



# Aqua Pulse Spas

## **MANLY SPA 1000 LITRES START UP INSTRUCTIONS**

**Note:** It is extremely important that you completely fill your spa with water and fit the vinyl cover as soon as the spa is delivered even if your electrician is not coming straight away.

Place a hose in the filter box to fill the spa with water, see page 8 in your user manual.

Remove the fittings from your hose to prevent them falling into the spas plumbing.

Fill the spa with water until the top of the highest jets are completely under water then install your filter in the spa, see page 8 in your user manual.

## **GARDEN HOSE FITTING**

Packaged with the filter is a small garden hose fitting which you will need when it comes time to drain the spa in the future.

## **VINYL COVER INSTALLATION**

Locate the screws and keys, which are packaged inside the vinyl cover.

Place the vinyl cover on top of the spa. Your vinyl cover may not be square, you may need to rotate it to fit the spa.

On each strap of the vinyl cover there is a black plastic lock. Press the two prongs on each lock together and gently pull downwards to remove the section of the lock which you will need to screw onto the spas cabinet. With the section of the lock you have in your hand place it behind the prongs which are attached to the vinyl cover strap lined up so that the bottom of each part is flush. Now raise the section of the lock you have in your hand towards the top of the spa by 2cm and mark the position of the two holes on each lock onto the spas cabinet. Using the screws supplied screw each lock onto the spas cabinet. Do not pre-drill holes the screws will self-tap in, if using a drill stop before the screw is completely tight and finish tightening the screw by hand, if you over tighten the lock you will crack the plastic.

Your vinyl cover must always be on the spa when not in use, and the spa must always be completely filled with water. An empty or partially empty spa of water during daylight hours can cause deforming, changes to the shape of the shell, melting, crazing, cracking, discolouration, blisters or holes in the spa's fiberglass, acrylic and fittings, this can happen within minutes of the spa being emptied or partially empty. Your warranty does not cover deforming, changes to the shape of the shell, melting, crazing, cracking, discolouration, blisters or holes in the spa's acrylic and fittings, so it is especially important your vinyl cover is on the spa when not in use and the spa is always completely filled with water at all times during daylight hours.

## **NEVER CONNECT POWER USING AN EXTENSION LEAD**

The use of an extension lead will void your spas warranty.

Have a qualified electrician connect the spa to power.

The power supply your electrician needs to connect is a 10Amp Dedicated Single Phase connection with the appropriate sized Residual Current Device in your houses metre box.

Please refer to page 5 through to page 6 of your user manual.

Once the spa has power connected to it and it is completely filled with water your electrician can turn the power on.

Never turn the spa on if you do not have it completely filled with water.

While your electrician is still on site press the jets button you should now have water movement within the spa.

If you have no water movement at this stage have your electrician, contact the store while they are still onsite.

Now go to the below chemical instructions and balance the spas water.

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## **EACH TIME THE SPA IS COMPLETELY FILLED WITH FRESH WATER**

**Note:** Do not apply any chemicals to the spas water if there is no power supply. The spa will be fine with the water unbalanced for a week if you are waiting for an electrician.

### **Add 80ml of Liquid Lithium**

Add straight into the spas water away from the filter box and run jets for 5 minutes to mix it in.

Four hours after applying the first dose of Liquid Lithium balance the pH, Alkalinity & Calcium Hardness in the water by following the instructions listed below under the title **ONCE A WEEK BALANCE THE WATER**

**Note:** Too much liquid lithium or too much sanitizer, unbalanced pH, Alkalinity or Calcium hardness will damage your spa and void your spas warranty.

## **CHEMICAL INSTRUCTIONS**

### **EVERY DAY**

**Add 40ml of Liquid Lithium** Add straight into the spas water away from the filter box and run jets for 5 minutes to mix it in.

### **ONCE A WEEK CLEAN THE FILTER**

Remove the filter from the spa and wash thoroughly with a garden hose, then place the filter in a bucket of cold water and add **125ml of Filter Cleaner & Degreaser #9 or Filter Cleaner & Degreaser 1Litre Bottle**. Agitate the water and leave the filter submerged to soak for 24 hours.

After 24 hours remove the filter and wash it thoroughly and allow it to completely dry out in an area exposed to the sun or wind.

It is recommended to purchase a spare filter and alternate between the filter each week to make the cleaning process easier. Filters which are not cleaned weekly can cause your spa to stop cleaning & heating.

Replace your filter every twelve months, however if you are rotating between two filters this will require replacement every two years. To order your replacement filter:

<https://www.aquapulsespas.com.au/products/universal-cartridge-filter-2>

### **ONCE A WEEK BALANCE THE WATER**

**Note:** When balancing the water in your spa you must wait 4 hours between adding each chemical and always add the chemical away from the filter box. Your jets must be run for a minimum of 5 minutes after applying any chemical.

**Note:** Detergents will cause foaming in the water. To avoid foaming do not allow any body lotions or swimmers which have been through your washing machine to enter the water. You may need to shower prior to using your spa and with your swimmers just rinse them off and hang them out to dry to avoid introducing detergents to the spas water which causes foaming.

Top the spas water up with at least two buckets of fresh water.

**Balance** the spas water using **3 in 1 Test Strips**.

Use the readings you get off the test strips to balance the:

Free Chlorine, pH & Alkalinity

To Balance your Calcium Hardness, you need to take a sample of your spas water into a pool or spa store for accurate testing. Do not use any brand of Test Strips to balance Calcium Hardness they will not be accurate enough.

### **HOW TO BALANCE FREE CHLORINE / LIQUID LITHIUM** required reading is between 1-3ppm.

It is normal for your chlorine reading to read zero on your test strips and when testing in a pool or spa store, as long as you are applying the Liquid Lithium as per these instructions and your water is not milky in colour while no pumps are running the water is safe to bathe in. If you have milky coloured water while no pumps are running adding additional Liquid Lithium will not fix the issue (it will cause damage), you will need to take a water sample to a professional pool or spa store for testing to resolve the issue.

If your reading is **lower than 1ppm** raise the free chlorine / liquid lithium by adding **40ml Liquid Lithium**.

Add straight into the spas water away from the filter box and run jets for 5 minutes to mix it in.

If your reading is **higher than 3ppm** lower the free chlorine.

Partially drain and refill with fresh water until your reading is 3ppm or less.

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## **HOW TO BALANCE TOTAL ALKALINITY** required reading is between 80-120ppm.

If your reading is **lower than 80ppm** raise the total alkalinity by adding **Alkalinity Increaser #4**.

17.5g will raise the Total Alkalinity by approximately 10ppm.

**Example** reading is 60ppm and I want to get close to 100ppm.  
 $100\text{ppm} - 60\text{ppm} = 40\text{ppm} \div 10\text{ppm} = 4 \times 17.5\text{g} = 70\text{g}$  to apply.

Do not use more than 30g in one day it will bind the chemical to the shell & feel like sandpaper if you apply more.

Use a bucket and scoop some of the spas water into the bucket until it is roughly  $\frac{3}{4}$  full, then add the Alkalinity Increaser #4 to the bucket of water and stir (avoid contact with your skin), once dissolved pour the water from the bucket into the spa away from the filter box and run jets for 5 minutes.

If your reading is **higher than 120ppm** lower the total alkalinity by adding **pH Reducer #6**.

17.5g will lower the Total Alkalinity by approximately 10ppm.

**Example** reading is 150ppm and I want to get close to 100ppm.  
 $150\text{ppm} - 100\text{ppm} = 50\text{ppm} \div 10\text{ppm} = 5 \times 17.5\text{g} = 87.5\text{g}$  to apply.

Do not use more than 30g in one day it will bind the chemical to the shell & feel like sandpaper if you apply more.

Use a bucket and scoop some of the spas water into the bucket until it is roughly  $\frac{3}{4}$  full, then add the pH Reducer #6 to the bucket of water and stir (avoid contact with your skin), once dissolved pour the water from the bucket into the spa away from the filter box and run jets for 5 minutes.

## **HOW TO BALANCE pH** required reading is between 7.2-7.8.

If your reading is **lower than 7.2** raise the pH by adding **Alkalinity Increaser #4**.

17.5g will raise the pH by approximately 10ppm. (10ppm = 1.0 from the reading)

**Example** reading is 7ppm and I want to get close to 7.5ppm.  
 $7.5\text{ppm} - 7\text{ppm} = 0.5\text{ppm} \times 17.5\text{g} = 8.75\text{g}$  to apply.

Do not use more than 30g in one day it will bind the chemical to the shell & feel like sandpaper if you apply more.

Use a bucket and scoop some of the spas water into the bucket until it is roughly  $\frac{3}{4}$  full, then add the Alkalinity Increaser #4 to the bucket of water and stir (avoid contact with your skin), once dissolved pour the water from the bucket into the spa away from the filter box and run jets for 5 minutes.

If your reading is **higher than 7.8** lower the pH by using **pH Reducer #6**.

17.5g will lower the pH by approximately 10ppm. (10ppm = 1.0 from the reading)

**Example** reading is 8ppm and I want to get close to 7.5ppm  
 $8\text{ppm} - 7.5\text{ppm} = 0.5\text{ppm} \times 17.5\text{g} = 8.75\text{g}$  to apply

Do not use more than 30g in one day it will bind the chemical to the shell & feel like sandpaper if you apply more.

Use a bucket and scoop some of the spas water into the bucket until it is roughly  $\frac{3}{4}$  full, then add the pH Reducer #6 to the bucket of water and stir (avoid contact with your skin), once dissolved pour the water from the bucket into the spa away from the filter box and run jets for 5 minutes.

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**HOW TO BALANCE CALCIUM HARDNESS** required reading is between 250-400ppm.

**Do not use any brand of Test Strips to balance Calcium Hardness.**

To balance your Calcium Hardness, you will need to take a sample of your spas water into a pool or spa store for accurate testing. When you apply the Calcium Hardness required this may make your water go cloudy, don't panic it will clear up in a couple of days.

If your reading is lower than 250ppm raise the Calcium Hardness by adding

**Hardness Raiser #11.**

10g will raise the Calcium Hardness by approximately 10ppm.

**Example** reading is 200ppm and I want to get close to 325ppm.

$325\text{ppm} - 200\text{ppm} = 125\text{ppm} \div 10\text{ppm} = 12.5 \times 10\text{g} = 125\text{g}$  to apply.

Use a bucket and scoop some of the spas water into the bucket until it is roughly  $\frac{3}{4}$  full, then add the Hardness Raiser #11 to the bucket of water and stir (avoid contact with your skin), when completely dissolved (this may take several hours) pour the water from the bucket into the spa and run jets for 5 minutes.

If your reading is **higher than 400ppm** lower the Calcium Hardness by adding

**Calcium Remover.**

3ml will lower the Calcium Hardness by approximately 10ppm.

**Example** reading is 450ppm and I want to get close to 325ppm.

$450\text{ppm} - 325\text{ppm} = 125\text{ppm} \div 10\text{ppm} = 12.5 \times 3\text{ml} = 37.5\text{ml}$  to apply.

Add straight into the spas water away from the filter box and run jets for 5 minutes to mix it in.

**EVERY 6 MONTHS PIPE FLUSH & DRAIN THE WATER**

Pipe Flush cleans your spas pumps & heater which helps prevent premature failure of these parts.

**NEVER DRAIN OR PARTIALLY DRAIN YOUR SPA OF WATER IN DAYLIGHT HOURS.**

**ALWAYS DRAIN YOUR SPA AT NIGHTTIME AND FULLY REFILL YOUR SPA WITH WATER THE SAME NIGHT.**

An empty or partially empty spa of water during daylight hours can cause deforming, changes to the shape of the shell, melting, crazing, cracking, discolouration, blisters or holes in the spa's fiberglass, acrylic and fittings, this can happen within minutes of the spa being emptied or partially empty. Your warranty does not cover deforming, changes to the shape of the shell, melting, crazing, cracking, discolouration, blisters or holes in the spa's acrylic and fittings, so it is especially important your vinyl cover is on the spa when not in use and the spa is always completely filled with water during daylight hours.

To drain your spa add some water so that the water is higher than the normal water line this will help to clean off chemical residue which can build up at the water line. Now put 1 Litre of Spa Pipe Flush #12 into the water and run all pumps for at least 20 minutes, then turn the power supply to the spa off and drain the water. Place your garden hose in each jet and flush out any residue left in the pipes. Sponge out any remaining water in the spa, wipe down the complete shell with a soft cloth, do not use any chemicals.

Before refilling the spa make sure that the drain has been closed and you have washed your filter clean. Remember to place the hose in the filter box to refill the spa with water, do not forget to remove the fitting off the hose.

**INSTRUCTIONS YOU MUST FOLLOW TO PROTECT YOUR SPAS WARRANTY**

The prescriptions provided here are based on using **Bond branded** Liquid Lithium & **Pool Pro branded** pH reducer #6, Alkalinity increaser #4, Hardness raiser #11, Calcium remover, Phosphate remover, Pipe flush #12, Filter cleaner & degreaser #9 or Filter cleaner & degreaser 1 litre bottle chemicals only. Other branded chemicals might say the same thing on the label or say they are suitable to be used in a spa, but the active ingredient of the product can be totally different which will require different prescriptions which we cannot help you with. You could cause accidental irreversible damage to your spa if you use different branded chemical's.

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## **CHEMICALS WITH ANY OF THESE INGREDIANTS CANNOT BE USED IN YOUR SPA**

Bromine  
Granular chlorine calcium  
Trichlor chlorine  
Dichlor chlorine  
Stabilised chlorine  
Cyanuric acid  
Liquid pool chlorine  
Hydrochloric acid  
Magnesium  
Epsom Salt  
Hydrogen peroxide chlorine free  
Polyhexanide hydrochloride chlorine free  
Polyhexamethylene biguanide chlorine free

**THESE CHEMICALS ARE ALL KNOWN TO CAUSE SOME FORM OF DAMAGE TO FIBREGLASS - ACRYLIC SPAS. SOME OF THESE CHEMICALS WILL BREAK DOWN THE BONDS OF THE FIBREGLASS – ACRYLIC SHELL WHICH ALLOWS THE FIBREGLASS – ACRYLIC SHELL TO BE RE SHAPPED. THE WEIGHT OF THE WATER WILL PUSH DOWN ON THE FIBREGLASS – ACRYLIC SHELL AND RESHAPE IT OVER THE STAINLESS-STEEL STRUCTURAL FRAME CAUSING THE STRUCTURAL FRAME TO BECOME VISABLE THROUGH THE SHELL. SOME OF THESE CHEMICALS WILL BREAK DOWN THE ACRYLIC SHELL CAUSING CRAZZING, CRACKS, BUBBLES, WRINKLES & HOLES IN THE ACRYLIC SHELL. THESE ISSUES ARE IRREVERSABLE.**

Your warranty will be made void if you use any of these chemicals, even if you only used them once.

If your monthly water test results show any amounts of these chemicals in your water, please contact your store of purchase immediately for advice.

3 in 1 Test Strips are not 100% accurate as the colours may be read differently by each person who reads them. We recommend that you use these test strips as a rough guide only and you must retest each day before applying more chemicals to prevent overdosing.

You must visit us or a local pool store with a water sample once you fill the spa to get an accurate water test done to check that the balances are correct.

We recommend that you have the spa water tested weekly at a pool or spa store to gain accurate results of the water chemistry. Do not add any doses of Liquid Lithium for 24 hours prior to taking your water in for testing. When you test at other pool or spas stores, you can use the test results they give you to calculate any adjustments you need to make using the once a week balance the water instructions. You do need to be careful to not just apply the amounts of chemical that they tell you to apply. The reason for this is that they might set the parameters differently to what your spa requires.

For Example:

|                  | Spa<br>Chemical Parameters | Swimming Pool<br>Chemical Parameters |
|------------------|----------------------------|--------------------------------------|
| pH               | 7.2ppm – 7.8ppm            | 7.2ppm – 7.6ppm                      |
| Alkalinity       | 80ppm – 120ppm             | 100ppm – 150ppm                      |
| Calcium Hardness | 250ppm – 400ppm            | 175ppm - 350ppm                      |

The chemical adjustments they ask you to make are most likely to balance it to the swimming pool parameters which means you will either overdose or underdose the amount you require.

**WE WILL NOT BE HELD RESPONSIBLE FOR POOR ADVICE, INACCURATE TEST RESULTS FROM POOR TESTING METHODS OR INCORECT WATER VOLUME TESTED BY ANOTHER POOL OR SPA STORE.**

Water chemistry test history from a professional pool or spa store showing results for Free chlorine, Total chlorine, pH, Alkalinity, Calcium hardness, Cyanuric acid & Salt must be kept as a dated once-a-month digital reference as part of your warranty terms. This test history will be required in the event of a warranty claim. Your warranty will be made void if you cannot show these results, or these results show you have used chemicals with ingredients we have asked you not to use or the results show you have not maintained the water to the required readings we have provided you with.

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