

Read these instructions before commencing installation. Please give these instructions to the owner/occupier after installation to retain for future reference/maintenance.

IP65 **UK** **CE** **240VAC~50HZ 8.8W**

Important Information

It is recommended that these luminaires are installed and fitted by a qualified electrician ensuring the installation complies with current IEE wiring regulations & local building control. These products are designed for connection to a 240V~50Hz supply.

Any faulty, broken or damaged luminaires should be replaced immediately.

KSR will not accept responsibility for any claims arising from a poor installation.

Please Note: The limited warranty shall be deemed null and void in the following circumstances: Failure by the installer, end user or any third party to exercise caution to protect any covered product or part from outside damage, adverse temperature (normal operating ambient temperature 0°C - +35°C), humidity conditions, fluctuations in the electrical system or physical abuse as well as failure related to workmanship in the installation of the products or parts.

Important User Advice

Always switch off mains supply before installing/servicing.

*Due to the components used in the driver these are not compatible with earlier versions of the QR10 downlights and should not be mixed on the same circuit.

This luminaire is suitable for indoor use only and should not be fitted to damp or wet surfaces such as freshly plastered or painted ceilings. To prevent damage to the driver, do not mix with conventional magnetic ballasts on the same electrical circuit. At the end of life the luminaire is classed as WEEE under directive 2014/30/EU and should be disposed of in accordance with local legislation

Installation Procedure

KSR recommends that a sample hole is cut in some scrap material to familiarise yourself with the installation. Once you are completely satisfied:

Locate the area's suitable to install these luminaires.

Cut a 72mm round hole in the ceiling and ensure sufficient ceiling void without infringing on joists, water pipes or electrical cables.

Connect the mains supply to the emergency pack/LED Driver as below. Earth terminals are provided for earth continuity only. The LED driver allows for mains loop in/loop out connections, if not looping through either of the L, E & N inputs can be used.

Press springs back and push luminaire body into aperture.

This luminaire is suitable for installations where vapor permeable membranes are installed. Fit this product as per illustration shown in Fig.1

If you are installing one of the KSR detachable rims remove the standard white rim by pulling the trim off of the main fitting, do not twist the trim and attach new trim by pushing and clicking it into place. Ensure there is adequate free air ventilation around the driver and emergency control pack. the head unit can be covered in mineral wool insulation.

Turn on the mains supply to test the luminaire.

*This downlight is designed with a Isolator switch (Fig:2) to allow for High voltage insulation resistance testing, without having to remove the luminaire/driver from the circuit just switch all isolation switches to off, test then switch back to on for normal operation.

An initial 24 hour charge period will be required prior to conducting any emergency lighting tests. thereafter periodic testing should be carried out in line with current regulations.

**Please note: Depending on the amount of QR10 fittings on a circuit you may have to upgrade the breaker to a 'C' or 'D' type due to the way electronic LED drivers start up with higher inrush currents compared to halogen lighting.*

Fig. 1

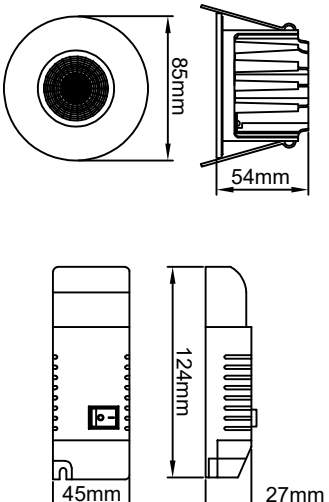
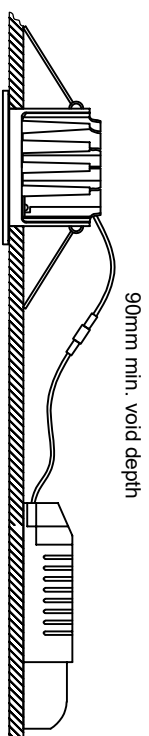
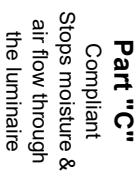
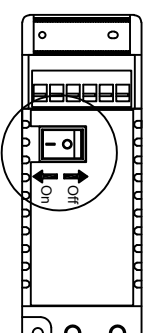


Fig. 2

Isolator Switch
 Isolates device
 from Circuit



Please Note: The isolation switch needs to be in the On (I) position during normal operation

	ØRim Size	ØCut out	Void Depth Req'd	LED Wattage/ Colour/Lumens
KSRFRD350EM	85mm	72mm	90mm	8.8W - 3000K (825 lumens)
KSRFRD351EM	85mm	72mm	90mm	8.8W - 4000K (855 lumens)



KSR Lighting Aftersales: 023 92 674343
 E-mail: aftersales@ksrlighting.com

Installation Particulars For End User

Installation Procedure
Familiarize yourself with the installation procedure and ensure the power is safely isolated before installing the Emergency pack.

Ensure the LED luminaire is within the specification 9-55VDC or 55-80VDC. If 55-80VDC voltage range is required please remove the jumper as stated on the casing.

Wire as required (Fig. 1):

Non-Maintained Emergency
Connect the mains input Unswitched Live (EM_L), Neutral (EN_N), and Neutral out (Dr_N) to the driver mains input. The low voltage side just requires output to the LED luminaire positive (+) and negative (-). Then connect the battery. Install the LED indicators in a suitable location.

Maintained Emergency

Connect the mains input Unswitched Live (EM_L), Neutral (EN_N) and Switch Live (SW_L). Connect the Live out (Dr_L) and Neutral out (Dr_N) to the driver mains input. The low voltage side connect the output from the LED driver to the from LED Driver positive (D+) and Negative (D-) luminaire output to the LED luminaire positive (+) and negative (-). Then connect the battery. Install the LED indicators in a suitable location.

Please note: For manual testing purposes a provision is made inside the cover of the low voltage side of the driver (Fig. 1) marked as Test on the casing. See overleaf for details on manual testing.

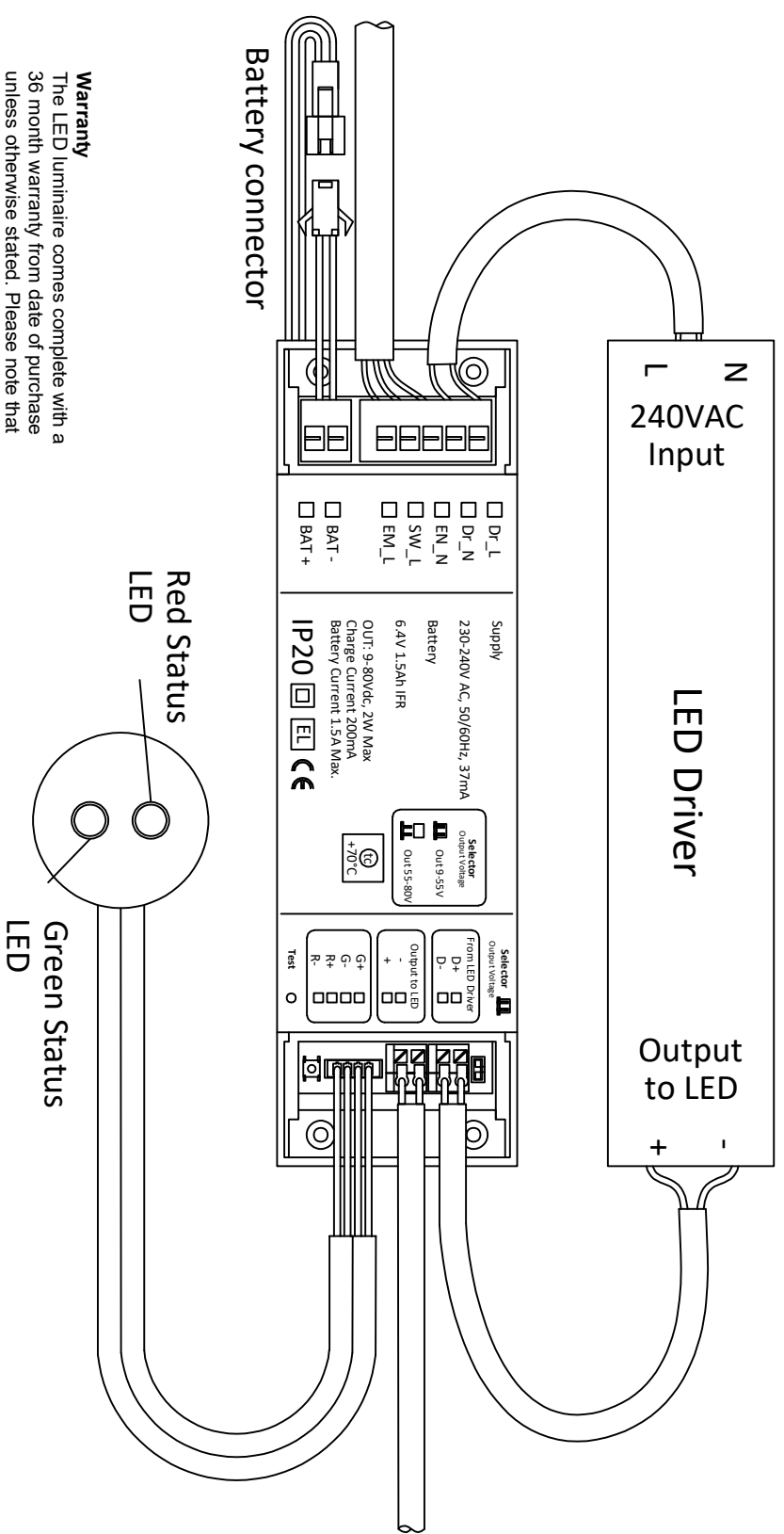
Install emergency label supplied on luminaire to be visible in normal use. Turn on the power and ensure that the module is showing charge indicator.

This fitting requires a minimum 24 Hour initial charge period prior to any manual emergency testing, please see overleaf for testing routine, write on the battery label in permanent ink the date of commissioning. All results must be recorded and left with the end user.

The battery has a rated duration of at least 4 years but should be replaced if the duration of operation is less than 3 hours after a 24hr charge time with no interrupted supply.

Input from mains supply

Output to LED Luminaire



Warranty

The LED luminaire comes complete with a 36 month warranty from date of purchase unless otherwise stated. Please note that the emergency packs and batteries come with a 36 month fixed warranty. Should any claim be made against battery failure within the warranty period, full and complete maintenance test reports must be provided.



KSR Lighting Aftersales: 023 92 674343
E-mail: aftersales@ksrlighting.com

Self Test Emergency Inspection/Testing Instructions

All full duration tests should be where possible be undertaken at times of low risk adjacent emergency luminaires we recommend that you you reset the inbuilt timer or run a manual 30 day test on alternate emergency luminaires to stagger testing times. Once commissioned fill in the date of the first test/install date this will allow the end user to monitor and record subsequent test information on the supplied report. All tests with the exception of the visual inspection will be completed automatically at the relevant times including battery charge condition and lamp status.

Daily:

Visual inspection of the battery charge LED.

Automatic Monthly (Every 30 Days):

(in addition to the daily check) The results of the short duration test shall be recorded.

Automatic Annually (Every 180 & 360 Days):

(in addition to the daily check) The results of the full duration tests shall be recorded.

A copy of this report must accompany any emergency pack returned to KSR Lighting for any reason.

Performance Indicators	
Normal Operation	Red LED off, Green LED Solid
Automatic 30 Day Test	Red LED off, Green LED flashing once a second
Automatic 180/360 Day Test	Red LED off, Green LED flashing twice a second
Manual Simulated Power Failure	Red LED off, Green LED off
Manual 30 Day Test	Red LED off, Green LED flashing once a second
Manual 180/360 Day Test	Red LED off, Green LED flashing twice a second
Manual Fast Test (24 minutes)	Red LED off, Green LED four times a second

Manual Testing - Can only be completed under mains conditions	
Manual Simulated Power Failure	Hold test button until you hear 1 beep
Manual 30 Day Test	Hold test button until you hear 2 beeps
Manual 180/360 Day Test	Hold test button until you hear 3 beeps
Manual Fast Test (24 minutes)	Hold test button until you hear 4 beeps
Abort Test	Hold test button for 1 second
Reset Inbuilt Timer	Hold test button for 15 seconds long beep

Fault Indicators	
Battery/Charging Fault	Red LED flashing once a second, Green LED off, Beeps twice every minute until fault rectified
Lamp Fault	Red LED flashing twice a second, Green LED off, Beeps twice every minute until fault rectified
Failed Duration Test	Red LED solid, Green LED off, Beeps twice every minute until fault rectified



