

# AKVA VITAL ELECTRONIC, max. 250-260 W / 230 - 240 V~

Read these instructions carefully before assembling and using the heating system.

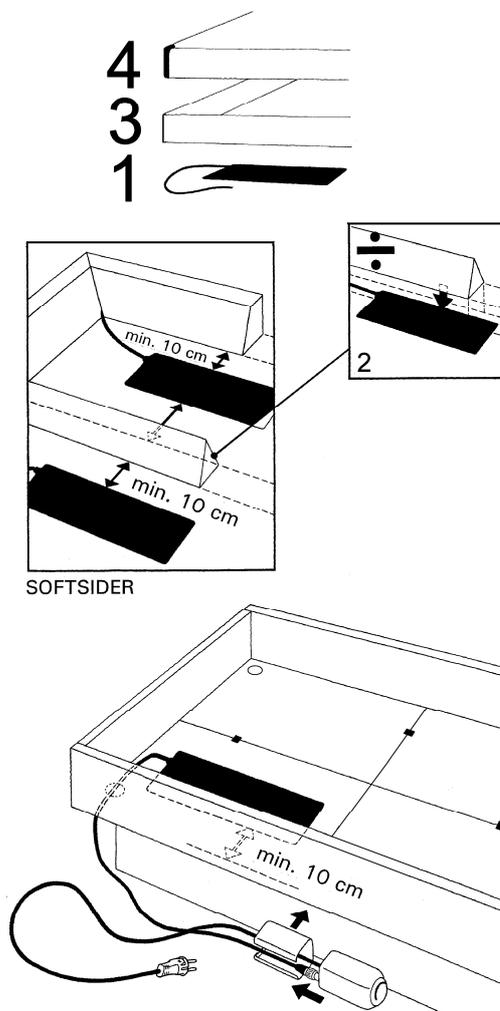
## Important

*The appliance is not to be used by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge without supervision or instruction. Children are not to play with the appliance. Cleaning and maintenance is not to be done by children without supervision or instruction.*

- Remove the plug from the socket before draining the mattress.
- Do not pull the cables. If they are damaged the heating system must be discarded.
- Install the control box with the temperature setting away from the water mattress, e.g. on the base of the water bed, since the box is not watertight.
- The Akva Vital heating system must only be used as a unity, meaning the heating mat is to be used only with the Akva Vital Electronic regulator.
- Avoid sharp objects that may damage the heating element, do not stick any sharp objects such as sewing pins or needles in the device.
- Bedding is not to come in contact with the heating mat.
- The Akva Vital heating element is not intended for use in hospitals.
- The Akva Vital heating element is only to be used to heat waterbeds.

## Fitting

- Position the heating element (1) flat on the bottom of the bed.
- Ensure that no sharp edges damage the heating element.
- Avoid placing the element over differences in level (2).
- The heating element must be at least 10 cm from the side of the bed/side of the foam.
- There must be no foam placed on top of the heating element. (Be careful with dual mattress system with foam dividers)
- Place the safety liner (3) directly over the heating element (1) and ensure that it does *not* fold at the point where it covers the heating element.
- Place the water mattress (4) in the safety liner (minimum dimensions 40 x 140 cm)
- **The heating element must not be switched on until the mattress has been filled to the normal level of approx. 20 cm depending on the weight and individual comfort setting of the user.**
- After setting the temperature install the protective cover to avoid accidental changes to the setting. The light in the setting knob indicates the status of the heating system.



## Operating procedure

- Connect the heating system to 230 – 240 V ~.
- Set the control knob to the desired temperature. Note that it takes 1 – 2 days to heat a cold bed. Then the temperature can be fine-tuned. Remember that the temperature has not been reached until the indicator lights up green.
- The regulator operates with 11 steps and a regulating accuracy of less than +/- 0.25° C. A red light in the indicator means that the temperature is being increased, and a green light indicates that the temperature set has been reached i.e. the heating is being discontinued or kept at a constant level.

*The indicator lamp in the control box of the heating system therefore shifts during normal operation between green and red. The heating system measures repeatedly every 5 seconds. This is also the response time for variations in settings, status changes, etc.*

## 12-hour operation –

After the mattress has heated up, the heating element can be changed to 12-hour operation. If the heating element is switched off when the bed is being used, proceed as follows:

- Turn the setting knob down to [sun/moon] for 5 seconds. The indicator will light up yellow to confirm.
- Turn the setting knob back to the desired temperature.

The heating system will now be switched off for 12 hours, after which it will heat for 12 hours, then switch off again for 12 hours and so on.

*The indicator lamp in the control box of the heating system shifts between green and yellow*

If you want to interrupt 12-hour operation, proceed as follows:

- Switch off the power to the heating system for a short time, or turn the setting knob down to [sun/moon] for 5 seconds.

After power interruptions the heating system will restart in standard 24-hour operation.

## Status indication

The light in the setting knob indicates the status of the heating system or any error conditions according to the diagram below. If the light in the setting knob flashes one colour rhythmically, it means that there is a fault in the heating system. See bottom line in the diagram below.

The heating system is designed for use in an earthed installation. If this is no such socket, or if the earthing is inadequate, a tickling sensation can be felt when touching the mattress. Contact the local installer. The energy consumption of a water bed depends on the heat loss of the mattress. This means that the temperature of the water bed and daily making of the bed have a high influence on the energy consumption of the heating system. If care is exercised, the energy consumption of a heating system for a dual low energy bed can be reduced to approx. 150 kWh/year. If the entire bed is heated by one heating system, the consumption will be twice of the above. If the heating system is installed in a hardside bed, twice the energy consumption of the low energy bed should be expected.

Indicator light	Green	Red	Yellow
Standard 24 hour operation	Temperature OK	Heating	
12 hour operation		Heating	Day: temperature OK Night: heating element switched off
Error condition (rhythmic flashing of 1 colour)	Fault of cable – check that the connection plug has been screwed on correctly.	Fault of regulator	Fault of heating element – possibly overheating, wait until the fuse has cooled down.