DESCRIPTION:

The V7 STD is a swimming pool controller that heats a swimming pool by the use of solar panels or an auxilliary heater (if fitted).

The auxilliary heater (gas or heat pump) has a temperature limit setting (aux limit), the pool will be heated to this limit by the auxilliary heater.

The auxiliary heater run time is controlled by heat demand settings, which can be set to on/off and set to run between start and end times, note that if the start & end time are set to the same values the auxilliary heater will run for 24 hours to achieve temperature limit.

If solar gain is available the solar system will heat the pool to the solar limit (sol limit), if large solar gain is detected the auxilliary heater will be switched off to save energy. Solar has a time lockout that prevents heating outside of the time set (default 09:00 – 18:00). If the system is fitted with an Auto Divert Valve it will turn when there is solar gain and switch on the booster pump if fitted.

SETTINGS MENU

To enter the SETTINGS MENU push either the up or down buttons and the following will be displayed;

SETTINGS MENU 1) MANUAL MODE

Use *Up/Down* buttons to scroll to the option you wish to change. Press the *Enter* button to select the currently displayed menu item.

All menu items are shown below;

SETTINGS MENU

- 1) MANUAL MODE
- 2) FILTER TIMER N/A
- 3) TEMPERATURE
- 4) HEAT DEMAND
- 5) MODE
- 6) CLOCK
- 7) SAVE & EXIT

1) MANUAL MODE

MANUAL PUMP MODE UP=ON DOWN=OFF

MANUAL MODE allows you to manually set the aux pump to 'on' by pressing the *Up* button or 'off' by pressing the *Down* button.

Pressing *Enter* will return you to the SETTINGS MENU. You can also keep pressing *Enter* to toggle the filter pump from 'on' to 'off' and vice versa.

MANUAL MODE will time out, after 24 hours the V7 will return to normal operation.

2) FILTER TIMER

Not Selectable

3) TEMPERATURE

TEMPERATURE SOL LIMIT XX.X°

When you enter the TEMPERATURE menu you may change the solar heater temperature limit setting (SOL LIMIT) by pressing the *Up/Down* buttons, if no change is required simply push *Enter*. Factory default is for SOL LIMIT is 30°C.

TEMPERATURE AUX LIMIT XX.X°

AUX LIMIT sets the temperature the auxilliary heater will heat the swimming pool to you can use *Up/Down* to change the selected temperature, press *Enter* to accept. (default is 25°C)

NOTE 1: AUX LIMIT setting will only be shown if heat demand is turned on.

NOTE 2: For maximum efficiency it is advisable that the solar limit (SOL LIMIT) be set higher

than the auxilliary limit (AUX LIMIT)

4) HEAT DEMAND (only set ON if auxiliary heating fitted)

HEAT DEMAND ON/OFF

When you enter the HEAT DEMAND you will need to select ON or OFF, the selected option will be flashing, you can use *Up/Down* to change the selected option, *Enter* to accept.

If OFF is selected you will return to the menu, If ON is selected you will be prompted for START and END time, modify values by using the *Up/Down* buttons, use *Enter* to accept the values. Factory default is 'heat demand off'

HEAT DEMAND TIME HEAT DEMAND TIME START TIME X:XX END TIME X:XX

NOTE: if a 24 hour continuous run time is required then set the start time and end time to the same value. (e.g. Start 12:00, End 12:00)

Factory default for HEAT DEMAND is OFF (06:00 to 22:00, sample @ 1 hour)

5) MODE

MODE

SUMMER MODE/WINTER MODE/TROPICAL MODE

You can use *Up/Down* to change the selected option, *Enter* to accept.

SUMMER MODE is the normal operation of heating the swimming pool.

TROPICAL MODE is selected if you wish to cool the swimming pool, the solar pump will run if the roof temperature is colder than the pool until SOL LIMIT is obtained; note that this is most likely to occur at night.

WINTER MODE, when selected you will be prompted to select the start month and end month of winter, this assists in the systems off-season maintenance and save energy as solar gain may be available but swimming temperature cannot be achieved. If heat demand is set to OFF a 3 minute flush of the solar matting occurs between 10:00 and 16:00 providing the roof temperature is equal or greater than the pool, but if that condition does not occur a solar system flush will be forced to occur at 16:00.

If heat demand is ON the system operates similar to normal mode but solar pump activity is monitored and will force a 3 minute flush if solar has not been active for seven days, note the unit may flush if winter mode is selected on the day of install.

6) CLOCK

TO CHANGE CLOCK TO CHANGE CLOCK TO CHANGE CLOCK SET MINS XX SET HOURS XX SET DATE XX SET MONTH XX

When you enter the CLOCK menu you will be prompted to change the MINS settings, adjust minutes by pressing the *Up/Down* buttons, to accept the setting press the *Enter* button.

You will then be prompted to change the HOURS, adjust by pressing the *Up/Down* buttons, to accept the setting press the *Enter* button.

You will then be prompted to change the DATE, adjust by pressing the *Up/Down* buttons, to accept the setting press the *Enter* button.

You will then be prompted to change the MONTH, adjust by pressing the *Up/Down* buttons, to accept the setting press the *Enter* button.

7) SAVE & EXIT

When this menu is selected, push *Enter* to save ALL settings, the unit will return to normal operation automatically.

Note: If any of the menu items are left unattended for 3-4 mins the menu will time out and automatically save all settings and return to operation.

The Enter button.

FOR MANUAL MODE PRESS ENTER NOW

Pressing the *Enter* button once will display the above message for \sim 3 seconds, simply wait and the unit will return to normal operation.

If you *Enter* is pressed for a second time within a 3 second period, the display will indicate you have entered Manual mode, operation is the same as manual mode in the menu with the only difference being the timeout value is 4 Hours.

NOTES.

- 1. If a sensor fault is detected the V7 will display which sensor and what the fault is.
- 2. Should power be interrupted for any reason, the V7 will resume normal operation when power is restored, all information will have been kept.
- 3. Temperature sensors used with this unit are Digital and are accurate to 0.5 Deg. C, no calibration is required.
- 4. The sensor cable with the thin trace is the positive and is usually fitted to the right hand side of the green plug, incorrect polarity will be displayed.
- 5. If Auxiliary heater interlock switching is used the maximum load is 5A at 32Vac max.
- 6. Solar start and end times may be changed by holding the up button while power is applied.

Return to Manufacturer for repair.

WARRANTY – V7-1 Standard

The V7 Standard is covered by a limited 3 year warranty against component failure or faulty workmanship from the date of installation.

Damage to the unit due to misuse, power surges, lightning strikes or installation that is not in accordance with the manufacturer's instruction may void the warranty.

Valves and actuators are covered by a twelve month warranty at the discretion of their manufacturer.

Warranty does not cover travel costs to or from installation site.

Return to supplier for repair

Customer Record. (To be retained by the customer)

Dealer/Installer Name
Model Number
Serial Number
Date Installed
For service assistance phone 1300 130 693

Dontek Electronics Pty Ltd P.O. Box 239 Bayswater Victoria 3153 www.dontekelectronics.com.au