

LD1094-N1

Exterior Low Glare Adjustable Downlight

Install sheet - Page 1

SPECIFICATION

LED recessed luminaires are class III for Safety Extra Low Voltage **DC** supply. The product should only be used with a supplied or LightGraphix approved **350mA, 500mA** or **700mA** constant current driver.

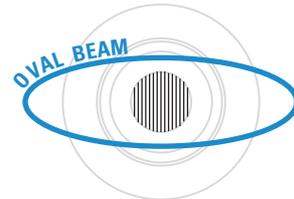
Suitable for mounting on normally flammable surfaces.

Lamp: **N1 LED Engine.**

This fitting is dual IP rated: **IP67** (from front) **IP65** (from back).
Lumen Maintenance: L90B5 at 90,000hrs.

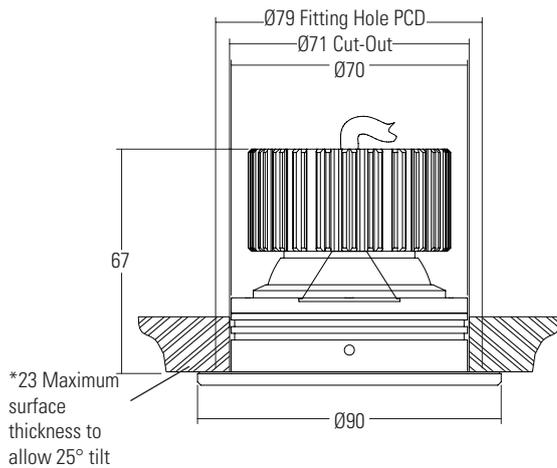
LD1094 - N1	
Product & LED Output Code	Power Output
LD1094-N1 - 350	350mA 7W
LD1094-N1 - 500	500mA 10W
LD1094-N1 - 700	700mA 14W

/OB
Oval Beam Orientation

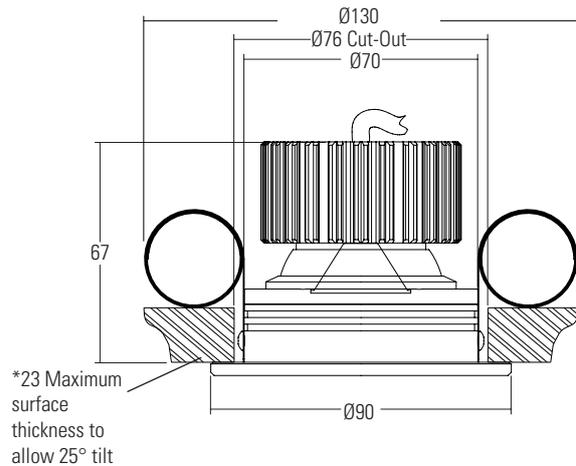


Wall/Lit Surface

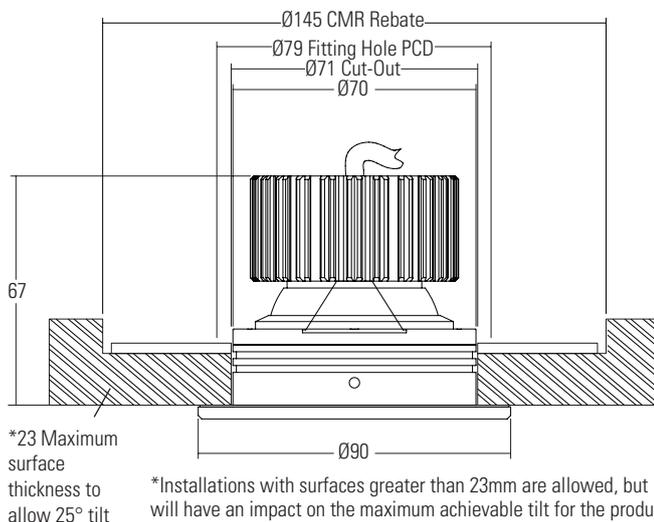
/SM
Screw Mounted
Included: 3x Fixing Screws



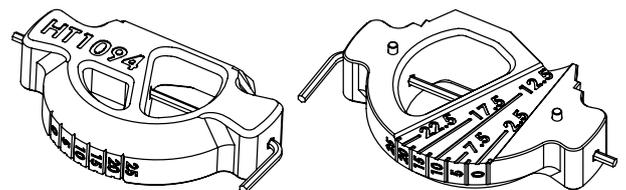
/SC
Spring Mounted



/CMR
Ceiling Mount Ring



/HT1094
Adjustment hand tool for the LD1094.
Included: 3D printed bezel and angle tool, with 2.5mm allen key.



LD1094-N1

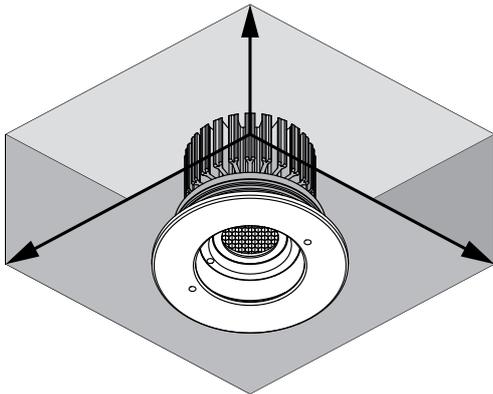
Exterior Low Glare Adjustable Downlight



Install sheet - Page 2

CEILING VOID REQUIREMENTS

When installing into a surface where there will be air around the fitting, these are the minimum space requirements around the fixture to allow for proper cooling of the LED fitting.



Going beyond the minimum specified dimensions will allow the LED fitting to cool itself more efficiently, extending the life of the product.

Output current	Minimum void dimension requirements (Lmm x Wmm x Hmm)	Minimum void volume	
		cm ³	Litre(s)
LD1094-N1-350	150 x 150 x 80	1,800cm ³	1.8
LD1094-N1-500	150 x 150 x 80	1,800cm ³	1.8
LD1094-N1-700	250 x 250 x 150	9,375cm ³	9.4

IMPORTANT ADVISORIES

When using the Hand tool OR replacing the optic, the following must be followed:

- Avoid staring into the light source when powered on.
- Fitting and surrounding area must be dry before opening the fitting. If the fitting has been wet, allow to dry thoroughly. Powered operation will help dry the fitting quicker.
- LED fitting must be powered off, allowed to cool down, and to be kept off until all work is done.
- Do not exert excessive force on bezel when opening or risk breaking the hand tool. If faced with a stubborn bezel, gently heat the fitting. Either through powered operation or with the use of a heat gun on a low heat setting.
- Do not open fitting in moisture condensing, humid conditions.
- If the provided allen key is lost, a Ø3.00mm screw driver can be used in its place for adjustments.



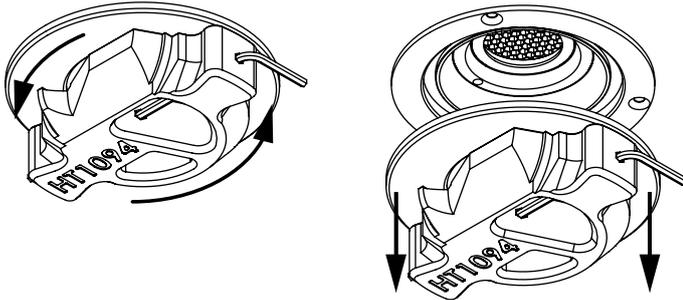
LD1094-N1/HT1094

Exterior Low Glare Adjustable Downlight

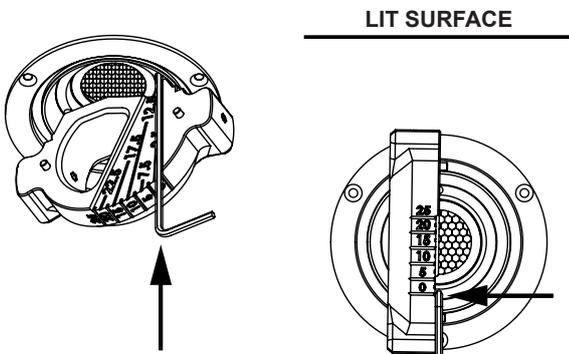
Install sheet - Page 3

INSTALLATION

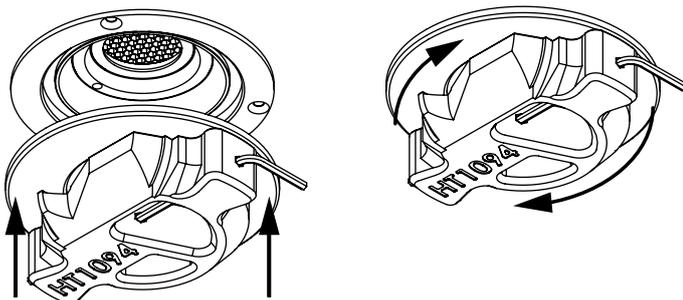
- 1 Fit the pins on the HT1094 into the corresponding holes on the front bezel of the fitting and begin to unscrew the bezel. **NOTE: Keep bezel clean.**



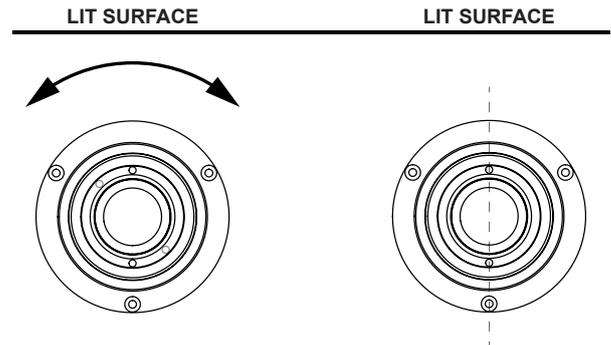
- 3 Place HT1094 into the LD1094 as shown. Using the provided Allen key or a 3mm screwdriver, push into module hole furthest away from the lit surface.



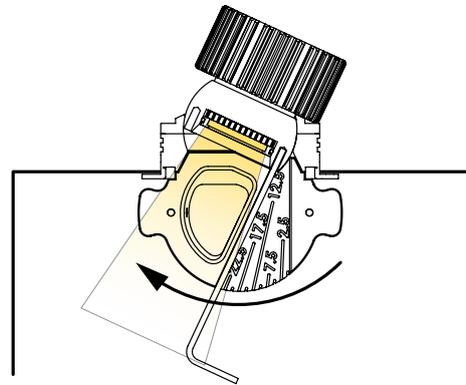
- 5 Make sure bezel is clean before refitting.



- 2 The holes on the LED module need to be perpendicular to the lit surface. Orientate the module either using the provided Allen key or a 3mm screwdriver.



- 4 Always start in the level & upright position. Push towards the desired lit surface. If you overshoot, bring the LED back to the starting position before tilting again.





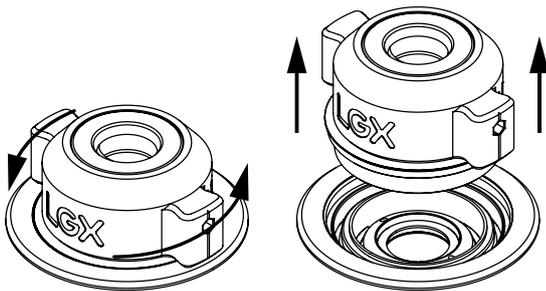
LD1094-N1 OPTIC REPLACEMENT

Exterior Low Glare Adjustable Downlight

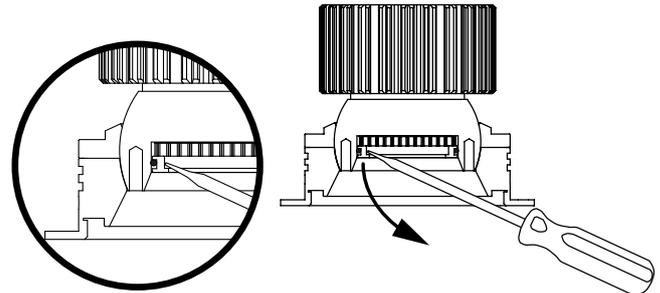
Install sheet - Page 4

INSTALLATION

- 1** Fit the pins on the HT1094 into the corresponding holes on the front bezel of the fitting and begin to unscrew the bezel. **NOTE: Keep bezel clean.**



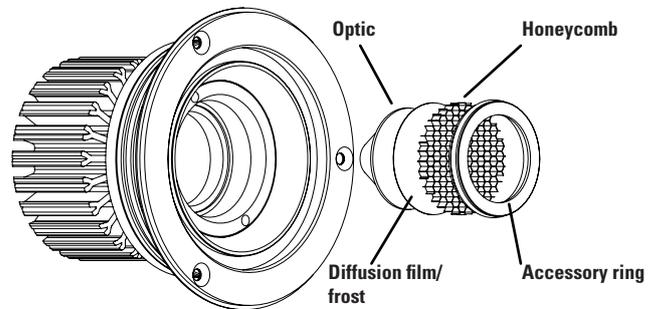
- 2** Using a wide slotted screwdriver, position the tool under the lip of the accessory ring, and pry the accessory ring out. Avoid using excessive force. **NOTE: Use a 5.5mm wide or larger slotted screwdriver.**



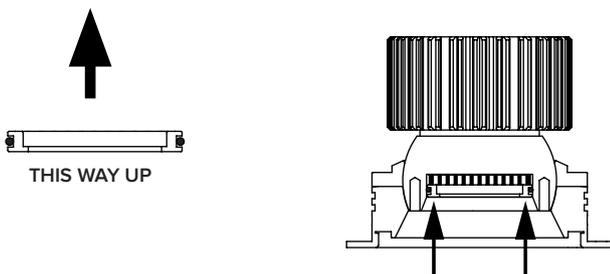
- 3** Below is the bill of materials for each beam angle option. Please contact LightGraphix if additional parts are required.

SUFFIX	PARTS NO.	DESCRIPTION
/NB	23.2070 optic & T10264 frost	20° narrow beam
/MSB	23.2060 optic	26° medium spot beam
/MB	23.2070 optic & T110019 film	35° medium beam
/WB	23.2070 optic & T110020 film	46° wide beam
/WWB	23.2070 optic & T10283 film	64° extra wide beam
/OB	23.2065 optic & T10264 frost	43° x 23° oval beam
/HL	T10561	Honeycomb louvre

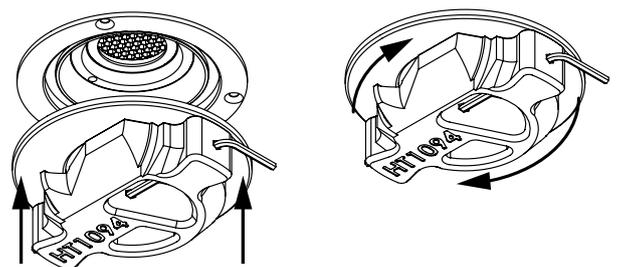
- 4** Shown below is the order in which the components need to be arranged in. Make sure that the film is installed matt side down, with the shiny side facing outwards. Hold the parts in place with a finger.



- 5** Once the optic/film has been replaced, the accessory ring will need to be pushed back into the LED module. Push until the ring is flat and level inside. Make sure the accessory ring is installed the correct way round.



- 6** Make sure bezel is clean before refitting.



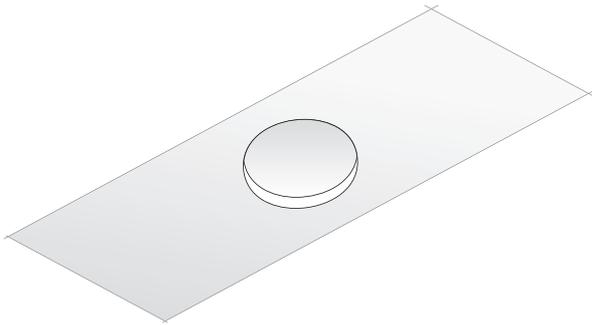
LD1094-N1

Exterior Low Glare Adjustable Downlight

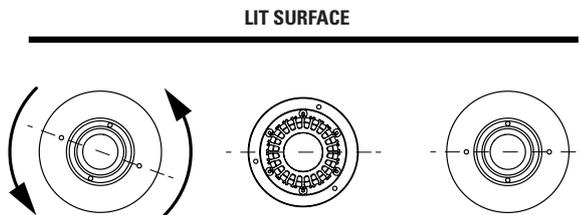
Install sheet - Page 5

INSTALLATION

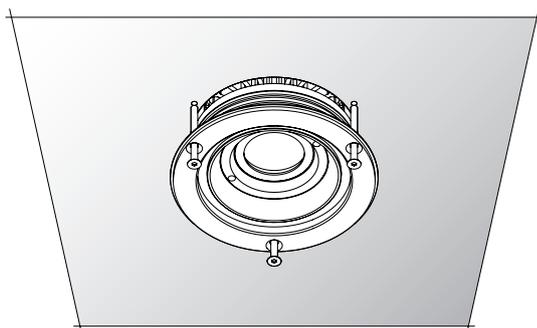
- 1 Prepare cut out: $\varnothing 71\text{mm}$



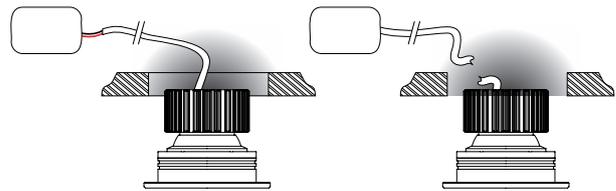
- 3 Orientation of the fitting will ensure a consistent look across all fittings installed. Using a pencil, mark out the position of the bezel holes on the rear face of the flanged front.



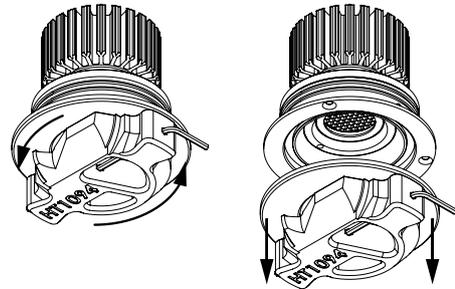
- 5 With the fitting correctly orientated. Fix the fitting to the mounting surface using either 3 x M3 or No.4 (3mm) countersunk screws. **NOTE: Ensure the mounting gasket is fitted!**



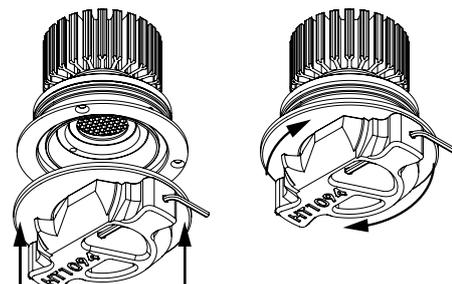
- 2 Feed cable through to the driver's location. Connect luminaire to the specified driver, ensuring it is disconnected from the mains side. **NOTE: Connections in wet environments. Make IP68 connection to stop water travelling along the cables, causing water and electrical damage!**



- 4 Either by hand or using the HT1094, unscrew the bezel from the fitting. Then continue the bezel hole position pencil marking from the rear of the flanged front, on to the front face.



- 6 Replace the bezel using the HT1094. Confirm installation was successful by powering up the fitting. If there is no light output, switch off power immediately and verify wiring. **NOTE: Ensure the bezel O-ring is fitted!**



LD1094-N1/CMR

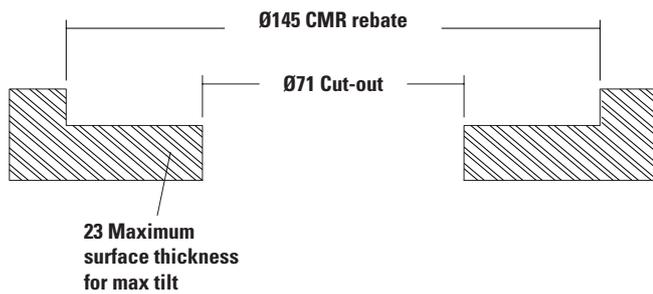
Exterior Low Glare Adjustable Downlight



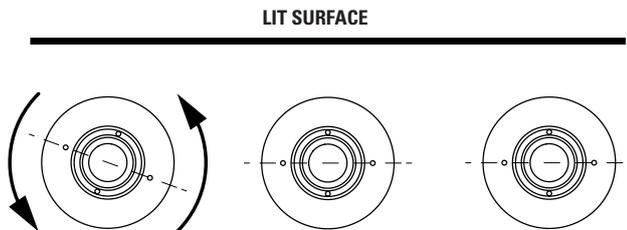
Install sheet - Page 6

INSTALLATION

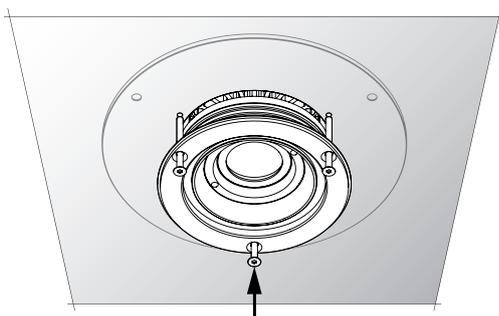
- 1 Prepare cut out: $\varnothing 71$ mm and $\varnothing 145$ mm rebate if required.



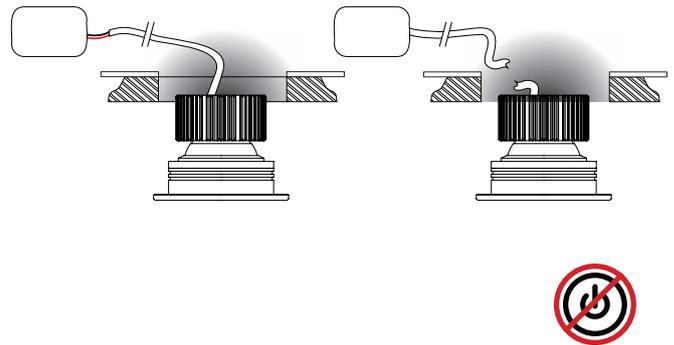
- 3 Orientation of the fitting will ensure a consistent look across all fittings installed. Using a pencil, mark out the position of the bezel holes on the rear face of the flanged front.



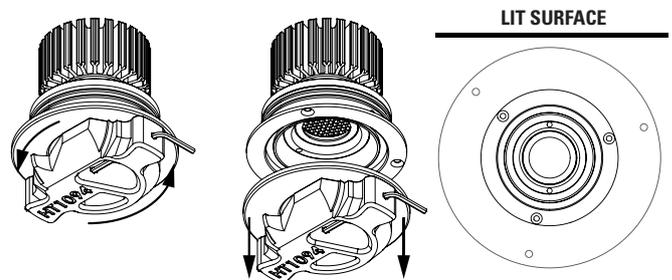
- 5 With the fitting and /CMR correctly orientated. Fix the fitting to the /CMR using the supplied 3 x M3 x 35mm CSK screws. Fix the /CMR to the surface using either 3 x M3 or No.4 (3mm) countersunk screws. **NOTE: Ensure the mounting gasket is fitted!**



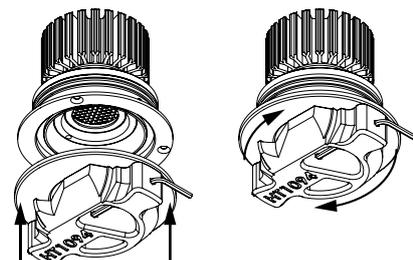
- 2 Feed cable through to the driver's location. Connect luminaire to the specified driver, ensuring it is disconnected from the mains side. **NOTE: Connections in wet environments. Make IP68 connection to stop water travelling along the cables, causing water and electrical damage!**



- 4 Either by hand or using the HT1094, unscrew the bezel from the fitting. Then continue the bezel hole position pencil marking from the rear of the flanged front, on to the front face. The /CMR fixing position will also need to be taken account for.



- 6 Replace the bezel using the HT1094. Confirm installation was successful by powering up the fitting. If there is no light output, switch off power immediately and verify wiring. **NOTE: Ensure the bezel O-ring is fitted!**



LD1094-N1/SC

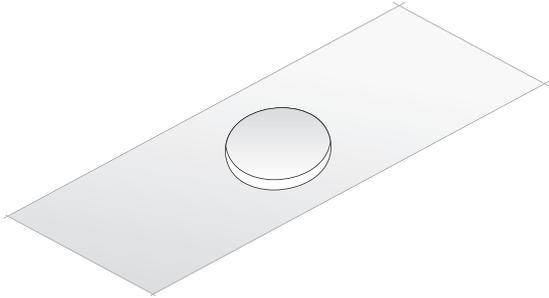
Exterior Low Glare Adjustable Downlight



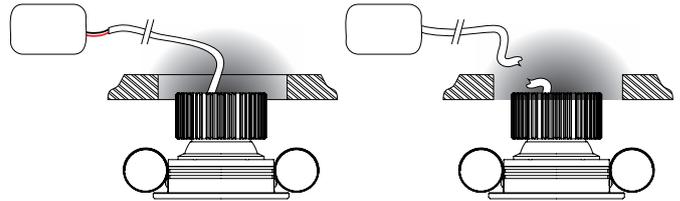
Install sheet - Page 7

INSTALLATION

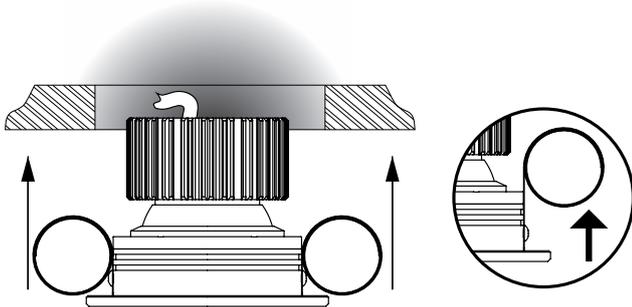
- 1 Prepare cut out: Ø76mm.



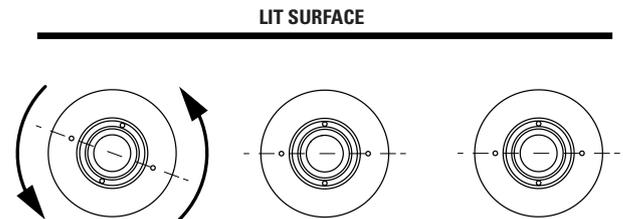
- 2 Feed cable through to the driver's location. Connect luminaire to the specified driver, ensuring it is disconnected from the mains side. **NOTE: Connections in wet environments. Make IP68 connection to stop water travelling along the cables, causing water and electrical damage!**



- 3 Partially uncoil the springs on the fitting, and push into through cut-out. The fitting should pull itself up into the cut-out.



- 4 Orientation of the fitting will ensure a consistent look across all fittings installed.



SEE CONSTANT CURRENT WIRING SHEET FOR IN SERIES WIRING DIAGRAM

WIRING

Do not power up until fitting is wired correctly! Constant current LEDs must be wired in series, polarity is critical. Please refer to specified driver sheet for details on the minimum and maximum number of LEDs per circuit.

IMPORTANT

Make sure that all cables and connections are securely connected before switching on the power. Failing to do this can lead to failure of the LEDs and/or the driver. If the LEDs do not work upon power up, turn off the power source immediately and check the polarity of the wiring. Any attempt made to open up and/or modify the luminaire will invalidate the manufacturers warranty. This is inclusive of but not limited to removal of the LightGraphix product label or removal of any parts from the main body of the product including bezels, electrical components and factory fitted fixing methods (unless otherwise stated in these instructions).

CORE COLOUR & POLARITY		
Colour of Cable	Red	Black
Materials	+	-

MAINTENANCE

Clean with soft damp cloth.
LED: Please contact LightGraphix.