

Greenhouse heater – Prototype



Complete unit  
(Box dimensions: 199cm x 54cm by 46cm high)



Cutaway showing diffuser inside box

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Fan and module assembly (note pen in foreground for scale)

### **DRAFT - Assembly notes – DRAFT**

- Position box in desired location within greenhouse
- Lay approximately 5cm of gravel in bottom of box
- Lay diffuser on gravel bed
- Push fan assembly through hole in lid then push tube into socket on diffuser
- Rotate lid to allow gravel to be poured into box
- Fill box with gravel
- Rotate lid back into position and snap onto box
- Attach cable from fan to PV panel (see instructions below)
- Mount PV panel on pole outside greenhouse (routing cable carefully so as to avoid locations where it may get damaged by feet / doors etc. Module fixings are included in pack for mounting to circular pole or wooden stake / wall. Point PV panel due south
- Extend flexible hose to apex of greenhouse – secure using string / cable ties

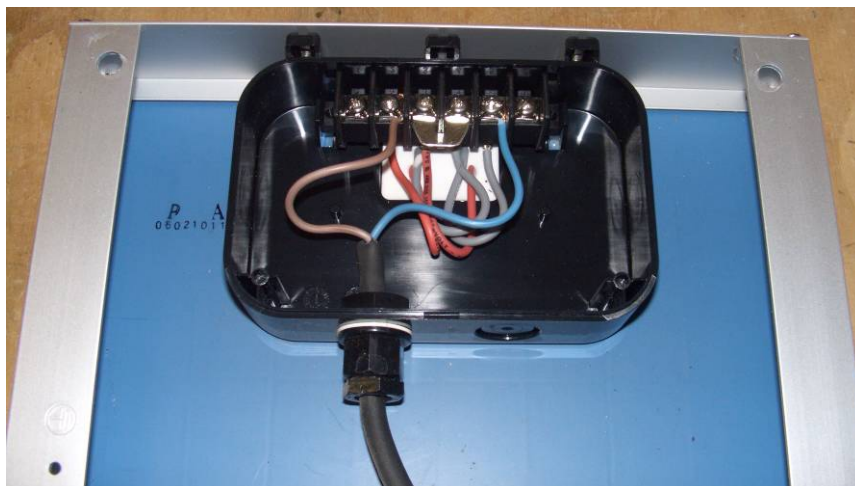
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Heater in place with hose outlet taken to apex of greenhouse

### Connecting cable into PV panel

1. Place PV panel face down on smooth, protective surface (cardboard sheet or similar)
2. Remove one of the “knock-outs” on the base of the PV module junction box. Be careful not to damage rear of PV module during this operation.
3. Remove locknut from cable gland – then run cable and gland through knock-out hole. Secure cable gland using locknut (finger tight)
4. Remove ~10mm of insulation from cable ends
5. Wire cables into PV module terminals as shown in photo below (brown wire to positive terminal, blue wire to negative terminal)
6. Secure lid on PV module junction box using the screws provided



Cable connections into PV module