



Chris Martin Services

Chris Martin - Herpetologist - Suppliers of Vivarium Equipment

A HERPETOLOGICAL SITE, MEETING THE
NEEDS OF REPTILES, LIZARDS, TORTOISES,
FROGS AND OTHER EXOTICS

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Information Sheet: Installation Instructions for Thermostats

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As with heater units the thermostat must be set up correctly otherwise problems will occur.

Most if not all the thermostats we use in the vivariums have an external probe or sensing device, this sensor must be positioned as near to the heat source as possible. If not 'over run' of the stat may occur. What is 'over run' you may ask? If your sensor is, say, 4 feet from your heat source the thermostat turns on, there is a delay in time while the heater heats the air to the sensor probe. Now this may be a few minutes or so, when the probe sensors the increase in temperature it switches the stat off. However the heater still radiates out the heat until it cools, so the temperature still continues to rise. This is known as 'over run'.

The best position usually for the probe is secured to the back wall on the same centre line as the heater unit. with the end of the probe about 2" off the bottom

If any part of the sensor unit gets damaged the stat will fail on

To help get over the problem of 'over run' the pulse proportional thermostat was introduced. The way this thermostat works is to feed short pulses of electricity to the heater. This way it regulates the power out put from the heater. However if the heat source is a long distance from the probe a big variant in temperature can occur.

Securing the thermostat sensor probe unit

Method 1 Make a wire mesh guard that encases the probe. Remember you must have free air flow around the probe otherwise you may have large temperature variations.

Method 2 Get some plastic garden tying wire, cut into approx.4" lengths. Mark the position of the probe on the back wall. Now drill 2 small holes either side of the mark. Take a length of the tying wire and form it into a 'u' shape, push the ends into the hole you have just drilled

pull through and twist. Repeat this process every inch till the probe is secured.

With this method it is best not to over tighten on the probe.

Important note for thermostats with copper/metal probes

The way these thermostats works is the probe and the thin connecting tube is full of a substance that expands and contracts with heat. This operates a pressure switch in the main body of the unit.

It is vital that this section of the thermostat is treated with utmost care. Do not bend the tube into a right angle, all bends should be as large as possible otherwise the tube will collapse.

Do not keep bending the tube in the same place otherwise the tube will 'work harden and break.

If I can be of more help please [contact me](#)