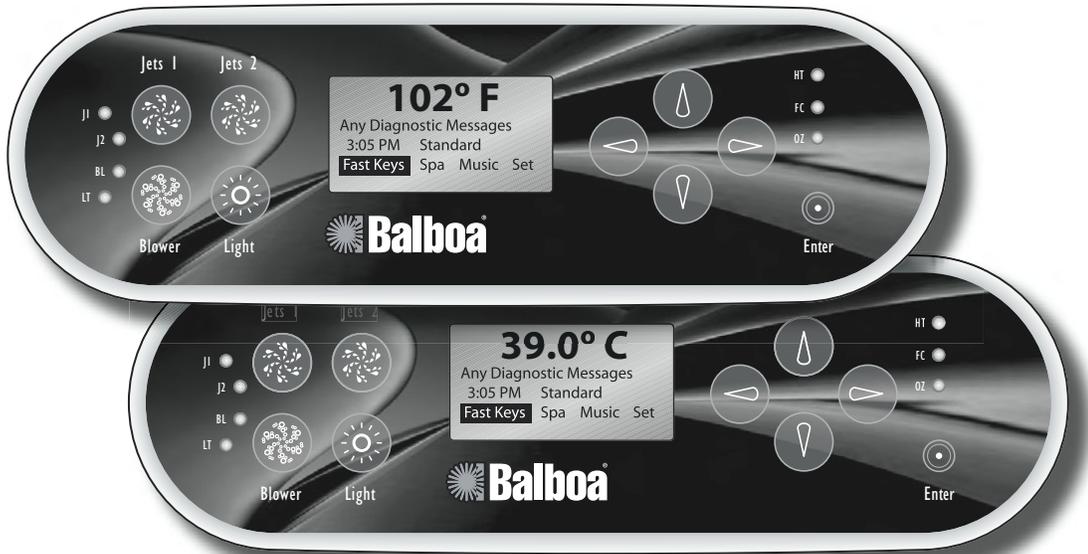


# EL/GL Series - Mach 3

## MLM990S User Guide

Panel Software Version 1.1.0



*Note regarding EL and GL systems: Mach 3 EL and GL systems function identically, but conform to different International requirements. This user guide will refer to EL systems for the sake of simplicity, but the information given applies to both EL and GL products.*





# EL/GL SERIES (Mach 3) CONTROL WITH MLM990S PANEL

The MLM990S panel can be used with the EL8000, EL5000, EL2000 and EL1000 systems. System software version 28 or higher is required for this panel. This user guide lists all features that are available. The features shown on your panel menus may vary depending on the system and equipment used.

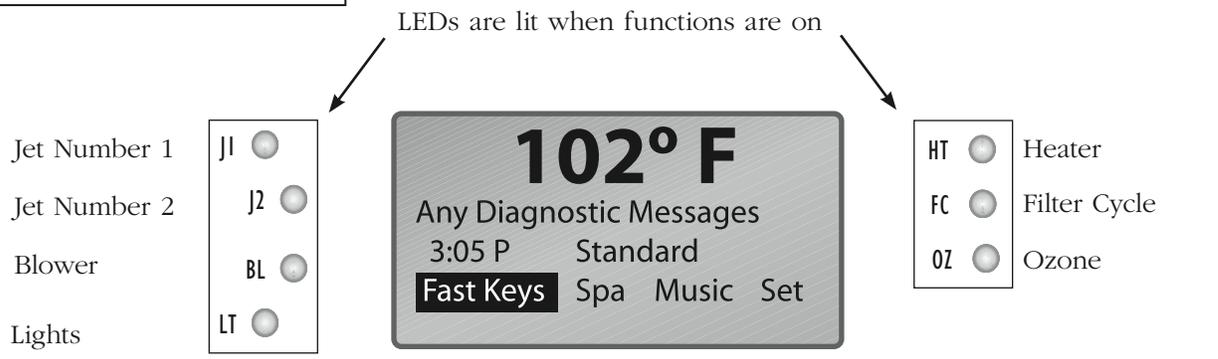
The pump responsible for heating and filtration (pump 1 low on non-circ systems, or the circ pump on circ systems) will be referred to simply as the pump.

Time-outs refer to a preset length of time that a function is programmed to operate before shutting off automatically. Certain conditions (filters or freeze) can cause a function to operate longer, while faults can cause a function to operate for a shorter length of time. The system keeps track of time-outs regardless of other conditions occurring.

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## Front Panel Screen and LEDs



Diagnostic and Reminder messages appear in place of **Any Diagnostic Messages**

To exit a menu,  
← Arrow Left



## A. Overview of a Start Up and Screen Displays

### Initial Start-up

When your spa is first actuated, it will go into Priming mode and then a quick configuration. **Please see the M-7 Installation Instruction Manual for complete instructions on Power-up and Pump Priming.**

The Priming mode will last for up to 4 minutes and then the spa will begin to heat and maintain the water temperature in the Standard mode. You will be given options as to whether you want the priming modes to continue or not. Follow the on-screen instructions. Highlight your choice and press Enter (⊙). If left alone, the system will resume after 4 minutes. The Home display screen will appear after completion.

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### Use the Arrow and Enter Keys to Navigate

Use the buttons on the front panel to move within the menu: Up ↑, Left ←, Right →, or Down ↓. Enter (⊙) chooses your menu selection.

To exit menus and go back to Home, press the left arrow key until the Home display screen appears.

---

### Home Display Screen (or “Home”)

The three basic function keys on the main display screen are “Fast Keys”, “Spa”, and “Set”. The spa temperature will appear after the system has ran its diagnostic tests. The “Standard” heat mode is displayed in this example. Note: Depending on your installed equipment, the screen may look different.



Home Display Screen

---

### Setting the Time

The time should be set first. All timed functions are dependant on this. Starting at the Home display screen, highlight “Set”, then press ⊙.

Use the arrow keys to highlight “Time of Day”. Press ⊙.

Press ↑ or ↓ to change hour. → to highlight minutes.

Press ↑ or ↓ to change minutes. → to highlight AM.

Press ↑ or ↓ to choose AM or PM.

To Save and Exit: ⊙, ←, ←.

### Setting the Spa Temperature Using Fast Keys

With “Fast Keys” highlighted on the Home display screen, press ↑. Set the desired spa temperature with ← or →, then ↓ to return Home.

You can also change the Spa temperature from within the menus: Set > Spa Settings > Set Temp > ⊙. Then press the left or right arrow keys to adjust the temperature. To Save and Exit: ⊙, ←.

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### Front Panel Buttons and Lights

For instant activation of devices, press Jets 1, Jets 2, Blower or Light. The left LEDs will light when activated. The Right LEDs will light when HT (Heater), FC (Filter Cycle), and OZ (Ozone Filter) are activated.

### Jets 1 Button

Press the Jets 1 button once to turn pump 1 on or off, and to shift between low and high speeds if equipped. If left running, the pump will turn off after a time-out period. The pump 1 low speed time-out on some systems may be as long as 4 hours.

On non-circ systems, the low speed of pump 1 runs when the blower or any other pump is on. It may also activate for at least 1 minute every 30 minutes to detect the spa temperature (polling) and then to heat to the set temperature if needed, depending upon mode. When the low speed turns on automatically, it cannot be deactivated from the panel; however, the high speed may be started.

### Jets 2 Button

Press the Jets 2 button once to turn pump 2 on or off, and to shift between low and high speeds if it is a two-speed pump. If left running, the pump will turn off after a time-out period.

### Blower Button

1-speed operation: On/Off

2-speed operation: High/Med/Off

3-speed operation: High/Med/Low/Off

If left on, the blower will automatically turn off after a time-out period.



## Light Button

Some systems are equipped with both a spa light and a fiber optic light; however, only one can be accessed by this panel. (Larger panels may be purchased so that both the spa light and fiber optic light can be utilized.) Depending upon how your spa is equipped and configured, the "Light" button will operate in one of three ways.

- 1) Press the "Light" button to turn the spa light on and off, and to shift between dim and bright settings if your light is dimmable.
- 2) If a fiber-optic light with wheel is installed, press the "Light" button once to start the light and wheel. Press it again to stop the wheel; again to turn the light off.
- 3) If a fiber-optic light without a separate wheel stop is installed, press the "Light" button to turn it on and off.

Both a spa light and a fiber optic light may be used simultaneously on the EL8000 and EL5000 systems with a different panel. If any light is left on, it will automatically turn off after a factory programmed time period.

## B. Fast Keys Give Quick Access to System Set-up

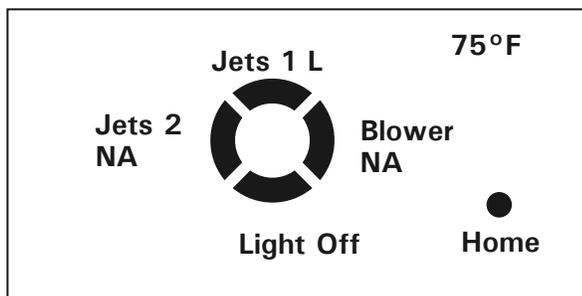
Fast Keys allows you to go directly to a programmed device and quickly view its status or change it. (See "Fast Keys, to Program".) For example, from the Home display screen, pressing "Enter" (⊙) with "Fast Keys" highlighted shows a menu with the four directional keys, their preassigned functions, and status.

In the example below, "Jets 1" is on Low; "Jets 2" is not available (not installed); "Blower" is not available (not installed); Spa "Light" is Off. These devices and functions can be found under section C. Spa Functions.

The panel Up Arrow (↑) toggles Jets 1, High or Low. The panel Down Arrow (↓) toggles the spa lights On or Off. The panel LED indicators will light when activated.

The spa temperature is shown in the upper right corner.

"Home" (⊙) to go back to the Home display screen.



Fast Keys Pictorial Screen

## C. Spa Functions Turn Equipment On or Off

In the "Spa" menu (shown on the "Home" display screen), you can control the devices on your system. The menu also shows the status of devices you may have installed on your system.

"Home" > Spa > ⊙ > Spa Functions menu.

The Spa Functions menu displays the following equipment: Jet Control, Mister, Lighting, Options, and Blower. Highlight the selected device, then press Enter (⊙). Use the direction keys to move within each menu and press ⊙ to turn the device On or Off, or to advance through the available options (High/Med/Low). Left Arrow (←) to Back up and to exit.

If you do not have a device installed, the menu will reflect it by stating "None" next to it.

### Jet Control

If Jets are programmed, they will be set to shift between low and high speeds if equipped. If left running, the pump will turn off after a time-out period. The pump 1 low speed time-out on some systems may be as long as 4 hours.

On non-circ systems, the low speed of pump 1 runs when the blower or any other pump is on. It may also activate for at least 1 minute every 30 minutes to detect the spa temperature (polling) and then to heat to the set temperature if needed, depending upon the mode. When the low speed turns on automatically, it cannot be deactivated from the panel; however, the high speed may be started.

### Jets 2-6

If these are installed, and if it is a two-speed pump, then the change in mode will be between low and high speeds. If left running, the pump will turn off after a time-out period. Please refer to "Optional Auxiliary Panels".

### Lighting

Light-On/Off

Fiber Wheel-On/Off/None

### Blower Option

1-speed operation: On/Off

2-speed operation: High/Med or Off

3-speed operation: High/Med/Low or Off

If left on, the blower will automatically turn off after a time-out period.

### Mister Control

Mister Control - On/Off/None



## Options

- Option 1 - None
- Option 2 - On/Off
- Option 3 - On/Off

Note: Options may include Waterfall, TV, CD, etc.

---

## D. Set Menu Presets Your Equipment

In the “Set” menu (shown on the “Home” display screen), you can preset (program) the equipment on your system, and view diagnostic and software version information.

“Home” > Set >  > Spa Settings menu.

From within the “Spa Settings” menu, choose which setting you’d like to change by using the arrow keys.

### The “Spa Settings” Submenu

#### Set Temp

From within “Spa Settings”, highlight “Set Temp”, ,  or  to set the temperature, ,  to exit.

(Note: The available range for adjustment of spa temperature is 80°F - 104°F (26.0°C - 40.0°C). Also, the last measured spa temperature displayed is current only when the pump has been running for at least 1 minute.)

Note: To change the format from Fahrenheit to Centigrade, access the “User Settings” within the “Spa Settings” menu. See User Settings under this section.

#### Filter Cycles, to Program

“Home” > Set >  > Filter Cycle > .

You are not required to set filter cycles; however, it is an option available to you.

On all systems, the pump and the ozone generator will run during filtration. At the start of each filter cycle, the blower will run briefly on its highest speed to purge the air channels. The lowest speed of any other pumps and the Mister will also run briefly. On some circ systems, Pump 1 may also run for the duration of the filter. There are two filter cycles per day.

The start/end times of each cycle are programmable. To program the cycles, the clock must be set. Under “Spa Settings”, highlight “Filter Cycle” and Enter (). Select Filter Cycle 1 or 2 by pressing  or . Arrow Down to the Start Time, then . Select  or  to choose the “Start Time” hour. Press  to change minutes, then use the  or  to select the minutes start time.

Arrow Right to change AM or PM if on a 12 hour clock (see “User Settings” if you don’t see AM or PM). Press “Enter” () to Save. Arrow Down to “Stop Time” and repeat. Once finished, Arrow Left to Exit or resume to set Filter Cycle 2.

If you would like to select continuous filtration, set the Filter 1 start and end times to be the exact same time. In this case, Filter 2 Start Time only controls when the second purge happens. Filter 2 end time will be unavailable.

### *(The following is specific to all systems that are programmed according to time)*

Default filter cycles can vary from system to system. A common default is 8:00 AM to 10:00 AM and 8:00 PM to 10:00 PM. From the Home display screen, select “Set” then “Enter” ().  on “Filter Cycle” to view how the filter cycle times that are currently set.

Also, each filter cycle automatically operates the pump for the duration of the filter cycle. The filter “FC” LED will light on the panel when any filter is running.

### Fast Keys, to Program

“Home” > Set >  > Fast Keys > .

Here you can designate how each key will respond when accessing the “Fast Keys” menu (page 3). The following equipment are available for each of the four Fast Keys: None, Jets 1-6, Blower, Light, Fiber Wheel, Mister, and Option 1-3.

In the menu “Program Fast Keys”, highlight a direction key to program, then . Scroll to the device you choose to place on the Fast Keys menu. For more options, Arrow Right (). Choose your device by highlighting it. Press Enter ().

Left Arrow () to go back to the “Program Fast Keys” menu to program the other Fast Keys, or continue () to exit.

Note: Within a Program menu, the current choice of the fast key chosen appears in parenthesis.

### Mode, Change Heat Mode

“Home” > Set >  > Mode > .

This screen allows options for Standard, Economy, or Sleep modes when using the heater. Select the mode, then .

**Standard mode** maintains the desired temperature.

**Economy mode** heats the spa to set temperature only during filter cycles.

**Sleep mode** heats the spa to within 20°F (11°C) of the set temperature only during filter cycles.

Arrow Left  to return to “Spa Settings”.

### Time of Day

“Home” > Set >  > Time of Day > .

Under “Set Time of Day”, follow the on screen instructions: Press Up or Down to change; the left and right arrow keys designate what to change: hour, minute, AM or PM. “Enter” to Save.



## User Settings

“Home” > Set >  > User Settings > .

Pressing Enter () on any setting within the User Settings menu toggles the choices:

- 1) Temp Format from F to C.
- 2) Time Format 12HR/24HR
- 3) Dolphin Address: 0 (zero) - 7. (See Dolphin manual for addressing one or two Dolphins)
- 4) Suppress Reminders, On/Off.

When “On”, Reminders are never displayed on the panel. When “Off”, Reminders are displayed on the panel periodically. (See page 8 for Reminders.)

← to Exit.

## Panel Settings

“Home” > Set >  > Panel Settings > .

 again to adjust the “LCD Contrast” using the arrow keys (←/→).  to finish and exit.

Arrow Left (←) to exit and to return to “Spa Settings”.

## Diagnostics

“Home” > Set >  > Diagnostics > .

 to view “Diagnostic Info”. Use the direction keys and Enter () key to view your settings. (←) to exit.

The available menus are:

- 1) Sensor Temperatures (Sensors A & B)
  - 2) Switches-Bank A. . Option A1-A12, On/Off
  - 3) Switches-Bank B. . Option B1-B6, On/Off
- Arrow Left (←) to return to “Spa Settings”.

## Versions/Version Information

“Home” > Set >  > Versions > .

If you call technical support, you may be required to provide system and panel information.

Highlight “Versions”,  to enter the “Version Info” Display. Here you will find the System and Panel version information. Arrow Left (←) to exit.

## E. Additional Options

### Freeze Protection

If the temperature sensors within the heater detect a low enough temperature, then the pump(s) and the blower automatically activate to provide freeze protection. The pump(s) and blower will run either continuously or periodically depending on conditions.

In colder climates, an optional additional freeze sensor may be added to protect against freeze conditions that may not be sensed by the standard sensors. Auxiliary freeze sensor protection acts similarly except with the temperature thresholds determined by the switch. See your dealer for details.

### Clean-up Cycle

When a pump or blower is turned on by a button press, a clean-up cycle begins 30 minutes after the pump or blower is turned off or times out. The pump and the ozone generator will run for one to four hours, depending on the system (on some systems, you can change this setting; see the “User Preferences” section.)

### Circ Pump

If your system is equipped with a circ pump, it may be configured to work in one of three different ways:

- 1) The circ pump operates continuously (24 hours) with the exception of turning off for 30 minutes at a time when the water temperature reaches 3°F (1.5°C) above the set temperature (most likely to happen in very hot climates).
- 2) The circ pump stays on continuously, regardless of water temperature.
- 3) The circ pump will come on when the system is checking temperature (polling), during filter cycles, during freeze conditions, or when another pump is on.

### Ozone

On most systems, the ozone generator (if installed) runs during filter cycles (except when pump 1 is operating at high speed on a non-circ system) and during clean-up cycles. On some systems, the ozone generator operates whenever the pump runs.

If your system is configured with the optional ozone suppress feature, the ozone generator will turn off for 1 hour any time a function button (Jets 1, Jets 2, Blower, etc.) is pressed.



## Diagnostic Messages

Message	Meaning	Action Required
No message on display. Power has been cut off to the spa.		The control panel will be disabled until power returns. Time of day will be preserved for 30 days with a battery back-up on EL8000 and EL5000 systems. EL1000 and some EL2000 systems reset the time of day on each power-up. Spa settings are preserved on all systems.
<b>Heater Overheat</b>	“Overheat” - The spa has shut down. <sup>1</sup> On some systems, an alarm may sound. One of the sensors has detected 118°F (approximately 47.8°C) at the heater.	DO NOT ENTER THE WATER. Remove the spa cover and allow water to cool. Once the heater has cooled, reset by pushing any button. If spa does not reset, shut off the power to the spa and call your dealer or service organization.
<b>Spa Overheat</b>	“Overheat” - The spa has shut down. <sup>1</sup> One of the sensors has detected that the spa water is 110°F (approximately 43.3°C).	DO NOT ENTER THE WATER. Remove the spa cover and allow water to cool. At 107°F (approximately 41.7°C), the spa should automatically reset. If spa does not reset, shut off the power to the spa and call your dealer or service organization.
<b>Freeze Condition</b>	“Ice” - Potential freeze condition detected.	No action required. The pumps and the blower will automatically activate regardless of spa status.
<b>Sensor A Fault</b>	Spa is shut down. <sup>1</sup> The sensor that is plugged into the Sensor “A” jack is not working.	If the problem persists, contact your dealer or service organization. (May appear temporarily in an overheat situation and disappear when the heater cools.)
<b>Sensor B Fault</b>	Spa is shut down. <sup>1</sup> The sensor that is plugged into the Sensor “B” jack is not working.	If the problem persists, contact your dealer or service organization. (May appear temporarily in an overheat situation and disappear when the heater cools.)
<b>Sensor Balance Transient</b>	Sensors are out of balance. If this is alternating with the temperature, it may just be a temporary condition. If the display shows only this message (periodically blinking), the spa is shut down. <sup>1</sup>	If the problem persists, contact your dealer or service organization.
<b>Heater Flow Low</b>	A substantial difference between the temperature sensors was detected. This could indicate a flow problem.	Check water level in spa. Refill if necessary. If the water level is okay, make sure the pumps have been primed. Press any button to reset.
<b>Low Flow</b>	Persistent low flow problems. (Displays on the fifth occurrence of the “ <b>Heater Flow Low</b> ” message within 24 hours.) Heater is shut down, but other spa functions continue to run normally.	Follow action required for “ <b>Heater Flow Low</b> ” message. Heating capacity of the spa will not reset automatically; you may press any button to reset.
<b>Heater Maybe Dry</b>	Inadequate water detected in heater.	Check water level in spa. Refill if necessary. If the water level is okay, make sure the pumps have been primed. Press any button to reset.
<b>Heater Dry</b>	Inadequate water detected in heater. (Displays on third occurrence of the above message.) Spa is shut down. <sup>1</sup>	Follow action required for the above message. Spa will not automatically reset; you may press any button to reset.



## Diagnostic Messages (continued)

Message	Meaning	Action Required
<b>Priming Mode</b>	When your spa is first actuated, it will go into Priming mode.	See the M-7 Installation Instruction Manual for complete instructions on Power-up and Pump Priming. The Priming mode will last for up to 4 minutes and then the spa will begin to heat and maintain the water temperature in the Standard mode.
<b>--F --C</b>	Temperature unknown.	After the pump has been running for 1 minute, the temperature will be displayed.
<b>-----</b>	Temperature not current in Economy or Sleep mode.	In Economy or Sleep mode, the pump may be off for hours outside a filter. If you wish to see the current spa temperature, either switch to Standard mode or turn Jets 1 on for at least 1 minute.
<b>Standby Mode</b>	Standby Mode has been activated by pressing a button combination on the user panel.	Press any button to leave Standby Mode and return to normal operation.
<b>pH Low</b>	pH is low.	Add pH increaser according to manufacturer's instructions.
<b>pH High</b>	pH is high.	Add pH reducer according to manufacturer's instructions.
<b>Sanitizer Low</b>	Sanitizer is low.	Add sanitizer according to manufacturer's instructions.
<b>Sanitizer High</b>	Sanitizer is high.	Remove spa cover and allow sanitizer to dissipate.
<b>Drain Water</b>	The pump is on during Standby Mode to assist in draining the spa.	Press "Jets 1" to turn off the pump when water has drained (or power off the spa.)
<b>RTC Failure</b>	Hardware failure.	Contact your dealer or service organization.
<b>Persistent Memory Fail</b>	Hardware failure.	Contact your dealer or service organization if message appears on more than one power up.
<b>Checksum Failure</b>	Firmware install problem.	Contact your dealer or service organization if message appears on more than one power up.
<b>Configuration Error</b>	Configuration error. Spa cannot start up.	Contact your dealer or service organization.
<b>GFCI Failure</b>	Spa could not trip GFCI.	Contact your dealer or service organization. Continued operation may be unsafe.
<b>Stuck Msg</b>	A pump appears to be stuck on, causing the water temperature to creep up, possibly to hazardous levels.	POWER DOWN SPA IMMEDIATELY. DO NOT ENTER THE WATER. Contact your dealer or service organization.
<b>HOT (Call Service)</b>	A pump appears to have been stuck on the last time spa was powered.	POWER DOWN SPA IMMEDIATELY. DO NOT ENTER THE WATER. Contact your dealer or service organization.

<sup>1</sup> On some systems even when spa is shut down, some equipment may occasionally turn on to continue monitoring temperature or if freeze protection is needed.



## Periodic Reminder Messages

(Press the “Mode” button to reset a displayed reminder.\*)

Message **	Frequency ***	Action Required
Check pH	Every 7 days	Test and adjust pH chemical levels per manufacturer’s instructions.
Check Sanitizer	Every 7 days	Test and adjust sanitizer chemical levels per manufacturer’s instructions.
Clean Filter	Every 30 days	Remove, clean, and reinstall filter per manufacturer’s instructions.
Test GFCI	Every 30 days	Test & reset GFCI per manufacturer’s instructions.
Drain Water	Every 90 days	Drain and refill spa per manufacturer’s instructions.
Clean Cover	Every 180 days	Clean and condition cover per manufacturer’s instructions.
Treat Wood	Every 180 days	Clean and condition wood per manufacturer’s instructions.
Change Filter	Every 365 days	Install new filter.
Change Cartridge	As needed	Install new Mineral cartridge.

\* User can suppress all reminders in User Preferences.

\*\* All of these Periodic Messages can be disabled individually by the spa manufacturer.

\*\*\* Any of these frequencies may be changed by the spa manufacturer.

**Note:** The GFCI section does not apply on EL systems used outside the United States.  
This GFCI section does not apply to GL Systems.

## GFCI Protection

Your spa may be equipped with a GFCI Protection feature. If your spa does have this feature enabled, the GFCI Trip Test must occur to allow proper spa function.

Within 1 to 7 days after startup, the spa will trip the GFCI to test it. (The number of days is factory programmed.) The GFCI must be reset once it has been tripped. After passing the GFCI Trip Test, subsequent GFCI trips will indicate a ground fault or other unsafe condition requiring the power to the spa to be shut off.

**Warning:** The Owner should test and reset the GFCI on a regular basis to verify its function.



## Optional Auxiliary Panels

**Note:** Below is a partial list of optional auxiliary panels and their basic functions.

Please contact your local dealer for a complete list of options that will work with your spa.



### Jets 3, Jets 4 (optional on some systems)

Press the “Jets 3” button once to turn pump 3 on or off, and to shift between low and high speeds if it is a two-speed pump. If left running, the pump will turn off after a time-out period. “Jets 4” operates the same way as “Jets 3”.

### Jets 5, Jets 6 (optional on some systems)

Press the “Jets 5” button once to turn pump 5 on or off. If left running, the pump will turn off after a time-out period. “Jets 6” operates the same way as “Jets 5”.

### Mister (optional)

Press the “Mister” button to turn the Mister on and off. If left on, the mister will automatically turn off after 15 minutes.

### TV Lift (optional)

Press the “TV Lift” button to raise and lower the TV Lift device. There is no time-out for this feature.

### Stir (optional on some systems)

Press the “Stir” button after adding new chemicals into the spa. This will turn all pumps on at high-speed for 5 minutes to thoroughly mix in the chemicals.



**Warning! Qualified technician required for service and installation.**

**Basic Installation & Configuration for Mach 3**

**Guidelines for Mach 3 EL-Series Spa Controllers.**

Use minimum 6AWG copper conductors only.

Torque field connections between 21 and 23 in-lbs.

Readily accessible disconnecting means to be provided at time of installation.

Permanently connected.

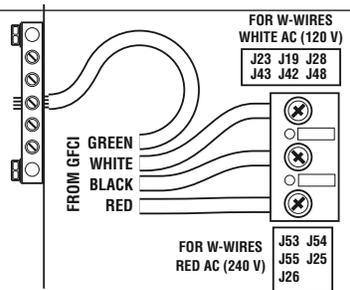
Connect only to a circuit protected by a Class A Ground Fault Circuit Interrupter (GFCI) mounted at least 5' (1.52M) from the inside walls of the spa/hot tub and in line of sight from the equipment compartment.

CSA enclosure: Type 2

*Typical field connections for main power.*

Refer to Wiring Diagram inside the cover of the control enclosure.

Refer to Installation and Safety Instructions provided by the spa manufacturer.



**Warning:** People with infectious diseases should not use a spa or hot tub.

**Warning:** To avoid injury, exercise care when entering or exiting the spa or hot tub.

**Warning:** Do not use a spa or hot tub immediately following strenuous exercise

**Warning:** Prolonged immersion in a spa or hot tub may be injurious to your health

**Caution:** Maintain water chemistry in accordance with the Manufacturers instructions.

**Caution:** The equipment and controls shall be located not less than 1.5 meters horizontally from the spa or hot tub.

**Warning! GFCI Protection.**

The Owner should test and reset the GFCI on a regular basis to verify its function.

**CSA Compliance/Conformité**

**Caution:**

- Test the ground fault circuit interrupter before each use of the spa.
- Read the instruction manual.
- Adequate drainage must be provided if the equipment is to be installed in a pit.
- For use only within an enclosure rated CSA Enclosure 3.
- Connect only to a circuit protected by a Class A ground fault circuit interrupter.
- To ensure continued protection against shock hazard, use only identical replacement parts when servicing.
- Install a suitably rated suction guard to match the maximum flow rate marked.

**Warning:**

- Water temperature in excess of 38°C may be injurious to your health.
- Disconnect the electrical power before servicing.

**Attention:**

- Toujours verifier l'efficacite du disjoncteur differentiel avant d'utiliser differentiel avant d'utiliser le bain.
- Lire la notice technique.
- Lorsque l'appareillage est installe dans une fosse, on doit assurer un drainage adequat.
- Employer uniquement a l'interieur d'une cloture CSA Enclosure 3.
- Connecter uniquement a un circuit protege par un disjoncteur differentiel de Class A.
- Afin d'assurer une protection permanente contre le danger de shock electrique, lors de l'entretien employer seulement des pieces de rechange identiques.
- Les prises d'aspiration doivent etre equipees de grilles convenant au debit maximal indique.

**Avertissement:**

- Des temperatures de l'eau superieures a 38°C peuvent presenter un danger pour la sante.
- Deconnecter du circuit d'alimentation electrique avante l'entretien.

**Warning/Advertissement:**

- Disconnect the electric power before servicing. Keep access door closed.
- Deconnecter du circuit d'alimentation electrique avant l'entretien. Garder la porte fermer.

**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.

