

THE GENESIS DEVICE

AUTOMATIC BROMINE GENERATOR

VIDEO AVAILABLE AT WWW.LIFESPAS.COM/BROGEN.HTML

The GENESIS Device

- Converts Sodium Bromide (NaBr) into Bromine. Then back to Sodium Bromide completing the perpetual treatment cycle.
- Quarterly draining is a thing of the past, usually one time a year is all that is necessary with the GENESIS Device.
- GENESIS makes spa easier to maintain & less expensive to operate.
- With GENESIS the water is always clear and inviting.
- With GENESIS the water is softer and gentle to your skin with less eye irritation.

Bromine is the #1 Choice for Sanitizing Spas

- Chlorine evaporates at 97 degrees and most hot tubs are kept at 104 degrees making Chlorine ineffective for spa use.
- Ozone creates a harmful gas that is corrosive to heaters, covers and jets.

The Alternative – Traditional Bromine Sanitation

- Aggravating Bromine floater.
- Expensive maintenance chemicals
 - Bromine Tables. Weekly Shocking, Clarifiers, De-Foamers, De-Scummers.
- Requires quarterly draining because of the binders and bi-products of Spa maintenance chemicals.
- Aggravating handling, purchasing, transporting and storing of chemicals.

GENESIS WATER TREATMENT

In the past before GENESIS, spa owners were forced to check water chemistry on a weekly basis. Checking Ph, Alkalinity and Bromine. Before GENESIS when checking for Bromine and there wasn't any, you added more Bromine or Bromine tablets, masking any water quality issues. With GENESIS you don't mask water quality issues, you simply correct your water chemistry, add Tru-Blu (Sodium Bromide) as directed, turn the GENESIS on, and it creates Bromine perpetually.

EXACTLY HOW THE SYSTEM WORKS!

It's a very simple process. First you add 2 lbs of Sodium Bromide for every 100 gallons of water added to your spa. Sodium Bromide is the kissing cousin of table salt. As the water circulates throughout your plumbing it comes in contact with a Bromine generating cell that converts the Tru-Blu (Sodium Bromide) into Bromine, sanitizing your spa.

THE SAVINGS WITH GENESIS

GENESIS does not require the expensive maintenance chemicals that ordinary spas require. The need for transporting and adding harmful sanitizing chemicals is gone, because there are no added bi-products there is no need to drain your tub every three to four months wasting hundreds of gallons of water. The GENESIS saves you time and money by eliminating the job of maintaining a spa. It is all done for you by the GENESIS Device.

GENESIS START-UP INSTRUCTIONS

1. Test the TDS (Total Dissolved Solids) from the source of water you are filling the tub with. Optimum reading should fall between 200 ppm's to 500 ppm's. If TDS reading is higher than 500 ppm's then a metal remover or Carbon block Spa Prefilter should be used to reduce TDS. Well water or non-municipal sources of water are typically high in TDS. Salt water softeners will also contribute to high TDS.
2. Fill the tub and balance the Ph., Alkalinity, and Calcium hardness. Ph (ideal range 7.2–7.8), Alk. (ideal range 80–120 ppm's), Calcium hardness (ideal range 150-200 ppm's).
3. Add 2 lbs. of TRU-BLU (Sodium Bromide) while jets are running for every 100 gallons of Spa water. Remember; spas are typically over rated in the amount of gallons that are actually added to the spa. For example; a spa that is rated at 500 gallons might only be 450 gallons and should probably use only 9 lbs. or 4 ½ bottles of Tru-Blu. Let the spa circulate for 10 minutes, then take a SODIUM BROMIDE reading. This should read between 7.8-8.0 ppm's. The SODIUM BROMIDE Test Strips are reading for “SODIUM BROMIDE” (Salt) not Bromine.
4. Check your TDS. This should come in at 2300 ppm's to 2700 ppm's. (If using a TDS meter; ensure that you allow enough time for the meter to calibrate. Allow up to one minute for TDS meter to adjust to the water temperature.
5. Ensure the Spa-filters are clean, set the GENESIS to a power setting of 10, and set the daily circulation time to a minimum of 8 hours per day. (24-hour circulation pumps are fine).
6. Remember; GENESIS only builds bromine during low speed circulations. The lights or power on the GENESIS will only appear during these times. The unit will have a “+” or “-“ sign to the left of the power setting (1-10) and will reverse every 4-6 minutes. This is normal as the power to the electrode is reversing polarity to prevent scale build up.
7. After 24 hours the tub should have established a “Bromine” bank. The water should be tested with preferably a liquid or paper test kit for “Bromine” at this time. If the tub has not established Bromine then please refer to trouble shooting the GENESIS. Every spa is different and every spa owner will use their spa differently. As a new spa owner the demand for “Bromine” is usually higher than a veteran spa owner. Therefore, the GENESIS will probably require a higher power setting initially and will need to be adjusted accordingly.

For further assistance please contact Pioneer H2O (877) 569-4377

GENESIS TROUBLE SHOOTING GUIDE

No Bromine Reading?

1. Double check the Genesis device to make sure that the digital display lights up when the spa is circulating. Keep the Genesis on a power setting of 10 until you have established a bromine reading.
2. Check to ensure that your spa is circulating on low speed for a minimum of 8 hours per day.
3. Using the Sodium Bromide test strips make sure your Bromide reading is between 7.8-8.0 or 1900-2100 ppm's. If Sodium Bromide reading is greater than 8.4 adjust by a partial drain of the spa. Draining 4 to 8 inches and then refilling the water back up to the spa's water line should be adequate in most circumstances (please refer to #9 TDS).
4. Ensure that your water chemistry is correct. The Ph needs to be between 7.2-7.8. The Alk. Needs to be 80-120. Calcium hardness needs to be 150-200 ppm's. Please refer to the GENESIS manual for corrective measures.
5. Check the connection to the electrode to ensure that the lead wires are secured to the electrode posts (hand tighten only). Verify that the electrode assembly is facing out horizontally (3:00 or 9:00 o'clock).
6. Make sure that you are cleaning your filter or back washing weekly (DO NOT CLEAN FILTER WITH CHEMICALS THAT HAVE PHOSPHATES).
7. Sometimes it is necessary to shock your tub with a chlorine shock when the tub has had a high bathing load, or because of organic demand being placed on the bromine, however, we do not recommend doing this frequently.
8. FLASHING dots on the controller: have the TDS (total dissolved solids) checked by a local pool or spa professional. Flashing dots is an indication that the TDS is becoming too high. A partial drain and fill will typically correct this problem. Solid dots are an indication that our TDS is in an unsafe range for the Genesis device to function. If the dots are solid the system is not operating and TDS must be lowered. To correct this problem; a complete drain and refill can typically repair the problem.

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GENESIS TROUBLE SHOOTING GUIDE

9. TDS (Total Dissolved Solids) is a combination of metals, minerals and other organic material. Genesis requires that the TDS from the fill water be in the low range of 200-500 ppm's. Municipal water sources in most cases are typically low in TDS usually between 200-500 ppm's. Well water is typically high in TDS 500-1200 ppm's. If the tub has been filled with a source that has high TDS, a metal remover (Metal Out) can sometimes correct the problem. It is strongly advised that a Carbon block spa pre-filter be used when filling your spa from a well or other troubled water sources. Salt water softeners will also contribute to high TDS (Do not fill spa using a salt water softener). As an example; if your fill water starts at the tap at 300 ppm's of TDS and you dose the spa with 2 lbs of Sodium Bromide for each 100 gallons of water, you will add an additional 2000-2200 ppm's of TDS. This will bring your total TDS within the ideal range of 2300-2700 ppm.
10. PHOSPHATES – A contaminant that promotes algae growth and inhibits Bromine production. Phosphates are introduced to your spa through several sources (Fertilizers, Hygiene Products such as soaps, shampoos and lotions). Some spa chemicals such as spa filter cleaners contain phosphates and should not be used. If you are unable to maintain a Bromine reading test your water for phosphates. Phosphate tests that exceed 100 ppm's need to be treated with a phosphate remover (Phos Out, Phos Free). It is recommended that you treat the spa for 4-5 days and clean the filter daily until phosphates are eliminated.

NOTE

- Genesis is pre-set at 240 volts and is 120 compatible by adjusting voltage switch inside the box.
- Genesis only creates Bromine during low speed circulation (8 hrs a day).
- Genesis – Controller lights are only ON during low speed circulation.
- Genesis is only capable of creating bromine. It cannot cause foaming or high PH
- Genesis switches polarity every 4-6 minutes

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