# ((CCO)) spas) Deluxe U-130

Manufactured by DM Industries, Ltd.

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Note: All pumps must be installed in accordance with UL Standard 1563 and any local codes in effect at the time of installation.

This OWNER'S MANUAL has been designed to familiarize you with your Spa operations and general maintenance. We suggest that you take some time to carefully review it. Please keep this manual available for reference.

If you have any questions regarding your spa set-up, operation or maintenance, please contact **DM Technical Support** at the numbers below.

# **Owner's Record**

DATE PURCHASE: \_\_\_\_\_

SERIAL NUMBER: \_\_\_\_\_

To contact our Technical Service Department, please call **1-800-316-7886** during normal business hours, Monday through Friday, **8:30am to 5pm, EST** 

The Serial Number is located within the equipment compartment. Please record it on your sales invoice.

# **IMPORTANT SAFETY INSTRUCTIONS**

#### WHEN INSTALLING AND USING THIS ELECTRICAL EQUIPMENT, BASIC SAFETY PRECAUTIONS SHOULD ALWAYS BE FOLLOWED, INCLUDING THE FOLLOWING:

- **1. WARNING :** To reduce the risk of injury do not permit children to use this product unless they are closely supervised at all times.
- 2. DANGER! RISK OF ACCIDENTAL DROWNING. Extreme caution must be exercised to prevent unauthorized access by children. To avoid accidents, ensure that children cannot use a hot tub or spa unless they are supervised at all times.
- **3. DANGER:** To reduce the risk of injury to persons, Do NOT remove suction fittings. The suction fittings in this spa are sized to match the specific water flow created by the pump. Should the need arise to replace the suction fittings or the pump, be sure that the flow rates are compatible. Never operate the spa if the suction fittings are broken or missing. Never replace a suction fitting with one rated less than the flow rate marked on the original suction fitting.
- 4. Install the spa so proper drainage is provided for the compartment containing the electrical components.

#### 5. DANGER - RISK OF ELECTRICAL SHOCK.

Placement of the spa shall be at least 5 feet (1.5 m) from all metal surfaces. (A spa may be installed within 5 feet of a metal surface if each metal surface is permanently connected by a minimum No. 8 AWG 8.42mm2 solid copper conductor attached to the wire connector on the terminal box that is provided for this purpose). National Electrical Code ANSI /NMFP A70-1993.

#### 6. DANGER-RISK OF ELECTRICAL SHOCK

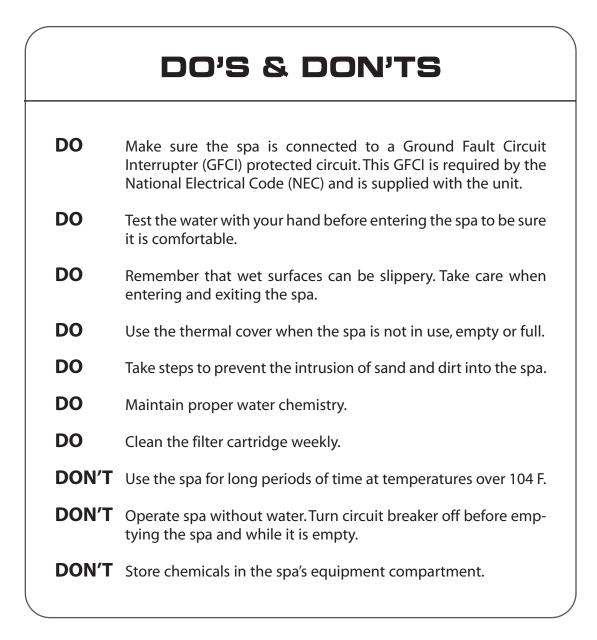
Do not permit any electrical appliances, such as a light, telephone, radio, or television within 5 feet (1.5 m) of the spa.

#### 7. Warning: To Reduce The Risk of Injury:

- A. The water in a spa should never exceed 40 degrees Celsius (104 degrees F). Water temperatures between 38 degrees C (100 E) and 40 degrees C 104 F) are considered safe for a healthy adult. Lower water temperatures are recommended for extended use (exceeding 10 minutes) and for young children.
- B. Since excessive water temperatures have a high potential for causing fetal damage during the early months of pregnancy, pregnant or possibly pregnant women should limit spa or hot tub temperatures to 38 degrees C (100 F)

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- C. Before entering a spa, the user should measure the water temperature with an accurate thermometer, since the tolerances of water temperature regulating devices vary.
- D. The use of alcohol, drugs, or medication, before or during spa use, may lead to unconsciousness with the possibility of drowning.
- E. Persons suffering from obesity or with a medical history of heart disease, low or high blood pressure, circulation system problems, or diabetes should consult a physician before using a spa.
- F. Persons using medication should consult a physician before using a spa since some medication may induce drowsiness, while other medication may affect heart rate, blood pressure and circulation.



# WARNINGS

Prolonged immersion in water that is warmer than normal body temperature can result in a dangerous condition known as **HYPOTHERMIA.** The causes, symptoms, and effects of hypothermia may be described as follows:

Hypothermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6 degrees F. The symptoms of hypothermia include dizziness, fainting, drowsiness, lethargy, and an increase in the internal temperature of the body. The effects of hypothermia include (1) unawareness of impending hazard, (2) failure to perceive heat, (3) failure to recognize the need to exit the spa, (4) physical inability, to exit the spa, (5) fetal damage in pregnant women, and (6) unconsciousness resulting in a danger of drowning.

WARNING: The use of alcohol, drugs, or medication can greatly increase the risk of fatal hypothermia in hot tubs and spas.

Persons taking medications which induce drowsiness such as tranquilizers antihistamines or anticoagulants should not use the spa. Pregnant women and persons with a medical history of heart disease, circulatory problems, diabetes or high blood pressure should consult their physician before using the spa.

Children are especially sensitive to hot water. At no time should children have unsupervised access to the spa. The use of elevated decking may encourage children to climb onto the thermal cover-**IT IS NOT DESIGNED AS A SAFETY OR CHILD RESISTANT COVER!** Each spa comes with a thermal cover which is provided with locking straps. Install the locks for your child's safety.

## SAVE THESE INSTRUCTIONS

# **INSTALLATION INSTRUCTIONS**

## Site Selection/Preparation

The spa must be installed on a structurally strong, solid and reasonably level surface. The site should allow for drainage away from the equipment compartment in which the electrical components are housed. Take into account the following when considering prospective sites:

#### LOCAL CODES:

There may be certain restrictions and/or requirements that are particular to your locality.

#### **DELIVERY PASSAGEWAY:**

Doors, halls, stairs, etc. may pose obstructions to deliver the spa to its intended site.

#### MAINTENANCE:

Trees, lawn, placement surfaces, etc. can create extra work in keeping your spa and spa area clean and safe.

#### **PRIVACY & WIND SHIELDING**

A sheltered environment can result in lower operating and maintenance costs.

#### ELECTRICAL REQUIREMENTS AND INSTALLATION:

**Important:** Your spa is wired to meet the requirements of **UL**, **ETL**, and the **National Electrical Code (NEC).** Any modifications required to meet state or local codes must be performed by a qualified, **LICENSED** electrical contractor and approved by a local build-ing/electrical inspection authority.

A ground terminal (pressure wire connector) is provided on the control box inside the spa to permit connection of a minimum No. 8 AWG (8.4mm) solid copper bonding conductor between this point and any metal equipment, metal enclosures or electrical equipment, metal water pipe or conduit, within 5 feet (1.5m) of the unit as needed to comply with local requirements.

#### In-Line Ground Fault Circuit Installation Diagrams

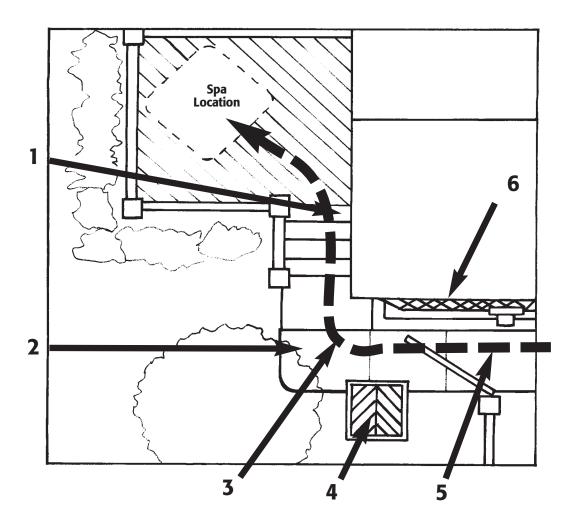
All wires feeding the spa are to be the same gauge. Ground wires are to be insulated. When using a ground rod, the ground wire to the rod should be #6 bare copper wire.

All 220 Volt spas require the use of an isolated GFCI protected circuit. The installation of a disconnect is required no more than ten (10) visual feet from the spa and not less than five (5) feet from the spa. This requirement is to assure that the power cannot be inadvertently turned back on when the power is disconnected from the spa for any reason.

Wire your spa per the diagram most similar to your house panel.

#### 220 Volts 3-wire systems:

Note: 220 volt spas use 3 wires: Ground, L1 and L2



## **CLEARANCES**

CHECK THE FOLLOWING AREAS PRIOR TO SPA DELIVERY

- 1. STEPS We suggest no more than six without a landing.
- 2. TREE BRANCHES Clearance for spa passage.
- 3. TIGHT CORNERS Make sure there is space to maneuver.
- 4. STORAGE SHEDS, DOG HOUSES, WOOD PILES Remove out of the way.
- 5.GATES: CLEARANCE FOR PASSAGE OF SPA Does gate need to be removed from hinges?
- 6. OVERHANGS AND GUTTERS Anything overhead, as well as drain pipe locations, must allow for spa passage.

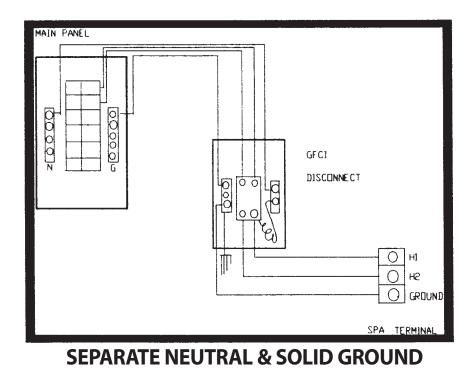
#### ELECTRICAL REQUIREMENTS AND INSTALLATION

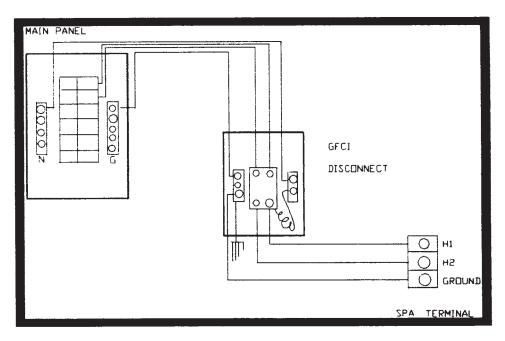
WIRE YOUR SPA PER ONE OF THE DIAGRAMS MOST SIMILAR TO YOUR HOUSE PANEL

ALL WIRES FEEDING THE SPA ARE TO BE THE SAME GAUGE. GROUND WIRES ARE TO BE INSULATED AS WELL. WHEN USING A GROUND ROD, THE GROUND WIRE TO THE ROD SHOULD BE #6 BARE COPPER.

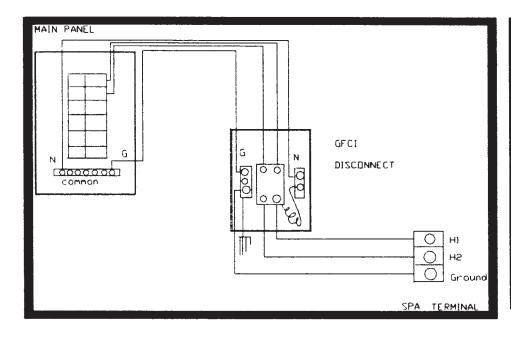
ALL SPAS REQUIRE THE USE OF AN ISOLATED GFCI PROTECTED CIRCUIT. THE INSTALLATION OF A DISCONNECT IS REQUIRED NO MORE THAN TEN (10) VISUAL FEET FROM THE SPA AND NOT LESS THAN FIVE (5) FEET.

THIS REQUIREMENT IS TO ASSURE THAT WHEN POWER IS DISCONNECTED FROM THE SPA, POWER CAN NOT BE INADVERTENTLY TURNED BACK ON.

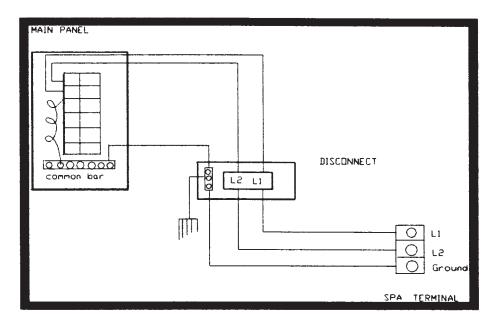




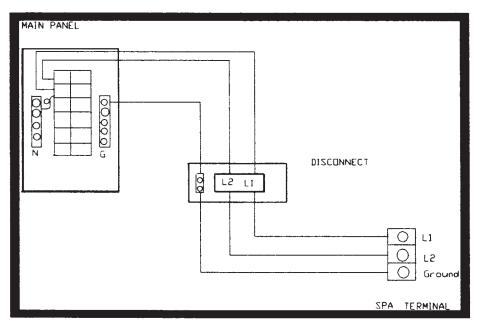
# SEPARATE NEUTRAL & WEAK GROUND OR ROMEX WIRE USED TO FEED GFCI WITH UNDERSIZED GROUND WIRE



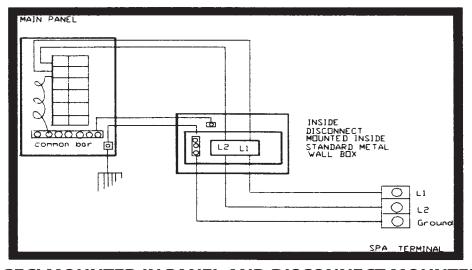
## COMMON NEUTRAL GROUND BAR IN MAIN



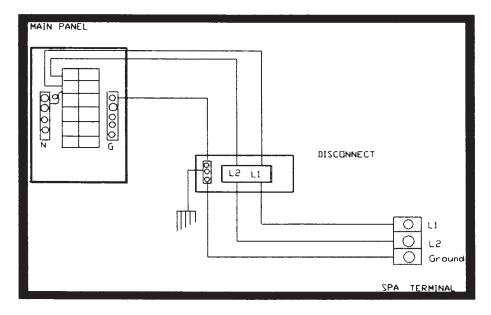
## GFCI IN PANEL WITH COMMON NEUTRAL BAR AND/OR ROMEX WITH UNDERSIZED WIRE USED TO FEED DIS-CONNECT.



### GFCI IN PANEL WITH SEPARATE NEUTRAL AND SOLID GROUND TO PANEL



GFCI MOUNTED IN PANEL AND DISCONNECT MOUNTED INSIDE TO COMMON WALL WITH METAL STUDS OR WITH METAL MOUNTING BOX.



GFCI IN PANEL WITH WEAK GROUND OR ROMEX WITH UNDER-SIZED GROUND WIRE USED TO FEED DISCONNECT

#### ALL WIRING TO THE SPA SHOULD BE IN ACCORDANCE WITH ALL LOCAL AND NATIONAL ELECTRICAL CODES. ALL WIRING SHOULD BE PERFORMED BY A LICENSED ELECTRICIAN KNOWLEDGEABLE IN THE OPERATION AND WIRING OF A GFCI PROTECTED SYSTEM.

- The spa must be permanently connected (hardwired) to the power supply. No extension cords or plug-type connections are to be used in conjunction with the operation of the spa. Failure to supply power to the spa that is not in accordance with these instructions could create a potential health hazard and will void both the manufacturer's warranty and the independent testing agency listing.
- 2. The National Electrical Code (NEC) requires that the power supply to this spa must be a dedicated, ground fault circuit (GFCI) protected circuit with no other appliances or lights sharing power on this circuit.
- 3. Refer to the wiring diagram posted inside the electrical equipment door to determine the current, voltage, and wire size requirements for your spa.
- 4. THHN type wire is recommended. The wire size for the distance of the wire run must conform to NEC and local electrical codes.

- 5. To ensure proper connections use copper conductors only. **DO NOT USE ALUMINUM WIRE.**
- 6. The spas' power terminal strip is located within the electrical control box.
- 7. Feed supply conductors through power supply inlets provided on the spa and install into the control box. Modifications to the electrical equipment box are not permitted. Drilling holes in the electrical control box to provide access for wires in areas other than those provided for will void the manufacturer's warranty and the independent testing agency listing.
- 8. Connect wires to terminal block (TBI) color for color. All wires must be connected or damage may result. TIGHTEN SECURELY!

## Getting Started:

#### NOTE:

For best results, read each step carefully and entirely before proceeding to the next.

#### **FILL YOUR SPA**

Wipe the interior of the spa with a damp, soft cloth to remove any residue that may be on the surface. Fill with a garden hose. As the spa is filling check in the equipment access area for any leaks. On occasion, it may be necessary to hand tighten a union fitting that may have come loose during transit. Also check that the gate valves are pulled out to the open position and that the hose bib is closed. Continue to fill to the water level line.

**NOTE:** If your water is extremely hard, it is preferable to fill the spa halfway with hard water and the rest with softened water.

#### NEVER FILL THE SPA ENTIRELY WITH SOFTENED WATER.

#### ADD START UP CHEMICALS

Carefully follow the directions and add the start-up chemicals recommended to you by your dealer. Contact your dealer to clarify any questions you may have.

## **CONTROLS & OPERATING INSTRUCTIONS**

Note: For best results, read each step carefully and entirely before proceeding to the next.

#### **TESTING THE GFCI**

The GFCI shuts off the electricity in a fraction of a second if there is ashort anywhere in the system. It is recommended that the GFCI be tested prior to each use. Test as follows:

- 1. Push the TEST button on the GFCI. The RESET button with trip out, the topside digital control LED display with go out. If this does not happen, DO NOT USE SPA. Check all wire connection to assure that all are tight and not exposed to moisture.
- 2. If the GFCI test properly, firmly push the REST button back into place. The topside digital control LED will come back on.
- 3. If the GFCI trips by itself at anytime, firmly press the reset button back into place and perform the above test. If this happens more than once, DO NOT USE THE SPA. Check for loose wires or moisture.

The initial factory settings can be changed by following the instructions shown below.

#### A. Displaying Time or Water Temperature

Pressing the "PROG" button will allow switching the display between time and water temperature. The displayed temperature is the last reading taken when the pump was operational. To verify water temperature when the pump is shut off, press the jet button and allow the pump to run for two minutes. The water temperature sensor will analyze the water temperature during this time period and then display the current water temperature.

#### **B. Setting Temperature**

1. Press the "PROG" button to display water temperature

- 2. Press the "UP" or "DOWN" arrow to select the desired temperature.
- 3. Press the "PROG" button to exit the programming mode.

#### **C. Setting Time and Filtration Hours**

- 1. Press and hold the "PROG" button for 5 seconds until the displayed hour starts to flash.
- 2. Press the "UP" or "DOWN" arrow to select the current hour.
- 3. Press the "PROG" button one or more item to display minutes.
- 4. Press the "UP" or "DOWN" arrow to select the current minutes
- 5. Press the "PROG" button one more item to display the filtration hours F=4H (default) will be flashing. Refer to "Filtration Cycles" section to determine the length of cycles (F=4H or F=8H) you prefer.
- 6. Press the "UP" or "DOWN" arrow to select the filtration cycle desired.
- 7. Press the "PROG" button to exit the programming mode.

#### **D. Auto Heat Operation**

This equipment has includes a 2-speed pump for the primary pump. The low speed operates during filtration and heating cycles. Your selected water temperature will be maintained automatically 24 hours a day. The electronic thermostat will monitor your water temperature at the top of each hour by cycling the low speed pump for 2 minutes. If the water temperature reaches the set temperature, at which point both low speed pump and heater will turn off. If the water temperature is at the set temperature, the low pump will turn off at the end of the 2-minute cycle. The spa water will heat about 1 to 3 degrees F per hour for 110v systems and 3 to 5 degrees F for 220v systems. The maximum temperature is set for 104F.

The pump hi-speed therapy mode can be activated during those cycles. The heater will stay on if needed to bring up the water temperature. Note that for 110v spas, the heater will turn off when you turn the HI-speed therapy pump mode.

#### **E. Jet Button**

#### Single Pump System:

- 1) Press "JET" to activate the low speed pump.
- 2) Press "JET" a second time to activate the high speed pump.
- 3) Press "JET" button a third time to turn the pump off. Note that the low speed pump will remain of if the water temperature is below the set temperature or if it is during the filtration hours.

Note that for safety, the pump will automatically turn off after 30 minute. Reactivate as needed.

Note that the low speed pump will remain on if the water temperature is below the set temperature or if it is during the filtration hours. For safety purposes, the pump will turn off after 30 minutes. Reactivate as needed.

#### F. Light Button

The light button turns the light ON and OFF. If left ON, the light will automatically go off after 9 hours.

#### I. Memory

The temperature setting that is entered in your digital control is permanently retained in the solid state memory. In the event of power failure, the temperature and time setting will be captured and held until power is resorted. The temperature setting at the time of the power loss will be restored when power returns. The time will need to be adjusted to current time.

#### J. Resetting Your Spa

Just like your computer at home, you spa electronics could get corrupted by electrical surges or spikes, or by low voltage. This could result in improper operation. Anytime there is reason to believe that your system is not operating properly, please follow the following resetting procedure:

1. Turn the power to the off for 15 full minutes

2. Turn the power back on.

3. Press "PROG" to show time.

4. Press and hold the "UP" arrow for 5 seconds. The control display will show 12:00 p.m. as soon as you release the "UP" arrow indicating a successful reset.

The set temperature and filtration hours will be reset to their factory pre-programmed settings of 102 F.

# SPA MAINTENANCE

Your spa is manufactured with the highest quality and most durable materials available. A spa care and maintenance program is recommended to increase your comfort, maintain the spa's reliability and protect your investment.

#### 1) DRAINING YOUR SPA

Detergent residues from bathing suits as well as soap film from your body may gradually accumulate in the water. Foam inhibitors will suppress the foam but will not remove the soap from the water. Eventually, the soap build-up in the water will concentrate enough to leave an unclean feeling on the user's skin, cause sudsing, and make the water impossible to clarify. Depending on the amount of soap input, the spa water should last between two and three months.

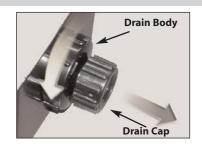
#### To Drain Your Spa:

A. Unplug Spa.

B. Remove cap. Attach a garden hose to the bib that is located directly behind the cap, once removed. Route the outlet of the hose to an appropriate draining area. Twist body then pull. The spa will empty by gravity. Siphon or scoop out the balance of the water.

**IMPORTANT:** Spa water with a **high sanitizer level** may harm plants and grasses. If you are draining your spa for the winter, be sure to fully drain water from the pipes by disconnecting the two unions at the gate valves. Drain the water pump by removing the pump plug. Then reinstall the valves and pump plug.

- C. Remove the filter and clean as required.
- D. Inspect the spa shell and clean as required.
- E. Refill the spa BEFORE restoring power to it.



#### 2) WINTERIZING YOUR SPA

Your spa has been designed and engineered for year-round use in any climate.

- A. If the spa will not be used, drain it completely following the instructions on "DRAINING THE SPA."
- B. If you intend to use the spa during the winter, keep the spa warm and set the thermostat to the temperature you wish to maintain. The spa will automatically come on and display **"ICE"** whenever the water temperature falls to 50° F and will continue to run until the water temperature comes up to 60° F. Note that accidental freezing could result due to prolonged power failures.

#### 3) FILTER MAINTENANCE

Maintenance is the most critical factor in keeping your spa water clean.

#### To clean the filter:

#### **NEVER RUN SPA WITHOUT FILTER**

- A. Remove the cartridge and spray it with a garden hose. It will be necessary to rotate the cartridge while spraying so as to thoroughly remove the debris lodged between the filter pleats.
- B. After allowing to dry, inspect the cartridge for calcium deposit (scaling) or an oil film. Rapid mineral build-up from hard water, or oil builds up from the use of oil-based water scent or body oils that may coat the filter.
- C. Use a rag to remove any debris at the bottom of the filter housing. Replace the cartridge.
- D. We recommend the use of a spare filter. This way one can be soaking and cleaning while you continue to enjoy the use of your spa.

#### 4) MARINE VINYL COVER

Your cover is manufactured from a durable marine grade, U.V. resistant material. Even so, monthly cleaning and periodic conditioning is recommended to maintain its beauty.

#### To clean and condition the vinyl cover:

- A. Lightly spray the cover with a garden hose to rinse it and remove the debris.
- B. Using a large sponge or soft cloth and a mild soap solution (1 teaspoon dish washing liquid with 2 gallons of water), scrub lightly in circular motion. Then rinse it thoroughly with plenty of water.
- C. Condition the vinyl after cleaning by applying a thin film of vinyl conditioner such as Armor-All. NOTE: To remove tree saps, use lighter fluid (not charcoal lighter, but the kind used in cigarette lighters). Use sparingly and rinse with mild soap solution afterwards. Wipe dry.

# WATER QUALITY AND MAINTENANCE

#### **GENERAL GUIDELINES FOR WATER QUALITY MAINTENANCE**

Maintaining water quality within specific limits will enhance your enjoyment and prolong the life of the spa. Safe, comfortable and clean spa water is a fairly simple task to achieve, but it does require regular attention because of the numerous factors that can alter it. There is no one formula to be followed because of the variables, i.e. quality of the water used to fill the spa, water temperature user load, etc.

Developing a disregard for water maintenance will result in poor soaking conditions, damage your spa investment and possibly void your warranty.

#### Spa water maintenance consists of three separate easily developed programs :

- 1. Sanitizing and maintaining a safe level of sanitizer in the spa water.
- 2. Balancing the pH and maintaining the recommended mineral content level.
- 3. Achieving and maintaining water clarity.

#### SANITIZING

To destroy bacteria and organic compounds in the spa water, a sanitizer must be used regularly. The use of a bromine floater is recommended. By regulating the amount of tablets, the amount of time the floater is open, and the length of the filtration cycles, you can control the amount of bromine in your spa. A bromine residual of 2 to 3 PPM is generally considered desirable. A two-part bromine system or a granular chlorine (dichlor) system is also acceptable Sanitizers.

#### **pH CONTROL**

pH is a measure of acidity and alkalinity of the spa water. The recommended pH for spa water is 7.4 to 7.6 ppm. Below 7.0 (considered neutral), the spa water is acidic and can cause damage to the heating system. Above 7.8 the water is too alkaline and can result in cloudy water and scale formation on the spa shell, heater, and cover.

# IMPORTANT: NEVER USE CHLORINE TABLETS OR LIQUID POOL CHLORINE (TRICHLOR) IN YOUR SPA.

This chemical can have an extremely corrosive effect on certain materials in the spa. Also, the use of liquids, chlorine or acid, are not recommended. Damage caused by use of these chemicals, or improper use of any chemical, is not covered under the spa warranty.

#### **OPTIONAL LIGHTNING SERIES WATER PURIFICATION SYSTEM**

If you have elected to equip your spa with the ozone water purification system, you will find that your water stays fresh and clean with significantly less usage of chemical sanitizer and you will also be able to go longer between spa draining.

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## **DIAGNOSTIC & TROUBLESHOOTING**

#### **Resetting Your Spa**

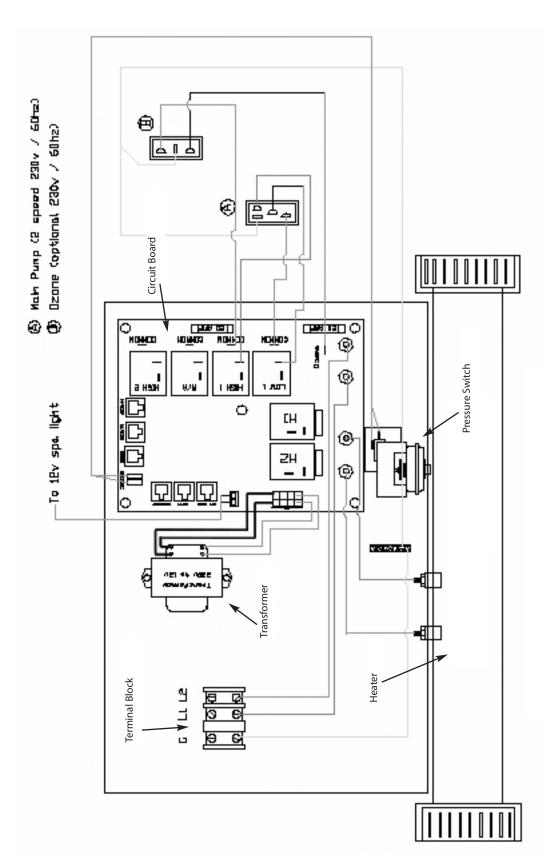
Just like your computer at home, you spa electronics could get corrupted by electrical surges and operate improperly. If your spa system is not operating properly or shows any of the following messages, please reset it to see if the malfunction clears itself.

Turn power off for 15 full minutes – then – turn power back on – then- press "PROG" to show time\_then\_Hold "UP" for 5 seconds. Display will show 12:00p.m., indicating a successful reset (reboot).

<b>SYMPTOM</b> Spa Inoperative	<b>MEANING</b> Power failure outside of spa.	ACTION Check power source breaker / GFCI. Call electrician if it will not start.
<b>MESSAGE</b> FLO	Lack of water flow through heater.	Remove filter and check for debris in the filter and filter adapter. If "FLO" remains check for closed gate valve or see priming the pumps.
HILI	Message appears if the heater sensor detects 118F at heater.	Remove spa cover and let the spa water temperature cool. Reset spa.
ICE	Water in plumbing below 50F	No action required. Pump will come on to circulate water and then the heater. Heater will stay on until the water temp reaches 60F or set temp.
LS=O or LS=S	Water temperature sensor	Reset spa, lf message returns, replace sensor
SS=O or LS=O	High Limit Sensor	Reset spa, If message returns, replace sensor.
Pb	Break in communication	Reset spa, If message returns,power down spa and check control connection to circuit board.

# Maintenance Record

Keep track of your water maintenance



## Schematic U130

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# LIMITED WARRANTY FOR ECO SPAS

DM Industries, Ltd., extends this limited warranty solely to the original Purchaser of any Eco Spa purchased within the United States or Canada.

#### **5 YEAR STRUCTURAL**

SPA SHELL: DM Industries, Ltd., warrants its shells against loss of water due to defects in materials and workmanship for five (5) years from the original date of purchase.

#### 2 YEARS SURFACE

The surface is warranted against blistering, cracking and chipping resulting from a defect in the surface material for a period of two (2) years from the original date of purchase.

#### COMPONENT WARRANTY

DM Industries, Ltd., warrants all factory installed electrical components– pumps, blowers, and control system – and plumbing components – jets, controllers, and air injectors,– to be free from defects in materials and workmanship for a period of one (1) year from the original date of purchase. The plumbing infrastructure, such as glued joints, pipes and hoses are also warranted to be free from defects in material and workmanship for a period of one (1) year.

Wearable components such as filter cartridges, light bulbs and fuses, are not covered under this warranty but are warranted to be free from defects in material and workmanship at the time of the original delivery.

Covers, as supplied by DM Industries, Ltd., are warranted to be free from manufacturing defects for a period of one (1) year.

Dealer added options are excluded from this warranty and are covered under separate warranties from their respective manufacturers.

#### WARRANTY PERFORMANCE

In the event of a defect covered by this warranty, notify your DM Industries, Ltd., dealer within 10 days of the time the defect is discovered. Proof of purchase is required. There is no infield service warranty. Components such as equipment pump or control center should be taken or delivered to closest service center. There will be no charge for service to repair or replacement components within the first 90 days of purchase. After 90 days, you will be accessed a minimum service charge of \$65.00. Plumbing repairs (leaks) may be done in-field (at the option of servicing dealer/center). DM Industries, Ltd., at its sole option, may elect to substitute a spa or component of equal value, either new or reconditioned, to correct a defect. Such replacement shall assume, as its warranty, the remaining portion of the warranty on the original product. If the entire spa needs to be substituted because the repair is not feasible or the repair can not be performed in the field, reasonable costs to pick up the defective spa and return it or delivering and installing the replacement spa will be the responsibility of the spa owner.

#### **EXCLUSIONS**

This warranty is void if DM Industries, Ltd., or its representative determines that the spa has been subjected to any alterations or repairs by anyone other than an authorized representative of DM Industries, Ltd. Eco Spas are NOT APPROVED for commercial applications. DM Industries, Ltd., will not be responsible for the cost of replacement parts or labor cost of any spa found to be used in a commercial application. This warranty shall also be voided if there is evidence that the spa has been subjected to misuses, abuses, negligence, improper installation or operations other than in accordance with the instructions in the owner's manual, including but not limited to damage to components caused by improper pH balance or other improper water chemistry maintenance, (use of chlorine based products other than dichlorine voids all warranties,) or by failure to maintain and clean the filtration system; damage to components or spa surface caused by operating the spa at water temperatures outside the range of 32 degrees F (freezing) and 120 degrees F (excessive heat); damage to the surface caused by leaving the spa uncovered while empty of water and in direct exposure to sunlight; damage caused by improper or incorrect electrical hook-up, modifications to internal electrical assembly boxes and grounding system, by electrical installations done by anyone other than licensed professionals in non-conformity with state and local codes or by power surges or spikes; or damage caused by Acts of God or conditions beyond the control of DM Industries, Ltd.

#### DISCLAIMER

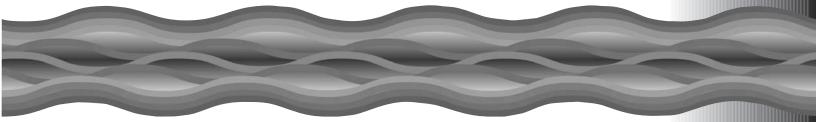
Except as expressly provided, there shall be no other warranty or obligation, expressed or implied, oral or statutory. No dealer or other person has the authority to make any warranties or representations covering DM Industries, Ltd., or its products. DM Industries, Ltd., and its representatives shall not be liable for any injury, loss, cost or other damage, including but not limited to, loss of use, inconvenience, costs of removal of a permanent deck, custom fixture, or any other incidental or consequential costs, expenses or damages. Under no circumstances shall DM Industries, Ltd., or any of its representatives be held liable for injury to any person or damage to any property, however arising. Some states do not allow the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights. You may also have other rights, which vary, from state to state.

#### CUSTOMER SERVICE

Contact your dealer or local authorized repair center for service. If you do not know who your local dealer is, contact DM Industries, Ltd.'s Technical Service Division at the address listed below, or call (305) 685-2063.

This warranty is effective for spas manufactured after January 1, 2005.

## DM Industries, Ltd. 2320 NW 147th Street, Miami, Florida 33054



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