

AquaVizor *Users Manual*



www.AquaVizor.com

AQUA
LAB7



Your Pool Water Monitor:

Congratulations, you have just purchased the Aquavizor Pool Water Monitor.

The AquaVizor is a fundamental innovation in the pool care industry. It will revolutionize how you maintain your pool. Once assembled and installed in your pool, the Aquavizor monitoring system will begin monitoring the pH, ORP, and temperature continuously. The monitor will measure and advise you on how to optimally maintain your pool for maximum safety and comfort. The AquaVizor is the ultimate addition to any pool; providing convenient, easy to understand recommendations for optimum water maintenance.

A well maintained pool results in comfortable, confident swimming, and extends the life of your pool surfaces and equipment.

You are only a few simple steps away from the future of pool water maintenance. This manual will guide you through the assembly and start-up procedures for your new Aquavizor Pool Water Monitor.

The AquaVizor monitoring system has been designed to be simple to use. Menus are simple and context sensitive. The Aquavizor communicates with simple recommendations, and is intended to be easy to operate without complicated instruction. If you should need to refer to these instructions in the future they are available at our website:

www.AquaVizor.com.

SAFETY WARNINGS



For maximum performance and safety, please comply with all 'Caution' and 'Warning' notices.



WARNING: The Aquavizor water monitoring pod does not monitor human or pet activity in the pool. **Children should never be left unsupervised in a pool or spa.**



WARNING: The Aquavizor water monitoring pod is not a toy. Use caution when swimming around the pod to avoid damaging the pod or becoming somehow entangled with the pod. **Children should never be left unsupervised in a pool or spa.**

SAFETY WARNINGS



WARNING: Do not handle the display or power transformer if your hands are wet; as this could present an electrical shock hazard.



WARNING: The Aquavizor water monitoring system can monitor pH, ORP (Oxidation-Reduction Potential), and temperature. It does not monitor other critical constituents of your pool water and is not intended to eliminate pool water testing. Failure to maintain water chemistry within established limits can result in unsafe swimming conditions and damage to pool surfaces and equipment.



WARNING: The Aquavizor water monitoring system does not replace sound maintenance practices and pool water testing. Failure to test and maintain your water chemistry and equipment can result in unsafe swimming conditions and damage to pool surfaces and equipment.



WARNING: The Aquavizor water monitoring pod is not intended to be used as a flotation device.

SAFETY WARNINGS



CAUTION: Leaving the Aquavizor water monitoring pod out of the water for extended periods of time will result in damage to the sensor system and/or reduced sensor life. The monitoring pod may be stored in a cool dry place for short periods by installing the protective cover over the sensor array. (Storage time out of the water should be limited to less than 72 hours).



CAUTION: The sensor cell is a sophisticated analytical instrument, it should be treated gently. Take care to avoid touching the sensing bulb surface, and



CAUTION: Dropping or striking the Aquavizor water monitoring pod can result in permanent damage to the pod or sensor array.

Your Pool Information

What you need to know about your pool before using the AquaVizor:

Pool Balance:

Your pool should be adjusted into proper balance before installing the AquaVizor. Installing the AquaVizor into a grossly unbalanced volume of water can result in shortening the sensor life and voiding the warranty.

NOTE: Balanced pool guideline:

pH – 7.2 to 7.6

Chlorine – 1 to 3 ppm

Pool Volume:

The pool volume must be entered into the AquaVizor system to be used when calculating the correct amount of chemistry to keep your pool in optimum balance.

The AquaVizor system stores pool volumes in 5000 gallon increments. Simply choose the value that is closest to your actual or estimated pool volume.

Estimating Pool Volume:

Estimating Pool Area & Volume

Circle	$V = \pi r^2 D$
Kidney	$V = (A + B) \times L \times 0.45 \times D$
Ellipse	$V = (L \times W) + \pi r^2 \times D$
Rectangle	$V = L \times W \times D$
Oval	$V = [\pi (A \times B)] \times D$

Multiply these values by 7.48 to convert to gallons.

Your Pool Information

Pool Type:

The AquaVizor can be used in the most common types of residential and commercial pools.

Pool Type Choices:

Regular Pool (Chlorine Sanitizer)

Salt Water (Salt Water Chlorinator)

Copper Ion (Ionization Sanitation)

Choose your pool type during the 'Set-up' process.

Preferred Sanitizer:

The preferred chlorine sanitizer must be entered into the AquaVizor system to be used when calculating the correct amount of chemistry to keep your pool in optimum balance. The Aquavizor will allow you to choose from several of the most common forms of pool water chlorinators.

Chlorination choices:

Liquid, sodium hypo chlorine

Dry, Cal-Hypo chlorine

1" tablets Trichlor

2" tablets Trichlor

Choose your preferred chlorination product during the 'Set-up' process.

Quick Start

Step 1: Inventory System Components

The AquaVizor Monitoring System is designed to be easy to set-up and use. First step, unpack and identify the included hardware.

Item 1 AquaVizor Monitoring Pod

Item 2 AquaVizor Information Display

Item 3 Battery Pack

Item 4 Sensor Cell

Item 5 Display Transformer



Step 2: Connect the Information Display

WARNING: Do not handle the display or power transformer if your hands are wet. As this could present an electrical shock hazard.

Remove the display from the protective wrap, and locate it in a convenient location for easy viewing. Rotate the antenna up for maximum reception. Connect the power transformer to the Information Display, and plug into an electrical outlet.

The display and power LED should light up. The screen will display:



Waiting for
Communications
Menu

Step 3: Assemble the Aquavizor pool water monitor

Unscrew the battery compartment cover as shown in Figure 2



Figure 2

Insert the battery pack into the down tube and connect the battery connector as shown in Figure 3.

Remove the sensor cell from its box, and remove protective cap over sensor cell.



CAUTION: The sensor cell is a sophisticated analytical instrument, it should be treated gently. Take care to avoid touching the sensing bulb surface, and avoid sensor contact with other objects.

NOTE: Some crystalline material may have formed around sensor membrane during storage. This is normal and will not affect the Aquavizor performance or sensor life.

Install the cell into the Aquavizor pool water monitor as shown in Figure 3.

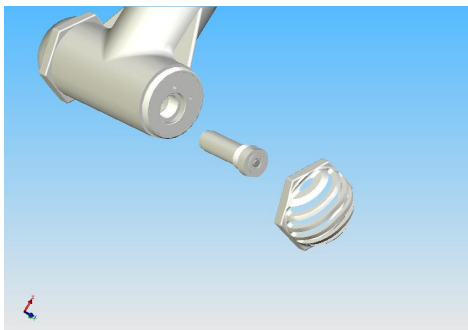


Figure 3

Step 4: Install protective covers

Screw protective vented cap over sensor side of the pool water monitor. Screw storage cap over non-sensor side of the pool water monitor. See Figure 4.

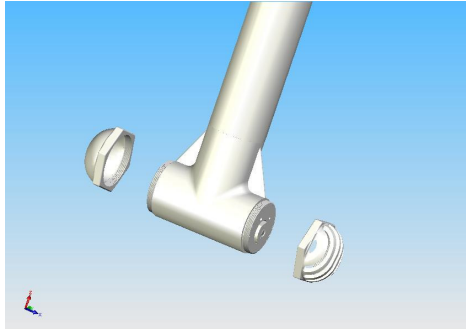


Figure 4

Step 5: Place pool water monitor in pool

Put the pool water monitor into your pool. Use the tether to constrain the monitor in the desired location. The monitor will begin sending pool chemistry information immediately.

Entering Pool Information

Enter your pool information

The installation menus will allow you to enter information about your pool. The Aquavizor monitoring system needs to know your specific needs regarding pool volume, type of sanitation and chemistry products in order to provide custom information tailored to your unique pool. Your information display will establish a unique pairing relationship with the Pool Water Monitor. Once this communication has been established for the first time, the Aquavizor will display the message below:



Press the Menu Button

Entering Pool Information

-> Regular pool		
Salt Pool		
Copper ion		
Back	Change	OK

Move the selection arrow to your pool type using the 'Change' button. Select 'OK' to enter the desired choice into the display memory.

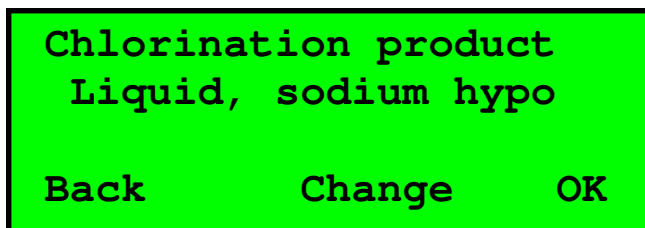
Measurement units:		
-> °F, Gallons		
°C, Liters		
Back	Change	OK

Move the selection arrow to your desired units using the 'Change' button. Select 'OK' to enter the desired choice into the display memory.

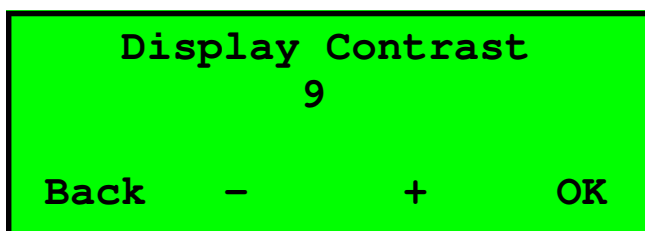
Pool Volume			
5000 gal.			
Back	-	+	OK

Use the (-) and (+) buttons to change the volume value to most closely match your pool volume. When the closest volume is displayed, select 'OK' to enter the choice into the display memory.

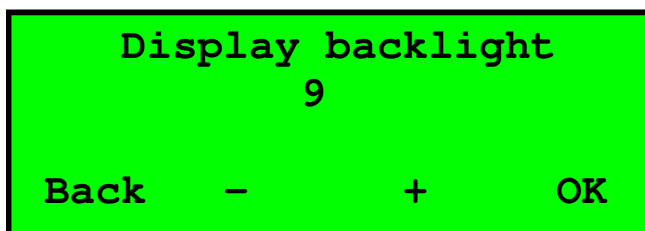
Entering Pool Preferences



The Aquavizor Monitoring System is programmed to support the most commonly used chlorination products. Use the 'Change' button to display the desired chlorination choice. When your product is displayed, select 'OK' to enter the desired choice into the display memory.



Use the (-) and (+) buttons to change the screen contrast. When the desired contrast level is displayed, select 'OK' to enter the desired choice into the display memory.

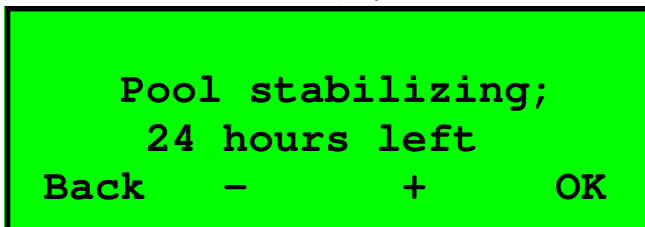


Use the (-) and (+) buttons to change the screen backlight level. When the desired level is displayed, select 'OK' to enter the desired choice into the display memory.

Monitor Messages

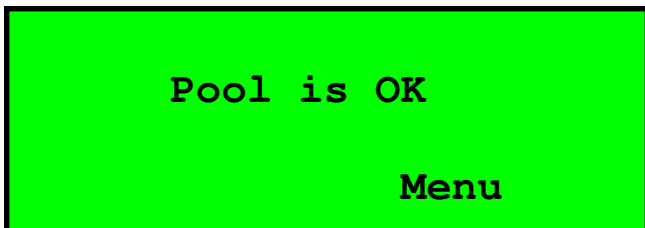
Pool Stabilization:

When the Aquavizor determines that a stabilization period is required after a chemistry addition or other disruptive event it will enter a standby state where it continues to monitor the pool conditions, but will display:



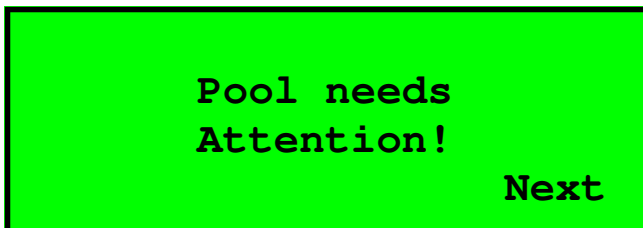
Pool is OK

The Aquavizor Monitoring System will display 'Pool is OK' when the pH and Chlorine levels are within established limits. Specifically the pH is between 7.2 and 7.8, and the Chlorine level is greater than 1 to 1.5 ppm. When your pool is within these limits your display will appear as shown below:



Pool Needs Attention:

When the Aquavizor determines your pool requires attention the display will appear as shown below. Choose next and follow screen directions to correct pool chemistry.



LIMITED WARRANTY

Thank you for purchasing the Aquavizor pool water monitor. Aqualabz warrants all parts to be free from manufacturing defects in materials and workmanship for a period of 90 days from the date of retail purchase.

This warranty is limited to the first retail purchaser, and is not transferable. Aqualabz liability shall not exceed the replacement of the defective part, and does not include labor costs to remove or reinstall it, and does not include transportation to or from the factory. This warranty does not cover failures or malfunctions resulting from the following:

1. Not maintaining a proper chemical balance in you pool and/or spa. (Proper balance levels are considered to be pH between 7.2 and 7.8, Alkalinity between 80 and 120ppm, Total Dissolved Solids less than 2000, not including salt).
2. Abuse, negligence, alteration, accident, or acts of God.
3. Use of non-factory authorized parts or accessories in conjunction with the product.

Failure to properly store the water monitoring pod when not in use. (The sensor array must remain moist during removal from the water, and while in storage as prescribed in this instruction manual).

LIMITATION OF LIABILITY:

This is the only warranty given by Aqualabz, LLC. No one is authorized to make any other warranties on the behalf of Aqualabz, LLC. **THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY. AQUALABZ EXPRESSLY DISCLAIMS AND EXCLUDES ANY LIABILITY FOR CONSEQUENTIAL, INCIDENTAL, INDIRECT OR PUNITIVE DAMAGES FOR BREACH OF ANY EXPRESSED OR IMPLIED WARRANTY.** This warranty gives you specific legal rights. You may also have other rights which vary by state or province.

WARRANTY CLAIMS:

For prompt warranty consideration visit our website at www.aqualabz.com. You will need model number, serial number, and the date of purchase. All returned parts must have a Returned Material number to be evaluated under the terms of this warranty.

FCC ID: TFU-AQV-1000
IC: 5964A-AQV1000
Model: Aquavizor 1000
USA

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

Part 15.21

Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

NOTE: The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

AquaVizor System

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