AQUA LOGIC®

Spa-side Remote

Installation/Operation Manual

for model

AQL-SS-RF

GOLDLINE CONTROLS INC.
A HAYWARD COMPANY

www.goldlinecontrols.com
888-921-7665

Compatibility

This product is compatible with all Aqua Logic controls operating with software revision r1.10 or higher. To verify the software level of your Aqua Logic control, press the Menu button (possibly multiple times) until "Diagnostic Menu" is displayed. Next, press the ">" or "<" keys (possibly multiple times) until the main and display software revision levels are displayed (the "main" rev should be r1.10 or higher).

If the software revision level is less than r1.10 contact the Goldline Technical Service Dept. from Monday through Friday, 8AM to 8PM Eastern at 888-921-7665 for information on upgrades.

Installation

1. **Batteries are installed at the factory:** There is no need to open the spa-side unit.

2. **Base Receiver required:** For operation of the spa-side remote, the Aqua Logic control unit must have a base receiver (AQL-BASE-RF) installed. The receiver allows the Aqua Logic control until to communicate with the spa-side remote.

3. **Teach the unique Aqua Logic ID code**: The base receiver attached to the Aqua Logic control unit has a unique ID code that ensures that your unit will not affect other systems in the neighborhood, and likewise, their remote will not affect your system. To teach the ID code to the spa-side remote unit:

> Settings
> Menu

a. On any Aqua Logic display/keypad unit press the "Menu" button (possibly multiple times) until "Settings Menu" is displayed.

> Teach Wireless:
> + to start

b. Press "<" or ">" (again, possibly multiple times) until "Teach Wireless" is displayed.

c. Press the "+" button to start the teaching process.

> Press and hold
> wireless button

> Teach Wireless:
> Successful

d. Press and hold any button on the spa-side remote for 4 seconds. At this point the LED indicator on the spa-side remote should flash 3 times and the Aqua Logic display should say "Teach Wireless, Successful". If the LED indicator does not flash, then refer to the Troubleshooting section of this manual for additional information.

4. **Apply labels:** Aqua Logic PS series of control allow each output (e.g. AUX1) to be re-named to what is actually being controlled. The spa-side remote comes with a sheet of name labels—simply peel the appropriate label off the sheet and apply to the appropriate set of buttons on the spa-side remote.

5. **Installation is complete:** you can now use the spa-side wireless remote.

Operation

The spa-side remote communicates with the base receiver on the Aqua Logic control unit using RF (radio frequency) technology. When you push a button on the spa-side remote, it sends a command and flashes the LED indicator once. After the spa-side remote receives a confirmation from the Aqua Logic base the receiver, the LED indicator on the spa-side remote flashes a 2nd time. Thus, 2 LED flashes are your confirmation that your command has been successfully transmitted to the Aqua Logic control unit. If the LED doesn't flash at all or else just flashes once after you've pushed a button, refer to the Troubleshooting section for assistance in resolving these problems.
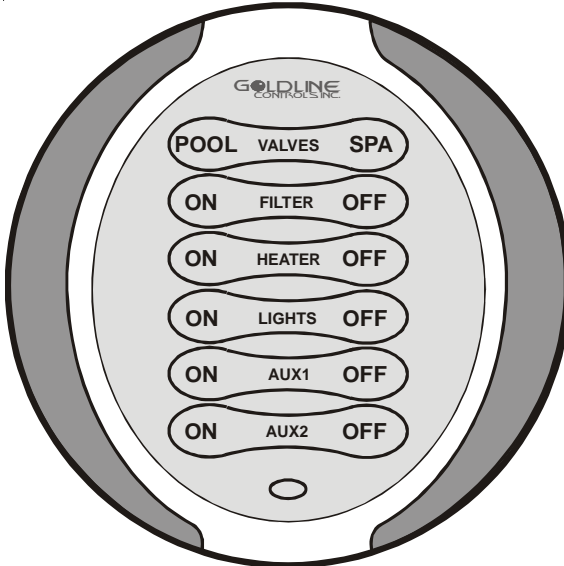
Valves POOL/SPA These buttons will allow you to select either pool or spa operation. You can not select spa spillover operation from the spa-side remote.

Filter ON/OFF The ON/OFF buttons allow manual operation that will override any automatic control settings (e.g. timeclock). The manual setting will remain active until the next scheduled automatic turn on/off event. There are some exceptions:

If the Heater1 is operating and the heater cooldown function is enabled, then pressing the OFF button will turn off the heater and the pump will run for another 15 minutes to allow the heater to cooldown before automatically turning off

If the freeze protection feature is enabled and the air temperature is below the selected freeze protection threshold (38°F default), then the pump will remain on to ensure that the pipes do not freeze.

Heater ON/OFF   Provided that the filter pump is running, normal Aqua Logic op-
                   eration will turn the heater (Aqua Logic HEATER1 output) on
                   until the desired temperature (see Settings Menu) is attained.
                   The heater will then turn on periodically, as required, to maintain
                   that temperature. When the "ON" button is pushed, the heater
                   will turn on for a minimum of 5 minutes or until the water reaches
                   104°F This allows people in the spa to temporarily override the
                   normal temperature setting. When the "OFF" button is pushed,
                   the heater is turned off regardless of the water temperature and
                   will remain off until either the "ON" button is pressed, or the start
                   of the next normal filter timer period.

Lights ON/OFF   The "ON"/"OFF" buttons allow manual operation that will over-
                   ride any automatic control settings (e.g. timeclock). The manual
                   setting will remain active until the next scheduled automatic turn
                   on/off event.

Aux1 ON/OFF   The "ON"/"OFF" buttons allow manual operation that will over-
                   ride any automatic control settings (e.g. timeclock). The manual
                   setting will remain active until the next scheduled automatic turn
                   on/off event. Note that the Aux3 - Aux6 outputs on Aqua Logic -
                   PS-8 models (Aux3-Aux14 on PS-16 models) can NOT be con-
                   trolled by this remote.

Battery Replacement

The spa-side remote runs on two AAA batteries. Since the internal circuits are only
active when you push a button, it is anticipated that the original, factory-installed,
batteries should provide years of service. If you do not at least see a single flash of the
LED indicator when you push a button, then the batteries may need replacement.

It is IMPORTANT that you carefully follow this procedure to ensure that your spa-
side remote retains its watertight integrity:

1. Use a Phillips head screwdriver to remove the 4 screws on the back of the spa-
    side remote. These are special screws with built-in O-rings and are an important
    part of making the spa-side remote watertight.

2. Separate the 2 halves of the remote. Do not touch the O-rings or allow any
    debris to fall onto the O-ring surface.

3. Replace the 2 AAA batteries. Alkaline batteries are recommended for maxi-
    mum life. If you observe any corrosion or water damage, contact the Goldline
    Technical Service Dept. Monday through Friday, 8AM to 8PM at 888-921-7665
    for assistance.

4. Carefully replace the back cover on the spa-side remote

5. Reinstall all 4 of the original screws.
       a. Loosely tighten all four screws
       b. Then go back and firmly tighten each screw.

6. The spa-side remote will remember the ID code of the Aqua Logic base receiver,
    so it is not necessary to perform the "Teach Wireless" procedure again. Verify
    proper operation by pressing any button and observing 2 quick flashes indicat-
    ing that the message was transmitted to the Aqua Logic base receiver and a
    confirmation was received.

Troubleshooting

If you have questions, you may call the Goldline Technical Service Dept. from Monday through Friday, 8AM to 8PM Eastern at 888-921-7665.

1. **Can't find the "Teach Wireless" display:** Press the "menu" button (possibly more than once) until "Settings Menu" is displayed. Next, press the "<" or ">" buttons (possibly more than once) unit the "Teach Wireless" display appears. If you get to the point where "Settings Menu" appears again, then this means that the Aqua Logic control unit is not communicating with the base receiver. Check that the 4 wire cable from the base receiver is plugged into the "wireless" connector on the main printed circuit board. If this connector is already plugged in (for more than 30 seconds), then call Goldline Technical Service for assistance.

2. **"Teach Wireless" failed:** Ensure that the remote is powered when pressing the button. This is indicated by a single flash of the LED on the spa-side remote or a message on the display of the in-house remotes. If the remote is powered, then the next most likely cause is that the distance between the base receiver and the remote is too great—try moving the remote closer to the receiver. Lastly, there may be other equipment in the neighborhood that is using the same frequency. To see if this is the case, go to the Settings Menu/Wireless Channel and select another channel. Note that after you change the channel you will have to "re-teach" every wireless remote device in the system.

3. **Unreliable communication with remote devices:** The most likely cause is that the distance between the base receiver and the remote is too great—try moving the remote closer to the receiver. Lastly, there may be other equipment in the neighborhood that is using the same frequency. To see if this is the case, go to the Settings Menu/Wireless Channel and select another channel. Note that after you change the channel you will have to "re-teach" every wireless remote device in the system.

4. **Single LED flash when a button is pushed:** The radio signal may be too weak—try pointing the spa-side remote in the direction of the pool equipment or try moving closer to the pool equipment. If that doesn't work, then try the "Teach Wireless" procedure to ensure that the remote knows the ID code of the base receiver and also what channel to communicate on. If this procedure is not successful, then refer to the "Teach Wireless" failed section above.

5. **The filter pump won't turn off when the "OFF" button is pressed:** (1) If the heater cooldown feature is enabled and the heater is on, then pressing the "OFF" button will cause the heater to turn off but leave the filter pump running for 15 more minutes to allow the heater to cooldown. Pressing the "OFF" button a 2nd time will override the cooldown period and turn the pump off. (2) If the freeze protection feature is enabled and the air temperature is less than 38°F then the pump will run continuously and any OFF button press will be disregarded.

6. **Functions won't turn on when the "ON" button is pressed:** (1) If the "SYSTEM OFF" button (Aqua Logic PS versions only) has been pushed then all functions are disabled. Press the "System Off" button again to resume normal operation. (2) If the Aqua Logic system is in service mode, then functions can only be turned on at the main unit display/keypad. Press the "SERVICE" button once (or twice) until normal operation is restored. (3) The filter pump is turned off for a short period of time while the valves are rotating. Normal operation will resume automatically when the valve(s) have finished their rotation.

Limited Warranty—Pool Automation & Chlorination Products
10/1/2004

This warranty statement is applicable to all pool automation and chlorination products manufactured by Goldline Controls, Inc. (Goldline) **on or after October 1, 2004**. See the appropriate warranty statement for other Goldline products or for pool automation and chlorination products produced prior to October 1, 2004.

Aqua Rite/Trol/Logic—Residential pools in USA or Canada:
Goldline warrants Aqua Rite, Aqua Trol, and Aqua Logic products (products with Goldline part numbers starting with AQ-RITE-, AQ-TROL-, AQ-LOGIC-, AQL-P-, AQL-PS-,or AQL-CL-) installed on private, residential swimming pools within the USA or Canada to be free from defects in material or workmanship, under normal use and service for **five years** from date of the initial system installation, provided it is installed in accordance with the Goldline installation instructions and specifications provided with the product. If written proof of the date of the initial system installation is not provided to Goldline, the manufacturing datecode on the Aqua Rite, Aqua Trol, or Aqua Logic electronics unit will be the sole determinant of the date of the initial system installation.

If a product is defective, in workmanship or materials and is removed and returned freight prepaid within three (3) years after the date of the initial system installation, Goldline Controls will, at its option, either repair or replace the defective product and return it freight prepaid. If the defective product is returned freight prepaid to Goldline more than three (3) years but within five (5) years of the date of the initial system installation, Goldline, at its option, will either repair or replace the defective product and will charge sixty percent (60%) of the current list price for such repairs or replacements, plus shipping charges. The costs incurred in removal and/or reinstallation of the product are NOT covered under this warranty.

Aqua Rite/Trol/Logic-- Commercial pools or any pool outside of the USA or Canada:
Goldline warrants Aqua Rite, Aqua Trol, and Aqua Logic products (products with Goldline part numbers starting with AQ-RITE-, AQ-TROL-, AQ-LOGIC-, AQL-P-, AQL-PS-,or AQL-CL-) installed on commercial pools anywhere or any non-private single family residential pool or any pool outside of the USA or Canada to be free from defects in material or workmanship, under normal use and service for **one year** from date of the initial system installation, provided it is installed in accordance with the Goldline installation instructions and specifications provided with the product. If written proof of the date of the initial system installation is not provided to Goldline, the manufacturing datecode on the Aqua Rite, Aqua Trol, or Aqua Logic electronics unit will be the sole determinant of the date of the initial system installation.

If a product is defective, in workmanship or materials and is removed and returned freight prepaid within one (1) year after the date of the initial system installation, Goldline will, at its option, either repair or replace the defective product and return it freight prepaid. The costs incurred in removal and/or reinstallation of the product are NOT covered under this warranty.

Accessory Products and Replacement parts—any pools, anywhere:
Goldline warrants any replacement parts or accessory products (any pool automation or chlorination product or part with a part number other than AQ-RITE-, AQ-TROL-, AQ-LOGIC-, AQL-P-, AQL-PS-,or AQL-CL-) to be free from defects in material or workmanship, under normal use and service for **one year** from date of the initial system installation, provided it is installed in accordance with the Goldline installation instructions and specifications provided with the product. If written proof of the date of the initial system installation is not provided to Goldline, the manufacturing datecode on the product or part will be the sole determinant of the date of the initial system installation.

If a product is defective, in workmanship or materials and is removed and returned freight prepaid within one (1) year after the date of the initial system installation, Goldline will, at its option, either repair or replace the defective product and return it freight prepaid. The costs incurred in removal and/or reinstallation of the product are NOT covered under this warranty.

Warranty exclusions:
1. Material supplied or workmanship performed by others in the process of installation
2. Damage resulting from improper installation including installation on pools larger than the product rating.
3. Problems resulting from failure to operate the products in accordance with recommended instructions contained in product's owners manual.
4. Problems resulting from failure to maintain pool water chemistry in accordance with recommended levels.
5. Problems resulting from tampering, accident, abuse, negligence, unauthorized repairs or alterations, fire, flood, lightning, freezing, external water, war, or acts of God.

THE EXPRESS LIMITED WARRANTY ABOVE CONSTITUTES THE ENTIRE WARRANTY OF GOLDLINE CONTROLS, INC. WITH RESPECT TO ITS POOL AUTOMATION AND CHLORINATION 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 GOLDLINE CONTROLS, INC. BE RESPONSIBLE FOR ANY CONSEQUENTIAL, SPECIAL OR INCIDENTAL DAMAGES OF ANY NATURE WHATSOEVER.

NO WHOLESALER, AGENT, DEALER, CONTRACTOR, OR OTHER PERSON IS AUTHORIZED TO GIVE ANY WARRANTY ON BEHALF OF GOLDLINE CONTROLS, INC. THIS WARRANTY IS VOID IF THE PRODUCT HAS BEEN ALTERED IN ANY WAY AFTER LEAVING THE FACTORY.

FCC Statement

(Compliance Statement, Part 15.19): 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.

WARNING (Part 15.21): Changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

Industry Canada Statement

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

Interference

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, then 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 the receiver
- Connect the equipment into a power source on different circuit than the receiver.