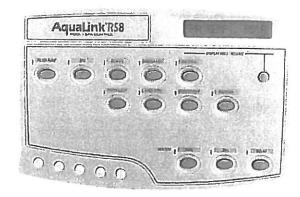
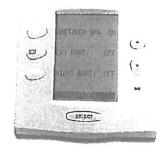
### Surge Suppression Installation Manual



## AquaLink® RS

# Optional Surge Suppression Kit





IMPORTANT NOTE TO INSTALLER. This manual contains important information, on maximizing the protection for your AquaLink® RS. Read the instructions carefully. Proper grounding and bonding is required for the surge suppression to be effective. In addition, a PROTECTION POLICY REGISTRATION CARD is included. The completed card must be returned to Jandy within 30 days of installation for the Surge Protection Policy to be in effect. Note that this kit contains components to protect a base system only. Depending on how your installation is wired, and the number of options, you may need additional surge boards (order P/N 6585). All necessary surge suppression components must be installed correctly for the warranty coverage to be in effect.



#### Power Center Low Voltage Surge Suppression

#### 4-wire RS485 and First Spa Side Switch

Use the Power Center Surge Suppression PCB to protect the Power Center PCB from surges that can enter from the 4-wire RS485 cable and first Spa Side Switch in the system. All 4-wire cables that enter the Power Center enclosure must be connected to the Surge Suppression PCB. Voltage signals are then transferred to the Power Center PCB, see Figure 1.

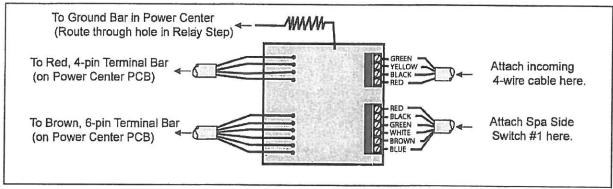


Figure 1. Power Center Surge Suppression PCB Wiring Diagram

If using more than one Spa Side Switch, Switch #2 and #3 must first be connected to the Dual Spa Side Interface PCB (P/N 6588). The Dual Spa Side Interface PCB includes a 4-wire cable that connects to the red terminal bar on the Surge Suppression PCB (see Figure 5 on back of this manual). Two sets of 4-wire cables that enter the Power Center can be "doubled up" on the red terminal bar, see Figure 1.

#### CAUTION

Never connect more than two wires on each of the pins of the red terminal bar. Use the Jandy Multiplex PCB, p/n 6584, when more than two of the 4-wire cables are used with the system.

Mount Surge Suppression PCB in Daughter Card area of Power Center Bezel, see Figure 2. If all Daughter Card slots are full, use the stand-off strips provided with the Surge Suppression PCB. Attach a strip on each side of the PCB, peel off the adhesive backing, and then mount the PCB to the back of the Power Center Can in the Low Voltage Area.

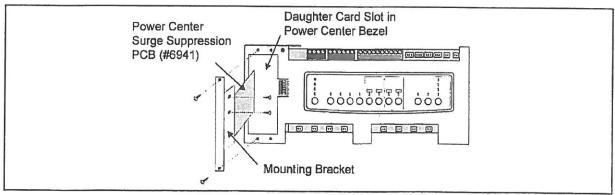


Figure 2. Power Center Bezel



#### Low Voltage (4-wire RS485) Surge Suppression PCB

#### Indoor Controller/Auxiliary Power Center(s)/TeleLink

Use the Low Voltage Surge Suppression PCB to protect the PCBs in any devices connected to the 4-wire cable in the RS485 system. Inside the indoor controller, there is a specific area where the Surge Suppression PCB can be mounted. To properly install the PCB and make sure that it does not interfere with other components, use the template provided. Wire the PCB according to Figure 3.

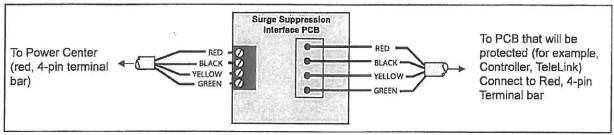


Figure 3. Low Voltage (4-wire RS485) Surge Suppression PCB Wiring Diagram

#### Accessory PCB's

Each accessory added to the RS485 system will require its own Surge Suppression PCB (P/N 6585) unless the accessory is wired "in series" and "downstream" of another accessory that already has a Surge Suppression PCB installed. Figure 4 illustrates a typical RS485 system. Notice that the 3 controllers are wired "in series" and are all protected by a Surge Suppression PCB installed in the first controller. The TeleLink J-box requires its own Surge Suppression PCB because it is wired directly to the Power Center ("in Parallel" to the controllers).

NOTE All wiring that exits the house, including wiring inside a screened porch, is susceptible to pick up and transfer power surges to the controller(s) or the Power Center. Buried cables (in or out of conduit) from spa side switches are also susceptible to transfer power surges. Ensure all low voltage wiring that runs outside the house or Power Center is connected to a surge suppression board before it connects to other PCBs.

## CAUTION Proper bonding and grounding is necessary for surge suppression to protect the AquaLink RS system.

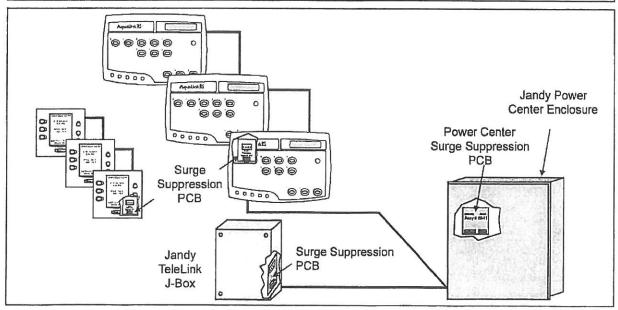
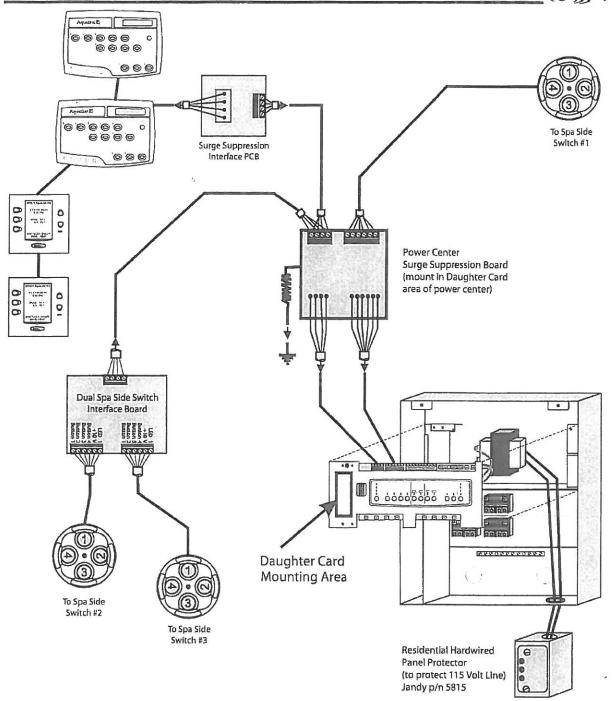


Figure 4. Typical 4-wire RS485 System with Jandy TeleLink J-Box



NOTE For Panel Protector installation instructions, please refer to the installation manual included with the High Voltage Surge Protection Kit.

