

# IMPORTANT INSTRUCTIONS

## For Installation LS393-UL

**A**  
START  
HERE

**MODELS** LS393 Inground  
12V only

 **UL US LISTED**  
LOW VOLTAGE FIXTURE  
1F30

 A.C.N. 010 572 773

### WARNING

DO NOT SHORTEN, INTERFERE OR DISCONNECT CABLE FROM FITTING. WARRANTY WILL BE VOID IF CABLE ASSEMBLY IS TAMPERED WITH.

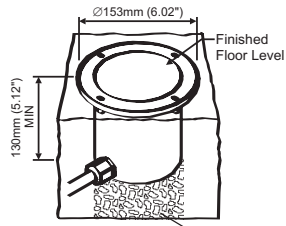
**CAUTION - HOT BULBS.** Keep Away From Curtains And Other Combustible Material.

### CAUTION



Do not use power tools to tighten screws. Do not exert downward force on screws while not fully tightened. Do not overtighten screws.

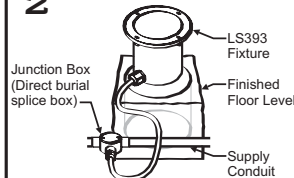
**1**



#### Locate Fixtures

Site fixture, in proximity to cabling, in gravel, soil or concrete. Use discretion in locating fixtures as glass can become very hot and may burn.

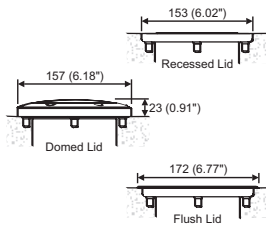
**2**



#### Supply Connection - Junction Box (Direct Burial Splice Box)

Connect junction box (direct burial splice box) to supply conduit as per instructions.  
**Warning:** Overcurrent protection for secondary circuit must be provided at the supply transformer in accordance with the National Electric Code.

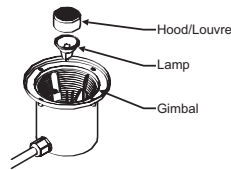
**3**



#### Mount Fixture

Mount fixture with either top lip or bottom surface of flange, flush with finished floor level, as shown above.

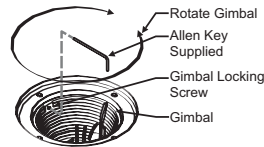
**4**



#### Insert Lamp

Remove Hood and louvre from gimbal and insert MR16 lamp into lampholder. Replace hood and louvre.

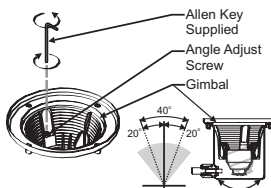
**5**



#### Adjust Rotational Alignment of Gimbal

Rotate gimbal to aim light at target. Once positioned tighten locking screw using Allen Key provided.

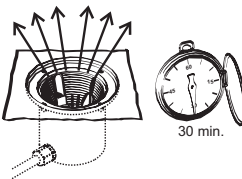
**6**



#### Adjust Angular Position of Light

Aim the light at target by rotating the angle adjust screw, with the Allen Key provided. The lamp has a maximum adjust of 20° either side of vertical.

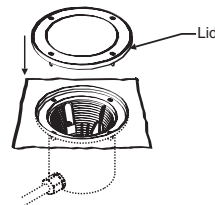
**7**



#### Test Fixture

Test to ensure fixture is operational. Allow to burn uncovered for 30 minutes to allow any moisture in fixture to evaporate.

**8**



#### Seal Fixture

Locate lid, complete with any accessories, on fixture aligning screws with clinch nuts in flange. Tighten screws.

### IMPORTANT SAFETY INSTRUCTIONS SAVE THESE INSTRUCTIONS.

- WARNING - To reduce the risk of FIRE or INJURY:**
1. Turn Off and allow to cool before replacing lamp.
  2. Lamp gets hot quickly! Contact only switch/plug when turning on.
  3. Do not touch hot lens, guard, or enclosure.
  4. Keep lamp away from materials that may burn.
  5. Do not touch the lamp at any time. Use a soft cloth. Oil from skin may damage lamp.
  6. Do not operate the lighting fixture with a missing or damaged shield.



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# IMPORTANT INSTRUCTIONS

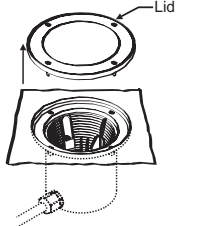
## For Installation LS393-UL

# B

<b>MODELS</b>	LS393 Inground 12V only		
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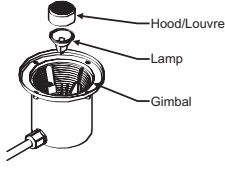
### RELAMPING INSTRUCTIONS

**A**



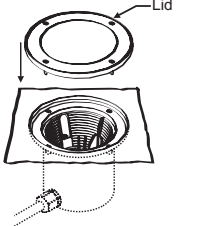
**Open Fixture**  
Ensure fixture is electrically isolated. Remove lid from fixture by undoing the four screws and levering out gently.

**B**



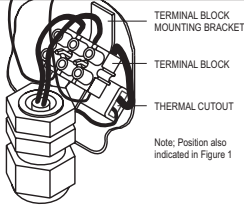
**Replace Lamp**  
Remove Hood and louvre from gimbal by pulling vertically. Remove MR16 lamp and dispose. Insert new MR16 lamp into lampholder. Replace hood and louvre.

**C**



**Open Fixture**  
Test fixture to ensure lamp is operational. Reseal fixture as per installation instructions over.

**IMPORTANT**  
When installing or relamping, the thermal cutout **MUST** be repositioned beneath the terminal block mounting bracket, within the LS393 fixture (refer fig 3).



TERMINAL BLOCK MOUNTING BRACKET  
TERMINAL BLOCK  
THERMAL CUTOUT  
Note: Position also indicated in Figure 1



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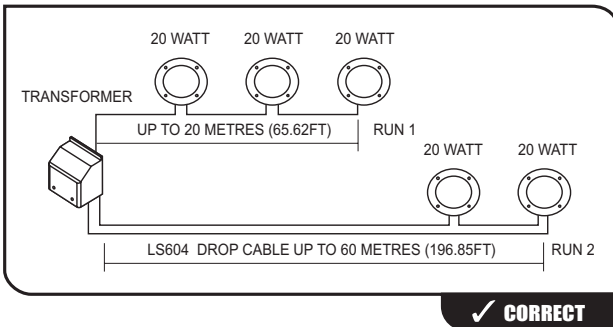
**Free Call**  
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### VOLTAGE DROP CHARTS - 12 VOLT CABLE

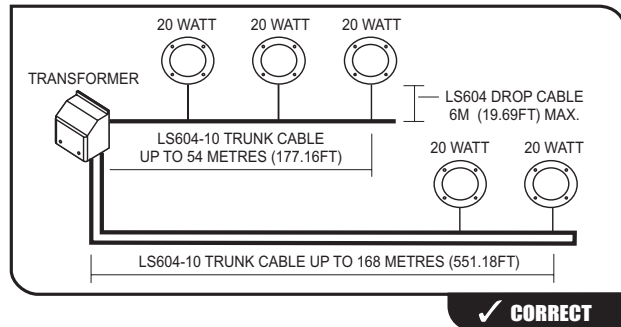
Note: The information below relates to Lumscape LS604 Direct Burial Cable only.

It is important that the Voltage Drop ( the amount of Voltage lost over a length of cable ) is kept to a maximum 1 Volt (ie. the Voltage should not be less than 11 Volts at the fixture).

A larger cable will experience a lower voltage drop over the same length of cable ( refer Voltage Drop Chart below ).



This example shows the correct way of installing the system using LS604 Drop Cable - The total load on RUN1 is 60 watts over 20 metres (65.62ft) which is allowed in the Voltage Drop Chart below (refer to (1)). The load on RUN2 is 40 watts and using a doubled cable allows the run to be up to 60 metres long (196.85ft) (refer to



This example shows the correct way of installing the system using LS604-10 Trunk Cable - The total load on RUN1 is 60 watts at 54 metres (177.17ft) which is the maximum allowed in the Voltage Drop Chart below (refer to (3)). The load on RUN2 is 40 watts and using a doubled cable allows the run to be up to 168 metres

### VOLTAGE DROP CHART

LOAD	3.3MM (0.13IN) LS604 DROP CABLE		6MM (0.24IN) LS604-6 TRUNK CABLE		10MM (0.39IN) LS604-10 TRUNK CABLE	
	Single	Double	Single	Double	Single	Double
20W	70m (229.66ft)	140m (459.32ft)	105m (344.49ft)	210m (688.98ft)	140m (459.32ft)	280m (918.64ft)
40W	30m (98.43ft)	60m (196.85ft) (2)	55m (180.45ft)	110m (360.90ft)	84m (275.59ft)	168m (551.18ft) (4)
50W	25m (82.02ft)	50m (164.04ft)	44m (144.36ft)	88m (288.72ft)	62m (203.41ft)	124m (406.82ft)
60W	20m (65.62ft) (1)	40m (131.24ft)	36m (118.11ft)	72m (236.22ft)	54m (177.16ft) (3)	108m (171.30ft)
70W	15m (49.21ft)	30m (98.42ft)	30m (98.43ft)	60m (196.86ft)	50m (164.04ft)	100m (328.08ft)
80W	14m (45.93ft)	28m (91.86ft)	27m (88.58ft)	54m (177.16ft)	46m (150.92ft)	92m (211.84ft)
90W	13m (42.65ft)	26m (85.30ft)	24m (78.74ft)	48m (157.48ft)	42m (137.76ft)	84m (275.52ft)
100W	12m (39.37ft)	24m (78.74ft)	21m (68.90ft)	41m (137.80ft)	36m (118.11ft)	72m (236.22ft)
120W	10m (32.81ft)	20m (65.62ft)	18m (59.06ft)	36m (118.11ft)	30m (98.43ft)	60m (196.86ft)

**CAUTION**

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