

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-N1 with /485N or /485N-2 concrete can
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: **N1 LED Light Engine.**

This fitting is **IP67** rated.

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

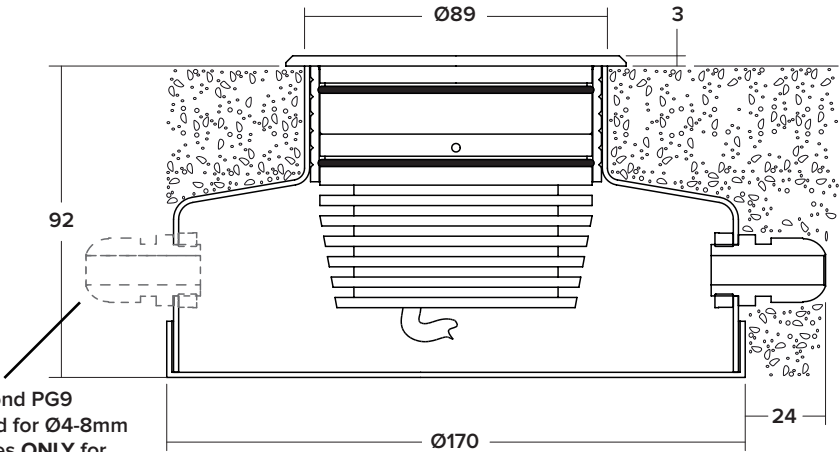
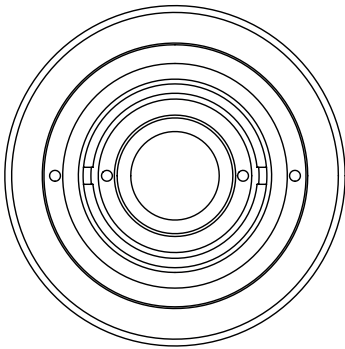
LD155-N1 is available in various power outputs options	
Product & LED output code	Power Output
LD155-N1-350	350mA 7W
LD155-N1-500	500mA 10W
LD155-N1-700	700mA 14W

DIMENSIONS

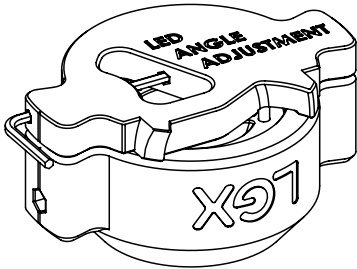
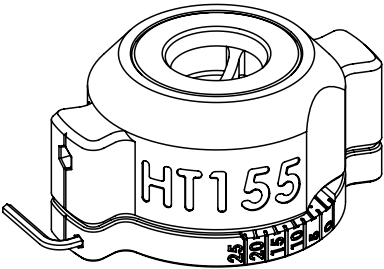
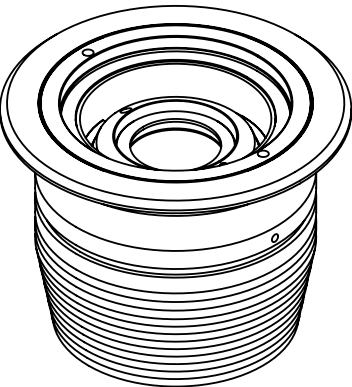
/485N Concrete can + /485N Concrete Can with second PG9 Gland

Front view

Side view



/HT155 Adjustment hand tool for the LD155.
Included: 3D printed hand 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.

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INSTRUCTION LEAFLET



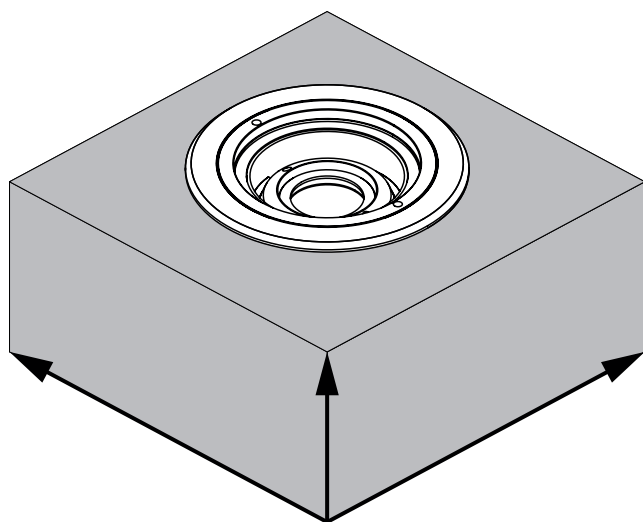
LD155-N1 with /485N or /485N-2 concrete can

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.

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. These cans are designed to be used primarily within concrete. They can be used in areas with loose / soft substrate but they must only be used within concrete for load bearing applications. Failure to do so, will cause structural and IP failure.



Output current	Minimum solid surface dimension requirements (Lmm x Wmm x Hmm)	Minimum solid surface volume	
		cm ³	Litre(s)
LD155-N1-350	300 x 300 x 180	18000cm ³	18
LD155-N1-500			
LD155-N1-700	400 x 400 x 200	32000cm ³	32

These are the recommended minimum 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.



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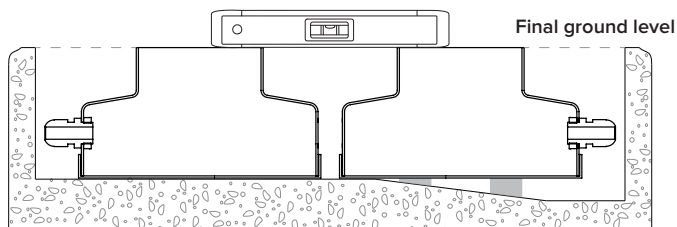


LD155-N1 with /485N or /485N-2 concrete can

Installation

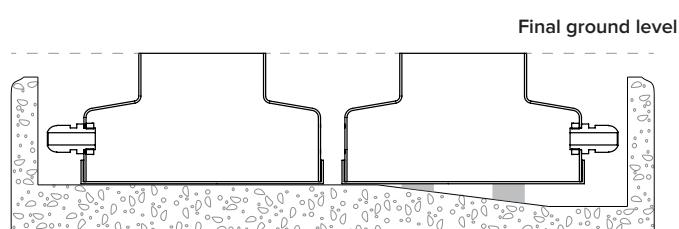
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- 1 Place the concrete can in the prepared area/cavity, this must be level. If the housing requires bolster, ensure it is supported.

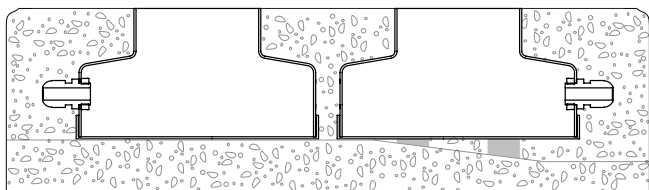


/485N Concrete can has been used for illustration use only

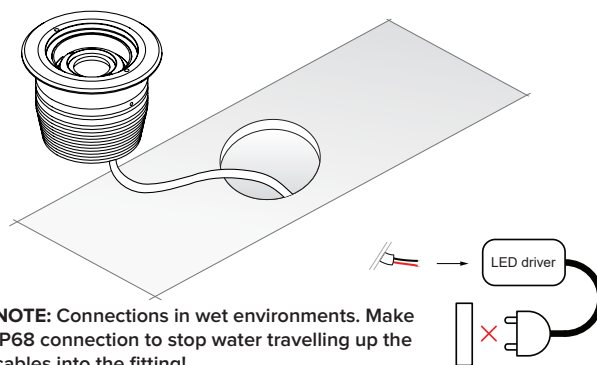
- 2 If a secondary surface is going to be used ensure the concrete is offset by the specified material thickness.



- 3 Fill remaining cavity with concrete. When pouring, ensure as little material falls into the can as possible.

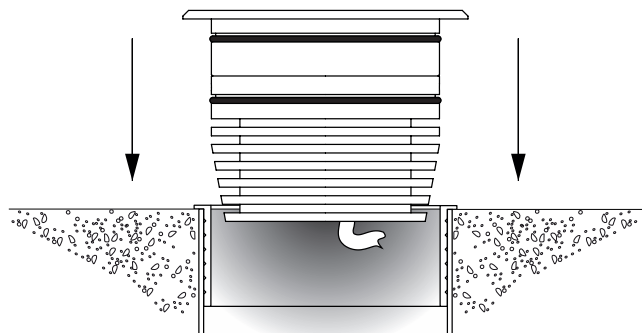


- 4 Feed cable through to the driver's location. Connect luminaire to the specified driver, ensuring it is disconnected from the mains side.



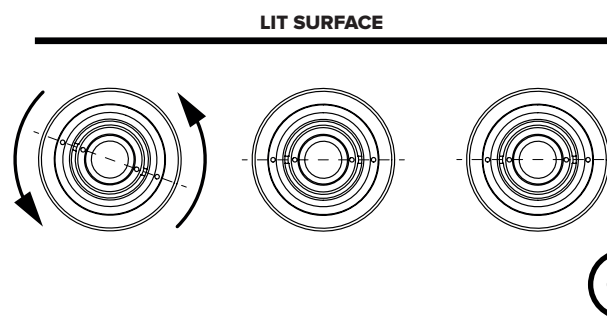
NOTE: Connections in wet environments. Make IP68 connection to stop water travelling up the cables into the fitting!

- 5 Grease O-rings with a heavy duty, silicone-free grease and place LD155 into sleeve. Failure to do so could hamper removal and cause damage to concrete can **DO NOT PUSH IN FULLY YET!**



NOTE: "Rocol Synthetic Grease Sapphire Premier" recommended

- 6 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. Once in a satisfactory orientation, push fittings fully into their sleeves.



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 overvoltage, 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.

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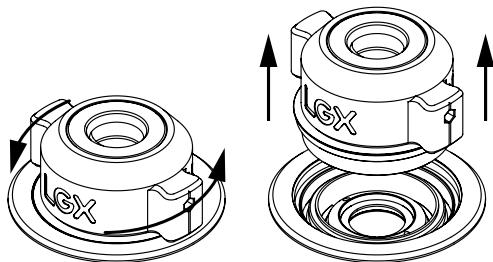


HT155 for LD155

Making Adjustments

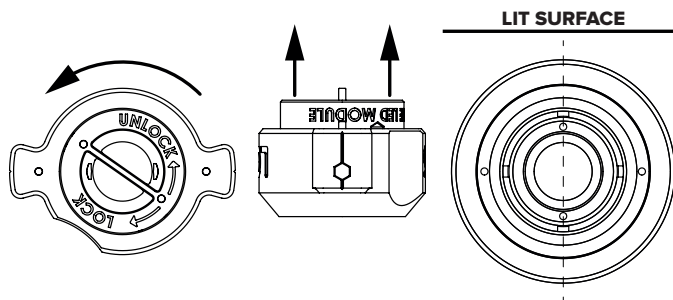
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- 1 Pull apart the top half of the HT155 and fit into the corresponding holes on the top of the fitting. Press palm down on top of the tool, grip, and begin to unscrew the inner bezel.

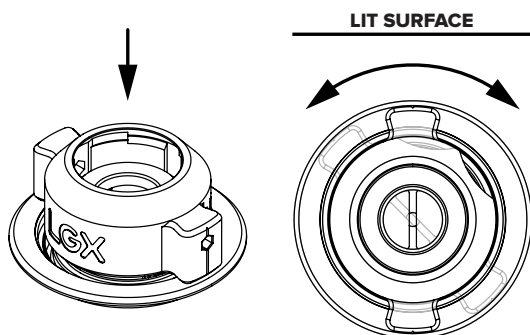


NOTE: Keep inner bezel clean.

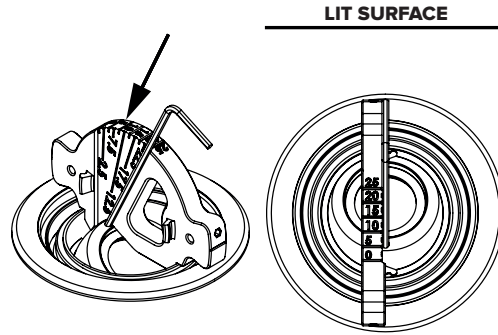
- 2 The holes on the LED module need to be perpendicular to the lit surface. Twist and pull out pins to extend.



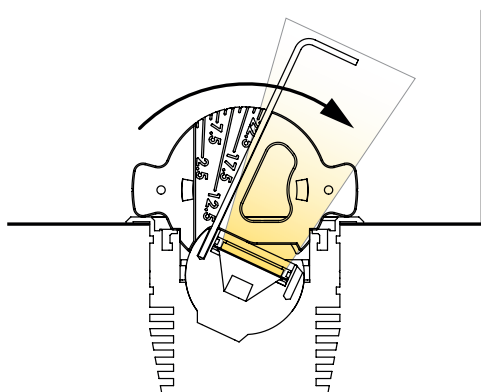
- 3 The inner pins will locate onto the LED module. Twist and orientate the LED to the desired position.



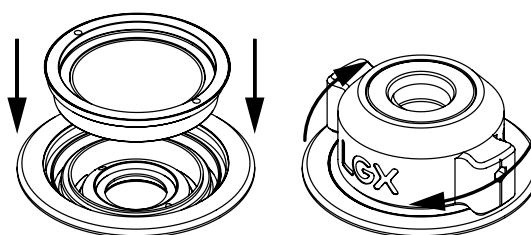
- 4 Place the LED Angle Adjustment tool inside the fitting, along with the provided allen key.



- 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.

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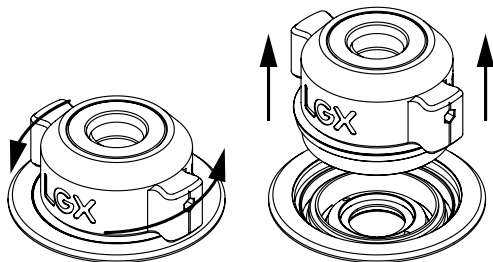


CHANGING OPTICS for LD155

Optical changes to adjust the beam angle of the fitting

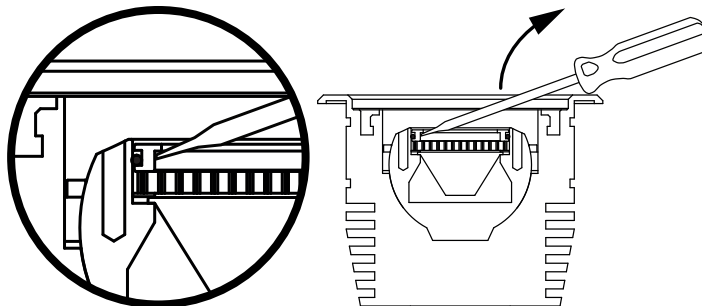
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- 1** Pull apart the top half of the HT155 and fit into the corresponding holes on the top of the fitting. Press palm down on top of the tool, grip, and begin to unscrew the inner bezel.



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.



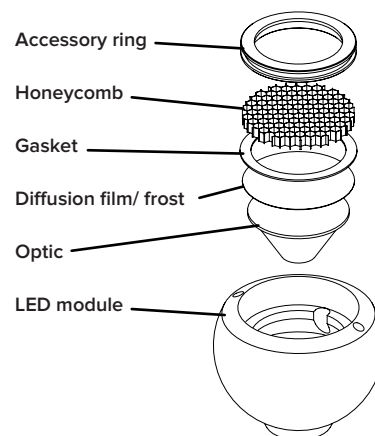
NOTE: Use a 5.5mm wide or larger slotted screwdriver.

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

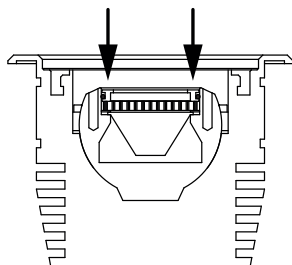
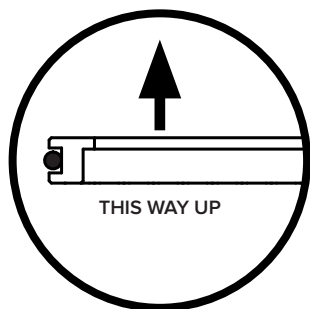
SUFFIX	PARTS NO.	DESCRIPTION
/NB	23.2070 optic & T10264 frost	20° narrow beam
/MSB	23.2060 optic	26° medium spot beam
/MB	23.2070 optic & T110019 film	35° medium beam
/WB	23.2070 optic & T110020 film	46° wide beam
/WWB	23.2070 optic & T10283 film	64° extra wide beam
/OB	23.2063 optic & T10264 frost	43°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

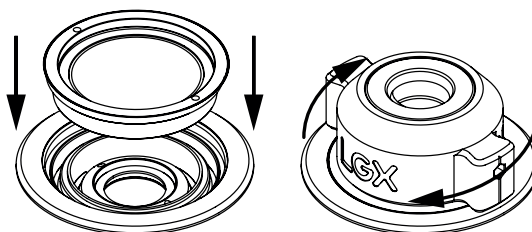
Make sure that the film is installed **mat** side down, with the shiny side facing outwards.



- 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 stubborn bezel, gently heat

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

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