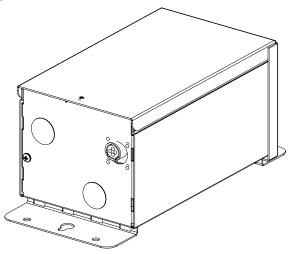


# PC100 POWER CENTER

FOR INTELLICHLOR® AND ICHLOR® SALT CHI ORINE GENERATORS

INSTALLATION AND USER'S GUIDE



# IMPORTANT SAFETY INSTRUCTIONS READ AND FOLLOW ALL INSTRUCTIONS SAVE THESE INSTRUCTIONS

Digital copies of all IntelliChlor manuals can be found at www.pentair.com, or by scanning the provided QR code.

Se pueden encontrar copias digitales de todos los manuales de IntelliChlor en www.pentair.com, o escaneando el código QR proporcionado.

Des copies numériques de tous les manuels IntelliChlor peuvent être trouvées sur www.pentair.com, ou en scannant le code QR fourni.



# **CUSTOMER SERVICE / TECHNICAL SUPPORT**

Hours: 9:00AM to 7:00PM EST (6:00AM - 4:00PM PST)

**Call:** (800) 831-7133 **Visit:** www.pentair.com **Fax:** (800) 284-4151

# **TABLE OF CONTENTS**

IMPORTANT SAFETY INSTRUCTIONS	2
POWER CENTER OVERVIEW	4
MOUNTING THE POWER CENTER	5
WIRING TO MAIN POWER	6
WIRING TO A PUMP TIMER	7
230 VAC WIRING	7
110 VAC WIRING	7
WIRING TO AN AUTOMATION SYSTEM	8
TROUBLESHOOTING	9
ELECTRICAL SPECIFICATIONS	10

# IMPORTANT SAFETY INSTRUCTIONS

This manual contains important information about the installation, operation and safe use of this product. Before installing this product, read and follow all included warning notices and instructions. Failure to follow safety warnings and instructions can result in severe injury, death, or property damage. This information should be given to the owner and/or operator of this equipment.

Call (800) 831-7133 for additional free copies of these instructions, or obtain a copy of these instructions at www.pentair.com.

**AWARNING** 

IMPORTANT SAFETY INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS, READ AND FOLLOW ALL INSTRUCTIONS.

**▲ WARNING** 

This equipment should only be installed and/or serviced by a qualified professional.

**WARNING** 

Most states and local codes regulate the construction, installation, and operation of public pools and spas, and the construction of residential pools and spas. It is important to comply with these codes, many of which directly regulate the installation and use of this product. Consult your local building and health codes for more information.

**WARNING** 

CHLORINE GAS BUILDUP CAN OCCUR WITH IMPROPER **WIRING!** THE SALT CHLORINE GENERATOR (SCG)

POWER CENTER/PACK MUST BE WIRED TO THE LOAD SIDE OF A PUMP TIMER, ELECTRONICALLY CONTROLLED SWITCH, RELAY, OR AUTOMATION SYSTEM. This ensures the SCG only receives power when the filter pump is running. The SCG should never be operated when water is not flowing through the SCG cell.

**AWARNING** Do not permit children to use this product.

**AWARNING** 

**RISK OF ELECTRICAL SHOCK OR ELECTROCUTION!** Always disconnect power to the pump, automation system and SCG at the circuit breaker before servicing. Failure to do so could result

in death or serious injury to service person, pool users or others due to electric shock.

**ACAUTION** 

A Grounding Lug is provided inside the power center wiring compartment. To reduce risk of electric shock, connect the ground

lug to the ground at your supply panel with a conductor equal in size to the conductors supplying power to this equipment.

**ACAUTION** 

A solid copper bonding conductor, no smaller than 8 AWG, should be connected from the equipment to all metal parts of the pool/

spa structure and to all electrical equipment, metal conduit, and metal piping within 5 ft. [1.5 m] of the inside walls of the pool/spa.

**ACAUTION** 

To reduce the risk of electric shock, install SCG a minimum of 5 ft. [1.5 m] away from the inside wall of the pool.

**ACAUTION** 

Disconnect main power to the power center/pack before disconnecting or connecting the SCG cell.

# **IMPORTANT SAFETY INSTRUCTIONS**

Canada - Industry Canada (IC) - This device complies with RSS210 of Industry Canada.

**FCC Standard** - 47 CFR Part 15, Subpart C (Section 15.247). This version is limited to chapter 1 to chapter 11 by specified firmware controlled in the U.S.A.

**Federal Communications Commission (FCC)** - This device complies with Part 15 of the FCC Rules. 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.

Interference Statement - This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- · Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- · Consult the dealer or an experienced radio/TV technician for help.

**Note:** Modifications not expressly approved by the party responsible for FCC compliance could void the user's authority to operate the device.

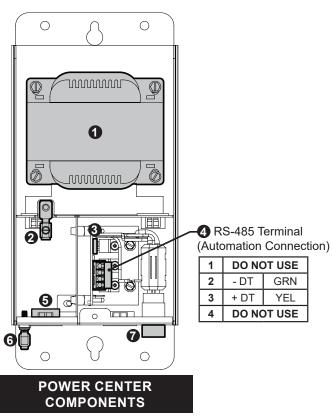
#### **POWER CENTER OVERVIEW**

The PC100 Power Center converts AC current to low-voltage DC current required by a Pentair Salt Chlorine Generator (SCG) cell and features a fuse mounted to the circuit board for additional circuit protection.

WARNING CHLORINE GAS BUILDUP CAN OCCUR WITH IMPROPER WIRING! THE SALT CHLORINE GENERATOR (SCG) MUST BE WIRED TO THE LOAD SIDE OF A PUMP TIMER, ELECTRONICALLY CONTROLLED SWITCH, RELAY, OR AUTOMATION SYSTEM. This ensures the SCG only receives power when the filter pump is running. The SCG should never be operated when water is not flowing through the SCG cell.

#### Main components of the power center are:

- 1. Transformer
- 2. Internal Grounding Lug
- 3. Replaceable 10 Amp Fuse
- 4. RS-485 Terminal for Automation Control
- 5. Main Power Wiring Knockout
- 6. Bonding Lug
- 7. SCG Cell Connector



#### MOUNTING THE POWER CENTER

**WARNING** 

This equipment should only be installed by a qualified professional.

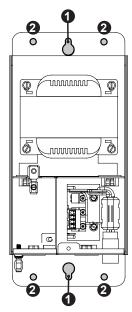
**ACAUTION** 

To reduce the risk of electric shock, install SCG a minimum of 5 ft. [1.5 m] away from the inside wall of the pool.

- Remove the screw securing the power center cover and remove the cover.
- 2. Position the power center on a flat, vertical surface within 15 ft. [4.6 m] of the SCG cell and mark both Keyhole Brackets (1).

Note: Mount the Power Center as close to the SCG cell as possible.

- 3. Using a 1/4" bit, predrill a 1/4" [6.4 mm] hole at each mark.
- 4. Install anchors (if necessary), then both mounting screws.
- 5. Place the power center over the mounting screws then tighten to secure.
- 6. Install the remaining four mounting screws in the remaining Mounting Points (2).





#### WIRING TO MAIN POWER

CHLORINE GAS BUILDUP CAN OCCUR WITH IMPROPER **A** WARNING WIRING! THE SALT CHLORINE GENERATOR (SCG) MUST BE WIRED TO THE LOAD SIDE OF A PUMP TIMER. ELECTRONICALLY CONTROLLED SWITCH, RELAY, OR AUTOMATION SYSTEM. This ensures the SCG only receives power when the filter pump is running. The SCG should never be operated when water is not flowing through the SCG cell.

**A**CAUTION

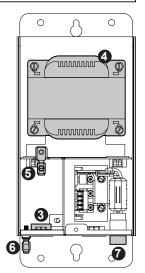
To reduce risk of electric shock, the connect breaker panel ground to the grounding lug inside the power center using a conductor equal in size to the conductors supplying power to this equipment.

**ACAUTION** 

A solid copper bonding conductor, no smaller than 8 AWG, should be connected from the equipment to all metal parts of the pool/

spa structure and to all electrical equipment, metal conduit, and metal piping within 5 ft. [1.5 m] of the inside walls of the pool/spa.

- 1. Route a 12-14 AWG three-conductor cable from the filter pump power source and through the Main Power Knockout (3).
- Connect power to the Transformer (4) according 2. to the wiring diagram on the back side of the power center cover.
- 3. Secure the incoming ground wire to the Grounding Lug (5) inside the power center.
- 4. Reinstall the power center cover and secure with the cover screw.
- 5. Connect a solid copper conductor, no smaller than 8 AWG, to the Bonding Lug (6) on the bottom side of the power center enclosure.
- Plug the SCG cell cord into the Cell Connector (7) on the bottom side of the enclosure.
- 7. Turn on power to the power center.

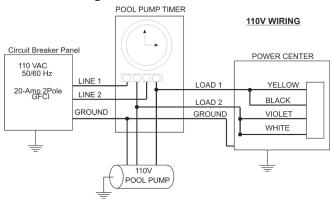


**WIRING THE ENCLOSURE** 

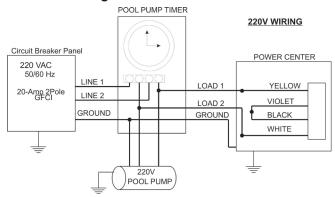
#### WIRING TO A PUMP TIMER

WARNING CHLORINE GAS BUILDUP CAN OCCUR WITH IMPROPER WIRING! THE SALT CHLORINE GENERATOR (SCG) MUST BE WIRED TO THE LOAD SIDE OF A PUMP TIMER, ELECTRONICALLY CONTROLLED SWITCH, RELAY, OR AUTOMATION SYSTEM. This ensures the SCG only receives power when the filter pump is running. The SCG should never be operated when water is not flowing through the SCG cell.

#### 110 VAC Wiring



#### 220 VAC Wiring



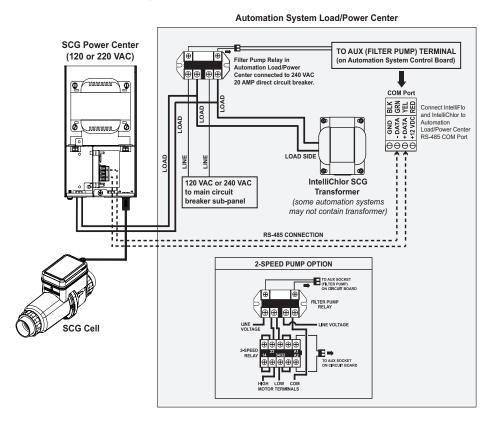
#### WIRING TO AN AUTOMATION SYSTEM

WARNING CHLORINE GAS BUILDUP CAN OCCUR WITH IMPROPER WIRING! THE SALT CHLORINE GENERATOR (SCG) MUST BE WIRED TO THE LOAD SIDE OF A PUMP TIMER, ELECTRONICALLY CONTROLLED SWITCH, RELAY, OR AUTOMATION SYSTEM. This ensures the SCG only receives power when the filter pump is running. The SCG should never be operated when water is not flowing through the SCG cell.

The IntelliChlor SCG can be controlled with a Pentair automation system via a RS-485 communication cable between the IntelliChlor power center to the automation system.

The diagram below provides general guidelines for wiring the power center to an automation system.

For specific automation system wiring and operation instructions, refer to the appropriate automation system manual.



#### TROUBLESHOOTING

**A**WARNING

RISK OF ELECTRICAL SHOCK OR ELECTROCUTION!
Always disconnect power to the pump, automation system

and SCG at the circuit breaker before servicing. Failure to do so could result in death or serious injury to service person, pool users or others due to electric shock.

PROBLEM	POSSIBLE CAUSE	CORRECTIVE ACTION
Power is not reaching the power center	Fuse in Power Center has blown.	Replace blown fuse with new 10 Amp fuse.
	Power Center transformer is wired incorrectly.	Verify transformer leads are wired according to the transformer wiring diagram on page 6.

#### ELECTRICAL SPECIFICATIONS

Circuit Protection: 110V, 15A (Single-pole)

220V, 20A (Two-Pole)

Input: 110-120 VAC, 50/60 Hz, 242 Watts, 2.2 A 220-240 VAC, 50/60 Hz, 242 Watts, 1.1 A

Output: 22-39 VDC, 7.3 Amp maximum from Power Center



1620 HAWKINS AVE., SANFORD, NC 27330 • (919) 566-8000 10951 WEST LOS ANGELES AVE., MOORPARK, CA 93021 • (805) 553-5000

All indicated Pentair trademarks and logos are property of Pentair. Third party registered and unregistered trademarks and logos are the property of their respective owners.

© 2025 Pentair. All rights reserved. WWW.PENTAIR.COM



P/N 520590 REV. J 2/21/25