



NATURAL ELECTRONIC WATER TREATMENT SYSTEM.

By ELECTRONIC IONISATION

The limitation in acceptance of this technology is the lack of understanding of the mode of this process.

Through history the use of metals has been employed as natural purification for water. Ancient Greeks threw coins into fountains and drank from silver and copper goblets. Pioneers placed copper and silver coins into barrels of water for sanitation. In 1960 N.A.S.A. developed electric copper zinc ionizer to purify the astronauts drinking water in Space Apollo mission.

N.E.W.T.S. System basically works in the same way . With the difference it generates High Frequency Direct Current Pulses with a variable power output.

N.E.W.T.S uses the latest technology power supply , the system can work from 100 to 240 Volt or from 12 to 14 volts SOLAR POWER SOURCE .

This allows the use of our NEWTS System to perform in different and variable environments.

Low voltage DC pulses between 800 and 3200 cycles per second are sent through the electrodes to break down calcium bicarbonate into powder form to prevent scales on surfaces.

DC Pulses are much more effective than just DC to eliminate bacteria and algae.

These DC pulses are sent separately to the Copper and the Titanium electrodes in the ionization chambers.

Automatic polarity reverses the DC Current direction between electrodes about every 15 minutes (adjustable ) to reduce wear and generating self cleaning effects on the electrodes.

Copper Electrodes:

The copper electrodes release copper ions into the water stream.

The Cathode electrode produces high purity hydrogen ions whereas

the Anode electrode produces high purity oxygen ions.

Titanium Electrodes:

Fused Iridium and Tantalum Oxide coating on the titanium electrodes avoids oxidation of the material itself. Those electrodes produce pure Oxygen, Hydrogen and Hydroxyl ions.

Hydrogen Ions help calcium bicarbonate ions adhere to Hydrogen atoms in order to avoid formation of calcium carbonate tending to sedimentation in water ways.

Copper Ions generated by the copper Electrodes kills effectively algae, bacteria and a large variety of microorganisms which "Chlorine" chemical..WILL NOT !

### SWIMMING POOL MAINTENANCE

A filter backwash is recommended daily which will provide extra protection , avoid sediment, dead bacteria, and chemical deposits.

The backwash water is recycled and good for your garden with no side effects on plants ,grass, etc.

The FIRST you need to do is to set the acidity of Your water (ph) to a normal level between 6.8 and 7.8.

Fill your Ph "water tester" with the water till the line on the test tube, this is 5 ml and usually 4 drops of the red liquid.

Your water tester kit will display a "yellow" color when too acid or a dark "pink" if too soft.

6.8

7.2

7.6

7.8

8.2



Rainfall or adding water from the mains will change stability of your swimming pool water .

Sodium bicarbonate should be added if the water is too acid ... "yellow" color on test.

Hydrochloric acid should be added if the water is too soft (alkaline) .."pink" color on test.

In fish ponds the use of hydrochloric acid is not recommended as it can be dangerous to fish if not diluted properly before added to the water. White Vinegar is a more friendly way to add acidity to the water. This can be used as well for swimming pools or water treatment.

Secondly, when your water acidity is right (ph) you should then test the "copper" content in the water.

The Aquarium water test kit needs to be filled with 5 ml of Your water and 10 drops of the test liquid added.

The water in the test tube will turn to a light yellow, You need to compare with the chart provided in the kit box and it should be between 0.25 and 0.5 , maximum 0.8.

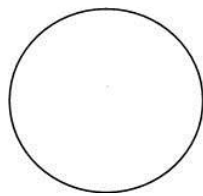
It is recommended to run these tests once a week or soon after a heavy rainfall .

If the “copper” reading is below 0.25 push the algae control button , the system will boost to “HIGH” , a “BLUE” blinking light will flash for about 4 hours then the System will return to low “YELLOW” .

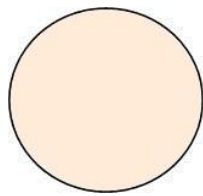
A warm pool (full sun all day) will need more oxygen than a cool one.

Water hardness : if display shows “YELLOW” add calcium hypochlorite to the water in the range of 1 kg. per 10 m cubic, run the system for one hour , add again till the display will show green.

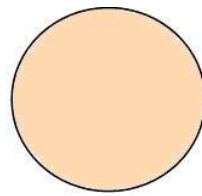
#### COPPER COLOR QUANTITY TEST



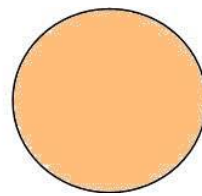
0 ppm (mg/L)



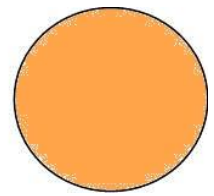
0.25



0.5



1.0



2.0

## NEW.TS SPECIFICATIONS

Latest Technology Switching Mode Power Supply with wide range input : AC Input ....110 - 240 volt – Low consumption 0.25 Amps . Homologation CE .

Adjustable 12 volts Output , stabilized , 5 or 10 Amps , depending on Swimming pool size and requirements.

NEW.TS System can be operated “wireless” with remote control.

NEW.TS Requires an efficient Ground Connection.

T.D.S. “Total Dissolved Solids” in Water must be between 300 and 400 ppm with “ NO MORE “ than 50% dissolved salts. If these requirements are not in this range ONLY specialized Technician can adjust the Equipment output according to the water conditions.

Adjustable High Frequency Low Voltage Pulsed DC Power Output.

Both Electrodes are overload protected by an automatic resettable fuse.

Electrodes Operating Frequency 800 Hz to 3200 Hz

Electrodes Polarity will be reversed automatically about every 15 to 20 minutes to avoid mineral deposits .

Algae control timer from 3 to 6 hours operated by “ ONE” push switch for full power , once this time is reached , Algae Output will automatically return on maintenance state “LOW”.

To monitor the amount of copper ions dissolved , normally 0.5 ppm to 0.8 ppm. Please use the “ copper tester “ provided.

Titanium electrodes , composed of 5 Titanium Coated Plates . These electrodes are very efficient Oxygen generators.

Algae control electrodes are 99.9% pure copper.

NEW.TS System is supplied with :

Digital PH tester

T.D.S. Tester

Copper tester

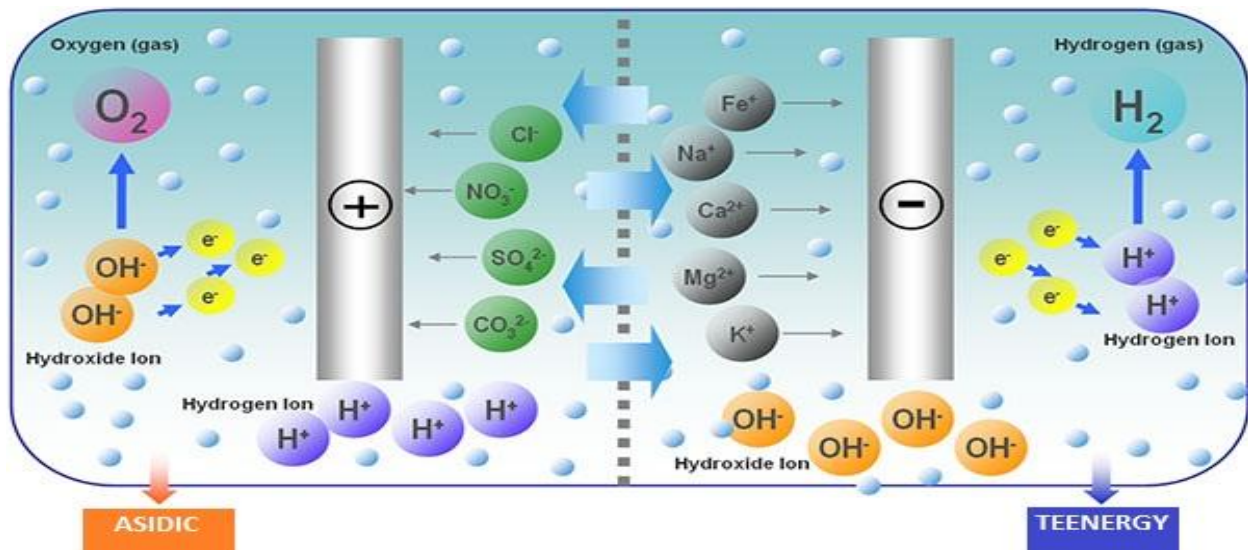
### IMPORTANT NOTE

NEW.TS System "MUST" be installed by a licensed electrician and in "accordance with the National Electrical Code " and such local codes and ordinances as they apply.

This would include a "Ground Fault Circuit Interrupter" required by law for any electrical installation in any dwelling or other installation.

NEW.TS System is to be installed by professional only!!

"WE ARE NOT " responsible for any problems issued or incurred by bad workmanship or improper installation or "IMPROPER HANDLING" of the product " NEW.TS".



This shows what water ionization process is about

When the electrodes are immersed in water and a DC voltage is applied ionization occurs.

The combination with Copper electrodes and Coated Titanium , The NEWTS System generates and releases in the water:

CU 2+ COPPER IONS

O2 Molecular OXYGEN

H2 HYDROGEN GAS

OH HYDROXIDE IONS

More powerful than Chlorine and Ozone these natural "OXIDISERS" are effective in eliminating algae, viruses, bacteria, yeast, fungi, protozoa and wide variety of waterborne pathogens and even "chlorine" resistant organisms like Legionella and Cryptosporidium.

## Digital PH Tester



