

# Mirage 3

Installation Instructions
C79 / C110 / C165 / SQ165 & Nightingale M3



PK-NPD134-IL

Revision 16 - 12/06/202



# Whitecroft Lighting Limited

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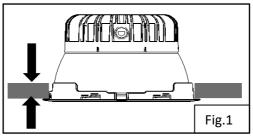
www.whitecroftlighting.com

Registered No. 3848973 England

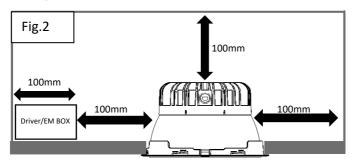
Registered Office: As above

#### INSTALLATION DETAILS

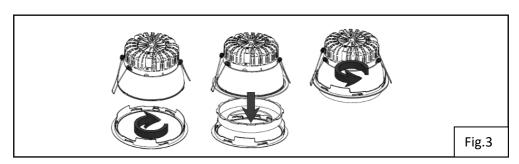
- 1) Open packing and locate the disposable gloves, this is to stop grease from skin contact getting onto the reflector surface. These must be worn throughout the installation.
- 2) Inspect the contents of the box for any damage in transit.
- Prepare aperture using appropriate tool, circular fittings are based around standard size hole saws. See Dimensions on last page for cut sizes.
- 4) Ceiling thickness is show under Product and Driver Dimensions. See fig 1.



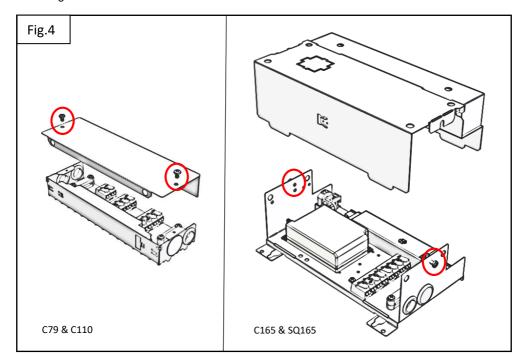
5) Check void dimensions. Ensure 100mm clearance from the down lighter is given in all directions to walls/insulation and driver/EM box. See Fig.2. Insulation cannot directly cover the back of the down lighter.

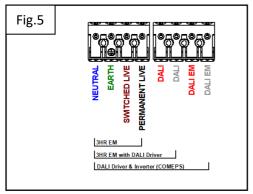


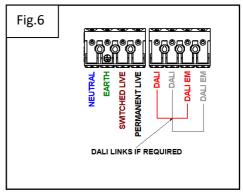
6) If attachments are required these are ordered separately and will be assembled next. They are only available on C165 –IP44 products. See the attachments list on last page. To assemble twist the bezel anti-clockwise to release as shown in fig.3. Then place the required attachment into the bezel and twist clockwise to lock. If the down lighter is an EM version take care that the EM LED indicator attached to the bezel is not over stressed. This can be easily removed with a flat bladed screwdriver if needed. Please remember to re attached when finished.



- 7) For standard F/O, DALI and Tuneable white products. Wire product to mains by removing the cable restraint cover from driver. Trim back Mains/Dali cabling 10-11mm and wire directly to driver. See Specification page for cable details.
- 8) For emergency products remove gearbox lid via 2 x Pozi drive screws see fig.4. Wire mains to product following the fig.5 wiring diagram. Note if driver and inverter are required to run on the same DALI pair then use the link kit provided and wire as fig.6. Once complete replace the lid and retighten screws. Earth lead must remain connected.



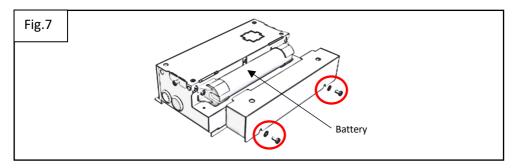




Note: Nightingale M3 requires controls for full functionality (See fig.5)

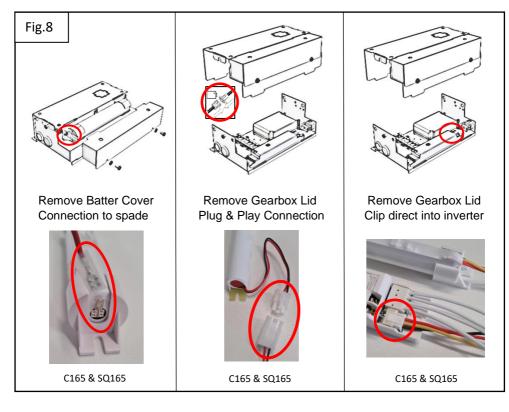
9) If emergency product an electrical battery connection is required and filling in the commissioning date on the label.

The battery on the C165 round and SQ165 square products is accessed by separate cover on the gear box lid, to gain access remove lid via 2 x Pozi drive screws ensure earth washers are maintained fig.7



The battery on the C79 and C110 round products is external.

Electrical connection of the battery depends on battery manuafacture there are typically 6 different ways of connecting the batteries fig.8 for C165 & SQ165 ans fig.9 for C79 & C110







Open Battery Casing Plug and Play Connection

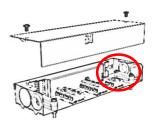
Unclip battery case lid

Chicane sleeved battery wire from gear box into battery case as shown.

Electrically connect battery.

Ensure anti-rattle part is in place.

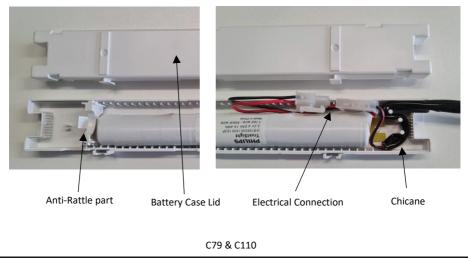
Reclip the lid on.



Remove Gearbox Lid Feed wire though clamp Clip directly into inverter

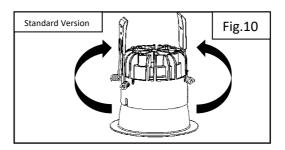


C79 & C110

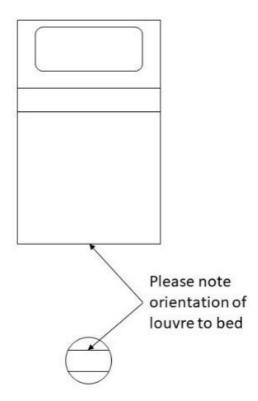


10) Install product in ceiling carefully place the product through the aperture in the following order external battery/Steel box/ external driver. Ensure the process does not damage the ceiling.

11) Pull back springs on body and carefully offer up to and through the cut aperture see fig.10, again be careful not to catch the ceiling during this process. Ensure fingers are clear before releasing spring to avoid injury. Ensure the fitting is centered in the aperture.



#### 12) Nightingale Orientation



13) To remove the fitting for maintenance, first ensure clean gloves are used to protect the fitting from dirt and grease. Then place a flat bladed screwdriver carefully behind the bezel and ceiling to open up a gap. Use fingers to grip the product and pull down. You can also use your free hand to ease the spring through the aperture to stop damage to the ceiling.

### **SPECIFICATION**

Lamp type: LED

Output: 500lm, 1000lm, 2000lm, 3000lm, 4000lm (Nominal + Tuneable White) size

specific (check website)

Colour: 3000k/4000K RA80/90 & Tuneable White

Materials Acrylic Diffuser

Polycarbonate Reflector (Specular, Semi Specular, White RAL 9010 or Black

RAL 9005)

**Graphite Composite Heatsink** 

**Supply** 220-240V, 50/60Hz

Operating temp 0°c to 25°c

Power Refer to Whitecroft Lighting Website for full list of power information. (See bottom)

**Connection** Terminal block/Driver 0.75mm² to 1.5mm², 10-11mm stripped

**Ingress:** IP44/65 (from below)

Protection

**Attachments:** MA3-FLO, MA3-CYL, MA3-DIFF (Only available on C165 – IP44 products)

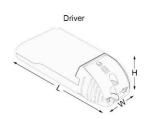
**Tuneable** Note this product requires DALI type 8 controls in order to output the tunable

**White:** colour control. (Supplied separately or by others)

## PRODUCT AND DRIVER DIMENSIONS

			Ceiling Cut Aperture		EM		
Version	Ø(mm)	H(mm)	Depth(mm	) CAر1mm	KG	KG	Driver(mm)
C79	87	79	1-40	79	0.5	1.5	53(W), 30(H), 121(L)
C110	118	102	1-50	110	1.0	1.5	$53(W),\ 30(H),\ 121(L)$
C165	173	106	1-50	165	1.0	2.0	$67(\text{W}),\ 30(\text{H}),\ 140(\text{L})$
SQ165	173sq	110	1-50	165sq	1.0	2.0	$67(\text{W}),\ 30(\text{H}),\ 140(\text{L})$
Nightingale M3	173	144	1-50	165	1.0	2.0	$42(W),\ 30(H),\ 97(L)$
C165 Tuneable	173	106	1-50	165	1.0	2.0	$70(\text{W}),\ 31(\text{H}),\ 215(\text{L})$
SQ165 Tuneable	173sq	110	1-50	165sq	1.0	2.0	70(W), 31(H), 215(L)





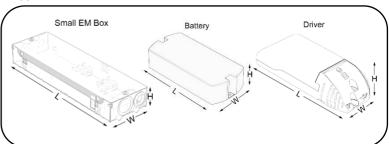
# **EMERCENCY BOX DIMENSIONS**

Version	W(mm)	H(mm)	L(mm)	EM Box	Battery Dims(mm)*	Driver Dims(mm)*
C79	69	40	227	Small	70(W), 34(H), 152(L)	53(W), 30(H), 121(L)
				LiFEPO	50(W), 41(H), 126(L)	
C110	69	40	227	Small	70(W), 34(H), 152(L)	$53(W),\ 30(H),\ 121(L)$
				LiFEPO	50(W), 41(H), 126(L)	
C165	145	80	236	Large	N/A**	N/A**
SQ165	145	80	236	Large	N/A**	N/A**
Nightingale M3	145	80	236	Large	N/A**	N/A**

<sup>\*</sup>Small EM box has separate remote battery and driver.

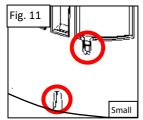
<sup>\*\*</sup>Included inside large EM box

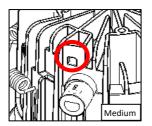


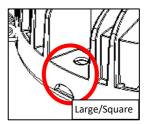


#### **GENERAL INFORMATION**

- A qualified electrician, in accordance with IET wiring regulations should carry out connection to mains wiring.
- 2) Observe ESD precautions during installation.
- 3) Emergency versions of this luminaire must be earthed
- 4) Ensure that the rated voltage and frequency requirements are compatible with the available mains supply.
- Cleaning of reflectors and lenses should be carried out using clean, soft and lint free cloths.
   Use of cleaning fluids can mark reflector surfaces.
- 6) Do not carry out high voltage insulation test, i.e. 500/1000v this may damage internal components.
- 7) For secondary suspension points please refer to fig.11. The holes are design to accommodate steel cable (supplied by others).







- 8) Allow sufficient time for product to cool before performing maintenance. Heatsink may be hot.
- 9) The light source contained in this luminaire shall only be replaced by the manufacturer or a designated service agent or a suitably qualified person.
- **10)** Batteries used in emergency versions of this luminaire range are replaceable by a qualified electrician.

#### **TECHNICAL SUPPORT**

Telephone: 0161 331 5700

E-mail: <u>technical@whitecroftlight.com</u> http://www.whitecroftlighting.com/