Using the humidity control system

ZeroDew

ZeroDew is a product designed and manufactured by Lunático Astronomía in order to offer a reliable and accessible solution to the condensation problems suffered by telescopes and optical elements in general of the amateur astronomer.

Elements

A ZeroDew system consists of a digital controller and one or more heating bands. The controller can be[1](1) directly connected to batteries or to a power source of the car lighter type. The bands must be connected exclusively to the controllers by means of the 4 outlets provided for such purpose.

Use

1. Place the band or bands in the telescope (or finder, ocular..) in such a way that the rugged part of the band remains towards the outside and the cable in the direction where the controller is to be installed. Try to place the band as close as possible of the element that is intended to protect from the humidity (correcting sheet, objective of the refractor.....) *See Photo.*

2. Firmly fix it with the Velcro.
3. Connect the band or bands to the controller.
4. At last, connect the controller to the power source.
5. The outlet is adjusted by means of the potentiometer; it is convenient to reach the lower position where the humidity is avoided, in

[1] Depending on the version

order to minimize the consumption of batteries and to avoid excessive heating.

The controller has a system of protection against the discharge of the batteries; in the case when the outlet voltage of the battery reaches a minimum value, a red indicator shall light and outlet power shall cease to be supplied. That shall avoid that the battery suffer irreparable damage.

Failures and repairs

If, for any reason, the ZeroDew controller ceases to work, first of all check the connections and the charge of the batteries, also check if any fuse is blown (there is one of 10A within the controller, and in the version for car lighter there is another one within the adapter –there is only necessary to unscrew the "nose" of the adapter for acceding, it is not necessary to use tools – the last is of 3A).

Safety warnings

- The system must be exclusively connected to power sources or batteries of 12V.
- The bands must be placed in the telescope, ocular, etc, before supplying power. Particularly the resistors must never be heated while being wrapped on themselves.
- The fuses must be replaced by equal ones.