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INTELLICENTER™ CONTROL SYSTEM

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CUSTOMER SERVICE / TECHNICAL SUPPORT	
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Note: INSTALLING THE WIRELESS ANTENNA KIT. (See IntelliCenter Control System Installation Guide).	

General Installation Information

1. All work must be performed by a licensed electrician, and must conform to all national, state, and local codes.
2. Install to provide drainage of compartment for electrical components.
3. If this system is used to control underwater lighting fixtures, a ground-fault interrupter (GFCI) must be provided for these fixtures. Conductors on the load side of the ground-fault circuit-interrupter shall not occupy conduit, junction boxes or enclosures containing other conductors unless such conductors are also protected by a ground-fault circuit-interrupter. Refer to local codes for details.
4. A terminal bar stamped _____ is located inside the supply terminal box. To reduce the risk of electric shock, this terminal must be connected to the grounding means provided in the electric supply service panel with a continuous copper wire equivalent in size to the circuit conductors supplying this equipment (no smaller than 12 AWG or 3.3 mm). The bonding lug(s) provided on this unit are intended to connect a minimum of one No. 8 AWG for US installation and two No. 6 AWG for Canadian installations solid copper conductor between this unit and any metal equipment, metal enclosures or electrical equipment, metal water pipe, or conduit within 5 feet (1.5 m) of the unit.
5. The electrical supply for this product must include a suitably rated switch or circuit breaker to open all ungrounded supply conductors to comply with in accordance with the current National Electrical Code (NEC), NFPA 70 or the Canadian Electrical Code (CEC), CSA C22.1. All applicable local installation codes and ordinances must also be adhered to. The disconnecting means must be readily accessible to the tub occupant but installed at least 10 ft. (3.05 m) from the inside wall of the pool.

This product is designed and manufactured for safe and reliable service when installed, operated and maintained according to the information and installation codes referred to in this Guide.

Risk of Electrical Shock or Electrocution!

- Always disconnect power at the circuit breaker before servicing the load center. Improper installation can create an electrical shock hazard that can result in death or serious injury.

This product must be installed by a licensed or certified electrician or a qualified pool professional in accordance with the current National Electrical Code (NEC), NFPA 70 or the Canadian Electrical Code (CEC), CSA C22.1. All applicable local installation codes and ordinances must also be adhered to. Improper installation will create an electrical shock hazard that can result in death or serious injury.



Water temperature in excess of 100° F (37.7° C) may be hazardous to your health. Prolonged immersion in hot water may induce hyperthermia. Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above normal body temperature of 98.6° F (37° C.). Effects of hyperthermia include: (1) Unawareness of impending danger. (2) Failure to perceive heat. (3) Failure to recognize the need to leave the spa. (4) Physical inability to exit the spa. (5) Fetal damage in pregnant women. (6) Unconsciousness resulting in danger of drowning. The use of alcohol, drugs, or medication can greatly increase the risk of fatal hyperthermia in hot tubs and spas.



A pool or spa pump must be installed by a qualified pool and spa service professional in accordance with the current 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, installers, or others due to electrical shock, and may also cause damage to property.

IMPORTANT WARNING AND SAFETY INSTRUCTIONS

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Canada - Industry Canada (IC) - The IntelliCenter Control System complies with RSS210 of Industry Canada. (1999). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

The device complies with industry Canada's License Exempt RSSs. Operation is subject to the following: (1) This device may not cause interference; and (2) This device must accept interference that may cause undesired operation of the device.

Le dispositif est conforme à la licence d'Industrie Canada Exempt CNR. Le fonctionnement est soumis à la suivante. (1) Ce ne doit pas provoquer d'interférences ; et (2) Cet appareil doit accepter les interférences qui peuvent causer un mauvais fonctionnement de l'appareil.

This Class B digital apparatus complies with Canadian ICES-003. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada. The term "IC" before the certification / registration number only signifies that the Industry Canada technical specifications were met.

Pentair Water Pool and Spa

IMPORTANT SAFETY INSTRUCTIONS

For Installation of Electrical Controls at Equipment Pad
(ON/OFF Switches, Timers, and Automation Control Systems)



Qualifications for Installers and Users

This product must be installed by a qualified pool technician in accordance with all applicable local codes and ordinances. It must be serviced by someone who fully understands its operation. Improper installation or servicing could result in death or serious injury to pool users, installers, servicers, or others and may also cause damage to property.

If you are not familiar with your pool filtering system and/or heater, do NOT attempt to adjust or service without consulting your dealer or a qualified pool technician.

Do not permit children to use this product.

EasyTouch[®] and IntelliTouch[®] Control System Upgrade Installation Kits

Overview

This manual describes how to upgrade an EasyTouch or IntelliTouch Control System to the IntelliCenter[®] Control System.

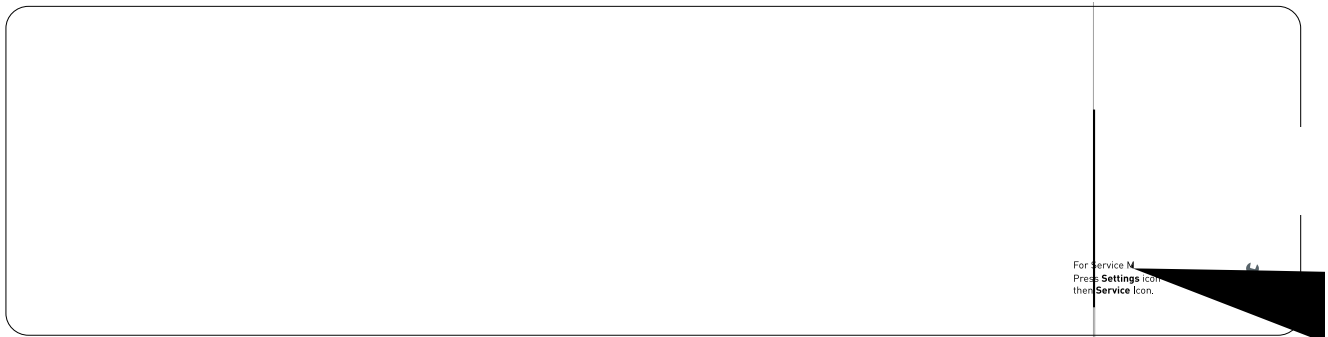
The Upgrade Installation Kits apply to the following:

- EasyTouch[®] PL4/PSL4 Control Systems, EasyTouch[®] Control Systems
- IntelliTouch[®] Control Systems

Systems using the following Load Center or Power Center use the following kit part numbers:

- 2012 or newer (square low voltage circuit breaker configuration)
 - P/N 522047 for i10P
 - P/N 522048 for i10PS
 - P/N 523049 for i10D
 - P/N 523529 for i10X

IntelliCenter Control System Outdoor Control Panel



IntelliCenter[®] Control System Installation Instructions Summary

REMOVING THE EXISTING OUTDOOR CONTROL SYSTEM FROM THE EXISTING CONTROL SYSTEM.....0 Tw 8.11 7.048

Required Tools:

- Medium size flat blade screwdriver or 1/4" and 5/16" sockets
- Needle nose pliers

1. Kit P/N 522047, 522048, 523049:
P/N 521938, i5P Outdoor Control Panel.
Kit P/N 523529: P/N 522029, i5X Outdoor Control Panel.
2. Kit P/N 522047: P/N 521993Z, i10P
Personality Board, Shared Equipment.
Kit P/N 522048: P/N 521873Z, i10PS Personality Board,
Shared Equipment.
Kit P/N 523049: P/N 523029Z, i10D Personality
Board, Shared Equipment.
Kit P/N 523529: P/N 522997Z, i10X Expansion Board,
Shared Equipment.
3. (3a) P/N 522338, Circuit Breaker 4 AMP.
(3b) P/N 522339, Circuit Breaker 5 AMP.
4. P/N 521090, Circuit Breaker Plug.
5. P/N 522337, Label Circuit Breaker.
6. P/N 522102, System Transformer.
P/N 522062Z, (kit sold separately).
7. P/N 520222, Six (6) screws.
8. P/N 544425, Wireless Antenna Kit
(not included with 523529 expansion kit).
9. P/N 522612, Wiring Label, IntelliCenter Control System.
IntelliCenter Control System manuals (not shown):
 - Installation Guide (P/N 522989)
 - User's Guide (P/N 522990)
 - Quick Reference Guide (P/N 522988)
 - Wi-Fi Remote Installation Guide (P/N 523350)
10. P/N 523342Z, separately).


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The following upgrade installation instructions are for EasyTouch[®] PL4/PSL4, EasyTouch or IntelliTouch[®] Control Systems using the 2012 or later (square low voltage circuit breakers con guration on bezel) Load Center or Power Center.

WARNING!
RISK OF ELECTRICAL SHOCK. BEFORE REMOVING THE HIGH VOLTAGE COVER PANEL FROM THE ENCLOSURE SWITCH OFF THE MAIN POWER AT THE HOME AT THE MAIN CIRCUIT BREAKER BOX.

1. TURN OFF POWER TO ALL POOL AND SPA EQUIPMENT BEFORE STARTING. CAUTION! DO NOT PLUG IN OR UNPLUG ANY SYSTEM COMPONENTS WITH THE POWER ON. THIS MAY DAMAGE THE SYSTEM COMPONENTS.
2. Unlatch the front door latch. Open the door of the Load Center or Power Center.
3. Remove the two screws securing the High Voltage Cover Panel. Remove the panel and set aside.
4. Loosen the two retaining screws securing the existing control panel. Fold down the panel to access the circuit board low voltage connections and transformer connector.

Continue to next page

Retaining screw 

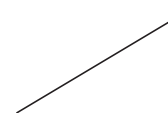
 Retaining screw

Figure 2. Load Center or Power Center (2012 or later)

Note: Refer to page 3 where (parts index number) is shown

Removing the Existing Outdoor Control Panel (Continued)

5. Disconnect the transformer connector and if necessary the SCG Board connector (RS-485) from the existing Outdoor Control Panel circuit board.
6. Disconnect all other connections from the circuit board.

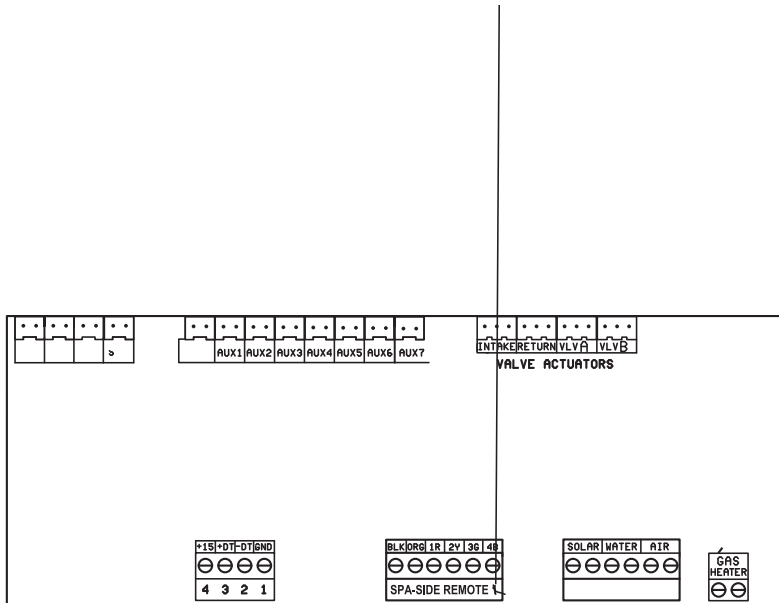


Figure 3. Transformer Connector and SCG Board Connector

7. Remove the two screws securing the outdoor control panel bezel. Remove the outdoor control panel and bezel from the enclosure. See Figure 2 on page 4.

Install the new 4A and 5A Low Voltage Circuit Breakers and System Transformer Continued

Wiring the new System Transformer (P/N 522102)

The IntelliCenter® Control System Load Center or Power Center System Transformer can be wired for 120VAC, 2.5A, 240VAC, 1.3A, 50/60 Hz.

1. Remove the existing System Transformer: Remove the four screws securing the transformer to the enclosure. Discard the existing system transformer.
2. Wiring the Low Voltage Transformer: Mount the new transformer (6) (P/N 522102) onto the back wall of the enclosure. Secure it with the four screws (7) (P/N 520222, provided in kit). See Figure 6. Route the transformer (and Circuit breakers) secondary wires through channel opening up to the circuit breaker bracket.
3. Connect Circuit Breaker Wires: Connect both Orange/White wires from the System Transformer Orange/White to the 5A circuit breaker terminal, and both Red/White wires to the 4A circuit breaker terminal. See Figure 5.



4. Reconnect 120 VAC Transformer Wires:

Route transformer
secondary wires up
through channel opening
to circuit breakers

System
Transformer
(4 screws
provided in kit)


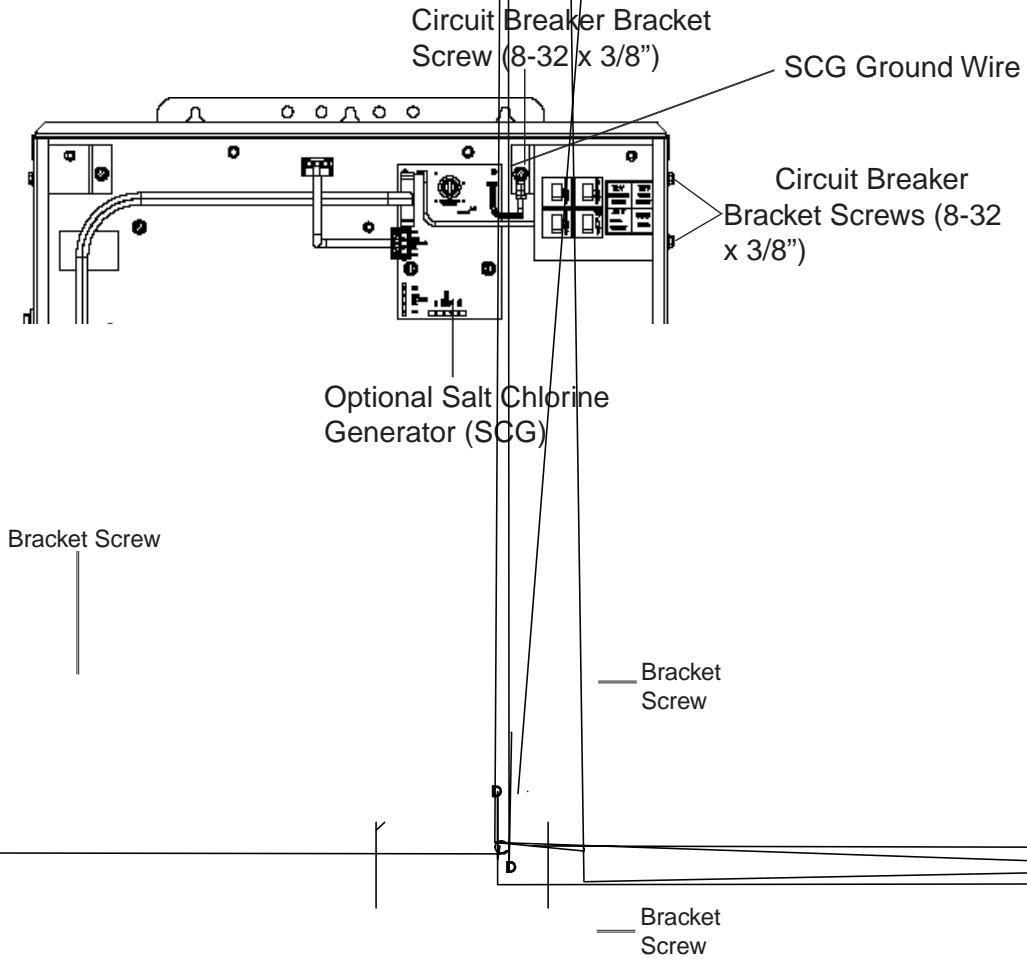
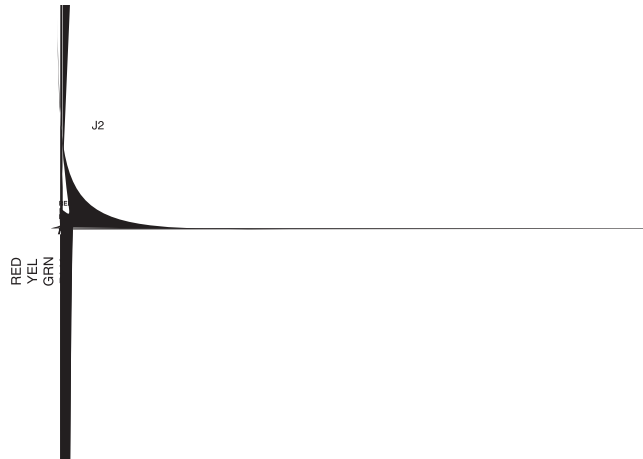
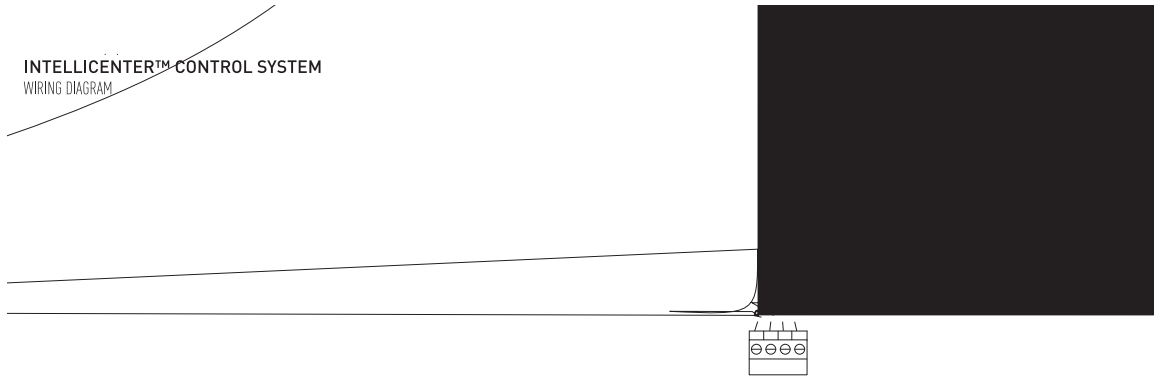


Figure 6. Wiring the System Transformer (Load Center or Power Center 2012 or later)

5. Install the circuit breaker bracket with the circuit breakers onto the enclosure, and secure it with two #8-32 x 3/8" screws (7).
6. Secure the circuit breaker bracket onto the back of the enclosure with #8-32 x 3/8" screw. Be sure to reinstall the SCG ground wire (if present). See Figure 7.







Installing the Wiring Label on the Enclosure Front Door

Figure 12. Load Center shown (2012 or later)

NOTES

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