

KIMBAL Range INSTALLATION INSTRUCTIONS (Intended for indoor use only ta 25°C)



KF4 Fixed Recessed Downlight

KF418 (1) 150mA
 KF428 (2) 250mA
 KF438 (3) 350mA
 KF458 (5) 500mA

IP 20 Without Lens
IP 64 (LED Optical Chamber) With factory fitted Lens
IP 54 With site fitted Lens

Complies with IEC60598
 Complies with AS/NZS60598
 RoHS compliant

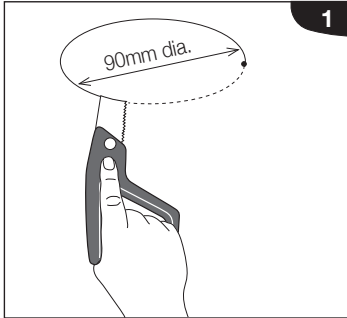
- Rated wattage 6-20W
- Un: 220-240V fr: 50/60HZ
- Uout: 34-38VDC
- PF 0.9C



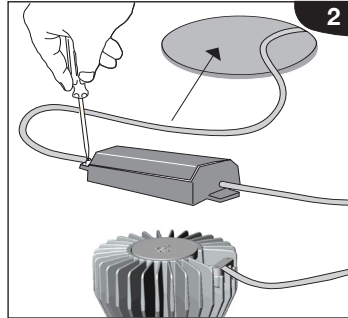
Note: The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.

Note: If the external flexible cord of this luminaire is damaged it shall be replaced by the manufacturer, its service agent or a similarly qualified person.

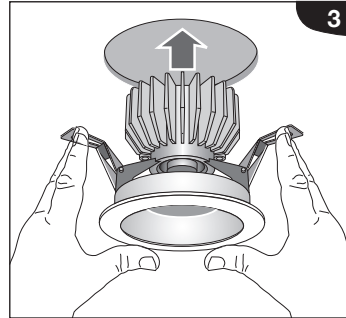
FIXED DOWNLIGHT INSTALLATION



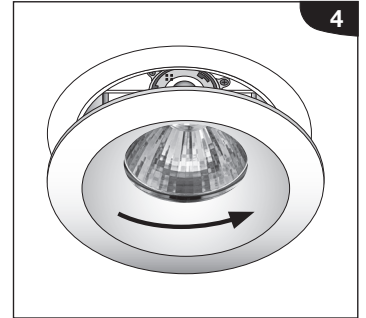
1. Cut 90mm diameter mounting hole.



2. Connect driver, then insert into ceiling space.



3. Gently insert downlight into ceiling while holding back mounting clips.

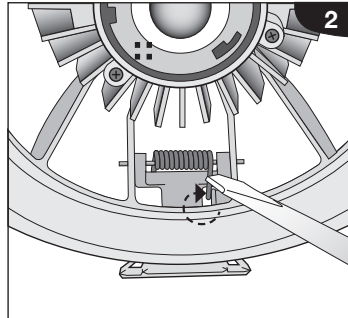


4. Ceiling ring/reflecter assembly can be removed (turn anti-clockwise) to allow for cleaning/painting ceiling.

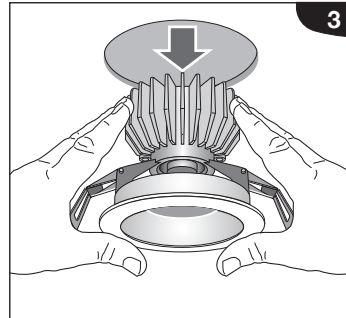
TO REMOVE FIXED DOWNLIGHT



1. Remove ceiling ring/reflecter assembly (turn anti-clockwise).

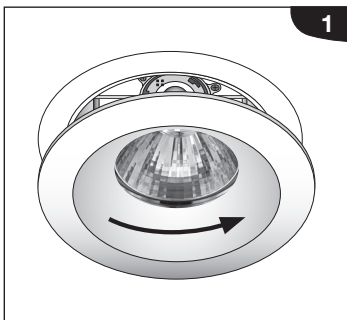


2. Disengage tail of torsion spring by pushing tail behind lug.

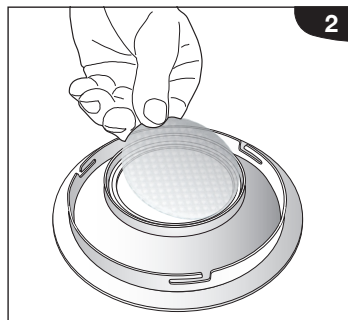


3. Gently remove downlight from ceiling.

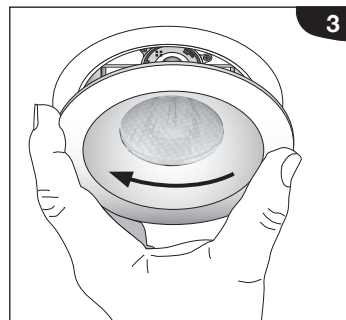
TO FIT LENS ACCESSORY – FIXED RECESSED DOWNLIGHT



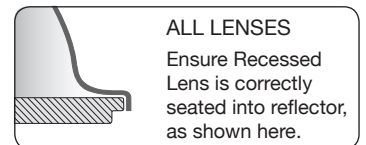
1. Remove ceiling ring/reflecter assembly (turn anti-clockwise).



2. **Recessed Reflector Option** – fit Lens Accessory into Ceiling Ring.
Flush Reflector Option – fit Lens Accessory Into Reflector.



3. Re-assemble Reflector Assembly (Reflector, Lens and Ceiling Ring) and install assembly into downlight by turning clockwise. Ensure reflector is fully seated into ceiling ring.



LENS ACCESSORY NOTE:
Prismatic Lens
 Smooth surface facing light source.
Diffusion Lens
 Matt surface facing light source.

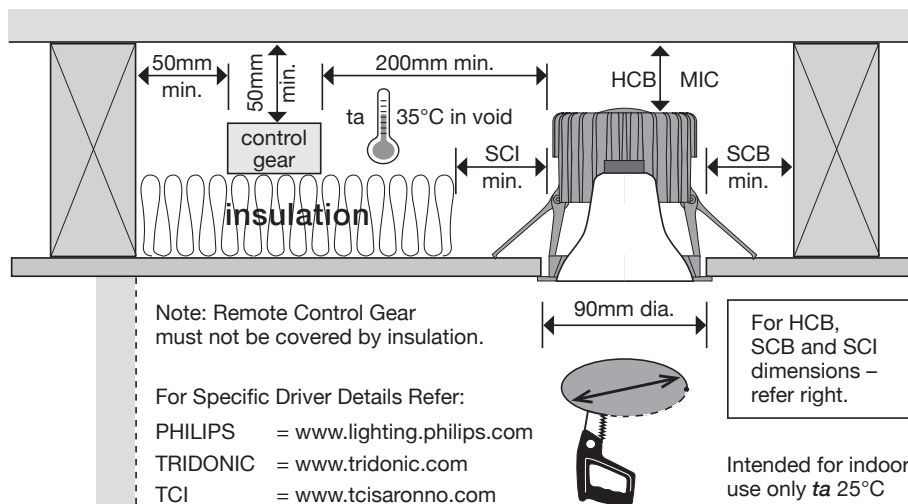


LED PERFORMANCE GUIDE | KF4 Fixed Series | Flood Beam Option (8R) 60 degree

Watts (W)	Driver Current (mA)	Colour Temp 2700K 3000K 4000K	Ultra (KF4U)			Excel (KF4X)			Performance (KF4P)			Insulation Class**			
			Output Lumens			Efficacy Lm/W (delivered)			CRI / STEP SDMC				R9 Value		
			U	X	P	U	X	P	U	X	P		U	X	P
6.2	(1) 150	27	547	608	716	88	98	116	98/2	90/3	80/3	95	56	12	IC-4/C-F
		3	607	653	752	98	105	121	98/2	90/3	80/3	95	56	12	IC-4/C-F
		4	636	684	787	103	110	127	98/2	90/3	80/3	95	56	12	IC-4/C-F
10.5	(2) 250	27	885	985	1159	84	94	110	98/2	90/3	80/3	95	56	12	IC-4/C-F
		3	985	1059	1219	94	101	116	98/2	90/3	80/3	95	56	12	IC-4/C-F
		4	1029	1107	1274	98	105	121	98/2	90/3	80/3	95	56	12	IC-4/C-F
14.2	(3) 350	27	1159	1292	1524	82	91	107	98/2	90/3	80/3	95	56	12	IC-4/C-F
		3	1290	1387	1597	91	98	112	98/2	90/3	80/3	95	56	12	IC-4/C-F
		4	1348	1452	1675	95	102	118	98/2	90/3	80/3	95	56	12	IC-4/C-F
20	(5) 500	27	1620	1803	2122	81	90	106	98/2	90/3	80/3	95	56	12	IC-4/C-F
		3	1802	1938	2231	90	97	112	98/2	90/3	80/3	95	56	12	IC-4/C-F
		4	1884	2026	2332	94	101	117	98/2	90/3	80/3	95	56	12	IC-4/C-F

LED Lifetime hrs L90/B10 > 50,000 **Excludes Driver
 * Figures extrapolated / inepolated from data at other currents and may vary + / -2.5%
 Output Lumens: Delivered lumen output from luminaires, including thermal, electrical and optical losses

BUILDING ELEMENT CLEARANCES



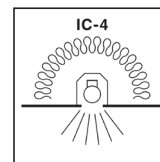
WARNING
 Risk of overheating or fire if the clearance distances are compromised.

Cables or cords (where provided): If any external cable or cord of the X or Y type luminaire is damaged, it shall be replaced by a qualified person or manufacturers service agent.
 For Z type attachments to luminaire, cord cannot be replaced if damaged, the luminaire shall be removed from service.

Flex cord types

- X: Specially prepared flexible cable or cord, may also include a part of the luminaire and only available from manufacturer.
- Y: Attachment may be used with either an ordinary or special flexible cable/cord.
- Z: Attachment of cable/cord that cannot be replaced without damage to luminaire.

CLASSIFICATIONS



IC-4 LUMINAIRE

Restricted access

In this Standard, this is assessed for access to high temperature parts by use of a IP4X-1mm probe to sides, top and front face of luminaire. 90°C limit on side or top or mounting surface of luminaire.

Suitable for residential or commercial use in Australia and New Zealand.

Used where air transfer is not permitted or not desired between living space and roof space (there will be no air transfer between spaces even if there is no insulation covering the luminaire).

Typical use is passive house design where no air transfer is allowed.

These luminaires have been tested to show that they are suitable for normal use when covered in building insulation.

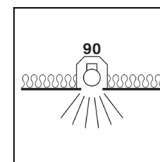
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Marking is required by standards—no marking indicates noncompliance.

Installation instructions specifying any clearance distance is required by this Standard.

Do not install any luminaire that does not have one of the marking symbols or instructions specifying any clearance distances.

NOTE: For luminaires installed prior to the publication of this Standard (AS/NZS 60598.2.2:201X), which do not have marking and/or installation instructions with clearance distances specified, refer to AS/NZS 3000.



CA90 LUMINAIRE

- HCB = 50mm
- SCB = 50mm
- MIC = 50mm
- SCI = 0mm (Abutted)

Risk of fire – Building insulation must not cover this luminaire.

Building insulation may abut the luminaire.

Required clearance from structural members and building elements.

- HCB = Minimum Height Clearance Building Element
- SCB = Minimum Side Clearance Building Element
- SCI = Minimum Side Clearance Insulation
- MIC = Minimum Insulation Clearance

KA4 Adjustable Recessed Downlight

KA418 (1) 150mA
 KA428 (2) 250mA
 KA438 (3) 350mA
 KA458 (5) 500mA

IP 20 Without Lens
IP 65 With factory fitted Lens
IP 54 With site fitted Lens

Complies with IEC60598
 Complies with AS/NZS60598
 RoHS compliant

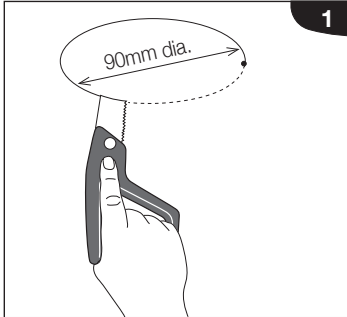
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- Un: 220-240V fr: 50/60HZ
- Uout: 34-38VDC
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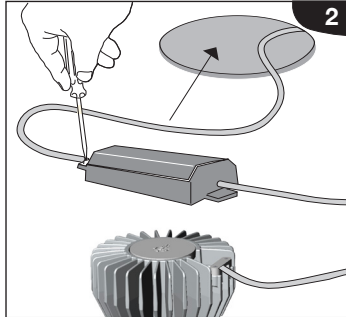
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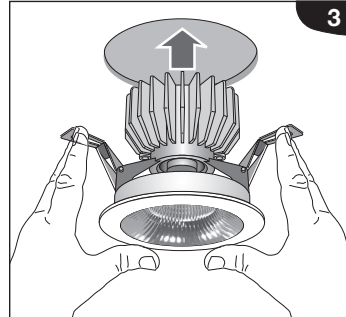
ADJUSTABLE DOWNLIGHT INSTALLATION



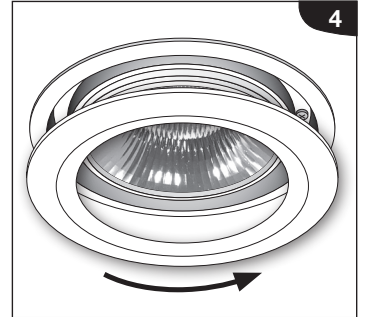
1. Cut 90mm diameter mounting hole



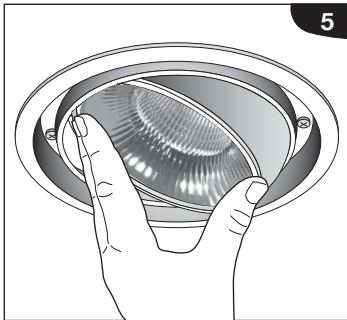
2. Connect driver, then insert into ceiling space



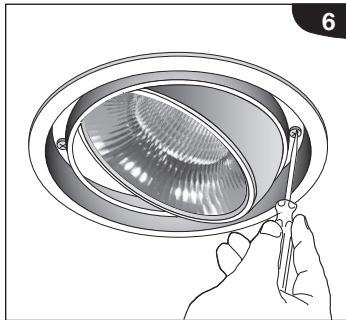
3. Gently insert downlight into ceiling while holding back mounting clips



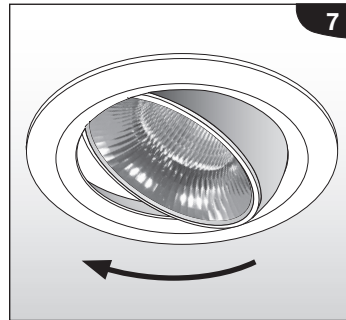
4. Remove ceiling plate (turn anti-clockwise)



5. Adjust body to desired beam position

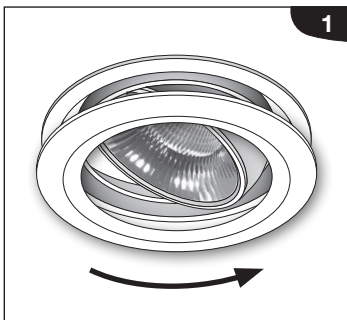


6. Tighten both beam direction locking screws

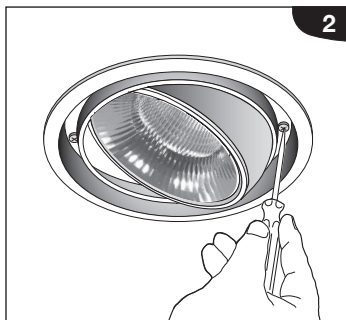


7. Install ceiling plate

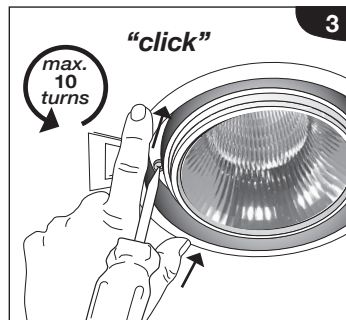
TO REMOVE ADJUSTABLE DOWNLIGHT



1. Remove Ceiling Plate (turn anti-clockwise).



2. Loosen Beam Direction Locking Screws and adjust Body to vertical position in chassis, tighten Beam Direction Locking Screws.

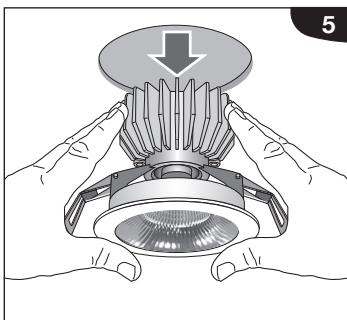


3. **Push downlight firmly against** the ceiling while unscrewing adjoining beam direction locking screw until the torsion mounting spring is released.*



4. Repeat Step 2 by unscrewing second beam direction locking screw.*

* **Do not use power screwdriver. Do not unscrew locking screw more than necessary (max. 10 turns).**

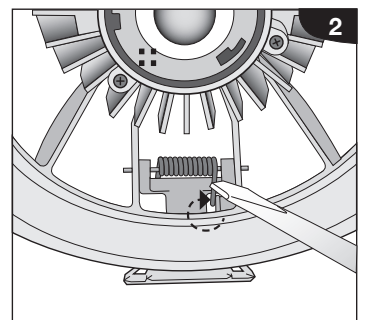
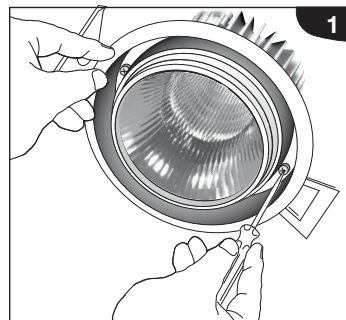


5. Gently remove downlight from ceiling.

TO RE-ENGAGE TORSION MOUNTING SPRING

1. Loosen Beam Direction Locking Screws and adjust Body to vertical position in chassis, tighten Beam Direction Locking Screws.

2. Using screwdriver, engage both tails of each torsion spring by pushing tails behind lugs on clamping ring.



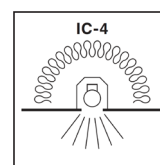


LED PERFORMANCE GUIDE | KA4 Adjustable Series | Flood Beam Option (8R) 60 degree

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14.2	(3) 350	27	1088	1211	1329	77	85	94	98/2	90/3	80/3	95	56	12	CA90
		3	1204	1295	1500	85	91	106	98/2	90/3	80/3	95	56	12	CA90
		4	1265	1361	1564	89	96	110	98/2	90/3	80/3	95	56	12	CA90
20	(5) 500	27	1467	1632	1792	73	82	90	98/2	90/3	80/3	95	56	12	CA90
		3	1631	1754	2016	82	88	101	98/2	90/3	80/3	95	56	12	CA90
		4	1705	1834	2108	85	92	105	98/2	90/3	80/3	95	56	12	CA90

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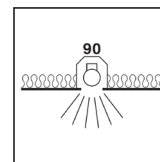
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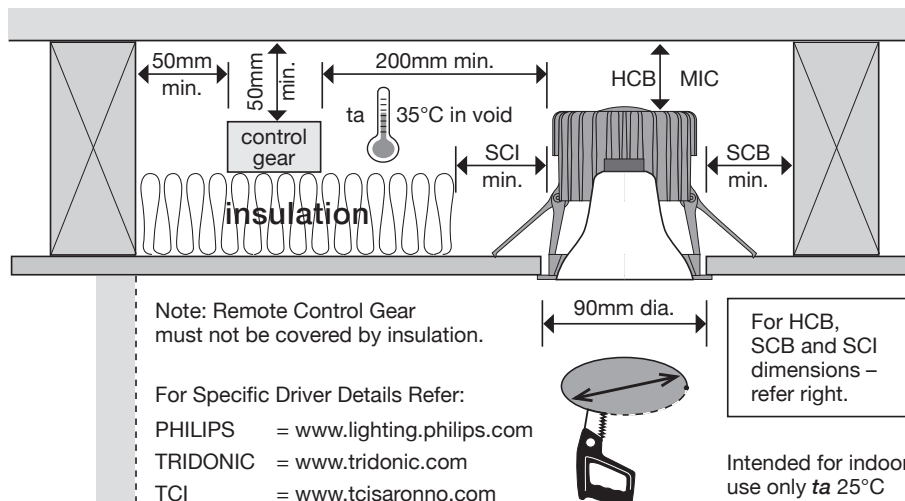
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BUILDING ELEMENT CLEARANCES



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 For Z type attachments to luminaire, cord cannot be replaced if damaged, the luminaire shall be removed from service.

Flex cord types

- X: Specially prepared flexible cable or cord, may also include a part of the luminaire and only available from manufacturer.
- Y: Attachment may be used with either an ordinary or special flexible cable/cord.
- Z: Attachment of cable/cord that cannot be replaced without damage to luminaire.

Lens Accessories for Adjustable and Fixed Recessed Downlights

Flush Lenses
P Prismatic
D Diffusion
C Clear
W Washlight

Recessed Lenses
P Prismatic
D Diffusion
C Clear

IP 65 From when factory fitted
IP 54 From below when site fitted

Complies with IEC60598
 Complies with AS/NZS60598
 RoHS compliant
 Supply voltage 220-240V 50 Hz



TO FIT LENS ACCESSORY – IF DOWNLIGHT IS INSTALLED (If downlight is not installed follow Steps 3 to 5).

1. Remove Ceiling Plate (turn anti-clockwise).
2. Loosen Beam Direction Locking Screws slightly to allow Body to be moved to vertical position.
3. Remove Reflector Assembly (Thermoplastic ring and reflector) by turning anti-clockwise.
4. **Flush Reflector**
Insert lens into reflector insuring it is correctly seated.
5. Then insert lens/reflector into reflector retaining ring. Ensure the reflector is firmly in place.
6. Re-assemble Reflector Assembly (Reflector, Lens and thermoplastic Ring) and install assembly into downlight by turning clockwise.
7. Re-adjust body to desired position and follow downlight installation instructions – (5-7 shown on separate Instruction sheet).

ALL LENSES
 Ensure Lens is correctly seated into reflector, as shown here.

Lens Accessories Available (Can be fitted to chassis after installation)

LENS ACCESSORIES for Adjustable Downlights

LENS ACCESSORIES for Fixed Downlights

P Prismatic
D Diffusion
C Clear

Flush Lenses
 IP65 (from below ceiling) Factory fitted
 IP54 (from below ceiling) Site installed

P Prismatic
D Diffusion
C Clear
W Washlight

Flush Lenses
 IP65 (from below ceiling) Factory fitted
 IP54 (from below ceiling) Site installed

P Prismatic
D Diffusion
C Clear

Recessed Lenses
 IP65 (from below ceiling) Factory fitted
 IP54 (from below ceiling) Site installed

KS4 Surface Mounted Downlight

KS418 (1) 150mA
 KS428 (2) 250mA
 KS438 (3) 350mA
 KS458 (5) 500mA

IP 20

Complies with IEC60598
 Complies with AS/NZS60598
 RoHS compliant

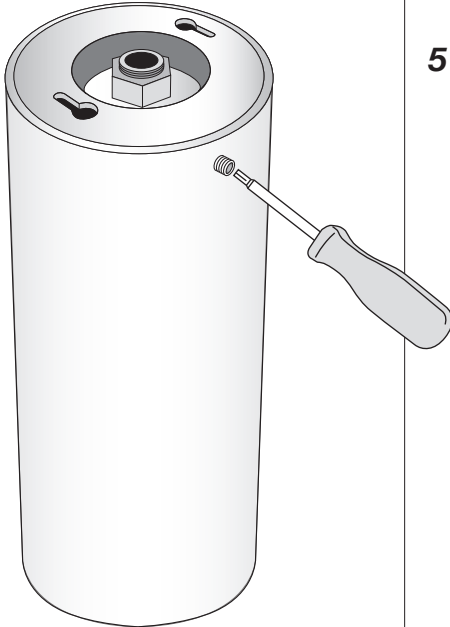
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- Uout: 34-38VDC
- PF 0.9C



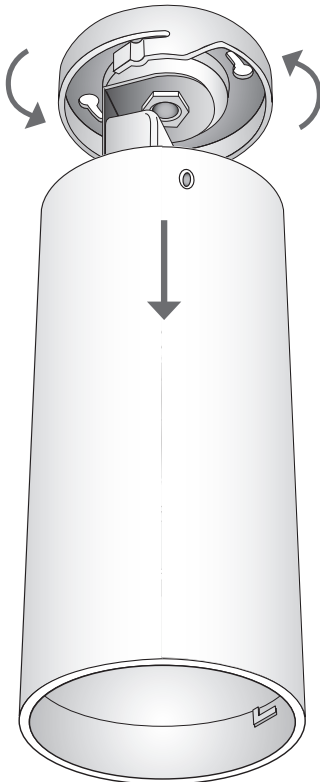
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Note: If the external flexible cord of this luminaire is damaged it shall be replaced by the manufacturer, its service agent or a similarly qualified person.

- 1** Loosen grub screw securing downlight housing to head plate.



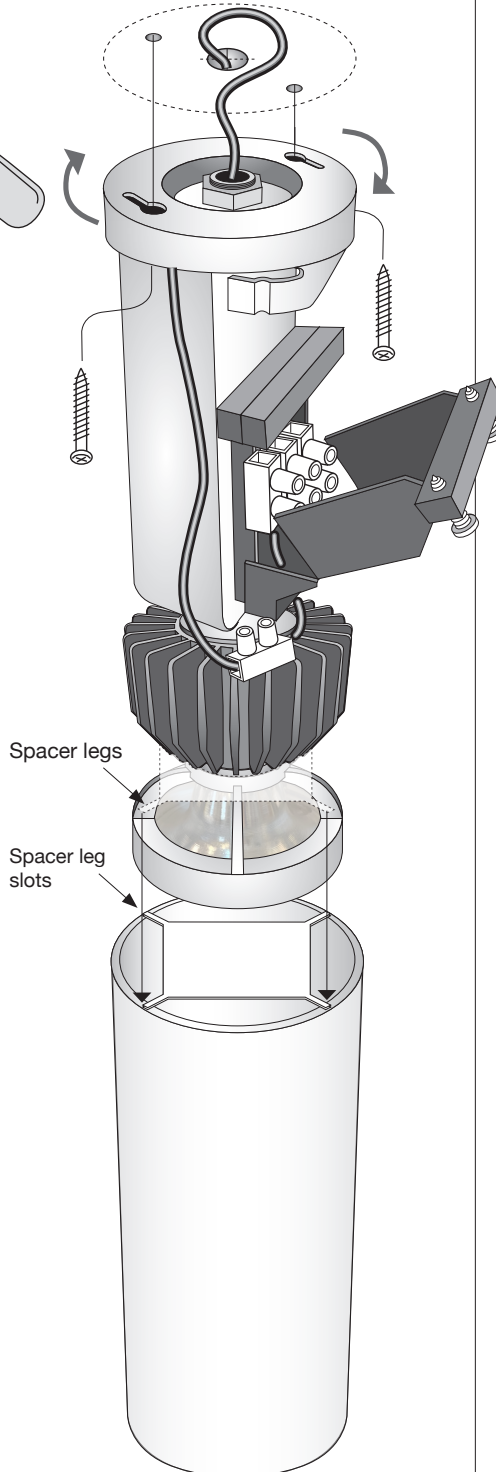
- 2** Rotate anti clockwise and gently remove housing.



- 3** Ensure Spacer legs attached to heatsink align with grooves in housing when removing.

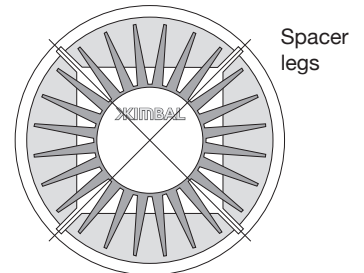
- 4** Locate mounting position of downlight. Mark out and fix the 2 mounting screws to ceiling.

- 5** Draw mains cable through hole in ceiling and connect to electrical block.

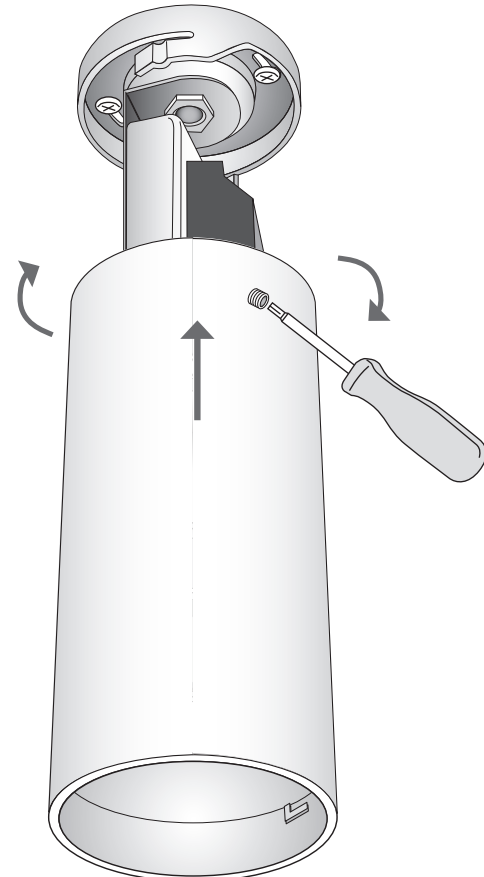


- 6** Secure inner chassis to the two mounting screws via keyhole slots, twist clockwise to engage and tighten screws.

- NB** When installing downlight into cylinder – ensure “Spacer” legs align with grooves in top of cylinder



- 7** Slip outer housing over inner chassis carefully align Spacer legs to slots.



- 8** Twist outer housing clockwise to fully engage with mounting plate.

- 9** Tighten grub screw.

KIMBAL Range INSTALLATION INSTRUCTIONS (Intended for indoor use only *ta* 25°C)



KR4 Rod Suspended Downlight

- KR418 (1) 150mA
- KR428 (2) 250mA
- KR438 (3) 350mA
- KR458 (5) 500mA

IP 20

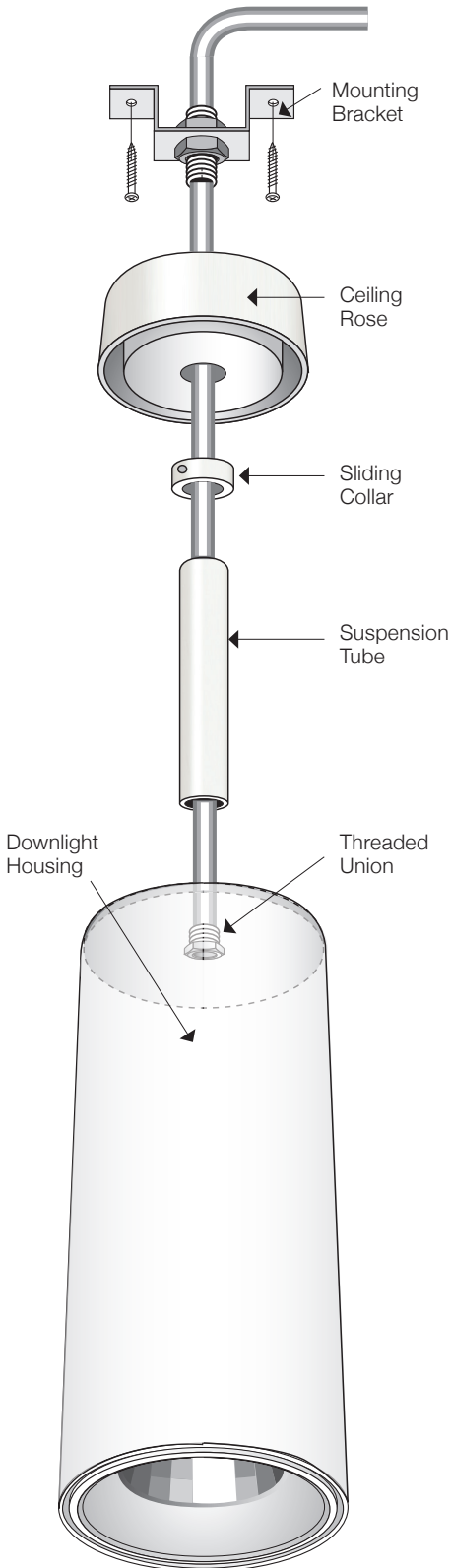
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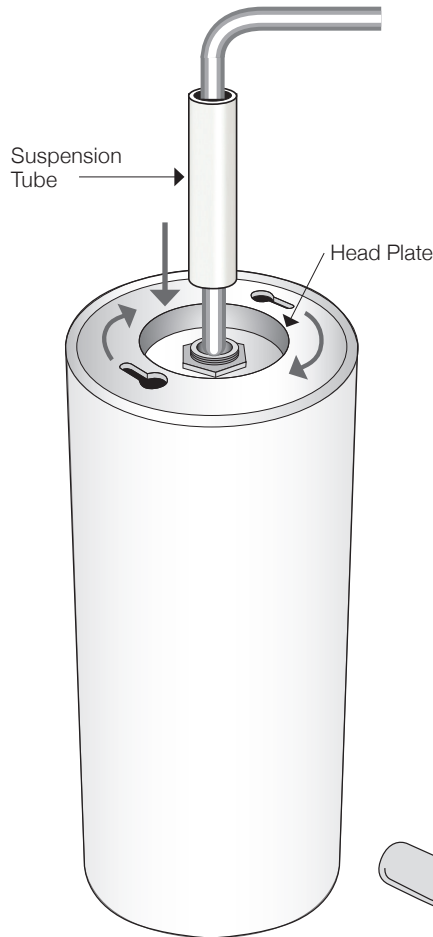
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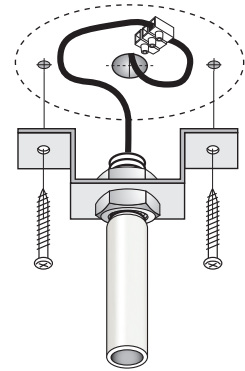
Components



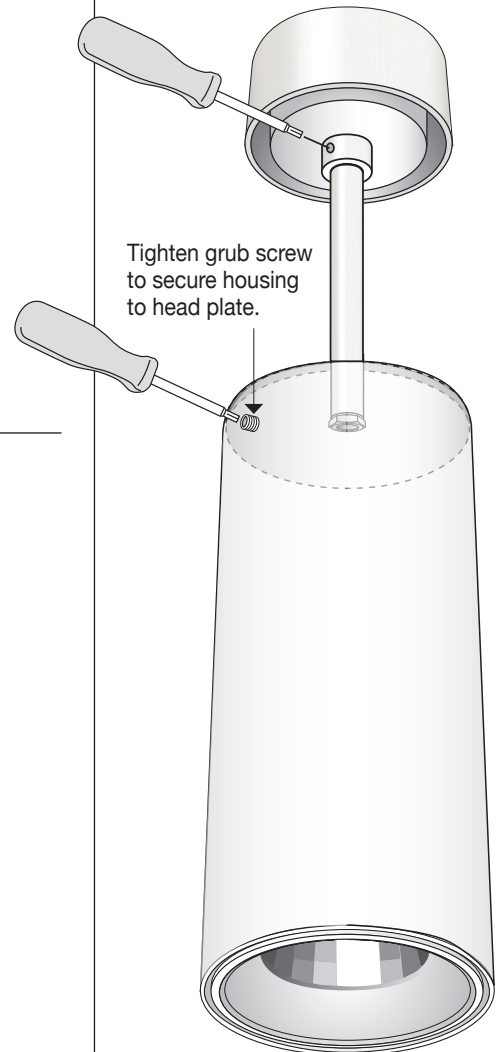
1 Thread cable through Suspension Tube and screw Tube into threaded union.



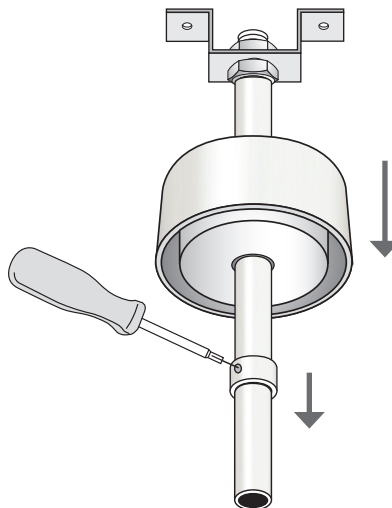
3 Fix Mounting Bracket to mounting surface and connect cable to power supply.



4 Secure Ceiling Rose with Sliding Collar.



2 Loosen Sliding Collar and lower Ceiling Rose.



KC4 Cable Suspended Downlight

- KC418 (1) 150mA
- KC428 (2) 250mA
- KC438 (3) 350mA
- KC458 (5) 500mA

IP 20

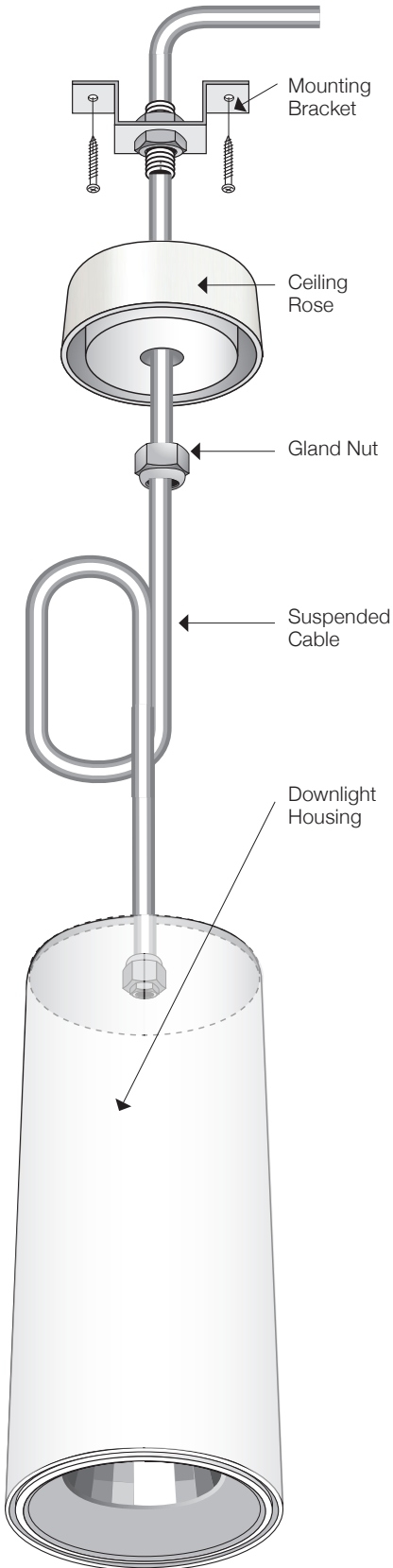
- Complies with IEC60598
 Complies with AS/NZS60598
 RoHS compliant
- Rated wattage 6-20W
 - Un: 220-240V fr: 50/60HZ
 - Uout: 34-38VDC
 - PF 0.9C



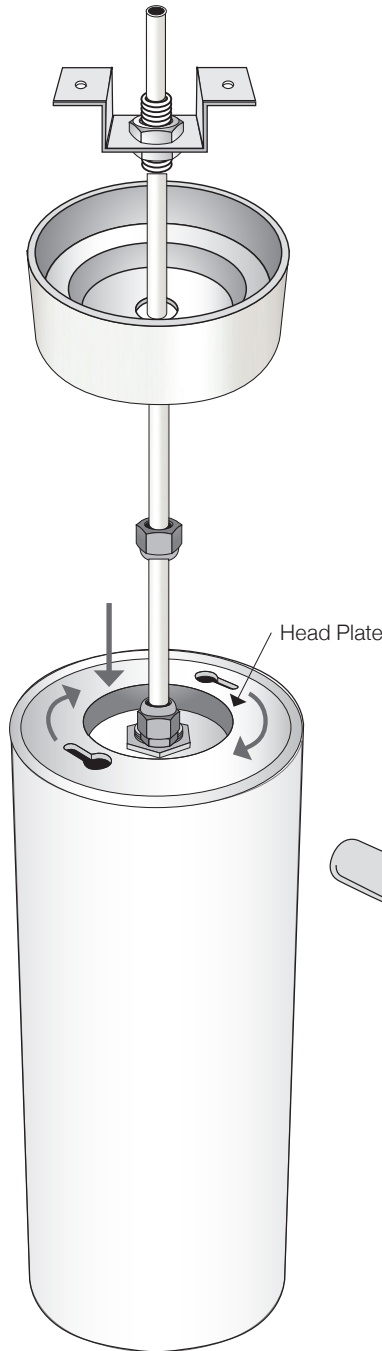
Note: The light source contained in this luminaire shall only be replaced by the manufacturer or his service agent or a similar qualified person.

Note: If the external flexible cord of this luminaire is damaged it shall be replaced by the manufacturer, its service agent or a similarly qualified person.

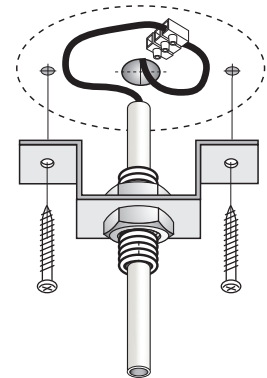
Components



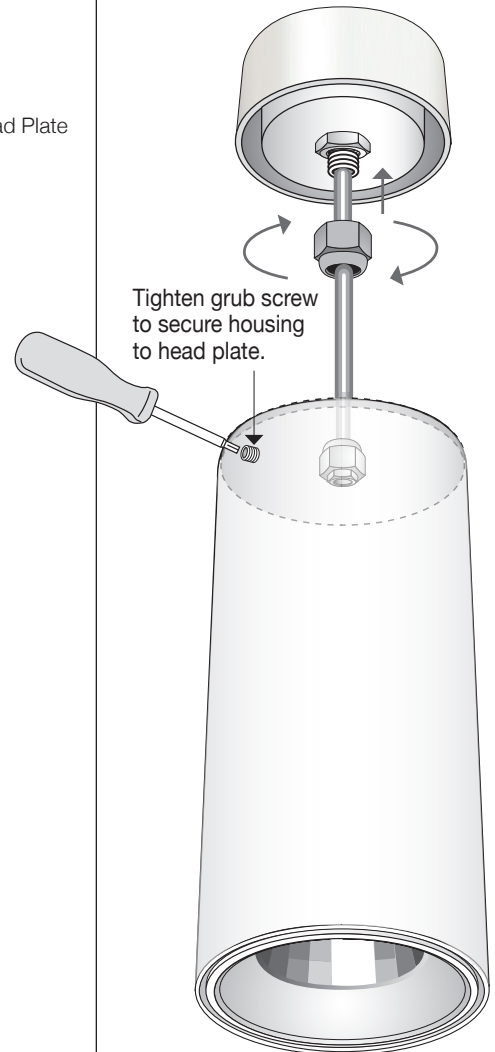
1 Release Ceiling Rose by unscrewing Gland Nut from Mounting Bracket and cut cable to required length.



2 Fix Mounting Bracket to mounting surface and connect cable to power supply.



3 Re-connect Ceiling Rose to Mounting Bracket with Gland Nut.



Lens Accessories for Surface Mounted & Suspended Downlights

Flush Lenses
P Prismatic
D Diffusion
C Clear
W Washlight

Recessed Lenses
P Prismatic
D Diffusion
C Clear

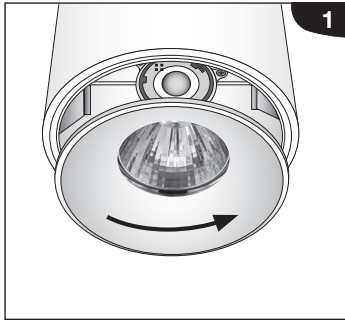
IP 20 On Surface Mounted and Suspended Downlights.

Complies with IEC60598
 Complies with AS/NZS60598
 RoHS compliant

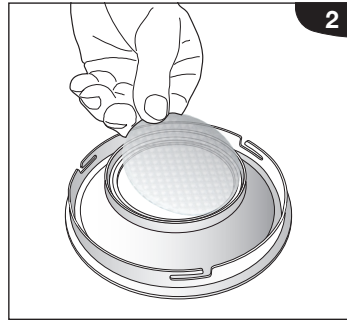
Supply voltage 220-240V 50 Hz



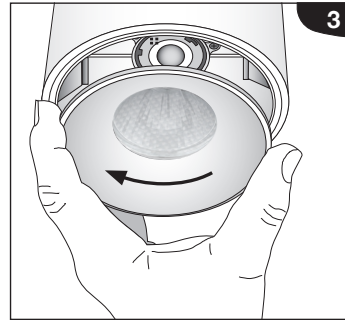
TO FIT LENS ACCESSORY



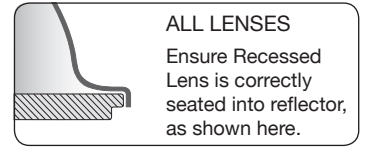
1. Remove ceiling ring/reflecter assembly (turn anti-clockwise).



2. **Recessed Reflector Option** - fit Lens Accessory into Ceiling Ring.
Flush Reflector Option - fit Lens Accessory Into Reflector.



3. Re-assemble Reflector Assembly (Reflector, Lens and Ceiling Ring) and install assembly into downlight by turning clockwise. Ensure reflector is fully seated into ceiling ring.



LENS ACCESSORY NOTE:
Prismatic Lens
 Smooth surface facing light source.
Diffusion Lens
 Matt surface facing light source.

Lens Accessories Available (Can be fitted to chassis after installation)

