

# Compool 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:**

## PDACONVC -- Compool to PDA Conversion Kit

### Section 1. Introduction

This document gives instructions for converting a Compool® system to Jandy® AquaLink® RS PDA.

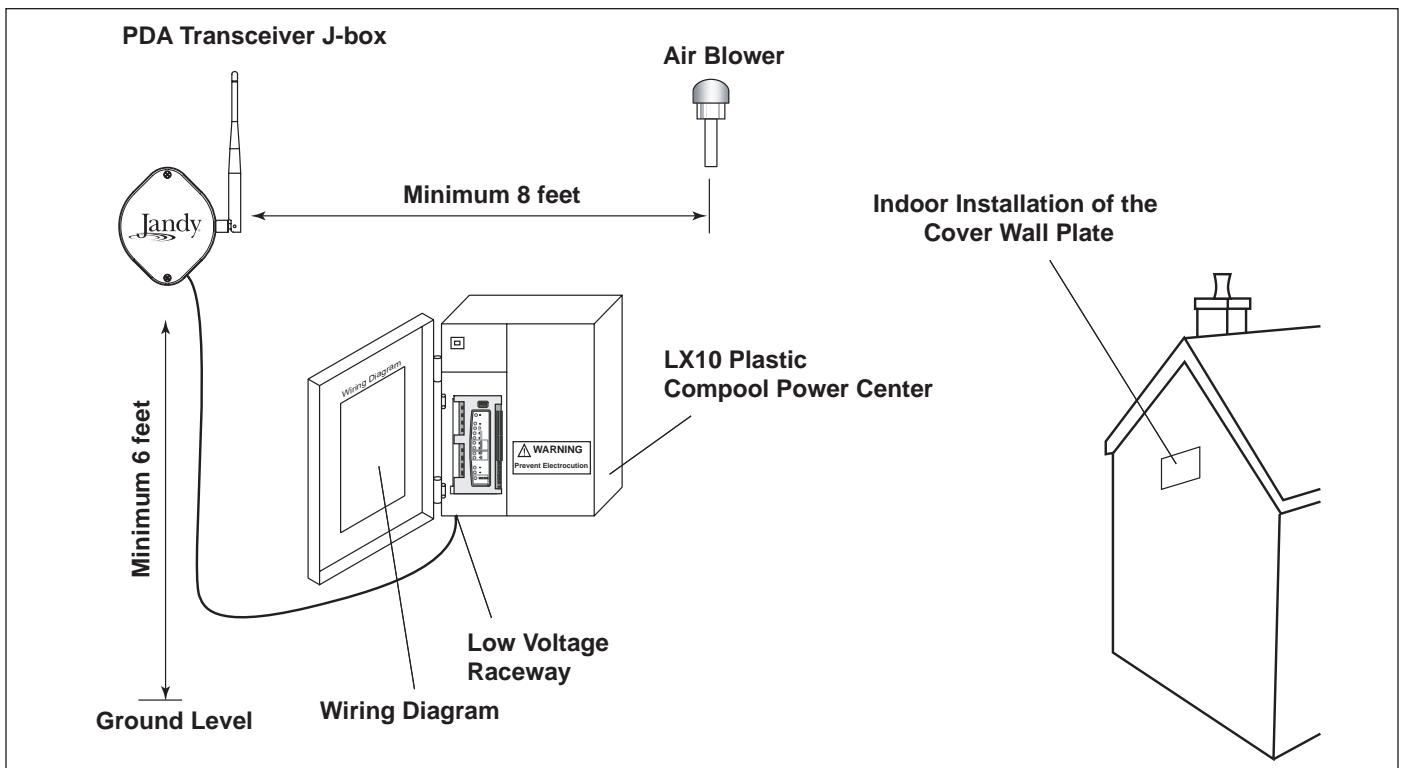
This conversion kit will convert the following systems to an AquaLink® RS PDA-PS8 system:

- Swim Master, Time Master
- CP100, CP2000, CP2020, CP3000
- CP3400T, CP3600T, CP3800T, CP3810/S, 3CP3810/SL

**NOTE** Compool conversions fit Compool LX10 Plastic Power Center only.

**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 (707) 776-8200, extension 260.



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Figure 1. Compool 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. Remove the four (4) screws securing the indoor controller to the wall. Remove the indoor controller.
  3. Unwire the terminal bar or unplug phone plug if unit is a CP100 or CP3000.
  4. Secure the cable to ensure it does not fall into the wall or conduit.
  5. To cover the existing hole in the wall install the provided cover mounting plate as follows:
    - a. Use an appropriate double faced adhesive tape (not supplied with kit) to attach the mounting plate to the wall, or
    - b. Drill holes on the cover mounting plate to attach to the wall with screws (not supplied with kit).
  6. Go to the power center; remove screw securing low voltage panel from left side of power center.
  7. For reinstallation, make note of each relay coil wire and which socket it is plugged into, then remove coil wires.
- NOTE** If the Compool® unit has time clock(s), remove them and replace with black hole plugs (included).
8. For reinstallation, make note as to which wires go to the heater, etc. Remove terminal bars from low voltage printed circuit board, then unscrew and remove wires from terminal bars.
  9. For reinstallation, note the Intake, Return, and Cleaner valve actuators (if applicable), then unplug valve actuators.

10. For reinstallation, note as to which wires go into the Four Function Remote.

Four Function Remote		
Function	Compool Wire Colors	AquaLink RS Wire Color
Common/Ground	Black	Black
LED	Orange	Red
Button 1	Red	Blue
Button 2	Yellow	Brown
Button 3	Green	White
Button 4	Blue	Green

## Section 3. Replace the Compool® Sytem

1. Remove components from the PDA conversion kit box.
2. Place the new wiring diagram decal over the existing wiring diagram on the power center door.
3. Remove existing water temperature sensor and replace with PDA sensor (the Compool sensor will not operate with PDA).
4. Remove the AquaLink RS power center bezel and printed circuit board from the packaging and install in power center.
5. Follow the wiring diagram to wire the Four Function Remote, heater, water temperature sensor, air and solar sensor, if applicable. Attach the ground wire (with lug) from conversion board to a relay lug, using its wing nut.
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.

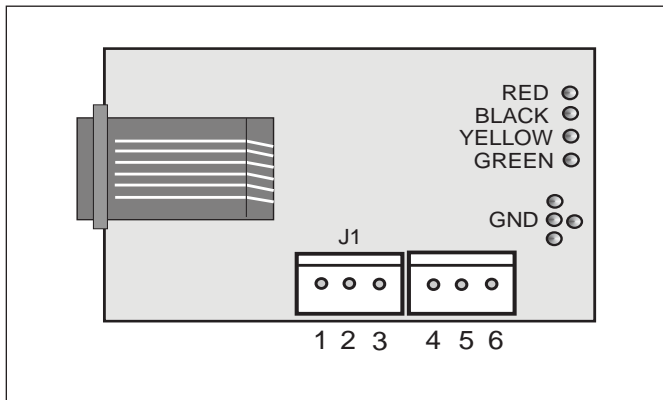
**7. For Replacing the Compool® CP100 or CP3000 Only:**

- a. Connect the four wires from the J-box to the red terminal bar on the power center PCB.

**NOTE** If old system was a Compool® CP30 or CP100, rewire the heater connections within the heater in series with the thermostat circuitry.

**NOTE** Old systems did not utilize an air temperature sensor. The PDA must have the air sensor installed.

- b. Plug in the connectors for the relay coils per your notes.
- c. Plug in valve actuators to appropriate sockets per your notes.
- d. Plug the transformer power connector (for its secondary) onto the J1 connector (pins 1, 2, and 3) of the power center conversion board. Note that some Compool units will have more than a three-pin connector. See Figure 2.



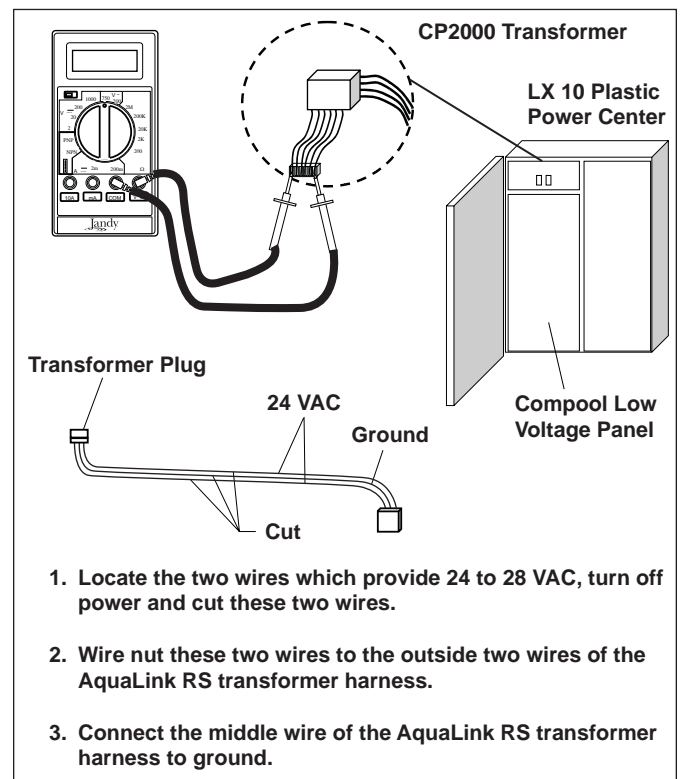
**Figure 2. Power Conversion Board**

- e. Plug the 3-pin connector from the conversion board onto the PDA power center printed circuit board.

**8. For Replacing the Compool® CP2000 Only:**

- a. As shown in Figure 3, the Compool® CP2000 has a center tap transformer, it provides 24 VAC, 19 VAC and 5 VAC to Compool® circuit board. Over the years Compool® has used different combinations of wires to provide these voltages to their circuit board. The PDA only needs the 24 VAC.
- b. When converting to a PDA system, the installer needs to use a volt meter to determine which wires provide the 24 VAC, and connect those two (2) wires (along with the ground wire) to the PCB connector on the PDA.

- 9. Connect battery and snap it into its bracket on back of low voltage printed circuit board.
- 10. Use the screws to attach the metal bracket to the bezel assembly. Remove hinges from old panel and remount to metal bracket. Mount assembly into the power center and hold in place with screw.
- 11. Turn on power, and press override switch to Service. Test each circuit, correct any errors, then press 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).

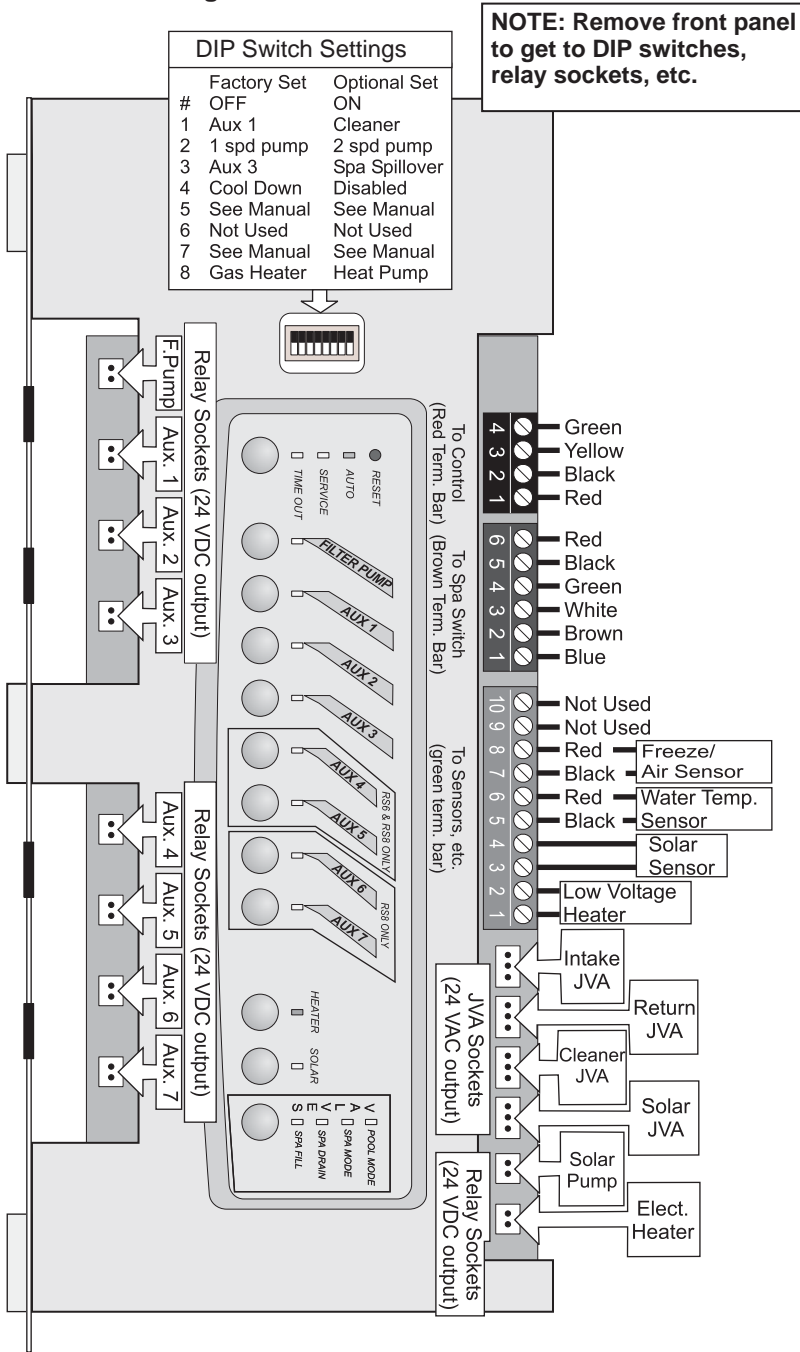


1. Locate the two wires which provide 24 to 28 VAC, turn off power and cut these two wires.
2. Wire nut these two wires to the outside two wires of the AquaLink RS transformer harness.
3. Connect the middle wire of the AquaLink RS transformer harness to ground.

**Figure 3. Compool Power Center with Transformer**  
**Section 3. Conversion Kit Parts List**

PDAONVC – Compool 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 4. AquaLink RS Conversion Wiring Diagram**



**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 Jandy Pool Products, Inc. at 707-776-8200, ext. 260.

**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.