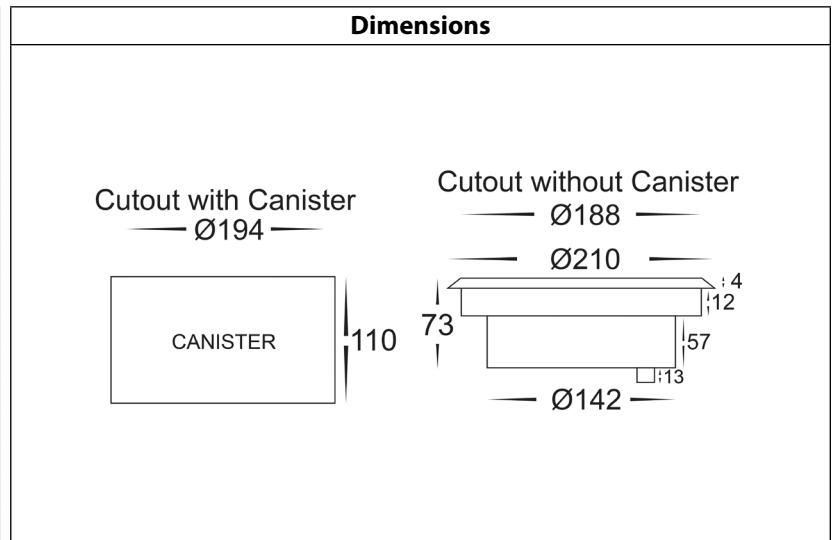


Klip Inground Light Installation Instructions



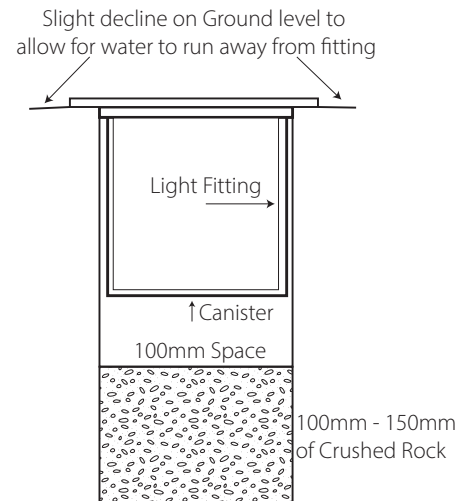
Product Specifications		
Model No.	HV1833W-12V	HV1833C-12V
Name	Klip	
Material	316 Stainless Steel + Aluminium	
Colour	Stainless Steel	
IP Rating	IP67	
Input Voltage	12v DC	
IK Rating	IK10	
Lamp Base	Built in LED	
Lamp Wattage	1x 20w	
Colour Temp	3000k	5500k
Lumens	1600lm	1800lm
CRI	> 80	
Wiring	Parallel	
Dimmable	No	
Warranty	2 Years Replacement*	



Important Safety Issues:

- This product must be installed by a qualified electrician according to AS/NZS 3000.
- Ensure all electrical mains are disconnected before any installation.
- Do not exceed maximum wattage restrictions for globes: 240V GU10 = 35w / 12V MR16 = 20w
- Modification of this product will void any warranty.
- Havit Lighting does not take responsibility for wrong installation, incorrect use, or use of installation material that does not belong to the system.
- When installing low voltage fittings, Voltage to fitting must be within +or- 5% of voltage required and cannot be installed more than 25m from LED Driver, if not within this allowance warranty will be voided.
- Aluminium and 304SS fittings must not be installed within 2km of any salt water environments.
- When installing copper fittings, gloves must be worn to avoid any oils transferring to fitting.
- All 316 stainless steel fittings must have regular cleaning maintenance to avoid any tea staining from forming on fitting. (Warranty does not cover Tea Staining)
- All o-rings and seals must be in place correctly to maintain warranty.
- These instructions may be updated at any time due to product improvements, Please visit website for most current installation instructions.

Sample Adequate Drainage Diagram



Steps for Installation:

1. Make sure that the electrical circuit is free of voltage (master switch off)
2. Make a hole where fitting is to be placed using dimensions provided on line drawings, making sure adequate drainage is allowed.
3. Insert canister, and ensure that the top is level with ground or floor. Failure to do so will void warranty.
4. Using an appropriate 12v DC LED Driver - DO NOT CONNECT LIGHT FITTING DIRECTLY TO 240V
5. Connect the cable - If more than one fitting installed, wiring must be done in parallel.
6. Strip back the cable on both fitting and cable run and twist the positive cables together. Then connect neutral cables together
7. Solder all joins using solder and either a heat gun or butane gas torch.
8. Cover connections using an adhesive lined heat shrink or gel cap to make connection watertight. Failure to do this will void warranty.
9. Heat the heat shrink or crimp the gel cap making sure all connections are covered.
10. Make sure the seals are still in place and screws are tight to avoid any water penetration.
11. Insert fitting into canister. Apply silicon around edge of fitting to prevent any water from getting inside to electrical connections.
12. All connections must be carried out carefully, inspect all contacts before switching back on the electric circuit.

Steps for Inserting Honeycomb Lens:

1. Remove nuts from back of fitting, remove glass and face and set aside
2. Insert honeycomb lens over reflector
3. Reinsert glass and face over honeycomb lens
4. Reattach nuts on back of fitting, making sure all seals are still in place and nuts are tight to avoid any water penetration.

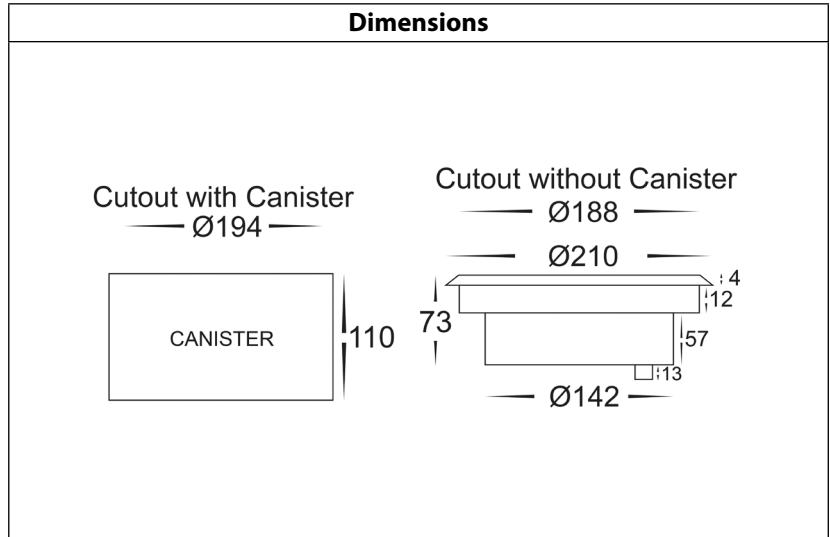
Must be installed by a licensed electrician

Contact Details:	Warranty Terms & Conditions*	Additional Information
143 Beauchamp Road Matraville NSW 2036 Australia Tel: 02 9381 8300 Fax: 02 9666 8881 Email: sales@havit.com.au Web: www.havit.com.au		

Klip Inground Light Installation Instructions



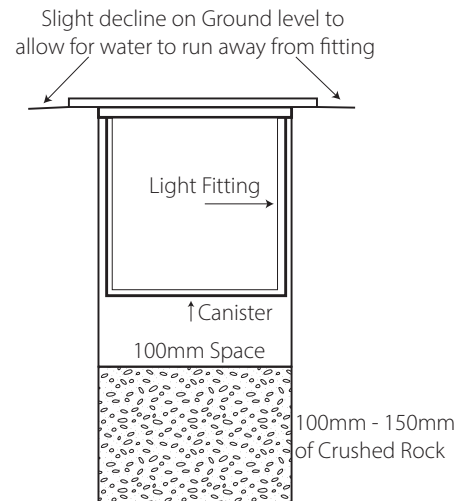
Product Specifications		
Model No.	HV1833W-240V	HV1833C-240V
Name	Klip	
Material	316 Stainless Steel + Aluminium	
Colour	Stainless Steel	
IP Rating	IP67	
Input Voltage	240v AC	
IK Rating	IK10	
Lamp Base	Built in LED	
Lamp Wattage	1x 20w	
Colour Temp	3000k	5500k
Lumens	1600lm	1800lm
CRI	> 80	
Wiring	Parallel	
Dimmable	No	
Warranty	2 Years Replacement*	



Important Safety Issues:

- This product must be installed by a qualified electrician according to AS/NZS 3000.
- Ensure all electrical mains are disconnected before any installation.
- Modification of this product will void any warranty.
- Havit Lighting does not take responsibility for wrong installation, incorrect use, or use of installation material that does not belong to the system.
- When installing low voltage fittings, Voltage to fitting must be within +or- 5% of voltage required, if not within this allowance warranty will be voided.
- Aluminium and 304SS fittings must not be installed within 2km of any salt water environments.
- When installing copper fittings, gloves must be worn to avoid any oils transferring to fitting.
- All 316 & 304 stainless steel fittings must have regular cleaning maintenance to avoid any tea staining from forming on fitting.
(Warranty does not cover Tea Staining)
- All o-rings and seals must be in place correctly to maintain warranty
- When installing surface mounted bollards, base plate must be installed on concrete or concrete pad, Fitting should not be installed under ground level, all holes including cable entry must be siliconed to prevent any water penetration into fitting, silicon must also be applied around fitting at ground level. Failure to do this will void warranty
- This form may be updated at any time due to product improvements, please check online installation form for most current version.

Sample Adequate Drainage Diagram



Steps for Installation:

1. Make sure that the electrical circuit is free of voltage (master switch off)
2. Make a hole where fitting is to be placed using dimensions provided on line drawings, making sure adequate drainage is allowed.
3. Insert canister, and ensure that the top is level with ground or floor. Failure to do so will void warranty.
4. To connect the cable, strip back cable on both fitting and cable run and twist the earths together first, then positive cables from fitting to positive on the cable run. Then connect neutral cables from fitting to neutral on cable run.
5. Solder all joins using solder and either a heat gun or butane gas torch.
6. Cover connections using an adhesive lined heat shrink or gel cap to make connection watertight. Failure to do this will void warranty.
7. Heat the heat shrink or crimp the gel cap making sure all connections are covered.
8. Make sure the seals are still in place and screws are tight to avoid any water penetration.
9. Insert fitting into canister. Apply silicon around edge of fitting to prevent any water from getting inside to electrical connections.
10. All connections must be carried out carefully, inspect all contacts before switching back on the electric circuit.

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1. Remove nuts from back of fitting, remove glass and face and set aside
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