



# Pool Chemistry

FOR ELECTRONIC CHLORINE GENERATORS



The only special requirements for the Aqua Rite, Aqua Trol, or Aqua Logic electronic chlorine generator are the salt level and stabilizer. It is important to maintain these levels in order to prevent scaling and to ensure maximum enjoyment of the pool. Test the water periodically and use standard pool industry procedures to adjust levels.

### Salt 2700 to 3400 ppm

Check monthly (using the digital salt display). The higher end of the salt level range lets the electronic chlorine generator produce more chlorine and also helps extend the life of the cell. The electronic chlorine generator will indicate when the salt drops below 2700 ppm and the electronic chlorine generator will stop operating if the salt drops below 2500ppm. On most pools, the salt level tends to slowly drift downward as fresh water is added to the pool (rain or makeup water for splash-out, back-washing etc.). A good procedure is to add enough salt to be near the top of the range. Usually add stabilizer (see below) at the same time.

### Stabilizer 60 to 80 ppm

Check monthly. Stabilizer is also known as conditioner, cyanuric acid, or isocyanuric acid. Refer to local codes regarding its use. Stabilizer helps maintain the chlorine residual in the pool by protecting it from the UV rays from the sun. Without stabilizer, the electronic chlorine generator would have to produce much more chlorine in order to keep the desired residual level in the pool. Add enough stabilizer to be near the top end of the range at the same time you add salt.

### Chlorine

Ideally, all of the chlorine in the pool should be "free chlorine" and there should be zero "combined chlorine." "Free chlorine" means that it is not attached to any contaminants in the pool and is ready to attack any algae or bacteria that it comes in contact with. Note that test kits using the OTO method (yellow color) only test total chlorine and can not differentiate between "free" and "combined". DPD test kits (red color) do allow for the testing of both total chlorine and "free chlorine".

### pH determines Chlorine effectiveness

The recommended pH range is 7.2 to 7.6. If the pool's pH rises above the top end of the range, the sanitizing effectiveness of the chlorine can be greatly reduced. For example: The chlorine in a pool with the pH at 7.2 is approximately ten times more effective than the same amount of chlorine in a pool with the pH at 8.2.

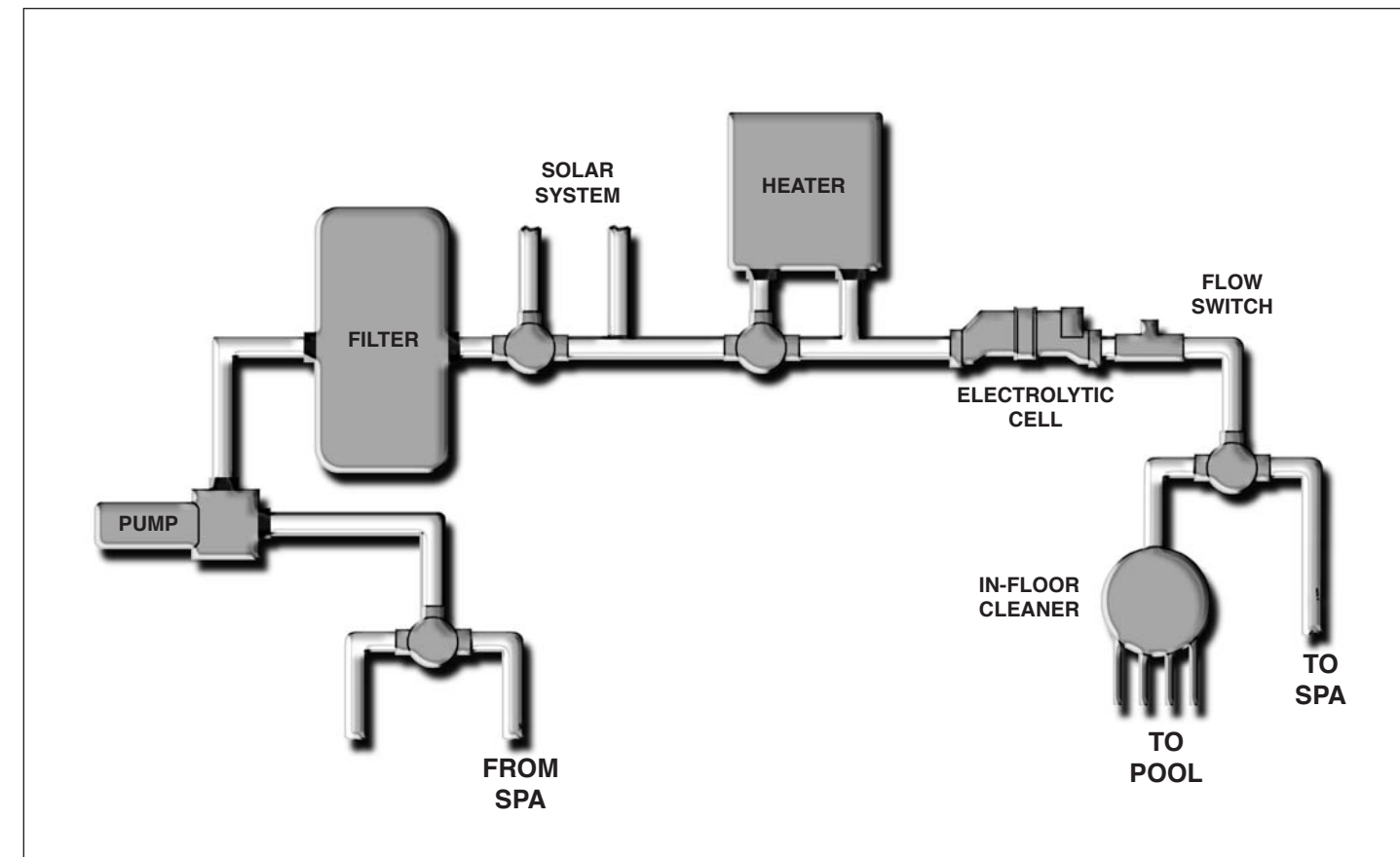
CHEMICAL	IDEAL LEVELS
Salt	2700 to 3400 ppm
Free Chlorine	1.0 to 3.0 ppm
pH	7.2 to 7.6
Cyanuric Acid (Stabilizer)	60 to 80 ppm (80 ppm best)
Total Alkalinity	80 to 120 ppm
Calcium Hardness	200 to 400 ppm
Metals	0 ppm
Saturation Index	-2 to 2 (0 basil)

# Chlorinator Cell

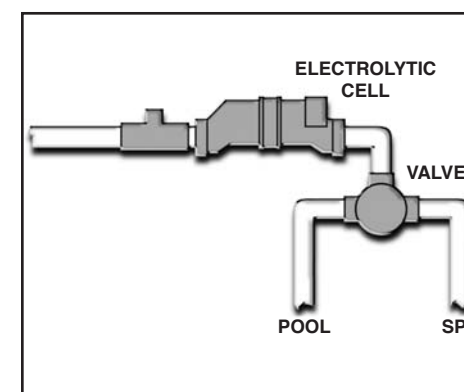
PLUMBING INSTALLATION



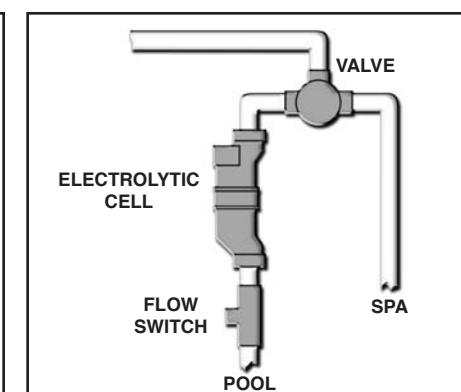
Install the cell and flow switch down stream of all existing equipment, but prior to the pool/spa return valve. The flow switch can be located immediately downstream from the cell (as shown) or can be installed with 12" of straight pipe directly before the mounting tee (option 1 below). For stand alone Aqua Rite installations on pool/spa systems, refer to options 2 or 3 in order to avoid possible over chlorination of the spa.



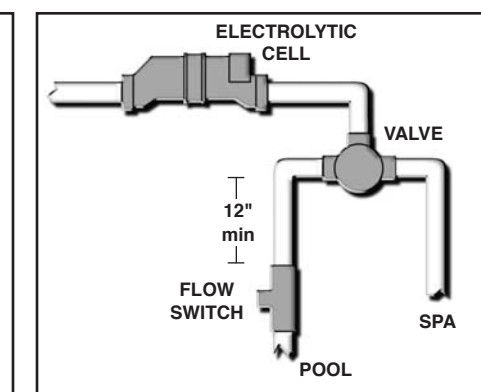
Chlorinator Cell



Optional Configuration #1



Optional Configuration #2



Optional Configuration #3