



Installation and Operation Manual



AquaLink[®] RS **PC-Computer** **Interface/Docking** **Station**

⚠ WARNING

FOR YOUR SAFETY - This product must be installed and serviced by a professional pool/spa service technician. The procedures in this manual must be followed exactly. Failure to follow warning notices and instructions may result in property damage, serious injury, or death.

This manual contains important information about the installation, operation and safe use of this product. This information should be given to the owner/operator of this equipment.

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EQUIPMENT INFORMATION RECORD	
DATE OF INSTALLATION _____	
INSTALLER INFORMATION _____	
POWER CENTER MODEL _____	SERIAL NUMBER _____
CONTROL PANEL MODEL _____	SERIAL NUMBER _____
SOFTWARE SERIAL NUMBER _____	
NOTES: _____	

Section 1. Safety Information

IMPORTANT SAFETY INSTRUCTIONS READ AND FOLLOW ALL INSTRUCTIONS SAVE THESE INSTRUCTIONS

FOR YOUR SAFETY: This product must be installed and serviced by authorized personnel qualified in pool/spa installation and maintenance. Improper installation and/or operation will void the warranty.

WARNING

Risk of Electrical Shock or Electrocution. This product must be installed by a licensed or certified electrician in accordance with the National Electrical Code and all applicable local codes and ordinances. Improper installation may create an electrical hazard which could result in death or serious injury to pool users, installer, or others due to electrical shock, and may also cause damage to property.



ATTENTION INSTALLER: This manual contains important information about the installation, operation and safe use of this product. This information should be given to the owner/operator of this equipment.

Section 2. System Description

The AquaLink® RS PC-Computer Interface/Docking Station allows you to use any personal computer that has a Windows® operating system (see *Section 3, System Requirements*) to monitor and control the operation of your AquaLink RS system as well as download and upload programs and settings. All functions of the AquaLink RS can be accessed from the computer; for example, you can turn on the filter pump, change the heater thermostat setting, or run any auxiliary function. The interface has the option to display a control panel on the computer screen that simulates the AquaLink RS All Button *or* OneTouch™ control panel.

After you use the AquaLink RS PC-Computer Interface/Docking Station to program your AquaLink RS system with your desired settings, you can use the AquaLink PC Dock application to save these settings to a file. The settings file can then be downloaded to the Power Center PCB of other AquaLink RS systems.

NOTE The saved settings file can only be downloaded to the same RS model. For example, a settings file for an AquaLink RS16 combination system can only be transferred to other AquaLink RS16 combination systems, not an AquaLink RS8.

NOTE A Revision G or higher Programmable Peripheral Device (PPD) must be installed in the AquaLink RS Power Center for operation of the AquaLink PC Interface. A Revision L or higher PPD must be installed in the AquaLink RS Power Center for operation of the AquaLink PC Docking System.

Section 3. System Requirements

To use the AquaLink RS PC-Computer Interface, you will need the following:

- A 386 or higher IBM-compatible computer with a minimum of 4 MB of RAM (8 MB recommended)
- A hard disk drive with at least 13 MB of free disk space
- An available communications (comm) port on the back of your PC, or an available USB port
- Windows 3.1®, Windows for Workgroups®, Windows 95®, 98®, 2000, NT4.0, ME, or XP

NOTE With Windows 2000® (and Service Pack 2) you must first start your computer. After start up, connect the AquaLink PC cable to the proper comm port. Windows XP® may require you to click **OK** on the Search dialog box, interrupting the automatic search for comm port. You then can select the name of the correct serial port from the pull-down box.

3.1 All Button PPD Firmware Verification

To verify the firmware revision on an All Button Control Panel, press the recessed switch located in the hole on the left side of the panel (see Figure 1). Hold the switch depressed for approximately 5 seconds.

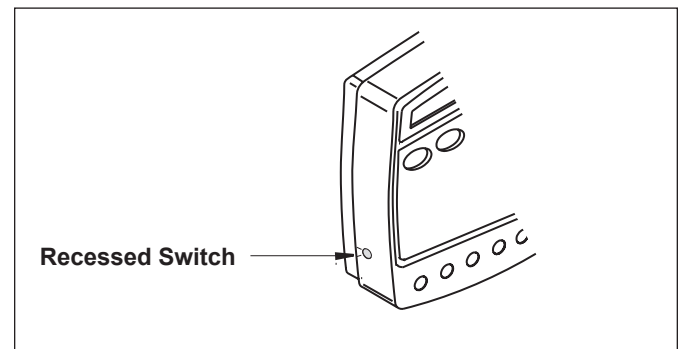


Figure 1. AquaLink RS All Button

NOTE You may use a toothpick or other small pointed object to press the switch.

After releasing the switch, the All Button will display the Firmware revision. Ensure the revision is G or higher.

If a higher revision PPD is necessary, contact Jandy Technical Support at 707-776-8200, ext. 260.

3.2 OneTouch PPD Firmware Verification

To verify the firmware revision on a OneTouch control panel, highlight MENU/HELP and press SELECT, highlight HELP and press SELECT (see Figure 2). Highlight DIAGNOSTICS by using the UP/DOWN arrow keys and press SELECT. The DIAGNOSTICS screen displays the firmware revision level.

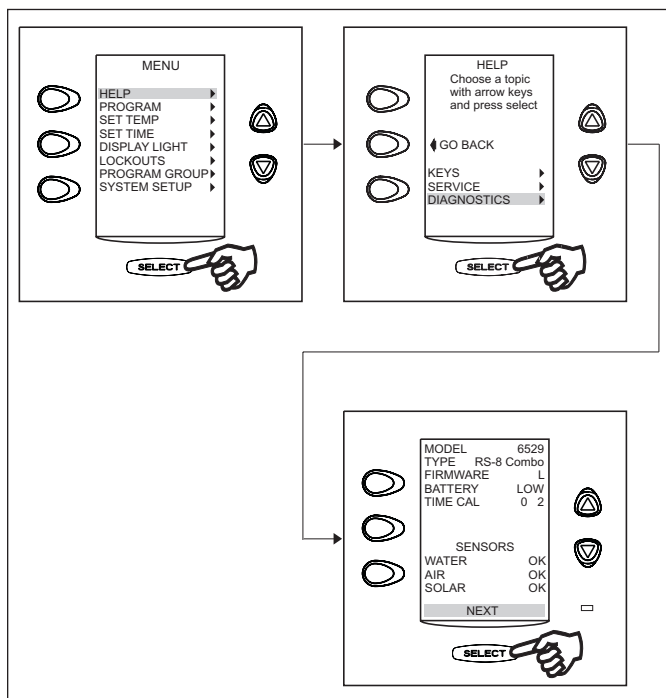


Figure 2. OneTouch Diagnostics Menu

NOTE When the AquaLink RS PC-Computer Interface/Docking Station is installed, it becomes one of the control panels in the system (Control Panel #4). If the AquaLink RS system has one or more control panels, ensure that *none* of them is set up as Control Panel #4. Check this by using the Diagnostics menu or by verifying that each control panel has at least 1 jumper on the 2 pairs of internal posts marked "W1" and "W2" (refer to the *AquaLink RS Installation Manual* for details).

Section 4. Installation

4.1 Hardware Installation

NOTE Please refer to the wiring diagram in Figure 3 when performing the following procedure. A USB-to-Serial Adapter is included if your computer does not have a serial port. Please load the USB-to-Serial Adapter Installation CD if you are planning to use the USB-to-Serial Adapter.

1. Turn off the power to the AquaLink RS at the Power Center.

2. Turn off the power to the computer.
3. Run a 22 AWG, 4-conductor color coded wire from the red 4-pin terminal bar in the AquaLink system (either in the RS Control Panel as shown in Figure 3 by the solid line or in the Power Center as shown by the dotted line) to your computer location.
4. Open the RS 485/232 Interface by carefully removing and saving the 2 screws in its housing.
5. Connect the 4-conductor wire as shown in Figure 3, and reassemble the connector and housing.
6. Select a serial (comm) port to use with this interface.

NOTE A typical comm port consists of a 9-pin male connection and may be marked **A** or **B**. If the comm port is a 25-pin male connection, plug the RS 485/232 Interface directly into that port. If the port is a 9-pin male connection, plug the 25 pin to 9 pin adapter cable (provided) into the comm port, then plug the RS 485/232 Interface into the adapter cable.

4.2 Software Installation

4.2.1 Windows 3.1 or Windows for Workgroups Installation

1. Turn on the power to both the AquaLink RS system and to your computer.
2. Type WIN at the DOS command prompt to start Windows.
3. Make sure no other applications are running. Press CTRL+ESC to display the Task List. If applications other than the Program Manager are running, select each one and click **End Task**.
4. Insert the Install Disk in the computer CD drive.
5. Double-click the Program Manager icon.
6. From the Program Manager's File menu, choose **Run**.
7. Type the file name **D:\aqlinkpc.exe** and click **OK**.
8. Follow the on-screen prompts.

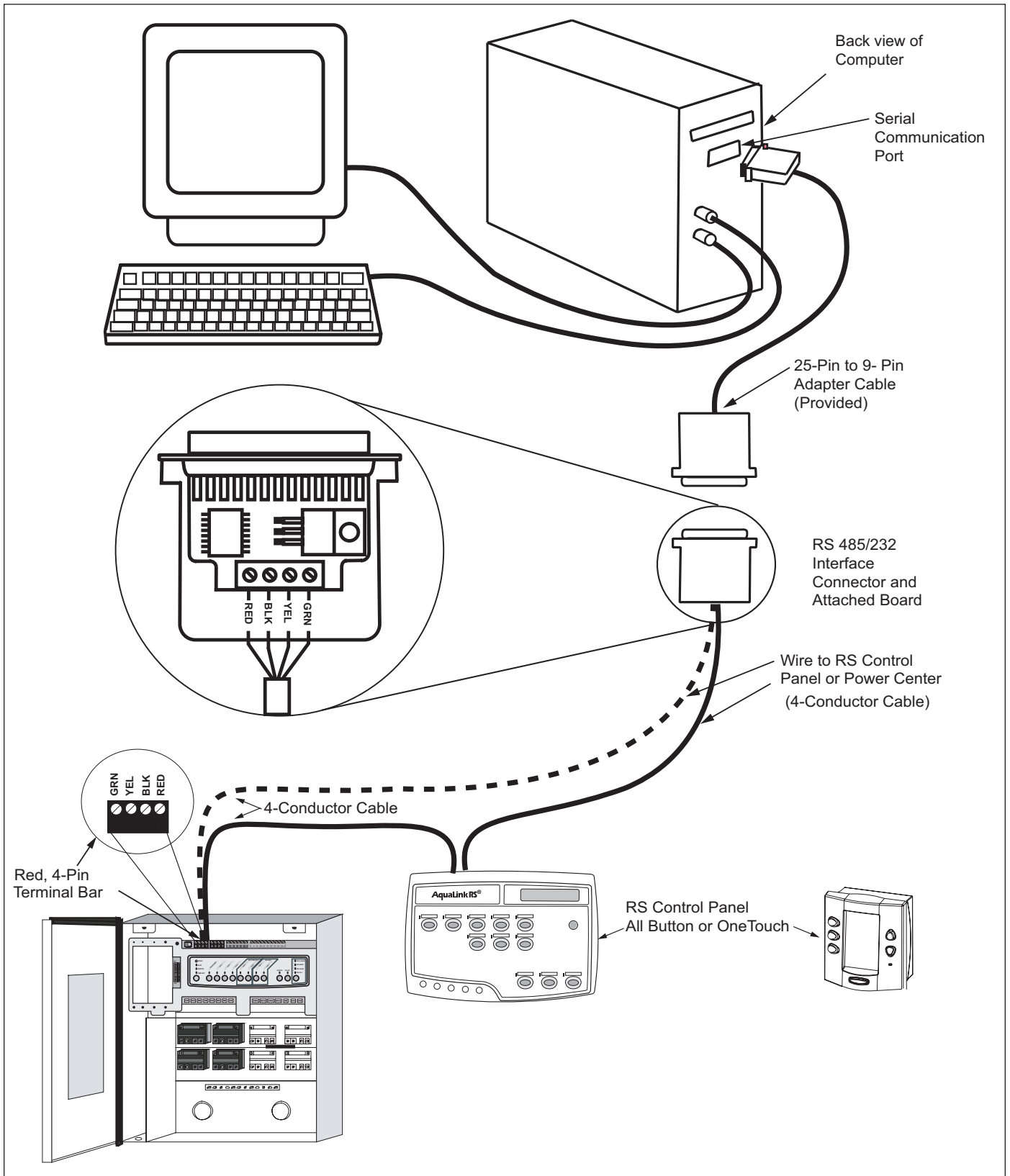


Figure 3. Wiring Diagram

NOTE The AquaLink RS allows each system to support a maximum of four (4) indoor control panels. The AquaLink PC is considered one of the indoor control panels. The control panels may be wired in "series" starting from the controller (solid line), or wired individually from the "Power Center" (dotted line), or a combination of the two. To accomplish the "in series" wiring scheme, you may "double-up" wires into each pin on the red 4-pin terminal bar, **but never put more than two (2) wires into each pin**. If you need to join more than two (2) of the 4-wire cables, order and install Jandy Part #6584 (Multiplex PCB Kit).

4.2.2 Windows 95, 98, 2000, NT4.0, ME, or XP Installation

1. Turn on the power to both the AquaLink RS system and to your computer.
2. Open Windows on your computer.
3. Ensure that no other applications are running. If applications other than the Program Manager are running, close them.
4. Insert the Install Disk in the computer CD drive.
5. From the Start menu, choose **Run**.
6. Type **D:\aqlinkpc.exe** and click **OK**.
7. Follow the on-screen prompts.

Section 5. PC Docking Application Instructions

To open the PC Docking application go to the **Start** menu, and choose **Programs, Aqualink PC Docking** or click on the AquaLink PC icon. For information about operating the All Button or OneTouch control panel, refer to the *AquaLink RS System Owner's Manual*.

NOTE Ensure the RS 485/232 Interface is installed. See Section 4.1, Hardware Installation.

5.1 Data Transfer from AquaLink RS Power Center PCB to File

The following set of instructions allows you to transfer the existing AquaLink RS settings from a Power Center PCB to your computer using the PC Docking application.

1. On your computer, start PC Docking application. From the **Start** menu, select **Programs > Aqualink RS System Simulation > PC Dock**. Figure 4 illustrates the PC Docking application in an AquaLink RS16 combination system with firmware Revision L.

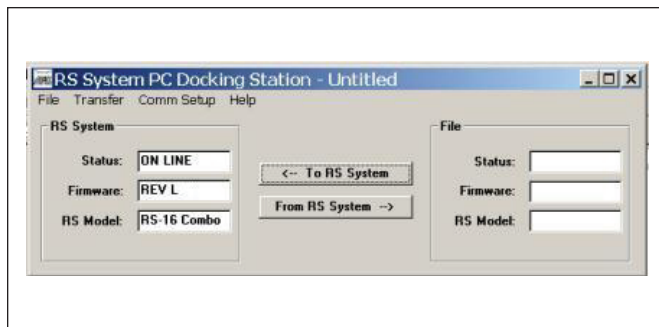


Figure 4. PC Docking Application Main Dialog Box

NOTE If you have a OneTouch control panel connected to the power center PCB, you can verify that the power center is communicating with the PC Docking application. On the OneTouch, go to the Diagnostics Menu (see Figure 5). Select **NEXT**. The REMOTES screen opens and displays ONETOUCH and PC DOCK.

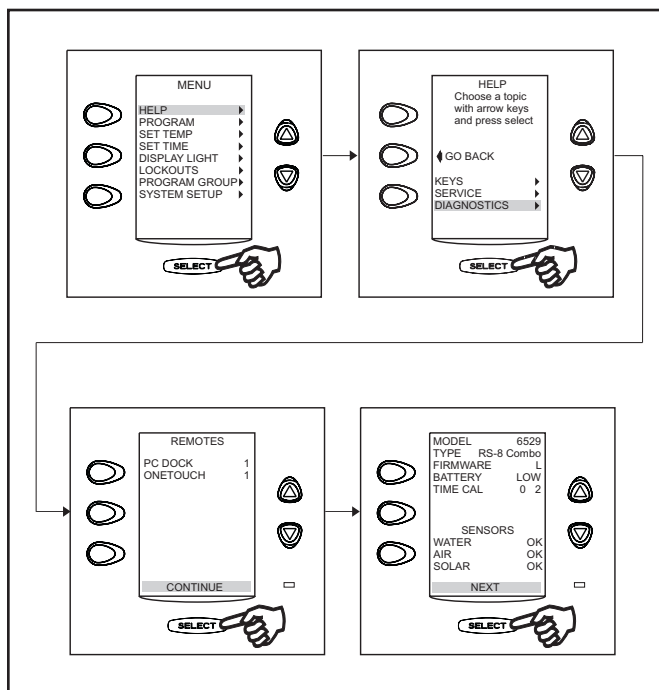


Figure 5. OneTouch Diagnostics Menu

2. To read the setup data from the Power Center, click **From RS System** (see Figure 4). The setup data will take approximately 30 seconds to load. The Transfer Status dialog box opens during the data transfer (see Figure 6).

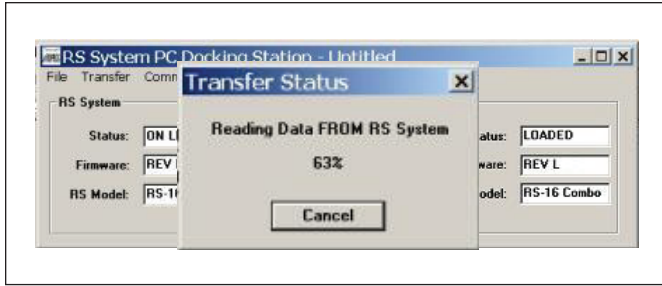


Figure 6. Transfer Status Dialog Box

- When the data transfer is complete, click **OK**. The PC Docking application opens and reports that the data is loaded as shown in the dialog box in Figure 7.

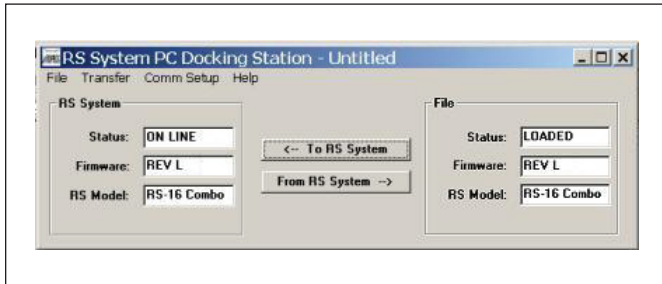


Figure 7. Transfer Complete Status in Main Dialog Box

- After the data transfer is complete, you can save the setup data to a file. From the **File** menu, choose **Save As**. The File Save As dialog box opens and allows you to name the file as well as specify the directory (folder) where you want to store the data (see Figure 8).

NOTE The filenames are limited to 8 characters with a 3 character extension.

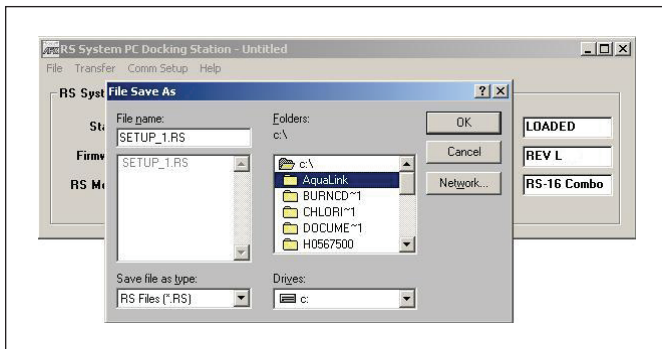


Figure 8. Save As Dialog Box

- To close the PC Docking application, choose **Exit** from the File menu, or click the **Close icon**

5.2 Data Transfer from File to Power Center PCB

The following set of instructions allows you to transfer your AquaLink RS settings from the simulator to your computer using the PC Docking application.

- On your computer, start PC Docking application. From the **Start** menu, select **Programs > Aqualink RS System Simulation > PC Dock**. Figure 9 illustrates the PC Dock application in an AquaLink RS16 combination system with firmware Revision L.

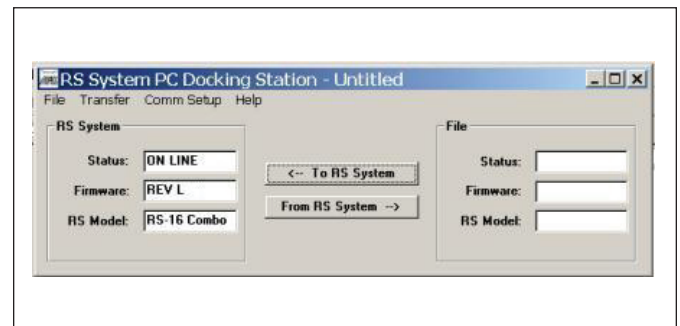


Figure 9. PC Docking Application Main Dialog Box

NOTE If you have a OneTouch control panel connected to the power center PCB, you can verify that the power center is communicating with the PC Docking application. On the OneTouch, go to the Diagnostics Menu (see Figure 5). Select **NEXT**. The REMOTES screen opens and displays ONETOUCH and PC DOCK.

- Open the setup file that you want to send to the Power Center PCB. From the **File** menu, choose **Open**. The File Open dialog box opens and allows you to select the file that contains the setup data you want to transfer to the Power Center PCB (see Figure 10).

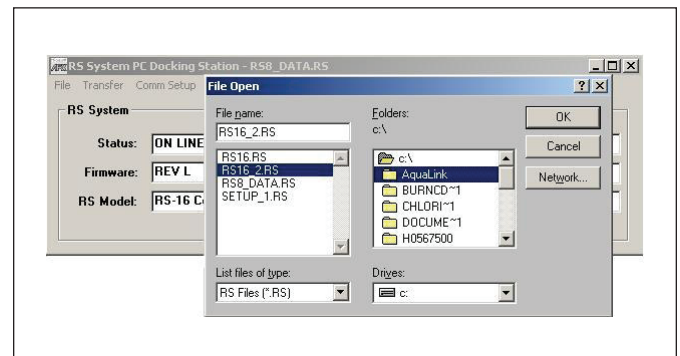


Figure 10. File Open Dialog Box

- To transfer the setup data from the selected file to the Power Center PCB, click **To RS System**. The setup data will take approximately 30 seconds to load. The Transfer Status dialog box opens during the data transfer (see Figure 11).

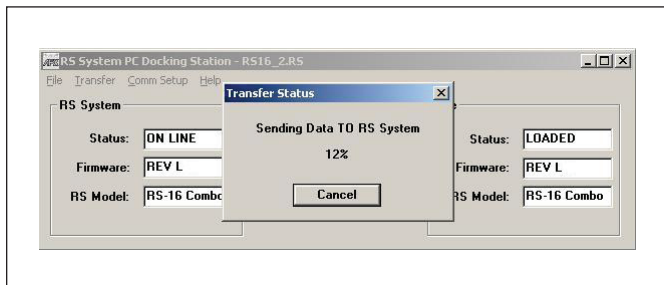



Figure 11. Data Transfer from Selected File to Power Center PCB

- To close the PC Docking application, choose **Exit** from the File menu, or click the **Close** icon .

5.3 Create Setup Files with the Simulator

NOTE If the AquaLink PC-Computer Interface is still connected to your computer, disconnect it. It will not be used for the following procedure.

- Close the PC Docking application if it is still open.
- From the **Start** menu, select **Programs > Aqualink RS System Simulation > Power Center**. The Power Center simulator application opens.
- From the **Start** menu, select **Programs > Aqualink RS System Simulation > OneTouch Panel**. The OneTouch control panel opens and allows you to setup the AquaLink RS system. Program your desired settings in the OneTouch control panel.
- From the **Start** menu, select **Programs > Aqualink RS System Simulation > PC Dock**. The PC Docking application opens.
- To create setup files, click **From RS System**.
- From the **File** menu, choose **Save As**. The File Save As dialog box opens.

- Save as many unique setup files as needed. At a later time, you can use the steps in *Section 5.2* to download these setup files to the Power Center PCB.

Section 6. Parts List

Part Number	Description
7270	AquaLink RS PC Interface/Docking Station Kit

NOTES

LIMITED WARRANTY

Thank you for purchasing Jandy® pool and spa products. Jandy Pool Products, Inc. warrants all parts to be free from manufacturing defects in materials and workmanship for a period of one year from the date of retail purchase, with the following exceptions:

- AquaLink® RS units installed with Jandy® Surge Protection Kits will be covered for two years.
- NeverLube® valves are warranted for the life of pool and/or spa on which they were originally installed.
- AquaPure™ Electronic Chlorine Generator Electrolytic Cells carry a 5 year limited warranty on a prorated basis.

This warranty is limited to the first retail purchaser, is not transferable, and does not apply to products that have been moved from their original installation sites. The liability of Jandy Pool Products, Inc. shall not exceed the repair or replacement of defective parts and does not include any costs for labor to remove and reinstall the defective part, transportation to or from the factory, and any other materials required to make the repair. This warranty does not cover failures or malfunctions resulting from the following:

1. Failure to properly install, operate or maintain the product(s) in accordance with our published Installation, Operation and Maintenance Manuals provided with the product(s).
2. The workmanship of any installer of the product(s).
3. Not maintaining a proper chemical balance in your pool and/or spa [pH level between 7.2 and 7.8, Total Alkalinity (TA) between 80 to 120 ppm, Total Dissolved Solids (TDS) less than 2000 not including salt ppm].
4. Abuse, alteration, accident, fire, flood, lightning, rodents, insects, negligence or acts of God.
5. Scaling, freezing, or other conditions causing inadequate water circulation.
6. Operating the product(s) at water flow rates outside the published minimum and maximum specifications.
7. Use of non-factory authorized parts or accessories in conjunction with the product(s).
8. Chemical contamination of combustion air or improper use of sanitizing chemicals, such as introducing sanitizing chemicals upstream of the heater and cleaner hose or through the skimmer.
9. Overheating; incorrect wire runs; improper electrical supply; collateral damage caused by failure of O-Rings, DE grids, or cartridge elements; or damage caused by running the pump with insufficient quantities of water.

LIMITATION OF LIABILITY:

This is the only warranty given by Jandy Pool Products, Inc. No one is authorized to make any other warranties on behalf of Jandy Pool Products, Inc. **THIS WARRANTY IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING BUT NOT LIMITED TO ANY IMPLIED WARRANTIES OF FITNESS FOR A PARTICULAR PURPOSE AND MERCHANTABILITY. JANDY POOL PRODUCTS, INC. EXPRESSLY DISCLAIMS AND EXCLUDES ANY LIABILITY FOR CONSEQUENTIAL, INCIDENTAL, INDIRECT OR PUNITIVE DAMAGES FOR BREACH OF ANY EXPRESSED OR IMPLIED WARRANTY.** This warranty gives you specific legal rights. You may also have other rights which vary by state or province.

WARRANTY CLAIMS:

For prompt warranty consideration, contact your dealer and provide the following information: proof of purchase, model number, serial number and date of installation. The installer will contact the factory for instructions regarding the claim and to determine the location of the nearest designated service center. If the dealer is not available, you can locate a service center in your area by visiting www.jandy.com or by calling our technical support department at (707) 776-8200 extension 260. All returned parts must have a Returned Material Authorization number to be evaluated under the terms of this warranty.

