

# AquaLink® or Ji Series to Jandy® AquaLink® RS PDA Conversion Kit

**FOR YOUR SAFETY:** This product must be installed and serviced by a professional pool/spa service technician. The procedures in this instruction sheet must be followed exactly. Ensure that all electrical power to the system is turned off before approaching, inspecting or troubleshooting any leaking valves that may have caused other electrical devices in the surrounding area to get wet. Failure to do so could result in an electrical hazard which could result in death or serious injury due to electrical shock, and may also cause damage to property. Failure to follow these instructions will also void the warranty.

These instructions are to be used with the following Jandy Conversion Kit:

## PDACONVJ -- AquaLink or Ji Series to PDA Conversion Kit

### Section 1. Introduction

This document gives instructions for converting an AquaLink or Ji Series system to Jandy AquaLink RS PDA.

This conversion kit will convert the following systems to an AquaLink RS PDA - PS8 system:

- Ji Series 400, 600, 650, 8000, 2000
- AquaLink 2, 4 and 8 Combos
- Anthony AT 100
- Anthony Antho Touch 2020, 2060, 2080
- Blue Haven 2100, 4100, 8100
- Paddock AquaTouch Combo

**NOTE** Early versions of the Ji2000 Power Center with a single face plate cannot be converted. These units require replacement of the Power Center. See Figure 3.

**These instructions must be followed exactly. Read through the instructions completely before starting the procedure.**

To identify the parts that are included in your kit, refer to the parts list located on page 3 of this manual. If any parts are missing from the kit please call your local Jandy distributor for assistance. For technical assistance please contact our Technical Service Department at (800) 822-7933.

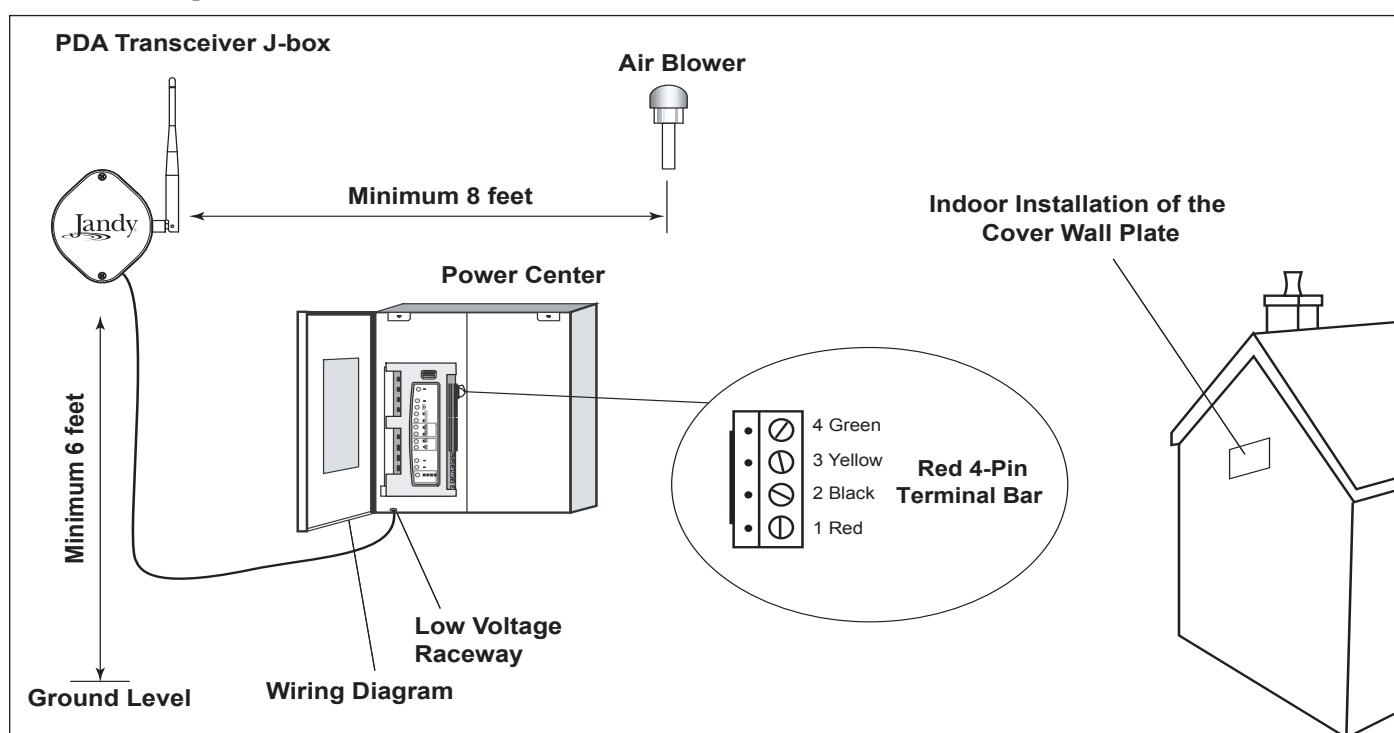


Figure 1. Power Center and Cover Mounting Plate

## Section 2. Removal of Power Center Components

### WARNING

**Risk of Electric Shock which can result In Serious Injury or Death.** Before attempting installation or service, ensure that all power to the circuit supplying power to the system is disconnected or turned off at the circuit breaker.

All wiring must be done in accordance with the National Electrical Code (NEC), NFPA-70. In Canada, the Canadian Electrical Code (CEC), CSA C22.1, must be followed. All applicable local installation codes and regulations must be followed.

1. Turn off all power to the power center.
2. Go to the indoor controller and remove it from the mounting bracket.
3. Unwire the terminal bar and remove it from the mounting bracket. Remove the mounting bracket.
4. Secure the cable to ensure it does not fall back into the wall or conduit.
5. To cover the existing hole in the wall install the provided cover mounting wall plate as follows:
  - a. Use an appropriate double faced adhesive tape (not supplied with kit) to attach the wall plate to the wall, or
  - b. Drill holes on the cover wall plate to attach to the wall with screws (not supplied with kit).
6. Go to the power center and remove screw securing low voltage panel from left side of power center.
7. Remove the screw that secures the low voltage panel to the left side of power center, making note of each relay coil wire and which socket it is plugged into. Then remove the relay coil wires.
8. Remove the terminal bars from the low voltage printed circuit board (terminal bars are not removable on Ji600 and Ji2000), then unscrew and remove the wires from the terminal bars. For reinstallation, make notes as to which wires go to the heater, etc.
9. For reinstallation, note which are Intake, Return and Cleaner valve actuators (if applicable), then unplug valve actuators.

## Section 3. Installation of the Jandy® AquaLink® RS PDA

1. Remove all components from the AquaLink® RS PDA package.
  2. Place the door decal on the power center door over the existing wiring diagram.
  3. There are two panels for the low voltage compartment. Choose the panel that fits the power center, then press the two thumb screws into the holes at the top and bottom of the panel opening.
- NOTE** If the power center is an Anthony sub panel power center, use the two Phillips head screws rather than the thumb screws.
4. Remove the existing water temperature and air sensors and replace with the sensors supplied with the kit. If a solar sensor is being used, it must be replaced with part #7908 (not supplied with kit).
  5. Remove the AquaLink® RS PDA power center bezel and PCB from the packaging and install in the power center.
  6. As shown in Figure 1, mount the outdoor transceiver J-box at least 6 feet above the ground and at least 8 feet from an air blower.

### 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® RS PDA Handheld Remote and the Power Center. **The transceivers do not require line of sight to communicate.** To optimize communication, install transceivers in a location that minimizes interference.

- NOTE** To improve performance of the transceiver, mount the J-box more than 6 feet above ground.
7. Connect the four wires from the J-box to the red terminal bar on the power center PCB.
  8. Follow the wiring diagram to wire the heater, Four Function Remote, water temperature(s), air sensor and solar sensor, if applicable.

**NOTE** If the old system was a Ji2000, rewire the heater connection within the heater, in series with the thermostat circuitry, like a Fireman's switch. (Old systems did not utilize an air temperature sensor. The RS must have the air sensor installed).

- NOTE** Early versions of the Ji2000 Power Center with a single face plate cannot be converted. These units require replacement of the Power Center. See Figure 3.
9. Plug in relay coils to the power center PCB per your notes.
  10. Plug in JVA's to their appropriate sockets on the power center PCB per your notes.
  11. Connect the battery and snap it into its bracket on the back of the low voltage PCB.
  12. Connect the three-pin transformer power plug to the power center PCB.
  13. Use the thumb screws to attach the metal bracket to the bezel assembly and then mount the assembly into the power center, securing it with a screw.

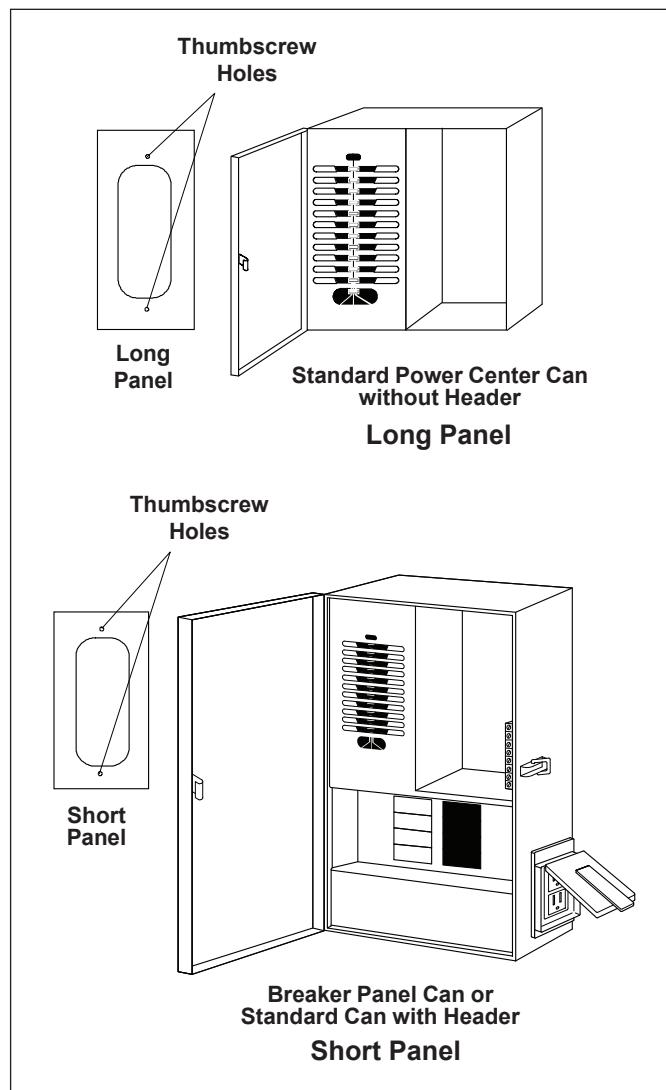


Figure 2. Type of Power Centers

14. Turn on power, and press the override switch to Service. Test each circuit, correct any errors, then press the override switch twice to move to "AUTO MODE." Use the PDA Handheld Remote to set time, date, and program equipment settings (Refer to PDA Installation and Owner's Manuals for programming).

**NOTE** If the old unit has time clocks, remove the time clock(s) and insert black hole plugs (included).

**NOTE** If converting a Ji8000 with a two-speed filter pump, order and install a Two Speed Relay (Part #6796).

### Section 3. Conversion Kit Parts List

PDACONVJ -- AquaLink® Ji Series to PDA Conversion Kit	
Description	Qty
PDA, Handheld Remote	1
PDA, J-Box	1
PDA PCB Sub-Assembly	1
Wall Plate	1
Battery Holder	1
Conversion Hardware	1
Instructions	1

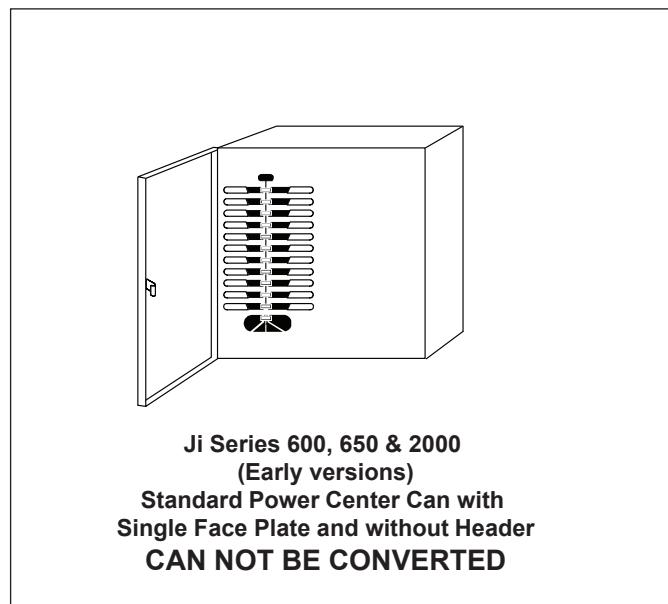
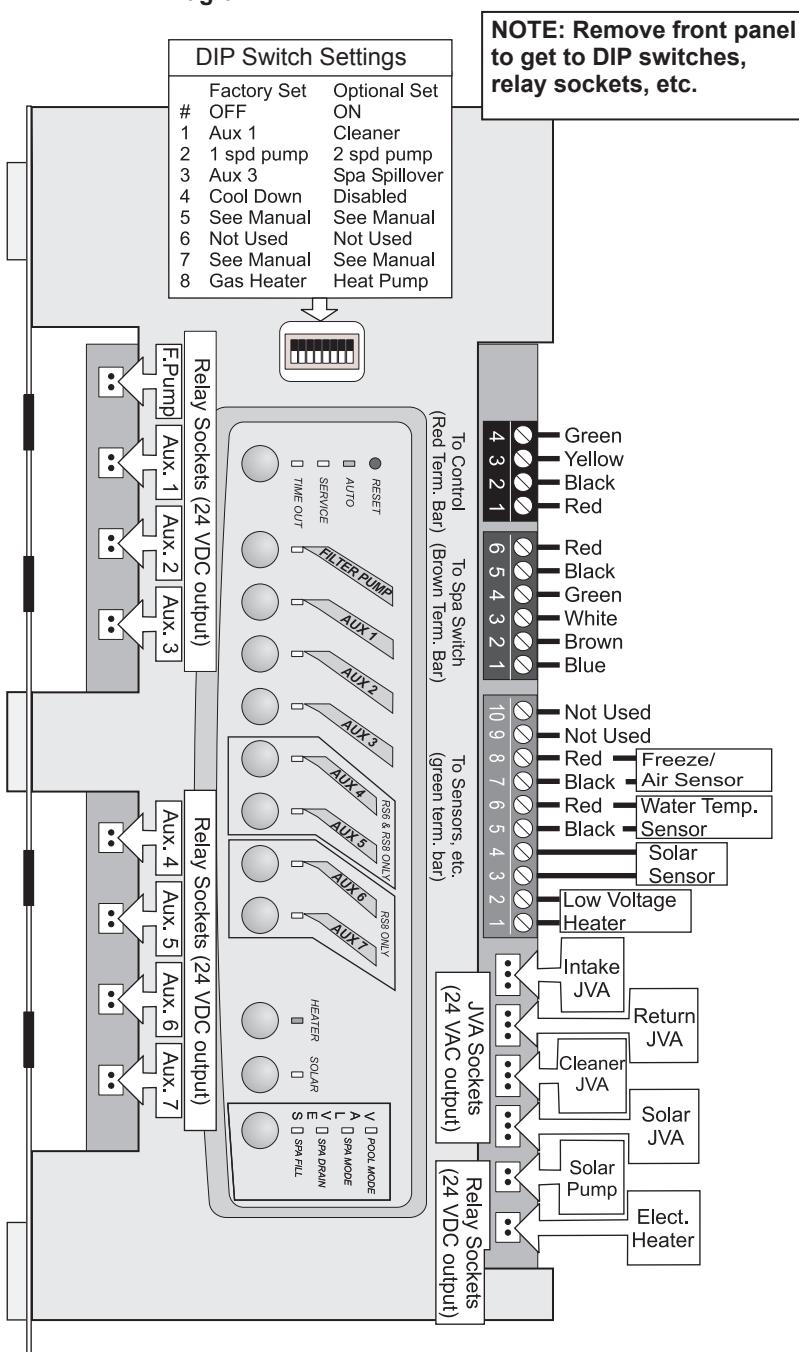


Figure 3. Ji Series 600, 650, 2000 Power Centers (Early Versions)

**Figure 4. AquaLink RS Conversion Wiring Diagram**



## What the Buttons Do:

### AUTO/SERVICE/TIME OUT Button

Pressing this button switches between the three modes outlined below:

#### AUTO Mode

Normal operation. Leave the system in this mode unless you are servicing the pool or the system. Power Center buttons do not work.

#### SERVICE Mode

Indoor Controller is locked out. Allows manual operation of equipment using the buttons shown at left. This mode will stay on until the button is pressed again.

#### TIME OUT Mode

Allows service person to override all programs and lock out PDA Handheld Remote for 3 hours. Any equipment turned on will remain on, any equipment left off will remain off. Operation will automatically switch back to AUTO mode after 3 hours.

**NOTE:** Safety interlocks are not in effect when Service or Time Out mode is active.

**System must be in SERVICE or TIME OUT mode for these buttons to operate:**

**FILTER PUMP** Button turns the Filter Pump on and off.

#### AUX Buttons

Turns on and off auxiliary equipment as labeled.

#### HEATER Button

Turns the heater on and off. The switch on the heater must be on, the heater thermostat should be turned to max., and the filter pump must be running for heater to fire.

#### SOLAR Button

Activates optional JVA (valve actuator) plugged into the "solar JVA" socket, and activates optional relay plugged into the "solar pump" socket.

#### VALVES Button

This button allows control of Intake and Return valve actuators installed on the system.

#### POOL MODE:

Normal operation. All circulation to the pool.

#### SPA MODE:

All circulation to the spa.

#### SPA DRAIN:

Intake valve rotates so intake is from spa. Return valve remains in pool position so return is to the pool. With the filter pump on, water is drawn from the spa and pumped into the pool.

#### SPA FILL:

Intake valve rotates so intake is from pool. Return valve rotates so return is to spa. With the filter pump on, pool water is pumped into the spa.

## Important Installation Instructions:

1. Read Installation Manual completely. This product must be wired in accordance with the Installation Manual.
2. Must be installed by a qualified electrician and must comply with all national, state and local codes.
3. To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.
4. Power Center must be mounted at least 5 feet away from the inside edge of the pool.
5. Install to provide drainage of compartments for electrical components.
6. After wiring, install panels over wiring compartments and keep Power Center door closed.
7. For indoor or outdoor use.
8. For technical information, call Zodiac Pool Systems, Inc. at 800-822-7933.