

**WARNING: DO NOT USE NORMAL LOW VOLTAGE TRANSFORMERS WITH LEDs.**

All LED fittings are tested multiple times before dispatch. It is not necessary to check them on site. Do not power up until fittings are wired correctly.

**INSTRUCTION LEAFLET**




**LD155-F1** with /SC mounting springs  
**Recessed Mounted, Adjustable Uplight**

This product should be installed by a qualified electrician in accordance with all current, local legislation. For the UK, the current edition of the IEE Wiring Regulations and European Standard IEC 60364.

**SPECIFICATION**

LED recessed luminaires are class III  for Safety Extra Low Voltage supply  **350mA, 500mA and 700mA** constant current supply.

Suitable for mounting on normally flammable surfaces. 

Light source: **F1 LED Light Engine.**

This fitting is **IP67** rated.

Lumen Maintenance: L90B5 at 90,000hrs at Max Ambient of 35°C.

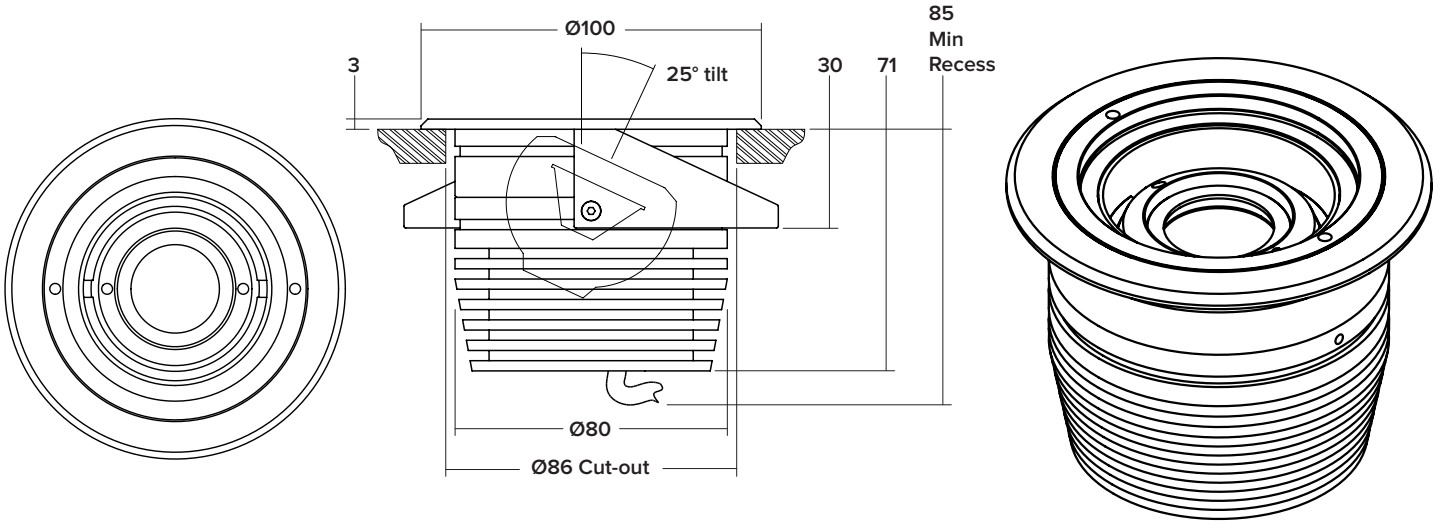
LD155-F1 is available in various power outputs options	
Product & LED output code	Power Output
LD155-F1-350	350mA 3.5W
LD155-F1-500	500mA 5W
LD155-F1-700	700mA 7W

**DIMENSIONS**

/SC Spring clips

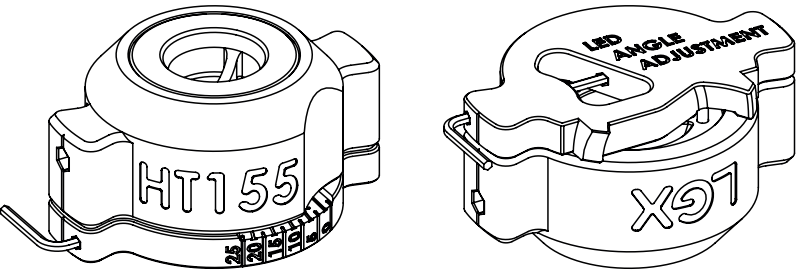
Front view

Side view



/HT155 Adjustment hand tool for the LD155.

Included: 3D printed hand tool, LED angle tool & 2.5mm allen key.



**WARNING**  
Do not power up LED or driver until all work is completed!  
See 'important' section on page 3.

**INSTALLATION INSTRUCTIONS  
ON NEXT PAGE**

# WARNING: DO NOT USE NORMAL LOW VOLTAGE TRANSFORMERS WITH LEDS.

All LED fittings are tested multiple times before dispatch. It is not necessary to check them on site. Do not power up until fittings are wired correctly.

## INSTRUCTION LEAFLET



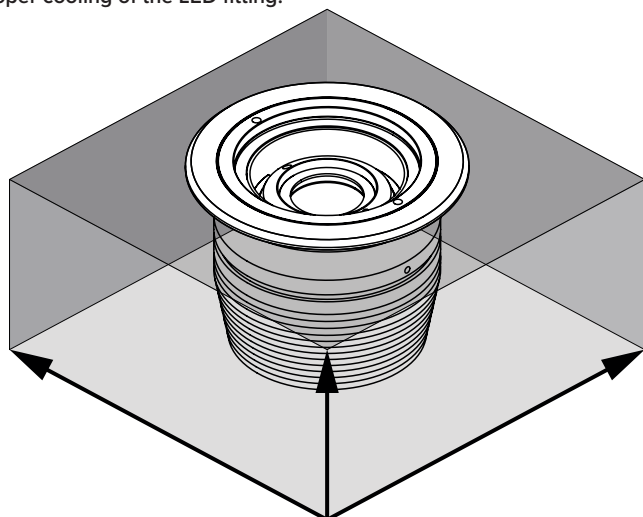
### LD155-F1 with /SC mounting springs

#### Installation Requirements

This product should be installed by a qualified electrician in accordance with all current, local legislation. For the UK, the current edition of the IEE Wiring Regulations and European Standard IEC 60364.

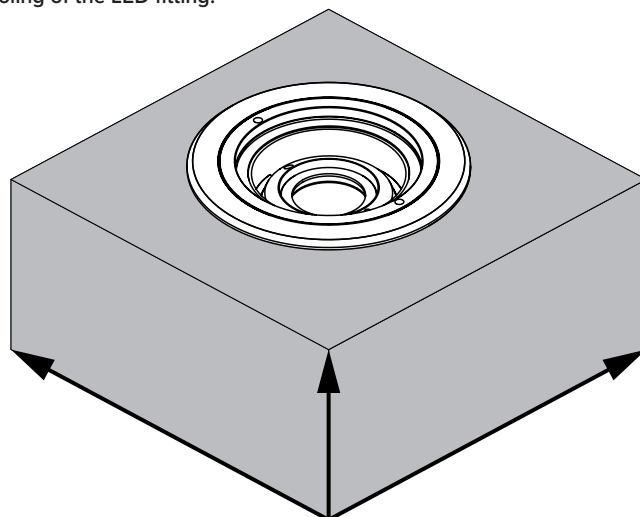
##### Air void requirements

If 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.



##### Concrete (or similar) requirements

If installing into a surface made from concrete (or similar), these are the minimum space requirements around the fixture to allow for proper cooling of the LED fitting.



Output current	Minimum void dimension requirements (Lmm x Wmm x Hmm)	Minimum void volume	
		cm <sup>3</sup>	Litre(s)
LD155-F1-350	120 x 120 x 85	1,200cm <sup>3</sup>	1.2
LD155-F1-500	160 x 160 x 85	2,200cm <sup>3</sup>	2.2
LD155-F1-700	220 x 220 x 85	4,000cm <sup>3</sup>	4.0

Output current	Minimum solid surface dimension requirements (Lmm x Wmm x Hmm)	Minimum solid surface volume	
		cm <sup>3</sup>	Litre(s)
LD155-F1-350	120 x 120 x 85	1,200cm <sup>3</sup>	1.2
LD155-F1-500	160 x 160 x 85	2,200cm <sup>3</sup>	2.2
LD155-F1-700	180 x 180 x 85	2,750cm <sup>3</sup>	2.7

These are the recommended minimum void/solid surface requirements. Going beyond the minimum specified dimensions will allow the LED fitting to cool itself more efficiently, extending the life of the product.



#### WARNING

Do not power up LED or driver until all work is completed!  
See 'important' section on page 3.

# WARNING: DO NOT USE NORMAL LOW VOLTAGE TRANSFORMERS WITH LEDs.

All LED fittings are tested multiple times before dispatch. It is not necessary to check them on site. Do not power up until fittings are wired correctly.

## INSTRUCTION LEAFLET

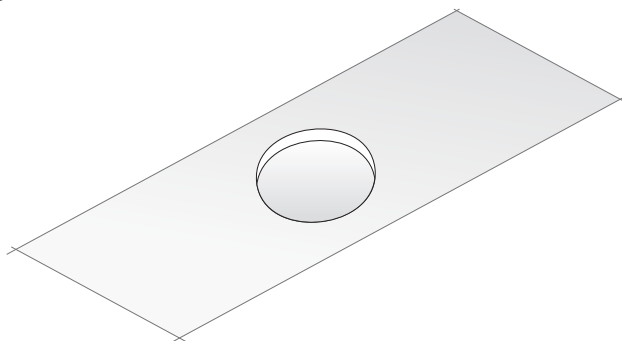


### LD155-F1 with /SC mounting springs

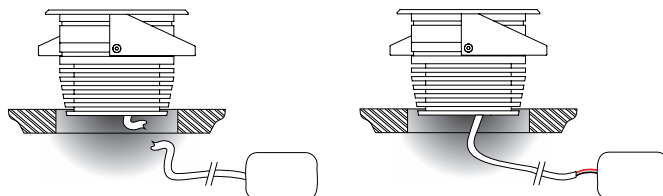
#### Installation

This product should be installed by a qualified electrician in accordance with all current, local legislation. For the UK, the current edition of the IEE Wiring Regulations and European Standard IEC 60364.

- 1** Prepare cut out: Ø86mm



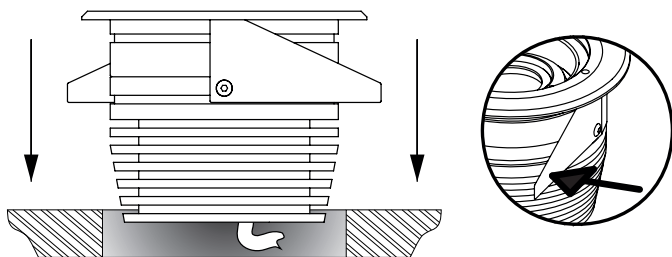
- 2** Feed cable through to the driver's location. Connect luminaire to the specified driver, ensuring it is disconnected from the mains side.



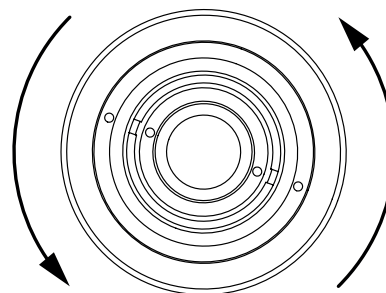
**NOTE:** Connections in wet environments. Make IP68 connection to stop water travelling up the cables into the fitting!



- 3** Compress springs against the side of the fitting.

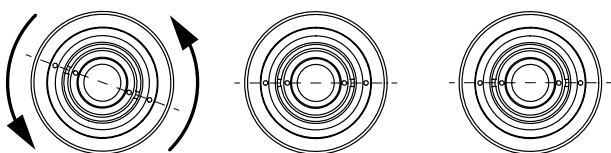


- 4** Rotate fitting anti-clockwise to allow the springs to bite into the mounting surface. This will help it stay securely in place.



- 5** For a neat and tidy appearance, rotate the fitting so that the holes on the top of the fitting line up with the intended lit surface.

LIT SURFACE



- 6** Confirm installation was successful by powering up the fitting. If there is no light output, switch off power immediately and verify wiring.



#### 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.

**SEE CONSTANT CURRENT WIRING SHEET FOR IN SERIES WIRING DIAGRAM**

#### Single Colour LED

Colour of Cable	Red	Black
Polarity	+	-

#### IMPORTANT

Make sure that all cables and connections are securely connected before switching on the power. Do not switch on the power source prior to making these connections as this will result in the LEDs being overvolted, which 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.

#### MAINTENANCE

**CABLE:** The external flexible cable of this luminaire can not be replaced; if the cord is damaged, the luminaire shall be destroyed.

**LAMPS:** The light source contained in this luminaire shall only be replaced by the manufacturer.

Please clean with soft cloth and avoid harsh cleaning chemicals.

# WARNING: DO NOT USE NORMAL LOW VOLTAGE TRANSFORMERS WITH LEDs.

All LED fittings are tested multiple times before dispatch. It is not necessary to check them on site. Do not power up until fittings are wired correctly.

## INSTRUCTION LEAFLET

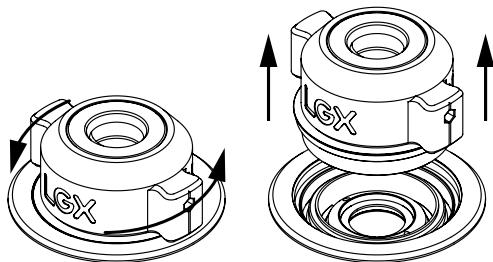


### HT155 for LD155

#### Making Adjustments

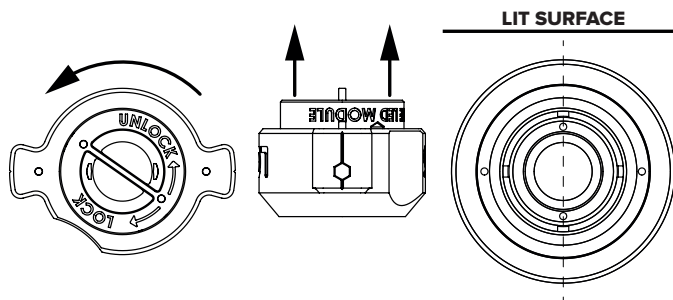
This product should be installed by a qualified electrician in accordance with all current, local legislation. For the UK, the current edition of the IEE Wiring Regulations and European Standard IEC 60364.

- 1** Pull apart the top half of the HT155 and fit into the corresponding holes on the top of the fitting. Press palm down on top of the tool, grip, and begin to unscrew the inner bezel.

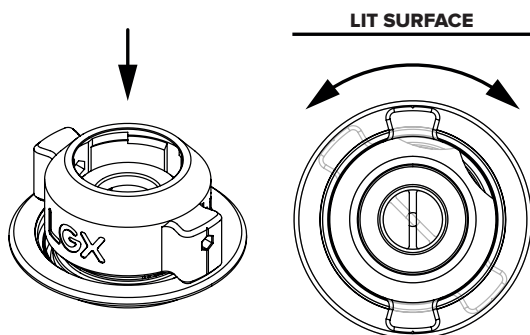


**NOTE:** Keep inner bezel clean.

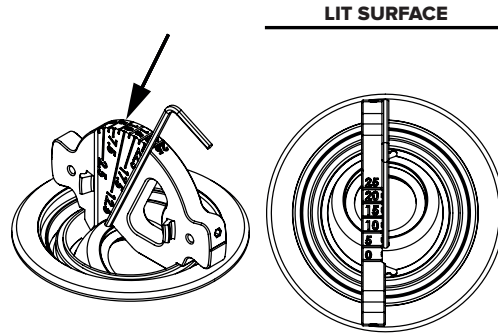
- 2** The holes on the LED module need to be perpendicular to the lit surface. Twist and pull out pins to extend.



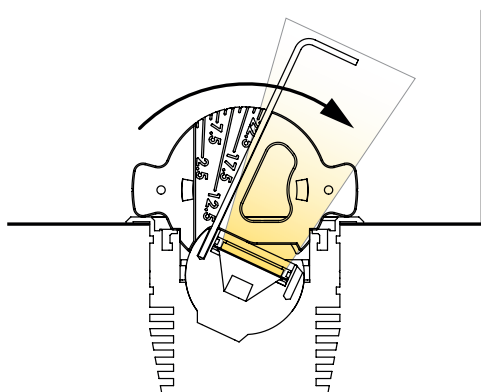
- 3** The inner pins will locate onto the LED module. Twist and orientate the LED to the desired position.



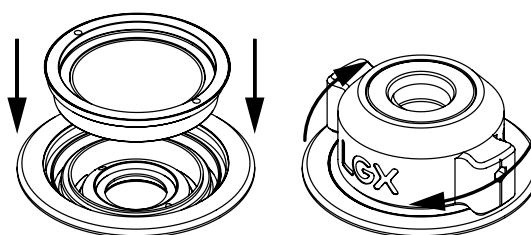
- 4** Place the LED Angle Adjustment tool inside the fitting, along with the provided allen key.



- 5** 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.



- 6** Make sure inner bezel is clean before refitting. Ensure inner bezel is flush with the outer bezel.



#### IMPORTANT ADVISORIES

- 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.
- 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.

**THIS LEAFLET SHOULD BE ISSUED AND RETAINED BY THE END USER.**



# WARNING: DO NOT USE NORMAL LOW VOLTAGE TRANSFORMERS WITH LEDs.

All LED fittings are tested multiple times before dispatch. It is not necessary to check them on site. Do not power up until fittings are wired correctly.

## INSTRUCTION LEAFLET

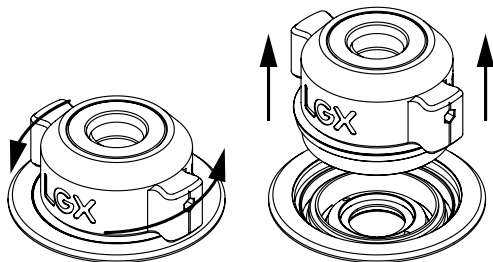


# CHANGING OPTICS for LD155

## Optical changes to adjust the beam angle of the fitting

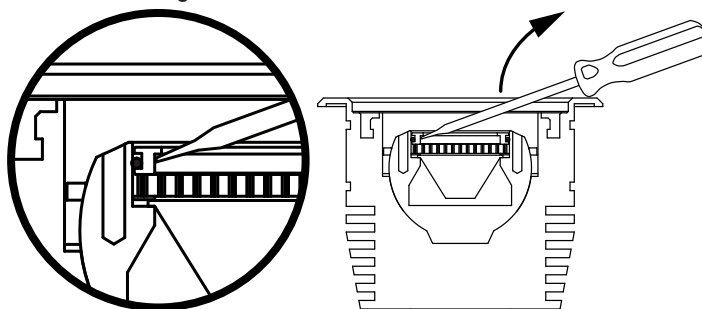
This product should be installed by a qualified electrician in accordance with all current, local legislation. For the UK, the current edition of the IEE Wiring Regulations and European Standard IEC 60364.

- 1** Pull apart the top half of the HT155 and fit into the corresponding holes on the top of the fitting. Press palm down on top of the tool, grip, and begin to unscrew the inner bezel.



**NOTE:** Keep inner 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.



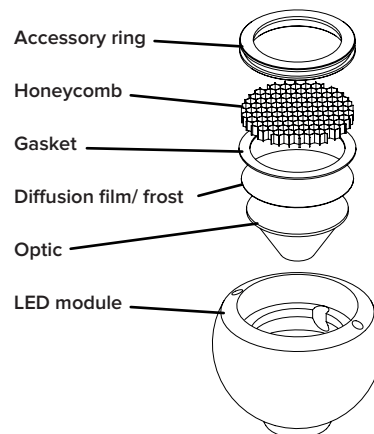
**NOTE:** Use a 5.5mm wide or larger slotted screwdriver.

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

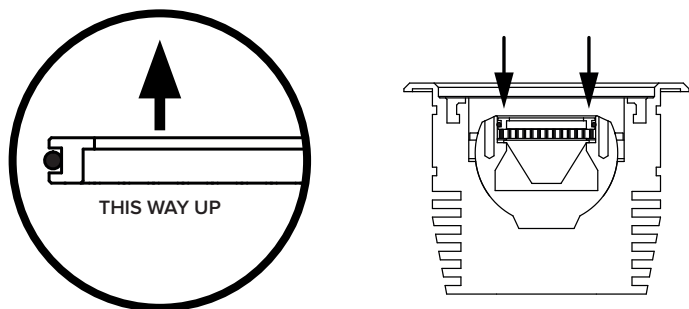
SUFFIX	PARTS NO.	DESCRIPTION
/NB	23.2070 optic & T10264 frost	20° narrow beam
/MSB	23.2060 optic	26° medium spot beam
/MB	23.2070 optic & T110019 film	35° medium beam
/WB	23.2070 optic & T110020 film	46° wide beam
/WWB	23.2070 optic & T10283 film	64° extra wide beam
/OB	23.2063 optic & T10264 frost	43° x 23° oval beam
/HL	T10561	Honeycomb louvre

- 4** Shown on the right is the order in which the components need to be arranged in.

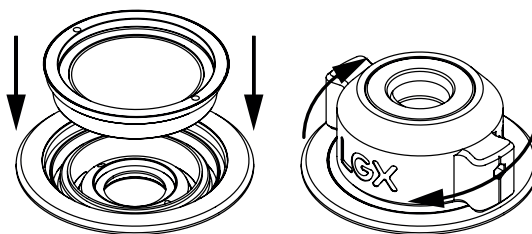
Make sure that the film is installed **matt side down**, with the shiny side facing outwards.



- 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 inner bezel is clean before refitting. Ensure inner bezel is flush with the outer bezel.



## IMPORTANT ADVISORIES

- 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 open fitting in moisture condensing, humid conditions.
- Do not exert excessive force on the bezel when opening or risk breaking the hand tool. If faced with a suborn bezel, gently heat the

fitting. Either through powered operation or with the use of a heat gun on a low heat setting

**THIS LEAFLET SHOULD BE ISSUED AND RETAINED BY THE END USER.**

Page 5/5