

PROGRAMMING

Parameter Programming is a means by which the spa owner / user can change the various timing elements and calibrate temperature. The process is simple and intuitive. Only 3 keys are used: UP, DOWN and SET. To program one or more parameters follow the outlined procedure:

1. Press SET and DOWN keys together. The first message in the menu, FP1 will be displayed
2. Use the UP & DOWN keys to scroll thru the messages in the menu.
3. Press the SET key to display the current value associated with the current message.
4. Use UP or DOWN keys to increase or decrease the value.
5. Press SET to lock in the new value and return to the menu.
6. If another item needs programming go to number 2 above.
7. To save changes scroll to message SEND and press SET.
8. To discard changes and restore previous values scroll to message CANC and press SET.

The menu of parameters is circular. Scrolling is from first to last or from last to first.

When in programming mode please note that this mode will be cancelled if there is no key activity for a period of 60 consecutive seconds. Programming mode is aborted and all changes will be restored to previous values.

On the following page is an example of how to program a filtration period. When in programming mode you may program as many parameters as needed.

Example: program filtration period 2 to start at 5:45 PM

Press	Display	Explanation
SET & UP	FP1	Start programming the display first message Is Filtration Period 1
UP	FP2	Scroll up to Filtration Period 2.
SET	12:00	Select FP2. The display shows the current FP2 start time with the hour portion flashing.
UP	1:00	Increase the hour value by 1.
UP		5:00 Press UP key 4 more times or press and hold for auto repeat.
SET	5:00	The hour is set, the minute portion flashes.
DOWN	5:45	Press UP 15 times or press and hold for auto repeat.
SET	FP2	FP2 set to 5:45 PM & the current message is displayed again.
DOWN	FP1	Scroll to previous message.
DOWN	CANC	Previous message – if you press SET when CANC is displayed all changes will be discarded
DOWN	SEND	Previous – save changes
SET	TEMP	Changes Saved

Exit programming mode.
Display current spa temperature, time or
Operating message.

The table on the following pages is a list of all menu items, their minimum, default and maximum values and an explanation of the function of each parameter.

Note: Time parameters have two components, the hours and the minutes. When programming a time element, first the hour portion is programmed (flashing). When the hours are set press the SET key to program the minutes portion.

PARAMETER MENU LIST

Msg	Min	Def	Max	Detail
FP1 FP2 FP3 FP4		12:00 12:00 12:00 12:00		<p>Start time of filtration period 1 Start time of filtration period 2 Start time of filtration period 3 Start time of filtration period 4</p> <p>Note: If filtration periods overlap, the most recent period (last) is in effect.</p>
SIL		12:00		Start time of the silence period. This is a period during which nothing will run. It overrides all filtrations, the economy cycle, and temperature sampling. Except if temperature drops below 40 degrees. A spa may be installed near a bedroom and need not come on at specific times.
FP1d FP2d FP3d FP4d	0 0 0 0	0 0 0 0	240 240 240 240	<p>Duration in minutes FP1 timer will run. Duration in minutes FP2 timer will run. Duration in minutes FP3 timer will run. Duration in minutes FP4 timer will run.</p>
SILd	0	0	12	Duration in hours the Silence Timer runs. Only a user may override the silence timer.

Note: Keep the value of any timer to 0 to keep it from running. Filtration timers must be programmed first one first. If the FP1d (first) timer has a duration of 0, Auto Filtration will be in effect and all 4 programmed timers will be disabled.

Msg	Min	Def	Max	Detail
CLDN	30	60	180	Cool Down cycle in seconds. Whenever the heater is turned off the pump keeps running the extra seconds to even the temperature of the heater element and the surrounding water to prevent scale build up and premature heater failure.
ECL	60	180	240	Economy Cycle Length. Time in minutes to specify the intervals between spa temperature sampling when the spa is not in use. During this period the spa is in Economy mode. Temperature is sampled at the end of the period. Press any key to cancel this mode.
CHCL	0	60	180	Channel Clear. Time in seconds to clear the air channel and the secondary pump(s) plumbing if the spa has not been used for a period of 24 hours. This prevents water stagnation in the plumbing.
UTO	10	20	60	User Time Out. The time in minutes from starting any device, after which all devices will be turned off, and the spa put in "not in use mode." If you should leave the spa with a pump or light running, it will be turned off after the specified time.
PUF	30	120	180	Post Use Filtration. Time in minutes to perform Post Use Filtration this is the optimal time to filter the spa. When you have finished using the spa, that is when it needs filtration the most. Press the SET key to turn everything off and start this cycle. This cycle is performed only once and after pressing the SET key. It is in addition to the standard filtration cycles. Pressing any other device key will cancel this function.

Msg	Min	Def	Max	Detail
CALB	194	204	218	This is not a time element. It is one of the distinctive features of the SmarTouch Control System. The number is internal and is indicative of what the processor sees as temperature. It is used to calibrate the temperature reading. Increase this value by 1 to decrease the displayed temperature by ½ a degree. Decrease this number by 1 to increase displayed temperature by ½ a degree. For example if the controller is displaying a temperature 2 degrees lower than real temperature, increase the number by 4 to get a correct reading. The total range of this parameter is 10 degrees Fahrenheit. Before doing a calibration Please read warning note at end of this page.
SEND				This menu message has no numerical value. Pressing SET while it is displayed records and saves all changes made to all parameters
CANC				This menu message also has no value. Pressing SET while it is displayed discards all changes made to all parameters and restores last saved or previous values.

WARNING

The recommended maximum temperature of a spa is 104°F. The absolute maximum beyond which no person should ever be exposed to is 108°F. When you calibrate the spa temperature you are doing so at your own risk. Obtain an accurate medical thermometer to check against. Please contact ACC for proper procedure or if you do not feel confident.