



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

IMPORTANT NOTE

Fitting not suitable for through wiring loop in / loop out when used with KSR98109 Emergency Pack.

IP20 220-240VAC~50/60Hz 50-300VDC 2W Max

The KSR98109 Emergency pack is Class II and does not require an Earth



IP20↑ 240V~50Hz 5W/7W
IP65↓

The KSRFRD385 & 386 LED Down lights are Class I and must be Earthed - Refer to fitting instructions for Wattage & CCT Selection etc.



Important Information

It is recommended that this Emergency pack & Downlight is installed and fitted by a qualified electrician ensuring the installation complies with current wiring regulations & local building control. These products are designed for connection to a 220-240V~50/60Hz supply. Any faulty, broken or damaged modules 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 - 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 and disconnect the battery before installing/servicing. This Emergency pack & LED Downlight are suitable for **indoor use only**. As the buyer/installer and/or user of this product it is your own responsibility to ensure that this emergency pack is fit for the purpose for which you have intended and operates to the relevant standards. KSR Lighting can't accept any liability for loss, damage or premature failure resulting from inappropriate use or connection to a incompatible luminaire. Do not use Megger or similar high voltage instruments. Due to the fact this Emergency pack contains electronic components that maybe damaged by high test voltages, they must be disconnected from the circuit before testing. To prevent damage, do not mix with conventional magnetic ballasts on the same electrical circuit. At the end of life the Emergency pack & downlight are classed as WEEE and should be disposed of in accordance with local legislation

Installation Procedure

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

Always ensure the battery is disconnected before installation or maintenance.

Wire as required below

Non-Maintained Emergency

Connect the mains input Unswitched Live (L), Neutral (N). The low voltage side just requires output to the luminaire Lout (live) and Nout (Neutral). Then connect the battery by opening the centre battery compartment and plugging in. Install the LED indicators in a suitable location by drilling a 20-22mm hole (please note if the hole drilled is slightly larger you may need to apply adhesive to the LED indicator housing to secure it).

Maintained Emergency (Fig. 1):

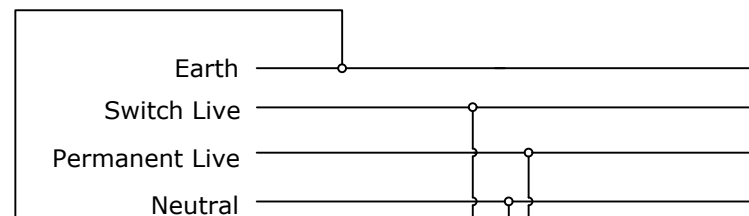
Connect the mains input Unswitched Live (L), Neutral (N) and Switch Live (Lin). Connect the Lout (live) and Nout (Neutral) to the luminaire mains input. Then connect the battery by opening the centre battery compartment and plugging in. Install the LED indicators in a suitable location by drilling a 20-22mm hole (please note if the hole drilled is slightly larger you may need to apply adhesive to the LED indicator housing to secure it).

Ensure the dip switch located with battery inside the battery compartment is set to ON for self-test or 1 for manual test, manual testing requires the pack unswitched live to be connected to a remote test device (i.e. key switch). Place correct label supplied to be visible on the product for selected test operation (A - Manual test, F - Self-test).

Please note:

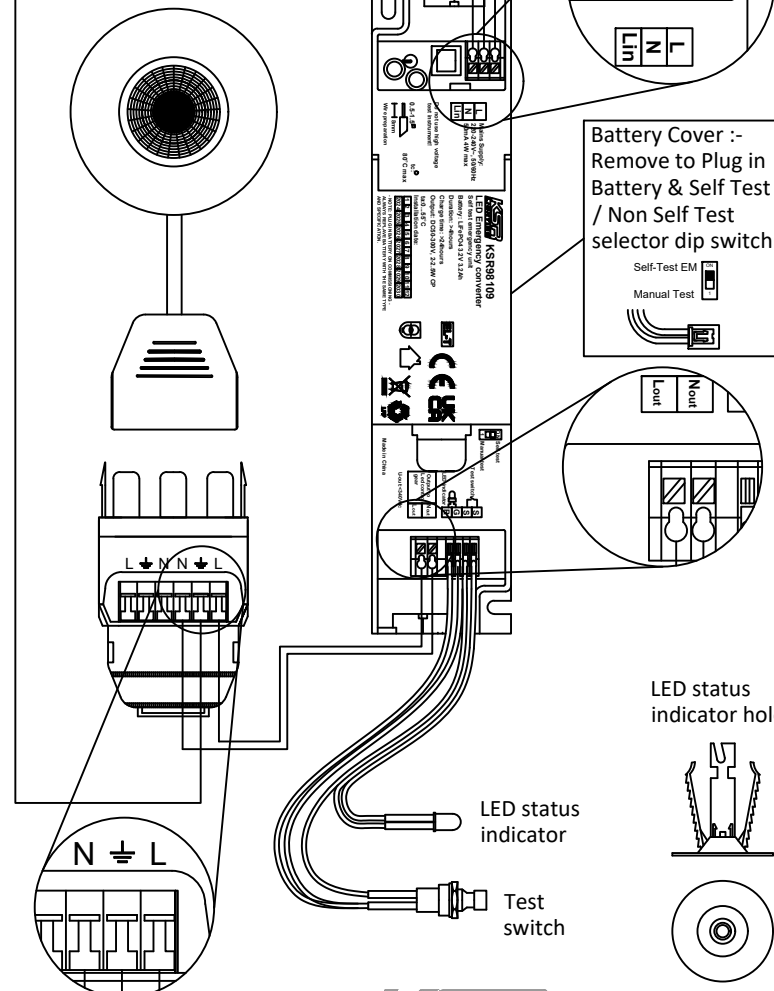
Turn on the power and ensure that the module is showing charge indicator. This pack requires a minimum 24 Hour initial charge period prior to any emergency testing, please see overleaf for testing routine, write on the battery label in permanent ink the date of commissioning. All results must be recorded 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.



IMPORTANT NOTE
Fitting not suitable for through wiring, loop in / loop out when used with KSR98109 Emergency Pack.

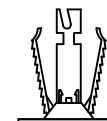
Fig.1



Battery Cover :- Remove to Plug in Battery & Self Test / Non Self Test selector dip switch

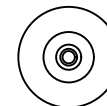
Self-Test EM
Manual Test

LED status indicator holder



LED status indicator

Test switch





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. When using the self-test option all tests with the exception of the visual inspection will be completed automatically including battery charge condition and load status.

Daily:

Visual inspection of the battery charge LED.

Monthly Function test (Every 30 Days):

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

Annual Duration test (Every 360 Days):

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

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

Self-Test Performance Indicators	
Charging/Normal Operation	Green LED Permanently on
Function Test	Green LED flashing once every 0.1 second
Duration Test	Green LED flashing once every second
Simulated Power Failure (push test switch)	LED off

Fault Indicators	
Battery/Charging Fault	Red LED flashing once a second
Load Fault	Red LED Permanently on
<i>If under fault conditions once the fault has been rectified then you must with the emergency pack powered on reset the fault by pushing and holding the test switch for 15 seconds.</i>	

PLEASE NOTE: This fitting requires a minimum 24 Hour initial charge period prior to any emergency testing



All tests must be undertaken at times of least risk and in accordance with the latest standards as indicated below:

Daily:

LED charge indicators shall be visually inspected for correct operation.

Monthly:

(in addition to the daily check) If automatic testing devices are used, the results of the short duration tests shall be recorded. Test shall be carried out as follows:

1. Switch the luminaire over to emergency mode to operate from the batteries by simulating a failure of supply to the emergency circuit for a period sufficient to ensure correct luminaire operation.

Note: The period of simulation failure should be sufficient for the purpose of this clause whilst minimising damage to the system components e.g lamps. During this period, all luminaires shall be checked to ensure that they are present, clean and functioning correctly. At the end of this test period, the unswitched supply should be restored and any indicator lamp or device should be checked to ensure that is showing that the supply has been restored.

Annually:

If automatic testing devices are used, the results of the short duration tests shall be recorded. For all other systems the monthly inspection shall be carried out and the following additional tests made:

1. Each luminaire shall be tested monthly as above but for its full duration in accordance with the manufacturer's information.
2. The unswitched supply for the luminaire should be restored and any charge indicator lamp or device should be checked to ensure that it shows the unswitched supply has been restored. The charging arrangements should be checked for proper functioning.
3. The date of the test and its results shall be recorded in the system logbook.

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



