

COMMERCIAL EMERGENCY SHUT OFF SWITCH w/AUDIBLE ALARM and REMOTE SPA JET SWITCH

Interface ESO-3 & RCS1 with Pentair Automation IntelliCenter System

INTELLICENTER - PENTAIR - ESO COMMERCIAL



INSTALLATION:

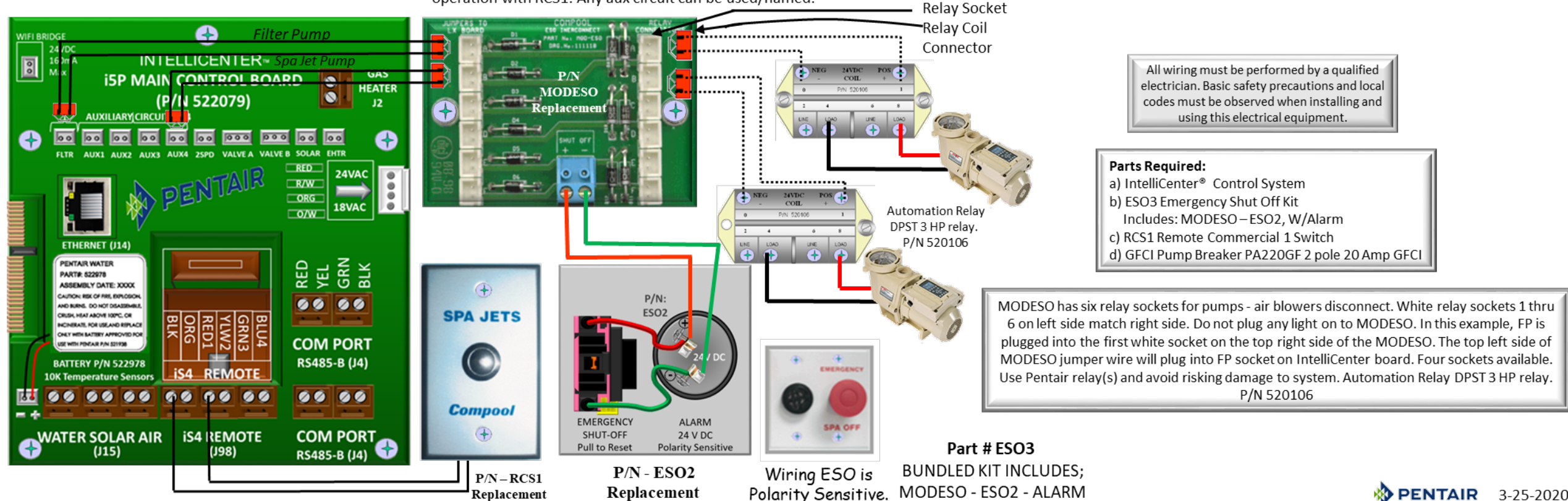
- Turn off all electrical power.
- Fold down bezel & install MODESO back of load/power center using pre-drilled holes.
- Locate jumper cable top left side MODESO, plug the other end into FP socket on IntelliCenter Board.
- Adjacent on right side of MODESO top socket, plug in FP relay coil connector.
- Repeat c & d for additional pumps, i.e., Spa Jet.
- Wire RCS1, momentary sw. Not polarity sensitive.
- Wire ESO with red & black wire which are polarity sensitive. Wire not supplied.
- Test RCS1 & ESO often. Emergency Shut-Off Switch RCS1- Remote Control Spa 1 Switch

SET-UP INSTRUCTIONS:

- Address IntelliFlo Pumps. Pool Filter Pump # 1. Spa FP # 2. Spa Jet Pump # 3. IntelliTouch 8. ET 2. IntelliCenter 16 address.
- Assign SPA FLTR PMP FLO/SPEED required for filtration & heating. Minimum 2600 RPM, 55 GPM. Ck HTR manual.
- Assign any aux (4) circuit relay name as "ESO JET PUMP".
- If you have a 2nd jet pump, name "ESO JET PUMP2".
- Assign ESO JET PUMP a Feature Circuit Name: "Jet".
- If you have a 2nd pump, name Feature Circuit "Jet2".
- Assign "Jet" Speed/Flo Pump feature circuit GPM/RPM.
- Assign ESO JET PMP to RCS1. Go to WIZARD, "Configure Remotes", "Config iS4", "Config Button" #1 Red wire & name "ESO JET PMP". Group a 2nd pump operates off RCS1
- Set Aux4/ ESO Jet Pump "Egg Timer" for length of operation with RCS1. Any aux circuit can be used/named.

NOTES:

- Filter Pump & Jet Pump must be wired individually to IntelliCenter relays
- IntelliFlo family of pumps must be wired to load side of relay.
- When (ESO) Emergency Switch is depressed, all relays connected to MODESO will disengage.
- Do not plug pool-spa light relay(s) or any lights onto MODESO circuit board.
- MODESO for use with single speed or variable speed/flo pumps.
- Circuit board MODESO receives 24 VDC power from relay connections for alarm.
- ESO2 is polarity sensitive. Part # ESO3 bundled Kit Includes; MODESO, ESO2 W/ALARM.
- This schematic will work with any Pump up to 3HP. If 3 phase PWR, control 3 phase coil w/STD relay
- Size relay according to amp draw, HP, for single & 3 phase. Pentair relay can sting larger contactor.
- Four additional relay circuits are available on MODESO for additional pumps, air blowers.
- All pumps must be wired to load side of relay. If wired HOT without relay, ESO will not disable pump(s)
- Pentair GFCI #PA220GF Compatible with IntelliFlo Pumps & Automation Systems



All wiring must be performed by a qualified electrician. Basic safety precautions and local codes must be observed when installing and using this electrical equipment.

- Parts Required:**
- IntelliCenter® Control System
 - ESO3 Emergency Shut Off Kit Includes: MODESO – ESO2, W/Alarm
 - RCS1 Remote Commercial 1 Switch
 - GFCI Pump Breaker PA220GF 2 pole 20 Amp GFCI

MODESO has six relay sockets for pumps - air blowers disconnect. White relay sockets 1 thru 6 on left side match right side. Do not plug any light on to MODESO. In this example, FP is plugged into the first white socket on the top right side of the MODESO. The top left side of MODESO jumper wire will plug into FP socket on IntelliCenter board. Four sockets available. Use Pentair relay(s) and avoid risking damage to system. Automation Relay DPST 3 HP relay. P/N 520106

Part # ESO3
BUNDLED KIT INCLUDES;
MODESO - ESO2 - ALARM

INTELLICENTER COMMERCIAL



MODESO connected to ESO will disable the relay(s) from operation according to code.

Diagram below shows wiring and set up configuration mitigating pump delay return to operation after ESO was triggered.

When ESO is initiated, the Pump will lose power and turn off. After resetting ESO, electrical power will be restored to the pump drive, but there will be a 30-second delay. This delay can be both annoying and confusing for the user. To help diminish this confusion for jet pumps, please follow the instructions below.

FILTER PUMP WIRING - PROGRAMMING

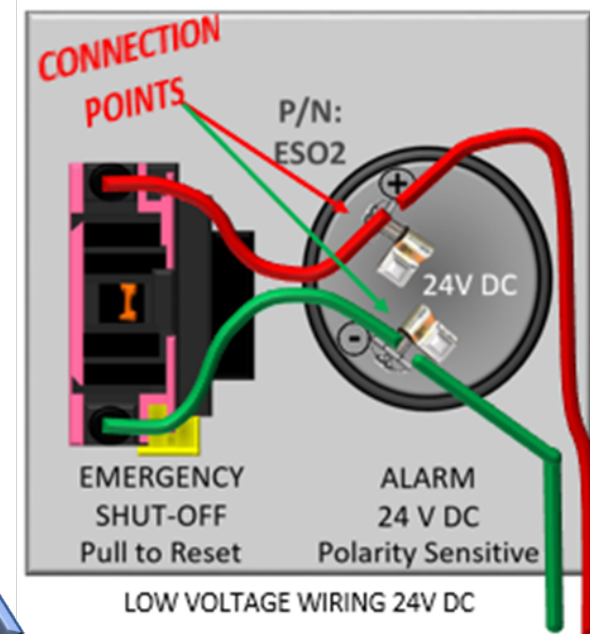
1. From GFCI breaker, wire relay 220v Line/Load to Spa Filter Pump.
2. Connect coil side relay for Spa Fltr Pmp to ESO3 circuit board, "RELAY CONNECTIONS", top right side.
3. Connect jumper connector on left side of ESO to Spa Fltr circuit.
4. Wire Yellow & Green wire to RS485 COM PORT screw terminal & assign pump address, (1-16 available).
5. Set Speeds, Schedules, heater target temperature.

RCS1 WIRING - PROGRAMMING

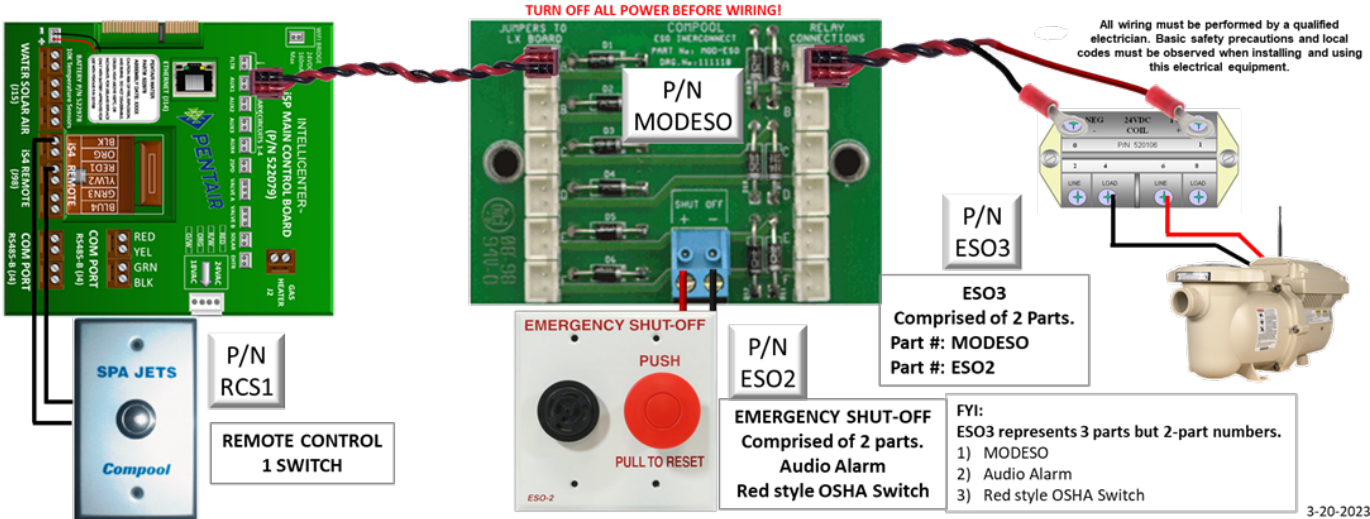
1. Connect 2 wires from RCS1 to IntelliCenter iS4 Remote, BK & RED1 screw terminals.
2. Assign ESO Jets-1 to #1
3. If system has more than 1 jet pump, set Group Circuit (Macro)

JET PUMP WIRING - PROGRAMMING

1. From GFCI breaker, wire relay 220v Line/Load to J.PMP-1.
2. Connect coil side relay for J.PMP-1 to ESO3 circuit board, "RELAY CONNECTIONS", top right side.
3. Connect jumper connector on left side of ESO to Auxiliary circuit controlling relay, J.PMP-1.
4. Wire Yellow & Green wire to RS485 COM PORT screw terminal & assign pump address, (1-16 available).
5. Name Aux relay "ESO Jets-1". If you have a 2nd pump, name "ESO Jets-2", and so on.
6. Set hours of operation, Start/Stop time, for #5 named "ESO JETS-1" in programming.
7. Create a "Feature Circuit" called "JET-1", set the pump Speed in the file name, ESO Jets-1 and set timer for 30 mins.



This is DC Voltage. Polarity Sensitive

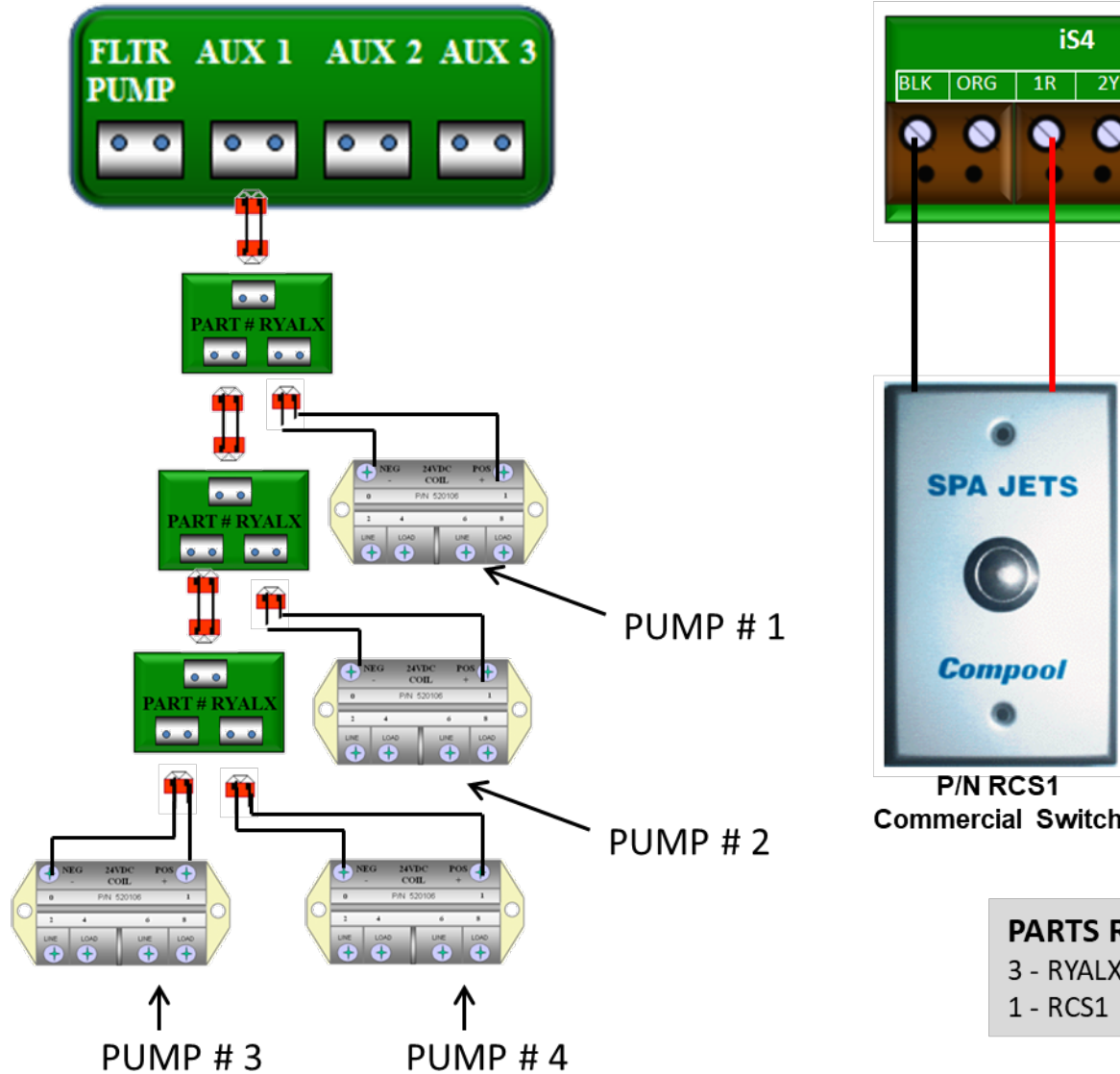


TURN OFF ALL POWER BEFORE WIRING!

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P/N: RYALX CONTROLS MULTIPLE RELAYS WITH 1 AUX CIRCUIT

– IntelliCenter – IntelliTouch – EasyTouch – LX80– LX802 –



Connect RCS1 to:
iS4 Spa Switch Screw Terminals.
No polarity with RCS1 Remote Switch
BK – GND (BK)
RED – Switch 1R(ed)

Name Circuit and assign to auxiliary.
Set egg timer if applicable.

NOTE:
Each RYALX can control 2 relays.
If 3 relays are required, a second RYALX is required.
If 4 relays are required, a third RYALX is required.

PARTS REQUIRED:
3 - RYALX - Controls 2 relays w/1 circuit. Add more if applicable.
1 - RCS1 - Single Push Momentary Button Switch