Installation Manual for the

Electronic Control ADL Spa
Introduction

About the ADL Spa Etherm System

The ADL Spa Etherm System allows the bather to control all tub functions at the push of a button. The temperature is regulated by a high flow thermostatic valve that efficiently controls water temperature and prevents scalding.

Water Temperature Display
Degrees C/F

Water Fill On/Off
Temperature Increase
Temperature Decrease
Select Celsius/Fahrenheit
Air/Water Jet Timer

Air Blower On/Off - 3 speed control
Water Pump On/Off
Hand Shower On/Off

Control Panel (IDU-215)
Supplied with Chrome or Brushed Nickel Trim Ring
# Table of Contents

Responsibility of the Installer......................................................................................................... 4
Important Safety Instructions......................................................................................................... 5

Parts List
- Cabinet Base Hardware...................................................................................................... 7
- Cabinet Base....................................................................................................................... 8
- Drain Parts.......................................................................................................................... 9
- Bathtub & Fixtures........................................................................................................... 10
- Control Panel and Plumbing............................................................................................. 11
- Specifications................................................................................................................... 12

Sizes and Clearances
- Bathtub and Base Dimensions.......................................................................................... 13
- Overall Dimensions.......................................................................................................... 14

Installation
- Preparing Installation Area............................................................................................... 15
- Hot/Cold Water Supply Preparation................................................................................. 15
- Power Supply: Electrical Outlet Location........................................................................ 15
- Cabinet Base: Frame......................................................................................................... 17
- Overflow and Main Drain Setup....................................................................................... 23
- Metal Trim Strip................................................................................................................ 23
- Grab Bar Installation......................................................................................................... 23
- Tile Trim (optional)........................................................................................................... 23
- Heated Air Massage System............................................................................................... 24
- Heated Water Massage System......................................................................................... 25
- Powering Up the System....................................................................................................... 26
- Troubleshooting and Error Messages..................................................................................... 26
- Cabinet Doors and Door Trim............................................................................................... 28
- Operating Instructions................................................................................................................ 31
- Pump and Fixture Access ........................................................................................................ 32
- Maintenance and Cleaning........................................................................................................ 33
- Warranty............................................................................................................................... 33
- Warranty Limitations............................................................................................................. 33
- Complete Bathtub Diagram................................................................................................... 34
- Installation Photos............................................................................................................... 35
RESPONSIBILITY OF THE INSTALLER

The installer must inspect and water test the product prior to installation to ensure the unit is free of defect or damage. In the event of a problem, this unit must not be installed. If the crate or product has been damaged, please call immediately. 1-866-433-6650.

This product complies with many nationally recognized standards. You are responsible for any local codes that may apply.

**This product is designed to be installed by a licensed tradesperson. Licensed plumbers and electricians should be used to ensure proper installation. Installers assume all liability for the correct installation procedures. Licensed tradespersons may call 1-866-433-6650 for installation questions.**

**USE ONLY MANUFACTURER AUTHORIZED ACCESSORIES WITH THIS PRODUCT.**

**DO NOT LIFT THE BATHTUB BY THE PLUMBING FIXTURES OR BY THE DOOR OR TOP FRONT EDGE ABOVE THE DOOR.** Doing so can result in personal injury or damage and leaks for which the installer is responsible.

Remove all packing material before installing. Take care not to scratch or damage the tub surface when handling.

**TEST YOUR ADL SPA BATHTUB BEFORE INSTALLATION.**

All ADL Spa bathtubs are 100% water tested at the factory. However, transportation and poor handling may cause leaks. It is necessary to test the bathtub for leaks before installing to prevent water damage.

To test for water leaks, place the unit outside on a flat surface where it may be drained after testing and fill with a garden hose. Seal the drain (tape can be used for the test). Fill the bathtub above the jets or at least 14”. Let the water stand in the tub for 10 minutes and then inspect all plumbing and seals for leaks.

Using an extension cord, operate each pump (air and hydro system, if applicable) for 10 minutes and inspect for leaks. Inspect the unions around the pump; if leaks persist from the unions after tightening, loosen the unions and ensure that the O-ring is seated properly. Ensure all jets are open and working.

If there are leaks, call 1-866-433-6650 for further instructions. Often leaks can be fixed with Teflon Tape and pipe thread sealant.

If the pumps do not operate; check the breaker to make sure the power is on and that the cable connecting the controls to the pump is attached. Also make sure that there is sufficient water in the pump—the water pump will not operate without sufficient water. Damage to the pumps due to dry running is not covered under warranty.

**FAILURE TO PERFORM THESE TESTS BEFORE INSTALLATION WILL MAKE THE INSTALLER LIABLE FOR FUTURE REPAIR COSTS.**
Important Safety Instructions - READ, FOLLOW AND SAVE THESE INSTRUCTIONS
Read the entire manual and safety instructions before operating your ADL Spa Bathtub.

1. DANGER: RISK of FIRE, ELECTRIC SHOCK OR INJURY TO PERSONS. When using this product basic precautions should always be followed. Use this unit for its intended purposes or as described in this manual.

2. DANGER: RISK of ACCIDENTAL DROWNING: Exercise extreme caution when children or people in poor health are using the spa. To avoid accidents or risk of drowning, ensure children or frail adults do not use this bathtub without direct and close supervision at all times by an adult.

3. DANGER: RISK of INJURY: to avoid injury, exercise care when entering or exiting the ADL Spa bathtub.

4. DANGER: RISK of ELECTRIC SHOCK: If a jetted option is purchased, this unit must be connected to a ground fault circuit interrupter (GFCI). All pumps and heaters must be connected to GFCI protected outlets. Such a circuit is provided by your installer and should be tested on a routine basis. To test the GFCI, push the test button; the GFCI should interrupt power. To restore power, push the reset button. If the GFCI fails to operate in this manner, there is a ground current flowing, indicating the possibility of electric shock. **Do not use the bathtub.** Disconnect the bathtub and have the problem corrected by a qualified electrician before using.

5. DANGER: RISK of INJURY: the suction fittings included in this bathtub are designed to match the water flow of the pump. To ensure safety and compatible flow rates, install the same model suction fitting for pump, in the event a replacement is required. Do not remove the suction grate. (jetted systems only)

6. DANGER: RISK of INJURY: Never operate the bathtub if the suction fittings are broken or missing. (jetted systems only)

7. DANGER: RISK of ELECTRIC SHOCK: Never operate any electrical appliances from inside the bathtub or if you are wet. Do not permit any electrical appliance, such as hair dryer, light, radio, telephone or television within 5 ft (1.5m) of the bathtub.

8. WARNING: RISK of INJURY: Water temperatures between 100 degrees F (38 degrees C) and 104 degrees F (40 degrees C) are considered safe for a healthy adult. Your bathtub is equipped with a thermostatic valve to easily regulate the water temperature.

   a. Lower water temperatures are recommended for young children, those with poor circulation and heart conditions and when the spa use exceeds 10 minutes. Never allow the water temperatures to exceed 104 degrees F (40 degrees C).

   b. Pregnant women should not set the water temperature above 100 degrees F (38 degrees C). High temperatures above 100 degrees F (38 degrees C) have the potential to cause fetal damage in the early stages of pregnancy.

   c. Individual tolerance of water temperature can vary and regulating devices may not reflect the proper temperature. Adjust the water temperature accordingly when filling the bathtub.
d. The use of alcohol, drugs, or medication before or during bathtub use may lead to unconsciousness with the possibility of drowning and is strictly prohibited.

e. Those people with a history of heart disease, low or high blood pressure, circulatory system problems, diabetes, or obesity should consult a physician about the maximum water temperature and length of time soaking in bathtub that they should use.

f. Do not use the bathtub immediately after any strenuous exercise.

g. WARNING: RISK of INJURY: Hyperthermia: Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6 degrees F or 37 degrees C. Symptoms include dizziness, fainting, drowsiness, lethargy, increase in internal body temperature. If you experience any of these symptoms while using the bathtub, consult a physician immediately. This is most often the result of staying in the bathtub longer than the recommended time and at a higher temperature than recommended.

h. WARNING: RISK of ELECTRIC SHOCK: Only service the bathtub jet system if the circuit breaker and/or power to the bathtub are off.

WARNING: RISK of INJURY: Frail elderly persons, and those with poor health or a history of stroke, heart conditions, weakness, fainting, high or low blood pressure or circulatory problems should not use the bathtub alone. They should be accompanied by a healthy adult who can assist if there is a medical need.
Parts List: Cabinet Base Hardware

- Angle Bracket Screws X 24
- Euro Screws X 28
- Magnetic Catches X 6
- Angle Brackets X 12
- Euro Hinge Base x 4
- Euro Hinge X 4
- Right X 2
- Left X 2
- Drawer Sliders X 4
- Plastic U-Channel X 4
- Cabinet Handles (optional) X 4
- Drawer Front Brackets X 4 (2 Right, 2 Left)
Parts List: Cabinet Base

Spacer Cabinet Doors Left & Right Spacer

Cabinet Base Front Pieces

Drawer X 2

Vertical Gable X 4

Horizontal Stringers X 3

5 ft trim strip

Left Door Tub & Cabinet

Right Door Cabinet

General overview of how cabinet parts fit together.
Parts List: Drain Parts

A. Drain Lever Handle
B. Waste overflow drain
C. ABS Long Pipe Section (X2)
D. Primary Tub Drain and Lever Control Base with Cable
E. Sanitary Tees (X2)
F. Medium ABS Pipe Section
G. Short ABS Pipe Section (X2)
H. Back flow Check Valve
I. ABS Adapter
J. Door track Overflow Drain
K. Chrome 90 degree Elbow 1 1/4"

Picture of assembled drain system for reference.
Parts List: Bathtub and Fixtures

Electronic Control Panel  (above)

Top view of Control Panel and Fixtures

<table>
<thead>
<tr>
<th>TEMPERATURE INDICATOR</th>
<th>FILLER ON/OFF</th>
<th>TEMPERATURE UP</th>
<th>TEMPERATURE DOWN</th>
<th>UNIT DISPLAY</th>
</tr>
</thead>
<tbody>
<tr>
<td>HANDSHOWER ON/OFF</td>
<td>WATER JETS ON/OFF</td>
<td>AIR JETS ON/OFF</td>
<td>TIMER</td>
<td></td>
</tr>
</tbody>
</table>
Electronic Control Panel and Plumbing

- Control Panel (IDU-215)
- Connective Water Sensors
- Automatic Tub Fill and Stop
- Cables Connect to IMC-213
- Tub Temperature Sensor & Capacitive Water Sensor ITW-209
- Etherm Valve with Temperature Probe and Gearbox
- 120V AC 60Hz SJT Power Cable IMC-213
- Gearbox Tub Temperature/Water Sensor ITW-209 Control Panel
- Control Modules ISD-237 and IMC-213
- ISD-237

Cable 239 x 2
ISD to On/Off Solenoids

Cable 176
IMC to Temperature Gearbox

Cable 177
IMC to Control Panel

- 6 foot hot & cold supply lines
- 90° brass elbow
- fill spout connected to 3/4 inch solenoid outlet
- handshower hose connected to half-inch solenoid outlet
- on/off solenoids
- mounting brackets for valve and solenoid assembly
Tempress Valve
- Concealed thermostat mixing valve
- Integral service stops and check valves
- Thermostatic cartridge automatically compensates for fluctuations in inlet pressure and temperature
- Hot water is restricted to prevent scalding if the cold water supply pressure falls
- Operating Pressure: minimum 20 psi (140 kPa), maximum 125 psi (860 kPa), recommended 20-72.5 psi (138-500 kPa); Maximum test pressure 500 psi (3450 kPa)
- Max hot water temperature 180°F / 80°C
- Connections: hot and cold water inlets ¾” female NPT (factory installed), outlets ¾” female NPT (factory installed)
- Factory set with 45 psi (310 kPa) inlet pressure and using 60°F (16°C) cold water and 140°F (60°C) hot water. This setting limits the outlet water temperature to 120°F (49°C) and limits rotation of the cartridge stem, which could damage the cartridge. In this position the safety button will stop when the valve is adjusted to 100°F (38°C).

Heated Air Massage System—Max Air Pump
- 1 Horsepower
- 110 volts
- 500 Watt motor
- 105 CFM (Air Flow)
- 95" Sealed pressure (inches of water)
- Field Pressure: 95" of Water
- Heater 250 Watts
- 7 Amp System
- 20 Pin Valve Air Jets—no retained water

Whirlpool Water Jet System—Syllent Pump:
- 3/4 Horsepower
- 115 volts
- 60 Hz
- Current 8.2A
- Pressure (ft) 48.8' Max
- Flow (at 15 ft) 77 gpm
- 7 Water Jets: 2 rotating massage jets on back, 2 rotating massage jets at feet, 3 directional jets on tub sides
- Dry jet system drains all but 0.2 oz of water per jet

Parts List: Specifications
Sizes and Clearances: Bathtub Dimensions

Water Pump (Optional)

Air Blower (Optional)

6.50

35.25

38.00

24"

29.75"
Sizes and Clearances: Overall Dimensions
Preparing Installation Area

Before installing the cabinet and tub assembly:

Remove the existing tub. Make sure the opening for the new tub is 60" long by 40.25" high. You will need clearance for the tub, plus a bit of extra height so that you have room to maneuver the tub into the enclosure.

If your space is too narrow (i.e. under 60"), you may need to remove the drywall in the enclosure up to the 40.25" height. If required, the wall studs at one or both ends of the tub can often be cut and turned 90 degrees to increase the available length to accommodate a 60" bathtub. Please ensure that you do not cut the studs to a load-bearing wall.

Hot and cold water supply

The hot and cold supply lines will need male 3/4" pipe thread ends (MIP). It is recommended that on/off valves be installed before the 3/4" MIP ends so that the water supply can be easily shut off for maintenance and installation purposes. The cabinet base has clearance of 15" from the floor on all sides beneath the tub. It is recommended that the hot and cold supply lines terminate at 12" above the floor level or lower. The tub will connect to the hot and cold supply lines with a pair of 3/4" flexible hoses with 3/4" female hex ends. These flexible supply hoses are included with the ADL Spa bathtub. They attach to the thermostatic valve. (The 3/4" valves and plumbing allow for up to 2 1/4 times the water flow of standard fixtures. Standard 1/2" supply lines to the tub are not restricted by back pressure and can also deliver improved flow.)

Make sure the floor of the installation area is clean and level with the surrounding floor area. The cabinet base is open to the floor underneath, so a finished floor is preferred. Use a 5 foot level and determine if the floor is level. If the floor is not level, shims within the U-channels can be used. Note: it is important that all 4 gables must be firmly seated in the U-channels and be level for the door system and cabinet doors and drawers to look and work properly. Shims can also be used between the tub and cabinet base if needed.

The cabinet base includes cutouts and clearances for easy retrofits. If the original tub has a drain on one end, the drain lines from the ADL Spa tub can pass through the clearances and cutouts to connect with the original drain and ‘P’ trap in the floor. For a new installation, the floor drain connections can be directly beneath the ADL Spa tub drain. All plumbing should fit within the tub shell and cabinet eliminating the need to cut access clearance in the floor or walls.

Power Supply: Electrical Outlet Location

The electronic control system requires a power supply, which should be installed by a certified electrician. Depending on the code in your area, the control modules (ISD-237 and IMC-213) may be hard wired or a standard 120 volt GFI outlet (built in circuit breaker) may be used. The control modules may require separate circuits. The ideal location of the electrical outlet would be at the end wall at the head end of the tub or back wall in the cabinet area beneath the tub. The power supply will then be accessible after final installation by either removing the spacer panel or the drawers at the head end of the cabinet. The height of the GFI outlet should be 12" or lower to facilitate access to the cabinet base. Before installing the bathtub, be sure that hot/cold cutoffs and electrical connections are installed where they can be easily accessed underneath the tub (see diagrams page 25). If you are installing a heat lamp/fan, have the electrician run power to this at the same time.

Once the tub is in place, verify that the tub is completely level by checking the deck surface with a 5 foot level.
After Installation:

After plumbing and electrical connections have been made, the tub should be cleaned of dirt and debris. Pay special attention to cleaning the door track. Debris in the door track can cause the wheels to squeak or stick. Debris near the air pump intake may cause injury to the bather or damage the air pump system.

Installation is not complete until the bath has been water tested in place.
**Installation: Cabinet Base Frame**

**Step 1:** Attach hinge brackets and drawer sliders to the vertical gables. Refer to cabinet diagrams on the next page to determine which gables have the drawer sliders and hinge brackets attached.

![Diagram of cabinet base frame with labeled screw holes and hardware locations.]

**Step 2:** Slide U-channels onto bottom of vertical gables. Optionally, a bead of silicone sealant can be run inside the U-channels before attaching to the gables as an additional adhesive and moisture sealant.

*Note:* The U-channels may need to be shortened to accommodate the base stringer. Cut flush to the front of the stringer.

![Diagram showing the installation of U-channels and stringer.]

See page 19 for Hardware locations.
**Installation: Cabinet Base Frame**

**Step 3:** Place the first stringer down at the back of the installation area in the orientation shown. Slide the vertical gables with U-channels into the slots on the bottom stringer. The rear top stringer can be slid into the top slots of the vertical gables to stabilize the top of the cabinet frame.

---

**For Left Side Door on tub:**

Gable 1: attach hinge brackets to Right side

Gable 2: the gearbox and solenoid assembly can be attached to either side of the gable at this stage for easier clearance or after the final assembly of the base cabinet.

Gable 3: attach hinge bases to Left side, drawers slides to Right side

Gable 4: attach hinge bases to Left side

---

**For Right Side Door on tub:**

Gable 1: attach drawer slides to Right side

Gable 2: attach drawer slides to Left side, hinge bases to Right side

Gable 3: the gearbox and solenoid assembly can be attached to either side of the gable at this stage for easier clearance or after the final assembly of the base cabinet.

Gable 4: attach hinge bases to Left side
Installation : Cabinet Base Frame

Step 4: Before placing the top front stringer in its final location, place it on the floor in front of the vertical gables and slide it back so that the gables are held in the stringer slots. This spaces the vertical gables evenly so that the U-channels can be anchored to the floor using adhesives, screws or nails. The last stringer can then be slotted onto the top front of the cabinet base.

Step 5: Make sure the vertical gables are located properly and have all hardware attached for cabinet drawers and fronts. Angle brackets should be used to attach the bottom stringer and top rear stringer to the vertical gables. The top front stringer should not be attached to the vertical gables until the tub is in its final position.
Once the cabinet base frame is assembled, the plumbing and electronic system can be installed in the cabinet.

Use the three U-brackets to attach the valve and solenoids to the vertical support between the cupboard doors. This support is centred under the bathtub door after installation. The hot and cold supply lines can be attached to the hot and cold valve inlets. The handshower and tub filler supply lines are normally attached after the tub is in place.

The 176-cable can be connected to the top of the gearbox and to the left blue control module socket. The 2 239-cables can be connected to the tub fill and handshower solenoid.

The control module boxes can be placed behind the drawer location. The solenoid control cables and gearbox cables are shown attached to the plumbing and control system.

Next, place tub on top of cabinet base and connect drains, water, and air/water pumps before powering up the electronic system.
Overflow and Main Drain Setup

The overflow drain system is installed on the bathtub in three stages (see page 9 for drain part list). The tub diagram on page 13 shows the drain system assembled on the tub.

Stage 1: The tub waste overflow (behind the fill spout) is connected to the main drain using the vertical drain assembly. The tub can now be placed on top of the cabinet base.

Stage 2: Place the tub on top of the cabinet base frame. The secondary door track overflow drain can now be connected to the chrome 90 degree elbow. Slide the tub forward on the cabinet base or lift the front edge from the bottom; DO NOT lift the front top edge of the tub. This may result in damage to the top front track covers. The chrome elbow pipe can be threaded onto the bottom of the door track overflow drain. Attach the chrome to ABS pipe adapter to the end of the chrome elbow.
Stage 3: Move the tub back onto the cabinet base so that it is in its installation position. The drain adapter, check valve and ABS pipe can be connected to the TEE and main drain system.

Stage 4: The bath drain system can now be connected to the home drain and ‘P’ trap. The cabinet base has cutouts to allow the drain to connect to pre-existing drain lines beneath the tub at either end. We suggest that you include a cleanout in the drain line for future maintenance.

Stage 5: The hot and cold water supply lines can now be connected to the home water supply. The home water supply lines should be fitted with 3" male (MIP) ends. The flexible supply lines factory assembled on the thermostatic valve can be threaded onto these ends. Please ensure that the drain system is fully connected before the water is turned on. Once the drain system is finished, the plumbing can be connected to the supply lines.
**Metal Trim Strip**

After the cabinet doors are on, the final step is to use a thin strip of silicone glue to attach the metal trim strip to the bottom edge of the bathtub. Secure with masking tape until the glue dries.

**Grab Bar Installations**

If this bathtub is being installed in a private residence or will be installed in a bathing facility for a single occupant accessed only through a private office and not for common use or public use, then grab bars are not required to be installed. However, reinforcement will need to be installed in walls and located so as to permit the installation of grab bars complying with Section 607.4 of the ANSI A114-2003 Standard. The reinforcement should comply with Section 1003.11.9 of ANSI A114-2003 Standard.

Reinforcement should be added to the entire wall enclosure area 9 inches (230 mm) above the rim of the bathtub horizontally to permit future installation of grab bars, if needed.

Reinforcement should also be added to the wall by the door to allow installation of a vertical grab bar. This reinforcement should be 18" (455 mm) minimum in length and be positioned 12" to 15" above the rim of the bathtub, and no more than 4" from the front of the bathtub.

Reinforcement should withstand stress of up to 250 pounds.

If this bathtub is to installed in a facility for public or common use, grab bars will need to be installed as per ICC/ANSI A117.1-2003 section607.4.2 Bathtubs without Permanent Seats.

**Tile Trim (optional)**

If the tub is installed against a wall or in an alcove, tile flange can be attached to the tub using silicone caulking adhesive. Tile flange is available at most hardware stores.

If the tub is installed in a ‘drop-in’ style (has a shelf around the back and sides of the tub), then we suggest that the shelf extends at least 1/2" underneath the tub rim. This edge can now be siliconed or tiled and grouted.
Heated Air Massage System

For tubs installed with the 20 jet heated air massage system:

The one way air inlet valve is located at the rear wall side of the tub, below the level of the tub floor. The inlet valve and hose hang vertically, with the clear valve at the bottom.

Connect the 14" section of white pvc air pipe to the bottom of the inlet valve.

Attach the 90 degree elbow to the bottom end of the air pipe.

The air blower can be placed or bolted (recommended) on the floor at the back of the tub cabinet. The space behind the drawer location works well for this.

The air blower outlet can then be connected to the 90 degree elbow using the remaining section of air pipe. This section can either be glued to the elbow or preferably attached with screws to allow future maintenance access.

The blower motor can then be connected to the female outlet cord attached to the IMC control box. The IMC control box has a male end electrical cord that can be plugged directly into a GFI wall outlet or hard-wired depending on local building codes.

**Make sure that the immediate area surrounding the air blower is free of insulation, dust, and debris.** Material can be sucked into the blower, causing potential bather injury and damage to the blower and air jets.

The blower will automatically purge the water from the lines approximately 20 minutes after the unit is turned off. This is an automatic function and should not be a cause for concern.
Syllent Water Jet Hydrotherapy System

Hydrotherapy water jet pressure is controlled by an air inlet valve on the deck of the tub on the back wall side.

The water pump is equipped with a water lever sensor and should not be attempted to be operated dry. The water pump should not be plugged directly into the building’s electricity supply. Plug the water pump cord into the female cord attached to the ISD control box. The ISD and IMC control boxes will be plugged into a GFI outlet when the system is powered up.
Powering Up the System

Step 1: Make sure all electronic cables are attached, except for control panel cable. The control panel cable can be passed through the control panel slot in the deck-plate on top of the tub, but do not attach the cable to the back of the control panel at this stage.

Step 2: Plug IMC and ISD power cords into the GFI wall outlet.

Step 3: Plug in the control panel. The control panel will light up and go through a self-test. The gearbox on the temperature valve will start moving to find its home position.

Step 4: The tub will go into standby mode. The tub fill and handshower buttons will light up.

Troubleshooting and Error Messages

The errors will occur when the corresponding device is unplugged when the system has been running. If all devices are plugged in on powerup and errors come up then the corresponding device should be changed.

List of errors:

**E02 - ISD-237 error** (ISD is not installed or IR is not being read. Make sure red IR caps are installed and not blue ones.)

**E06 - ITW-209 error** (ITW has been unplugged when system is powered up)

**E09 - thermistor error** (thermistor has been unplugged when system is powered up)

**E12 - gearbox error** (gearbox has been unplugged when system is powered up)

Errors will continue to flash on display unless complete system is powered down then powered up again. If errors still occur then replace the corresponding device.

When installing the components the last thing to be connected is the display.

**There is no functional response from the system:**

1. Check if the green power LED on the front panel of the IMC is ON or OFF. Go to step 7 if the green LED is off.
2. If the LED is ON, verify that the cable connection between the IDU head and the IMC is solid.
3. If the connection is good then unplug and re-plug the head into its 8-position cable and view the digital readout for ‘---’ to be displayed.
4. If the display still does not respond, disconnect all cables from the front IMC panel except the display cable. Try a second reset of the display.
5. Replace the 8-position mini din display cable and conduct a third reset of the display.
6. No sign of display working and the IMC appears to have power and the IDU cable connection is solid; replace the IDU head unit.
7. Disconnect the IMC power plug from the power outlet.
8. Disconnect all cables from the front panel of the IMC device.
9. Disconnect the Load device from the load line cable at the rear of the IMC.
10. Plug the IMC back into the power outlet. Observe the green power LED on the IMC front panel.
11. If the green LED remains OFF, replace the IMC-213 device.
12. If the green LED comes ON, unplug the IMC from the power outlet and re-connect the load device.
13. Re-apply power to the unit. If the LED does not come on, then there is a fault with the load device.
14. If the green LED comes on with the load connected, then the fault resides in one of the front panel connections.
The display shows ‘E06’ on system start-up:
The display does not show the temperature and the ITW power LED is ON:
1. Run the display calibration routine. Calibration routine instructions:
   a. Power down the system.
   b. Hold buttons 2 and 3 on the display and then power up the system.
   c. Wait 1 second and then let go of buttons 2 and 3.
   d. The display will show “CAL” and the calibration routine will initiate.
2. Check the cable connection between the IMC-213 and ITW-209 device.
3. Replace the ITW-209 device.

The display does not show the temperature and the ITW power LED is OFF:
1. Replace the ITW-209.

The display is blank and button presses have no affect:
1. Verify that the IMC-213 green LED is ON. If the LED is OFF, then treat as a system with no functional response.
2. If the green IMC power LED is ON, then verify the cable connection between the display and the IMC and reset the power to the display.
3. Display still does not respond, reset the power to the whole system.
4. Display still does not respond, replace the IDU-215-01-09-06 display head.

An ISD-237 is not responding to any display commands, and the display is correctly showing the temperature reading:
1. Verify the ISD-237 power LED is ON, check the power connections if the LED is OFF.
2. Remove the load device if connected, and ensure there are no devices connected to the front panel ports.
3. If the power LED still fails to come ON when connected to power, then replace the ISD device.
4. If the ISD power LED is ON, verify the ISD-237 is positioned to the left of the IMC-213 and that there are no front panel connections to the ISD device.
5. Verify there is no blockage of the Infrared signal between the IMC-213 and the ISD-237 devices.
6. Verify that the Dip Switches on the front panel of each IAU is correct.
   a. Closest ISD to the IMC: Both switches to the right.
   b. Farthest ISD from the IMC: Top switch to the left and bottom switch to the right.
2. Replace the ISD device if all above tests have been conducted.
Cabinet Doors and Door Trim

Step 1: The euro hinges should be attached to the cabinet doors. Slide the round base of the hinge into the round cutout on the door. Line up the holes in the door with the holes on the hinge base. Fold the cover plate down. This will lock the hinge base onto the cabinet door. The two smaller location holes do not require screws to attach the hinge.

Step 2: To attach the cabinet doors to the base frame: Slide the door end of the hinge over the hinge base on the cabinet so that it hooks on the front of the hinge base. The back end of the hinge should be pressed down until it clicks onto the back of the hinge base. To remove the cabinet doors, pull the hinge release catch on the back of the hinge body.
Cabinet Doors and Door Trim

**Step 3:** The drawer fronts are pre-drilled for the drawer brackets which are labeled ‘L’ and ‘R’ for the left and right side of the drawer. Attach the brackets using the euro screws. The drawer front can now be attached to the drawer body. Loosen the brackets by backing off the centre screw on the side. Adjust door front height with the lower adjusting screw before tightening the centre screw to lock the front onto the drawer.

**Step 4:** The left, right, and under drawer spacer panels can be attached with angle brackets (included) or magnetic clips for future access. Magnetic clips are recommended.
Once the tub base and doors have been assembled, the end spacers can be permanently attached using the angle brackets supplied or they can be attached using magnetic clips so they can be removed for future access. The cabinet doors should be temporarily removed at this stage so that the tub and drains can be installed on the cabinet. Pictured above is the cabinet assembled for a right hand door model. The drawers and cupboards would be reversed for a left hand door model.

**Pressure Testing the Plumbing**

Before the final positioning of the tub on the cabinet base, place the tub on top of the cabinet base so that there is access to the rear of the tub around the control panel. Connect the hand shower and hand shower hose to the hand shower solenoid on the solenoid and gearbox assembly. Connect the tub fill solenoid to the vacuum breaker inlet mounted on the tub deck using the shorter stainless steel braided flex hose provided. The two longer stainless steel braided flex hoses can be connected to the hot and cold inlets on the thermostatic valve/gearbox assembly and to the corresponding hot and cold supply lines.
Operating Instructions

Control Features:
• 1 Single speed pump with water sensor
• 1 Variable speed blower
• ON/OFF fill and hand shower solenoids
• 7-Segment digital water temperature display
• Programmable run-timer for pump and blower
• Temperature increase and decrease

The Programmable Run-Timer:
In order to adjust the timer, the pump or blower must first be running. If the timer button is pressed and held, the timer will scroll through the programmable run-times. Release the button on the desired amount of run-time. The maximum programmable time is 30 minutes.

Single Speed Pump Operation:
Press button 6 to turn the pump ON and press button 6 again to turn the pump OFF. Once the pump has been turned off, the timer countdown will discontinue (unless blower is ON) and the display will return to standby mode.

Variable Speed Blower Operation:
Variable speed blower control is worked into a one-button operation. Pressing and releasing the button will turn the blower speed full ON or full OFF depending on the current state of the blower. To vary the speed of the blower, pressing and holding the button will start the blower at high speed and after 3 seconds begin to decrease down to the lowest speed. The digits on the display will indicate the speed numbers down to the lowest speed setting. A release of the button on a particular setting will stop the pump’s speed adjustment and remain on the selected speed setting. If a variable speed blower is active, a press and hold of the blower button will always return the blower to full speed.

Digital Water Temperature Display:
Once the system detects the presence of water, the digital display will show the temperature of the water.

ON/OFF Fill and Hand Shower:
Press button 1 to turn the fill solenoid ON and press button 1 again to turn the fill solenoid OFF. The fill solenoid has a 45 second top up function if the system is detecting water to prevent overflow. Press button 5 to turn the hand shower solenoid ON and press button 5 again to turn the hand shower solenoid OFF.

Temperature Increase and Decrease:
In order to change the temperature, the fill or hand shower solenoids have to be active. Press and holding the increase temperature button will display the set point temperature and start increasing slowly and then faster. Press and holding the decrease temperature button will display the set-point temperature and start decreasing slowly and then faster. The maximum set point that the system will allow is 115 °F and the minimum is 65 °F.

Celsius and Fahrenheit Temperature Display:
Press button 4 to switch between Celsius or Fahrenheit.
Installation must provide access for servicing the air and/or water pump. All ADL Spa bathtubs come with an access panel for the air and water pump (see pictures above and removal instructions below). Note location of water pump behind the access panel, behind the back area of the bathtub.

To remove door to access pump system:
A slotted screwdriver is required for this.

The bottom of the sliding door has an “L” shaped track guide. This is located at the lower inside corner at the foot end of the door.

Line up the track guide with the slot cut into the inside edge of the bottom door track. The door should be nearly at its fully open position.

The top of the door has a spring-loaded guide roller that moves in the top door track. Use a flat screwdriver to press down on the metal roller support, at the same time, gently pull the top edge of the door outward from the top track. Take care not to damage the top track cover in the process. If additional downward clearance is needed for the top guide roller; try rotating the screwdriver rather than levering the guide downwards. Once the top of the door is pulled clear, it can be lifted off the bottom track.

The access panel behind the door can then be removed using the 2 top screws.

To replace the door: line up the bottom track guide with the bottom track slot. Place the bottom door guide rollers in the track grooves. Press down on the top guide roller support and press inwards until the top guide roller pops back into the top track groove. Slide the door open and closed to make sure the guide rollers are back in the proper track grooves.
REGULAR CLEANING

Because of the detrimental effects that mineral deposits, soap scum and bacteria have on finished surfaces, it is important to keep your bathtub and the fixtures clean on a regular basis. The best way to counteract the soiling and often time corrosive action of these residues is to prevent water from remaining on any finished surface.

For regular maintenance-type cleaning, proceed as follows once a week:
1. Check for stubborn spots. Oily or greasy spots can be lifted with denatured alcohol.
2. In order to keep the seal and the door jamb clean and free of dirt or debris of any kind, it is very important that the door jamb and the seal to be cleaned with a mild dishwashing detergent and warm water using a soft cloth.
3. Wash all exposed surfaces of the bathtub.
4. Rinse and wipe dry.

If your tub is equipped with the water jet system, then:
1. Once a month, clean the entire system using liquid automatic dishwashing detergent, which will remove body and bath oils, soap residue and other sources that can contribute to bacterial growth in the hydro massage system.
2. Fill the tub to one inch above the highest jet and add one spoonful of liquid automatic dishwashing detergent, turn on the water jet system for 15 minutes, and then drain the tub.
3. Now refill the tub with just fresh water and run the system for another 15 minutes to rinse out the system, again drain the tub and wipe dry.

USER MAINTENANCE INSTRUCTIONS

There are serviceable parts in this system. All service, repairs and electrical wiring must be performed by a qualified service technician in accordance with all applicable local and national codes.
Best Bath Systems, Inc. warrants to the original consumer that Best Bath’s Walk-In Bath Tub fiberglass reinforced products will be free from manufacturing defects for as long as the original consumer occupies the residence in which the bathing unit is installed.

If a manufacturing defect should become apparent, Best Bath Systems, Inc. following investigation and verification of claim, will either repair or replace the item at our discretion. The Best Bath warranty obligation in regard to equipment and accessories is limited to any warranty extended to Best Bath Systems, Inc. by the manufacturer of the equipment or accessories.

Limits to Coverage

- When products are shipped by common carrier, the responsibility for the unit’s safe delivery is assumed by the carrier. It is the responsibility of the consignee to inspect the container and report any damage to the freight company within their allotted time and to Best Bath Systems Customer Service within five (5) business days of delivery.

- Abusive treatment, misuse, normal wear and tear, accidents, fire, repairs or alterations not authorized in writing by Best Bath Systems, theft, lost materials, improper installation, damage to product due to shipping, storage or handling, reactions caused by accessories or cleaning materials, mis-drilled holes, negligence, construction damage, punctures from dropped items into the tub and other non-manufacturer issues are not covered by this warranty.

- The use of permanent non-slip type appliqués or rubber bath mats that are left in place after use for over 24 hours may result in blistering of the surface which is not covered under our warranty.

- Best Bath Systems will under no circumstances be liable for water damage to the house and furnishings in connection with any bathing unit. It is the responsibility of the purchaser/installer to inspect and test the unit upon receipt and installation.

- If a replacement of the warranted item is determined to be necessary, this warranty does not cover labor costs involved in demolition and removal of item or installation of the replacement.
**Filing a Claim**

To file a claim, contact Best Bath Systems Customer Service/Warranty Department by phone, email, or mail.

Please contact:

National Customer Service Supervisor  
Best Bath Systems, Inc.  
723 Garber St.  
Caldwell, ID 83605

Phone: (208) 433-6650 Toll free: (866) 433-6650  
Fax: (208) 333-8657 Toll free: (866) 333-8657

Email: warranty@best-bath.com    Web Site: www.best-bath.com

**The following information is necessary to process your claim:**

1. Name, address, email and phone number  
2. Sales Order number, Invoice number, Purchase Order from the original customer, or some documentation that reflects original date of purchase  
3. Description of damage and repair requested

**State laws relating to this warranty**

Some states laws prohibit limitations on warranties. In any case where a portion of this warranty is found to be not legal or conflicting with any state law, that portion of this warranty is voided but all other portions remain valid.

**Modifications to this Warranty**

This document supersedes all previous warranties written, verbal, or implied issued by Best Bath Systems, Inc., Best Bath Systems, Inc. reserves the right to modify or change this warranty in its entirety at any time without prior notification. Effective date of this warranty is 06/01/2009.
**ADL Spa Bathtub Installation Photos**

Original bathtub removed from alcove.

Tub and drain system on top of cabinet base and connected. Cabinet front panels being installed.

Frame for cabinet base being installed

Note: hot and cold water supply lines have 3/4 " male (MIP) ends (on/off shut-off valves can also be installed here)

Toilet replaced. Bathtub operational.
Installing aqua-board before final surround or tile.

Final testing of air and water jet systems before enclosing tub installation.

Installation complete with surround.

A finished installation with tile.