

Programming of **HeatSavr** Dosing Pump

Programming - General

The pump can be activated manually by simultaneously pressing and holding down both **↑ ↓ keys**.

Priming – once the pump system has been installed the system must be primed by holding down the **↑ ↓ keys** until all the air has been expelled from the tubes.

Programming mode is entered by pressing and holding **SET** for 3 seconds

Pressing **SET** at any stage will proceed to the next programme item

Pressing **SELECT** in any programme item will move to the next setting within that item which will then start flashing indicating that it is available for adjustment.

The dose duration time for the pool concerned should be established before programming. This is the daily dose in ml recommended divided by the dose rate of the pump system installed.

Standard dose rate for normal temperature pools is as follows:

Freeboard skimmer pool 0.8 ml/m²/day Level deck pool 1.0 ml/m²/day

Example: Daily dose rate for 16 x 7 m level deck pool (112 m²) = 112 x 1.0 = 112 ml/day

 Pump dose rate 25 ml/min

 Therefore duration of dose to be set at $112 \div 25 = 4.48$ minutes = 4 minutes 29 secs

For hydrotherapy or spa pools please consult Heatsaver

Programming - Procedure

1. Press and hold **SET for 3 seconds** to enter programming mode. First programme item “Language” will appear with actual language flashing
2. Use the **↑ ↓ keys** to select required Language. Press **SET**. *Language is now set and Time setting screen will appear.*
3. Use the **↑ ↓ keys** to select the correct hour. Press **SEL**.
4. Use the **↑ ↓ keys** to select the correct minutes. Press **SEL**.
5. Use the **↑ ↓ keys** to select the correct seconds. Press **SET**. *Time is now set and DAY screen will appear*
6. Use the **↑ ↓ keys** to select the correct day. Press **SET**. *The correct day is now set and PROGRAMME TYPE screen will appear.*
7. Press **SEL** to select the program type (Day) - flashing. Press **SET**. *The “Mon” dose screen will appear with the “1” flashing. There are eight possible dose times for each day but for this application dosing is generally once a day after the last swim. Therefore this should be set on “1” for each day*
8. Press **SEL** until the start time hours flash and set the dose start hour using the **↑ ↓ keys**.

9. Press **SEL** until the start time minutes flash and set the dose start minutes using the **↑ ↓ keys**.
10. Press **SEL** twice as start time seconds are not normally required and until the duration hours start to flash.
11. Set the dose duration hours – normally zero - using the **↑ ↓ keys**.
12. Press **SEL** until the duration minutes flash and set the dose duration (minutes) using the **↑ ↓ keys**.
13. Press **SEL** until the duration seconds flash and set the dose duration (seconds) using the **↑ ↓ keys**.
14. Press **SEL** until “Menu” flashes in bottom left hand corner of screen

The dose start time and duration of the dose for the first day is now set.

15. Press **SET**. and “MENU” screen will appear

Day	Copy	MEM
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 Press **SEL** until ‘Copy’ starts to flash. Press **SET** and dose timing screen for the next day will appear with times already copied.
16. Continuing to press **SET** will copy the dose times and duration through the rest of the week.
17. Once each day shows the correct time return to the menu screen

Day	Copy	MEM
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 , press **SEL** until ‘MEM’ flashes and then press **SET** to save the settings.

All settings are now saved and the Dosing Pump is set to operate

IT IS IMPORTANT TO ENSURE THAT THE TIME OF DOSE AND DURATION IS SET FOR EACH DAY OF THE WEEK

Calibration of dosing rate

Whilst the nominal delivery rate of the pump is 25 ml per minute this can vary a little with each system, since it can be affected by the filtration system, the location of pump and reservoir and the length of tubing etc. Therefore, once installed it is advisable to check and calibrate the pump as follows:

1. Place the pump suction tube into a 250 ml or 500ml.measuring jug positioned in the same location as the Heatsavr reservoir and fill with water to the highest graduation.

Then either:

2. Activate the pump manually by holding down both **↑ ↓ keys for 2 minutes**. The volume of water drawn off after 2 minutes can be measured. At a dose rate of 25 ml/min then the level in the jug should have dropped by 50mm.
3. If the volume of water drawn off is more or less than 50 mm then actual volume should be divided by 2 to arrive at the actual rate/min which can then be used to calculate the dose duration time for the pool concerned. E.g. if the volume measured over 2 minutes is 40 ml the actual dose rate for the system is 20 ml per minute. Adjust the dose duration time accordingly.

Or:

4. Set a dose programme to run on the current day for a specific time and measure the volume of water drawn off. Establish the dose rate per minute and if different than 25ml per min adjust the dose duration time accordingly.