







## Temperature

Never let your hot tub temperature surpass 41°C. Temperatures above this can become a health hazard by placing the cardiovascular system under pressure. High temperatures can also affect the hot tub shell's integrity.

## Safe Handling

Keep all chemicals out of reach of children. Do not mix chemicals with any substance but water. Do not interchange container caps. Store chemicals in a cool dry place out of sunlight.

## First Aid

If hot tub chemicals accidentally contaminate skin or eyes, immediately flush with copious amounts of water.

Seek medical advice or ring the National Poisons and Hazardous Chemicals Information Centre:

0800 764 766

## Quick Setup Installation Guide

## 1. Positioning

- Only lift your tub from under the steel frame do not lift on the plastic lip at the top. When pushing your tub to move it, only push on the plastic rim, not on the cedar panels.
- Position your hot tub on a level, hard, dry surface, preferably concrete with a tolerance of +/- 3mm for levelness. Pavers are acceptable if well compacted and level. Avoid placing the tub on dirt, compacted shingle, or grass as this will void your warranty. At this stage, leave the tub sitting up on a few pieces of timber, approximately 50mm high, around the edge of the steel frame.
- Using a 3mm allen key, remove the front access panel via the four button head cap screws. Locate the electrical cord and feed it out under the edge of the tub in the direction towards your power supply. Ensure it is not directly under one of the steel feet.
- Lower your tub off the wood blocks; you may use a crowbar under the edge of the steel frame to do this.
- You can now pack under the steel feet with plastic packers to get it levelled up.

## 2. Electrical Setup

- Your Moji Mini (10 amps) and Moji Midi (15 amps) can be plugged into an outdoor socket. The circuit must be RCD protected and dedicated solely for the tub's use. No piggybacking off other circuits or using extension leads is permitted. Please note that the Midi is equipped with a 15 amp plug featuring a larger earth pin and thus requires a 15 amp socket.
- For Moji Maxi and custom hot tubs, Moji will provide the required amp input for your electrician to hardwire in.
- Do not switch on the power until your tub is filled with water.

## 3. Filling

- Fill the hot tub with a garden hose to the suggested level on the skimmer (filter) box. Do not go above the water mark on the filter box lid.

## 4. Power On / Priming

- Once your tub is filled with water, you can remove the hose and switch on the power.
- The display screen will go through a few actions before showing "Water Priming". Do not touch any keys while it's in this mode.
- Once primed, the pump will run at low speed, and the display should then show the water's temperature in the tub with the "Auto" light illuminated. The fire symbol light will also remain illuminated until your tub reaches the set temperature.

**Moji Tip!** Turn the air control valve to "off" while heating to prevent introducing ambient temperature air into the water while heating.

- If the tub fails to prime (ER 3), this is usually associated with an airlock.
   If this occurs, unscrew the top Mac Union on the boost pump until a little water flows out; you should hear the air being pushed out.
   Retighten the Mac Union and press Pump Button A to retry the prime sequence.
- Once primed and running, put the front cover back on using the four button head cap screws.

## 5. Touch Pad Settings

 Refer to your SpaNet User Manual to adjust the time and date settings. You may also adjust the water temperature to your preferred temperature. The default setting is 38 degrees.

## 6. Draining

Your hot tub is fitted with an easy-to-use drain valve. Simply unscrew
the centre cap, push the fitting inward, and turn anti-clockwise to start
drainage. Alternatively, you can attach a garden hose with the supplied
adaptor to the drain valve for easy drainage.

## Startup, Maintenance & Water Care

To ensure your hot tub is safe and healthy for use, please test the water chemistry regularly and adjust it following the instructions included in your Moji startup chemical kit.

#### **Hot Tub Chemical Treatment**

Regular water maintenance is an excellent habit to form from the first use of your hot tub. Keeping on top of your water maintenance and correct use of your filtration and cleaning settings has the potential to significantly reduce the amount of sanitiser you need to add to your tub. To ensure a well-balanced and correctly sanitised hot tub it is vital that you have a test kit capable of undertaking the following water tests:

- Free Available Chlorine or Total Bromine
- Ha -
- Total Alkalinity

These tests give the hot tub operator the information needed to maintain a well-balanced and clean tub. A sanitiser removes harmful bacteria and is essential for clean and safe water. Users may choose between a rapid acting sanitiser (*Spa Master Super Chlor*) or slow-release option (*Spa Master Bromine*). Water hardness levels are also important, but not tested for with standard test kits, it may be necessary to increase soft water hardness levels using *Spa Master Water Hardener*. Calcium hardness relates to the levels of minerals in the water. If the level is too low, the water will eat away at anything possible to get the needed minerals. If the mineral level is too high, scaling or calcium deposits will form.

## Water Testing

pH and Free Chlorine / Total Bromine levels should be tested prior to use and adjusted accordingly. Testing can be carried out using either simple dip test strips or a tablet/dropper type test kit. The main jet pump/s should be running while dosing chemical to ensure rapid mixing and to avoid chemical remaining on the hot tub surfaces – let the pump/s run for one full turnover (around 10 minutes) in between chemical adjustments and before using the hot tub.

## **Recommended Water Quality Criteria**

Criteria or Test	Recommended Result	Most Desirable
рН	7.2 - 7.6	7.5
Free Chlorine	2 ppm - 4 ppm	3.5 ppm - 4 ppm
Total Bromine	2 ppm - 4 ppm	3 ppm
Total Alkalinity	80 ppm - 150 ppm	120 ppm
Calcium Hardness	80 ppm - 150 ppm	120 ppm

#### Notes:

- ppm = parts per million, as shown on your test kit
- Avoid testing immediately after a chlorine shock dose as high chlorine levels can alter test kit accuracy

### **Shock Dosing Treatment**

Where a hot tub is under continuous heavy loading, a minimum free available chlorine or total bromine level of 3ppm should be maintained at all times. Shock treatment should also be carried out at least weekly to break down organic contaminants and unwanted chlorine products. A shock treatment is a single large dose of either *Spa Master Super Chlor* or *Spa Master Oxygen Shock* (20g per 1,000L of water). Due to the higher than normal levels of sanitisers after shock treatment, use of the hot tub should be avoided for 12-24h following treatment for comfortable use. Your tub likely is due for a shock treatment if you experience any of the following:

- Loss of clarity
- No chlorine reading for extended periods
- After heavy loading
- Presence of chlorine aroma (indicates high chloramines)
- Change of water colour



#### **Additional Treatments**

- Spa Master Defoamer can be used to remove excess foam or bubbles, commonly caused by moisturisers and excess shampoo
- Spa Master Spa and Pool Clarifier removes fine particles to produce clear sparkling water
- Spa Master Spa Kleen added prior to a water change helps clean pipes, jets and pumps

## Hot Tub Loading (the number of uses per day)

Hot tubs can have heavy loading due to the comparatively small water volume and large number of bathers per day. If the hot tub water is not treated correctly, considerable numbers of disease producing and other microorganisms will accumulate, particularly in the surface layer of the water. Loading factor is also compounded by:

- The close proximity of bathers in the hot tub which could allow the transfer of germs from a carrier to another person sitting next to the carrier. Consequently, there is only a short period of time in which to sanitise the water.
- The warm temperature of tub water promotes bacterial growth.
- The fast transportation of germs throughout the tub because of rapid water movement.

It is therefore evident that the proper chemical treatment and efficient filtration must work together. The filter should operate for a minimum of three hours each day.

## Change of Water

Water should be changed a minimum of every six to twelve weeks in private hot tubs. Every six weeks is recommended for heavy loads, twelve for lighter use. The filter cartridge should be cleaned every 4 weeks with *Spa Master Cartridge Cleaner*. Changing the water is the only way to remove finely dissolved solids. Hot tub water should be changed if the following cannot be resolved with shock dosing:

- Loss of clarity
- Presence of aromas
- Change of water colour



## **Recommended Startup Treatment Procedure**

- Fill hot tub to slightly above the recommended line or where the skimmer operates most effectively.
- Turn the main jet pump/s on for dosing chemical let the pump/s run for one full turnover (around 10 minutes) in between chemical adjustments.
- Test for total alkalinity and adjust with *Spa Master Alkalinity Up* (125g will raise total alkalinity approximately 80 parts per 1000L of hot tub water).
- When total alkalinity has been adjusted to 120 ppm, test and adjust pH to 7.5.
- Use Spa Master pH Decrease to lower (30g per 1000L will decrease reading by 0.6 parts) or Spa Master pH Increase to raise (30g per 1000L will increase reading by 0.6 parts).
- Depending on test reading, at start up, add Spa Master Water Hardener (100g will raise water hardness approximately 80 parts per 1000L of hot tub water).
- Add an initial dose of your chosen sanitiser either 20g of Spa Master Super Chlor per 1,000L of water OR load your adjustable bromine dispenser with 2 tablets of Spa Master Bromine per 1,000L of water.
   A floating dispenser must be used for bromine tablets when placed into the filter basket there is a high risk of damage to your pumps and filtration system over time.
- After the startup chemical treatments, the level of free chlorine should be allowed to come down to below 5 ppm before use for comfortable use.

Depending on the size of the hot tub, filtration cycles will vary. Most tubs will require a minimum of 3 hours of filtration a day. Every hot tub varies for one to another regarding chemical demand. You will become accustomed to your own tub and know what quantities of chemicals are required to make necessary adjustments.

# Filter Cleaning & Maintenance

Your Moji hot tub is equipped with a single filter that needs regular maintenance. Users with low usage may find they only need to clean their filter once a month, whereas a tub with high usage could require cleaning every 1 to 2 weeks.

## What is the purpose of a cartridge filter?

- The cartridge filter in a hot tub is specifically designed to remove particles from the water: soaps, chemicals, perspiration, body fats, oils, and fine particles of dust or dirt.
- Once taken from the water, these particles are stored within the
  polyester fiber pleats. To prevent cartridge failure, these pleats will have
  to be cleaned regularly. Below is a guide to cleaning the cartridge.

## Filter Cleaning Instructions

- Firstly, cycle the pump "A" button to "off" to turn the pump off. This will prevent any debris from being drawn into the circulation system while your filter is removed.
- Place your hands under the front panel of the filter box and slide it up to remove it, then place it somewhere safe.
- Slide the tray out from the filter box, wash any large debris off the tray.
- Reach into the top of the filter and locate the small handle on top. Turn it anti-clockwise to unscrew it and remove it.
- Wash the filter using a garden hose, working from the top down. Open the pleats with your fingers so the water can reach the bottom of the pleats where most of the debris accumulates. You may want to invest in a hot tub filter cleaner wand that attaches to a hose to make this task more efficient Moji recommends the Life Products Water Wand Pro.
- Soak the cartridge for 24 hours in the cartridge cleaning solution provided in your start-up kit. Using a bucket will minimise the amount of solution needed. We recommend turning the filter halfway to ensure both ends are fully submerged in the solution.

- Rinse the cartridge thoroughly after removing it from the bucket until the water is free of foam.
- The cartridge is now ready for use again.
- Place the filter in the filter box and turn it clockwise until it's just snug.
   Be careful not to over-tighten it.
- Replace the skimmer tray between the two slots in the filter box and push it all the way back.
- Slide the front panel back down onto the front. The flap should swing freely through the opening.
- Press the "A" button on the pump until "auto" is displayed on the screen.

**Moji Tip:** It's good practice to have two filters so when one is being cleaned, you have one to put back in your tub. Doing this also means you can soak the filter in the cleaning solution for a longer time. We recommend and supply Magnum Filters for all our Moji tubs.

## Replacing the Filter Cartridge

- Your filter cartridges contain a filter fabric specially designed for filtering hot tubs. However over time the cartridge will block up to the extent that it will have to be replaced. Unlike many other types of cartridge filters i.e.: carbon block, polyester pleated cartridge filters do not have a predefined hygienic life. It will gradually plug up over time due to the soaps, chemicals, body fats, and very fine particles. It is important that the cartridge is replaced when this occurs. Failure to do so could result in inadequate filtration and ultimately equipment failure.

## How to maximise the life of your filter cartridge

- Maintain hot tub water chemistry in proper balance
- Clean the cartridge in accordance with its cleaning instructions.
- Do not scrub the filter with a stiff/coarse brush.
- Do not use a pressure washer on your filter.
- Rotating two cartridges will prolong the filters life considerably.

# Limited Warranty

- 1. This warranty is valid to the original purchaser only and is non transferable. Unless otherwise specified it is a five (5) year warranty.
- 2. Limitations, this warranty does not cover defects or damage due to normal wear and tear, improper installation, electrical spikes or brownout, accidents, acts of God, alterations without Moji Hot Tubs prior written consent, misuse, abuse, commercial use, use of a part or accessory not approved by Moji Hot Tubs, failure to follow the Owner's Manual, or repairs made by anyone other than an authorised person with out Moji Hot Tubs consent to undertake the work. All warranties start from the time the hot tub or products have left the manufacturers factory.
- 3. The hot tub polyethylene shell is guaranteed by the manufacturer for 5-years from the date of delivery from Moji's factory, against failure in water loss, structural integrity or faulty workmanship or materials, provided the installation, use and water chemistry / maintenance has been carried out in accordance with normal practice and to our recommendations.
- 4. The tubs steel frame has a 10-year structural warranty from date of delivery from Moji's factory provided that it is installed following Moji's guide lines. The Warranty will be invalidated if the tub frame is set in, or exposed to a continually damp /wet location.
- 5. All electrical equipment i.e. Controller and Touch Pads, Boost Pumps, Circulation Pumps, XL80 ozone unit, UV Units have a two year manufacturers warranty from date of delivery from Moji's factory against faulty components, provided they are used under the terms of the manufacturers warranty. Components not included in the warranty are the heating element, Orings, and pump mechanical seals. Access to service all the above is to be made available to Moji or its service agents at the tub owners cost, i.e. if the tub has to be moved to be serviced then that is the responsibility of the tub owner.
- 6. For any major work required where the tub may be have to be returned to the Moji's workshop, it is the customers responsibility to organise the tub to be returned to base for the work to be performed. It is also the customers responsibly to up lift the tub from the workshop and reinstall.

- 7. The lockable hard cover is covered by a 36-month warranty on the cover skin and 12-month warranty on the foam billets.
- 8. In the event of any defect covered by this limited warranty, Moji or its authorised agent will correct such defect subject to the terms and conditions contained in this limited warranty. There will be no charge for parts to repair, although you may be assessed reasonable repairman travel charges if the hot tub is located outside your service agents service area. If Moji determines that repair of the covered defect, is not feasible, we reserve the right to instead provide a replacement hot tub equal in value to the original purchase price of the defective hot tub. In such event, reasonable costs for removal of the defective hot tub and delivery and installation of the replacement hot tub will be the responsibility of the hot tub owner, and the limited warranty, if any, will commence from the date of the original hot tub purchase date and run for five (5) years. To obtain service, notify your Moji as soon as possible and use all reasonable means to protect the hot tub from further damage.
- 9. This is the only warranty given by Pacific Spas Ltd / Moji and all other warranties, conditions or representation whether expressed or implied are excluded.
- 10. The hot tub water chemistry must be adhered to; failure to keep hot tub water within recommended ranges can result in equipment failure. Professional water testing is recommended monthly. Damage caused by dirty or clogged filters will not be covered under this warranty.
- 11. All electrical work including initial installation connections are to be undertaken by a registered electrician. Under no circumstances are the hot tubs to be operated by plugging into an extension cord. Operating voltage is to be 220 volts to 240 volts on a dedicated RCD protected circuit for your tub only.





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