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1. Safety Warnings

For installation by a licensed electrician only.

Read all instructions before installing.

Use only the provided power supply.

Turn off power at the main switch before installing or adjusting the light.

Do not disassemble the light fitting or power supply.

Do not over-tighten the red cap.

2. Installation Requirements

The mounting point must be able to support at least 2 times the weight of the fitting.

Indoor use only. Do not install near air vents or drafts. Do not expose to water or dampness.

Keep appropriate ventilation around the power supply unit and ensure ambient temperature is within the operating range specified by the manufacturer.

This lamp is not suitable for use with dimming circuits.

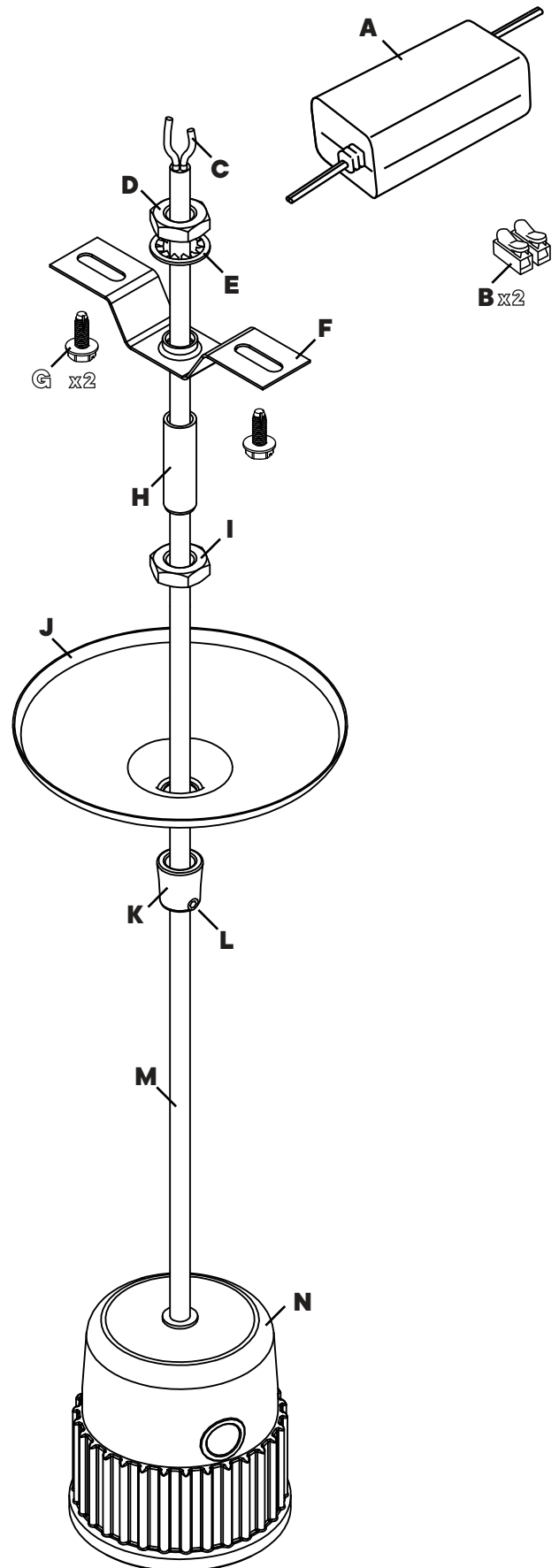
3. Installation using the Heliograf canopy

You will need

2x screws, suitable for the mounting surface.

1. Ensure glass [O] is securely attached to cap [N]. Do not over-tighten.
2. Unscrew cable grip [K] from threaded rod [H].
3. Thread cable [M] through cable grip [K], then canopy [J], then threaded rod [H].
4. Determine final height of lamp. Tighten a cable tie to cable above top M10 nut [D] at desired position.
5. Use connectors [B] to connect wires to the power supply module [A]. Refer to the power supply module information sheet. Ensure that correct connections have been made, and all wires are securely fitted with no wires exposed.
6. Fit power supply module [A] in ceiling. Ensure safe clearance values are maintained.
7. Attach mounting bracket [F] to ceiling using screws suitable for mounting surface.
8. Slide canopy [J] up into position. Tighten cable grip [K] on threaded rod until canopy is secure against ceiling. Tighten grub screw [L] in cable grip [K]. Do not over tighten.

To adjust brightness: Touch and hold the button on the cap to adjust brightness. Release finger to set desired level. The light will save the last used brightness setting.



4. Heliograf Canopy Diagram

- A** Power Supply Module
- B** Connectors x2
- C** Wires
- D** M10 Nut
- E** M10 star/lock washer
- F** Mounting bracket
- G** Screws x 2 (not included)
- H** M10 hollow threaded rod
- I** M10 Nut
- J** Canopy
- K** Cable grip
- L** Grub Screw for cable grip
- M** Cable
- N** Cap

5. Installation using a third-party canopy

1. Follow all instructions provided with third-party canopy. Ensure canopy meets all safety requirements for weight, ventilation and complies with local regulations.
2. Use connectors or terminal blocks to connect lamp to the power supply module, and power supply module to the mains power. Refer to the power supply module information sheet. Ensure that correct connections have been made, and all wires are securely fitted with no wires exposed.

To adjust brightness: Touch and hold the button on the cap to adjust brightness. Release finger to set desired level. The light will save the last used brightness setting.

6. Selecting a third-party canopy

If installing in a location where the power supply cannot be concealed in the ceiling, you will require a canopy that contains the power supply.

Refer to the diagram and dimensions on the power supply module information sheet to ensure the supply fits your selected canopy.

7. Recommended third-party canopies

CableCup Original 158mm



- : N/A : P
- 0CPANCA : 0eAN : 19:PS C
- CS : aPNe // 1SC 7A : 7eelaNC :
- a0A:2AS0CP : 0aA:2Sa27SA : :- :ale0N9 : :- :a : 0eAN .:
- 7eeE:SP0eNA:9 : eNPAS2:2NP:
- 00eSC : E : a : 1NSa:20C : 2AS0C
- mNeelNC9:20m N2A:PS :
- eNPP: 0 : a:17CSA : 1C0:
- eNPP:6: 0 : a:17CSA
- NPP:
- 6:9:PS C
- 7SAN e: 1 0a : [a:eNA:9] S A7a:10a:IN eSNC2:1
- P72 [NP] : : 20aNAS0C:0a:19 : aASP:m:CA:9: S2:P
- F : 7eele0N9 : 7aC SC:A:PA
- 0 : 20PA : S : [a:eSN SeSAE
- 6:E:NaP : NaaNCAE

IS 15885(Part 2)Sec13
R-41027766 : 2: A:0aF

EAC c **UL** us **05** **CB** **CE** **CCC** 0 : 8/C1e

SPECIFICATION

MODEL	APV-12-5	APV-12-12	APV-12-15	APV-12-24	
OUTPUT	DC VOLTAGE	5V	12V	15V	24V
	RATED CURRENT	2A	1A	0.8A	0.5A
	CURRENT RANGE	0 ~ 2A	0 ~ 1A	0 ~ 0.8A	0 ~ 0.5A
	RATED POWER	10W	12W	12W	12W
	RIPPLE & NOISE (max.) Note.2	100mVp-p	120mVp-p	120mVp-p	150mVp-p
	VOLTAGE TOLERANCE Note.3	±5.0%			
	LINE REGULATION	±1.0%			
	LOAD REGULATION	±2.0%			
	SETUP, RISE TIME Note.6	1500ms, 30ms / 230VAC	1500ms, 30ms / 115VAC at full load		
HOLD UP TIME (Typ.)	20ms/230VAC	15ms/115VAC at full load			
INPUT	VOLTAGE RANGE Note.4	90 ~ 264VAC	127 ~ 370VDC		
	FREQUENCY RANGE	47 ~ 63Hz			
	EFFICIENCY (Typ.)	76%	82%	82%	84%
	AC CURRENT	0.2A/230VAC	0.35A/115VAC		
	INRUSH CURRENT(Typ.)	COLD START 70A(width=120µs measured at 50% Ipeak) at 230VAC			
	MAX. No. of PSUs on 16A CIRCUIT BREAKER	17 units (circuit breaker of type B) / 29 units (circuit breaker of type C) at 230VAC			
LEAKAGE CURRENT	0.25mA / 240VAC				
PROTECTION	OVER LOAD	Above 105% rated output power Protection type : Hiccup mode, recovers automatically after fault condition is removed			
	OVER VOLTAGE	5.75 ~ 6.75V	13.8 ~ 16V	17.5 ~ 21V	27.6 ~ 32.4V
		Protection type : Shut off o/p voltage, clamping by zener diode			
ENVIRONMENT	WORKING TEMP.	-30 ~ +70°C (Refer to "Derating Curve")			
	WORKING HUMIDITY	20 ~ 90% RH non-condensing			
	STORAGE TEMP., HUMIDITY	-40 ~ +80°C, 10 ~ 95% RH			
	TEMP. COEFFICIENT	±0.03%/°C (0 ~ 50°C)			
	VIBRATION	10 ~ 500Hz, 2G 10min./1cycle, period for 60min. each along X, Y, Z axes			
SAFETY & EMC	SAFETY STANDARDS Note.8	UL8750, CSA C22.2 No.250.0-08, ENEC EN61347-1, EN61347-2-13, EN62384 Independent, BIS IS15885(except for 15V), EAC TP TC 004, IP42 Approved; design refer to EN60950-1			
	WITHSTAND VOLTAGE	I/P-O/P: 3.75KVAC			
	ISOLATION RESISTANCE	I/P-O/P: >100M Ohms / 500VDC / 25°C / 70% RH			
	EMC EMISSION	Compliance to EN55032, EN61000-3-2 Class A, EN61000-3-3, EAC TP TC 020			
	EMC IMMUNITY	Compliance to EN55024, EN61000-4-2, 3, 4, 5, 6, 8, 11; light industry level(surge 2KV), criteria A, EAC TP TC 020			
OTHERS	MTBF	1145.7K hrs min. MIL-HDBK-217F (25°C)			
	DIMENSION	77*40*29(L*W*H)			
	PACKING	0.08Kg; 120pcs/11.8Kg/1.06CUFT			

NOTE

Fill e: NaNm: A eP:V- 1:P : 2:3e:im: C:5C: 9:INa:im : NP7a 9:INA:6 : 1 : 16 7A NA 9:e0N9:INC9:6 °C:10 :IN SCA:Am : aV7a i

6: S el : 1C0:SP:IN a:im : NP7a 9:INA:6 : 10 :INC9 9A : E:17PS : 1NI:6 : 1SPA 9: NS : 9a : am SNA 9: SA : 1NI:IF7 : 17 : NaNe el:2N N2:90a

1:1 0e aNC2:1 : 1S2:9: P:IP: A:17A:0e aNC2: : Sa: a : 7aN:5C:INC9:e0N9:a : 7aN:5C:

1: : aVAC : INe:1: C : : 9: 9:7 C9: a:1e : 1S 7A:1 0eV : 1: e NP:12 : 2 : A:1P : AN:2:2 : 1NA2a aP:2:P: 0a:1m0a:19 : AN:SP:

1:1 : 1 0 : a:P7 : e:1P:120CPS: a 9:INP:IN:20m 0C: CA:ANA:1 : Se:1:10 : aVA 9:SC:120m : SNA:5C:1 : SA : 1SNet: 7Sm: CA: 1S2:1 : : : a0amNC2:1 : Sa:1:N : 2A 9: E:A :1

11:1 20m e A:SCPAN:V:5C : 1A : SNe: 7Sm: CA:IN:NC7 N2Aa aP:1m7PA:1a 7N:6SE : : 2AS :10 C:1A :12 0m e A:SCPAN:V:5C:IN N:5C:

1: : C A : 10 : PA:17A:Sa:1S:P:im : NP7a 9:INA:1:SPA:1:2:1:PA:NA:1:7aC:5C : 1-V - : 1A:1 0 : a:P7 : e:1m:Ne:1e N9:1A0:SC2a NP:10 : 1AP : A:17A:Sa:1: i

1:1 :17 CS:1mS A:1C0A:1:1P 73N el 0a:16 AC : 1N : 6N:5C:PS:1 : 12:7CA:5P:1: e NP:12 : 2 : 1SA : 1E:7a:1e2Ne:17A 0a:5S P:1 0a:A:1 : 1PPS:e:7 P:10 : 1A7 CS:

1:1 : 1m 09: e:12 aSS 9: 0a:1 F F iF : F F iF : F F iF : 1C9 : F 6 iF : P:NV:10 : 1S:CNe:im09: e:11 e NP:12 0CAN2A:1 I V:1 : 1Da:9: AN:SP:

1:1 :1N m SCA:Am : aV7a:19 : aVAC : 10 : 1°C F m: 1SA : 1Nc:PP:im09: e:P:INC9:10 : 1°C F m: 1SA : 1Nc:im09: e:P:10a:10 : aVAC : 1N:579:1 S : a:1A NC:16 m Ai

F: 11 a0972A:1P:07a2: 9: 1a0mA : 1:1 m: aSN:P:ia : 1SCP:im:Ne:1C0A:1N : 1A : 1V : 1e 10:1 e NP:12 0CAN2A:1E:7a:1 I V:1 : 1Ne P:1 0a:1m0a:10:SC:0am N:5C:1

F: 11 0a:1NCE:1N : 6N:5C:1C0A:1N C9:1 : 1NA a: 1a0 7C2A:5C:1SPAN:V:5C:12N7A:5C : 1e NP:1a : : a:107a:17P: a:1mNC7Ne:1 : 0a:17 P:5C : i

11:11 : AP : im: NC : e:20m : e:1N9 : Vi 9

