOLTAGE DROP

Excessive voltage drop causes lamps to have a low light output. The following charts and illustrations apply only to Lumascope supplied cable. The distance and wattage shown are maximum and should not be exceeded.

EXAMPLE 1

Using drop cable only

This example shows the correct way to install Lumascope light luminaires using LS604 (3.3mm²) drop cable. The total load on Circuit 1 is 60W over 20 metres as allowed in the Voltage Drop table. The load on Circuit 2 is 40W and by using a doubled cable this circuit can be 60 metres.

EXAMPLE 2

Using trunk and drop cable only

This example shows the correct way to install Lumascope luminaires using LS604-10 (10mm²) trunk cable. The total load on Circuit 3 is 60W over 50 metres which is shorter than the 54 metres allowed in the Voltage Drop table. The load on Circuit 4 is 40W and using a doubled cable allows the circuit to be up to 168 metres long.

TABLE: VOLTAGE DROP

LOAD WATTAGE	DROP CABLE 3.3mm ² LS604		TRUNK CABLE 6mm ² LS604-6		10mm ² LS604-10	
	SINGLE	DOUBLE	SINGLE	DOUBLE	SINGLE	DOUBLE
20	70m	140m	105m	210m	140m	280m
40	30m	60m	55m	110m	84m	168m
50	25m	50m	44m	88m	62m	124m
60	20m	40m	36m	72m	54m	108m
70	15m	30m	30m	60m	50m	100m
80	14m	28m	27m	54m	46m	92m
90	13m	26m	24m	48m	42m	84m
100	12m	24m	21m	41m	36m	72m
120	10m	20m	18m	36m	30m	60m
150	7m	14m	15m	30m	26m	52m
200	5m	10m	11m	22m	20m	40m
250	4m	8m	9m	18m	17m	34m

CAUTION

The distances and wattages shown are maximum and should not be exceeded.