



HAYWARD®

092444A RevG

Aqua Connect Home Network

Web-Based Pool Control Interface

Operation Manual



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Hayward Industries
400 Connell Drive, Suite 6100
Berkeley Heights, NJ 07922
Phone: (908) 355-7995
www.hayward.com



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FCC Statement

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.

Changes or modifications not expressly approved by Hayward could void the user's authority to operate this equipment.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio / TV technician for help.

Industry Canada Statement

This Class B digital apparatus complies with Canadian ICES-003.

Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada.

The term "IC" before the certification / registration number only signifies that the Industry Canada technical specifications were met.



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Introduction

The Aqua Connect Home Network (ACHN) is a communications gateway that allows certain Hayward pool controllers to connect to a home network and, if desired, the Internet.

Home Network: Any home PC on the same router as the ACHN can become a pool control terminal. This is accessible via any web browser and does not require special software to be installed on the PC. This is known as “local server” functionality.

Internet: If the home has a full time (24/7) Internet connection, then the ACHN will communicate with the Aqua Connect website. Via an active login account on the Aqua Connect website, the homeowner is able to monitor and control their pool from any Internet enabled computer, anywhere. This is known as “web client” functionality.

The ACHN connects to the pool controller via the Hayward proprietary radio network and connects to the home router via a CAT5e ethernet (or equivalent) network cable. The ACHN is wired into the home network.

This Manual

This manual will cover three different topics:

- ACHN hardware
- Local server functionality
- Aqua Connect website (web client) functionality

This manual does NOT contain installation instructions. They are in a separate installation manual.

Achn Hardware

The front panel of the ACHN contains 4 LEDs at the top and the Teach Button at the bottom. The LEDs are labeled and their meanings are detailed in the table on the following page. The back panel of the ACHN contains the power jack, the Ethernet (CAT5e) connector, and the RS-485 connector. The ACHN connects to the pool controller as a wireless terminal does: It needs to be taught. Both ACHN and the pool controller must be put into Teach Mode at the same time to allow ACHN to link to the pool controller. As a fallback, ACHN can be wired into the pool controller RS-485 bus.

Teach Button

The Teach Button is used during installation both to initiate Teach Mode and to initiate Range Test Mode. Both Teach Mode and Range Test Mode may need to be re-run after installation.

Teach Mode

To initiate Teach Mode: First go to the Settings Menu on the pool controller, press the left arrow twice to get to the screen “Teach Wireless: + to start”, and then press the plus key. Then depress and continue to hold down the Teach Button on the ACHN. All 4 LEDs should turn off as soon as the Teach Button is pressed; they will remain off for several seconds as you continue to hold the Teach Button down. Then all 4 LEDs will begin to blink in unison and you should continue to hold the Teach Button down. Finally all 4 LEDs will turn on and remain on. If you release the Teach Button while all 4 LEDs are on solid then you will force the ACHN to enter Teach Mode.

Note that after releasing the Teach Button with the ACHN in Teach Mode the RF LED should immediately begin to blink rapidly. If this does not happen then the ACHN did not enter Teach Mode;



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press and hold the Teach Button to start the whole process over again. At the end of Teach Mode the RF LED should go on and remain on solid; the pool controller should display the message "Teach Wireless: Successful". If this is not the case then Teach Mode was unsuccessful and needs to be repeated.

Range Test Mode

Range testing only applies if you are using a wireless connection between the ACHN and the pool controller.

To initiate Range Test Mode on the ACHN: Disconnect the power jack, depress and hold the Teach Button, and re-connect the power jack with the Teach Button depressed. For the first several seconds after power is applied all 4 LEDs will be off; continue to press the Teach Button. Then all 4 LEDs will begin to blink in unison and you should release the Teach Button while this blinking is happening to enter Range Test Mode.

Note that after releasing the Teach Button with the ACHN in Range Test Mode the LINK LED should either come on solid or begin to blink. If the LINK LED is blinking then the ACHN is out of range of the pool controller. If the LINK LED comes on solid then you should wait at least one minute to see how many more LEDs turn on; this is a slow process and you will not get an accurate result unless you are patient. In Range Test Mode the ACHN LEDs act like the bars on a cell phone: Each additional LED is one more bar. If the signal strength is 2 bars or better then you have a usable communications channel to the pool controller; if you have less than two bars or the LINK LED is blinking then the ACHN needs to be relocated.

LED Functionality

LED functionality is shown below:

LED	LED ON Significance	LED OFF Significance
RF	ON when Webster has a solid communication channel with the pool controller.	OFF means pool controller communication has been lost.
Tx	Should blink ON when Webster is transmitting information across the Ethernet.	Always OFF is a problem.
Rx	Should be ON when Webster is receiving information across the Ethernet.	Always OFF is a problem.
LINK	ON when Webster is communicating information with the Aqua Connect website. Should blink as needed.	Always OFF means there is no communication with the website.

If all LEDs remain off check the power. If the RF LED remains off then you may need to repeat the range test to make sure that the RF communications path between the pool controller and the ACHN is sufficiently robust. If the Tx and Rx LEDs remain off then check the Ethernet cable; the ACHN is probably not connected to the router.

Local Server

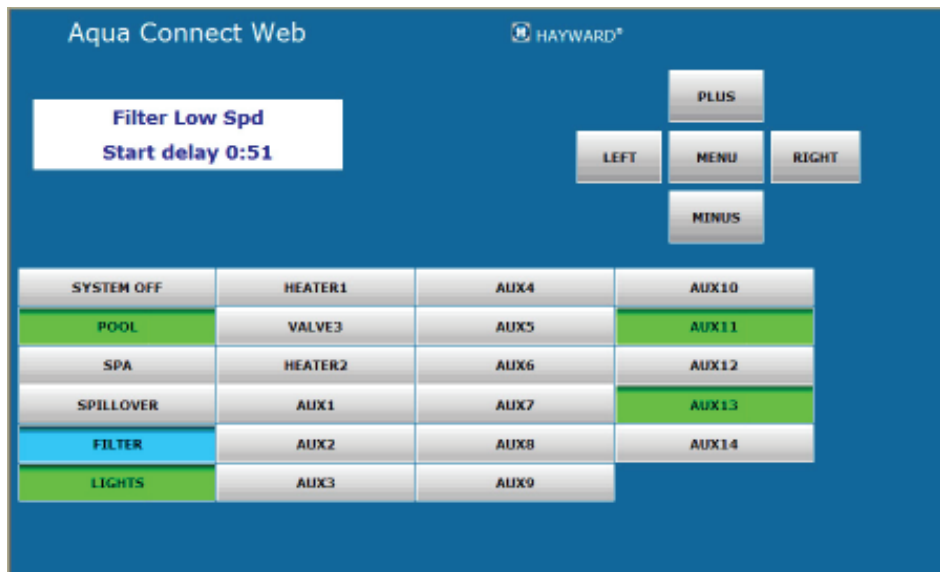
The "local server" is a remote control web page that is served by the ACHN and accessible from any PC connected to the same router that the ACHN is connected to. The local server is comple-



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mentary to the website, but it is also independent of the website. In fact, local server functionality is present even when there is no Internet connection to the World Wide Web.

It allows the PC to emulate a hardware terminal. The layout of the local server depends on the configuration of the pool controller hardware terminals. The image below shows the local server page for a Pro Logic PS-16:



Note that there is a two line text display (white background), menu navigation buttons (to the right of the text display) and pool control buttons (below the text display). The “Check System” LED is implemented as text just below the two line text display (when a Check System situation exists).

Accessing The Local Server

The ACHN uses its unique Media Access Control (MAC) address to identify and access its local server. The MAC address for each ACHN is located on the bottom of each device. The MAC is a string of the form 00:23:62:00:wx:yz where “wx” represents a string of valid hexadecimal characters. To start the local server, type the ACHN’s Uniform Resource Locator (URL) into your web browser’s address field. The local server’s URL (i.e., logical name) is the string “mypoolxyz” where the “xyz” consists of the last three digits of the ACHN’s MAC address. For instance the URL of the ACHN shown in the image above is “mypool319” because its MAC address ends in “319”. The last three digits can contain alphanumeric values. If the last three digits of your ACHN’s MAC are ABC, the name used for your ACHN would be “mypoolabc”. Do not enter a leading “www.” or a trailing “.com” when accessing the local server. The name is not case sensitive: You may use MYPOOLxyz, mypoolxyz, or even MyPoolxyz.

How The Button Works

The local server buttons are similar to the buttons on the Aqua Connect Remote Control page, but not identical. In general, feedback from the pool controller is so fast that there is no direct indication that a button has been pushed. Simply move the cursor over the button and click the mouse to



“depress” a button. Most buttons have a built in LED that can be read per the following table; the color of the button determines the LED state. Note that we have replaced the blinking LED on the hardware terminal by a third button color on the local server page. The table below explains how to interpret the button colors.

Button Color	Meaning
Gray Button	Corresponds to LED OFF, but is also the color used when no LED is associated with a button.
Light Green Button	Corresponds to LED ON.
Light Blue Button	Corresponds to LED blinking

The Pro Logic series of pool controllers includes support for button naming. For example, if the Aux 6 button is used to turn on the waterfall, the button can be renamed “Waterfall”. When buttons are renamed at the pool controller the chosen names will appear on the local server display.

Local Server Security

The communications link between the ACHN and the home PC which is displaying the local server page IS NOT encrypted (http, not https) and it cannot be setup to be encrypted. It is also NOT password protected. In order to provide security it is recommended that the ACHN NEVER be used with an unprotected wireless home network. Again, even though the ACHN connects to the home network via cable and the local PC may also connect via cable, there is still a security risk when there is an unprotected wireless home network.

Aqua Connect Web Site Operation

The Aqua Connect web site is a subscription service that allows a pool owner/pool service professional/pool builder to monitor and/or control a pool from any Internet enabled computer. The user needs valid login credentials, and must log into the web site before any services are provided. The subscription is associated with the ACHN (the pool) not with the login account.

Any number of ACHN units (pools) can be registered to the same login account. For example, one login account can access 1) your home pool, 2) the pool at your vacation house, and 3) the pool at your parent's house. This login account has three separate, independent subscriptions, one for each pool. A pool service professional may put an ACHN on each of the pools that they service, and register all of these ACHN units to a single login account. From that one account everything is visible. The login account to which an ACHN is registered is called the “Manager Account” for that ACHN.

The Manager Account can create sub-accounts to allow other people to access one, a few, or all of the managed pools.

Usage Models

There are three different usage models for the ACHN. In the first case, the pool owner is also the ACHN owner. The ACHN is registered to the homeowners login account and the homeowner is billed for subscription renewals.



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In the second case, a pool builder owns multiple ACHN units and installs an ACHN on every pool they build to allow them to monitor the pool for the duration of the warranty period. The pool builder has a master account to which every ACHN is registered. Sub-accounts are created for each homeowner so that they can access their own pool. In this case when the warranty period ends the pool builder has the option of moving the ACHN to the next new pool.

Finally, a pool service company can own multiple ACHN units and install one on every pool for which they have a service contract. The pool service company has a master account to which every ACHN is registered. Sub-accounts are created for each homeowner so that they can access their own pool. In this case the ACHN may be removed when the service contract expires and moved to a different location.

Creating a Master Account

If you own one or more ACHN units, you need to create a master account. If you are a homeowner and your pool builder/pool servicer owns the ACHN, then your pool professional will provide you with a login account – you should not create your own. A login account is only useful if it can access the ACHN connected to your pool.

To create a master account, open a browser and go to www.aquaconnectweb.com. Fill out all of the required information. You will be able to edit all of this later except for the username. You must choose a unique username. When you are finished click Next; if there is anything wrong with what you have entered you will stay at the same page and get one or more yellow error messages. After completing this information and accepting the Terms of Use and Privacy agreements, you'll be taken into your account where you can then register one or more ACHN units.

Login

Once you have a login account you can, from any Internet enabled computer anywhere, log onto the Aqua Connect web site to monitor and/or control your pool. Type www.aquaconnectweb.com to get to the web site login page, and then enter your username and password. The password is case sensitive; the username is not case sensitive. Once logged in, you will remain logged in until you manually log out or there is 30 minutes of inactivity.

Note that the entire Aqua Connect web site is secure, meaning that all communication between the computer you are logged in at and the web site is encrypted. Look at the URL at the top of your browser; it is: <https://www.aquaconnectweb.com/login.aspx>. Even if you type http into the URL it will be forced to this. The beginning https signifies that this is a secure web site. When you try to login to a secure web site your computer checks the authenticity of the security certificate of the web site. The line at the top of your browser that contains the URL becomes color coded when communicating with a secure web site. There is also a security status bar with the same color code.

You should never encounter a security certificate violation. If you do, contact Hayward technical support immediately. See the Miscellaneous section at the end of the manual for more details.

General Web Site Navigation

You navigate through the web site using both buttons and hyperlinks. Buttons appear in several places depending on which page you are viewing. At the top of all web pages there are three special links: Home, Help, and Logout (note that throughout this document we will use italics to indicate a button name or a link name that you must select (click on) to navigate the web site). The Site Listing page is the home page if you have access to more than one pool (ACHN), but if you have only one pool then your home page is the Dashboard.



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The Dashboard and Remote Control pages have navigation buttons in a column on the left side. Many pages have navigation buttons across the bottom. Other pages have hyperlinks, which show up as underlined text; hyperlinks can be located anywhere on the page. Note that some buttons/hyperlinks perform an action and DO NOT take you to another page. Some buttons/hyperlinks perform an action and take you to another page. Finally some buttons/hyperlinks only take you to another page.

Each page has a name, contained in the title block at the top of the page. The two pages you are likely to use the most are the Dashboard page and the Remote Control page. If you have access to multiple pools you will also have to navigate through the Site Listing page, which is a list of all of the pool that you have access to.

Be aware that the web site contains two distinct types of pages: Pool specific pages and account management pages. Most pages are pool specific.

A Quick Tour of the Web Site

The Site Listing page is a table with one row for each pool accessible by this login account. The first (leftmost) column contains the Pool Name that was given to the pool when the ACHN was installed and registered. The Pool Name is implemented as a hyperlink that takes you to the Dashboard page for that pool. (The Pool Name can be changed on the Pool Settings page.)

Dashboard Page: This page is used for monitoring current pool conditions. The Dashboard contains information about the current status of your filter, heaters, water and air temperatures, and, if using Sense and Dispense, water chemistry. Active Alarms are also displayed on the Dashboard. Note that the Dashboard is not updated as often as the Remote Control page.

Remote Control Page: This page looks just like a wireless tabletop or wall mount pool control terminal. There is a simulated 2 line text display with menu navigation buttons to the right and pool control buttons below. The Remote Control page can do anything that a remote pool control terminal can do.

Accounts Settings Page: The Account Settings page is where you update your account information, change your password, create and manage sub-accounts (if you are authorized), and set up your alarm notification email list.

Sub-accounts are independent login accounts that you can assign to other people (children, relatives, neighbors, employees, customers) to allow them to access your pool(s). The sub-accounts can be permanent or temporary, and can have full or limited access rights.

Your alarm notification email list is a list of email addresses that will receive an email whenever an alarm occurs on the pool. Alarms can signal temporary conditions that you need to address or can indicate problems with the actual pool equipment. Alarm emails are sent when the alarm first occurs, and then once daily until the alarm is cleared. If you don't like being nagged like this you can mute any individual alarm on the Dashboard.

Data History Page: The Data History page (and the related Reading History page) allows you to view your pool performance over time. You select which parameters you want to view and the period of time to view them over, either graphically or as a table. Note that the Aqua Connect web site is not a permanent repository for historical data on your pool. We will store recent performance history only. You have the option of downloading most of this data to your own computer at any time.



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Do Pool Survey & View Pool Survey Pages: Do Pool Survey and View Pool Survey pages allow you to enter, view, and modify pool surveys. Pool surveys contain water chemistry readings that are not yet available from electronic sensors; the pool owner or pool service provider must use a standard test kit to take these readings and then manually enter them into a Pool Survey. Some of this data is displayed on the Dashboard and used in the Water Balance computation.

Add A Pool Page: This page is a form that allows you to register another pool (ACHN) to your account.

Pools Settings Page: The Pool Settings page is where you update your pool information, control your alarms, and control which sub-accounts will have access to this pool.

On this page you have individual control over whether or not an alarm is displayed on the Dashboard. (You are NOT affecting the alarm, only the Dashboard display.) IMPORTANT: If you are physically removed from the pool and can only monitor it via the web site, then removing an alarm from the Dashboard can have serious consequences. It is recommended that you rarely, if ever, use this feature.

For some alarms you are allowed to modify the alarm limits (within reasonable ranges). For example: The default low alarm limit for Cyanuric Acid/Stabilizer is 60 ppm, a recommended limit for an outdoor pool that requires Cyanuric Acid/Stabilizer. If you have an indoor pool, Cyanuric Acid/Stabilizer is not required and you may choose not use it. To avoid a Low Stabilizer alarm on your indoor pool you can simply change the low alarm limit to 0 ppm for your indoor pool.

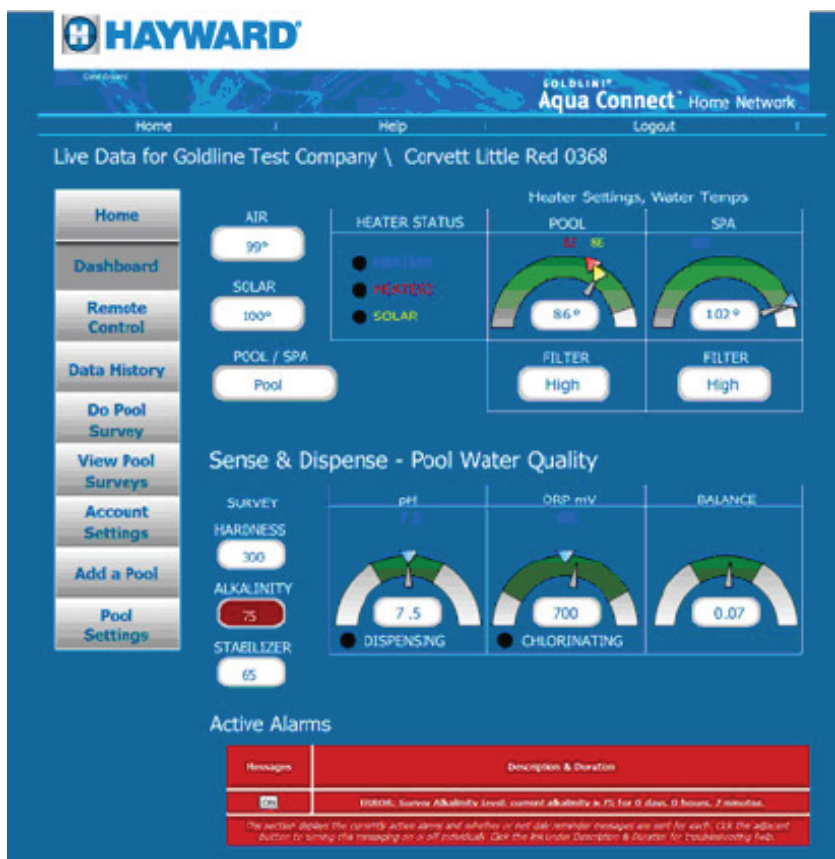
Finally, you can select the Manage Access button at the bottom of the page to go to the Pool Management page. This page has a table with every single sub-account you have created, showing whether that sub-account is allowed to access/control this particular pool.

Using the Dashboard page

The Dashboard page is the first page you see for any pool and is used to monitor, BUT NOT CONTROL, the pool. It is intended to display all significant pool status information simultaneously in one location. The image on the following page shows a Dashboard for a dual equipment configuration with separate heaters plus solar plus chemistry sense and dispense. There is also an alarm present related to the Total Alkalinity survey measurement. Your pool may not have all of these fields present, depending on your configuration.



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All of the information on the Dashboard is also available on the Remote Control page, but you have to either look for it in the menu structure or wait for it to appear on the two line text display. The Dashboard is a convenient display of a lot of information simultaneously.

There are five sections to the Dashboard page:

- The left navigation buttons (identical to the Remote Control page).
- The air and solar temperatures along with the Pool/Spa/Spillover status.
- The Heater Settings and Water Temp section displays the current heater status as well as the pool and spa filter status, pool and spa temperature setpoints, and current pool and spa temperature.
- The Sense and Dispense – Pool Water Quality section contains the pool survey data as well as the pH, ORP, and water balance dials.
- At the bottom of the page is the Active Alarms window.

Temperatures And Pool/Spa/Spillover Status

- **Air Temperature** - This temperature is always displayed.



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- **Solar Temperature** - The solar temperature will not be displayed unless solar is enabled. The solar temperature displayed is the temperature of the water in the solar collectors. When the filter is Off, the solar temperature becomes “n/a”.
- **Pool/Spa/Spillover Status** - This status is most important if you have a Pool & Spa standard configuration (a pool and a spa sharing a single pump, possibly including spillover from the spa to the pool). For a pool only system, the status will always be pool. For a Pool & Spa Dual Equipment configuration, the status will be pool unless spillover is present and active. For a Pool & Spa Std configuration, the status will be Pool if the filter is connected to the pool, Spa if the filter is connected to the spa, and Spillover if spillover is present and active.

Heater Settings And Water Temps

At the top right of the Dashboard is the “Heater Settings, Water Temps” section. This section displays water temperature, filter status, and heater setup and status. Heater Settings, Water Temps is subdivided into 3 fields: Heater Status, Pool and Spa.

Heater Status

There are 3 possible heat sources supported by the Pro Logic pool controller; two conventional heaters and Solar heater. If a heat source is enabled in the Pro Logic Configuration Menu, then a status LED for that heat source will appear in the Heater Status field, next to text that identifies the LED. If none of the 3 heat sources are enabled, then the Heater Status field will not appear at all. The Dashboard shown in the image on the previous page has three heat sources, none of which are currently active.

When an LED is on (green), then the heat source is active. When an LED is off (black), then the heat source is inactive.

Note that the heat sources are color coded: light blue corresponds to Heater1, red corresponds to Heater2, and yellow corresponds to Solar. Heater1, Heater2, and Solar are the default names for the 3 heat sources. It is possible to rename the Heater1 and Heater2 buttons on the Remote Control page. When these buttons are renamed on the Remote Control page, the new names will also appear in the Heater Status field.

Pool

The Pool section gives the status of the pool. In a Pool Only or Pool & Spa Dual Equipment configuration, the Pool section will ALWAYS be present. In a Pool & Spa Standard configuration, the Pool section will be present when the filter is connected to the pool, or if spillover is possible and the system is in spillover mode.

The status of the pool filter pump is also displayed - High, Low, Cooldown, or Off.

The water temperature can only be read accurately when there is water flowing past the sensor. So if the filter is in any state other than Off, an accurate water temperature is available and will be displayed. When the filter is Off, the last valid water temperature will continue to be displayed for a few hours, but the water temperature value will eventually switch to “n/a” and remain there until the filter turns back on. The water temperature is displayed 2 ways: Numerically and also using a needle on a half round dial. When the numerical water temperature display is “n/a”, the needle will disappear.

The set points of every heater that can be connected to the pool are also shown. A color coded triangle (same color code as for Heater Status) appears on the dial and color coded text appears above the dial. Set points are always valid (even when the filter is off).



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Spa

This section gives the status of the spa. In a Spa Only or Pool & Spa Dual Equipment configuration the Spa section will ALWAYS be present. In a Pool & Spa Std configuration then the Spa section will be present only when the filter is connected to the spa. The status of the filter pump is also displayed - High, Low, Cooldown, or Off.

The water temperature can only be read accurately when there is water flowing past the sensor. So if the filter is in any state other than Off, an accurate water temperature is available and will be displayed. When the filter is Off, the last valid water temperature will continue to be displayed for a few hours, but the water temperature value will eventually switch to "n/a" and remain there until the filter turns back on. The water temperature is displayed 2 ways: Numerically and also using a needle on a half round dial. When the numerical water temperature display is "n/a", the needle will disappear.

The set points of every heater that can be connected to the spa are also shown. A color coded triangle (same color code as for Heater Status) appears on the dial and color coded text appears above the dial. Set points are always valid.

Sense & Dispense - Pool Water Quality

This is divided into 4 sections: Survey, pH, ORP, and Balance. These sections provide data on your pool chemistry and will only appear if your pool controller is using an AQL-CHEM chemistry kit and sensing has been enabled. If so, the following variables will be shown:

pH

pH is the classic measure of the acidity/alkalinity of your pool on a scale from 0 – 14. The working pH of a swimming pool is a far narrower range centered at 7.5. The pH sensor used will only return an accurate value when there is water flowing past the sensor. If the filter is in any state other than Off an accurate pH reading will be displayed. When the filter is Off, the last valid pH reading will continue to be displayed for a few hours, but the pH reading will eventually switch to "n/a" and remain there until the filter turns back on. The pH reading is also used in the water balance computation.

The pH reading is displayed 2 ways: Numerically and also using a needle on a half round dial. When the numerical pH reading is "n/a", the needle will disappear.

pH high and low alarms originate in the pool controller. They are currently fixed. These alarm limits appear on the pH dial as the ends of the green region. When the pH needle is within the green region of the dial, the numerical pH will be displayed as blue text on a white background. When the pH needle is outside of the green region of the dial then pH is in an alarm condition and the numerical pH will be displayed as white text on a red background.

There is a pH setpoint that will appear both as a triangle on the dial and as text above the dial. If pH Control is set to Auto, then a Dispensing LED will appear below the dial. When this LED is on (green) acid is being dispensed to lower the pH (either in the form of CO₂ gas or as a liquid acid, depending on how your pool is installed). When this LED is off (black), no CO₂ or acid is being dispensed. Note that pH control is only capable of lowering the pH of your pool.

ORP

ORP, or Oxidation Reduction Potential, is a measure of the sanitizing effect of the chlorine in your pool water. If the ORP is too low then bacteria can grow in your pool; if the ORP is too high, your



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eyes can be irritated and pool equipment can be damaged. Refer to the AQL-CHEM manual for a detailed explanation of this measurement.

The ORP sensor used will only return an accurate value when there is water flowing past the sensor. If the filter is in any state other than Off, an accurate ORP reading will be displayed. When the filter is Off, the last valid ORP reading will continue to be displayed for a few hours, but the ORP reading will eventually switch to "n/a" and remain there until the filter turns back on. The ORP reading is also used in the water balance computation.

ORP high and low alarms originate in the pool controller. They are currently fixed. These appear on the ORP dial as the ends of the green region. When the ORP needle is within the green region of the dial, the numerical ORP will be displayed as blue text on a white background. When the ORP needle is outside of the green region of the dial then ORP is in an alarm condition and the numerical ORP will be displayed as white text on a red background.

The ORP reading is displayed 2 ways: Numerically and also using a needle on a half round dial. When the numerical ORP reading is "n/a", the needle will disappear. When auto control of ORP is selected on the pool then an ORP setpoint will be displayed both as a triangle on the dial and as text above the dial. When timed (percentage) control is selected, the setpoint will NOT appear on the dial.

Below the ORP dial is a Chlorinating LED. When this LED is on (green) the electronic chlorinator on your pool is active. When this LED is off (black) the electronic chlorinator is inactive. The electronic chlorinator is only capable of increasing the ORP of your pool.

Balance

The final dial is the water balance, sometimes known as the Langolier Saturation Index. This is a measure of the water quality of your pool that takes into consideration the pH, the water temperature, the Calcium Hardness, and the Total Alkalinity.

The water balance is 0 for a perfectly balanced pool. Any number between negative 0.5 and 0.5 is considered good. For values outside of this range the pool water is potentially damaging to the pool and pool equipment (at least over the long term).

The green region of the water balance dial is from -0.5 to 0.5 (fixed). When the water balance needle is within the green region of the dial, the numerical water balance will be displayed as blue text on a white background. When the water balance needle is outside of the green region of the dial, then water balance is in an alarm condition and the numerical water balance will be displayed as white text on a red background.

The pH and water temperature values that are used to compute the water balance are only valid when there is water flowing past the pH and temperature sensors. Further, the Calcium Hardness, Total Alkalinity and Cyanuric Acid readings from the Pool Survey have an expiration date. So if the pool filter is in any state other than Off and the Calcium Hardness and Total Alkalinity readings are still valid, then an accurate water balance reading will be displayed. When the pool filter is Off, the last valid pH and temperature readings will continue to be displayed for a few hours so that the water balance reading can continue to be displayed. The water balance reading will eventually switch to "n/a" and remain there until the pool filter turns back on. Also, if the Calcium Hardness and Total Alkalinity readings from the Pool Survey expire then the water balance reading will display "n/a" regardless of the state of the pool filter.

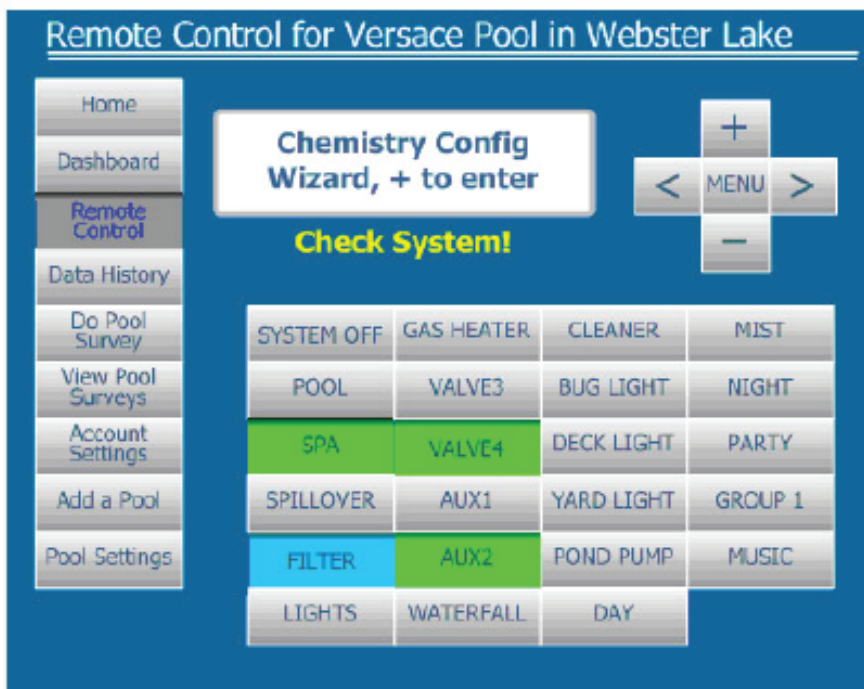


Active Alarms

At the bottom of the page is the “Active Alarm” display. If there are any active alarms they will be noted here, one entry per alarm. Each alarm is a hyperlink into an alarm help file that will provide additional information on the cause and the steps required to resolve the alarm. When alarms are cleared, they are removed from the Active Alarm display. If there are no active alarms the red box goes away and the text “No Active Alarms” appears.

Using the Remote Control page

The Remote Control page allows you to control your Aqua Rite Pro or Pro Logic pool controller as if you were standing in front of it. The page will look similar and simulate the function of the pool controller's local display/keypad or a physical remote control. If your pool controller is a Pro Logic PS-16, then the Remote Control page will look and function like a PS-16 remote control. The image below shows the PS-16 version of the Remote Control page.



There are four sections to the Remote Control page:

- The left navigation buttons (not present on a physical remote).
- The 2 line text display (white display with blue text).
- The menu navigation buttons (to the right of the two line text display).
- The pool control buttons (below the two line text display).

There are several differences between a physical remote control unit and the Remote Control page that need to be noted. First, the physical remote controls have small round pool control buttons with one or more LEDs next to each button. The Remote Control page has large rectangular buttons with the LED function built into the button itself. LED functionality is explained in the following table.



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Button Color	Meaning
Gray Button	Corresponds to LED OFF, but is also the color used when no LED is associated with a button.
Light Green Button	Corresponds to LED ON.
Light Blue Button	Corresponds to LED blinking
Black "SENT" Button	A temporary state showing that a key press has been accepted.

When you push a button on the Remote Control page the button will momentarily turn black and the word "SENT" will be displayed on the button. This is to give you positive feedback that your button push was forwarded to the pool controller. This immediate feedback is given because it may take several seconds to receive actual feedback (an LED state change or a two line text display update).

The Pro Logic series of pool controllers includes support for button naming. For example, if the Aux 6 button is used to turn on the waterfall, the button can be renamed "Waterfall". When buttons are renamed at the pool controller, the names will appear on the Remote Control page. The image on page 13 shows many renamed buttons.

Note that on actual remote control terminals there are three LEDs (Pool/Spa/Spillover) associated with one button. On the Remote Control page there are three separate buttons that are displayed, to implement the three LEDs. Be aware that this is really **ONLY ONE BUTTON**. Pushing **ANY** of these buttons (Pool, Spa, Spillover) will advance the Pool/Spa/Spillover state **TO THE NEXT AVAILABLE STATE**. Pushing the Spa button will **NOT** always put the controller into Spa state.

On actual remote controls there is a Check System LED to the right of the LCD display. On the Remote Control page the words "Check System!" appear in yellow text below the two line text display when a check system error is active.

There is an inactivity timeout on the Remote Control page. After 5 minutes of inactivity (no button presses) you will be taken to the Dashboard page for that pool.

Using the Accounts Settings page

Creating And Managing Sub-Accounts

If you have a Manager Account (if you've created the account yourself and then registered one or more ACHN devices to the account), then you are capable of creating sub-accounts beneath your Manager Account. These sub-accounts are separate login accounts with their own username and password that you can provide to other people (your customer/your neighbor/your relative/your spouse/your child). The sub-account can be given access to one or all of the pools that are registered to your account, at your discretion. The type and level of access to each pool that a sub-account has is also at your discretion (on a pool by pool basis).

Sub-accounts are lower level accounts than the Manager Account that creates them and are not capable of creating their own sub-accounts. Sub-accounts cannot change their own privileges; they will always have the privileges that you give them. You will always have the option of disabling



any sub-account you created or of reducing the sub-account access privileges.

If an ACHN subscription expires then the pool associated with that ACHN becomes inaccessible on the Aqua Connect web site. The pool becomes inaccessible to the Manager Account that owns the ACHN and ALL sub-accounts beneath that Manager Account that have been given access to that pool (ACHN) until such time as the subscription is renewed.

Sub-Account Privileges

Sub-accounts can have a variety of privileges depending on how you set them up. This section will describe the options available to you when you set them up. The next section will describe how to set them up. You control sub-account privileges in two ways. First, you choose an account type. Second, you decide what access privileges the sub-account should have on each pool that you manage (and this is decided on a pool by pool basis).

There are two types of sub-account: User and View Only. A User account is intended to allow full control access to at least one pool, while a View Only account is intended to allow monitor only access to all pools. When a sub-account is created it will default to View Only. In fact, you cannot create a User sub-account directly; you must create a View Only account and then go back into Manage Sub-Accounts and change the type to User. Access privileges to each pool are controlled by the Pool Management page, which can be accessed from the Dashboard by selecting Pool Settings and then scrolling to the bottom of the page and selecting Manage Access. The Pool Management page has an entry for every sub-account and allows the pool manager to determine which, if any, sub-accounts should have access to this pool. A full rundown of per pool privileges base on sub-account configuration is shown in the table on page 17.

Sub-Account Creation Procedure

- Before beginning the procedure, decide which of the pools that you manage should be accessible to the sub-account. Then look at the table on page 17 and determine the privileges that you would like to provide to the new sub-account for each pool.
- Select Account Settings from the left hand column of buttons on the Dashboard or the bottom of the Site Listing. This will take you to the Account Settings page. As you go down the page there are four white fields: Password, Account Details, Alarm Notifications, and Account Management. Click on the Create a Sub-Account link from the Account Management field near the bottom of the page. This takes you to the Create Sub-Accounts page.
- On the Create Sub-Accounts page you need to fill out all of the required information. With one exception, all of this information can be changed by the person you are assigning the sub-account to. So if you aren't sure about a phone number or a zip code that will not be a problem. The one piece of information that cannot be changed is the username. You may want to ask the person you are creating the sub-account for if they have a preference for username. If you are a pool service company you may want to establish a system for assigning usernames: for example first initial last name. Be aware that the username **MUST** be unique. If you enter a username that has already been taken you will get an error message ("The username you entered is already taken! Please enter another username.") and you will have to try again.
- When you are done entering information, select Add from the bottom of the page. If the information is complete and the username is unique you will be taken to the Site Listing page. At this point the sub-account has been created but is has not been given access to one or more pools.
- The sub-account you just created is a View Only Account. If you want it to be a User Account then return to the Account Settings page and click on the Manage Sub-Accounts link from the Account Management field near the bottom of the page. This takes you to the Manage Sub-



Accounts page. The Manage Sub-Accounts page contains a table of all of the sub-accounts that you have created. The left most column contains links to the individual accounts. Click on the link for the account you wish to change.

- In the top field ("Sub-Account Details") there is a drop down box labeled "Access". Change the value in the drop down box to User.
- Click on the Save and Return button on the bottom of the page. This will return you to the Site Listing page. At the Site Listing page select the pool (or the first pool) that you want the sub-account to have access to. This will take you to the Dashboard page for that pool.
- Select Pool Settings from the left hand navigation column. This takes you to the Pool Settings page. Scroll to the bottom of the page and click on the Manage Access button. This will take you to the Pool Management page.
- The lower field on this page is called Unit Access. It contains a table showing each sub-account created and managed by your Manager Account. The rightmost column of that table shows the privileges of that sub-account on this pool. There is a drop down box to select access level and a check box to enable alarm warning email notifications. The default levels are "No Access" and no notifications.
- Go to the drop down box for this sub-account and select either "Read Only" or "Read/Write" to provide access to the sub-account. Check the notifications box if you would like the sub-account to receive alarm warning emails. "Read/Write" allows the sub-account to change pool configuration and control pool features while "Read Only" does not.
- Once you have configured access to this pool, click on the Update button at the bottom. You should get a yellow message near the top of the page that says "The Unit Access has been updated". At this point select Home at the top of the page to return to the Site Listing page. Select the next pool and follow the same procedure that you did with this pool.
- If this is the last pool that you wish the sub-account to access, then select Logout from the top navigation row.
- Login to the sub-account with the username/password you just defined. Make sure that the sub-account is able to see all of the pools that you provided access to.

Sub-Account Management Procedures

The Manager Account that created the sub-account can modify sub-account privileges at any time.

Disable a Sub-Account

Should it become necessary to eliminate a sub-account:

- Go to Account Settings and then go to the bottom of the page and select the Manage Sub-Accounts link. You are now at the Manage Sub-Accounts page.
- In the left most table column click on the sub-account you wish to disable.
- Use the "Access" drop down box in the "Sub-Account Details" field. Changing the drop down box value to "Disabled" essentially deletes the account (although you can re-activate it later).
- Click on the Save and Return button at the bottom of the page. This will return you to the Site Listing page.

Switching a Sub-Account Type

Should it become necessary to change a sub-account from View Only to User, or vice versa:

- Go to Account Settings and then go to the bottom of the page and select the Manage Sub-Accounts link. You are now at the Manage Sub-Accounts page.
- From the left most table column click on the sub-account you wish to modify.
- Use the "Access" drop down box in the "Sub-Account Details" field. Change the drop down box value to "View Only" or "User" as required.
- Click on the Save and Return button at the bottom of the page. This will return you to the Site Listing page.



Changing Access to a Pool

Should it become necessary to grant a sub-account access to additional pools, or eliminate access to existing pools:

- Go to the Dashboard for each pool for which you wish to change privileges for this sub-account.
- Select Pool Settings from the left navigation column.
- Go to the bottom of the page and select Manage Access. This takes you to the Pool Management page.
- On the right side of the sub-account table, for each sub-account, are a drop down box to select access privileges to this pool and a check box to select email notification for this pool. Modify these as required.

Sub-Account Type	Pool Access Level	Privileges Given to the Sub-Account
Disabled	n/a	Cannot login – no access at all.
View Only Account	No Access	Login is allowed, but this pool is invisible to this sub-account. No access is provided to any web page specific to this pool.
	Read Only	Read and modify Account Settings for sub-account Read but not modify Pool Settings for this pool Read but not modify existing Pool Surveys Can't create new Pool Surveys Read the Dashboard Read and navigate the Remote Control menus Can't change pool configuration, settings, set points Can't control pool features (filter, lights, etc.)
	Read / Write It is recommended that you DO NOT use this combination of sub-account type and pool access level.	Read and modify Account Settings for sub-account Read but not modify Pool Settings for this pool Read but not modify existing Pool Surveys Can't create new Pool Surveys Read the Dashboard Read and navigate the Remote Control menus Change pool configuration, settings, set points Control pool features (filter, lights, etc.)
User Account	No Access	Login is allowed, but this pool is invisible to this sub-account. No access is provided to any web page specific to this pool.
	Read Only	Read and modify Account Settings for sub-account Read but not modify Pool Settings for this pool Read but not modify existing Pool Surveys Can't create new Pool Surveys Read the Dashboard Read and navigate the Remote Control menus Can't change pool configuration, settings, set points Can't control pool features (filter, lights, etc.)
	Read / Write	Read and modify Account Settings for sub-account Read and modify Pool Settings for this pool Read / modify / delete existing Pool Surveys Create new Pool Surveys Read the Dashboard Read and navigate Remote Control menus Change pool configuration, settings, set points Control pool features (filter, lights, etc.)



Changing Your Aqua Connect Login Account Password

Once your login account has been created, you can change the password at any time (you will never be forced to change the password). This applies to any type of login account (Manager, User, and View Only). To change the password:

- Login to the account with the present password and select Account Settings from the left hand column of buttons on the Dashboard or the bottom of the Site Listing page. This will take you to the Account Settings page.
- There is a Password box near the top of the Account Settings page. Click on the Change Password link.
- Enter your new password (twice to verify it). Then select Update.
- You should get a message saying that your password has changed. If you get an error message try again.
- Once you get the message that your password has changed, select Logout from the top navigation bar.
- Now login using the new password to make sure that the change has really taken effect.

Changing the Pool Name

The Pool Name is stored on the Pool Settings page. The Pool Name appears in the table on the Site Listing page and is included in the heading of every pool specific page to remind the web site user which pool they are looking at. It is also used in alarm warning emails. If you are managing multiple pools with your login account then you need Pool Names that are sufficiently descriptive that you can read the Pool Name and know exactly which pool this is.

- Select Pool Settings from the left hand column of buttons on the Dashboard. This will take you to the Pool Settings page.
- Edit the Pool Name, which is the first field that you can change. Then go to the bottom of the page and select Update.
- You will be brought back to the same page and the message "Unit profile updated!" should appear near the top of the page. The Pool Name is now changed. You can select Home from the top navigation buttons or you can select the Dashboard button at the bottom of the page to return.

Changing the Account Description (Name)

The Account Description (Name) is edited on the Account Settings page. The Account Description appears in the table on the Pool Management page and is included in the heading of every page. Note: On pool specific pages the owner Account Description is used, not the Account Description of the current login account.

- Select Account Settings from the left hand column of buttons on the Dashboard or the bottom of the Site Listing. This will take you to the Account Settings page.
- As you go down the page there are four fields: Password, Account Details, Alarm Notifications, and Account Management.
- Edit the Account Description, which is the first field that you can change in the Account Details field. Then go to the bottom of the page and select Save and Return.

Adding a Pool (ACHN)

You can manage multiple pools from your login account. Perhaps you have added a pool at your summer home, or your parents have added an ACHN to their pool and have asked you to manage it for them. Perhaps you are a pool service company. If you need to install another ACHN and then register the new ACHN to the existing login account:

- First install the ACHN per the Installation Manual.
- Once the ACHN is linked to the pool controller via RF and linked to the Internet, let it sit for 5 –



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10 minutes sending telemetry to the web site. The ACHN must register itself with the web site before you can register it to an account.

- Log into your account. If you already have multiple ACHN units registered you will go to the Site Listing page and you can select Add a Pool from the bottom of the page. If you only have one ACHN unit registered you will go to the Dashboard page for that the ACHN and you can select Add a Pool from the left navigation column buttons.
- This will take you to the Add a Pool page.
- Now select Add a Pool at the bottom of the page.

Setting up/Managing Emailed Alarm Messages

An alarm is a situation that requires your attention. Most alarms are generated by the pool controller and indicate an issue with either the pool water or the pool equipment. Some alarms are generated directly by the Aqua Connect web site (relating to pool survey data and water balance). All alarms relate to a specific pool.

The Aqua Connect web site can be configured to send emails notifying and reminding you of an alarm. These emails are configured on a pool by pool basis and can be sent to a single email address or a list of email addresses. Each pool has an Alarm Notifications email list. Alarm notifications can only be controlled by the login account to which the pool (ACHN) is registered. A sub-account that is allowed to access a pool has no control over alarm notifications. Setting up the Alarm Notifications list is a two step process (for the pool manager):

- Select Account Settings from the left hand column of buttons on the Dashboard or the bottom of the Site Listing. This will take you to the Account Settings page.
- The third field on the Account Settings page is the Alarm Notifications list. You are allowed to add or delete email addresses from this list. This is a global list – it applies to ALL of the pools registered to this account. We will deal with specific pools in the next step.
- Then go to the Pool Settings page for each pool and select Manage Access. This will take you to the Pool Management page.
- The Pool Management page contains a table containing every sub-account created by this Manager Account. The rightmost column of this table are checkboxes that enable “notifications” (alarm warning emails) when checked. This second step must be done on a pool by pool basis.

Silencing Alarm Warning Emails

All alarms appear at the bottom of the Dashboard page for the pool that they relate to. This is a static display, until the condition causing the alarm is removed. Pool controller generated alarms will also appear on the display on the Remote Control page.

The web site also generates a warning email the moment an alarm occurs, and then once a day until the alarm is cleared. In some cases the alarm warning emails may not be welcome. One common situation involves the low salt alarm. Some pool owners like to run their salt-chlorinated pool at a lower salt level than we recommend such that they are constantly running with a low salt alarm. To avoid getting a low salt alarm email every day, you can mute the alarm on the Dashboard page. The alarm will still exist on the pool controller. The alarm will still appear on the Dashboard. But the alarm warning emails will be muted.

To mute an alarm warning email:

- Go to the Dashboard page and scroll to the bottom where the alarms are visible.
- Each alarm will show it's current status (ON/OFF). You can change the status of each alarm individually.



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- When an alarm is off, no email warnings will be sent out to you.

Entering/Modifying Pool Survey Information

A pool survey involves a manual test of the pool water chemistry/quality that is independent of the sensors attached to the pool controller. The Aqua Connect web site contains a Pool Survey Form that should be used to keep track of the results of these manual pool surveys. Any number of pool surveys can be added and maintained.

Note that you must supply the pool water test kit. Many different kits are available at your pool supply store. Before purchase you should make sure that the kit you buy measures all three of the required items listed in the table below.

Some items in the pool survey are for your benefit or the benefit of your pool service firm. There are three items in the pool survey that are reported on the Dashboard and used in the Water Balance computation. These three items are: Total Alkalinity (sometimes called Alkalinity), Calcium Hardness (sometimes called Hardness) and Stabilizer (sometimes called Cyanuric Acid). These are the only three items (along with date and time) that are required by the Aqua Connect web site for a pool survey.

The Aqua Connect web site expects you to keep current values of Total Alkalinity, Calcium Hardness, and Stabilizer on file in pool surveys. These values have an expiration date; after several weeks or a month the value can no longer be assumed to be accurate, so a new pool survey needs to be performed. When these values cease to be accurate they will no longer be displayed on the Dashboard; "n/a" will be displayed instead. The expiration dates are shown below; to maintain a Water Balance measurement on the Dashboard manual readings must be taken every 2 weeks:

Measurement	Expiration
Total Alkalinity	14 days after the data is entered into the pool survey.
Calcium Hardness	28 days after the data is entered into the pool survey.
Stabilizer (Cyanuric Acid)	14 days after the data is entered into the pool survey.

To enter a new pool survey:

- Perform the actual test on your pool water using a commercially available test kit. These usually involve strips that contain a patch for each water condition that they test for. Each patch changes color when it comes in contact with your pool water. You dip the strip in the water, and then compare the final color of each patch to a chart. From this chart you estimate values. Once you have these values you can enter them on the web site.
- Select Do a Pool Survey from the left hand column of buttons on the Dashboard. This will take you to the Pool Survey Form.
- Enter the values from your test into the pool survey form along with the date and time. Each field in the form is clearly marked. Make sure that you enter values for Total Alkalinity, Calcium Hardness, and Stabilizer.
- When all of the values have been entered, select Update at the bottom of the form. You will be taken back to the top of the Pool Survey Form and you will see the message "The survey has been updated!".
- You may make additional edits to the form if you choose, and select Update again. Or you may return to the bottom of the Pool Survey Form and select Dashboard.



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Graphing Pool Data

The Aqua Connect web site allows you to view historical data in graphical form. The default data on the graph are pH and ORP values, but these can be changed. In general two variables are displayed simultaneously on the graph.

To view a graph:

- Select Data History from the left hand navigation column. This takes you to the Data History page.
- At any time you can push the Refresh button to update the graph. There are Refresh buttons both at the top and the bottom of the page.
- At the top of the page are the two date/time fields (from and to).
- Below that are the selections for the two variables.

Miscellaneous Items

Controlling Multiple Pools Simultaneously

If you register multiple pools to your login account you may want to monitor/control two different pools simultaneously. Note that you cannot run two different instances of the Aqua Connect web site in two different tabs of the same browser. If you absolutely must monitor/control two pools simultaneously you **MUST** open your browser twice and login to the Aqua Connect web site once in each browser task.

Web Site Security Certificate Issues

The background color of the URL bar and the security status bar (typically at the top of your browser) provide information about the level of security for the communication between the computer you are logged in on and the web site (across the Internet). This is explained in the table on the following page. The Aqua Connect web site should **ALWAYS** show a green background.

Frequently Asked Questions

My Aqua Rite Pro is set to Spa, but on the Dashboard the label says pool. Why?

On the Aqua Rite Pro Settings Menu, under Chlor. Config, you are asked to select Pool or Spa for the body of water. This only affects the sense and dispense algorithm implemented on the Aqua Rite Pro; it doesn't affect the Aqua Connect web site in any way.

This is not the same as the Pool or Spa mode on a Pro Logic, which affects the display on Dashboard. On a Pro Logic Dashboard the words "POOL" and "SPA" are significant.

Early versions of the Aqua Rite Pro Dashboard show the water temperature labeled "POOL", even if you selected Spa on your Settings Menu. "POOL" is just a label on the Aqua Rite Pro Dashboard and doesn't mean that your Aqua Rite Pro configuration is wrong.



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Background Color	Meaning
Red	The certificate is out of date, invalid, or has an error. Your browser should warn you not to proceed. Communication will NOT be secure.
Yellow	The authenticity of the certificate cannot be verified. This might indicate a problem. Proceed at your own risk.
White	The certificate has normal validation. Communication with the web site is encrypted, but the certification authority makes no assertion about the business practices of the web site.
Green	The certificate uses extended validation. Communication with the web site is encrypted and the certification authority has confirmed that the web site is owned or operated by a business that is legally organized under the jurisdiction shown on the certificate and on the Security Status bar. The certification authority makes no assertion about the business practices of the web site.

Hayward® - Remote Pool Control Website

Terms of Use

This website (the "Site") is published and maintained by Hayward® Industries, Inc. (the "Company"), primarily to allow owners of Hayward® swimming pool controllers and the pool service companies that are allowed to service those swimming pools the ability to remotely monitor and control their swimming pools (the "Service"). When you access, browse, or use this Site or take advantage of the Service you accept and agree to, without limitation or qualification, the terms and conditions set forth below.

Your Right to Use the Site and the Service

Aqua Connect™ Home Network (the "Gateway") is a gateway device that allows the Hayward pool controller to connect to the Site. There are two possible scenarios that will be considered here. In the first, the owner of the pool (the "Pool Owner") and the owner of the Gateway (the "Gateway Owner") are the same individual. In the second the Pool Owner and the Gateway Owner are different. A common example of the later scenario is when a pool service provider installs a Gateway that they own on a pool that they do not own as part of a service contract or agreement with the Pool Owner.

In addition to the Pool Owner and the Gateway Owner, there may be other individuals who are given access to the Site by permission of either the Pool Owner or the Gateway Owner (the "Registered Guests"). These individuals may be, but are not limited to, friends or relatives of the Pool Owner or employees of the Gateway Owner. This Terms of Use Agreement is for ALL users of the Site; the Pool Owner, the Gateway Owner, and all Registered Guests.

The Site and the Service are intended only for the Gateway Owner, the Pool Owner, and any Registered Guests that either the Gateway Owner or the Pool Owner choose to allow. Upon the creation of your login account the Company will issue you a username and allow you to select a password to access the Service. You are not authorized to access the Service through use of any username other than the one issued to you by the Company upon registration.



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The Gateway Owner agrees to (i) provide accurate, current and complete information as may be prompted by any registration forms for the Service ("Registration Information"); (ii) maintain and promptly update the Registration Information and any other information they provide to the Company, to keep it accurate, current and complete; (iii) maintain the confidentiality of your username and password to access the Service; and (iv) accept full responsibility for all consequences of all actions initiated and all conduct that occurs under your username and password.

The Gateway Owner also accepts full responsibility for all consequences of all actions initiated and conducted that occur under any username that is a sub-account of the Gateway Owners login account. These would be Pool Owners and Registered Guests to whom the Gateway Owner has extended access privileges.

Your authorization to access and use the Service with your username and password extends only while:

- 1) You are a Gateway Owner: you have a current subscription to the Service for this Gateway device.
- 2) You are a Pool Owner who has contracted with a Gateway Owner: you have a current contract with the Gateway Owner (pool service provider) who has installed the Gateway device on your pool AND the Gateway Owner has a current subscription to the Service for this Gateway device.
- 3) You are a Registered Guest: You have the current permission of both the Gateway Owner and the Pool Owner AND the Gateway Owner has a current subscription to the Service for this Gateway device.

In all usage cases your authorization to access and use the Service with your username and password extends only while you conform to the Terms of Use contained in this document.

If the subscription for the Gateway device expires, then ALL ACCESS to that Gateway device, for all parties that have been granted access, ceases. The cessation of service can only be ended by the renewal of the subscription for the Gateway device.

By registering for the Service as a Gateway Owner, you are expressly agreeing to allow the Company's third party payment processor to debit the account or charge the credit card number identified in your new subscription or subscription renewal information. Payment of the service fee will be processed prior to your access to and use of the Service for the period covered by the service fee. The Company reserves the right to change the annual or biennial fee for the Service in its sole discretion and without advanced notice. If you cancel the Service prior to expiration of your subscription, no refunds of any service fee payment or portion thereof will be provided.

As long as you comply with these Terms and Conditions of Use, the Company grants you a non-exclusive, non-transferable, limited right to enter, display, and use the Site and the Service. You agree not to interrupt or attempt to interrupt the operation of the Site or the Service in any way. Notwithstanding anything to the contrary, the Company reserves the right, without notice and in its sole discretion, to cancel or restrict your access to and use of the Service.

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Security of Electronic Transmissions

Even though the entire site is https encrypted, Internet transmissions are never completely private or secure. You understand that any communication you send to this Site, including while accessing and using the Service, may be read or intercepted by others, unless there is a special notice that a particular message is encrypted. Sending an e-mail message to the Company does not create any reciprocal obligation or responsibility of the Company to you.

Links to Other Websites

The Site may contain links to other Internet sites on the World Wide Web. The Company provides such links for your convenience only, and is not responsible for the content of any website linked to or from the Site. Links from the Site to any other website do not indicate that the Company approves of, endorses, sponsors, or recommends that website. The Company disclaims all warranties, express or implied, as to the accuracy, legality, reliability, or validity of any content on any other website.

Availability of the Service

The Service may not be available in your particular country, state or locality. Even where the Service is available, access and use may be limited based your method of electronically connecting to the Service and the security and data transmission rate of that connection. The Service will be unavailable



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able for access each Sunday from 10:00 p.m. through 4:00 a.m. (Eastern U.S. Time) for maintenance. The Service may become unavailable at other times due to circumstances beyond the control of the Company. At such times every reasonable effort will be made to restore the Service in a timely manner, but the Company cannot guarantee that the Service will be continuous.

Effectiveness of the Service

The Service may not allow you to take advantage of all features of your Hayward® swimming pool controller or permit you to remotely control all functions of your swimming pool that can be accomplished manually with this controller. Furthermore, the Company does not warrant that your efforts to remotely control your swimming pool through the Service will be effective.

Right to Change These Terms and Conditions of Use or Site Content

The Company may add to, change, or remove any part of these Terms and Conditions of Use at any time, without notice. Any changes to these Terms and Conditions of Use or any terms posted on the Site apply as soon as they are posted. By continuing to use the Site or the Service after any changes are posted, you are indicating your acceptance of and agreement to those changes. Furthermore, the Company may add, change, discontinue, remove, or suspend any other Content posted on or functionality of the Site, including the Service, temporarily or permanently, at any time, without notice and without liability.

Disclaimer of Warranties and Damages

Your use of the site is at your own risk. The site (including the service and all other content and functions made available on or accessed through the site) is provided "as is." To the fullest extent permissible by applicable law, the company disclaims all warranties, express or implied, including, but not limited to, implied warranties and conditions of merchantability and fitness for a particular purpose, workmanlike effort, title, and non-infringement. Furthermore, the company does not warrant that the server that makes the site and the service available is free of viruses or other harmful components that may infect, harm, or cause damage to your computer equipment or any other property when you access, browse, download from, or otherwise use the site or the service.

Note that it is possible to damage your pool, make it unsafe for bathing, or generate unexpectedly high utility bills if you misuse your pool controller. Since the remote control portion of the Service gives you full control over the pool controller, you can, by extension, damage your pool, make it unsafe for bathing, or generate unexpectedly high utility bills if you misuse the pool controller via the Service. There is an additional risk of damage via the Service since you are operating the pool remotely; there may be nobody on site to observe what is actually happening.

Limitation of Liability

Under no circumstances, including, but not limited to, the company's negligence, shall the company be liable for any consequential, direct, incidental, indirect, punitive, or special damages that result from (a) the use of, (b) the inability to use, or (c) errors or omissions in the contents and functions of, the site or the service, even if the company or an authorized representative of the company has been advised of the possibility of such damages. Some states do not allow the exclusion or limitation of consequential or incidental damages, so the above limitation or exclusion may not apply to you. In no event shall the company's total liability to you for all damages, losses, and causes of action (whether in contract or tort, including, but not limited to, negligence or otherwise) exceed \$100.00.



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General Provisions

These Terms and Conditions of Use and any additional terms posted on the Site together constitute the entire agreement between the Company and you with respect to your use of the Site and the Service. Any alleged claim or cause of action you may have with respect to your use of the Site or the Service must be commenced in the state or federal courts of Rhode Island within one (1) year after the alleged claim or cause of action arises. If, for any reason, a court of competent jurisdiction finds any provision of these Terms and Conditions of Use, or any portion thereof, to be unenforceable, that provision or portion shall be deemed severable, and shall not affect the validity and enforceability of any remaining provision of these Terms and Conditions of Use. These Terms and Conditions of Use shall be governed by and construed in accordance with the laws of the State of Rhode Island, United States of America, without reference to its conflicts of law rules.

Privacy Policy

Hayward Industries, Inc. (the "Company"), understands the importance of protecting the privacy of its customers and visitors to this website (the "Site"). We believe our privacy policy and the way we handle your data is consumer friendly. To that end we would like to explain to you some of the features of the Site so that you can fully understand the implications of our Privacy Policy.

Highlights

- Our servers store operating history of your pool. This occurs even without a currently active subscription.
- We use this telemetry from your pool to provide the data that you access in your login account, or in the login account you authorized when contracting a pool service.
- We also use aggregate data (data sets run through algorithms) to help us make our products better.
- We will not sell or share to 3rd parties any personally identifiable data for marketing purposes.
- You can opt-out of Hayward marketing messages.

Introduction

Aqua Connect™ Home Network (the "Gateway") is a gateway device that allows the Hayward pool controller to connect to the Site. There are two possible scenarios that will be considered in this policy. In the first the owner of the pool (the "Pool Owner") and the owner of the Gateway (the "Gateway Owner") are the same individual. In the second the Pool Owner and the Gateway Owner are different. A common example of the later scenario is when a pool service company installs a Gateway that they own on a pool they do not own as part of a service contract or agreement with the Pool Owner.

In addition to the Pool Owner and the Gateway Owner, there may be other individuals who are given access to the Site by permission of either the Pool Owner or the Gateway Owner (the "Registered Guests"). These individuals may be, but are not limited to, friends or relatives of the Pool Owner or employees of the Gateway Owner. This Privacy Policy is for ALL users of the Site; the Pool Owner, the Gateway Owner, and all Registered Guests.

To offer the features described herein, the Company will collect and store a user profile for each pool and for each user account with equipment and contact information. The Company will not share this personally identifiable data (the "Personal Data") with 3rd party companies for marketing purposes. The Company may employ contract companies to assist the delivery of the Aqua Connect product, and these companies will also handle the Personal Data. All internal and contract employees are bound by confidentiality agreements, and are required and trained to protect the



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privacy of your Personal Data.

The Company will also collect, upload, and store telemetry from your Hayward pool control via the Gateway, which will indicate both automated activities and user initiated activity as they happen on the pool control, as well as water quality measurements. This continuously uploaded telemetry (the "Telemetry") is what allows both the Pool Owner and the Gateway Owner to remotely monitor and control the pool from the Site, check the status of the pool over time, etc. This automatic Telemetry upload will begin as soon as the Gateway is installed on the pool controller, connecting the pool to the Site. The automatic Telemetry upload is independent of whether or not the Pool Owner or the Gateway Owner has a current subscription or a valid user account on the Site.

Contained in the Telemetry are Pool Owner habits and activities that will be stored on the Company servers. For example, every time someone uses a spa they turn on the heater, the jets, etc. and this information is included in the Telemetry that is uploaded to the Site. A record of when this spa is used is thus stored on the Company servers and uniquely associated with the spa. Therefore the Company considers Telemetry that is associated with an individual pool or spa to be Personal Data.

If a pool service provider managing multiple pools owns multiple Gateways then the Site contains a customer list for that pool company as well as contact information for every one of the customers who have Gateways installed (the "Customer Information"). The Company understands that the privacy of this Customer Information is critical to your business.

The Company may use the Personal Data associated with each pool and each user account to contact the Pool Owner, the Gateway Owner, and Registered Guests on important product announcements, service bulletins, and occasional marketing offers. All user account holders will be able to specify their communication preferences at any time, and thus opt-out of these communications.

The pool service provider that is a Gateway Owner may elect to withhold the contact information of their customers from the Company. They may do this by limiting the information that is entered when a Gateway is registered or a customer sub-account is created. Even if a field is required, the pool service provider can use their own information rather than their customer's information (for example, they can always use the pool service provider email address and phone number rather than the customers).

The Company may also use the Telemetry to compute trends or alarms that occur on an individual pool, and we may report these trends or alarms to the Pool Owner, the Gateway Owner, and Registered Guests via email / message alerts that have been specified in the user accounts. The Company cannot be responsible for mistakes made by the Pool Owner, the Gateway Owner, or the Registered Guests in the user settings that may misdirect communications to an unintended party.

The Company will not use Personal Data for purposes other than supporting the features we are offering to you.

For the purposes of the Company we may run queries or math functions on the Telemetry from many different pools or user accounts. These queries or math functions will strip out the Personal Data, and thus the data output from the queries or math functions becomes anonymous and is then used for other purposes. The Company may use such aggregate data to do studies on how to improve the reliability or usability of our product offering.

This Privacy Policy discloses the Company's practices relating to collection, use and disclosure of



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both the Personal Data that you may provide to the Company through this Site, and the Telemetry that is automatically uploaded to the Site by the Aqua Connect Home Network device. Before you submit any personal information to the Company through this Site or otherwise, and before you install your Aqua Connect Home Network and allow Telemetry to be continually uploaded to the Site, please thoroughly review this Privacy Policy, and contact us if you have any questions.

Intended Audience of this Site and the Service

This Site is primarily intended to allow owners of Hayward swimming pool controllers and the pool service professionals that they contract with the ability to remotely monitor and control their swimming pools and / or spas (the "Service"). This Site and the Service are not intended to attract or be used by individuals under the age of 18 without verifiable parental consent, and the Company will not knowingly collect personal information from such visitors.

Your Consent

By installing a Gateway or by allowing a pool service company to install a Gateway, and by using this Site and the Service, you agree with and accept the terms of this Privacy Policy. This holds for ALL users of the Site: Pool Owners, Gateway Owners, and Registered Guests.

As a Pool Owner, whenever you submit Personal Information through this Site and access and use the Service, and for the duration of time that the Gateway is uploading Telemetry to the Site from your pool, you consent to the collection, disclosure, use and retention of that information in accordance with this Privacy Policy.

As a Gateway Owner, whenever you submit Personal Information or Customer Information directly to the Site, or allow your customers to submit Personal Information directly to the Site, and for the duration of time that any of your customers has a Gateway actively uploading Telemetry to the Site, you consent to the collection, disclosure, use and retention of that information in accordance with this Privacy Policy.

As a Registered Guest, whenever you submit Personal Information to the Site you consent to the collection, disclosure, use and retention of that information in accordance with this Privacy Policy.

Collection of Information About You

The Company collects Personal Information from its customers and visitors to this Site primarily to assist in optimizing their ability to remotely control their swimming pools through their Hayward swimming pool controllers and the Gateway. The Company collects such information directly from you through this Site, in responses to our specific requests and via e-mail and web input screens and forms. The types of Personal Information we collect include your name, company, department, address, telephone number, facsimile number, and e-mail address.

When the Gateway Owner is different than the Pool Owner, the Gateway Owner must provide Personal Information to the Company about the Pool Owner. The Company requires that the Gateway Owner has permission from the Pool Owner prior to the submission of this information to the Company.

When either the Gateway Owner or the Pool Owner enables a Registered Guest, the Gateway Owner or the Pool Owner must provide Personal Information to the Company about the Registered Guest. The Company requires that the Gateway Owner or the Pool Owner has permission from the Registered Guest prior to the submission of this information to the Company.



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The Company also collects information related to the Hayward swimming pool controller, the swimming pool equipment that it controls, and the state of the swimming pool via the Telemetry upload.

All of the Personal Data collected by the Company becomes the property of the Company. This Personal Data is always accessible to the Gateway Owner, may be accessible to the Pool Owner, and may be accessible to the Registered Guest. The Gateway Owner controls access to the Personal Data to the Pool Owner and the Registered Guests.

You should carefully limit the personal information you voluntarily provide to strictly that which is necessary for the Company to assist in optimizing your ability to remotely control your swimming pool through your Hayward swimming pool controller and the Gateway.

When enabling a Registered Guest you should carefully limit the Personal Data that you make available to them.

Automatic Collection of Information

As you navigate this Site, certain limited information can and may be collected automatically from you without your active involvement, using methods known as cookies and navigational data collection. Some of the information (e.g., type of web browser) does not identify who you are. Other information, such as your Internet Protocol ("IP") address, may identify you indirectly, when supplemented with other commercially available sources of information.

When you visit this Site, we may send to your computer one or more cookies, which are small text files containing a string of characters. These cookies uniquely identify your computer and your swimming pool controller and equipment to the Site. We may use cookies to improve the quality of the Site and the Service by storing user preferences and tracking user trends. Most web browsers are set up to accept cookies, but you can reset your browser to refuse all cookies or to indicate when a cookie is being sent. However, some features of this Site and the Service may not function properly if your cookies are disabled.

Furthermore, the Company computer servers automatically record information that your browser sends whenever you visit a website. These server logs may include information, such as the portions of the Site accessed, the IP address assigned to your computer, the type of browser used by your computer, the date and time of your access to the Site, and one or more cookies that may uniquely identify your computer.

We also automatically upload, record, and preserve your swimming pool equipment and sensor status via the Telemetry. This Telemetry occurs continuously, not just when you log onto the Site and access and use the Service.

Collection, Disclosure, Use and Retention of Information

Except as otherwise stated at the point of collection, we may use your information for improving the content of the Site and the Service, customizing this Site and the Service to your preferences, communicating information to you and subsequently updating such information, internal marketing and research purposes, and as further specified in this Privacy Policy. We may combine such information with other passively or actively collected information unless we specify otherwise at the point of collection.

The Company may transfer your information, including Personal Data and Telemetry data, to third



parties, including contractors we use to support our business (e.g., marketing services, fulfillment services, technical support, delivery services, and financial institutions), in which case we will require such third parties to agree to treat your information in accordance with this Privacy Policy or as you may otherwise have previously consented. We do not share your Personal Data or Telemetry with third parties for their direct marketing purposes unless you have affirmatively agreed in advance to such a disclosure.

The Company also may transfer such information (i) in connection with the sale, assignment or other transfer of the business function of the Company to which the information relates, in which case we will require any such buyer, assignee or transferee to agree to treat it in accordance with this Privacy Policy; or (ii) in compliance with subpoenas or other valid court orders, in response to inquiries and requests from regulatory authorities, in connection with the prevention or detection of fraud, or as otherwise permitted or required by law. In addition, we will make full use of all information acquired through this Site and Service or otherwise that is not identifiable to you.

Choices for Disclosure and Use of Information

You may choose to prevent the Company from disclosing or using your Personal Data and Telemetry under certain circumstances. You may opt out of any disclosure or use of your Personal Data or Telemetry for purposes that are incompatible with the purpose(s) for which it was originally collected or for which you subsequently gave authorization.

Access and Correction

All of your Personal Data that is not Telemetry is accessible on the Site via your user account. You may correct inaccuracies in that information at any time you are logged on. Most of the Telemetry data stored on the servers is also accessible on the Site via your user account, but Telemetry cannot be modified. Most Telemetry data can be downloaded from the Site by any login account with access to the pool.

Security

The Company takes reasonable measures to safeguard your personal information and telemetry data against unauthorized access, disclosure, copying, use or modification, whether or not in electronic format. We use industry-standard technological precautions, such as Secure Socket Layer technology in an effort to protect your Personal Data and Telemetry data as it is transmitted electronically from your computer to this Site and the Service and, furthermore, to protect it from loss, misuse and unauthorized access, disclosure, alteration or destruction. Furthermore, the Company requires that employees and third-party administrators / processors access your Personal Data and Telemetry data only on a "need-to-know" basis.

You should keep in mind that no combination of security measures can ever provide guaranteed protection all the time. We caution you that e-mail may be particularly vulnerable to unauthorized interception, eavesdropping, modification and spoofing, and, therefore, you should take special care in deciding what information you send to us via e-mail. Moreover, where you use passwords, identification numbers or other special access features on this Site, it is your responsibility to safeguard them.



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Enforcement

The Company has in place procedures for maintaining the confidentiality of Personal Data and Telemetry data. Any questions, concerns or complaints regarding this Privacy Policy or the Company's treatment of personal information or telemetry data may be communicated by contacting us through this Site, sending an e-mail message to us at support@aquacconnectweb.com or by writing to us at Privacy Officer, Hayward Industries, 61 Whitecap Drive, North Kingstown, RI 02852. When we receive a formal written complaint, our Privacy Officer will contact the author within a reasonable period of time regarding his or her concerns and attempt to resolve these concerns directly with this individual.

Links to Other Websites

This Site may contain links or references to third-party websites that are not affiliated with the Company. The inclusion of any link does not imply the Company's endorsement of any other company, its websites, or its products and/or services. Any such linked websites have separate and independent privacy policies which we encourage you to read carefully. Please be aware that the Company has no control over linked third-party websites and, therefore, no responsibility or liability for the manner in which the organizations that operate such websites may collect, disclose, use or otherwise treat your personal information.

Other Terms

Your use of this Site is subject to our Terms of Use.

How to Contact Us

To correct or update any personal information or access any telemetry data previously collected by us, please follow instructions at the original point of collection on this Site, send an e-mail message to us at support@aquacconnectweb.com or write to us at Privacy Officer, Hayward Industries, 61 Whitecap Drive, North Kingstown, RI 02852.

Changes to This Privacy Policy

If this Privacy Policy changes, the revised policy will be posted on this Site. Please check back periodically and especially before you provide any personal information to the Company. This Privacy Policy was last updated on October 6, 2009.



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LIMITED WARRANTY (effective 03/01/12) Hayward warrants its Pro Logic, OnCommand and E-Command pool automation products as well as its Aqua Rite, Aqua Rite Pro, Aqua Plus and SwimPure chlorination products to be free of defects in materials and workmanship, under normal use and service, for a period of three (3) years. Hayward also warrants its Aqua Trol chlorination products to be free of defects in materials and workmanship, under normal use and service for a period of one (1) year. These warranties are applicable from the initial date of purchase on private residential swimming pools in the US and Canada. Installations of product for use on commercial pools in the US and Canada is covered for a period of one (1) year for defects in materials and workmanship. Hayward warrants all accessories and replacement parts for the above-identified pool automation and chlorination products for a period of one (1) year. Accessories also include remotes, actuators, base stations, temperature sensors, flow switches and chemistry probes. Each of these warranties is not transferable and applies only to the original owner.

Hayward shall not be responsible for cartage, removal, repair or installation labor or any other such costs incurred in obtaining warranty replacements or repair.

Proof of purchase is required for warranty service. If written proof of purchase is not provided, the manufacturing date code will be the sole determinant of the date of installation of the product. To obtain warranty service or repair, please contact the place of purchase or the nearest Hayward authorized warranty service center. For more information on authorized service centers please contact the Hayward Technical Service Support Center (61 Whitecap Road, North Kingstown RI, 02852) or visit the Hayward web site at www.hayward.com.

WARRANTY EXCLUSIONS:

1. Material supplied or workmanship performed by others in process of installation.
2. Damage resulting from improper installation including installation on pools larger than the product rating.
3. Problems resulting from failure to install, operate or maintain the product(s) in accordance with the recommendations contained in the owners manual(s).
4. Problems resulting from failure to maintain pool water chemistry in accordance with the recommendations in the owners manual(s).
5. Problems resulting from tampering, accident, abuse, negligence, unauthorized repairs or alterations, fire, flood, lightning, freezing, external water, degradation of natural stone used in or immediately adjacent to a pool or spa, war or acts of God.
6. Use of a non-genuine Hayward replacement salt chlorination cell on any Hayward automation or chlorination product will void the warranty for that product.

The express limited warranty above constitutes the entire warranty of Hayward Pool Products with respect to its products and is in lieu of all other warranties expressed or implied, including warranties of merchantability or fitness for a particular purpose. In no event shall Hayward Pool products be responsible for any consequential, special or incidental damages of any nature. Some states do not allow a limitation on how long an implied warranty lasts, or the exclusion of incidental or consequential damages, so the above limitation may not apply to you. This warranty gives you specific legal rights, and you may also have other rights, which vary from state to state.

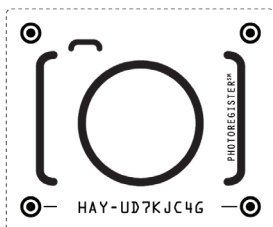
90 DAY EXTENDED WARRANTY*

REGISTER WITH YOUR SMARTPHONE

— PROTECT YOUR INVESTMENT IN 2 EASY STEPS —

1. TAKE A PHOTO

Take a photo of the camera icon



2. SEND IT IN

Send it in using **one** of the methods below



SMARTPHONE

Text a photo of the camera icon to **71403**

OR



ONLINE

Visit **Hayward.com/Warranty**

OR



MESSENGER

Send photo to **photoregister**

*Extended warranty is in addition to applicable product warranty and is for parts only, labor not included.

Need help? Visit photoregister.com/help or text HELP to 71403.

For further information or consumer
technical support, visit our website at
www.hayward.com



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