

## ELECTROLYTIC CHLORINE GENERATOR BASIC POOL MAINTENANCE REQUIREMENTS

	TEST	IDEAL RANGE	ADJUSTMENT REQUIRED
WEEKLY	Free Chlorine	1.0 - 3.0 ppm	Turn output dial up to increase, down to decrease -OR- increase or decrease pump filtration time.
	pH	7.2 - 7.8	Too high - add muriatic acid Too low - add soda ash.
MONTHLY	Alkalinity	80 - 120 ppm	Add baking soda to increase. Add acid as required to decrease.
	Salt	2700 - 3400 ppm	Add salt as required to increase.
QUARTERLY	Stabilizer	60 - 80 ppm	Add cyanuric acid to increase.
	Calcium	200 - 400 ppm	Add calcium to increase. Drain and add water to decrease.
	Electrolytic Cell	inspect & clean	Refer to section in manual.

Refer to [www.hayward-pool.com](http://www.hayward-pool.com) for latest manual revisions, additional information and helpful service.

# Remote Display for Pro Logic® and AQUA LOGIC®



## Installation/Operation Manual for model

black  
AQL2-WB-PS-4  
AQL2-WB-PS-8  
AQL2-WB-PS-16

white  
AQL2-WW-PS-4  
AQL2-WW-PS-8  
AQL2-WW-PS-16

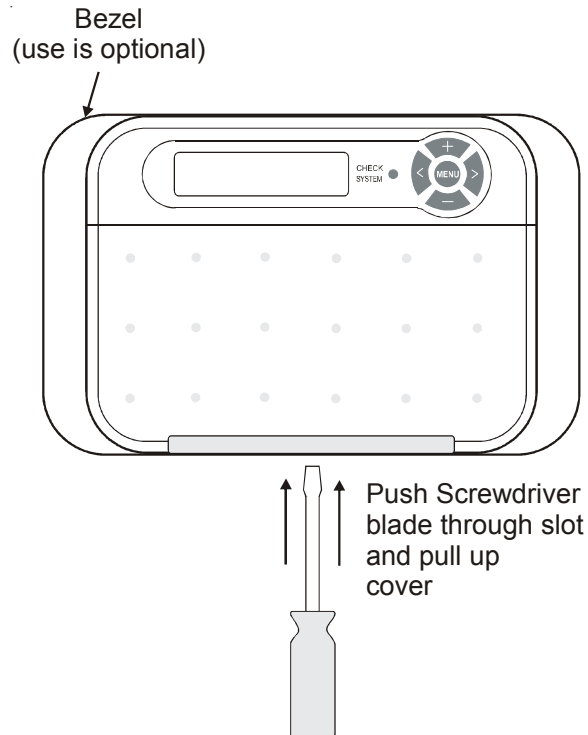
**COMPATIBILITY:** This display/keypad is compatible with all Pro Logic PS-4/8/16 models and for all Aqua Logic PS-4/8/16 systems running main software r2.00 or higher.

## INSTALLATION

### Mounting

The AQL2-Wx-PS-x Remote Display/Keypad must be mounted indoors or in a weather protected area (rain should never hit the display/keypad). Up to 3 remote display/keypads can be installed. The display/keypad is designed to mount onto a standard electrical utility box (same size as used for a triple light switch) or can be mounted directly onto any wall surface. When selecting a location, note that the wire to the Pro Logic/Aqua Logic main unit must be no more than 500 feet long. Follow the steps below:

1. Remove display/keypad baseplate from the cover by inserting a screwdriver in the slot shown below. Lift up on the cover while pushing gently with the screwdriver.



2. If bezel will be used, snap baseplate into bezel before mounting.
3. Screw the baseplate in the desired position (screws supplied by installer).

**LIMITED WARRANTY (effective 04/01/09)** Hayward/Goldline warrants its Pro Logic 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/Goldline 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 installation on private residential swimming pools in the US and Canada.

Hayward/Goldline warrants all the above-identified pool automation and chlorination products installed on commercial swimming pools and on swimming pools outside of the US and Canada for a period of one (1) year. Likewise, Hayward/Goldline warrants all accessories and replacement parts for the above-identified pool automation and chlorination products for a period of one (1) year. Each of these warranties is not transferable and applies only to the original owner.

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/Goldline authorized warranty service center. For more information on authorized service centers please contact the Hayward/Goldline Technical Service Support Center (61 Whitecap Road, North Kingstown RI, 02852) or visit the Goldline web site at [www.goldlinecontrols.com](http://www.goldlinecontrols.com) or the Hayward website at [www.haywardnet.com](http://www.haywardnet.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 alternations, 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.

**DISCLAIMER. THE EXPRESS LIMITED WARRANTIES ABOVE CONSTITUTE THE ENTIRE WARRANTIES WITH RESPECT TO THE ABOVE-IDENTIFIED HAYWARD/GOLDLINE POOL AUTOMATION AND CHLORINATION PRODUCTS AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. THESE WARRANTIES GIVE YOU SPECIFIC LEGAL RIGHTS, AND YOU MAY ALSO HAVE OTHER RIGHTS OF EQUIPMENT, LOST PROFITS OR REVENUE, COSTS OF RENTING REPLACEMENTS, AND OTHER ADDITIONAL EXPENSES, EVEN IF THE SELLER HAD BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. SOME STATES DO NOT ALLOW THE EXCLUSION OF LIMITATION OF INCIDENTAL OR CONSEQUENTIAL DAMAGES, SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.**

**NO WHOLESALE, AGENT, DEALER, CONTRACTOR OR OTHER PERSON IS AUTHORIZED TO PROVIDE, SUPPLEMENT OR MODIFY ANY WARRANTY ON BEHALF OF HAYWARD/GOLDLINE.**

**THESE WARRANTIES ARE VOID IF THE PRODUCT HAS BEEN ALTERED IN ANY WAY AFTER LEAVING THE FACTORY. FOR THE ABOVE-IDENTIFIED CHLORINATION PRODUCTS, THESE WARRANTIES ALSO ARE VOID IF, DURING THE WARRANTY PERIOD, YOU USE A REPLACEMENT CHLORINATOR CELL OTHER THAN AN UNMODIFIED, NEW HAYWARD/GOLDLINE CHLORINATOR CELL PURCHASED FROM HAYWARD/GOLDLINE. IF A WARRANTY BECOMES VOID, YOU STILL MAY PURCHASE SERVICE AND/OR TELEPHONE TECHNICAL SUPPORT AT THE THEN CURRENT TIME AND MATERIAL RATES.**

6.

Communication Err 3  
call 908-355-7995

The display/keypad is receiving data from the main Pro Logic/Aqua Logic control unit however that data contains errors and is unusable. The most likely cause of this problem is that wires "2" and "3" in the cable between the control unit and the display/keypad are crossed. If you are unable to find the problem, contact the Hayward Tech support department Monday through Friday, from 8AM to 8PM eastern time.

7.

Display Error 1  
call 908-355-7995

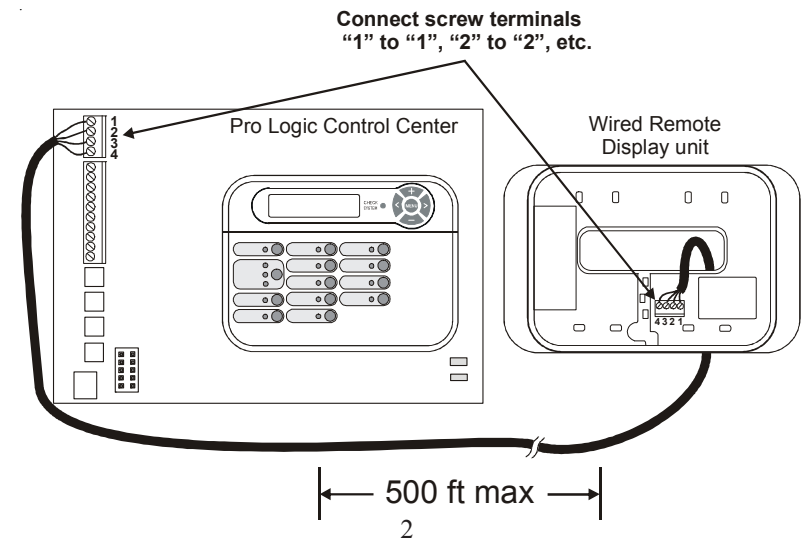
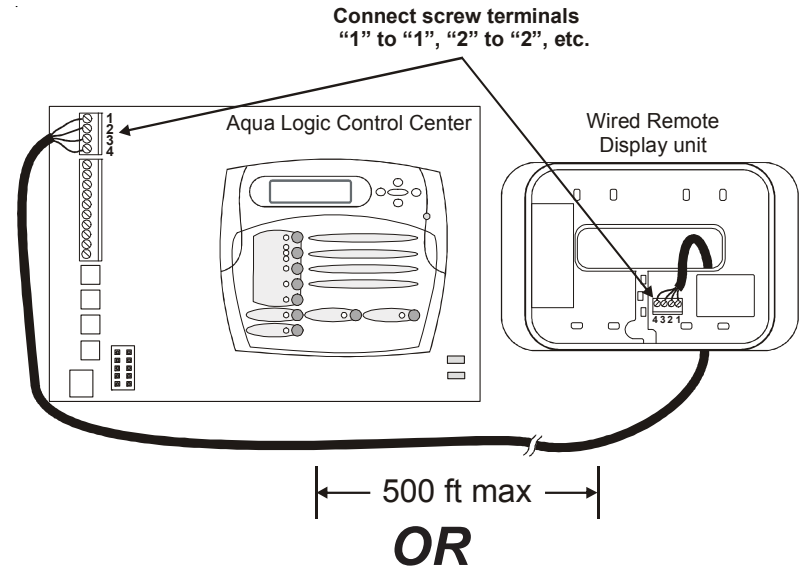
Display Error 2  
call 908-355-7995

An internal problem has occurred in the display/keypad. Remove the display/keypad from the wall mount base (see diagram on page 1) and write down the model number and serial number of the display/keypad. Next, call the Hayward Tech support department (Monday through Friday, from 8AM to 8PM eastern time) to find out how to obtain a replacement display/keypad.

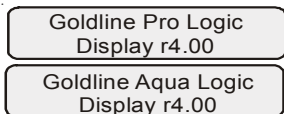
## Wiring

The Pro Logic or Aqua Logic main unit can connect to a maximum of 3 remote display/keypads. Use four conductor cable (typically phone cable) to connect the remote display keypad with the Pro Logic/Aqua Logic Control Center as shown below. The maximum wiring distance is 500ft. (160m). Note that the terminals on both the Pro Logic/Aqua Logic main unit and the remote display/keypad are numbered: Connect 1 to 1, 2 to 2, etc.

If multiple remote display/keypads are installed: Never connect more than 2 wires to any terminal block. Two remotes can be wired back to the Pro Logic/Aqua Logic main unit or the second display/keypad (and third, if applicable) can be "daisy chained" with one display/keypad wired to the next. The maximum wire run from the Pro Logic/Aqua Logic main unit to the furthest remote display/keypad is 500 ft. (160m).



When power is turned on, all the LED indicators will flash briefly, the display backlight will illuminate, and the following display will appear for a short period of time:



The "r4.00" is the software revision level. The actual revision level for your display/keypad may be different.

Refer to the Pro Logic or Aqua Logic Operation Manual for complete operating instructions.

## TROUBLESHOOTING

- 1. Display/keypad not functioning (no display, no LEDs illuminated)**

If the display/keypad located on the main unit is working correctly, the most likely cause is that wires 1 and 4 are either open circuited or reversed. Check wiring. If none of the displays are working, check that 120V power is being applied to the main control and that the 3A fuse (violet) is not blown.
- 2. Display backlight turns off after a period of time**

The display backlight should always illuminate when you press any key on the unit. If it turns off after a period of time, you can stop this by pressing the menu key (possibly multiple times) until "Settings Menu" appears. Next press the "<" or ">" key (possibly multiple times) until "Display Light" appears. At this point, pressing either "+" or "-" will allow you to select either "Always On" or "On for 60 sec.". After you have selected the desired operation, press the "Menu" button to lock in your setting. Note that this selection applies to this display/keypad only. Repeat the process of each display/keypad in the system.
- 3. Display backlight always on**

The display backlight should always illuminate when you press any key on the unit. If it remains on after 60 seconds have elapsed since the last button push, you can stop this by pressing the menu key (possibly multiple times) until "Settings Menu" appears. Next press the "<" or ">" key (possibly multiple times) until "Display Light" appears. At this point, pressing either "+" or "-" will allow you select either "Always On" or "On for 60 sec.". After you have selected the desired operation, press the "Menu" button to lock in your setting. Note that this selection applies to this display/keypad only. Repeat the process for each display/keypad in the system.
- 4. Communication Err 1  
call 908-355-7995**

The display/keypad received data from an Aqua Logic system running software earlier than r2.00. This keypad is not compatible with these systems. Another cause for this problem may be that the local display/keypad in the main Pro Logic/Aqua Logic control unit is not connected or not functioning. If this is the case, connect and/or replace the local display/keypad and then cycle power to the Pro Logic/Aqua Logic off and then back on to reset the system. Call the Hayward Tech support department.
- 5. Communication Err 2  
call 908-355-7995**

The display/keypad is not receiving any communication from the Pro Logic/Aqua Logic main control unit. The most likely cause of this problem is a broken wire or "open circuit" in wires "2" and/or "3" in the cable between the display/keypad and the Pro Logic/Aqua Logic main control unit. If you are unable to find the problem, contact the Hayward Tech support department Monday through Friday, from 8AM to 8PM eastern time.