

# AQUA LOGIC<sup>®</sup>

Base Receiver



## Installation/Operation Manual

for model

AQL-BASE-RF

**GOLDLINE**  
CONTROLS INC.

North Kingstown, RI USA

[www.goldlinecontrols.com](http://www.goldlinecontrols.com)

## **Compatibility**

This product is compatible with all Aqua Logic controls operating 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.

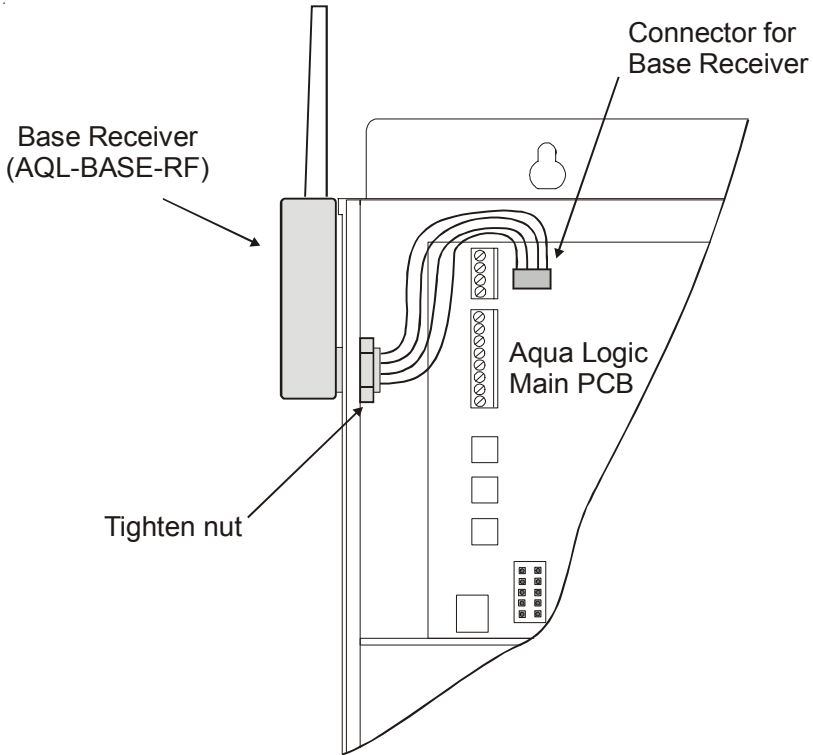
This Aqua Logic base receiver can communicate with the Aqua Logic spa-side remote (AQL-SPASIDE-RF) and also the wireless in-house remote display/keypads (AQL-REMOTE-RF-PS-4/8/16).

# INSTALLATION

Installation is very easy and should just take a few minutes. For most installations the Base Receiver will mount directly on the Aqua Logic main control unit (see description and diagram below). For some installations where the remote devices are a long distance from the Base Receiver or where there are interfering walls (eg. A steel shed in the yard or a steel reinforcing grid inside a stucco wall on the house), the Base Receiver may have to be mounted remotely from the Aqua Logic control unit in order to achieve reliable communications. Refer to the instructions and diagram on page 3 for more information regarding remote mounting.

## Direct Mounting on Aqua Logic Control Unit

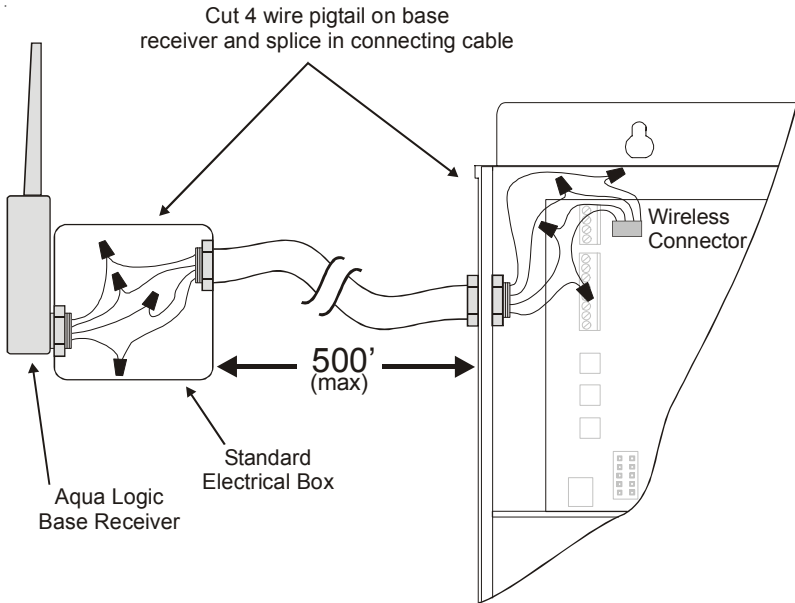
Disconnect power and then remove the panel from the Aqua Logic control unit. Remove the knock-out on the upper left side of the Aqua Logic main unit and mount the RF base station. Secure the base receiver in place by firmly tightening the nut from inside the Aqua Logic unit. Lastly, plug the pigtail cable into the connector labeled “Wireless Connector” on the Aqua Logic main circuit board.



## Remote Mounting of the Base Receiver

The Aqua Logic Base receiver can be mounted up to 500 feet away from the main control unit. This feature is helpful if the main control unit is located a long distance from the pool area or if there are buildings that may interfere with the radio communication between the Base Receiver and the remote devices.

1. Mount the Base Receiver on an standard, outdoor rated electrical box.
2. Cut the each of the 4 wires in the Base Receiver "pigtail" cable and then install the connector half into the "Wireless Connector" on the main printed circuit board (PCB) in the Aqua Logic control unit.
3. Use a 4 conductor cable and splice both ends of the cable making sure that the colors match up correctly.



## OPERATION

Every Base Receiver is manufactured with a unique ID code. This allows private, secure communication with all of your remote devices while ignoring any signals transmitted by other wireless devices including any other Aqua Logic controls in the neighborhood.

**IMPORTANT:** Before trying to use any remote device: You must "teach" the correct ID code to the remote device so it knows which base receiver to communicate with. Refer to the Aqua Logic Operation Manual or the manual for your remote device for "teaching" instructions .

The Aqua Logic Base Receiver and remote devices are programmed with a sophisticated protocol that automatically switches frequencies if other devices are interfering. In the unlikely event that it can not find a usable frequency, it may be necessary to change channels. Refer to the Aqua Logic Operation Manual for instructions.

# TROUBLESHOOTING

If you believe that your system is not operating properly or if you have a general question regarding system operation, 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) until "Teach Wireless" display appears. If you go through all of the displays without ever seeing the "Teach Wireless" and 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 (refer to the Installation section for connection diagram). 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 on 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. No communication with remote controls:** 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.

# Limited Warranty

## Pool Automation & Chlorination Products

1/1/2004

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