

## Installation and Operation Manual



# AquaLink<sup>®</sup> Touch<sup>™</sup>

#### Wired/Wireless Controller

(For use with AquaLink® RS for Systems with Rev Q Firmware or later)

#### FOR INDOOR USE ONLY

## A WARNING

FOR YOUR SAFETY - This product must be installed and serviced by a contractor who is licensed and qualified in pool equipment by the jurisdiction in which the product will be installed where such state or local requirements exist, the maintainer must be a professional with sufficient experience in pool equipment installation and maintenance so that all of the instructions in this manual can be followed exactly. Before installing this product, read and follow all warning notices and instructions that accompany this product. Failure to follow warning notices and instructions may result in property damage, personal injury, or death. Improper installation and/or operation will void the warranty.

Improper installation and/or operation can create unwanted electrical hazard which can cause serious injury, property damage, or death.

#### ATTENTION

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.

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 to an electrical source on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Modifications made to this equipment, which are not authorized by the manufacturer, may void the user's authority to operate this equipment.

H0325400 Rev

C

### **Table of Contents**

**NOTE** Some of the features described in this Manual DO NOT apply to all AquaLink RS models.

Section 1. Important Safety Instructions...... 4 Section 2. Overview of the AguaLink Touch Controller ..... 6 System Overview ......6 2.1 2.2 2.2.1 Turning ON the AquaLink Touch ......7 2.2.2 Turning OFF the AquaLink Touch......7 2.3 Battery Status for Wireless Controller.....7 2.4 Signal Strength for Wireless Controller.....7 2.5 Maintenance Information ......7 Section 3. Wired AquaLink Touch Installation......8 3.1 Wired AquaLink Touch AC Adapter Kit ......8 3.2 Installation of the Wired AguaLink Touch AC Adapter Kit on the Bezel Assy......8 3.3 Installation of the Wired AguaLink Touch AC Adapter Kit in the Low-Voltage Raceway ......9 Wired Flush-Mount Installation ......10 3.4 Wired Surface-Mount Installation ...... 11 3.5 Section 4. Wireless AquaLink Touch Installation.....12 AguaLink Touch Transceiver J-Box Cable 4.1 4.2 AquaLink Touch Charger Installation ......12

4.3	Changing the Frequency Channel	.12
Section	on 5. Using the Home Screen Menu	. 13
5.1 5.1.1 5.1.2 5.1.3 5.2	Home Screen Title Bar Middle Info Panel Navigation Bar Dialog Boxes	.13 .13 .13 .13 .13
Section	on 6. Using the Menu Screen	. 14
6.1 6.2 6.2.1 6.2.2 6.3 6.3.1 6.3.2 6.4 6.4.1	<ul> <li>Menu Screen</li></ul>	.14 .14 .14 .15 .15 .15 .15 .16
6.5 6.5.1 6.5.2 6.5.3 6.5.4 6.5.5 6.5.6	Touch Setup         Brightness         Sound         Calibrate AquaLink Touch         Address         RF Channel (For wireless units only)         AquaLink Touch J-Box LED Operation	.16 .16 .17 .17 .17 .17 .18

#### Section 7. Troubleshooting ...... 19

7.1 AquaLink Touch Troubleshooting Guide .......19

EQUIPMENT INFORMATION RECORD				
DATE OF INSTALLATION				
INSTALLER INFORMATION				
INITIAL PRESSURE GAUGE READING (WITH CLEAN FILTER)				
PUMP MODEL	HORSEPOWER			
FILTER MODEL	SERIAL NUMBER			
CONTROL PANEL MODEL	SERIAL NUMBER			
NOTES:				



## Section 1. Important Safety Instructions

## READ AND FOLLOW ALL INSTRUCTIONS

### Lire la notice technique.

All electrical work must be performed by a licensed electrician and conform to all national, state, and local codes. When installing and using this electrical equipment, basic safety precautions should always be followed, including the following:

#### **DANGER**

To reduce the risk of injury, do not remove the suction fittings of your spa or hot tub. Never operate a spa or hot tub if the suction fittings are broken or missing. Never replace a suction fitting with one rated less than the flow rate marked on the equipment assembly.

#### 

Prolonged immersion in hot water may induce hyperthermia. Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above the normal body temperature of 98.6°F (37°C). The symptoms of hyperthermia include dizziness, fainting, drowsiness, lethargy, and an increase in the internal temperature of the body. The effects of hyperthermia include: 1) unawareness of impending danger; 2) failure to perceive heat; 3) failure to recognize the need to exit spa; 4) physical inability to exit spa; 5) fetal damage in pregnant women; 6) unconsciousness resulting in a danger of drowning.

#### **WARNING**

#### To Reduce the Risk of Injury -

- a) The water in a spa should never exceed 104°F (40°C). Water temperatures between 100°F (38°C) and 104°F (40°C) are considered safe for a healthy adult. Lower water temperatures are recommended for young children and when spa use exceeds 10 minutes.
- b) Since excessive water temperatures have a high potential for causing fetal damage during the early months of pregnancy, pregnant or possibly pregnant women should limit spa water temperatures to 100°F (38°C).
- c) Before entering a spa or hot tub, the user should measure the water temperature with an accurate thermometer since the tolerance of water temperature-regulating devices varies.
- d) The use of alcohol, drugs, or medication before or during spa or hot tub use may lead to unconsciousness with the possibility of drowning.
- e) Obese persons and persons with a history of heart disease, low or high blood pressure, circulatory system problems, or diabetes should consult a physician before using a spa.
- f) Persons using medication should consult a physician before using a spa or hot tub since some medication may induce drowsines while other medication may affect heart rate, blood pressure, and circulation.

#### 

**Risk of electric shock -** Install the power center at least five (5) feet (1,52m) from the inside wall of the pool and/ or hot tub using non-metallic plumbing. Canadian installations must be at least three (3) meters from the water. Children should not use spas or hot tubs without adult supervision.

Do not use spas or hot tubs unless all suction guards are installed to prevent body and hair entrapment.

People using medications and/or having an adverse medical history should consult a physician before using a spa or hot tub.

#### **AVERTISSEMENT**

**Danger d'electrocution -** Les installations canadiennes doivent se trouver à au moins trois (3) mètres de l'eau. Ne pas laisser les enfants utiliser une cuve de relaxation sans surveillance.

Pour éviter que les cheveux ou une partie du corps puissent être aspirés, ne pas utiliser une cuve de relaxation si les grilles de prise d'aspiration ne sont pas toutes en place.

Les personnes qui prennent des médicaments ou ont des problèmes de santé devraient consulter un médecin avant d'utiliser une cuve de relaxation.

#### 

People with infectious diseases should not use a spa or hot tub.

To avoid injury, exercise care when entering or exiting the spa or hot tub.

Do not use drugs or alcohol before or during the use of a spa or hot tub to avoid unconsciousness and possible drowning.

Pregnant or possibly pregnant women should consult a physician before using a spa or hot tub.

Water temperature in excess of 100°F (38°C) may be injurious to your health.

Before entering a spa or hot tub, measure the water temperature with an accurate thermometer.

Do not use a spa or hot tub immediately following strenuous exercise.

Prolonged immersion in a spa or hot tub may be injurious to your health.

Do not permit any electric appliance (such as a light, telephone, radio, or television) within 5 feet (1,52m) of a spa or hot tub.

The use of alcohol, drugs or medication can greatly increase the risk of fatal hyperthermia in hot tubs and spas. Water temperature in excess of 100°F (38°C) may be hazardous to your health.

#### 

Les personnes atteintes de maladies infectieuses ne devraient pas utiliser une cuve de relaxation.

Pour éviter des blessures, user de prudence en entrant dans une cuve de relaxation et en sortant.

Pour éviter l'évanouissement et la noyade éventuelle, ne prendre ni drougue ni alcool avant d'utiliser une cuve de relaxation ni quand on s'y trouve.

Les femmes enceintes, que leur grossesse soit confirmée ou non, devraient consulter un médecin avant d'utiliser une cuve de relaxation.

Il peut être dangereux pour la santé de se plonger dans de l'eau à plus de 38°C (100°F).

Avant d'utiliser une cuve de relaxation mesurer la témperature de l'eau à l'aide d'un thermomètre précis.

Ne pas utiliser une cuve de relaxation immédiatement après un exercice fatigant.

L'utilisation prolongée d'une cuve de relaxation peut être dangereuse pur la santé.

Ne pas placer d'appareil électrique (luminaire, téléphone, radio, téléviseur, etc) à moins de 1,52m de cette cuve de relaxation.

La consommation d'alcool ou de drogue augmente considérablement les risques d'hyperthermie mortelle dans une cuve de relaxation.

Il peut etrê dangereux pour la santé de se plonger dans de l'eau à plus de 38°C (100°F).

#### WARNING

To avoid injury ensure that you use this control system to control only packaged pool/spa heaters which have builtin operating and high limit controls to limit water temperature for pool/spa applications. This device should not be relied upon as a safety limit control.Vaticone ssignatissin tus hostionsula poractoric tuam et vehente inum me con

#### A WARNING

A terminal bar marked "GROUND" is provided within the power center. To reduce the risk of electrical shock which can cause serious injury or death, connect this terminal bar to the grounding terminal of your electric service or supply panel with a continuous copper conductor having green insulation and one that is equivalent in size to the circuit conductors supplying this equipment, but no smaller than no. 12 AWG (3,3mm<sup>2</sup>). In addition, a second wire connector should be bonded with a no. 8 AWG (8,4mm<sup>2</sup>) copper wire to any metal ladders, water pipes, or other metal within five (5) feet (1,52 m) of the pool/spa. In Canada the bonding wire must be minimum 6 AWG (13,3mm<sup>2</sup>).

#### **WARNING**

Only use the battery pack provided with the equipment. Only use the battery charger provided with the equipment. RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.

### 

A ground-fault circuit-interrupter must be provided if this device is used to control underwater lighting fixtures. The conductors on the load side of the ground-fault circuit-interrupter shall not occupy conduit, boxes, or enclosures containing other conductors unless the additional conductors are also protected by a ground-fault circuit-interrupter. Refer to local codes for complete details.



Attention installer: Install to provide drainage of compartment for electrical components.

## SAVE THESE INSTRUCTIONS

#### Section 2. Overview of the AquaLink Touch Controller

Welcome, and thank you for purchasing the AquaLink Touch Controller!

The AquaLink Touch controller is a state-of-the-art fully configurable touch-sensitive panel. It's an ideal modern and stylish panel to control pool, spa, sprinklers, salt chlorinators and much more equipment -- all in one compact package.

**NOTE** The AquaLink Touch controller is for indoor use only. The controller is not weather proof or water proof.

This document gives instructions for installing the Jandy AquaLink Touch Controller. **The instructions must be followed exactly. Read through the instructions completely before operating the equipment.** 

#### 2.1 System Overview

The AquaLink Touch controller can be used in addition to an existing AquaLink RS control system, however, the firmware, in the power center must be updated to revision Q or later. The AquaLink Touch controller is a wall-mount or hand-held color touch screen that is preconfigured with a basic setup.

The AquaLink Touch controller is a scalable system that may be customized in any of the following ways:

- 1. Activate the equipment manually through the DEVICES menu.
- 2. Program the equipment to turn on and off at specific times.
- Use the OneTouch<sup>™</sup> buttons to create scene settings with just "one touch" of a button. For example, you can program the spa heater to heat to 101 degrees, spa light on, jets on, water features on, and then name the result Romantic Scene.

Additionally, the AquaLink Touch case comes with a flash memory card reader where you can import your favorite digital photos to create your own custom slideshow.

#### 2.2 Basic Functions

The AquaLink Touch controller is operated by touching the screen with the tip of your finger or you may use a stylus pen or similar device.

When the screen is touched, an optional "keyclick" provides audible feedback. The default setting for the sound is ENABLED. See Section 6.5.2.

#### 

To prevent damage to the screen, lightly touch the screen with the fingertip. Do not use any other type of objects other than the finger or a stylus to touch the screen. DO NOT use metal or hard pointing devices that might scratch or damage the LCD screen and may possibly void the warranty.



Figure 1. Wall Flush-Mount AquaLink Touch Controller







Figure 3. Wireless Controller with Charging Base

#### 2.2.1 Turning ON the AquaLink Touch

To turn on the wireless AquaLink Touch controller, touch anywhere on the LCD screen for two (2) seconds and the screen will be lit. You will hear a beep sound. For a wired AquaLink Touch controller, a momentary touch will awaken a unit that has gone to sleep.



Figure 4. Turning ON the AquaLink Touch

#### 2.2.2 Turning OFF the AquaLink Touch

To turn off the AquaLink Touch controller, touch the POWER button on the bottom navigation bar and a CONFIRM dialog box will appear. Touch the OK button to turn off the AquaLink Touch.



Figure 5. Turning OFF the AquaLink Touch

#### 2.3 Battery Status for Wireless Controller

The Battery icon located on the top middle of the HOME menu screen, indicates the status of the battery. If the batteries have full or sufficient charge, the icon will appear on the display screen as 100%, 75%, 50%, or 25% full. If the battery needs to be charged, the icon will consistently blink and appear as and the display will sound a warning signal.

#### 2.4 Signal Strength for Wireless Controller

The Signal Strength icon  $T \equiv$ , located on the top of the HOME menu screen, indicates the signal strength available from the transceiver J-box to the AquaLink Touch controller. Signal strength is affected (lowered) as the AquaLink Touch controller is moved farther away from the transceiver J-Box. Also, obstructions, such as walls or other wireless products, can lower the signal strength if located between the AquaLink Touch controller and the transceiver J-Box.

#### 2.5 Maintenance Information

The LCD display and the touch panel are sensitive components that can be easily scratched and damaged. This type of screen requires special care when cleaning. Follow the steps below to safely clean the AquaLink Touch screen:

- 1. Turn off the screen. If the screen is dark, it will be easier to see the areas that are dirty or oily.
- 2. Use a dry, soft cloth and very gently wipe the screen. A great choice would be the microfiber type of cloth used to clean eyeglasses.

#### 

Avoid using paper towels, tissue paper, or something like your shirt to wipe the LCD screen. These nonultrasoft materials can easily scratch the screen.

- 3. If the dry cloth did not completely remove the dirt or oil, do not press harder in an attempt to scrub it off.
- 4. Many companies also sell small spray bottles of special cleaner for LCD screens. Spray cleaner may also be used by applying to a dry, soft cloth.

#### 

Avoid cleaning products that contain ammonia, ethyl alcohol, acetone, toluene, ethyl acid, or methyl chloride. These chemicals can react with the materials that the LCD screen is made of which could yellow the screen or cause other kinds of damage.

5. The plastic case that surrounds the screen can be cleaned with any multipurpose cleaner but take care to avoid contact with the screen itself. Never spray liquid directly on the LCD screen or it could run inside the display and cause damage.



#### Section 3. Wired AquaLink Touch Installation

The AquaLink Touch controller can be used in addition to an already existing AquaLink RS control system, however, the firmware in the power center must be updated to revision Q or later.

#### 3.1 Wired AquaLink Touch AC Adapter Kit

The Wired AquaLink Touch adapter kit contains the following items:



Figure 6. Wired AquaLink Touch AC Adapter Kit

#### 3.2 Installation of the Wired AquaLink Touch AC Adapter Kit on the Bezel Assy

#### 

Potentially high voltages in the AquaLink RS power center can create dangerous electrical hazards, possibly causing death, serious injury or property damage. Turn off power at the main circuit feeding the AquaLink RS power center to disconnect the power center from the system.

- 1. Turn off all power to the power center.
- 2. Remove the screws that secure the front panel. Remove the front panel.
- 3. Unscrew and remove the power center PCB and bezel assembly from the power center.
- 4. Unplug the AquaLink RS transformer 24 VAC power plug from the 24 VAC 3-pin terminal on the power center as shown in Figure 8.

- 5. Pull the white and black wires of the AC Adapter into the high voltage area through the wire conduit.
- **NOTE** The AC adapter and the power center transformer will share the breaker panel terminals. See Figure 7.
- 6. In the high voltage area of the power center, connect the white wire of the AC adapter to the neutral bar and the black wire to the circuit breaker with the AquaLink RS transformer.



Figure 7. Wiring in the Power Center High Voltage Area

7. Using the self-adhesive strip attached on the back of the AC adapter, attach the AC adapter to the power center.

Jandy<sub>®</sub>

- 8. Secure the RS485 interface board and mounting bracket to the daughter card mounting area in the bezel assembly with two (2) self-tapping screws provided in the kit. See Figure 8.
- 9. Remove the red, 4-pin terminal bar from the power center PCB and bezel assembly and secure each of the four (4) color wires of the RS485 interface board cable to their corresponding color into the 4-pin terminal bar. Reconnect the 4-pin terminal bar to the power center PCB and bezel assembly.



Figure 8. Installation of the RS485 Interface Board Assembly

- Remove the red, 4-pin terminal bar from the RS485 interface board and secure the AquaLink Touch RS485 four (4) color cable to the red, 4-pin terminal bar. Reconnect the 4-pin terminal bar to the RS485 interface board.
- 11. Re-connect the AquaLink RS transformer 24 VAC power plug to the 24 VAC 3-pin terminal on the power center PCB and bezel assembly.
- 12. Reinstall the power center PCB and bezel assembly in the power center can using the screws previously removed.

#### 3.3 Installation of the Wired AquaLink Touch AC Adapter Kit in the Low-Voltage Raceway

If the daughter card area is not available or if the slots on the bezel assembly are all used, install the RS485 interface board in the low-voltage raceway of the power center.

#### A WARNING

Potentially high voltages in the AquaLink RS power center can create dangerous electrical hazards, possibly causing death, serious injury or property damage. Turn off power at the main circuit feeding the AquaLink RS power center to disconnect the power center from the system.

- 1. Turn off all power to the power center.
- 2. Unscrew and remove the power center PCB and bezel assembly from the power center.
- 3. Unplug the AquaLink RS transformer 24 VAC power plug from the 24 VAC 3-pin terminal on the power center PCB and bezel assembly as shown in Figure 8.
- 4. Pull the white and black wires of the AC Adapter into the high voltage area through the wire conduit.
- **NOTE** The AC adapter and the power center transformer will share the breaker panel terminals. See Figure 7.
- 5. In the high voltage area of the power center, connect the white and black wires to the AC power source.
- 6. Using the self-adhesive strip atached on the back of the AC adapter, attach the AC adapter to the power center.

- 7. Secure the RS485 interface board and mounting bracket inside of the power center can in the low voltage raceway. See Figure 9.
- Remove the red, 4-pin terminal bar from the power center PCB and bezel assembly and secure each of the four (4) color wires of the RS485 interface board cable to their corresponding color into the 4-pin terminal bar. Reconnect the 4-pin terminal bar to the power center PCB and bezel assembly.
- 9. Remove the red, 4-pin terminal bar from the RS485 interface board and secure the AquaLink Touch RS485 four (4) color cable to the red, 4-pin terminal bar. Reconnect the 4-pin terminal bar to the RS485 interface board.
- 10. Re-connect the AquaLink RS transformer 24 VAC power plug to the 24 VAC 3-pin terminal on the power center PCB and bezel assembly.
- 11. Reinstall the power center PCB and bezel assembly in the power center can using the screws previously removed.



Figure 9. Installation of the RS485 Interface Board in the Low-Voltage Raceway

#### 3.4 Wired Flush-Mount Installation

#### 

Potentially high voltages in the AquaLink RS power center can create dangerous electrical hazards, possibly causing death, serious injury or property damage. Turn off power at the main circuit feeding the AquaLink RS power center to disconnect the power center from the system.

See section 3.2 and 3.3 to install the AC adapter kit in the power center.

1. With the aid of the homeowner, find the best location for the AquaLink Touch controller.

#### 

Prior to cutting any holes, ensure sufficient clearance. Check for any hidden wires or structural braces behind the wall where the panel is to be located.

- 2. Place the template in the location chosen. Level the template and trace around the outside of the box with a pencil. Cut the hole being careful not to oversize.
- 3. Route the 4-conductor cable from the power center to the wall.



Figure 10. Installation of the Wired Flush-Mount AquaLink Touch Controller

4. To release the LCD front panel and PCB from the AquaLink Touch case, use the provided tool to press gently on the retaining tabs located on each side of the panel.

**NOTE** Retain the tab release tool for future use.

- 5. Disconnect the wire harness from the RS485 interface board and pull the front panel out the AquaLink Touch case.
- Depending on the thickness of the drywall, determine which side of the cleat is to be facing. For 1/2" (1,2 cm) use the small hook facing the drywall. For 5/8" (1,5 cm) use the bigger hook facing the drywall. See Figure 11.



Figure 11. Installation of the Cleats

- 7. Wire the 4-conductor cable to the red, 4-pin terminal bar. Push the 4-pin terminal bar onto the RS485 interface board at the back of the AquaLink Touch case.
- 8. As shown in Figure 10, insert the screws through the tabs and put the cleats into the four (4) holes of the AquaLink Touch case. Hand tighten the screws.
- 9. Place the AquaLink Touch case on the wall and connect the wire harness of the front panel to the RS485 interface board. Place the LCD front panel back into the case.

#### 3.5 Wired Surface-Mount Installation

#### **WARNING**

Potentially high voltages in the AquaLink RS power center can create dangerous electrical hazards, possibly causing death, serious injury or property damage. Turn off power at the main circuit feeding the AquaLink RS power center to disconnect the power center from the system. See section 3.2 and 3.3 to install the AC adapter kit in the power center.

- 1. With the aid of the homeowner, find the best location for the AquaLink Touch controller.
- 2. Place the surface mount bracket in the location chosen. Mark the holes for drilling for the bracket.
- Drill two (2) holes for the anchors and a 1<sup>1</sup>/<sub>2</sub>" (4 cm) hole for the 4-conductor cable. See Figure 12.
- 4. Install the two (2) anchors into the holes of the wall.
- 5. Secure the mounting bracket to the wall with the two (2) self-tapping screws provided in the kit.
- 6. Route the 4-conductor cable from the power center to the AquaLink Touch controller.
- 7. Pull the 4-conductor cable through the hole in the wall. Wire the 4-conductor cable to the red, 4-pin terminal bar located on the back of the AquaLink Touch controller.
- 8. Align the four (4) holes on the back of AquaLink Touch controller and snap into the four (4) retainer screws on the bracket.



Figure 12. Installation of the Wired Surface-Mount AquaLink Touch Controller



#### Section 4. Wireless AquaLink Touch Installation

#### 4.1 AquaLink Touch Transceiver J-Box Cable Installation

*Installation Considerations.* The transceivers will transmit through walls and around corners. Steel framing, aluminum siding, wrought iron, cyclone fences, leaded glass, and other 900 MHz frequency items may inhibit/prevent communication between the AquaLink<sup>®</sup> RS AquaLink Touch wireless control and the power center. The transceivers do not require line of sight to communicate.

#### **WARNING**

Potentially high voltages in the AquaLink RS power center can create dangerous electrical hazards, possibly causing death, serious injury or property damage. Turn off power at the main circuit feeding the AquaLink RS power center to disconnect the power center from the system.

Never run high voltage and low voltage in the same conduit.

- 1. Turn off all power to the power center.
- Mount the outdoor transceiver J-box at least six (6) feet (1,8 m) above the ground at least eight (8) feet (2,4 m) from any motor or air blowers that may be in the vicinity, and at least five (5) feet (1,5 m) away from other transceiver J-boxes.
- 3. The transceiver J-box antenna must point towards the sky.
- **NOTE** To improve performance of the transceiver, mount the J-box more than six (6) feet (1,8 m) above the ground.
- 4. Open the door to the power center and remove the dead panel.
- 5. Pull cable through the knockout with the Heyco fitting and into the low voltage compartment. See Figure 13.
- 6. Strip back the insulation jacket of the cable approximately 6" (15 cm).
- Strip each wire ¼" (6 mm) and connect to the red, 4-pin connector on the power center PCB. A multiplex kit (part number 6584) may be required if there are more than two (2) cables running to a red, 4-pin connector on the PCB.

8. Install the dead panel to the power center and restore all power.

#### 4.2 AquaLink Touch Charger Installation

- 1. Plug the charger into a wall socket.
- **NOTE** The charger plug must be installed near the wall socket and easily accessible.
- 2. Charge the wireless controller for 24 hours before removing from the power supply/charger (the system is operational while charging).

#### **WARNING**

Only use the battery pack provided with the equipment. Only use the battery charger provided with the equipment. RISK OF EXPLOSION IF BATTERY IS REPLACED BY AN INCORRECT TYPE.

#### 4.3 Changing the Frequency Channel

See Section 6.5.5, "**RF Channel (For wireless units only)**".



Figure 13. Outdoor Transceiver J-box Installation

## Section 5. Using the Home Screen Menu

#### 5.1 Home Screen

Initially, when the AquaLink Touch controller is turned on, the HOME screen appears. This screen functions primarily as the logon screen and starting point for each session, providing access to the main navigation bar. This screen displays the current time, date, temperature, and some user defined features.

As shown in the figure below, the AquaLink Touch menu screen displays the following layout:

- The title bar.
- The middle info panel.
- The navigation bar.



#### 5.1.1 Title Bar

The title bar displays the title of the screen and the current date/time. The title of the current menu in use will always be shown on the title bar. This portion of the screen is a read only bar and does not respond to touch.

**NOTE** For wireless controllers, a battery status and signal strength are shown on the HOME screen title bar.

#### 5.1.2 Middle Info Panel

The middle info panel on the HOME screen displays temperature, user defined features and access to the OTHER DEVICES ON/OFF screen.

#### 5.1.3 Navigation Bar

The navigation bar displays the following links:

Returns the user to HOME screen.
Displays the main menu setup and programming.
Displays preset mood/scene settings.
Displays the service and equipment information.
Returns the user to the previous screen.
Displays information about the equipment.
Displays the slideshow program and setup.
Turns off the controller.

#### 5.2 Dialog Boxes

These are secondary windows that provide additional information or alerts about an operation in progress.



**CONFIRM** Asks if the user wants to proceed with an action.

#### INFORMATION

Informs the user of events that are related to the current user activity.

- **WARNING** Alerts the user of a condition that might cause a problem.
- **ERROR** Alerts the user of an error.

#### Section 6. Using the Menu Screen

#### 6.1 Menu Screen

The MENU screen provides access to the main links to program, set up, schedule, and customize your pool/spa system.

#### 6.1.1 To Display the Menu Screen

#### HOME > MENU

From the HOME screen, touch the MENU button to display the main MENU screen.



#### 6.2 Schedule

The SCHEDULE screen allows ON and OFF times to be programmed for any circuit (equipment) controlled by the AquaLink RS. The circuit can be scheduled to turn ON or OFF all days, weekends, weekdays, or any specific day of the week. Each piece of equipment can be programmed for multiple on/off times each day.

#### 6.2.1 Adding Devices to the Circuit List

Adding new devices to the circuit list on the SCHEDULE screen is a two-steps procedure. First, you select and add the device to the circuit list and then you program it as desired.

#### First Step - Selecting the new device

#### MENU > SCHEDULE > SCHEDULE DEVICES

From the SCHEDULE screen, in the circuit schedule list, touch the ADD button to display the screen below.

From the SCHEDULE DEVICES screen, in the DEVICES list, touch the desired equipment. Then, touch the SELECT button to save your selection and you will be automatically returned to the SCHEDULE screen.

Schedule Dev	vices	Thu January 1, 2009 3:03 PM
	Devices Filter Pump VSP Pump Spa Pool Heat Spa Heat Chiller Aux 1 Aux 2 Page Up Page Down	Select
Home Menu One	D ? Touch Help Ba	us Photos Power
		$\nabla$

Use PAGE UP/DOWN to scroll the devices list.

**NOTE** Only one piece of equipment can be selected at a time.

#### Second Step - Programing the new device

On the SCHEDULE screen, the added equipment will be displayed and highlighted in the circuit list. Also, the EDIT will be highlighted.

Enter the day for the new device. Touch SAVE when finished. Repeat this procedure to add more devices to the circuit list.

Sched	lule			Thu	Januar	y 1, 20	009 3:	03 PM
Circuit	Start Time	Stop Time	Days			Run	days	
VSP Pool	7:00 AM 8:00 AM 7:00 PM	6:00 PM 5:00 PM	Th, Wknd All		All	м	Tu	w
Spa Spa Spa Hoat	5:00 PM	9:00 PM	M, W		Th	F	Sa	Su
Pool Light	6:00 PM	8:00 PM	All		Week	Days	Wee	kends
Add	Edit Delete	Page Down	Page Up Save	,	Star	Time	Stop 1	Гime
Home Menu OneTouch Help								
				٢				

#### 6.2.2 ON/OFF Times

#### MENU > SCHEDULE

From the SCHEDULE screen, in the circuit schedule list, touch the desired equipment to be scheduled. Touch the EDIT button.

From the RUN DAYS box, touch the desired run day and then touch the START TIME button to display the numeric keypad screen.

Sched	ule		T	hu January 1, 2	009 3:03 PM
Circuit	Start Time	Stop Time	Days	Ru	n Days
VSP Pool	7:00 AM 8:00 AM	6:00 PM 5:00 PM	Th, Wknd All	All M	Tu W
Spa Spa Spa Heat	5:00 PM 5:00 PM 6:00 PM	10:00 PM 9:00 PM 8:00 PM	F, Sa M, W All	Th F	Sa Su
Pool Light	6:00 PM	8:00 PM	All	Week Days	Weekends
Add E	Edit Delete	Page Down	Page Save	Start Time	Stop Time
Home	Menu One	D ? Touch He	) (O) Back	C Stat	) 🔘 ps Power
					<b>/</b>

Enter the desired time. Toggle the AM/PM button to select your choice. Touch ENTER when finished.



#### 6.3 To Set Up Date/Time

The DATE/TIME screen allows to enter the current date and time. The correct time and date ensures that programming will work properly.

#### 6.3.1 Date

#### MENU > SET DATE/TIME

From the MENU screen, touch the SET DATE/TIME button to display the SET DATE/TIME screen.

On this screen, touch the DATE button. Enter a date in Month-Day-Year format. Touch ENTER to save the new date.



#### 6.3.2 Time

#### MENU > SET DATE/TIME

From the SET DATE/TIME screen, touch the TIME button. Enter new time. Toggle the AM/PM button to select your choice. Touch ENTER when finished.





#### 6.4 Customize Home

The CUSTOMIZE HOME screen is used to link the icons of the HOME screen to general items, auxiliaries, and OneTouch<sup>TM</sup> settings.

#### MENU > CUSTOMIZE HOME

From the MENU screen, touch the CUSTOMIZE HOME button to display the CUSTOMIZE HOME screen.



## 6.4.1 Customize General, Aux and OneTouch™ Items

Highlight the GENERAL, AUX or ONETOUCH button. Select the desired item from the item list. Touch an icon from the bottom list. The label of the icon should reflect the assigned item.

Use the UP/DOWN arrows to scroll the list.



#### 6.5 Touch Setup

The TOUCH SETUP screen allows to display features of the Touch controller screen to be set up.

#### MENU > TOUCH SETUP

From the MENU screen, touch the TOUCH SETUP button to display the TOUCH SETUP screen.

Touch Setup	Thu January 1, 2009 3:03 PM
Slideshow Enabled Image Time 1 Min	Sleep Mode Enabled Sleep Time 10:00 P.M.
No Activity 30 Sec Brightness 80%	Sound Enabled Calibrate Touch Screen
	RF Channel     Address       1     1
Home Menu OneTouch Help	Back Status Photos Power

Note that the wireless AquaLink Touch controller displays an additional RF CHANNEL button.

#### 6.5.1 Brightness

The AquaLink Touch screen is designed to be lit so that you can use this controller in various lighting conditions. The brightness of the screen can be easily adjusted.

From the TOUCH SETUP screen, touch the BRIGHTNESS button, and the screen will brighten by increments of 10%. The default setting for this feature is 80%.

**NOTE** After reaching 100% brightness, the screen will darken back to 10% if the BRIGHTNESS button is touched again.

#### 6.5.2 Sound

The sound is a single tone, generally made when touching the buttons on the AquaLink Touch screen.

DEFAULT - Enabled.

If you want to disable the sound, touch the SOUND button on the TOUCH SETUP screen.

#### 6.5.3 Calibrate AquaLink Touch

The AquaLink Touch controller is a touch-sensitive device and must be calibrated when the links are not responding to the touch, or when the touch-sensitive area of the buttons are out of place.

The purpose of this procedure is to teach the touchsensitive panel to recognize the precise location of the buttons and menus. To calibrate the AquaLink Touch screen, you will need a stylus pen or similar device for point accuracy. You cannot use your finger to calibrate the AquaLink Touch screen.

#### 

To avoid scratching or damaging the LCD screen, DO NOT use metal or hard pointed devices to operate the LCD.

From the TOUCH SETUP screen, touch the CALIBRATE TOUCHSCREEN button. A CONFIRM dialog box will appear, touch the OK button to proceed and the CALIBRATION screen will be shown.



Using a stylus pen, make sure to touch the CENTER of the crosshair icons as they appear on the screen. When calibration is successful, you will hear a loud beep sound, the screen will display a "waiting for connection..." message, and then the HOME screen will appear.



If you fail to calibrate the screen at your first try, simply continue the procedure until calibration succeeds.

#### 6.5.4 Address

Up to four (4) AquaLink Touch controllers can be connected to a system, but each device must be set to a unique address.

From the TOUCH SETUP screen, toggle the ADDRESS button to change the address.



## 6.5.5 RF Channel (For wireless units only)

If your AquaLink Touch remote system is turning items on or off at undesignated times, another AquaLink Touch system may be in close proximity using the same or similar frequency channel.

To prevent these unwanted operations, the channel for your AquaLink Touch system can be changed.

# The AquaLink Touch handheld remote and the AquaLink Touch transceiver J-Box must be set to the same RF channel.



1. At the J-box, remove the cover to expose the PCB.





- 2. At the J-box, slide the Learn Switch to ON. If it is not doing so already, the AquaLink Touch screen will display the "waiting for connection..." screen after a maximum of 10 seconds.
- From the AquaLink Touch "waiting for connection..." screen, touch the SETUP button. The screen displays "what would you like to set?".
- 4. Select "RF Channel".



5. The AquaLink Touch screen displays "select desired RF channel, then press ENTER." Using the arrow buttons, select the desired channel then touch ENTER.



6. The AquaLink Touch screen displays "set LEARN switch in J-Box to ON, then press J-Box RESET."



7. If it is not already set to ON, set the LEARN switch

in J-Box to ON, then press the RESET button in the J-Box.

- 8. At the Transceiver J-Box, the Red and Green LEDs flash alternately while the J-Box searches for the correct channel.
- 9. When the correct channel is found, the J-Box LEDs flash simultaneously and the AquaLink Touch screen displays "channel found! set LEARN switch in J-Box to OFF, then press J-Box RESET."



- 10. At the Transceiver J-Box, return the Learn Switch to OFF and press the J-Box RESET switch.
- 11. After a short time, the AquaLink Touch will return to the "waiting for connection..." screen, then to the home screen when connected successfully.

#### 6.5.6 AquaLink Touch J-Box LED Operation

Normal Operating Mode

Function	LED Indication
Reset	Both on continuous for 2 seconds
RS-485 Detected	Both rapid blink simultaneously for 2 seconds
Waiting for AquaLink Touch Beacon	Green LED slow blink
RS/AquaLink Touch Communication	Random blink of both LEDS

Channel Learn Mode

Function	LED Indication
Searching for AquaLink Touch channel	Alternate Red/Green blink
AquaLink Touch Channel Learned	Both blink simultaneously

### Section 7. Troubleshooting

#### 7.1 AquaLink Touch Troubleshooting Guide

Use the troubleshooting information in the following table for suggestions.

Symptom	Problem	Possible Solution		
Power Center override switches operate when in Service or Time Out Mode, but the AquaLink Touch controller is completely dead (no display)	No power to the AquaLink Touch controller.	Wired: Check the two (2) outer wires (red and green) of the four (4) conductor cable from the power center. The minimum desired input voltage is 9VDC.		
		Wireless: Return AquaLink Touch to cradle to begin recharging battery. Make sure the cradle is plugged into a wall socket.		
AquaLink Touch controller backlight is on and the startup screen is displayed. The	AquaLink Touch controller is not communicating with the power center PCB.	Wired: Check the cabling to the AquaLink Touch (all conductors).		
override switches at the power center operate as they should.	power center PCB.	Wireless: Check the cabling to the J-box transceiver (all conductors).		
		Wireless: Change the RF channel.		
		Wired and Wireless: In multiple AquaLink Touch installations, verify each unit is set to a unique address.		
AquaLink Touch controller backlight is on and the "Waiting	1. Damaged or improperly installed CPU board.	1. Check alignment of the CPU board.		
displayed, but override switches at the power center do not	2. Wrong CPU board.	2. Make sure that the CPU board is revision Q or later.		
operate at all.	PCB.	3. If CPU board is installed correctly, replace the power center PCB.		
Some buttons do not operate from the AquaLink Touch controller, nor from the power center override switches.	Wrong CPU board installed at the power center PCB.	Make sure that the CPU board is revision Q or later.		
System locked up. AquaLink Touch frozen at "waiting for connection" screen.	Power center microprocessor locked.	Turn off power to the system. Wait one (1) minute and turn the power back on.		
Programs do not run at the correct time.	AquaLink RS does not display correct time and date.	At the AquaLink Touch controller, set correct time and date.		
Communication is lost.	Signal Interference.	The wireless AquaLink Touch controller will stop communicating anytime interference (such as a 900 MHz device) prevents a valid signal transmission. When communication is lost the AquaLink Touch controller will lock on the "waiting for connection" screen until a good link is again achieved, usually within a few seconds.		



CONFORMS TO ANSI/UL STD. 60950-1 CERTIFIED TO CAN/CSA STD. C22.2 NO. 60950-1

> Zodiac Pool Systems, Inc. 6000 Condor Drive • Moorpark, CA USA 93021 • 800.822.7933 • Fax 877.327.4103 © Zodiac Pool Systems, Inc. 1001

