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# Pre-Purchase Decisions

## Before Delivery

Before attempting to install or use your hot tub, please read these instructions thoroughly and carefully review the owner's manual for your Dimension One Spa. Because your hot tub is completely self-contained, you can install it just about anywhere you wish. However, your spa must be placed above ground, in an area with good drainage and on a level surface that fully contacts the bottom of the hot tub.



## Typical Installation Site

Most spa owners place their spa on a concrete slab. You may also choose to install it on a wood deck or bricks. If you choose to install your hot tub on a raised deck or indoors, contact a structural engineer to confirm that the surface will hold a hot tub filled with water. Settlement of your deck or slab may result in damage to the hot tub, which is not covered by warranty. Wherever you plan to install your hot tub, be sure the surface is flat and solid. Locate your hot tub so that the equipment is above grade and not subject to flooding. Water should always drain away from the hot tub. If you are placing your hot tub next to an obstacle, such as a fence or wall, be sure that you place the hot tub with the upper control panel facing forward for easy equipment access.



### Note

To allow the spa to be repaired in the event of a problem, you must allow 36" clearance at the equipment compartment and 24" around the rest of the spa. Failure to provide the required space around the spa will void your warranty.

Locate the vents on the specifications for your Dimension One Spa. This is where cool air will enter and warm air will escape during hot tub operation. Please ensure that these areas are always free of obstructions. If you purchased any accessories for your spa, such as an E-Z Lifter or steps, you will need to allow additional space around the hot tub for these items. Check with your dealer to determine exact requirements.



### Note

In most cities and counties, permits are required for the installation of electrical circuits or the construction of exterior structures such as decks and gazebos. Some communities have also adopted residential barrier codes that may require fencing and/or self-closing gates on the property to prevent unsupervised access to a hot tub by young children.



### Note

If you install the spa indoors, the surrounding area should be waterproof or water resistant. Water may be splashed out during normal usage and when entering or exiting the spa. Dimension One Spas is not responsible for any water damage to any indoor location for any reason.

Dimension One Spas and @Home Hot Tubs are equipped with a locking cover that meets or exceeds the "Standard for Safety Covers," but is not an adequate safety measure to prevent unsupervised entry. Please check with your local Building Permit Office to learn about any special requirements for your installation. Your local dealer may also provide you with information on local building and electrical codes.

## Site Access



### Caution

Due to manufacturing tolerances, there could be some minor differences between the actual measurements of your spa and the engineering specifications referenced below. If site planning is critical to such tolerances, be sure to measure your actual spa.

Most spas are delivered on a dolly or cart. The additional distance from the ground to the dolly or cart must be included in your measurements for vertical clearance. You may need additional clearance or assistance if your hot tub must be transported uphill or taken upstairs. Be sure to remove obstacles such as gates, planters, or items attached to the house. The point of entry must be clear of air conditioning units, heating units, meters, electrical boxes or other obstructions. It is best that your dealer inspect the installation site to determine the best way to deliver your hot tub. In rare cases, a crane must be brought in to place the spa in its final location. Your Dimension One dealer will supervise this for you. Here are some of the most common installation hazards that must be considered when planning your route:

- Gates
- Fences
- Eaves
- Gutters
- Air Conditioners
- Heaters
- Hose Bibs
- Bushes
- Overhanging Branches
- Steps
- 90° Turns

## Cover

The cover supplied with your hot tub is equipped with quick-release keyed buckle locks that meet standards set by American Standards for Testing and Measurement (ASTM). When the hot tub is not in use, the cover locks should always be utilized to discourage unsupervised use and minimize heat loss. When installing the cover on your hot tub, be sure it is facing the correct direction. When standing in front of the topside primary control panel, the center seam or hinge should run horizontally. You should be able to lift the handle of the cover and see the hot tub control panel. If using an E-Z Lifter, allow 18 inches of extra space on the back side of the hot tub to give the E-Z Lifter room to open.



## Electrical Hook Up

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### Warning

Do not turn on electrical power to your hot tub until told to do so later in this manual.

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Have a licensed electrician run the required 120/240 volt power line to the hot tub installation site. The power inlet connection is located in the pedestal on the left side of the hot tub, approximately 25" from the front. This connection is designed to mate with a Carlon 1" conduit body Type LB, Access Fitting E986F or any 1" female PVC conduit fitting. The manufacturer's label lists the power requirements for your hot tub.

**Your initial hot tub hook-up should only be performed by a licensed and bonded electrician.**

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### Warning

**This unit requires a GFCI (Ground Fault Circuit Interrupter).** A "line of sight" service disconnect must be located where visible from the hot tub, not less than 5 feet from the hot tub and not to exceed 50 feet from the hot tub. This requirement may be filled with the GFCI sub-panel. **All supply wire to be rated minimum 90°C.**

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## Load Sharing

Computerized load sharing is used to allow your spa to automatically recognize the temperature differential and the number of jet pumps in use, compare these demands with the available power, and adjust the heater to maximize heater output. If you want to be able to run the pumps at full power and generate heat at the same time, consider installing the maximum electrical service available for your spa. If you do not have enough electrical service, you may not be able to run the pumps and the heater at the same time.

## Electrical Requirements

The following charts provide a listing of electrical requirements for Dimension One Spas and @Home Hot Tubs. For information on Aquatic Fitness Systems, see the "AFS Consumer Planning Guide" available for download at <http://aquaticfitnesssystems.com/pdfs/ConsumerPlanningGuide.pdf>.

### North American

Model	Power	Branch Circuit	Circuit Protection	Wire Gauge
<b>Bay Collection</b>	240V	3 wire + ground	40A	#6 AWG
	240V		50A	#6 AWG
<b>Aurora, Californian, Chairman II, Diplomat, Nautilus, Nautique</b>	240V	3 wire + ground	30A	#8 AWG
	240V		40A	#6 AWG
	240V		50A	#6 AWG
<b>Arena, Seville, Triad II</b>	240V	3 wire + ground	30A	#8 AWG
	240V		40A	#6 AWG
<b>Cove, Serenade, Journey</b>	240V	3 wire + ground	30A	#8 AWG
	240V		40A	#6 AWG
	120V	2 wire + ground	15A	#12AWG
<b>Dream, Sojourn, Venture, Wayfarer</b>	240V	3 wire + ground	30A	#8 AWG
	240V		40A	#6 AWG

### Other Markets

Model	Power	Branch Circuit	Circuit Protection	Wire Gauge
<b>Bay Collection</b>	230/400V	2 wire + ground	1 x 32A	3 x 6mm <sup>2</sup>
		3 wire + ground	2 x 16A	4x2.5mm <sup>2</sup>
		4 wire + ground	3 x 16A	5x2.5mm <sup>2</sup>
<b>Aurora, Californian, Chairman II, Diplomat, Nautilus, Nautique</b>	230V	2 wire + ground	1 x 16A	3x2.5mm <sup>2</sup>
	230V	3 wire + ground	2 x 16A	4x2.5mm <sup>2</sup>
	230V	2 wire + ground	1 x 32A	3 x 6mm <sup>2</sup>
<b>Arena, Seville, Triad II</b>	230V	2 wire + ground	1 x 16A	3x2.5mm <sup>2</sup>
	230V	3 wire + ground	2 x 16A	4x2.5mm <sup>2</sup>
	230V	2 wire + ground	1 x 32A	3 x 6mm <sup>2</sup>
<b>Cove, Dream, Journey, Serenade, Sojourn, Venture, Wayfarer</b>	230V	2 wire + ground	1 x 16A	3x2.5mm <sup>2</sup>
	230V	3 wire + ground	2 x 16A	4x2.5mm <sup>2</sup>
	230V	2 wire + ground	1 x 32A	3 x 6mm <sup>2</sup>

## Starting Up Your Hot Tub

To hook up your hot tub, follow these instructions:

1. Remove the screws holding the equipment access panel to the front of the hot tub cabinet. Remove the panel and set it aside.
2. Loosen the screws on the front of the equipment control box and open the panel to allow access to the four-wire connection terminal block.
3. Attach 1" rigid non-metallic conduit to the conduit nipple located in the pedestal base on the side of the hot tub. Run the required conductors through the conduit to the equipment control box.
4. Connect the wires to the equipment system terminal block (TBI) as indicated on the wiring diagram on the inside of the lower control cover.
5. Configure jumpers on the upper right corner of the PC Board to match the circuit size being used for your hot tub. The proper jumper settings can be found on the wiring schematic located on the inside of the Lower Equipment Compartment cover. Use the Electrical Requirements Chart (shown on page 4) to determine the proper wire size for your spa.
6. Remove the shipping bolt(s) under the pump(s) to avoid excessive vibration.

## Installation Check List

Become familiar with the following tasks before using your spa:

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|---|--|
| <input type="checkbox"/> Hot Tub Cover Operation          | <input type="checkbox"/> Ozonator Operation  |
| <input type="checkbox"/> Hot Tub and Cover Lock Operation | <input type="checkbox"/> Drain Valve and Hose Bib Operation                          |
| <input type="checkbox"/> Cabinet Care                     | <input type="checkbox"/> Selector Valve Operation                                    |
| <input type="checkbox"/> Filter Use, Removal and Cleaning | <input type="checkbox"/> Jet Adjustment and Replacement                              |
| <input type="checkbox"/> GFCI Location                    | <input type="checkbox"/> NeckFlex™ Jet Pillow Operation                              |
| <input type="checkbox"/> Electrical Disconnect Location   | <input type="checkbox"/> Water Chemistry (see Water Care Guide for more information) |
| <input type="checkbox"/> Filling and Draining the Spa     | <input type="checkbox"/> Vision Cartridge Usage (optional)                           |
| <input type="checkbox"/> Upper Control Operation          |  |

## Hot Tub Specifications

Please visit <http://www.dlspas.com/> to download specifications for your specific model.