



~ The future in heating and cooling ~

GLACIER EVAPORATIVE COOLERS

OPERATING GUIDE

How do they work?

Fresh outside air is drawn into the unit through a series of wet filter pads. This causes evaporation to take place and the resulting air being blown through the duct work is filtered and cooled. The resulting cool air is then dispersed into each room (to be cooled) through an outlet at a rate pre-determined by your contractor at the time of sale. This rate of air is governed by the outlet size and the duct layout. Adequate air flow is essential for optimum operation of evaporative cooling and it is necessary to exhaust air via open windows or doors. It is advisable that each room that has an outlet has the window slightly open. This allows the cool air to flow from the outlet across the room and out via open windows. In some circumstances you can channel the air through the house by leaving a door/window open at one end of the house, however you should consult your contractor for the best way to do this.

Humidity

Evaporative coolers are particularly suited for dry regions. If outside air is particularly humid then the best result from your cooling unit may be to run the unit on fan mode only (without operating the water pump). This is done by pressing the fan only button and adjusting the fan speed to your desired setting via the step button.

Electronic Control

The low voltage electronic control is designed to provide automatic and manual operation. It provides the following features:

- Automatic Fan Speed Control in "COOL" Mode
- Manual Fan Speed Override for "COOL" Mode
- Fan Only Mode for Ventilation
- Timer Control for automatic switch off

Note that all commands use a delay of approximately ten seconds. For example, having chosen a particular fan speed a change will not be noticeable for 10 seconds.

Operation

This section explains how to operate your Stadt Glacier evaporative cooler, and the functions of each of the buttons featured on the evaporative cooling wall controller. Figure 1 shows the controller for your evaporative cooler. It features four buttons which are used to control the operation of the unit, and an array of lights which are used to display the operation of the unit.

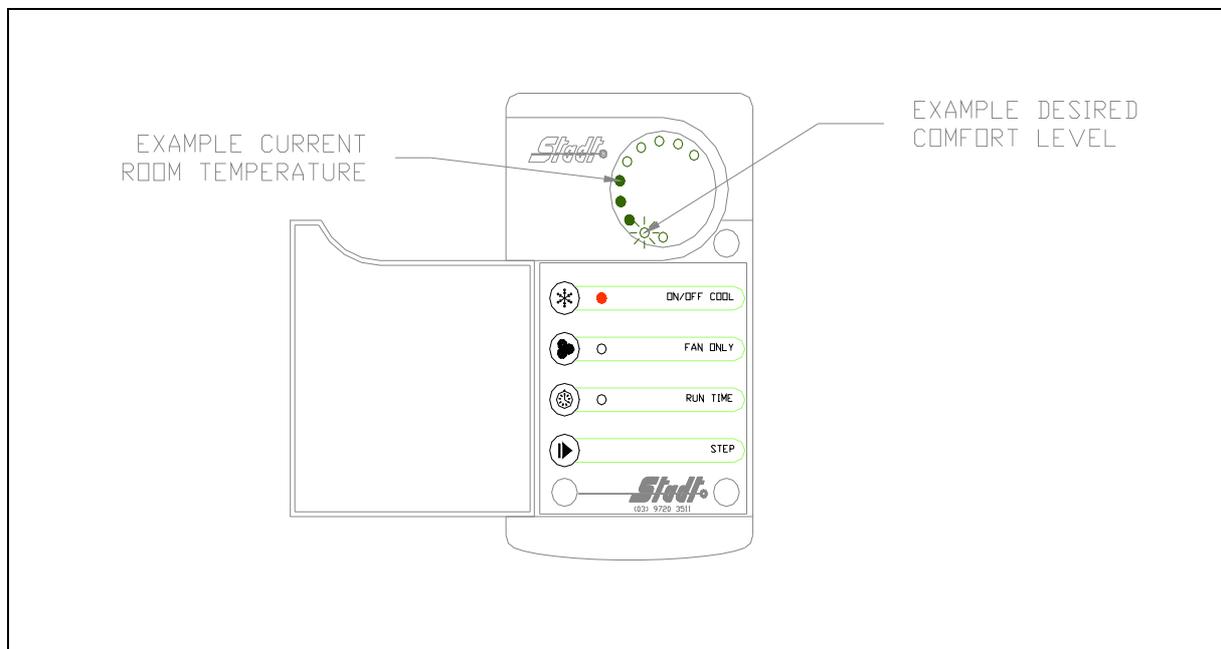


Figure 1. Wall controller showing automatic cooling operation.

Step Button

As explained throughout these instructions the “STEP” button is used to increment various features such as the comfort level, fan speed or the time after which the unit will turn off.

On/Off Cool Button (Automatic Mode)

Press the button marked “ON/OFF COOL” once and the sequence of events listed below will occur automatically.

1. A range of lights will appear on the display. The top light will indicate the current room temperature. The lower flashing light will indicate your required comfort level.
2. Each press of the “STEP” button will change your required comfort level. For example at comfort level two (2) the unit will cool less than comfort level one (1).
3. Your unit will not operate the fan immediately. Should the unit be fitted with a dump valve the unit will fill the water sump. Should the unit not be fitted with a dump valve the sump will already be filled with water.
4. Next, the pump will move water over the filter pads (pre-wetting) thus saturating your pads so the first burst of air will be cool.
5. After the pre-wet cycle is finished the pump will continue to operate and the fan will come on automatically. The fan will adjust its own speed according to the difference in temperature between that inside your house and your selected comfort level.
6. As the room temperature nears the preset comfort level the fan of the unit will automatically slow down and the number of lights will decrease, indicating the lowering temperature. As your house temperature rises the fan speed will automatically increase to reduce the temperature to your required comfort level or as close as possible. Note that the desired comfort level is not always achievable as the humidity of the outside environment is variable.
7. To turn your unit off simply press the “ON/OFF COOL” button once again.

8. At each press of the “STEP” button the lower flashing light will move in a clockwise direction.

If the mains power to the unit has **not** been interrupted the next time the “ON/OFF COOL” button is activated the comfort level setting will be as last programmed.

If the mains power **has** been interrupted the comfort level setting will revert back to the lowest setting when automatic cooling is next activated.

On/Off Cool Button (Manual Mode)

Whilst in the automatic mode the fan selects its own speed, although at times you may wish to manually adjust the fan speed whilst still in the cooling mode. You can do this by pressing the “FAN ONLY” button after pressing the “ON/OFF COOL” button. Pressing the “STEP” button will increase the fan speed to your desired level. In this mode the display changes to show a continuous line of lights indicating the manually set fan speed and a light beside the ON/OFF COOL button and a light beside the “FAN ONLY” button. This overrides your automatic comfort level and the fan will operate at your speed setting until you further adjust the speed setting or turn the unit off. Should you wish to return to automatic cooling operation press the “FAN ONLY” button once more.

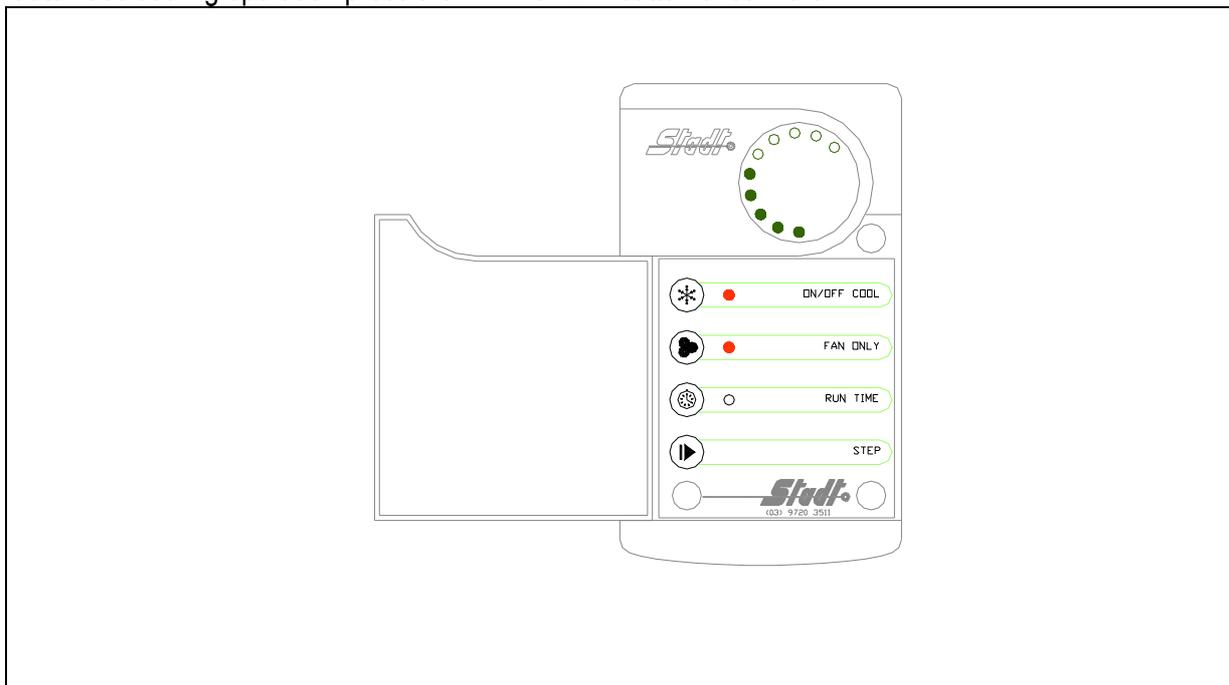


Figure 2. Wall controller showing manual fan operation.

Fan Only Button

To operate the fan only press the “FAN” button once, then press the “STEP” button to select the desired fan speed. This speed will be displayed by a solid series of lights. The speed increases as you press the “STEP” button. The lights will illuminate in a clockwise direction, as shown in Figure 3. The operation of the fan only is normally used to move fresh air through the house or on particularly humid days.

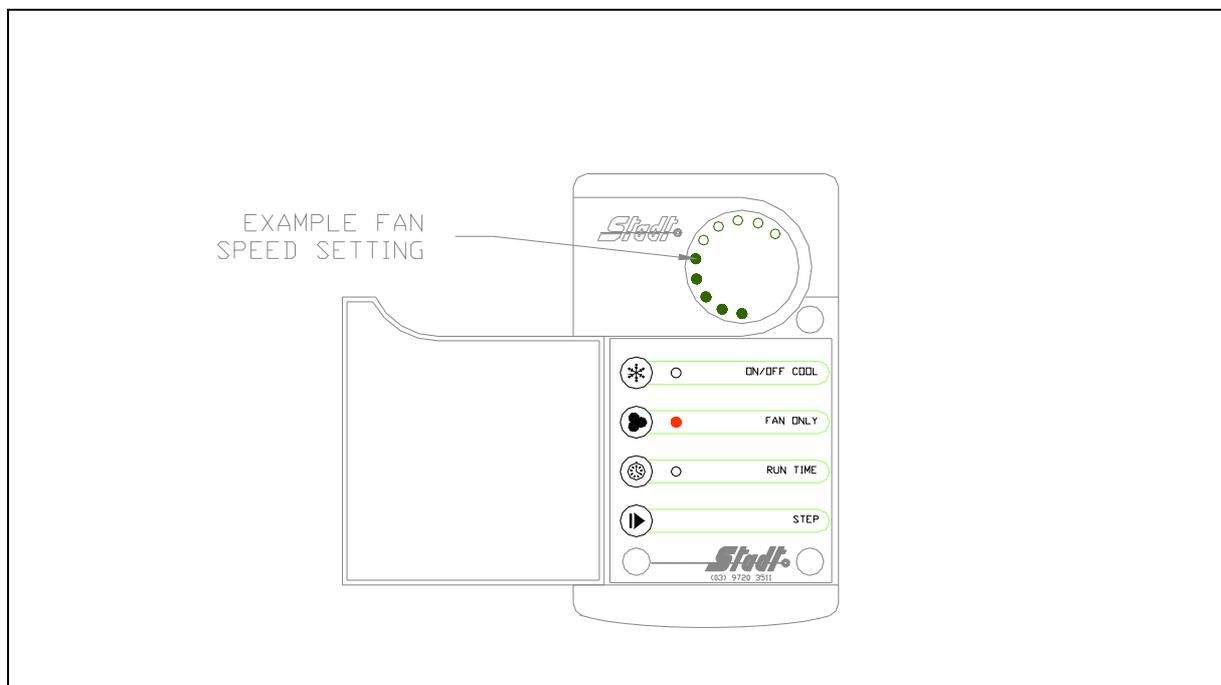


Figure 3. Wall controller showing changes to fan operation.

Run Time Button

This button allows you to preset the time at which your cooler turns on or off.

If the unit is operating and you press the “RUN TIME” button all the light indicators will go blank. If you press the “STEP” button the lowermost light will be illuminated. This indicates that the unit will turn off in one (1) hour (the off time). Each subsequent press of the “STEP” button delays the unit turning off by one more hour. This will be indicated by the light moving clockwise around the dial as shown in Figure 4. If having reached the ten (10) hour mark and the “STEP” button is pressed again the off time will return to zero (0). If the “RUN TIME” button is pressed again the display will return to the state it was in before activating the “RUN TIME” button for the first time, i.e. it will return to that shown in Figure 1 or Figure 2, depending on which mode the unit is operating. The light beside the “RUN TIME” button will now flash, indicating the number of hours left before the unit turns off. At ½ an hour to the turn on or turn off time the small red light beside the “RUN TIME” button will flash rapidly, until the unit either turns on or off.

If the unit is not operating and the “RUN TIME” button is pressed this will set the time at which the unit will turn on. If you press the “STEP” button the lowermost light will be illuminated. This indicates that the unit will turn on in one (1) hour, the “on time”. Each subsequent press of the “STEP” button delays the unit turning on by one more hour. This will be indicated by the light moving clockwise around the dial as shown in Figure 4. Unlike in Figure 4 the lights beside either of the “ON/OFF COOL” or “FAN ONLY” button will not be illuminated, as the unit is not currently operating. Again, if having reached the ten (10) hour mark and the “STEP” button is pressed again the on time will return to zero (0). Pressing the “RUN TIME” button a second time will clear the main display of lights. The light beside the “RUN TIME” button will now flash, indicating the number of hours left before the unit turns on. Having counted down to the on time the unit will automatically turn on and select the lowest temperature setting which also automatically sets the fan speed.

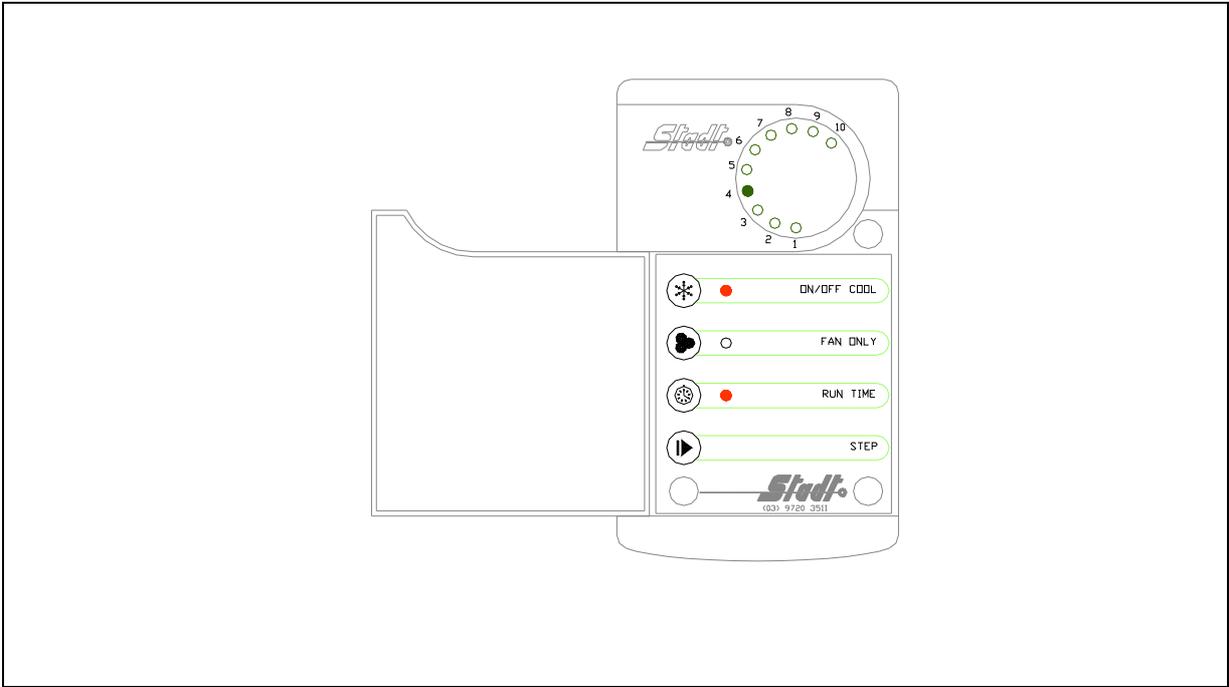


Figure 4. Wall controller showing changes in run time.

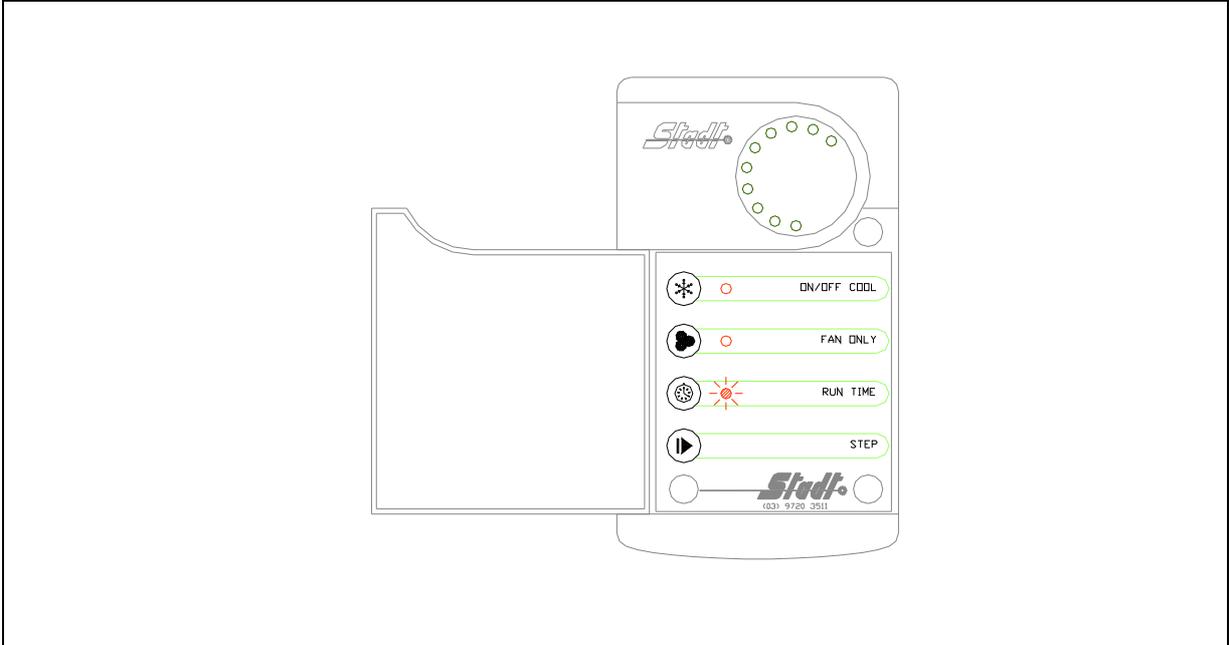


Figure 5. Wall controller showing countdown to "on time".

Maintenance

Regular maintenance is essential for ensuring that your evaporative cooler operates at maximum efficiency and comfort levels. To ensure that your evaporative cooler remains in good working condition for many years it should be thoroughly serviced every year. This service should be performed at the beginning and end of each cooling season.

FOR SERVICE CALL 03 9800 2409