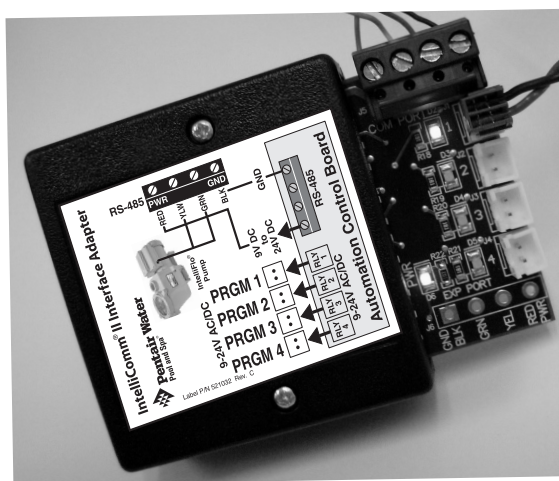




IntelliComm® II Interface Adapter

(For use with IntelliFlo® and IntelliPro® pumps)



Installation and User's Guide

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL
INSTRUCTIONS
SAVE THESE INSTRUCTIONS

IMPORTANT SAFETY PRECAUTIONS



Important Notice: 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 and/or operator of this product. **READ AND FOLLOW ALL INSTRUCTIONS IN THIS MANUAL.**



WARNING Before installing the IntelliComm® II Interface adapter, read and follow all warning notices and instructions which are included. Failure to follow safety warnings and instructions can result in severe injury, death, or property damage. Call (800) 831-7133 for additional free copies of these instructions.



Risk of electrical shock or electrocution:



The IntelliComm II Interface adapter must be installed by a qualified electrician, according to the National Electrical Code (including article 680-22) or Canadian Electrical Code (including section 68) and local codes and ordinances. The electrician should also consult the local building department regarding local codes.

Improper installation will create an electrical hazard which could result in death or serious injury to pool users, installers, or others due to electrical shock, and may also cause damage to property.

Always disconnect power to the pool pump at the circuit breaker before servicing the pump. Failure to do so could result in death or serious injury to serviceman, pool users or others due to electric shock.

Contents

IntelliComm® II Interface Adapter Overview	1
IntelliComm II Interface Adapter Connections	2
Connecting to IntelliComm II Input Program Terminals	2
Connecting Power to IntelliComm II	2
Connecting IntelliComm II to IntelliFlo	3
Connecting to a Compool® Control System	4
RYA-LX Harness (P/N RYALX) Accessory	7
Connecting to a Jandy® AquaLink RS Control System	10
Connecting to a Hayward® Control System	12
Connecting to a Polaris® EOS Control System	14
Setting up an IntelliFlo® VF Pump with IntelliComm II	16
Mounting the IntelliComm II Interface Adapter	20

Technical Support: **(800) 831-7133**

© 2009 Pentair Water Pool and Spa, Inc. All rights reserved.

1620 Hawkins Ave., Sanford, NC 27330 • (919) 566-8000

10951 West Los Angeles Ave., Moorpark, CA 93021 • (805) 553-5000 • (800) 831-7133

IntelliComm®, IntelliFlo®, IntelliPro®, IntelliTouch®, EasyTouch®, SunTouch®, Compool®, and Pentair Water Pool and Spa® are trademarks and/or registered trademarks of Pentair Water Pool and Spa, Inc. and/or its affiliated companies in the United States and/or other countries. Hayward® and ProLogic® are registered trademarks of Hayward Industries Inc. Jandy® and AquaLink® are registered trademarks of Jandy Industries Inc. Polaris® is a registered trademark of Zodiac Pool Systems, Inc. Unless noted, names and brands of others that may be used in this document are not used to indicate an affiliation or endorsement between the proprietors of these names and brands and Pentair Water Pool and Spa, Inc. Those names and brands may be the trademarks or registered trademarks of those parties or others.

P/N 521033 - Rev C - 10/16/09

IntelliComm® II interface adapter kit contents

- IntelliComm II Interface Adapter
- Two mounting screws
- Mounting tape
- One Terminal Connector (RS-485 and IntelliComm II power connection)
- Compool RJ12 Adapter
- Four AUX cables (22 AWG)
- Installation and User's Guide (this manual)

IntelliComm II interface adapter overview

The IntelliComm II interface adapter provides automatic control of IntelliFlo® VF , IntelliFlo VS and IntelliPro® pumps. IntelliComm II is compatible with IntelliTouch®, EasyTouch®, SunTouch®, Compool®, Hayward®, Jandy® and Polaris® EOS control systems. The IntelliComm II Interface adapter provides:

Four input (9-24V DC/AC) program terminals (GPM/RPM 1, 2, 3, and 4) for connection to any available auxiliary relay, valve actuator or controlled output circuit on the automation control system circuit board. Typically, GPM/RPM 1 connects to the output Filter Pump relay terminal plug. You can also connect to the spa, pool electric heater, solar or 2-speed pump output circuit. Each of the four inputs can be used to control the IntelliFlo pump's speed or flow. **Note: If more than one terminal input is active, the highest input number (GPM/RPM 4) will take priority regardless of the pump setting.**

A four screw terminal connector for connection to the RS-485 IntelliFlo communication cable and power source (9-24V DC) from the automation control system circuit board.

Note: The IntelliComm II Interface adapter will always use **ADDRESS 1** to communicate with the IntelliFlo pump.

Note: The IntelliComm II Interface adapter can be used with IntelliTouch®, EasyTouch® and SunTouch® systems, when additional pumps are required beyond the normal system capacity.

Safety Devices: All required safety devices, such as the IntelliFlo VS+ SVRS (Safety Vacuum Release System) pump, are unaffected when using the IntelliComm II.

Selecting Flow Rates (GPM) for IntelliFlo VF

The IntelliFlo VF pump can be selected to run at a specific US gallons per minute (GPM), for each external control input:

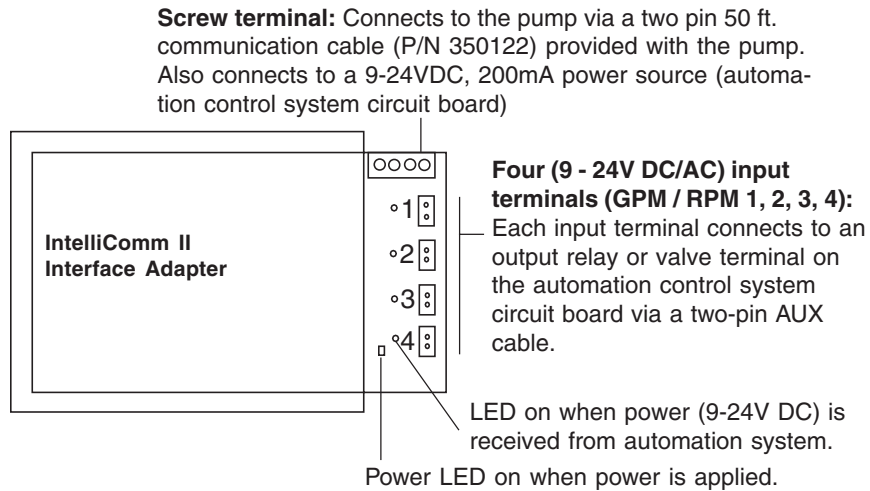
IntelliFlo VF: 15 - 130 GPM

Selecting Pump Speeds (RPM) for IntelliFlo VS+ SVRS and IntelliPro VS3050

The IntelliFlo VS+ SVRS, IntelliFlo VS 3050 and IntelliPro VS 3050 pump can be selected to run at a specific speed (RPM), for each external control input:

IntelliFlo VS+ SVRS:	1100 - 3450 RPM
IntelliFlo VS 3050:	400 - 3450 RPM
IntelliPro VS 3050:	400 - 3450 RPM

IntelliComm II Interface Adapter Connections



Connecting to IntelliComm II Input Program Terminals

There are four (two-wire) cables provided in kit for interface connections from the automation control system circuit board, to the four IntelliComm II program (GPM / RPM) input terminal (see page 3). The input terminal cable wires are not polarized. Plugs/wires can be connected in any order.

Connecting IntelliComm II to a Valve Actuator

A Valve Actuator can be connected from the automation control system circuit board to any one of the IntelliComm II input terminals (1-4) by splicing into the valve actuator cable using the provided two-wire input terminal cable (see page 3).

Connecting Power (9-24 VDC) to IntelliComm II

Power to the IntelliComm II requires a 9-24VDC, 200mA power source, which can be supplied from the automation control system circuit board or an AC to DC power adapter. For VDC power connection on Compool, Jandy and Hayward control systems, see pages 4 - 13.

IntelliFlo pump AC connection

If multiple pump speeds are required, the IntelliFlo pump must be wired to a circuit breaker **not** to a relay.

Note: If the IntelliFlo pump is used in a commercial application or connected to an Emergency Shut-Off switch, the pump must be connected to a relay for proper Emergency Shut-Off operation.

Salt Chlorine System Connections

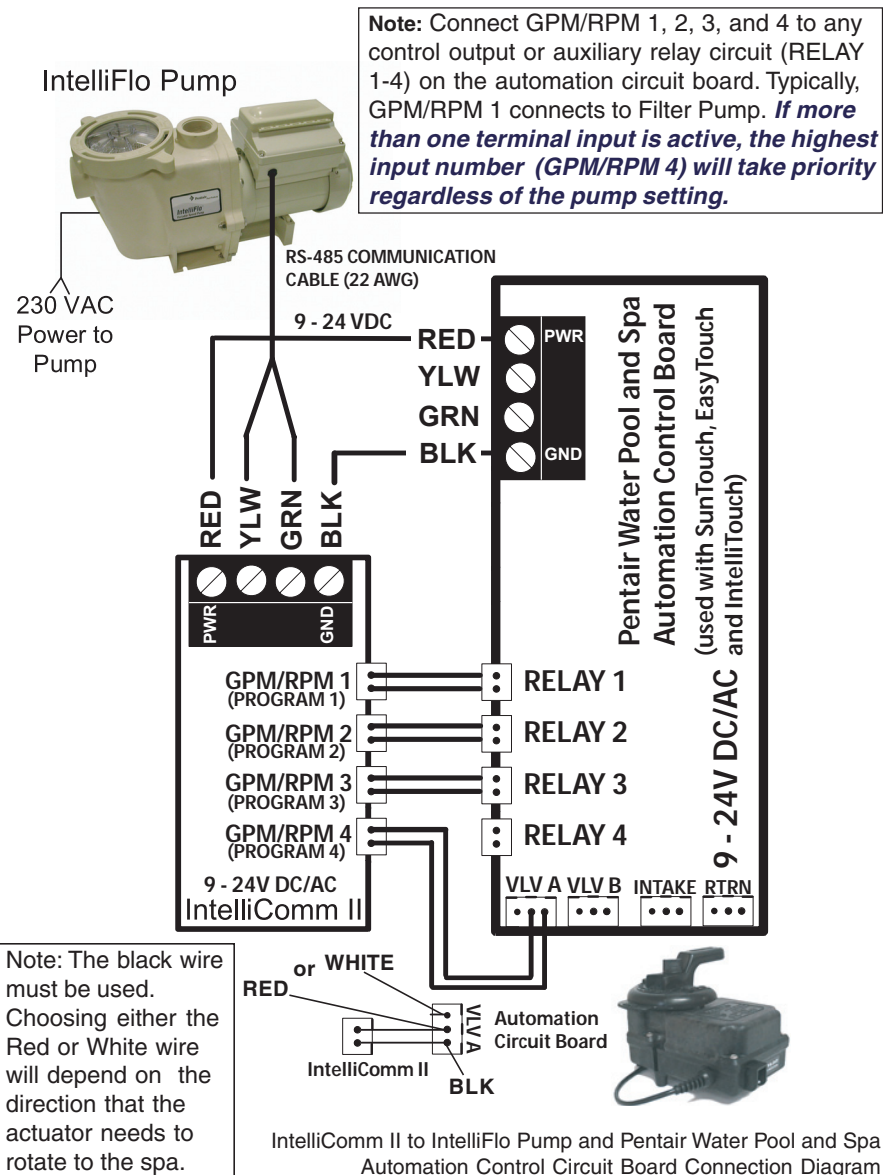
All Salt Chlorine Generator (SCG) units must be connected to the Filter Pump relay output. If the Filter Pump relay output is being used for the IntelliComm II, then a RYALX can be used if a SCG is present in the system. For more information about using the RYALX see page 7.

Connecting IntelliComm II to IntelliFlo

Connection from IntelliComm II to an IntelliFlo VF or IntelliFlo VS pump is via a 50 ft. RS-485 communication cable (P/N 350122), which is provided with the pump.

Connecting the IntelliFlo Pump to IntelliComm II RS-485 Terminal

Connect the YELLOW and GREEN wire from the IntelliFlo communication cable to the YELLOW and GREEN RS-485 screw terminals on the IntelliComm II interface adapter as shown below.



Connecting to a Compool® Control System

Connection from IntelliComm II to a Compool control system utilizes the RJ12 adapter (provided in the kit), and the IntelliFlo RS-485 communication cable (provided with the pump).

Compool Models Compatible with IntelliComm II (see page 6 and 7)

Compool CP-3xxx series, CP-2000 and Time Master, CP-1000, CP-2020, Swim Master LX-20, LX-42, CP-2020, LX-100, LX-80 Commercial and CP-100 control systems. Note: IntelliComm II does not support the LX-820 Commercial system.

Compool Models Compatible with IntelliComm II

(Using an External 9 VDC 200mA AC Power Adapter)

The following Compool models are compatible with IntelliComm II using an external 9 VDC, 200mA AC power adapter: Compool CP-30, LX-220, LX-40.



⚠ WARNING Always disconnect AC POWER to the LOAD CENTER at the circuit breaker. Also, disconnect AC power to the PUMP before installing the IntelliComm II interface adapter. Failure to do so could result in death or serious injury to the service person, pool users or others due to electric shock. Read all **SAFETY PRECAUTIONS** on page i before starting.

Accessing the Compool Circuit Board

The Compool control system circuit board is located in the power center. Refer to the Compool control system owner's manual for access information.

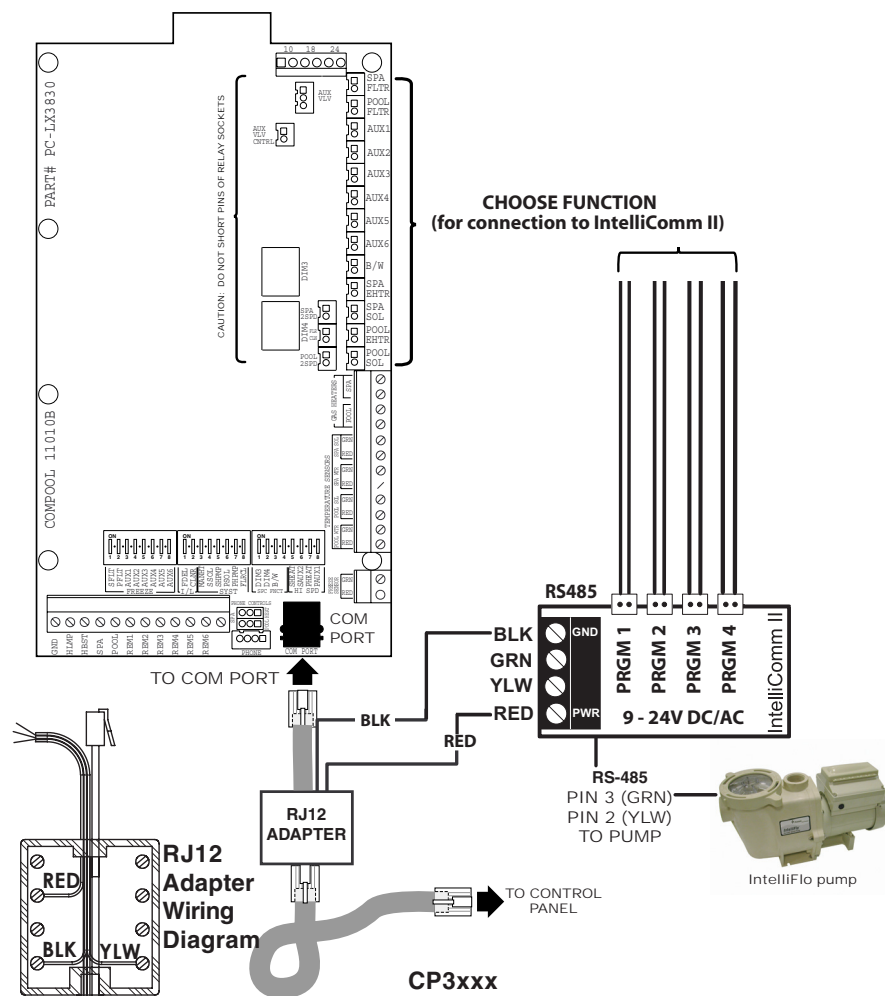
Connecting power to the IntelliComm II from a Compool CP3xxx circuit board (see page 5 and 7)

1. **Connect RJ12 adapter power wires (9-24V DC/AC):** From the RJ12 adapter, connect the BLACK wire and RED wire to the RS-485 GND (BLACK) and PWR (RED) terminal respectively. **NOTE: For LX-100: Connect the YELLOW wire from RJ12 to IntelliComm II Red (PWR) screw terminal. Note: To avoid circuit board damage, DO NOT connect the RED and YELLOW wires together to Red (PWR) terminal, leave RED UNCONNECTED (see page 6).**
2. **Connect RJ12 adapter cable plug to the Compool COM PORT:** Disconnect the Compool control panel RJ12 plug from the Compool circuit board COM Port and connect it to the RJ12 adapter (provided). Connect the RJ12 adapter plug into the COM Port (use black plug for LX-100) on the Compool circuit board (see page 5).
3. **Connecting AUX cables:** Choose the functions you wish to control on the Compool system. Connect the auxiliary cables (provided in kit) from the IntelliComm II input terminals (GPM/RPM 1, 2, 3, 4) to the auxiliary connector on the Compool circuit board. Typically, GPM/RPM 1 input terminal, connects to Compool FILTER PUMP output terminal. Choose the other functions on the Compool board and connect them to GPM/RPM 2, 3, and 4 input terminals.
4. **Connecting IntelliComm II to IntelliFlo:** For IntelliComm II to IntelliFlo wiring information, see page 3.
6. **Mounting the IntelliComm II** (see page 20).
7. **Setting up IntelliFlo speeds and flow rates** (see page 16).

Note: Using a RYALX Harness

(for Compool CP-38xx Systems): For the Compool SOLAR system, connect the RYALX harness cable plug to the SOLAR socket, then connect the IntelliComm II pump speed plug and the VALVE cable plug to the RYALX board. The RYALX can be used for any output.

Note: The Spa output plug on the Compool circuit board can be used for direct IntelliComm II connection, instead of splicing into the valve output cable.



The diagram illustrates the wiring for the IntelliFlo pump system. It shows the following components and connections:

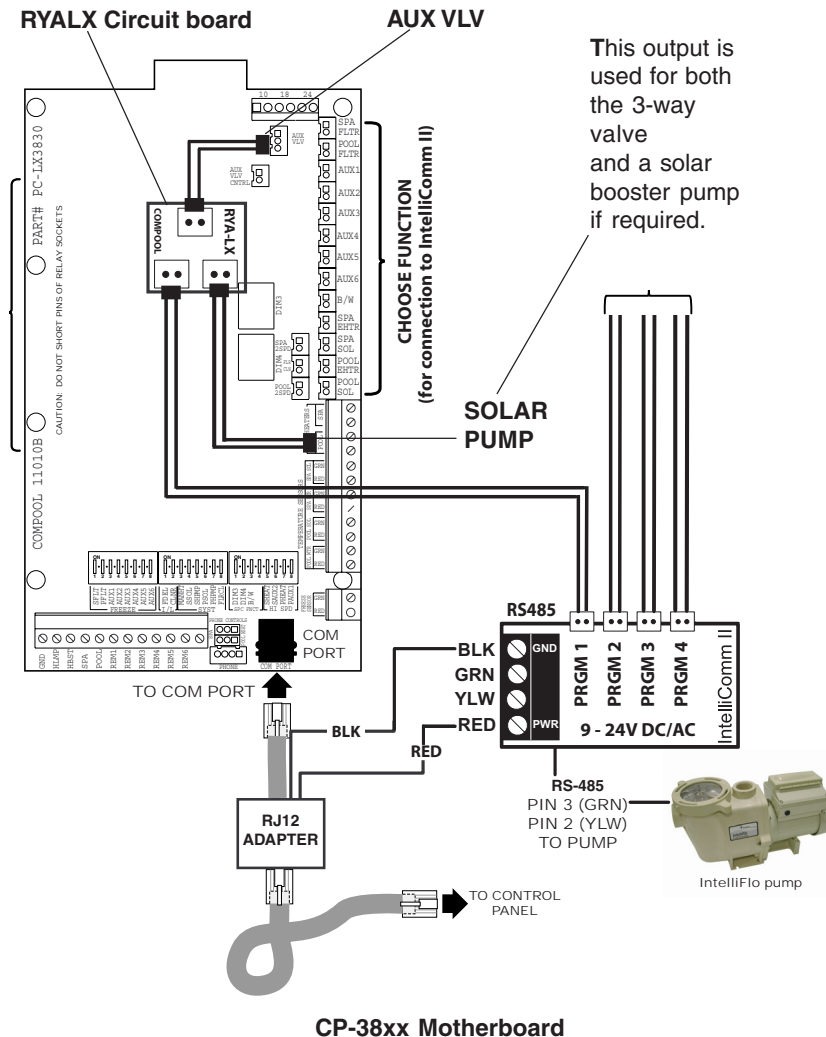
- IntelliFlo pump:** A green pump unit with a control box. It is connected to the RS-485 module via a cable labeled "IntelliFlo pump".
- RS-485 module:** A black module with four pins labeled "GND", "PRGM 1", "PRGM 2", and "PRGM 3". It is connected to the IntelliComm II module via a cable labeled "RS-485".
- IntelliComm II module:** A black module with four pins labeled "GND", "PRGM 1", "PRGM 2", and "PRGM 3". It is connected to the pump control box via a cable labeled "IntelliComm II".
- Pump control box:** A green box with various terminals. It includes a "COM PORT 2" terminal, a "SILVER 1" terminal, and a "RED NOT CONNECTED" terminal. It is connected to the RS-485 module via a cable labeled "BLK".
- Wiring details:**
 - The "COM PORT 2" terminal is connected to the "SILVER 1" terminal.
 - The "RED NOT CONNECTED" terminal is connected to the "RED" wire of the RS-485 module.
 - The "BLK" wire of the RS-485 module is connected to the "PRGM 1" terminal of the IntelliComm II module.
 - The "PRGM 2" terminal of the IntelliComm II module is connected to the "PRGM 2" terminal of the RS-485 module.
 - The "PRGM 3" terminal of the IntelliComm II module is connected to the "PRGM 3" terminal of the RS-485 module.
 - The "GND" terminal of the IntelliComm II module is connected to the "GND" terminal of the RS-485 module.

IntelliComm II Interface Adapter Installation and User's Guide

RYALX Harness (P/N RYALX) Accessory (For use with Compool CP-38xx Systems)

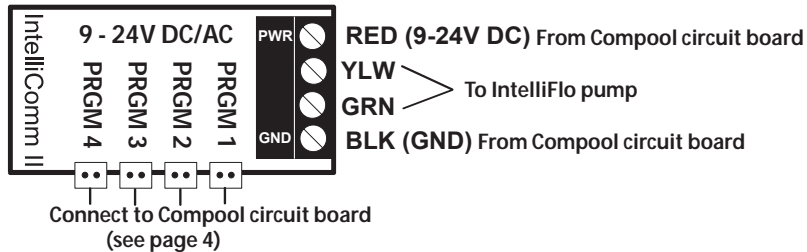
The RYALX harness (y-adapter) allows any one output circuit to operate two relay circuits. For example, to free up an additional connection on the Compool SOLAR system, connect the RYALX harness cable plug to the SOLAR socket, then connect the IntelliComm II pump speed plug and the VALVE cable plug to the RYALX board. The RYALX can be used for any output.

The example connection diagram below shows how to share the Aux Valve Control using solar. The signal to tell solar to turn on, comes from the solar socket located below the HTR socket. Then the AUX VLV control and the speed of the pump now responds to that signal.

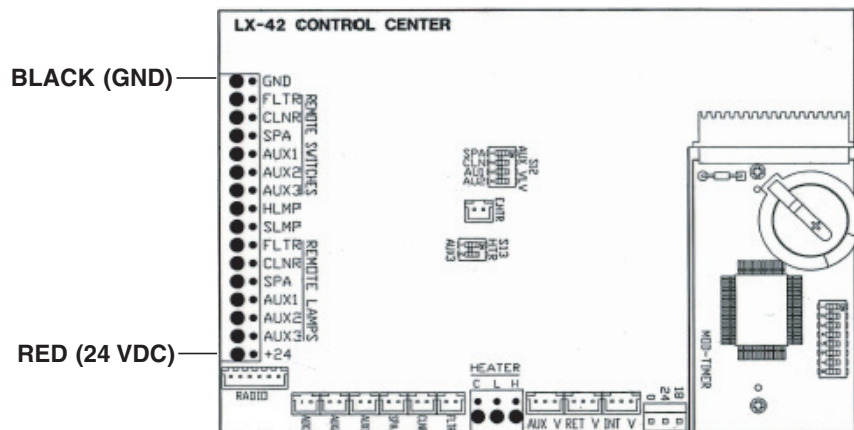
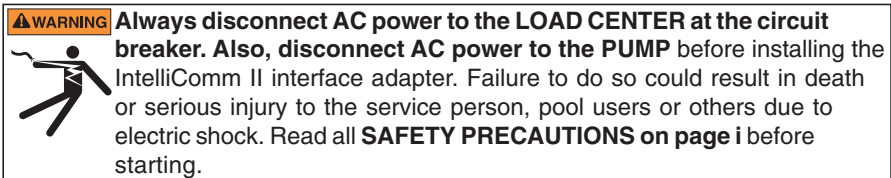


Connecting Power to IntelliComm II from Compool Circuit Board

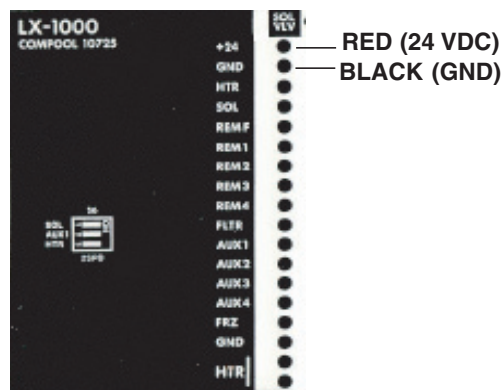
To power the IntelliComm II requires a two wire connection from the Compool circuit board to the IntelliComm II circuit board (as shown below). For Compool to IntelliComm II auxiliary cable connection information, see **Connecting AUX cables, on page 4**.



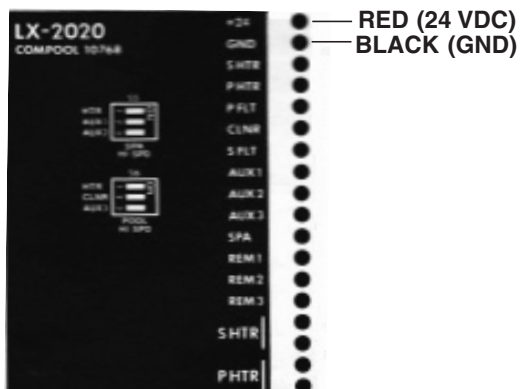
Choose the function on the Compool circuit board



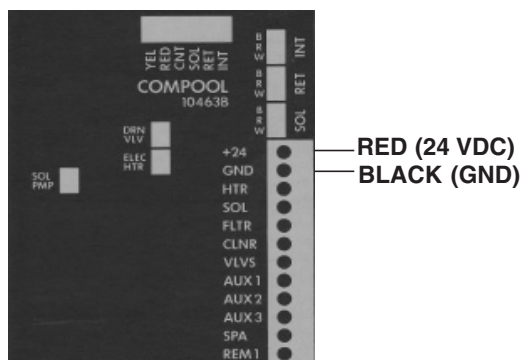
LX-42



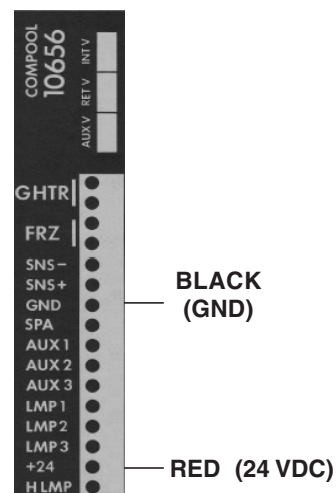
CP1000



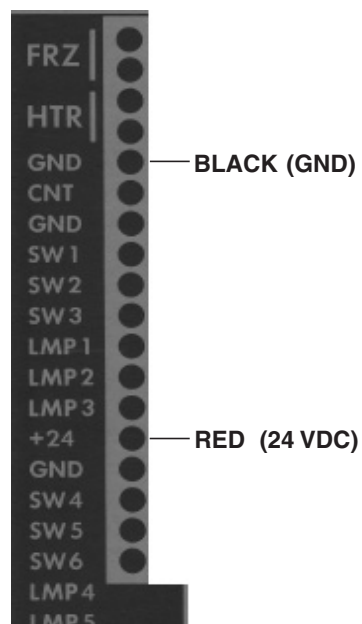
CP2020



CP2000 and Time Master (LX10)



Swim Master (LX20)



SP100 (LX36)

Connecting to a Jandy® AquaLink® RS Control System



WARNING Always disconnect AC power to the LOAD CENTER at the circuit breaker. Also, disconnect AC power to the PUMP before installing the IntelliComm II interface adapter. Failure to do so could result in death or serious injury to the service person, pool users or others due to electric shock. Read all **SAFETY PRECAUTIONS** on page i before starting.

Access Jandy control system circuit board

The Jandy control system circuit board is located in the load center. Refer to the Jandy control system owner's manual for access information.

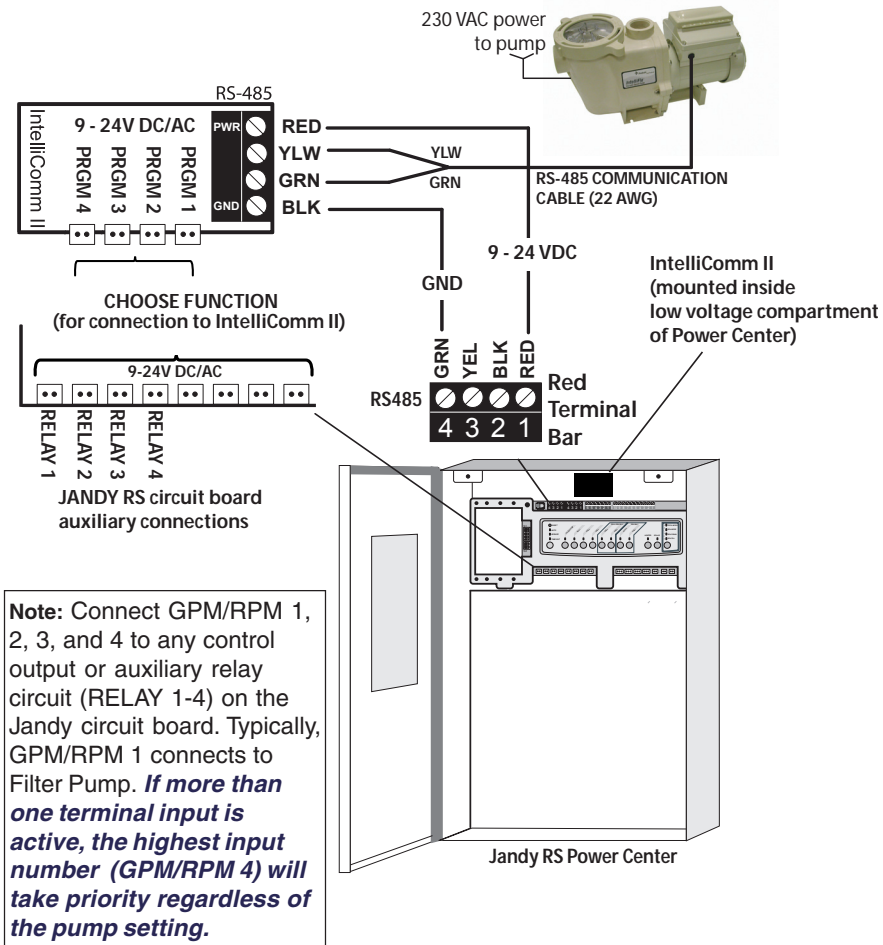
Connect power to the IntelliComm II (9-24 VDC) from Jandy circuit board

1. Connect the GREEN (-) wire and the RED (+) wire from the Jandy RS-485 screw terminal, to the GND and PWR terminal respectively, on the IntelliComm II RS-485 screw terminal (see page 8).

Connect AUX cables

2. Connect the auxiliary cables (provided in kit) from the IntelliComm II input terminals GPM/RPM 1, 2, 3, and 4 to any control output or auxiliary relay circuit on the Jandy circuit board. Typically, GPM/RPM 1 connects to the output Filter Pump relay terminal plug. However, Jandy auxiliary relay circuits can be connected to any of the four input terminals for custom pump speed control. **NOTE: If more than one terminal input is active, the highest input number (GPM/RPM 4) will take priority regardless of the pump setting.**
3. **Connect IntelliComm II to IntelliFlo**
For IntelliComm II to IntelliFlo wiring information, see page 3.
4. **Mounting the IntelliComm II** (see page 20).
5. **Setting up IntelliFlo speeds and flow rates** (see page 16).

Note: The Spa output plug on the Jandy circuit board can be used for direct IntelliComm II connection, instead of splicing into the valve output cable.



IntelliComm II to Jandy AquaLink Control System Connection Diagram

Connecting to a Hayward® Pro Logic® Control System

The following describes how to connect IntelliComm II to a Hayward Pro Logic® series control system (see page 13 for connection diagram).



⚠ WARNING Always disconnect AC power to the LOAD CENTER at the circuit breaker and disconnect AC power to the PUMP before installing the IntelliComm II interface adapter. Failure to do so could result in death or serious injury to the service person, pool users or others due to electric shock. Read all **SAFETY PRECAUTIONS** on page i before starting.

Access the Hayward Pro Logic Circuit Board

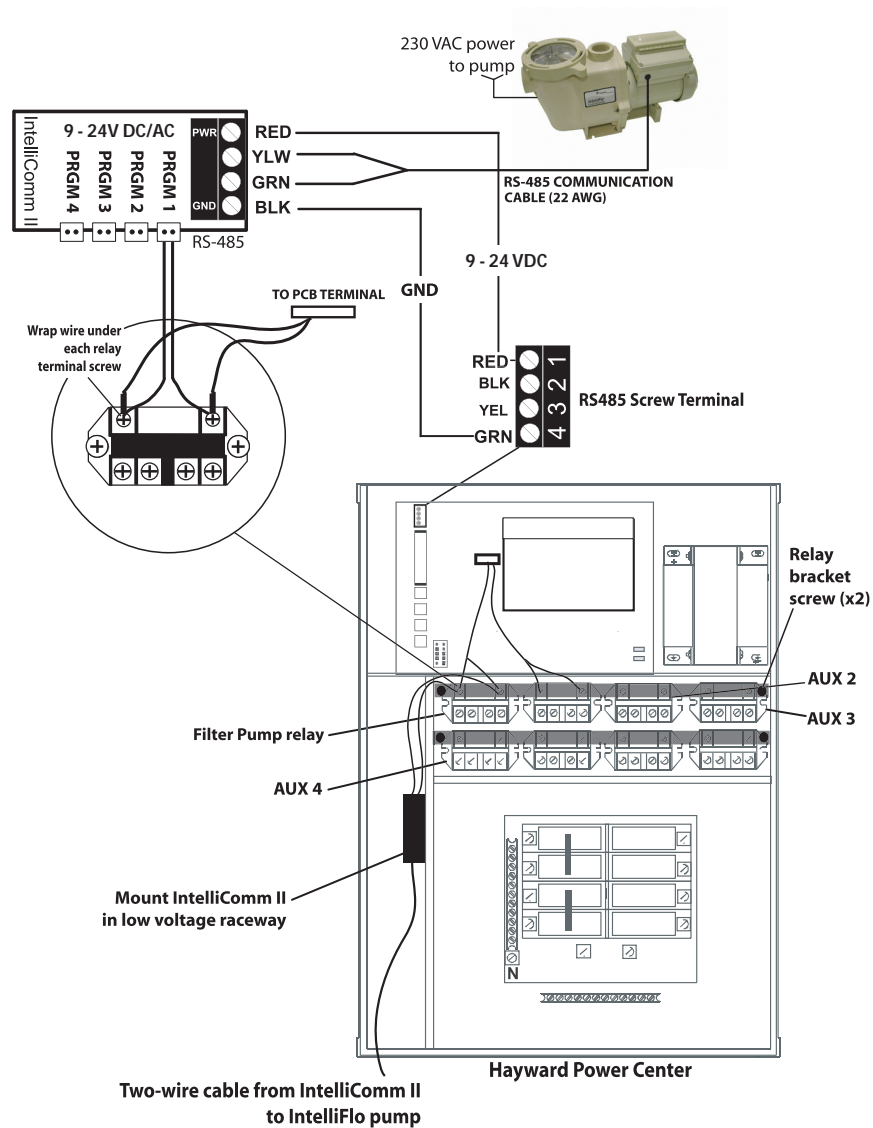
The Hayward control system circuit board is located in the load center. Refer to the Hayward control system owner's manual for access information.

Connect power to the IntelliComm II (9-24V DC) from Hayward Circuit Board

1. Connect the GREEN (-) wire and the RED (+) wire from the Hayward screw terminal (RS-485), to the GND and PWR terminal respectively, on the IntelliComm II RS-485 screw terminal (see page 13).

Connect AUX cables (Disconnect AC power to the PUMP and Controller)

2. Cut one plug off each of the provided four auxiliary cables. Strip back the ends of the wires.
3. Remove the relay bracket(s) to access relays: In the Hayward load center, remove the two screws securing the upper and lower relay bracket and remove the brackets.
4. **Attach wires to the FILTER PUMP relay screws terminals:** Loosen the two top relay terminal screws with attached wires. Using the provided auxiliary cable (see step 1), carefully wrap the ends of each wire under the screw terminals. Tighten the screws to secure the wires in place. Wires are not polarized; connect wires to either relay terminal.
5. **Repeat Step 3:** Splice the cable wires into any control output or auxiliary circuit relay terminals on the Hayward circuit board.
6. Reinstall the relay bracket(s) in the load center and secure with the retaining screws.
7. **Connect IntelliComm II to IntelliFlo**
For IntelliComm II to IntelliFlo wiring information, see page 3.
8. **Mounting the IntelliComm II** (see page 20).
9. **Setting up IntelliFlo speeds and flow rates** (see page 16).




IntelliComm II to Hayward Pro Logic Control System Connection Diagram

Connecting to a Polaris® EOS Control System

The following describes how to connect IntelliComm II to a Polaris® EOS control system (see page 15 for connection diagram).

Connecting Power to IntelliComm II from Polaris Circuit Board

To power the IntelliComm II requires a two wire connection from the Polaris circuit board to the IntelliComm II circuit board (as shown on page 15).



⚠ WARNING Always disconnect AC power to the **LOAD CENTER** at the circuit breaker and disconnect AC power to the **PUMP** before installing the IntelliComm II interface adapter. Failure to do so could result in death or serious injury to the service person, pool users or others due to electric shock. Read all **SAFETY PRECAUTIONS** on page i before starting.

Access the Polaris Circuit Board

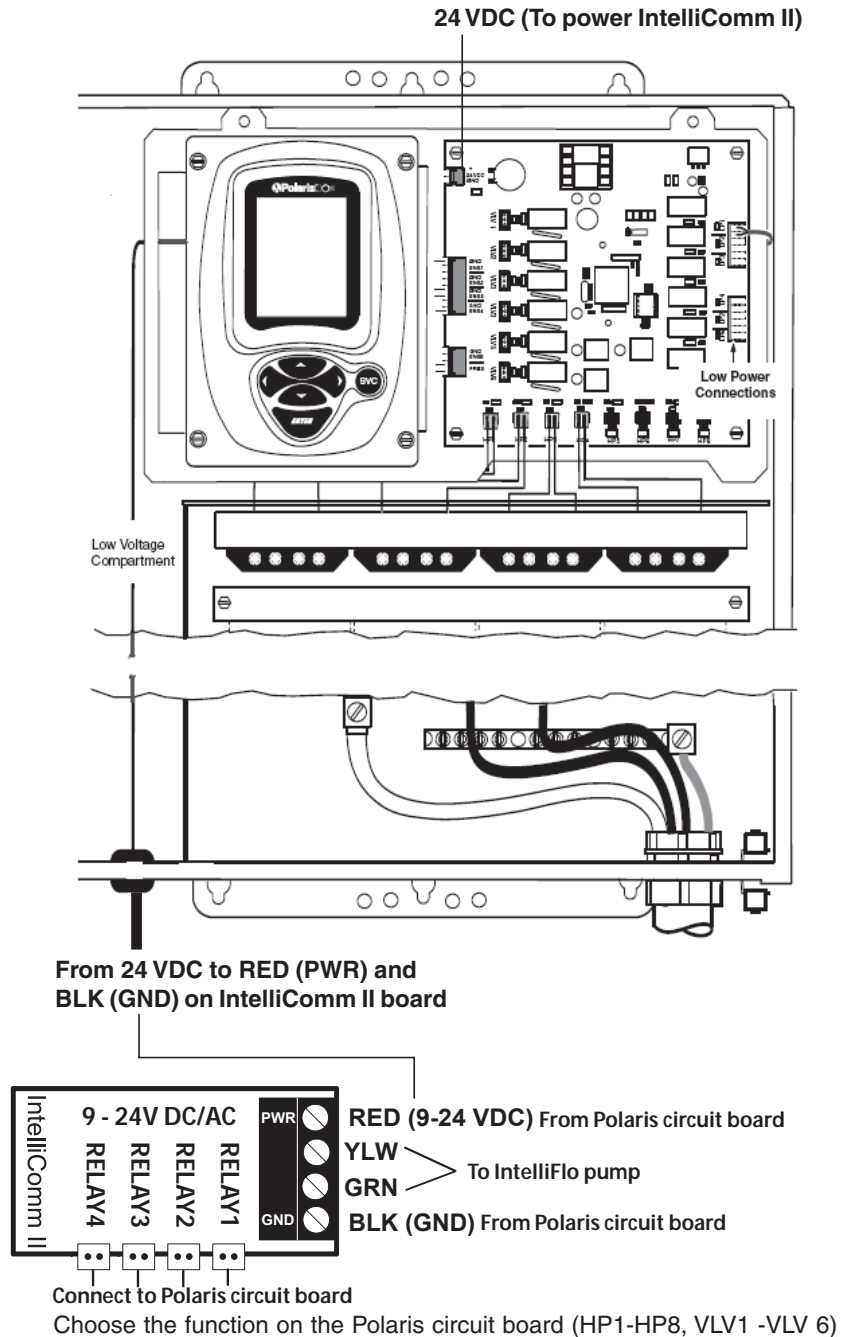
The Polaris control system circuit board is located in the load center. Refer to the Polaris EOS control system owner's manual for access information.

Connect power to the IntelliComm II (9-24 VDC) from Polaris circuit board

1. Connect the GREEN (-) wire and the RED (+) wire from the Polaris 24 VDC output screw terminal, to the GND and PWR terminal respectively, on the IntelliComm II RS-485 screw terminal (see page 15).

Connecting AUX cables

2. Connect the auxiliary cables (provided in kit) from the IntelliComm II input terminals GPM/RPM 1, 2, 3, and 4 to any control output or auxiliary relay circuit on the Polaris circuit board. Typically, GPM/RPM 1 connects to the output Filter Pump relay terminal plug (HP4). However, Polaris auxiliary relay circuits (HP1 - HP6) can be connected to any of the four input terminals for custom pump speed control. **NOTE: If more than one terminal input is active, the highest input number (GPM/RPM 4) will take priority regardless of the pump setting.**
3. **Connect IntelliComm II to IntelliFlo**
For IntelliComm II to IntelliFlo wiring information, see page 3.
4. **Mounting the IntelliComm II** (see page 20).
5. **Setting up IntelliFlo speeds and flow rates** (see page 16).



Polaris EOS Control System Load Center

IntelliComm II Interface Adapter Installation and User's Guide

Setting up an IntelliFlo VF Pump with IntelliComm II

The IntelliFlo VF pump can operate with all of its stand alone features if desired. For example the pump can run filter cycles, egg timer features 1 and 2 and time of day scheduling of features 3-9. If IntelliComm II sends the pump a command when the pump is running the filter cycle or features 3-9, the IntelliComm II command takes priority regardless of flow rate. **IntelliComm II will not interrupt nor take priority over Features 1 or 2.**

For the IntelliFlo VF to accept a command from the IntelliComm II the pump must be in the "Running" mode. To place the IntelliFlo VF in "Running" mode, press the **Filter mode button**, then press the **Start/Stop button**. The led above the Start/Stop button must be lit for the IntelliFlo VF to accept commands from the IntelliComm II.

The default "Filter" cycle time in the IntelliFlo VF is from 9 AM to 9 PM. Since the IntelliFlo VF must be in the "Filter" mode, running Schedules, (LED above Start/Stop button lit) to accept commands from IntelliComm II, it will run its default filtration schedule first. If you want the pump to only run when it receives commands from IntelliComm II, program its "Filter" mode with the same start and stop times. For example program Cycle 1 in the "Filter" menu to "Start" cycle one at 9 AM and "Stop" cycle one at 9 AM. This will cause the pump to not run its filter cycle. This is done on the IntelliFlo keypad under Menu, Filter. Address 1, is the default address for the IntelliFlo VF. The IntelliComm II will only communicate with address 1. The pump's "Address" setting is the first menu item under "Pool Data".

Programming Flows into the IntelliFlo VF

1. Press the Menu button.
2. Press the down arrow until Ext. Ctrl. (External Control is displayed).
3. Press the Select button to go Ext. Ctrl. (Program 1 is displayed).
4. Press the Select Button (Enabled, Activation is displayed).
5. Press the down arrow. (Program 1, 30 GPM, Set Flow, is displayed. The Program 1 flow rate will run when PRGM 1 is activated on the IntelliComm II control board.
6. To change this flow rate press the "Select" button. The flow rate can be adjusted from 15 gpm to 130 gpm.
7. The cursor will highlight the one's digit column. Press the left and right arrows to move the cursor and the up and down arrows to change the number.
8. Press the Enter Button to save.
9. Press the down arrow until "Time Delay Stop" is displayed. Time Delay Stop is used to control the pump to run the Program speed for an additional amount of time after the IntelliComm II turns off its run command. This is often used for a heater cool down.
10. Press Select to highlight the cursor, use the left and right arrows to move the cursor and the up and down arrows to change the number.
11. Press Enter to save.
12. Press Escape to Exit. The display shows Program 1. Press the down arrow to get to Program 2 and follow the same instructions to program. For more information about programming the pump, refer to the IntelliFlo VF Installation and User's Guide (P/N 353850).

Setting up an IntelliFlo VS or IntelliPro VS

The IntelliFlo VS pump Speeds 1, 2, 3 and 4 correspond to Prgm (Program) 1, 2, 3 and 4 on the IntelliComm II circuit board. To program speed one on the IntelliFlo VS. Press the “Speed 1” button. Press the Start button. To increase the speed of “Speed 1” press the up arrow button. Each press of the up arrow will increase the RPM by 10 RPM increments. Pressing the down arrow will decrease the RPM by 10 RPM. When the desired speed is found, press and hold down the “Speed 1” button and the new speed will be locked in. This new speed will be the speed that the pump will run when “Prgm 1” is activated on the IntelliComm II. The speed can be adjusted from 400 RPM to 3450 RPM.

Note: If the IntelliFlo VS pump is turned on manually by pressing a Speed button and the Start button, it will run the speed that was pressed and the LED above this button will be illuminated. If it then gets a command to run a speed from the IntelliComm II, it will run the new commanded speed and the LED above the new speed will be illuminated. When the command from the IntelliComm II has stopped, the pump will go back to running the manually pressed speed.

Note: If the IntelliComm II has switched on the IntelliFlo VS and it is running a speed and you manually adjust the pump speed using the speed buttons on the pump, you must then manually switch the pump OFF, this turns off the manually manipulated speed and allows the IntelliComm II to take command and switch the pump back on to run at the commanded speed. If, after manipulating the keypad, the pump is not manually turned off by pressing the Stop button the pump will continue to run after the IntelliComm II command is stopped.

Unlike the VF, the IntelliFlo VS does not have to be in the “Running” mode to accept commands from an IntelliComm II. The power must be on (Green LED lit) on the IntelliComm II to accept commands.

Setting up an IntelliFlo VS+SVRS

The IntelliFlo VS+ SVRS is programmed in a similar way to the IntelliFlo VF. Speeds for each program number are set up under the menu item “Ext. Ctrl.” (External Control).

Programming IntelliFlo VS+ SVRS Speeds

Press the menu button. Press the down arrow until “Ext Ctrl.” is displayed. Follow the instructions as described on page 10 for the IntelliFlo VF (steps 1 through 12). However there is one difference. The IntelliFlo VS+SVRS does not have any default “Schedules” so it is not necessary to deactivate any schedules so it will only run commands from the IntelliComm II. But, just like the IntelliFlo VF it can be programmed to run scheduled flows and when it gets a command from IntelliComm II to run a program the IntelliComm II program will take priority.

Note: If more than one terminal input is activated on the IntelliComm II the highest number input will take priority, regardless of the pump setting. For example: If program 1 and program 3 are activated on the IntelliComm II The pump will run program 3, regardless of speed, flow or order of activation.

When a command to run is sent from the IntelliComm II to the VS+SVRS the pump’s display will show “Running Prog. 1” and the countdown timer on the IntelliFlo VF display will show 00:01.

CAUTION: *When performing maintenance on the system or the pump switch the power to the pump off at the circuit breaker. This will ensure that the pump does not switch on from remote operation or run a schedule.*

IntelliFlo Pump Warnings and Alarm Conditions

The IntelliFlo VS-3050 alarms and warnings are indicated by flashing LEDs on the control panel. For example, if a “Drive Temperature” warning occurs, the LED will blink two times, then Off, then blink two times. This sequence is repeated until the condition is cleared.

- **Warning condition:** If a warning condition occurs the pump will be continue to run but at a reduced speed. The Green LED executes a sequence of blinks to indicate which alarm or warning has occurred.
- **Alarm condition:** If an alarm condition occurs the pump will drive stop running. The red LED flashes continuously to indicate the presence of an alarm. The alarm LEDs will reset when the condition clears.

Number of time the LED will blink	Alarm	Description	Action
2	Drive Temperature Warning	Excessive drive temperature	<ol style="list-style-type: none"> 1. Ensure the motor fan has adequate area for ventilation. 2. Stop motor and allow to cool. 3. Run motor at a higher speed to improve cooling air flow.
5	Unknown alarm	Electronic failure	<ol style="list-style-type: none"> 1. Cycle power to reset pump. 2. Replace drive.
6	Drive Temperature Alarm	Excessive drive temperature	<ol style="list-style-type: none"> 1. Ensure the motor fan has adequate area for ventilation. 2. Run motor at a higher speed to improve cooling air flow.
7	Power Out Alarm	Supply voltage low	Ensure proper supply voltage.
8	Over current Alarm	Excessive drive current	<ol style="list-style-type: none"> 1. Examine fluid/mechanical system for source of overload. 2. De-energize motor and determine if motor spins freely. 3. Replace drive.
9	Over voltage Alarm	Excessive voltage on drive buss	<ol style="list-style-type: none"> 1. Rapid switching between speeds can cause excessive voltages on the drive's DC buss. 2. Ensure proper supply voltage.

Alarm (RED) and Warning (GREEN) LED sequence

Mounting the IntelliComm II Interface Adapter

The IntelliComm II Interface Adapter cover (3 in. x 2 ¾ in.) can be mounted as follows:

- On the inside back wall of the low voltage compartment in a load center, using the provided adhesive mounting tape.
- On a flat surface using the two mounting screws. Choose a dry covered a location within ten (10) feet from the system load center.

Mounting the IntelliComm II Interface Adapter on a flat surface

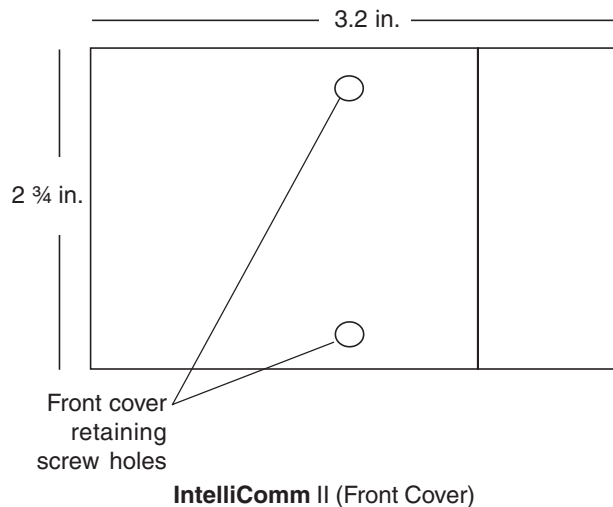
1. Remove the two cover retaining screws.
2. Carefully separate the front (label) and back cover (two screw holes) with the back support from the circuit board. Be careful not to touch the circuit board components. Hold the circuit board by the edges. Place the circuit board aside.

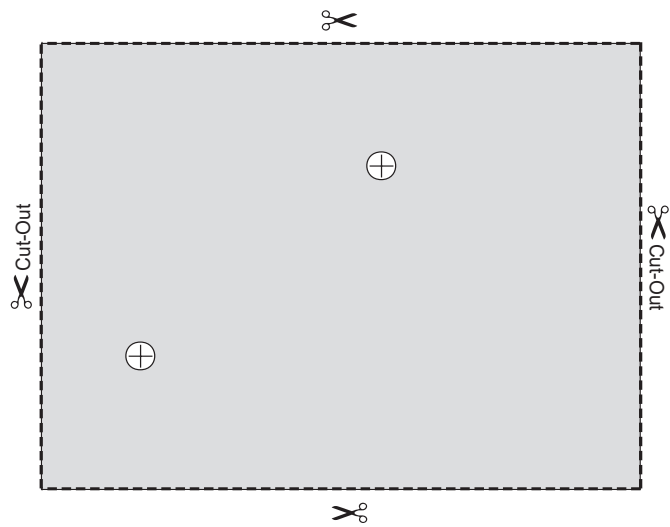
Drill two mounting screws holes for the back cover

3. Cut out the template on the following page.
4. Position the template on a flat surface. Mark the two screw locations for the mounting holes. Remove the template.
5. Using a ¼ in. drill bit, drill the two mounting holes.
6. Position the back cover over the two mounting screw holes. Secure the back cover with the two mounting screws.

Install the circuit board and front cover

7. Place the circuit board on the back cover standoffs.
8. While holding the circuit board, place front cover (with the back support) over the back cover. Secure the front cover with two retaining screws.
9. The installation is complete.





IntelliComm II (Back Cover) Template



P/N 521033 - Rev C