Jandy®

Installation and Owner's Manual

C1900 ORP and pH ChemLink™ Controller

For use with AquaLink® RS OneTouch Systems with Rev P Firmware, or AquaLink® RS PDA Systems with PDA 5.0 Firmware

---

⚠ 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. Improper installation and/or operation will void the warranty.

Table of Contents

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.

⚠ WARNING

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.

⚠ WARNING

Risk of electric shock - Install the power center at least five (5) feet (152.4cm) 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.

⚠ **WARNING**

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 (1.5m) 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.

⚠ **AVERTISSEMENT**

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 1.5m 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 built-in 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.

⚠ **CAUTION**

A terminal bar marked "GROUND" is provided within the power center. To reduce the risk of electrical shock, 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). In addition, a second wire connector should be bonded with a no. 8 AWG (4.115mm) copper wire to any metal ladders, water pipes, or other metal within five (5) feet (1.52m) of the tub.

⚠ **CAUTION**

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. System Overview

2.1 Overview

The ChemLink™ controller automatically monitors and maintains both the sanitizer level and the pH balance in swimming pools, spas, or any circulating water system that requires water chemistry management. Designed for easy installation and operation, it can be used with liquid feed pumps, granular and tablet erosion feeders, ozone generators, and salt chlorinators. It is not warranted or recommended for use with chlorine gas systems.
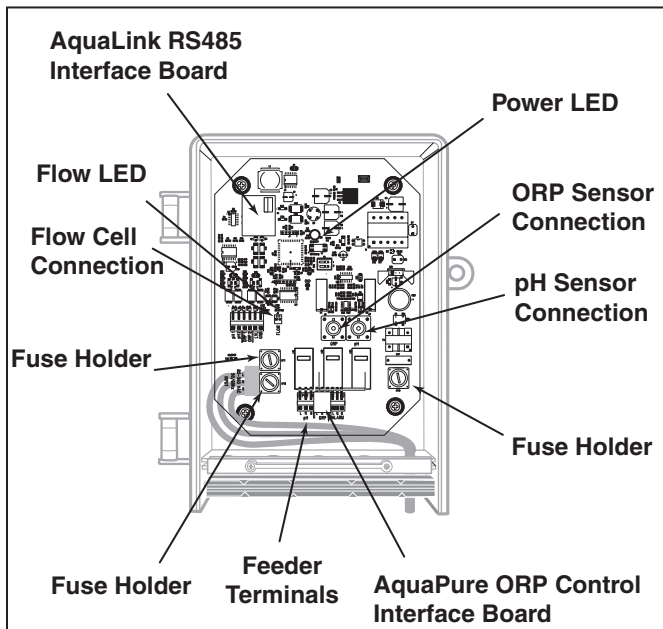

Figure 1. ChemLink™ Board Components

During the filtration cycle, the controller maintains sanitizer levels and pH balance by constantly measuring the Oxidation-Reduction-Potential (ORP) and pH balance of the water. If the sanitizer level (ORP) or pH falls below a predetermined set point, the controller activates the chemical feeder.

2.2 ChemLink™ Components

The package of the ChemLink™ kit contains the following:

1. C1900 ORP/pH Controller
2. Flow Cell with Flow Switch
3. Parts Bag
4. ORP Sensor
5. pH Sensor
6. Manual

The C1900 is used with the Jandy AquaLink® and PDA Systems and a Jandy power center.
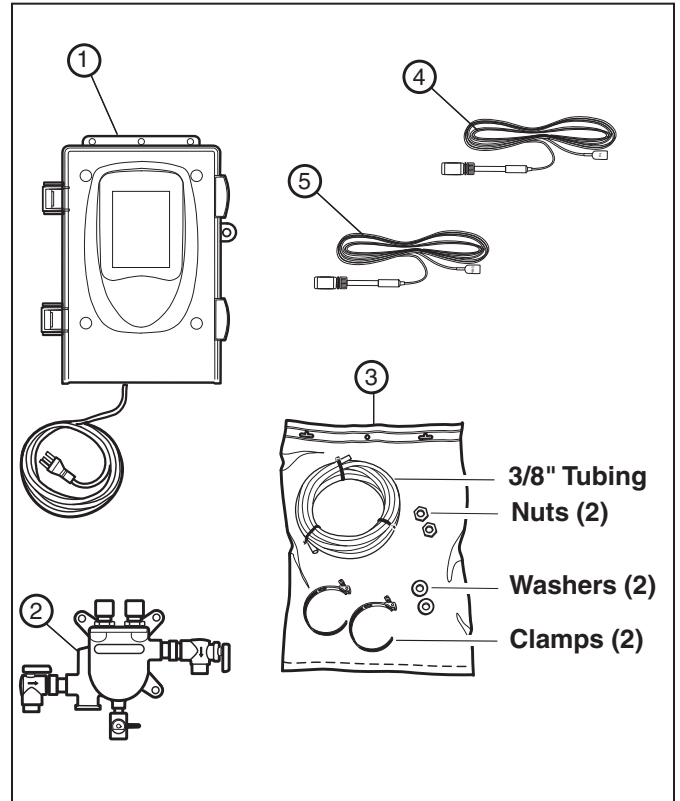

Figure 2. ChemLink™ Components

2.3 Flow Cell Overview

The flow cell assembly houses the sensors and provides a sample port for manual testing. It also contains an integrated flow switch/flow indicator that prevents the feeder(s) from feeding if there is insufficient flow. If flow is insufficient, a warning message will flash at the bottom of the screen.
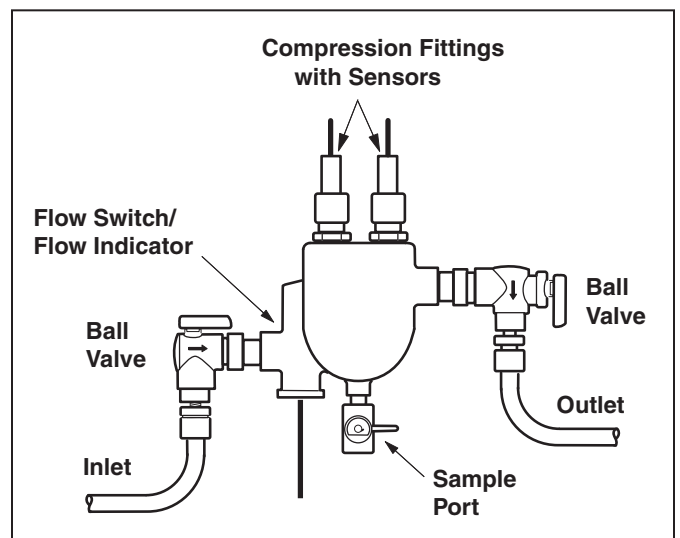

Figure 3. Flow Cell Overview

Jandy®

2.4   Specification

pH Control Range:

• 7.0 to 8.0

ORP Control Range:

• 200 to 900

Input Power:

• 120 VAC 50/60 Hz auto-switching when supplied with 3-wire grounded power cord; GFCI source required

• 240 VAC 50/60 Hz capable

Controller Power:

• 1 amp, internally fused

Output Power:

• 120 VAC 50/60 Hz auto-switching when supplied with 3-wire grounded power cord; GFCI source required

• 240 VAC 50/60 Hz capable

• 8A fuse for 120V, 4A fuse for 240V
Max load at 120V is 6.4A, 240V is 3.2A

• 3 HP (High power - line voltage) and 2 LP (Low power - 24V) built-in relays

Operating Temp:

• 40 - 120°F

Sensors:

• pH: glass combination with 10' cable

• ORP: platinum combination with 10' cable

Inputs:

• AquaLink® RS485 Communications
ORP & pH sensors: BNC connector
Level detection: allows feeding, normally closed
Flow detection: allows feeding, normally closed

Outputs:

• Max load at 120V is 6.4A, 240V is 3.2A

• ORP Feeder - High Voltage
120 VAC 50/60 Hz (with 120V input)
240 VAC 50/60 Hz; (with 240V input)
8A on-board fuse for 120, 4A fuse for 240, normally OFF

• ORP Feeder – Low Voltage, 24V

• pH Feeder – High Voltage,
120 VAC 50/60 Hz (with 120V input)
240 VAC 50/60 Hz; (with 240V input)
8A on-board fuse for 120, 4A fuse for 240, normally OFF

• pH Feeder – Low Voltage, 24V

• RS485 for Communications with AquaLink® RS

• Output connection to AquaPure® ORP Control Input

Section 3.   Controller Installation

3.1   Controller and Flow Cell Installation

The controller should be mounted on a wall or other vertical surface within eight feet (2.4 meters) of the feeder, at least ten feet (3 meters) away from the edge of the water and within six feet (1.8 meters) of the GFCI power source. Use mounting screws or anchors to mount the controller.
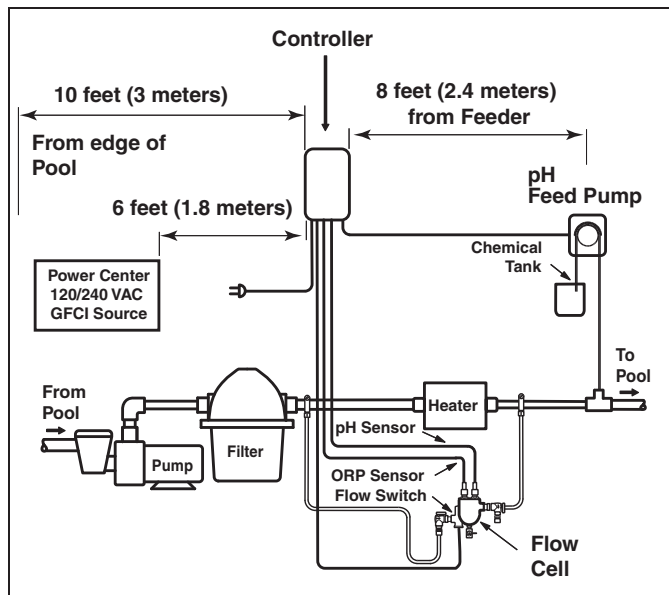

Figure 4.   Flow Cell Overview

3.2   Flow Cell Assembly Installation

Mount the flow cell on a vertical surface within eight feet (2.4 meters) of the controller.

Plumb it so the pressure difference between the inlet (flow switch side) and the outlet is sufficient to ensure flow through the flow cell. If the 3/8" tubing provided is being used, a minimum pressure differential of 3 PSI and 0.3 GPM is required to activate the flow switch. It is also desirable to have filtered water pass over the sensors to minimize cleaning.

There are two suggested plumbing installations for the flow cell.

1. Pressure Differential Installation
2. Pressure/Suction Method

3.2.1   Pressure Differential Installation

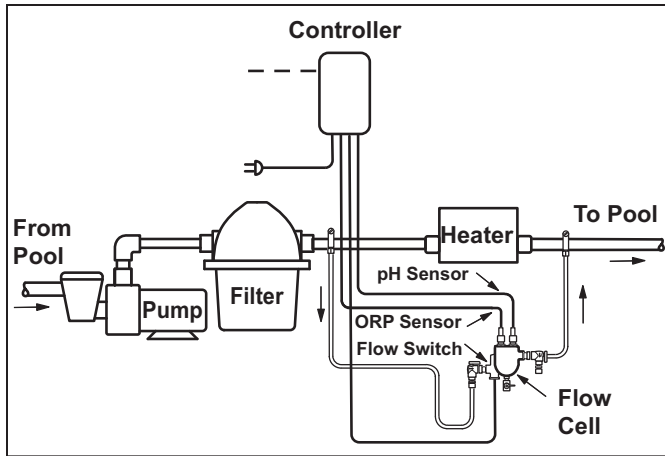Plumb the inlet after the filter and the outlet after the heater.

Figure 5.   Pressure Differential Installation

3.2.2   Pressure/Suction Method

Plumb the inlet after the filter and the outlet before the pump. This ensures excellent flow but the flow must be adjusted so the sensors are not subjected to a suction environment. Open the sample port to verify that water is flowing freely from it.
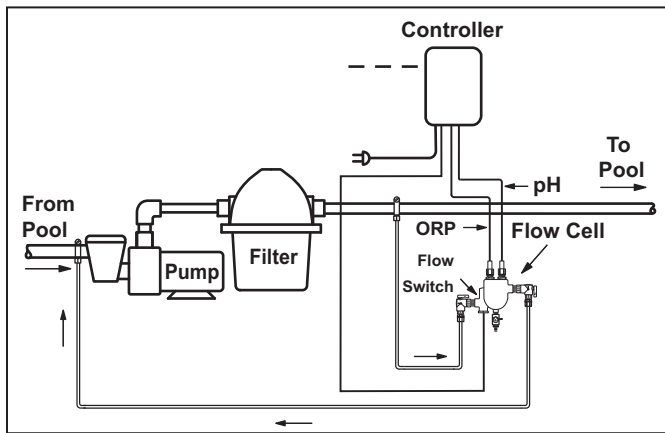

Figure 6.   Pressure/Suction Method

3.3   Water Supply Connections

The flow cell comes fully assembled, ready to install with the 3/8" tubing provided. Other sized tubing or 1/2" hard plumbing can be used.

To use an alternative tubing, remove the 90 degree on/off valves and plumb according to the application.

3.3.1   Saddle Clamp

1. If using a saddle clamp, drill a 7/16" hole in the pipe. See Figure 7.

2. Insert the 1/8" compression fitting through the clamp and place the nylon jam nut onto the compression fitting.

3. Slide the pipe seal washer onto the end of the compression fitting.

4. Insert the completed assembly into the hole in the pipe and tighten the clamp.

5. Test for leaks.

6. If the pipe is larger than 2" in diameter, two clamps joined together will be required per each hole.
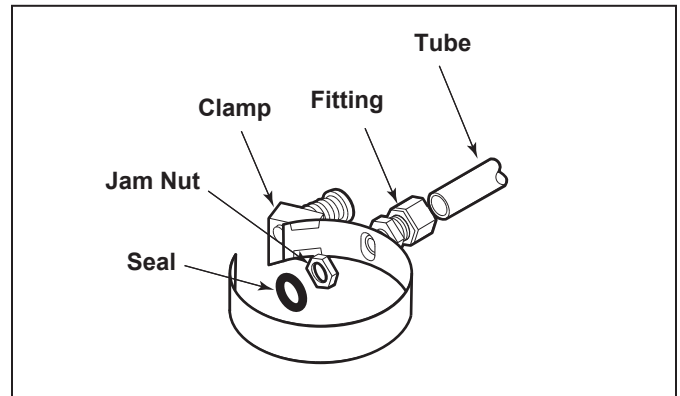

Figure 7.   Saddle Clamps

3.3.2   Pipe Tap

1. If using a pipe tap, drill a 7/16" hole and tap a 1/4" NPT hole. Be careful not to over tap the hole. See Figure 8.

2. Apply Teflon tape to the threads on the compression fitting and screw securely into the pipe.

3. Test for leaks.

4. Cut the tubing to the appropriate length. Slightly loosen the compression fitting in the pipe and insert the tubing.

5. Take the free end of the tubing and insert it into the compression fitting on the flow cell.
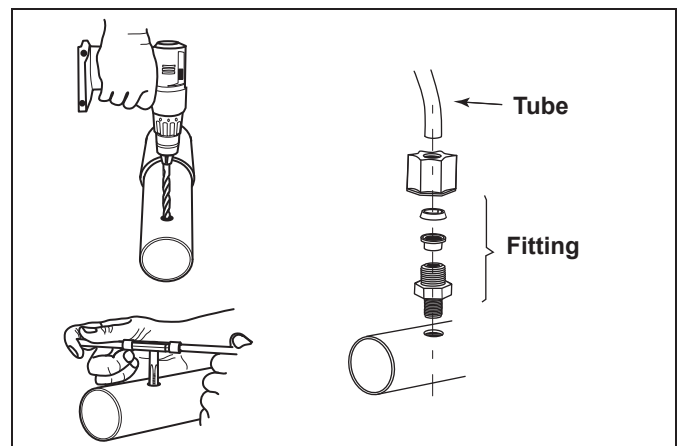

Figure 8.   Pipe Tap and Threaded Fitting

Section 4. Electrical Connections

4.1 Installation of the ORP and pH Sensor onto the Flow Switch Assembly

1. Unpack the sensors and remove the protective bottle and o-ring.

2. Set aside the o-rings and save the bottles for winterizing or reshipping.

3. Remove the compression fitting nut from the flow cell and slide it up onto the sensor.

4. Slide the o-ring from the bottle onto the sensor.

5. Insert the sensor into the compression fitting on the flow cell assembly. The sensor tips should extend below the water line in the flow cell. See Figure 9.

6. Hand-tighten the nut of the fitting, do not use a wrench.

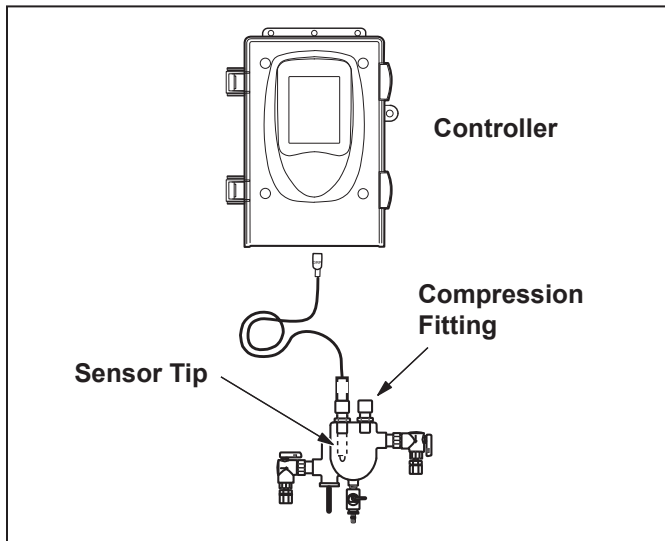7. Coil any extra sensor cable externally, not in the controller box.

Figure 9.   Sensor Installation

4.2 ORP and pH Sensor and Flow Switch Connections

1. Turn off all power to the C1900 controller.

> ### ⚠ 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 Electric 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.

2. Open the door of the C1900 controller.
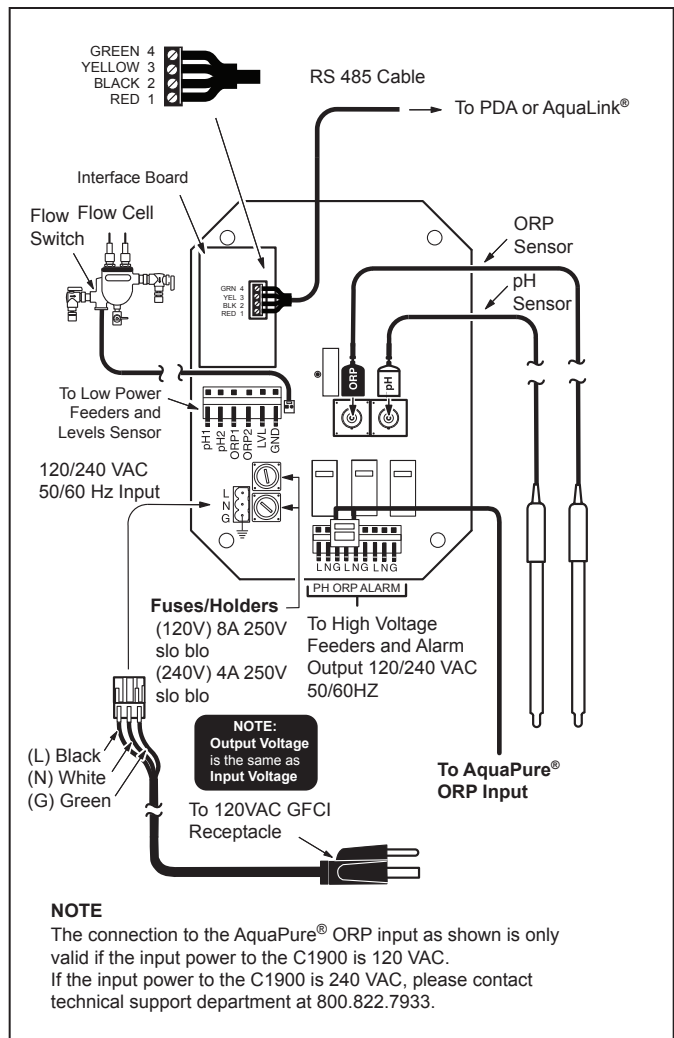
3. Unscrew and remove the wire clamp.

Figure 10. Controller Electrical Connection

4. Insert the AquaPure® ORP board into the terminal block. See Figure 10.

NOTE When using the ORP board to connect to an ORP input on the AquaPure®, set the output set point on the AquaPure® to 100%.

5. Connect pH leads to the terminal block. Note the orientation of the leads (ground, line and neutral).

6. Connect leads from flow switch to the flow terminal block.

7. Connect the pH and ORP sensor BNC connectors to the controller.

8. Route connections through housing grommets using the appropriate grommet for the wire size.

9. Reinstall the wire clamp. Close door and plug the controller power cord into the GFCI receptacle.

4.3   Power Center Connections

1. Turn off all power to the power center and to the C1900 controller.


⚠ **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 Electric 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.

---

2. Open the door of power center and the door of the C1900 controller.

3. On the power center AquaLink® RS PCB, connect the other end of the RS485 cable to the four-pin connector.

4. On the C1900 controller PCB board, connect the RS485 cable to the AquaLink® RS485 Interface Board as shown in Figure 10.

5. Route connections through housing grommets using the appropriate grommet for the wire size.

6. Close door and plug the controller power cord into the GFCI receptacle.

Section 5.   Programming the
ChemLink™

The AquaLink will automatically recognize the ChemLink™ once the cable connection has been made. The main AquaLink® screen will alternate between the Main screen and the Equipment Status screen.
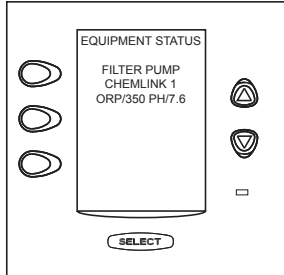

NOTE   The screens shown in this sections are of the OneTouch™ control, however these instructions apply to the PDA as well. The display on the PDA remote is a smaller, but selections are the same.
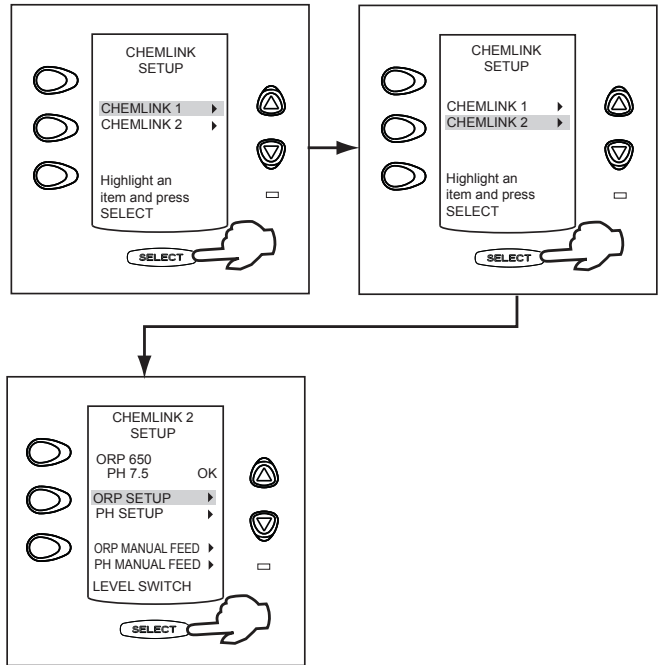
5.1   To Configure the ChemLink™

NOTE   Check with the installer before making changes to the SYSTEM SETUP.

Highlight MENU/HELP and press SELECT. Highlight SYSTEM SETUP and press SELECT. Using the arrow keys or PAGE UP or PAGE DOWN keys, highlight CHEMLINK and press SELECT.
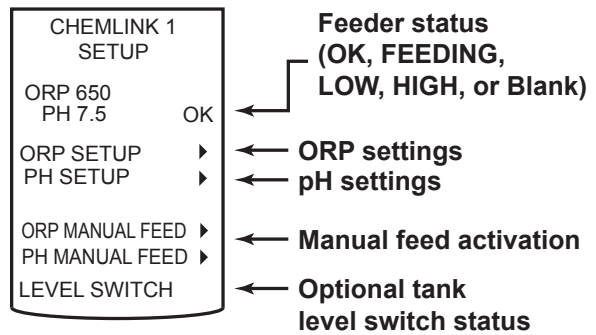
NOTE   If only one ChemLink™ is present in the system, the Main ChemLink™ screen is displayed.
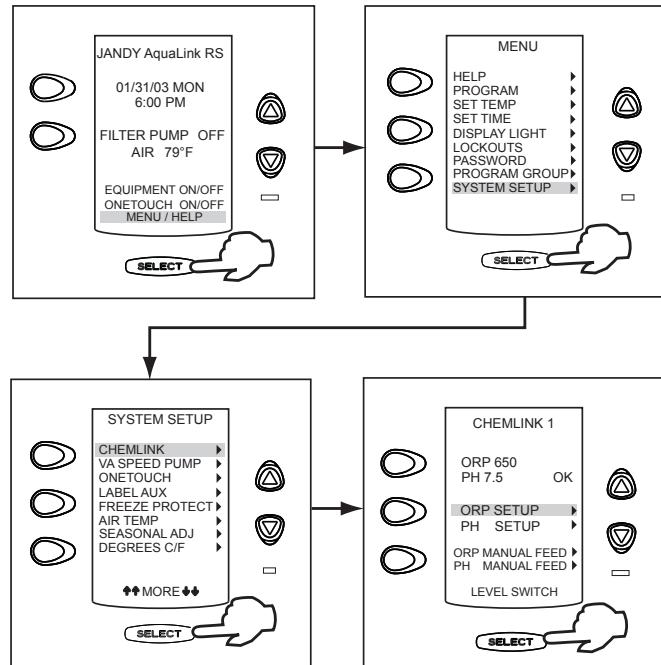
If more than one ChemLink™ is present, a ChemLink™ select screen is displayed. Using the arrow keys, highlight the ChemLink™ to be configured and press SELECT.
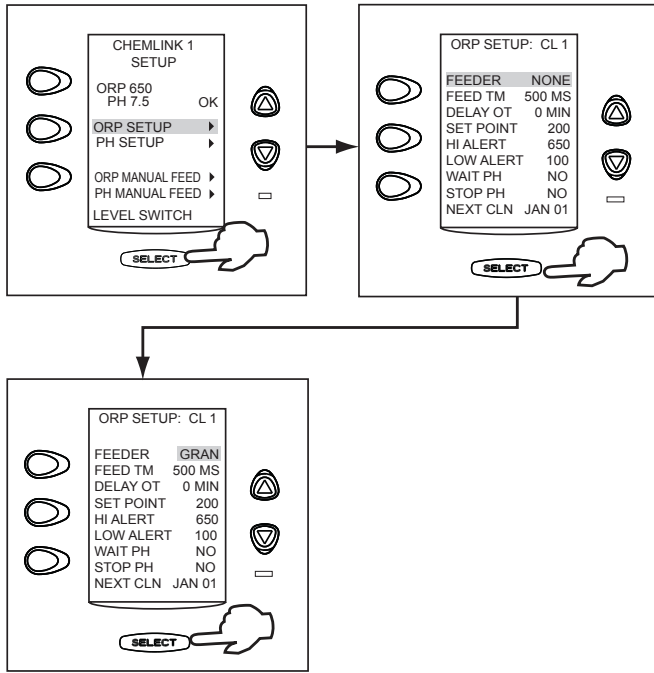

5.1.1   Details of the ChemLink™ Screen

5.2 To Configure the ChemLink™ ORP Controller

At the Main ChemLink™ screen, use the arrow keys to highlight ORP SETUP and press SELECT. Using the arrow keys, highlight the item to edit and press SELECT. Use the arrow keys to scroll through the list of options for the item. When the correct option is selected, press SELECT to accept the entry. Pressing BACK/DONE before pressing SELECT restores the previous setting.

Press BACK/DONE to return to the Main ChemLink™ screen.

5.2.1 To set the Feeder Type

NONE - Default
SALT - For salt water chlorinators

ERO LP
MBV   Non typical
ERO HP   applications

LIQUID - For liquid peristaltic pumps

GRAN - For Polaris G1000 dichor feeders

5.2.2 To set the Feeder Times

Sets the amount of time the controller activates the feeder per dose.

Type	Salt	ERO LP/MBV/ ERO HP	Liquid	Gran
Default	CONT	Do not use	30 Sec	5 Sec
Range	No Change Allowed		0.5 Sec to CONT	0.5 Sec to 5 Sec

5.2.3 To set the Overfeed or Feed Delay

Type	Salt	ERO LP/MBV/ ERO HP	Liquid	Gran
Default	OVERFEED OFF	Do not use	10 Min	30 Min
Range	OFF 24 HRS		1-99 MIN	1-99 MIN

OVERFEED: Salt only. Will alarm and not feed if ORP has activated for too long, preventing damage to the cell.

FEED DELAY: Sets the amount of time the controller waits to dose the pool again.

5.2.4   To set the ORP Setpoint

Specifies the level of sanitizer to be maintained.

```
ORP SETUP:  CL 1

FEEDER       NONE
FEED TM     500 MS
DELAY OT   45 MIN
SET POINT      200  ←
HI ALERT        650
LOW ALERT     100
WAIT PH          NO
STOP PH          NO
NEXT CLN   JAN 01
```

Default	650
Range	200 to 900

5.2.5   To set the Alarm - High Alert

Sets an alarm to deactivate the controller in the event of an ORP reading that is out of high range. This could be an indication of a mechanical malfunction in the feeding system.

```
ORP SETUP:  CL 1

FEEDER       NONE
FEED TM     500 MS
DELAY OT   45 MIN
SET POINT      200
HI ALERT        650  ←
LOW ALERT     100
WAIT PH          NO
STOP PH          NO
NEXT CLN   JAN 01
```

Default	950
Range	650 to 950

5.2.6   To set the Alarm - Low Alert

Sets an alarm to deactivate the controller in the event of an ORP reading that is out of low range. This could be an indication of a mechanical malfunction in the feeding system.

```
ORP SETUP:  CL 1

FEEDER       NONE
FEED TM     500 MS
DELAY OT   45 MIN
SET POINT      200
HI ALERT        650
LOW ALERT     100  ←
WAIT PH          NO
STOP PH          NO
NEXT CLN   JAN 01
```

Default	100
Range	100 to 640

5.2.7   To set the Wait or Stop pH

```
ORP SETUP:  CL 1

FEEDER       NONE
FEED TM     500 MS
DELAY OT   45 MIN
SET POINT      200
HI ALERT        650
LOW ALERT     100
WAIT PH          NO  ←
STOP PH          NO  ←
NEXT CLN   JAN 01
```

Wait for pH:
YES= ORP will not feed at the same time as pH.
NO= ORP will feed regardless of when pH feeds.
Default= YES

Stop for pH:
YES= ORP will not feed if the pH is out of range.
NO= ORP will feed regardless of pH.
Default=YES

5.2.8   To set the Next Cleaning

Manually set reminder to clean the ORP sensor. Enter Month, then Year for automatic reminder. Default= JAN 01 (essentially OFF)

```
ORP SETUP:  CL 1

FEEDER       NONE
FEED TM     500 MS
DELAY OT   45 MIN
SET POINT      200
HI ALERT        650
LOW ALERT     100
WAIT PH          NO
STOP PH          NO
NEXT CLN   JAN 01  ←
```

5.3 To Configure the ChemLink™ pH Controller

At the Main ChemLink™ screen, use the arrow keys to highlight PH SETUP and press SELECT. Using the arrow keys, highlight the item to edit and press SELECT. Use the arrow keys to scroll through the list of options for the item. When the correct option is selected, press SELECT to accept the entry. Pressing BACK/DONE before pressing SELECT restores the previous setting.

Pressing BACK/DONE before pressing SELECT also cancels and returns to the Main ChemLink™ screen.
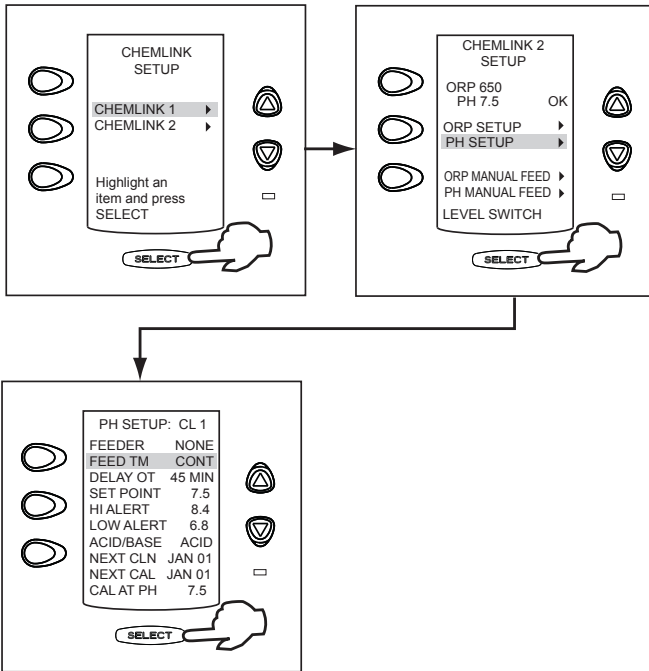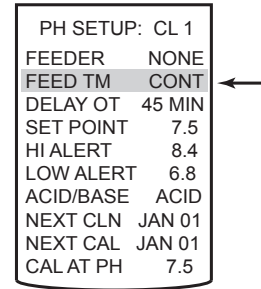

5.3.1 To set the Feeder Type
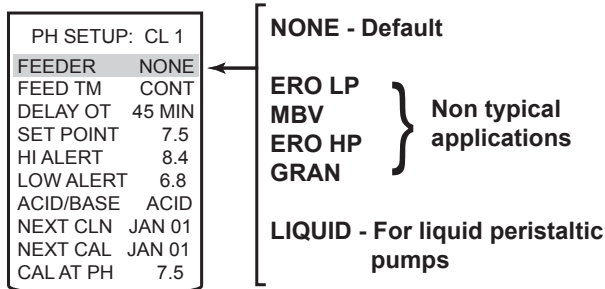
5.3.2 To set the Feeder Times

Sets the amount of time the controller activates the feeder per dose.

Type	ERO LP/MBV/ERO HP	Liquid
Default	Do not use	30 Sec
Range		0.5 Sec to CONT

5.3.3 To set the Feed Delay

Sets the amount of time the controller waits to dose the pool again.
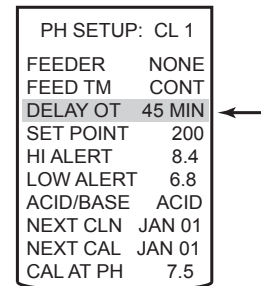
Type	ERO LP/MBV/ERO HP	Liquid
Default	Do not use	30 Sec
Range		0.5 Sec to CONT

5.3.4 To set the PH Setpoint

Specifies the level of sanitizer to be maintained.
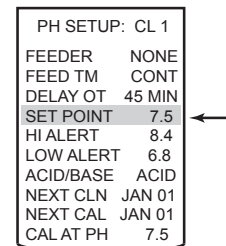
Default	7.5
Range	7.0 to 8.2

5.3.5   To set the Alarm - High Alert

Sets an alarm to deactivate the controller in the event of an PH reading that is out of high range. This could be an indication of a mechanical malfunction in the feeding system.

```
PH SETUP:  CL 1
FEEDER       NONE
FEED TM      CONT
DELAY OT   45 MIN
SET POINT      7.5
HI ALERT        8.4   ←
LOW ALERT     6.8
ACID/BASE    ACID
NEXT CLN   JAN 01
NEXT CAL   JAN 01
CAL AT PH      7.5
```

Default	8.4
Range	7.5 to 8.4

5.3.6   To set the Alarm - Low Alert

Sets an alarm to deactivate the controller in the event of an PH reading that is out of low range. This could be an indication of a mechanical malfunction in the feeding system.

```
PH SETUP:  CL 1
FEEDER       NONE
FEED TM      CONT
DELAY OT   45 MIN
SET POINT      7.5
HI ALERT        8.4
LOW ALERT     6.8   ←
ACID/BASE    ACID
NEXT CLN   JAN 01
NEXT CAL   JAN 01
CAL AT PH      7.5
```

Default	6.8
Range	6.8 to 7.4

5.3.7   To set the Acid or Base Feed

```
PH SETUP:  CL 1
FEEDER       NONE
FEED TM      CONT
DELAY OT   45 MIN
SET POINT      7.5
HI ALERT        8.4
LOW ALERT     6.8
ACID/BASE    ACID   ←
NEXT CLN   JAN 01
NEXT CAL   JAN 01
CAL AT PH      7.5
```

ACID: Feeds acid to lower the pH.
BASE: Feeds base material to raise the pH.
DEFAULT: Acid.

5.3.8   To set the Next Cleaning

Manually set reminder to clean the pH sensor. Enter Month, then Year for automatic reminder.

Default: JAN 01 (essentially OFF)

```
PH SETUP:  CL 1
FEEDER       NONE
FEED TM      CONT
DELAY OT   45 MIN
SET POINT      7.5
HI ALERT        8.4
LOW ALERT     6.8
ACID/BASE    ACID
NEXT CLN   JAN 01   ←
NEXT CAL   JAN 01
CAL AT PH      7.5
```

5.3.9   To set the Next Calibration

Manually set reminder to clean the pH sensor. Enter Month, then Year for automatic reminder.

Default: JAN 01 (essentially OFF)

```
PH SETUP:  CL 1
FEEDER       NONE
FEED TM      CONT
DELAY OT   45 MIN
SET POINT      7.5
HI ALERT        8.4
LOW ALERT     6.8
ACID/BASE    ACID
NEXT CLN   JAN 01
NEXT CAL   JAN 01   ←
CAL AT PH      7.5
```

5.3.10   To set the Calibration

Calibration for pH reading. Enter the actual pH here to adjust sensor reading.

Default: 7.5

```
PH SETUP:  CL 1
FEEDER       NONE
FEED TM      CONT
DELAY OT   45 MIN
SET POINT      7.5
HI ALERT        8.4
LOW ALERT     6.8
ACID/BASE    ACID
NEXT CLN   JAN 01
NEXT CAL   JAN 01
CAL AT PH      7.5   ←
```

5.4   Manual Feed Activation

5.4.1   To Perform a ORP Manual Feed

At the Main ChemLink™ screen, use the arrow keys to highlight ORP MANUAL FEED and press SELECT. At the prompt, highlight OK and press SELECT to start feed, or GO BACK and press SELECT to cancel and return to the Main ChemLink™ screen. Pressing BACK/DONE before pressing SELECT also cancels and returns to the Main ChemLink™ screen.
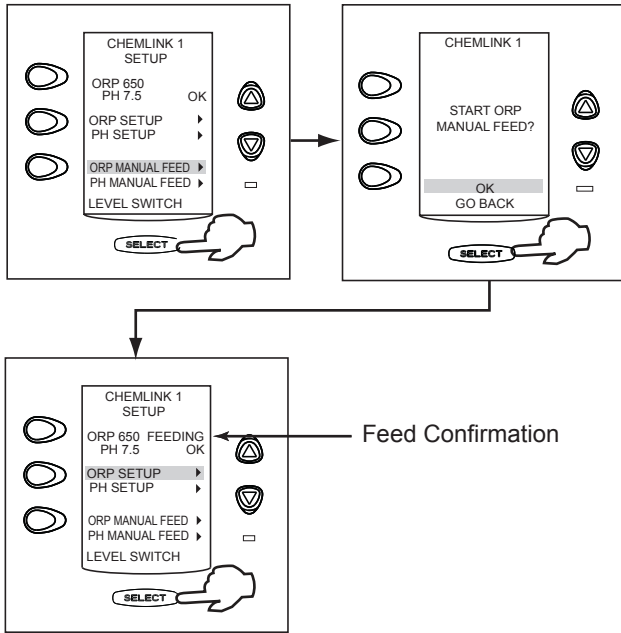

Feed Confirmation

5.4.2   To Perform a Manual pH Feed

At the Main ChemLink™ screen, use the arrow keys to highlight PH MANUAL FEED and press SELECT. At the prompt, highlight OK and press SELECT to start feed, or GO BACK and press SELECT to cancel and return to the Main ChemLink™ screen. Pressing BACK/DONE before pressing SELECT also cancels and returns to the Main ChemLink™ screen.

Feed Confirmation
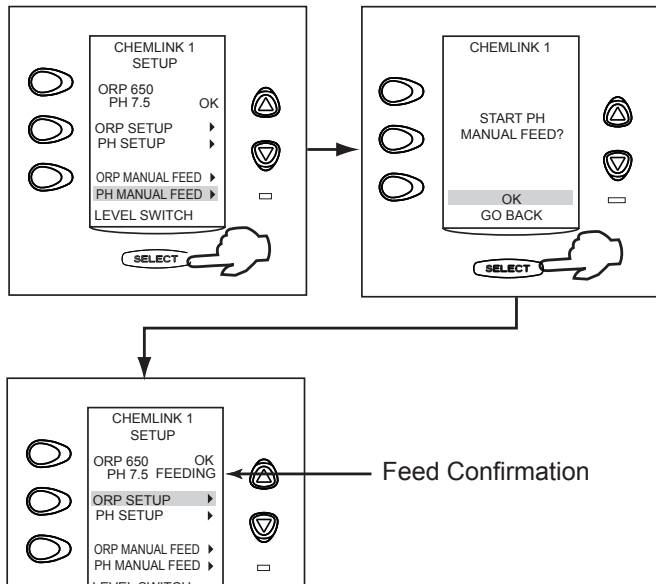
## 5.5   The ChemLink™ Feeder Tank Level Switch

This feature allows the use of an external, tank-mounted level switch to indicate when a liquid tank is empty to prevent the dry feeding of a peristaltic pump. These switches are an after-market product and not available through Jandy. There are only provisions for one switch. The switch must be normally closed (NC).
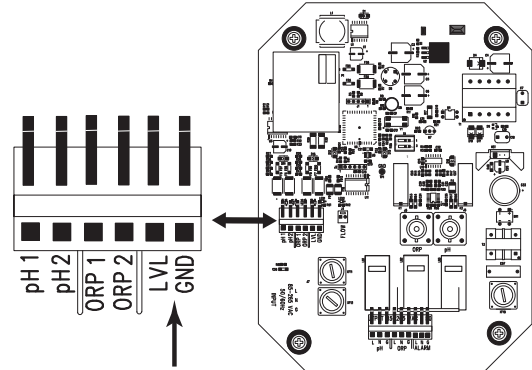
Connect level switch here to LVL and GRD terminals

5.5.1   To Enable the ChemLink™ Feeder Tank Level Switch

At the Main ChemLink™ screen, use the arrow keys to highlight LEVEL SWITCH and press SELECT. An 'X' on the display indicates the Level Switch is enabled. Press SELECT again to disable the Level Switch.

Level switch is open, indicating an empty tank
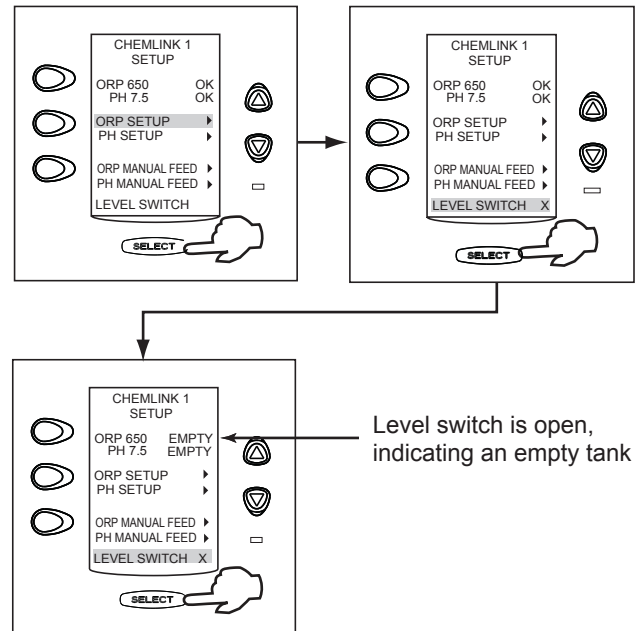
NOTES

NOTES

LIMITED WARRANTY

Thank you for purchasing Jandy® pool and spa products. Zodiac Pool Systems, Inc. warrants all parts to be free from manufacturing defects in materials and workmanship for a period of one (1) 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 (2) years.
• Never Lube® valves are warranted for the life of the pool and/or spa on which they were originally installed.
• AquaPure® Electronic Chlorine Generator Electrolytic Cells carry a five (5) year limited warranty on a prorated basis.
• Heat pumps are covered for two (2) years. There is a lifetime warranty on titanium tubing.
• The heat pump compressor is covered for five (5) years.

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 Zodiac Pool Systems, 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, or any other materials required to make the repair. Refrigerant or other expendables are not covered by the warranty. 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 pubished Installation, Operation and Maintenance Manuals, which are 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 levels between 7.2 and 7.8, with ideal ranges being between 7.4 and 7.6, 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 Zodiac Pool Systems, Inc. No one is authorized to make any other warranties on behalf of Zodiac Pool Systems, 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. ZODIAC POOL SYSTEMS, 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 that 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 to obtain 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 1.800.822.7933. All returned parts must have a Returned Material Authorization number to be evaluated under the terms of this warranty.