


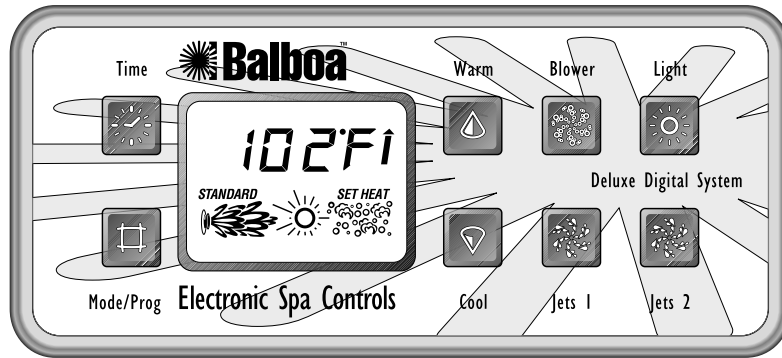
M-3 Control Reference Card

Don't Panic! No Programming is Necessary!

Instruction card for M-3 systems equipped with Deluxe Digital control panels.

Initial Start-up

When your spa is powered up, it begins running in an economy mode. This setting is designed for periods of little or no spa use, but the spa continues to filter twice a day to maintain water quality. Press the  pad to switch the spa to standard mode which will automatically heat and maintain the water at 100°F or your desired set temperature.



Control panel pads

Temperature Adjustment (80°F - 104°F)

Press either pad once, and the LCD will display the temperature which has been set, as well as the words "SET HEAT." Each time either of these pads is pressed again, the set temperature will increase or decrease. After three seconds, the LCD will automatically display the current spa temperature.

Jets 1

Press this pad to operate pump 1. The operating sequence for pump 1 is: low speed (small jet icon blinks); high speed (small jet icon is solid); then off. If left running, the low speed will automatically turn off after 4 hours; the high speed will turn off after 30 minutes. The low speed will run when the heater is turned on, when a filter cycle is activated, or when a freeze condition is detected. When the low speed turns on automatically, it cannot be deactivated from the panel; however, the high speed may be started.

Systems with a circulation pump: Pump 1 has only one speed and the small jets icon is always solid. The pump will turn off if the water temperature is 2°F above the set temperature. It turns on again at 1°F below the set temperature. It always comes on during a filter cycle.

Automatic Features

Preset Filter Cycles

Your spa will automatically filter itself twice each day. The low speed of pump 1 and the ozone generator (if installed) will run the duration of each filter cycle.

Filter 1

The first filter cycle is automatically activated at 8:00 PM and operates the low speed of pump 1 and the ozone generator (if installed) until 10:00 PM. Again, if the heat enable feature is on, the spa will heat to the set temperature in the economy mode. The blower will run for 30 seconds, and the high speed of pump 2 will run for 5 minutes.

Jets 2

Press the "Jets 2" pad to operate pump 2. Press the pad to turn on the low speed (large jet icon blinks). If equipped, press the pad again to turn on the high speed (large jet icon is solid), and again to turn off the pump. The low speed and the high speed (if installed) will turn off after 30 minutes.

Blower

This pad turns the blower on and off. If left on, the blower will automatically turn off after 30 minutes.

Light

Your spa light has three settings. Press the pad once for brightest intensity and a second time for medium intensity. Press the pad a third time for the dimmest setting and a final time to turn the spa light off. After 4 hours, the light will automatically turn off.

Economy & Standard Modes

Press this pad to switch between modes. **Standard mode maintains the set temperature at all times.** Economy mode heats the water only during filter cycles. See the Optional Filter Cycle Programming section for more heater options.

Filter 2

The second filter cycle is automatically activated at 8:00 AM and will operate the low speed of pump 1 and the ozone generator (if installed) until 10:00 AM. If the heat enable feature is on, the spa will heat to the set temperature in the economy mode.

Systems with a circulation pump: If your spa has a circulation pump and an ozone generator, each will run 24 hours per day to constantly maintain the spa water. Also, once a day, the blower will run for 30 seconds and the high speed of pump 1 and pump 2 will run for 5 minutes.

System Programming

Setting the Time of Day

When the spa is first powered up, the words "SET TIME" will flash on the display. To set the time, press (blower) or , then or . After or is pressed once, the time will begin changing in one-minute increments. Press either pad to stop the time from changing. Press to enter your correct time into the system.

Optional Filter Cycle Programming

While you are not required to set filter cycles, if you want to change them, press within 3 seconds. "SET START FILTER 1" will appear on the display.

Press or to reset the filter start time.

When "SET HEAT" is on the display, press (on) to warm the water during filtering, or press (off) to disable the heater.

Press to see "SET STOP FILTER 1" and adjust the time with the or pads, as done above.

Press to see "SET START FILTER 2" and proceed as above.

Pressing will enter the new filter cycle times into the system and display the current water temperature.

Locking the Panel

Press (blower) within 3 seconds. When locked, the display will show the temperature you have chosen, along with the lock symbol. All pads are frozen except the pad.

Unlocking the Panel

Press (blower) within 2 seconds. The lock symbol will disappear and all panel pads will work again.

Locking the Temperature

While setting your spa water temperature, after you have pressed or , press (blower) within 3 seconds to activate the lock. When locked, the center display will show the spa temperature along with the lock symbol.

Unlocking the Temperature

Press or then (blower) within 2 seconds.

Freeze Protection

If the high-limit sensor detects 40°F at the heater, then all equipment is automatically activated to provide freeze protection. This is a normal spa function; no corrective action is necessary. The equipment stays on until the sensor detects 45°F at the heater. Freeze protection is enabled regardless of the status of the spa. In colder climates, an optional additional freeze sensor may be added to protect against freeze conditions. See your dealer for details.

Diagnostic Messages

Message

Meaning

No message on display.
Power has been cut off to the spa.

OH

"Overheat" - The spa has shut down. Either the spa water has reached 112°F or the high-limit sensor has detected 118°F at the heater.

FLO

"Flow" (Flashing) - Flow of water is inhibited.

FLO

"Flow" (Not flashing) - A pressure switch has malfunctioned.

COOL

"Cool" - Water temperature is 20°F or more below the temperature you last set.

ICE

"Ice" - Potential freeze condition is detected.

Sn1

"Sensor 1" - Spa is shut down. High-limit sensor is not working.

Sn3

"Sensor 3" - Spa is shut down. Water temperature sensor is not working.

Action Required

The control panel will be disabled until power returns. Spa settings will be preserved for 30 days with a battery backup.

DO NOT ENTER THE WATER. Remove the spa cover and allow water to cool. At 110°F, the spa should automatically reset. If spa does not reset, shut off the power to the spa and call your dealer or service organization.

Check and open flow valves. Check for correct water level. Clean filter.

Contact dealer or service organization.

No action required. Spa is functioning properly.

No action required. The pump(s) will automatically activate regardless of spa status.

Contact your dealer or service organization.

Contact your dealer or service organization.

Warning! Shock Hazard! No User Serviceable Parts.

Do not attempt service of this control system. Contact your dealer or service organization for assistance. Follow all owner's manual power connection instructions. Installation must be performed by a licensed electrician and all grounding connections must be properly installed.

