

INTELLICENTER™ CONTROL SYSTEM FOR POOL AND SPA





USER'S GUIDE

IMPORTANT SAFETY INSTRUCTIONS READ AND FOLLOW ALL INSTRUCTIONS SAVE THESE INSTRUCTIONS

CUSTOMER SERVICE / TECHNICAL SUPPORT

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Visit www.pentairpool.com

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IntelliCenter Control System User's Guide

IMPORTANT WARNING AND SAFETY INSTRUCTIONS



Attention Installer: This Installation and User's Guide ("Guide") contains important information about the installation, operation and safe use of this underwater pool and spa light. This Guide should be given to the owner and/or operator of this equipment.

Attention User: This manual contains important information that will help you in operating and maintaining this product. Please retain it for future reference.

ATTENTION

Before installing this product,

read and follow all warning notices and instructions in this Guide. Failure to follow warnings and instructions can result in severe injury, death, or property damage. Call (800) 831-7133 for additional free copies of these instructions. Please refer to www.pentairpool.com for more information related to this products.

A DANGER SERIOUS BODILY INJURY OR DEATH CAN RESULT IF THIS LIGHT IS NOT INSTALLED AND USED CORRECTLY.

A DANGER INSTALLERS, POOL OPERA-TORS AND POOL OWNERS MUST READ THESE WARNINGS AND ALL INSTRUCTIONS BEFORE USING THE POOL AND/ OR SPA LED LIGHT.



RISK OF ELECTRICAL SHOCK OR ELECTROCUTION:



THIS PRODUCT REQUIRES HIGH VOLTAGE WHICH CAN SHOCK, BURN, OR CAUSE DEATH.

ATTENTION

Before working on the IntelliCenter Control System

always disconnect power to the pool and/or spa pumps, lights and other electrical devices at the house circuit breaker. Failure to do so could result in death or serious injury to service person, pool users or others due to electric shock. **DANGER** This underwater light must be installed by a licensed or certified electrician or a qualified pool professional in accordance with the 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 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 the power to the pool light at the circuit breaker before servicing the light. Failure to do so could result in death or serious injury to serviceman, pool users or others due to electrical shock.

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.

ANSI - American National Standards Institute

ASME - American Society of Mechanical Engineers

CSA - Canadian Standards Association

IAPMO - International Association of Plumbing and Mechanical Officials

UL - Underwriter Laboratory

IMPORTANT WARNING AND SAFETY INSTRUCTIONS

Regulatory Compliance Information

FCC Compliance Statement

This device complies with part 15 of the FCC rules. Operation is subject to the following two conditions:

(1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. See instructions if interference to radio or television reception is suspected. Radio and Television Interference

This computer equipment generates, uses, and can radiate radio-frequency energy. If it is not installed and used properly—that is, in strict accordance with Pentair instructions—it may cause interference with radio and television reception. This equipment has been tested and found to comply

with the limits for a Class B digital device in accordance with the specifications in Part 15 of FCC rules. These specifications are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. You can determine whether your computer system is causing interference by turning it off. If the interference stops, it was probably caused by the computer or one of the peripheral devices. If your computer system does cause interference to radio or television reception, try to correct the interference by using one or more of the following measures:

- Turn the television or radio antenna until the interference stops.
- Move the computer to one side or the other of the television or radio.
- Move the computer farther away from the television or radio.

• Plug the computer into an outlet that's on a different circuit from the television or radio. (Make certain the computer and the television or radio are on circuits controlled by different circuit breakers or fuses.)

If necessary, consult Pentair Technical Support 1.800.731.3773 or consult an experienced radio/television technician for additional suggestions. Important: Changes or modifications to this product not authorized by Pentair could void the EMC compliance and negate your authority to operate the product. This product was tested for EMC compliance.

IMPORTANT WARNING AND SAFETY INSTRUCTIONS

Wireless Radio Use

This device is restricted to indoor use due to its operation in the 5.15 to 5.25 GHz frequency range to reduce the potential for harmful interference to co-channel Mobile Satellite systems. Cet appareil doit être utilisé à l'intérieur.

Exposure to Radio Frequency Energy

The radiated output power of this device is well below the FCC radio frequency exposure limits. However, this device should be operated with a minimum distance of at least 20 cm between its antennas and a person's body, and the antennas used with this transmitter must not be co-located or operated in conjunction with any other antenna or transmitter subject to the conditions of the FCC Grant.

Industry Canada Statement

Complies with the Canadian ICES-003 Class B specifications. Cet appareil numérique de la classe B est conforme à la norme NMB-003 du Canada. This device complies with RSS 210 of Industry Canada.

Disposal and Recycling Information



This symbol indicates that your product must be disposed of properly according to local laws and regulations. When your product reaches its end of life, contact Pentair Technical Support 1.800.371.7333 or your local authorities to learn about

recycling options.

California: The coin cell battery in your remote contains perchlorates. Special handling and disposal may apply.

Refer to www.dtsc.ca.gov/hazardouswaste/perchlorate.



The symbol above means that according to local laws and regulations your product should be disposed of separately from household waste. When this product reaches its end of life, take it to a collection point designated by local authorities. Some collection points accept products for free. The separate collection and recycling of your product at the time of disposal will help conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment.

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Overview

| 1

Welcome! Your Pentair IntelliCenter[™] Control System will change the way you view pool and spa controls. This innovation in pool and spa automation offers complete freedom for you while having full automation control over your pool, spa, lights, heater, cleaners and much more. You can now schedule multiple start and stop times to control your lights, heater, spa jets, and filter pumps. The historical usage data feature provides a convenient way to help you conserve energy. Using an iPhone[®], iPad[®] mobile digital device or an Android[®] wireless device, you can now control your pool and spa from anywhere inside or outside your home. The IntelliCenter Control System is a scalable system that can be used with popular home automation systems.

This manual describes how use the IntelliCenter Control System and associated equipment.

Features

- 4" x 3" capacitive touch sensitive color touch screen.
- Day Time and Night Time color screen modes
- Multifunction Schedules/Programs
- Adjustable schedule timer for easy system scheduling
- 100 Schedules/Programs
- 32 Feature Circuits: Allow additional speeds on a variable speed pump or an actuator to be assigned without using an existing auxiliary circuit.
- 16 Groups: Assign groups of lighting and AUX circuits that can be controlled by a single button.
- Supports up to 16 IntelliFlo® VF and VS Pumps
- Supports up to four Spa Command[®] and iS10 Spa Side Remotes, and two iS4 and one QuickTouch[®] II Wireless Spa Side Remotes
- Supports IntelliBrite® LED Color lights
- Valves: Intake/Return plus A and B valve circuits. Expandable up to 10 valves.
- Indoor Control Panel, Wireless Hand-Held Remote, Outdoor Control Panel
- IntelliChem[®] Controller
- IntelliChlor[®] Salt Chlorine Generator: Supports one unit.
- 40 Auxiliary Circuits (up to three Expansion Enclosures)
- Spa Manual Heat Function
- Support for two Bodies of Water

Features (Continued)

- System Reboot from touch screen control panels
- Spa Side Control Enable/Disable
- Solar Heating Option/Support
- 16 Heat Pump Support: RS-485 Support, Heat Pump Cooling Support.
- Safety and Functional Delay(s) and Cancel Systems Delays
- Real Time Clock
- Assignable Circuit Names and Custom Circuit Names
- Special Circuit Functions
- Two Speed Pump Support
- English/Metric Support
- Sensor Calibration
- Passcode Protection
- USB port for use with a standard flash drive. Save the system's configuration and upgrade the system's firmware.

Navigation

Back: Returns to the previous screen. Tap and hold to return to the Home screen.

↑ ↓ Move to next vertical screen (up/down).

Select an item. Add an item. Cancel/Close a screen.



Delete an item.



Select and save an item.





Edit an item.

?

Help information. Tap the Help icon to display the contextual on-screen help information.



Green: System status is good (OK)



Blue: System Status Information.



Orange: Warning status condition.

Red: Alert status condition. Note: Badges are displayed on the Home screen Status icon.



Features and Light Green Number Badge: Indicates the number of Features or lights currently activated.

Status Icon Number Badge: Indicates the number of Alerts and Warnings present in the Status Screen. Items shown in the Status can be selected from the Alerts & Notifications Screen Note: To select or hide Status Badge icons, see Settings > Alerts and Notifications, on page 45.

Home Screen Pool and Spa Status Badges: *Note: Shared equipment one badge for each body.*



Green Badge. A Green (Schedule) badge displayed on the on the Home screen Pool/Spa icon indicates that a programmed schedule is active.



Yellow Badge (Pool/Spa filter pump turned on): A Yellow Badge indicates a delay is in progress. Delays: (Heat Cool-Down (pump), Valve Rotation Delay, Pump Priming). Note: For Pool and Spa (shared equipment systems), when the pool or spa pump is turned on, the Yellow badge displays on the pool or spa icon; not on both at the same time. See page 44 to hide/show Yellow and Blue Badges.



Blue Badge (Pool/Spa pump turned on): A Blue Badge indicates that the Pool/Spa pump has been turned on.

Using Override Delays (see page 87):

Go to Delays and tap Override Delays.

• Override Delays will cancel all active delays. If a Schedule is running, a Green Badge will display. If the pool/spa pump is manually enabled (ON/ OFF), a Blue badge will display.

Delay Settings			
Valve Delay	OFF		
Heater Cool Down	OFF ?)	
Frz Cycle Time (min)	- 15 +		
Spa Frz Override (min)	- 30 +		
Override Delays	Cancel		



Badge Color Changing Sequence:

The color badges shown on left indicate No heater (Off) installed.

Yellow changes to Green: A schedule has started running. Yellow changes to Blue: Pool/Spa pump has been manually turned ON. Blue will stay on until pool/spa pump is manually turned off. Note: Blue Badge will stay on for the Egg Timer duration (12 hrs. default). If the Egg Timer is set to **Don't Stop** to circuit will run continuously until manually is switched off.

Home Screen Connection Indicators

Connection indicators for IntelliCenter™ Outdoor and Indoor Control Panel and Wireless Remote are displayed on the top right side of the Home screen.



Padlock: Indicates the Home screen is passcode protected. Requires password to access the Home screen.



Pentair logo: Indicates connection to **intellicenter.com** server, see page 84.



Battery Icon: Wireless Remote battery indicator.



Green/Amber/Red Dot: These icons display on the Indoor Control Panel and Wireless Remote. Green indicates connection to the Outdoor Control Panel. Amber indicates synchronizing with the outdoor control panel. Red indicates no connection to the Outdoor Control Panel.



Ethernet Icon: Ethernet icon indicates an Ethernet connection to the Outdoor Control Panel.

Initial System Power Up

After all required pool/spa equipment has been connected to the IntelliCenter™ Control System, apply power to the system at the main panel circuit breaker. Upon the initial system power up, the Outdoor LCD Control Panel will display the PENTAIR END USER LICENSE AGREEMENT. Please read this agreement. To continue, tap the Down arrow on the right side of the screen to



scroll down to the end of the agreement and tap **I Accept t**o accept the agreement. The Home screen is then displayed. **See page 94 for Setup Wizard.**

Setup Wizard and Wireless Remote: Before running the Setup Wizard on the Wireless Remote, the Wireless Transceiver antenna must be connected to the IntelliCenter Control System Load Center. For more information, see the IntelliCenter Installation Guide. For Wireless Remote settings, see page 86.

Setup Wizard and Wireless Network Bridge (www.intellicenter.com): In order to connect the IntelliCenter Control System to your home network, the Wireless Network Bridge Antenna must be connected to the IntelliCenter Load Center and your home network. For more information, see the IntelliCenter Installation Guide. For Wireless Network Settings, see page 84.

Home Screen Display Icons and Day/Night Theme

For optimal screen viewing, the color touch screen contrast can be set for daylight, or night time viewing.

To change the Day/Night Theme: From the Home screen, tap Settings > General > Day/Night Themes. Select Day Theme, Night Theme or Transition Type (Manual or Auto). See page 44.

Change the screen time out delay: If you require the screen to stay on longer and not turn off while setting up system configurations; from the Home screen, tap Settings > General > Backlight, and change the Dim Display and Turn Off Display settings to the desired time in minutes.

Manual Control of Equipment and Functions

The Home screen displays the current pool and spa operating status. The example below shows IntelliCenter[™] Control System model i5PS (pool/spa shared equipment with heater, see page 72. Tap an icon to access its control screen to manually control pool and spa equipment. The Home screen displays the installed equipment as configured from the Settings screen, see page 35.



Pool/Spa System Configurations

Systems with multiple pools and/or spas (up to two bodies of water total).

Depending on the Personality Card installed in the IntelliCenter™ Control System load center (*see page 95*) a system can be configured as follows:

Single Body (model i5, i8, i10): One set of equipment for a single body of water (pool or spa).

Shared Equipment (i5PS, i8PS, i10PS): One body of water with shared equipment (same pump, heater and filter).

Dual Equipment (i10D): Two separate equipment sets for two separate bodies of water (pool/pool and spa/spa (only one pool or spa icon with draw).

The Home screen displays each additional body of water under the main Pool and Spa icon. Up to two bodies maximum of water can be displayed.



Lower Drawers: An i10D model system can be configured as Pool, Pool or Spa, Spa. Using the lower draws on/ off button, each body of water can be turned on or off. *Note: The Home screen shown on the left are passcode protected, see Passcode Protect below for more information.*

Tap the On/Off slide button icon to manually control the pool or spa filter pump and heater for the selected body of water. Tap the Up/Down arrow to display more pools and/or spas. The current settings are displayed above the pool and spa the icon.

Note: To configure the pool and spa systems, see Settings > Advanced System Configuration > Installation Setup > Body Configuration, see page 53.

Passcode Protect

Passcode Protect: When a screen or individual screen item is Passcode protected a *lock icon* is displayed. To access the passcode protected screen or item, tap on the screen icon to display the Passcode four digit screen. Enter the four digit Passcode. After passcode is entered, the screen can be accessed.



Tap number key pad to enter the four digit Passcode to access the Passcode protected screen.

Note: To setup Passcodes, see Settings > Security on page 45.

Home Screen (see page 8)

Pool Screen Spa Screen Features (Individual/Groups) Lights ((Individual/Groups) Schedule (Pump schedule) Usage Chemistry (IntelliChem® Controller/IntelliChlor® SCG) Status

Settings (see page 35)

Service Mode Vacation Mode Support

General: Location, Date & Time, Units (Fahrenheit/Celsius), Features and Lights List Order, General List Order, Backlight (Deep Sleep: Wireless Control Panel only, Temperature Sensor Calibration, Day / Night Themes, Manual Operation Priority, Manual Heat, Chemistry Readings Badge, Badge Colors.

Alerts and Notifications: Choose which system status, alerts and warnings badges to display on the Home screen Status icon.

Security (Passcode Protect)

Pentair User Portal (intellicenter.com)

Groups: Configure groups of AUX circuits, Light circuits and Feature circuits. System Reboot: Reboot the panel

Advanced System Configuration (see page 52) Installation Setup:

Body Configuration,Circuits, Pumps, Heaters, Valves, Chemistry, Pool/Spa Cover.

Remotes Setup: iS4, QuickTouch II, iS10, SpaCommand remotes **Network and WiFi Setup:** Configure Ethernet, Connect to a Wireless Network, Adjust Wireless Transmit Power, Internet Connection Test, Reboot WiFi Device.

IntelliCenter Wireless Remote Setup: Configure the Address and Panel # for wireless remote.

Delays: Valve Delay, Heater Cool Down, Freeze Cycle Time (min), Spa Freeze Override (min), Override Delays.

System: System Information, Detected Hardware, System Diagnostic Information, Firmware Update (Update from Panel, Update from USB, Update from Ethernet), Factory Diagnostics.

Import/Export: Import System Configuration, Export System Configuration. **Restore Factory Defaults:** Restore system to factory configuration.

Setup Wizard: Step-by-step system configuration.

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Home Screen

The IntelliCenter[™] Control System Outdoor Control Panel Home screen displays the current ambient air temperature, and the current system time. Green badges displayed above the Pool and Spa icons show the current water temperature and heater set point temperature. Green badges displayed above the Features and Lights icon show the number of active features and lights that have been manually switched on. The Pentair logo (IntelliCenter.com connection), Ethernet connection and the optional Wireless Remote signal and battery strength may also be displayed. The Home screen example below shows an i5PS IntelliCenter Control System (shared equipment pool and spa with heater). For IntelliCenter Control System models see page 106. The Home screen is displayed when power is applied to the IntelliCenter Control Panel load center.



Tap the Home screen Pool icon to display the Pool Pump control settings screen. From this screen tap the Pool Pump button to activate the pool pump. A Blue badge displayed on the Pool icon indicates the Pool/Spa pump button has been manual turned on. The Blue badge displays until the pump button is turned off. The badge displays the current pool water temperature. If there is a heat source active, a flame icon is displayed with the pool water set point temperature. Note: For more information about screen badges, see page 3.





Note: The displayed heat sources are configured from Settings > Advanced System Configuration > Installation Setup > Circuits, see page 56.

Heat Mode Button: Tap the Heat Mode button to select the heat source type: Off (no heat source), Heater, Solar Only, Solar Preferred, Heat Pump, UltraTemp (Hybrid) or UltraTemp (Hybrid) Preferred. Note: To add a heater, see page 72.

Pool Badge Icons: A Flame icon (heat source active) is displayed with the current heat set point temperature. A Snow Flake icon indicates the UltraTemp Heat Pump or Solar Heat (if enabled) is in cooling mode. A Sun icon indicates solar heat is active. Select the heat source from the Select Heat Source screen.

Heat Mode indicators:



Pool Pump On/Off Button: Tap this button to turn the Pool Pump on to activate the heater. Tap the Heat Mode button to select a heat source. Note: When the heater is turned it will activate the pool/spa pump when the Heating Set Point is above or at the current water temperature reading.

Note: The Pool button name can changed (up to nine characters), go to Settings > Advanced System Configuration > Installation Setup > Body Configuration, see page 55.

Heating Set Point: Use the Up/Down button to increase or decrease the heat set point temperature.

Pool Temperature: Displays the current pool water temperature in Fahrenheit or Celsius, see page 41.

9

10

Pool

Pool Pump Button (Override Freeze Protect)



Freeze Protection Override: The pool pump can be manually turned on to override the Freeze protection. This also applies if a schedule is running. To assign freeze protection to a circuit. **See page 59 for more information.**

Schedules (Heat Source and Set Temperature) See page 20: See Schedules to schedule the pool/spa pump to turn on at a specific time to pre-heat the pool or spa water. From the Schedules Weekly or One Time Only option, select Heat Source and select a heat source, then set the Set Temperature settings.



Nocturnal Cooling Set Point Temperature control for Heat Pump or Solar: If using a heat pump, use the Cooling Set Point temperature or solar heat control buttons displayed on the Pool and/or Spa screen to adjust the nighttime temperature of the pool/spa water. See page 74.

Solar Heater: Nocturnal (nighttime) feature provides automatic cooling during night time hours for pools that overheat in hot climates to circulate the warmer pool water to the collector panels when the collector temperature and the pool temperature is hotter than the high limit setting. This process cools the pool water over time. Note: This feature is also used for the UltraTemp heat pump, Hybrid Heater and a Heat Pump. See page 74.

Note: If the Heat Mode is set to Off, the Heating Set Point setting on the Pool screen is not displayed. Tap the Heat Mode button to display the Select Heat Source screen. Note: The Home screen displays a Blue badge over the Pool icon with the current pool water temperature.





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Spa

Tap the Home screen Spa icon to display the Spa Pump control settings screen. From this screen tap the Spa Pump button to activate the Spa heat source. A Blue badge displayed on the Spa icon indicates the Pool/Spa pump button has been manually turned on. The Blue badge displays until the pump button is turned off. The badge displays the current pool water temperature. If there is a heat source active, a flame icon is displayed with the pool water set point temperature source. Note: For more information about screen badges, see page 3.





Select the heat mode from the Select Heat Mode screen.

Note: The Spa button name can changed (up to nine characters), go to Settings > Advanced System Configuration > Installation Setup > Body Configuration, see page 55.

Spa Badge Icons: A Flame icon indicates that the heat source has been called for. A **Snow Flake icon** indicates the UltraTemp (Hybrid) Heat Pump or Solar Heat (if enabled) is in cooling mode. A **Sun icon** indicates solar heat is active. Select the heat source from the Select Heat Source screen.

Heat Mode indicators:



Heat Source Nocturnal Solar Active Cool Down Heat Source

Spa Pump On/Off Button: Tap this button to turn the Spa Pump on to activate the heater. Tap the Heat Mode button to select a heat source.

Heating Set Point: Use the Up/Down button to increase or decrease the heat set point temperature.

Spa Manual Heat ON/OFF: When set to ON, overrides current heater settings and schedules to allow manual control of the spa heater settings (on/off and temperature settings), see page 12.

Heat Mode Button: Tap the Heat Mode button to select the spa heat source type: Off (no heat source), Heater, Solar Only, Solar Preferred, Heat Pump (Heat Pump Preferred) or UltraTemp® (UltraTemp Preferred). Note: To add a heater, see page 72. To add a circuit go to Settings > Advanced System Configuration > Installation Setup > Circuits, see page 56. 12

Spa

Spa Pump Button (Override Freeze Protect -See Delay Settings, page 87.)



Spa Freeze Override Time (0-240 min (4 hrs): Override the spa pump circuit that has freeze protection active to run the pump and heat the spa during freezing temperatures. This also applies if a schedule is running. **Freeze Cycle Time (min):** Set the freeze protection time from 5 to 60 minutes to run the pump during freezing temperatures. Default time is 5 minutes. **See page 87 and 59.**



Spa Heater Button: Tap to access the Select Heat Mode screen. Tap the desired heat source (solar or conventional heaters). Note: Heat sources are configured from Settings > Advanced System Configuration > Installation Setup > Circuits, see page 56. Also see: Manual OP Priority: Manual ON/OFF circuit during a schedule. See page 44.

Spa Manual Heat ON/OFF: See page 59: If the Heat Enabled (Default ON), feature is selected and the Spa pump button (or from the Spa-Side remote, or Wireless Controller) is turned on, the pump will turn on and the heater will begin to heat the spa (even if the heater is set to OFF). This feature allows you to program the pool pump to filter daily with the heater set to off, and then be ready to heat whenever the Spa button is pressed. See Settings > Advanced System Configuration > Installation Setup > Spa Body Configuration > Spa Settings on page 53.

Schedules (Heat Source and Set Temperature) See page 20: See Schedules to schedule the pool/spa pump to turn on at a specific time to pre-heat the pool or spa water. From the Schedules Weekly or One Time Only option, select "Heat Source" and select a heat source, then set the Set Temperature settings. Note: The Heating Set Point setting on the Spa screen is not displayed if Off is selected on the Select Heat Source screen. Tap the Heat Mode button to display the Select Heat Source screen.





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Features

Up to 32 individual or Groups of Feature Circuits can be assigned as a Generic circuit or a Spillway circuit. Tap Features on the Home screen to display the Feature circuits screen. From the Features screen you can manually turn on or off an individual Feature circuit or a group of Features circuits. To assign Feature Circuits, **see Settings > Advanced System Configuration > Installation Setup > Circuits > Feature Circuits on page 57**.



Green Number Badge: Displays the number of active feature circuits. Tap the Features icon on the Home screen to display the Feature circuits. To hide the Features number badge. See page 57, Settings > Advanced System Configuration > Installation Setup > Circuits > Feature Circuits > Feature Circuit Settings (Visible in Features (Y/N) option).

Features: Individual / Groups

Tap Individual or Groups to display the assigned Feature circuits buttons. Tap the circuit button to switch the individual circuit or a group of circuits on or off.

Feature Groups can include multiple circuits for multiple schedules. You can also set different pump speed using IntelliFlo® Pump. Assign each feature circuit a different pump speed to manually control or schedule different pump speeds. See Installation Setup on page 53, For more about Light Groups see page 49, 56. For Feature Groups see page 58.



Lights (MagicStream[®], IntelliBrite[®], ColorCascade[®] and GloBrite[®])

To access the Lights screen, tap the Lights icon on the Home screen. From the Lights screen you can manually turn on or off individual lights, groups of lights or all lights. Lights displayed in the Lights screen are configured from the Circuits screen, see Settings > Advanced System Configuration > Installation Setup > Circuits, page 56. Light circuits settings include Schedule Egg Timer and Freeze Protect options. Note: A Green number badge displayed on the Home screen Lights and Features icon, indicates the number of individual and/or groups of lights currently turned on. To hide the number badge on the Features icon, turn Visible in Features OFF. See page 56.









All On/All Off Button (IntelliBrite[®], ColorCascade[®], GloBrite[®] Light (Color and White), and MagicStream[®] lights): Tap the All On or All Off button to turn all light circuits On or Off. Note: Up to 12 light circuits can be configured.

Lights (Individual/Groups Button): Tap either of these buttons to toggle between the Individual and Groups screens.

Individual: Displays the assigned individual AUX Light circuits. Tap the light name button to turn the light ON or OFF.



Four Color Dots Edit Button (IntelliBrite): Tap edit button to display the Colors or Light Shows screen.

Light Shows: Includes IntelliBrite, ColorCascade, GloBrite Color Light, and MagicStream. Tap one of the displayed Light Shows to switch the light show on or off. The options are: SAm, Romance, American, Royalty, Party, Caribbean, and Sunset.

✓ **Check:** Tap Check to save changes and return to the Lights screen.

X button: Tap to exit and return to the previous screen without saving changes.



MagicStream Laminar only (Light Shows and Colors): Tap the Gears icon to access the

Thumper Toggle screen. Tap the Thumper button to activate the built-in solenoid **Thumper** to create a random wrinkle in the laminar's water stream and display a brilliant spot of light that moves along the stream's arc.

Lights (Individual Fixed Color)

Fixed Colors: For IntelliBrite[®], ColorCascade[®], GloBrite[®] Color Light and MagicStream[®] lights:

Change a Fixed Color: From the Lights screen, tap the Four Color Dots Edit Button to display the Colors (or Light Shows) screen. From the Colors screen, select one of the displayed color buttons (White, Blue, Red, Green and Magenta). Tap the Check button to return to the Lights screen. Tap the light name button to turn the color light on or off. Tap the Return arrow to return to the Home screen. Note: GloBrite White light and Dimmer circuits only display white light.

Individual Lights - Switch between fixed colors and light shows:

Four Color Dots Edit Button (IntelliBrite): Tap this button to display the Colors and Light Shows screen. To display a Light Show, tap one of the Light Show buttons. The options are: SAm, Romance, American, Royalty, Party, Caribbean, and Sunset). Tap Check to return to the Lights screen.

Light Groups

From the Lights screen, tap the Groups button. To turn on or off a selected group of lights, tap the group of light name button. Light Groups displayed in the Lights screen are configured from the Settings > Advanced System Configuration > Installation Setup > Circuits > AUX Circuits screen. To add a group of lights, tap the Four Dots icon to display the Groups screen. Note: Light Groups can be created from the Lights screen (see page 14), Installation Setup (see page 53), Groups (see page 48), and displayed in the Features screen (see page 58).



Tap the Edit Pencil icon to display the Light Settings screen. Tap **Light in Group or Group Settings** to change the light Fixed Color and Light Shows in a selected group of lights.

Light Groups		
Individual	Groups	_
Lights Group 1	/ <i>C</i> 🞽 Z	?
Candscape LT Grp		
All Lights OFF		
Waterfall LT Grp		

Continue to the next page.

AUX 4 Light Color		
Light Shows	Colors	~
White	Green	×
🔵 📕 Blue	🔵 📕 Magenta	
Red		*

AUX 4 Light Show			
Light Shows Colors			
SAm	🔿 🗾 Party	×	
C Romance	🔵 🌇 Caribbean	•	
🔎 💽 American	🔘 🚺 Sunset		
🔵 🌄 Royalty			

Light Settings		
Lights in Group	Groups Settings	
IntelliBrite	GloBrite	?
ColorCascade	Lighting Group 1	
All Lights		

Lights (Groups) Continued

Lights (Groups - Change a Light Color or Light Show)



Change a Light Color: The Lights in the Group screen display the lights in the selected group (Fixed Color). To change the color of the selected light in the group, tap the light button and choose a different color for the light (White, Blue, Red, Green or Magenta). Tap check to return to the previous screen.

All Lights Same Color (ON/OFF): From the Lights Settings screen, tap the All Lights Same Color ON/OFF button.

ON: All lights in the group are set to the same color. OFF: Each individual fixed color light

can display a different color. Tap Light in Group to view the selected Lighting Mode.

Change a Light Mode from Fixed Color to Light Show: From the Light Settings screen, Tap the Groups Settings button, tap the Lighting Mode button (Fixed Color) and select Light Show. Select one of the Light Shows. Tap the Check to return to the Light Settings screen.

Select a Different Light Show: Tap the Lighting Mode button and select one of the Light Shows. Tap Check to return to the previous screen.



Lights (Groups) Continued

The Light Groups Sync, Swim and Set SAm feature are configured from Settings > Groups. The SAm feature supports IntelliBrite®, ColorCascade®, GloBrite® Light (Color and White), and MagicStream® lights. For more information about creating light groups, see page 49. From the Groups screen, light groups can be added, and each light color and delay (0 to 60 seconds) from the Groups screen. Select the group of lights to change. Tap Color Settings. Set the delays between the lights from 0 to 60 sec.

Light Group Settings			Select Circuit to Edit		6
Group Name	All Yard Lights	5	Beach Light	Delay 0s White	ف
Included Lights	3	?	Back Yard Light	Delay 15s Light Green	?
Egg Timer	Ohr. Omin.		Pool Light	Delay 25s Green	•
Color			Pool Light 2	Delay 35s Cyan	1
Color Settings			Spa Light	Delay 55s Blue	\downarrow



Pool Light		Green	•
Pool L	ight 2	Delay 35s Cyan	1
Spa L	ight	Delay 55s Blue	\downarrow
	Edit (Pencil): D Settings screer Lights in Group	lisplay the Lig n. os: Displays th	ht ne
light c	ircuit name and	color. Note: A	ll
light w	vill display the sa	ame color if A l	ll
Light S	Same Color is er	habled (ON) fr	om
the Gr	oup Settings scr	een. To displa	V

different fixed colors for each light,

select All Light Same Color (OFF).



Sync (SAm Color Swim effect): Tap this momentary button to synchronize (Green light on) all IntelliBrite lights in the group. The Light in the group will go to the beginning of the SAm rotation. After 21 seconds the lights will start rotating eaach time the button is tapped.

Note: Also this feature also works for indivdual legacy SAm lights).



Color Set: Tap this momentary button to activate (Green light on) to set the default color for each light then stop the light on one of the selected eight (8) colors.



Swim (SAm Color Swim effect): Tap this momentary button to activate (Green light on) an effect of moving colors across the pool. From the Swim Settings Delays screen set a delay between the lights so that the first light syncs and starts rotating, then the second light starts rotating after that, and the third light rotates after that with a delay between the lights.

To change the light color or the light delay (from 0 to 60): Tap Settings > Groups. Select the group of lights to change. Tap Color Settings. Set the delays between the lights from 0 to 60 sec.

Lights (GloBrite® White and Dimmer Light)

From the Lights screen you can manually turn on or off *individual* or *Groups* of **GloBrite or Dimmer lights**. Lights displayed in the Lights screen are configured from the Circuits screen. To access the Lights screen, tap the Lights icon on the Home screen. Tap the light name to manually switch the light circuit on or off (Green light indicates the light is on). Note: A Green number badge displayed on the Home screen Lights and Features icon, indicates the number of individual and/or groups of lights currently turned on. To hide the number badge on the Features icon, turn Visible in Features OFF. See page 56.

Configure a GloBrite White Light and Dimmer Light: Go to Settings > Advanced System Configuration > Installation Setup > Circuits, page 56 and 60. Select AUX Circuits, select the light AUX circuit, tap Circuit Function and select GloBrite White or Dimmer.

Dimming Lights (50%, 75%, 100%)

Lights that have dimming functionality can be dimmed from the Lights screen. Only incandescent tungsten filament lights may be dimmed. IntelliBrite, Fiber-optic, or Halogen lights cannot be dimmed. The feature circuit must be assigned a **Dimmer** circuit function.

Note: Feature Circuits can turn on light dimming circuits, but lights cannot be dimmed using this feature. The dimming level must be changed for each light dimming circuit.

GloBrite White & Dimmer ON/OFF Button: On the Lights screen, tap the **Individual button** to display the assigned light circuits. Tap the GloBrite White light or the Dimmer Generic Light button to switch the light on or off. Tap Return Arrow to return to the Home screen.







GloBrite & Dimmer Edit Button:

Tap this edit button to display the Dimmer level screen.

Note: To assign a GloBrite White Light or Dimmer circuit, go to Settings > Advanced System Configuration > Installation Setup > Circuits, page 56 and 60.

GloBrite White Light Dimmer Level: Use the Up/Down arrow button to increase or decrease the brightness levels of the light. Brightness levels are from 50%, 75% and 100% increments.

✓ **Check:** Tap Check to save changes and return to the Lights screen.

X button: Tap to return to the previous screen without saving changes.

Schedule

To access the Schedule screen, from Home screen tap Schedule: Select either a **Weekly**, or **One Time Only** schedule. From the Schedule screen you can add, delete, edit, enable and disable schedules. Tap the Add button (+) to add a schedule. To delete a program, tap the program from the list. Tap the Trash Can icon to delete the program from the list.

Air Temp 65° F	8:00 A.M.	🚸 💷 • 🕅	Schedu	les - 94 free	5
700			🛨 Add Program		
<u>84°</u>			Spa	8:00pm-10:00pm Mon Tue Wed Thu Fri	Ô
Pool	Spa Fea	atures Lights	Pool Pump Manual On	5:00am-10:00pm Everyday	?
	6.50	4	Pool Lights Manual On	8:00pm-11:00pm Mon Tue Wed Thu Fri	
Schedule	Usage Chemistry	Status Settings	AUX 4 Manual On	8:00pm-11:00pm Fri Jan 12 2018	

From the Schedule screen you can program On and Off times for circuits (AUX auxiliary and Feature circuits). Circuits can be scheduled set to turn On or Off all days, weekends, weekdays, or any specific day of the week. Each 24 hour period, equipment (lights, heater, spa jets, filter pump) can be programmed for multiple On/Off times. You can also schedule which heat mode to use and also change the heat set point if necessary. The Schedule screen lists each scheduled circuit(s) start and stop time, and days to run.

One Time Only Timer: This schedule will switch equipment on for the specified amount of time. You can set the desired One Time Only schedule to run the pump for the specified time only.

Heater Cool Down: Default enabled. Provides a two minute-delay in turning off the circulation pump after heater has completed its firing cycle to allow the heater to cool down. See page 72 for more information.

Continue to next page.

Schedule - Weekly Program

Weekly Program: This feature will automatically schedule a circuit or a group of circuits to switch on and off at a specific start and stop time and day. Circuits can be scheduled to turn On or Off all days, weekends, weekdays, or any specific day of the week. Each 24 hour period, equipment (lights, heater, spa jets, filter pump) can be programmed for multiple On/Off times. You can also schedule which heat mode to use and also change the heat set point if necessary. The Schedule screen lists each scheduled circuit(s) start and stop time, and days to run.







Add a Program: From Home screen tap Schedule > Add Schedule > Weekly to add a new schedule. Note: If the system is in Vacation Schedule mode, the Home screen Schedule icon will change to Vacation text, see page 38.

Delete Program: Tap the Trash Can icon and select the schedules to delete from the list, then tap Check and the Yes button to delete.

Weekly: Tap **Weekly** to display the available AUX (auxiliary) circuit, Feature circuits and Groups (circuits and Feature circuits) as defined in the Circuits screen, see page 56.

Everyday: Tap Everyday and select the days of the week (Mon-Sun), Weekdays, Weekends, Every Day, or No Days to run the schedule. Tap **Check** to save and return to the previous screen.

Circuits: Tap Circuit and select a circuit from the assigned circuits list. Note: Heat Source and Set Temperature options only display for Pool an Spa circuits. Use these options to schedule your pool/spa heater to heat the water at a specified time.

To assign circuits see Settings > Advanced System Configuration > Installation Setup > Circuits and Feature Circuits, see page 56.

Start Time (Manual): Set the start time (am/pm) for the Weekly schedule.

Schedule - Weekly



Everyday		
Circuit	Pool	?
Start Time	8:00	^
Stop Time	5:00	
Heat Source	Gas	\downarrow
Set Temperature	- 77 +	

Duration: Start time duration: The equivalent time left after the start time is established (e.g. 1:00 AM to 9:00 AM. The system clock calculates the duration between the start and stop time which is 8 hours. 24 Hrs. duration is display when the Start/Stop time is set to 8 AM to 8 PM. **Note: To offset Sunrise and Sunset start time, see page 24**.

Stop Time (Manual): Set the stop time (am/pm) for the Weekly schedule.

Duration: Stop time duration: The equivalent time left after the start time is established (e.g. 1:00 AM to 9:00 AM. The system clock calculates the duration between the start and stop time which is 8 hours. 24 Hrs. duration is display when the Start/Stop time is set to 8 AM to 8 PM. Note: To offset Sunrise and Sunset stop time, see page 24.

Heat Source: Tap Heat Source and select: Off, Heater, Solar, or Solar Preferred. Heat Pump Only, Heat Pump Preferred. To create a heat source go to Settings > Advanced System Configuration > Installation Setup > Heaters, See page 72 for more information.

Set Temperature: Tap the Plus or Minus (+/-) button to set the Heat Source set point temperature from (40° F to 104° F).

Manual OP Priority (Default ON): If this feature is set to ON, a circuit can be manually switched OFF and switched ON within a scheduled program and will continue to run for a maximum of 12 hours or whatever that circuit Egg Timer is set to, after which the scheduled program will resume if the schedule has not ended before the Egg Timer has expired. See Settings > General page 44 for more information.

Schedule - One Time Only

One Time Only: This feature will automatically schedule a circuit or a group of circuits to switch on and off at a specific start and stop time and day, for one time only. The circuit or group of circuits must be turned off manually or wait for the 12 hour automatic shut-off. However, the 12 hour factory shut off time can be changed by setting a new run time in the Egg Timer. See Egg Timer feature in the Circuits settings (Settings > Advanced System Configuration > Installation Setup > Circuits, see page 53). For example, you could set up the program to preheat your spa ready for your arrival. After the scheduled One Time Only program is completed, it is automatically erased. If the heater and pump already are on a schedule and the equipment is off, the One Time Only timer will switch it on for the scheduled time that has been set.





FILTERI	FILTERZ	
AUX2 Pro	AUX3 AUX2	
AUX4 AUX2	AUX5 AUX2	•
Waterfall Feature Circuit	Light Group 1	1
AUX 6 AUX6	AUX7 AUX7	\downarrow

Add a Program: From Home screen tap Schedule > Add Schedule > One Time Only to add a new schedule. Note: If the system is in Vacation Schedule mode, the Home screen Schedule icon will change to a Vacation text, see page 25.

Delete Program: Tap the Trash Can icon and select the schedules to delete from the list, then tap Check and the Yes button to delete.

One Time Only: Tap **One Time Only** to display the available AUX (auxiliary) circuit, Feature circuits and Groups (circuits and Feature circuits) as defined in the Circuits screen (see page **56**).

Circuits: Tap Circuit and select a circuit from the assigned circuits list. Note: Heat Source and Set Temperature options only display for Pool an Spa circuits. Use these options to schedule your pool/spa heater to heat the water at a specified time.

Note: To assign circuits see Settings > Advanced System configuration >Installation Setup > Circuits and Feature Circuits, see page 57.

Manual OP Priority (Default ON): If this feature is set to ON, a circuit can be manually switched OFF and switched ON within a scheduled program and will continue to run for a maximum of 12 hours or whatever that circuit Egg Timer is set to, after which the scheduled program will resume if the schedule has not ended before the Egg Timer has expired. See Settings > General page 44 for more information.

Schedule - One Time Only (Continued)



Scheduled One Time Only		5
Fri, Jan, 12 2018		
Circuit	Pool	?
Start Time	8:00	^
Stop Time	5:00	
Heat Source	Gas	\downarrow
Set Temperature	- 77 +	

Start Time (Manual): Set the start time (am/pm) for the Weekly schedule.

Duration: Start time duration: The equivalent time left after the start time is established (e.g. 1:00 AM to 9:00 AM. The system clock calculates the duration between the start and stop time which is 8 hours. 24 Hrs. duration is display when the Start/Stop time is set to 8 AM to 8 PM. Note: To offset Sunrise and Sunset start time.

Stop Time (Manual): Set the stop time (am/pm) for the Weekly schedule. **see page 24**.

Duration: Stop time duration: The equivalent time left after the start time is established (e.g. 1:00 AM to 9:00 AM. The system clock calculates the duration between the start and stop time which is 8 hours. 24 Hrs. duration is display when the Start/Stop time is set to 8 AM to 8 PM. Note: To offset Sunrise and Sunset start time, see page 24.

Heat Source: Tap Heat Source and select: Off, Heater, Solar Only, or Solar Preferred. Heat Pump Only, Heat Pump Preferred. To create a heat source go to Settings > Advanced System Configuration > Installation Setup > Heaters, See page 72 for more information.

Set Temperature: Tap the plus or minus button to set the Heat Source set point temperature from 40° F to 104° F.

Schedule - Offset the Sunrise/Sunset Time

Sunrise & Sunset Start & Stop Time: The Sunrise and Sunset times are based on the system date and time established from the area and location (zip code and time zone setting) of the system, see Setting > General > Location > Date & Time. See page 40 for details.

The IntelliCenter[™] Control System clock can be manually set or synchronize from the Internet clock. If you select to use the Internet clock your computer clock should connected to the your Internet domain to synchronize automatically with a network time server, then the IntelliCenter Control System clock will be in sync with your computer time. Be sure your computer has a continuous Internet connection to maintain automatic clock synchronization.

Sunrise Start Time (Hours/Minutes): The schedule start time set by the IntelliCenter Control System clock in sync with your computer Internet time. Before/After Offset: Select Before to adjust the Sunrise start or stop time for a schedule.

Sunrise Stop Time (Hours/Minutes): The schedule stop time set by the IntelliCenter Control System clock in sync with your computer Internet time.Before/After Offset: Before to adjust the Sunrise start or stop time for a schedule.

How to Use the Sunset Offset Setting

The following example describes how to offset the schedule Sunset time two hours before the actual sunset time. This allows you to schedule the heater/pump circuit to start heating the spa before the sunset, so you can enjoy the sunset in your heated spa.



Start/Stop Time Screen: Set the start and stop time for the program. Manual: Select Start time duration (AM/PM).

Sunrise/Sunset: The Sunrise and Sunset times are based on the system time established from the area and location (zip code and time zone setting) of the system. See page 40 for details.

Sunrise/Sunset Offset Program: The Sunrise and Sunset Offset time can be adjusted up to a maximum of 6 hours.





Schedule - Offset the Sunrise/Sunset Time



Start/Stop Time Screen: Set the start and stop time for the program. Manual: Select Start time duration (AM/PM).

Sunrise: The Sunrise and Sunset times are based on the system time established from the area and location (zip code and time zone setting) of the system. **See page 40.**

Sunrise Offset Program: The Sunrise and Sunset Offset time can be adjusted up to a maximum of 6 hours.



Vacation Mode Schedules - One Time Only (Vacation Mode see page 38)



Vaction Mode Schedules		5
🛨 Add Program		
Pool	8:00pm-5:00pm Weekdays: M Tu W Th F	Î
		?

Vacation Schedules: When the system is in Vacation Mode, you can setup a Weekly or One Time Only schedule while on vacation the same way as you would for a non-vacation schedule.

Note: When in Vacation Mode, the Schedule icon is replaced with the Vacation icon which is displayed on the Home screen to indicate the system is in Vacation Mode. To access the Usage screen, tap the Usage icon on the Home screen. The Historical Usage data is saved when using the IntelliCenter™ Control



Graph Icon: Tap this icon to display a graph view of the Summary View items (1-6).

Graph Icon: Tap this icon to display a visual comparison of a preset list of items (Heater vs Pump Usage). See page 28.

Graph Icon: Tap this icon to display a graph view comparison of a preset list of items. See page 28.

Summary View Summary View

Usage Screen: Displays up to six months of system historical usage data. Tap the - **Minus or + Plus** button to select the desired Time Period to view the items. The Time Period selection range is one day, two days, one week, one month, three months or six months.

Usage items: You can select any of the following six items to display on the Summary View screen. The items are: Any of the following six items can be displayed on the Summary View screen: Air Temp, Pool Water Temp, Spa Water Temp, Solar Temp, Gas Heater, Heat Pump, UltraTemp (Hybrid), Pool Pump, Spa Pump, Dual Speed Pump, IntelliFlo (VS, VSF, VF), pH Data, ORP Data, pH Feed Time, ORP Feed Time. **Note: Up to 6 months of historical usage date can be stored on intellicenter.com.**

Edit Pencil icon: Tap the Edit Pencil button to access the **Edit Summary View** screen (see next page). From the Edit Summary View screen you can arrange the usage items listing order (1-6) and also select other system items to display. See the complete Usage Item list as shown above (Usage Items).

Summary View: Minus and Plus Buttons: Tap the - Minus or + Plus button to select the desired Time Period to view the items.

This Period, Last Period: This Period displays the current system usage date compared to the Last Period date selected. The current time period is displayed on the bottom of the screen.

Graph View Icon (first graph icon right side of the screen)



Tap the first Graph icon on the Summary View screen to access a graph view of the displayed Usage Items (1-6).

Note: See Settings > Advanced System Configuration > Import/Export to export status logs to a USB device, page 89.

Usage (Summary View)





Change the Summary Usage List Order (1-6): To change the Summary Usage List order, tap on any Row number item name (1-6), then from the next screen select the new item to display on that Row (Edit Summary View). Tap Return to return to the previous screen to view the updated list order.

Note: See Settings > Advanced System Configuration > Import/Export to export status logs to a USB device, page 89.

Select Summary View Item: Displays the Usage Items: Air Temp, Pool Water Temp, Spa Water Temp, Solar Temp, Gas Heater, Heat Pump, UltraTemp, Pool Pump, Spa Pump, Dual Speed Pump, IntelliFlo (VS, VSF, VF), pH Data, ORP Data, pH Feed Time, ORP Feed Time). Tap on an item to corresponding to the select row (1 through 6). Tap Return to return to the previous screen.

Edit Summary View (AUX circuits usage)



This Graph view displays a detailed view of the historical usage data items. Tap the Graph icon to access the view graph usage screen. On the second screen, each usage is displayed on a graph. For more information.

Usage History Summary View screen: (Tap the Graph Icon (lower right side of the screen):

- Minus or + Plus Button: Tap the to select the desired Time Period to view the items. The Time Period selection range is one day, two days, one week, one month, three months or six months.

Left and Right Buttons: Use these buttons to scroll through a selected item details from

Magnifying Glass Button: Tap the magnifying glass button the to display the highest usage data for the selected item. Tap the button again to display the lowest usage data.

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Graph View Icon (second graph icon) Compare Preset Item List



Left and Right Buttons: Use these buttons to scroll through a selected item details from

Tap the first Graph icon on the Summary View screen to view



the preset item comparison list. See list below. Tap the Down arrow button to scroll through the graph items.

- Minus or + Plus Button: Tap the to select the desired Time Period to view the items. The Time Period selection range is one day, two days, one week, one month, three months or six months.

Magnifying Glass Button: Tap the magnifying glass button the to display the highest usage data for the selected item. Tap the button again to display the lowest usage data.

Usage Graph Comparison Items (Heater vs Pump)

Pool vs Spa Water Temp Air vs Pool Water Temp Air vs Spa Water Temp Air vs Solar Water Temp Pool Water Temp. vs Gas Heater Spa Water Temp. vs Gas Heater pH vs ORP Feed time pH vs ORP Feed time pH vs ORP Data pH vs ORP Feed time Pool Water Temp vs Solar Heater Spa Water Temp vs Solar Heater Pool Water Temp vs HeatPump Heater Spa Water Temp vs HeatPump Heater Pool Water Temp vs Ultra Heater Spa Water Temp vs Ultra Heater Pool Water Temp vs Hybrid Heater Spa Water Temp vs Hybrid Heater Spa Water Temp vs Hybrid Heater pH vs ORP Data pH vs ORP Feed Time pH vs Feed Time / ORP vs Feed Time

Usage (Graph) Comparison Items

This Graph displays a detailed usage view of the preset items for a selected time period (up to six months). To access the compare graph, tap the lower Graph icon on the Summary View screen.



Magnifying Glass Button: Tap the magnifying glass button the to display the highest usage data for the selected item. Tap the button again to display the lowest usage data. Up and Down Arrows: Use the Up or Down arrow to scroll through the preset usage items. The preset usage items are: Pool Water Temp, Spa Water Temp, Air Temp, Pool %, Spa %, Gas Heater %, Solar Heat %. After scrolling to the last item, continue to tap the Up/Down button to return to the Summary View. Also, tap the Down arrow (right side of graph screen) to display system configured AUX circuits usage data.
Chemistry (IntelliChem[®]/IntelliChlor[®] - pH Measurement)

To view the (IntelliChem) Chemistry Summary screen tap the Chemistry icon on the Home screen. Tap the UP arrow on the screen to display the next page (Page 2 of 2) to view the Pool Output and Spa Output chlorine percentage values. If an IntelliChlor SCG is installed, tap the Up arrow on the screen to display the IntelliChlor SCG screen. To add an IntelliChem and/or IntelliChlor device to the system, see Advanced System configuration > Installation Setup > Chemistry , on page 78. Note: To display pH and ORP readings on Home screen Chemistry Icon, see Settings > General > Chemistry Readings Badge(Set to ON). See page 45.

pH Value

pH value is the measurement of the acidity (0 to 7) or alkalinity (7 to 14) of the pool water. The pH low and high alarm set point values are preset at the factory to 6.7 and 7.9. For a pool, the advised ideal pH is between 7.2 - 7.8 (a pool professional should regularly check the water for metal presence, cyanuric acid levels and TDS (total dissolved solids). To maintain accurate pH pool water measurements, regular maintenance of the pH probe is advisable. pH probe calibration is necessary before the summer season.

IntelliChem Chemistry Controller Screen: Tap Up arrow to view Page 2 of 2.



Tap **pH** to select the pH setting screen.



ph Reading/Set Point/Tank: Displays the current pH level reading. Tap the **Set Point Up/Down button** to adjust the pH set point value. The adjustable range is from 7.2 to 7.6 in increments of 0.1. The default pH set point value is 7.5.

(IntelliChlor) Chemistry Summary Page 2 of 2

The salt level in the chlorinator is low

50

35

÷

÷

Pool Output (%)

Spa Output (%)

Salt Low

Tank: Tap the tank segment (1-6) to match the amount of muriatic acid currently in the canister. The canister can hold a maximum of 3-1/2 gals. of muiatic acid.

The Tank indicator (1-6 segment) is a visual representation of the amount of muriatic acid currently in the external canister. Tap the Up or Down button to match the amount of muriatic acid in the canister.

29

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Chemistry (ORP Measurement)

Oxidation-Reduction Potential (ORP) is the concentration level of disinfectant (chlorine, bromine, active oxygen) present in the pool water. It is advised to keep this measurement between 400 mV and 800 mV. To maintain accurate ORP pool water levels, regular maintenance of the ORP probe is advisable. ORP probe calibration is necessary before the summer season.



Tap **ORP** to select the ORP setting screen.

ORP Reading/Set Point: Displays the current ORP level reading. Tap the **Set Point Up/Down button** to adjust the ORP set point value. The adjustable range is from 400 to 800 in increments of 10. The default ORP set point value is 700.

IntelliChem ORP Control Chlorination: The IntelliChem Controller will constantly measure ORP and will increase or decrease chlorine production based on a preset setpoint that you have determined. The system will automatically monitor ORP and produce the correct amount of chlorine to maintain the preset level. If the ORP level is manually set, the amount of chlorine produced is based on this setting.

ORP Setpoint: The setpoint for the ORP level is measured in mV. 700mV is the default value. The lintelliChem Controller monitors the ORP and produces the proper amount of chlorine to maintain this setpoint.



Usage (Graph) pH & ORP

Comparison: Tap the Graph icon on the right of the Chemistry Summary screen to display a detailed view of the pH and ORP usage for a selected time period (up to six months).

Note: Use the Up/Down arrow to scroll through the graph.

Chemistry (Water Balance)

To view the current water balance, tap Water Balance on the Chemistry Summary dialog box. The Water Balance Settings screen is displayed.

Water Balance Summary

The Water Balance Setting screen displays the current water balance and salt levels. The Calcium Hardness, Alkalinity and Cyanuric Acid values can also be adjusted based on manual water tests to allow the water balance number to be calculated. **Note:** A Saturation Index value of 0 indicates the water is chemically in balance. If the Index is a minus (-) value, corrosive tendencies are indicated. If the Index is a plus (+) value, scale-forming tendencies are indicated. A Saturation Index value between +0.5 to -0.5 is considered satisfactory in a swimming pool.



Water Bala	nce Settings	5	Water Ba	lance Settings	5
Saturation Index			Salt Level	- 3200 +	
+U.UZ Ideal			Calcium Hardness	- 490 +	
Salt Level	- 3200 +	•	Alkalinity	- 60 +	
Calcium Hardness	- 490 +	.Т.	Cyanuric Acid	- 18 +	Т
Alkalinity	- 60 +	\downarrow			\downarrow

Recommended Pool Chemistry:

pH: 7.2 - 7.8 (use Muriatic acid to lower pH and Soda Ash to raise pH)
Combined Chlorine (Chloramines): None (super chlorinate to remove all chloramines)
Chlorine: 1.0 - 3.0 ppm
Cyanuric Acid: 30 - 50 ppm
Total Alkalinity: 80 - 120 ppm
Calcium Hardness: 200 - 400 ppm
Salt: 3000 - 4500 ppm (ideal 3400 ppm)
Metals: (Copper, Iron, Manganese): None
Nitrates: None
Phosphates: Less than 125 ppb
Total Dissolved Solids: below 5000 ppm

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Chemistry (IntelliChlor® Salt Chlorine Generator)

To view the (IntelliChem) Chemistry Summary screen tap the Chemistry icon on the Home screen. Tap the Up arrow on the screen to display the next page (Page 2 of 2) to view the Pool Output and Spa Output chlorine percentage values for the IntelliChlor SCG. Note: To install an IntelliChlor SCG, see Advanced System configuration > Installation Setup > Chemistry, on page 78. See IntelliChlor Salt Chlorine Generator (Page 2 of 2).



Chlorinator			
Status	Settings		
Body 1 (%)	- 20 +		
Body 2 (%)	- 40 +		
Body 3 (%)	- 40 +		
Body 4 (%)	- 20 +		



ORP			
ORP Settings Chlorinator			
- 20 +	?		
- 40 +			
- 40 +			
- 20 +			
	Chlorinator - 20 + - 40 + - 40 + - 20 +		

Tap **Settings** to display the Chlorinator Settings. Select the Body of water using an IntelliChlor SCG.

Pool Output: Displays the pool chlorination output level from 0 to 100%. Tap the left or right arrow to increase or decrease the pool chlorination output level.

Spa Output: Displays the spa chlorination output level from 0 to 100%. Tap the left or right arrow to increase or decrease the spa chlorination output level.

Salt Level: Displays how much salt parts per million is in the water. The color (Green, Orange or Red) of the status bar indicates the condition of the water. Corresponding information is displayed under the status bar.

Status

The Status screen displays the current system status, warnings and alerts. The Status feature is **OFF** by default. If set to ON, system warnings and alerts will be reported and logged and indicated by a Red number badge displayed on the Status icon located on the Home screen. *General* status conditions will not be reported or logged. The system water and air sensors are constantly monitored for errors. If a sensor error is detected, the displayed error is listed as shown below. To view the Status screen, tap the Status on the Home screen. See Settings > Alerts and Notification for Alerts show in Status (on Home Screen), page 45.

The Status screen displays the current status delays and alerts for the system. If a system error occurs, a Red number badge is displayed on the Status icon located on the Home screen. You can cancel delays that were configured for the pool cleaner or pump.

Note: See Settings > Advanced System Configuration > Import/Export to export status logs to a USB device. See page 89.



Status	6	High Reading	6
Air Sensor Sensor Error	<u> </u>	Increase filter time and increase	
Pump1 Communication Lost		dose size. This may be the result of the IntelliChem pH Sensitivity	
IntelliChem Check pH Tank		setting. If the sensitivity is set to "Low", you may not have a	
Pump3 Heater Cool-Down Delay		sufficiently sized dose to reach the setpoint. Try turning Sensitivity to	
IntelliChem 1 pH Low		"High" or "Off".	

Status



	Sensor Error Log	5
×	Equipment: Air Sensor Error: Sensor Error Events: 2 Instances: 05/12/2013 10:11 AM 03/10/2013 09:00 PM	

Selecting which Error conditions to display

From this screen you can select which circuits to report equipment status, warning and alert message. The Red number badge on the Home screen indicates how many error conditions have occurred.

Warning and Alerts Indicators

Red X: Indicates a warning condition such as a low voltage conditions, system power loss etc. Warning messages are automatically logged for viewing.

Orange!: Indicates a system caution alert, such as a chemical feeding error or pump communication lost. Alert messages are automatically logged for viewing.

Blue!: Indicates a system status condition, such as a heater cooldown delay. Status messages are not automatically logged unless selected from the Status Selection screen.

Settings

Access the Settings options to configure and setup the IntelliCenter[™] Control System. See *Settings > Advanced System Configuration > Installation Setup, see page 52.*

Settings	6	Settings	6
Service Mode		Alerts and Notifications	
Vacation Mode	0	Security	•
Support		Pentair User Portal	1
🔅 General		Groups	_ '
Alerts and Notifications	\checkmark	System Reboot	\downarrow

Settings Summary:

Service Mode: Auto, Service, Timer. For maintenance or service purposes. **See page 37.**

Vacation Mode: Setup vacation schedule (weekly or one time only), and duration (start and stop date). **See page 38.**

Support: Pool service, support contact information is saved here. Add contact phone number, Email, URL information. **See page 39.**

General: Touchscreen, Location, Date and Time, Units, Features and Lights List Order, Backlight, Temperature Sensor Calibration, Day / Night Themes, Manual Operation Priority, Chemistry Readings Badge. **See page 40.**

Alerts and Notifications: Setup alerts/warnings and pool/spa equipment status information to display (Green Badge) and specific status information in the Home screen Status screen. **See page 45.**

Security: Enable passcode protection for the IntelliCenter™ Control System. Setup system Administrator and Guest passcode. See page 45.

Pentair User Portal: Login or Create New Account (enter contacts email address, property name, password). The system will attempt to connect to the account email address (via the Internet). **See page 47.**

Groups: Add LIGHTS and CIRCUITS Groups of circuits for one touch button On/OFF control. Group circuits are displayed in Features, Lights screens on the Home screen. **See page 48.**

System Reboot: Tap System Reboot to restart the system (Outdoor, Indoor Control Panel and Wireless Remote). To cancel system reboot, tap Cancel before 4 seconds. **See page 51**.

Advanced System Configuration Options: Go to Settings > Advanced System Configuration, **see page 52**.

35

36

Settings

Advanced System Configuration Options: To access the Advanced System Configuration options, go to Settings > Advanced System Configuration, page 52.



Advanced System Configuration Options Summary:

Installation Setup: Configure the IntelliCenter[™] Control System system. Body Configuration (page 53). Circuits (page 56), Pumps (page 62), Heaters (see page 72), Valves (page 76), Chemistry (page 78).

Remotes Setup: Add Spa-Side Remote: Select Spa Command, iS4, iS10, or QuickTouch Spa-Side Remote. See page 80.

Network and WiFi Setup: Configure Ethernet, Connect to a Wireless Network (SSID), Adjust Wireless Transmit Power, Internet Connection, and Reboot WiFi Device. See page 84.

IntelliCenter Wireless Remote Setup: Set up the wireless remote. See page 86.

Delay Settings: Valve Delay ON/OFF, Heater Cool Down ON/OFF, Freeze Cycle Time (min), Spa Freeze Override (min) and Override Delays. See page 87.

System: System Information, Detected Hardware, Firmware update. See page 88.

Import / Export: Import System Configuration, Export System Configuration, Export Status Logs. See page 89.

Restore Factory Defaults: Overwrite the current system configuration with the default factory settings. Follow the screen prompts. See page 91.

Setup Wizard: Configure the system using the step-by-step setup wizard assistant. See page 94.

Service Mode





Tap Manual Circuit Control and choose the circuits to enable. *Note: Circuits selected in the Service Manual Circuit Control screen are retained in the Timer Manual Circuit Control screen.* Service Mode: Service and Timer mode is used for pool/spa maintenance or service purposes to manually control and test system equipment. During Service mode, the Outdoor Panel, Indoor Control Panel and Wireless Remote Home screen will display SERVICE MODE. All system auxiliary circuits will be disabled once Service or Timer is selected. When AUTO is selected, normal operation will resume and the system will not be in service mode.

Note: If the panel is passcode protected, enter the four digit assigned passcode, see page 45 for details.

Auto: When Auto is selected it indicates that the system is operating normally and not in Service or Timer mode.

Service: When Service is selected, all system auxiliary circuits will turn OFF. To enable auxiliary circuits select Manual Circuit Control and choose the system auxiliary circuits to turn on/off.

Manual Circuit Control: Choose the auxiliary circuits to allow manual control for shared equipment or dual equipment). Tap the circuit name to turn the circuit on/off. Note: For shared equipment, only one valve can be activated at a time.

Timer: Use the Timer mode to leave the system in service mode up to 24 hours and automatically return to Auto mode (normal system operation) after the maximum hours set has elapsed. Set the count-down timer from 1 to 24 hours for selected circuits to remain in service mode.

Vacation Mode

If you are planning a vacation and want to create a pump/filter daily schedule while on vacation, you can setup a start and stop date to run a daily pool/spa filter schedule. When you return from vacation the system will continue with the previous non-vacation mode schedule.

 $(\mathbf{2})$



Vaction Mode Schedules	
🛨 Add Program	
Pool 8:00pm-5:00pm Weekdays: M Tu W Th F	Î
	?



Vacation Mode: ON: Turn on Vacation Mode (manually enabled, no end date and time). OFF: Turn off Vacation Mode. Note: Previous vacation schedules will remain in memory and can be enabled again for future use.

Schedules: Set up a Weekly or One Time Only schedule for the duration of the vacation time. See Schedules on page 20. Note: To indicate the system is in Vacation Mode, the Schedule icon displayed on the Home screen is temporally replaced with the Vacation icon. Tap Vacation to see the current vacation schedules. **See Home Screen on page 8.**

Duration: ON: Set Start & Stop date for duration of schedule(s). **OFF:** Duration for vacation schedules is disabled (no Start & Stop date has been established).

Vacation Start Date: Set the vacation start month, day and year. The number days before the vacation start date are shown on the screen.

Vacation Stop Date: Set the vacation end month, day and year. The number days before the vacation stop date are shown on the screen.

61 days to stop Vacation

Support

The Support screen displays customer support contact information. Enter the pool service company contact information and the pool sales contact information. Also, you can upload a scanned image of a company business card or a company logo to display with the contact information.





Support screen: Displays contact name and Phone Number. Tap the Contact Name to display name, phone, Email and URL information.

Tap + to add a contact. Delete a Contact: Tap the Trash Bin, tap the contact to delete, then tap Check and Yes to delete contact.

Support screen: Displays contact name, phone, Email and URL information.

To Add a Contact: Tap + on the Support screen to Enter Contact Name. Tap **Checkmark** to save contact name or X to exit without saving the information.

To edit contact information: Tap the contact name on the Support screen. Tap Edit to access the contact information. Edit the Name, Phone, E-mail and URL information. Tap the Return to return to the Support screen.

Import Logo: To load an image (JPG, GIF and PNG), insert USB device into USB port on IntelliCenter[™] Control System Outdoor Control Panel, Indoor Control Panel, or Wireless Remote and Tap **OK**. Follow the screen instructions. 40

General

Location - page 41 Date & Time - page 41 Units - page 41 Features and Lights List Order - page 41 Backlight - page 42 Temperature Sensor Calibration - page 43

Location (General)

Location		5
Zip Code	Brooklyn, NY	
11220	United States	6
Latitude	40.049	U
Y Coordinate	40.64*	
Longitude	74.02°	
Y Coordinate	-74.02	
Time Zone	LITC-5	
Eastern Time (US & Canada)	010-5	

Note: If you do not enter a Zip Code, you have to manually enter the Longitude/ Latitude coordinates for your location.

General		6
Units	English	
Features and Lights Order	Most Recent	?
Backlight		•
Touchscreen		1
Temperature Sensor Calibration	on	\downarrow

Date & Time (General)



Day / Night Themes - page 44 Manual Operation Priority - page 44 Manual Heat - page 44 Chemistry Readings Badge - page 44 Show Badge Colors - page 44

Location: The US Zip code, Latitude, and Longitude coordinates and Time Zone information will automatically populate via a Broadband Internet connection. You can also enter the information manually.

To enter information manually, tap the Location then Zip Code to enter your Zip code for your location. Tap Check to save. The US Zip code information will automatically populate the Latitude and Longitude coordinates and Time Zone via a Broadband Internet connection.

Time Zone (UTC): Use the - and + button to set your time zone if no Internet connect is available. UTC-05:00 (Brooklyn New York) is a time offset that subtracts five hours from Coordinated Universal Time (UTC). In North America, it is observed in the Eastern Time Zone during standard time, and in the Central Time Zone during the other eight months (see Daylight saving time). The western Caribbean uses it year round. *Note: Time and date synchronization for all systems may take a few minutes.*

Date & Time: The displayed date and time on the General screen is synchronized with the Internet connection time. If needed. Tap Date & Time to manually change the IntelliCenter System Control System clocks, including the Outdoor, Indoor, and Wireless Remotes. If the PC time and date do not match the time and date displayed on the Home screen, you need to reset the PC time and date to the time and date set in the Date and Time IntelliCenter™ Control System screens.

Date & Time (Continued) (General)

Date & Time			5
Mode		Manual	
Clock Mode	12h		?
Daylight Savings	ON		^
Time Set	11:	49p	
Date Set	Jan. 1	2, 2018	\downarrow

Mode: Manual: Date and time is manually entered. **Internet:** Date and time retrieved from the Internet.

Time Set: Manually set IntelliCenter system controller time, am/pm. If the system is connected to the Internet, resetting the system date will override the Internet time.

Date Set: Manually set IntelliCenter system controller date. If the system is connected to the Internet, resetting the system date will override the Internet date.

OffSet (min/month): Sets the month offset from 0 to 120 (e.g. leap years).

Clock Mode: Select either 12-hour am-pm clock, or 24-hour military time (e.g 12:00 midnight is 24:00 hours)

Daylight Savings: Set to ON will adjust the time automatically for the region you are located in. Offset (min/month): Sets the month offset from 0 to 120 (e.g. leap years).

Units (General)



Units: Sets the system units of measure to English or Metric. Set values to display English US Standard Units: GPM, Fahrenheit (F) degrees, Fl, oz) or Metric International Standard Units: L/min, Celsius (C) degrees, ml.

Features & Lights Order (General)

Use this feature to define the order of the circuits displayed on the Features and Lights screens. For example, the order of the named circuits can be displayed alphabetically (up and down) or left to right.



List Order (User Define): Tap List Order and select the list order: Alphabetically (Default): Sort in ascending name order. Most Recent: Sorted in descending from most recently used. Most Frequent: Sorted in descending from most frequently used. Custom Order: User defined order.

Grid Display: Select Left to Right (Default) or Top to Bottom.

Set Grid Flow: Select Left to Right or Top to Bottom.

Reset: Tap Clear Order Lists to reset the List order and Grid Display to default settings.

Backlight (General)



Back Light: Brightness Level: Adjust the screen brightness level from 33 to 100%.

Dimness Level: Adjust the contrast level from 10 to 100%.

Dim Display (min): While in other screens, sets the time to return to the Home screen (from 0 to 240 minutes (20 hrs).

Turn Off Display (min): Set the time to turn off the screen from 0 to 240 minutes (20 hrs). Note: The time set to turn off the screen also affects the start time of the Deep Sleep feature, see below for more information. *Also see* Day/Night Theme Selection Settings > Advanced System Configuration > General > Day/Night Theme, page 44.

Wireless Remote only:

Battery Conservation Mode (Deep Sleep): Tap Deep Sleep Mode to turn on this feature. The default setting is ON. This feature allows you to save the battery life while the Wireless Remote is in its cradle.

Deep Sleep (Hr): Deep Sleep time can be set from 1 to 3 hours (Default 3 hrs.). Select when you want the device to go to sleep to conserve battery life.



Example: While device is of its cradle: Go to Settings > General> Backlight. Tap On to turn on Deep Sleep. The default setting is (ON). The Deep Sleep time is set for three hours. The device will go in to Deep Sleep after the screen goes black which will start **after** current time set in the **Turn Off Display** feature. The device is now in save battery mode. The device is still responsive up to an hour, so you can still use the device. This will stop Deep Sleep mode, then the Backlight settings are in effect.

General List Order

Any screen where there is a list can be displayed alphabetically or based on the system definition (default).

	General List Order	6
0	Alphabetically Sorted in ascending order	
•	System Sorted based on System index	

General List Order: Lists order of installed equipment: Define the general list order based on Alphabetically (sorted in ascending order or System sorted on system index.

Select List Order: Sort Alphabetically, Most Recent, Most Frequent or Custom Order. **Temperature Sensor Calibration:** List the installed IntelliCenter[™] Control System sensors (ambient air, pool and solar (if installed). The current sensor temperature is displayed. Tap sensor name bar to access Sensor Calibration screen.

Sensor Calibration: Adjust the sensor temperature value. Use Up/Down arrow to Increase or decrease temperature value compared to actual reading. Tap Check mark to save setting. Tap X to exit without saving setting.

Temperature Sensor Calibration		6
Water Sensor	75° F	
Solar Sensor	89° F	?
Air Sensor	72° F	

Temperature Sensor Calibration Procedure: Before you start, you need an accurate all weather thermometer. Calibrate the air sensor in the shade. The Home screen displays the Pool, Spa Water Temp and Air Temp setting. Calibrate the Spa and Pool temperatures the same way as described below for Water and Air temperature sensor. Be sure the air temperature sensor is located in the shade for accurate readings. To calibrate the air, pool and spa sensors:

- 1. First, tap the Pool or Spa button on the Temperature Sensor Calibration screen to switch on the spa or pool filter pump.
- 2. Tap Pool Sensor to start the pool calibration.
- 3. Place the thermometer in the spa or pool. Take an accurate temperature reading. When calibrating the air sensor, place the thermometer next to the air sensor. The sensor is normally located near or under the Load Center or Power Center enclosure, not inside the enclosure. Take an accurate temperature reading in the shade.
- 4. On the Calibrate Sensors screen, use the Up or Down buttons to raise or lower the Air, Pool and Spa temperature to match the corresponding thermometer temperature reading.
- 5. Press the OK Calibration button when done.

Day / Night Theme Selection (General)



Day/Night Theme Selection:

Select either Day or Night screen contrast levels.

Day: In Day mode the LCD screen uses a white background for normal day light viewing.

Night: Select Night mode for low light conditions. This mode uses a black back ground with white text.

Transition Type:

Manual: Allows you to manually select either Day or Night Theme modes.

Auto: This option will automatically transition between Day and Night screen mode based on the IntelliCenter™ Control System 24 hour clock.

Manual Operation Priority (General)

Manual OP Priority: ON: This feature allows for a circuit to be manually switched OFF and switched ON within a scheduled program, the circuit will continue to run for a maximum of 12 hours or whatever that circuit Egg Timer is set to (see page 56), after which the scheduled program will resume. This feature will turn off any scheduled program to allow manual pump override. **The Default setting is OFF.**

Manual Heat (General)

Manual Heat: ON (Default OFF): If a GAS heater is configured for the Spa, but the Heat Source is set to OFF in the Spa screen, enabling this option will result in the heater being temporarily enabled whenever the body is manually turned on. For more information, see 9 and 12.

Show/Hide Chemistry Readings Badges (General)

Show Chemistry Readings Badges (ON/OFF): Change this setting to ON or OFF to show or hide the pH and OPR readings badge (if an IntelliChem Controller is being used). **The Default setting is OFF.**

Show Badge Colors (ON/OFF) (General)

Badge Colors (ON/OFF): Change this setting to ON or OFF to show or hide the Pool and Spa color badges (Yellow (Delays), Blue (manual enabled filter pump circuits). **The Default setting is ON.** The badges are displayed on the Home screen Pool and Spa icons.

Alerts & Warnings Shown in Status (Settings)

Alerts & Warnin	gs Shown in Status	•
Circuits	2/2	
Pumps	5/8	
Hybrid Heater	1/22	
IntelliChlor	Configure	
IntelliChem	1/17	

Alerts & Warnings Shown in Status:

Displays a Badge icon on the Status Home screen icon for selected items show on this screen. *See page 33.*

Configure...: Tap on the **Configure...** option to display the selectable items for the displayed options. From the Select Shown in Status screen, tap on items or Select ALL items to shown on the Home screen Status icon.

If Configure is displayed on the option button, it indicates Alerts & Warnings Status Badge will not be displayed.

Circuits (2/2): Select 2 status conditions: Valves delay and heater cool down. **Pumps (8/8):** Select up to 8 common pump and filter warnings and alarms. **Hybrid Heater (22/22):** Select 22 status conditions: Air flow switch, temperature status, condensate filter, freeze and more.

Chemistry IntelliChlor (5/5): Select up to five common IntelliChlor SCG warnings and alarms.

Chemistry IntelliChem(17/17): Select up to 17 common IntelliChem Controller related warnings, errors, alarms and more.

Security (Settings)



Enable Security (ON): (Only the Administrator can access this screen):

Tap Administrator then tap **ON** to Enable Security. Enter a Passcode for the Administrator. To log out the Administrator, tap Administrator and Yes.

Administrator Security Settings		6
Log Out Administrator	Yes	
Enable Security	ON	?
Enable Guest	ON	
Passcode	***	
Timeout (min)	- 5 +	

Log Out Administrator (Yes - No Passcode required): Tap Log Out Administrator to log out of the system and return to the Home screen. Enable Administrator Security (ON/OFF): Tap ON to Enable Administrator Security. Tap OFF to disable Administrator Security (no Administrator or Guest passcode required to access the system).

Enable Guest: ON: The Administrator assigns a **Guest** access to the system without a passcode. From the Security screen, tap **Guest**, then tap **Can Access** and select the system Sections that the Guest has access to.

Passcode (**):** Displays the current Administrator 4-digit passcode (4 asterisks shown to omit the assigned Passcode). Tap the Passcode button to change the Passcode.

Timeout (min): Tap the **plus or minus** button to set the screen elapse time (1-10 minutes) before a screen message is displayed for the passcode. *Note: A padlock icon displayed on the Home screen (top right) indicates there is an Administrator logged in (passcode assigned to the system).*

Security (Settings)

Security		6
+ Add New User		
Administrator - Logged i	in 24/24 Sect	
Guest	8 /24 Sections	2
GCH Guest	2 /24 Sections	
Joe NS Bloggs	24/24 Sections	
USER Security Settings		
Name	Joe Bloggs	ت
Can Access	10/24 Sections	?
Passcode	***	
Timeout (min)	- 5 +	

Guest User has Access to these Checked Screens		
Select All	Deselect All	\checkmark
Vacation Mode	Support	×
General Setings	Alerts&Notification	^
🗹 User Portal	Groups	
Remotes	Advanced Settings	\downarrow

Security: This screen shows the Administrator is logged in, and lists Guests assigned by the Administrator and their allowable system Sections. 0/24 Sections indicates no access to the system.

Administrator Log out: Tap Administrator to enable or disable the system security. To log out the Administrator, tap Yes.

User List: Tap a name to display the User Security Settings screen: Change the user name, passcode, access to sections and timeout setting.

Add New User (Admin must be logged in): Tap Add New User, enter the new user's name. Select up to 24 sections that the user has access to. Up to 10 users can be assigned access to the sections. Tap Check to save the name and return to the previous screen. Note: Tap Guest to access the Guest Security Settings screen to allow the Guest to access 0 to 24 system settings.

Note: A Guest account does not require a passcode.

Delete Guests: Tap the Trash can icon and select the Guest(s) to delete from the Security screen.

Can Access: Tap this button and select the system sections that the guest has access to.

Select All: Tap Select All to select all of the system functions listed, or select individual selections. Tap Check to save selections. Tap X to exit without saving changes.

Deselect All: Tap Deselect to deselect all of the system functions selections in the list.



Passcode (****): Displays the current 4-digit Guest passcode (4 asterisks shown to omit the assigned Passcode). Tap the Passcode button to change the Passcode. Timeout (min): Tap plus or minus button to set the screen elapse time (1-10 minutes) before a screen message is displayed for the passcode.

Note: A padlock icon displayed on the Home screen (top right) indicates there is an Administrator logged in (passcode assigned to the system).

Note: If the incorrect Passcode is entered multiple times, the Access Denied screen is displayed. This screen will time out for 60 seconds. After 60 seconds has elapsed, tap OK to enter the correct Passcode.

Pentair User Portal (www.intellicenter.com) (Settings)

Pentair User Portal	6
Enable Web & Mobile Interface	
Add New Account	?
Login to Existing Account	
Update Owner Information	
View Connection Information	



Web and Mobile Interface:

Tap to access the Web and Mobile Interface screen. The default setting for Web Interface is ON. This enables the Web App and Mobile Interface which allows local network and Internet communications to your home network. To disable Web based and mobile interface, set to OFF. *Note To test the Internet connection see* page 84.

Note: For the IntelliCenter[™] Control System to connect to the Web requires connection of the Wireless Bridge Transceiver Antenna to the Outdoor main circuit board. For installation instructions, see the IntelliCenter Control System Installation Guide (P/N 522989).

Add New Account: Enter the owner's information, Email Address, Property Name, Password. The system will attempt to connect to the owner's account Email address (via the Internet) to www.**intellicenter.com**.

Connecting to your pool using the Web App: Go to www.intellicenter.com and sign in using the pool owner's user email address. Select your pool listed on the Installations screen to display the Home screen.

Login to Existing Account (www.intellicenter.com): Enter email address and password. The system will attempt to connect to the owner's account Email address via the Internet connection.

Update Owner Information: Edit owner information: Property Name, Name of Owner, Address, City, State, Zip Code, County, Time Zone, Phone number, Email. Location information is populated when entered in General > Location, Date & Time. **See page 40.**

View Connection Information: View server connection information: Last messages received, total number of server connects.

Groups (Lights/Circuits) (Settings)

The Groups feature allows multiple Light circuits and AUX circuits to be grouped together and assigned to one ON/OFF button that is displayed on the Home screen Lights Groups screen. Up to 40 groups of light circuits and AUX circuits can be assigned. Go to Settings > Groups to add a group of circuits. Note: A group of Light Circuits or AUX Circuits can be switched ON/OFF from one button in the Features/Groups screen, and the Lights/Groups screen.



	AUX Circuits	6
Spa Function: Spa	Spa	0
AUX 1 Function: IntelliBrite	Pool Light	••
AUX 2 Function: IntelliFlo	Pool Pump	••
Waterfall Function: Generic	Booster Pump	
AUX 5 Function: Generic	AUX 5	\downarrow

AUX Circuits Screen

Group Type Light Group Circuit Group ()

+Add Group (Lights or Circuits): Tap Add Group, and select either a Light Group or Circuits Group. Light or Circuits (Group Settings): Group Name: Tap the name button to access the keyboard. Enter a name for the group of lights or circuits. Included Lights or Circuits: Tap the Included Lights (or Circuits) button to access the available circuits. The circuits displayed depend on the model of the Personality Card installed. Light circuits (AUX circuits) are assigned in the AUX circuits screen.

Egg Timer: Tap the Egg Timer button to display the Hours and Minutes button. Tap the Hours and Minutes button to select a manual time-out from 0 to 23 hrs. 59 mins. for the circuit. The Egg Time is a specified time delay (hrs/ mins) for the circuit, once it is turned on manually.

Don't Stop: Tap the Hours button until 23 hours is displayed, then tap the button again to display **Do Not Stop**. The Do Not Stop feature will continuously run the circuit until the it is manually turned off.

From the AUX Circuits (4 Dots Icon), you can also create a group of light circuits and AUX Circuits. Go to Advanced System Configuration > Installation Setup > Circuits > AUX Circuit (page 56) and Feature Circuits (page 58).

Groups (Lights/Circuits) (Settings)

Groups

🛨 Add Group

Night Group

Light Group

Pool Party

Circuit Group

Use the Light Groups feature to group multiple light circuits together and assign them to one ON/OFF button on the Home screen Features Groups screen. Groups of circuits are displayed on the Lights screen (page 14), and Lights Groups (page 16).

+Add Group (Lights): Tap Add Group, and select Lights Group, and enter a name for the light group. Tap Check to save the Group name and continue to the Lights Group Settings screen. Tap the group name from the Groups list.

5

m

?

4 Circuits

4 Circuits

Deck Lights 5 Light(s) Light Group WaterFall Lights $\mathbf{1}$ 5 Lights Light Group Group Type X Light Group 0 **Circuit Group**

Note: A group of light circuits or AUX circuits can be turned ON/OFF from one button in the Features (Circuits). Lights (circuits) screen on the Home screen. See page 14.

Egg Timer: Tap the Egg Timer button to display the Hours and Minutes button.

Tap the Hours and Minutes button to select a manual time-out from 0 to 23 hrs. 59 mins. for the circuit. The Egg Time is a specified time delay (hrs/mins) for the circuit. once it is turned on.

Dont Stop: Tap the Hours button until 23 hours is displayed, then tap the button again to display **Do Not Stop**. The Do Not Stop feature will continuously run the circuit until the it is manually turned off.

Delete Groups: Tap the Trash icon; check the desired Groups to delete. Tap Yes to delete. Nested Groups: If necessary, it is

possible to create a Group of circuits within another Group of circuits, as long as they are from the same group of Lights, and AUX Circuits.

Included Lights: Tap the Included Lights button to access the available light AUX circuits. The displayed light circuits depend on the model of the Personality Card installed. AUX circuits are assigned in the AUX circuits screen. For more information. see, Advanced System Configuration > Installation Setup > Circuits > AUX Circuit - OCP 0 or Feature Circuits, see page 56.







Groups (Lights) (Settings) Continued



Color Settings: Tap this button to display the assigned light circuits and the current delay time and selected light color.

Note: The Color Swim Settings effect feature synchronizes any IntelliBrite® or Landscape color lights. The color swim effect starts from the first light, then the color change is delayed across to the adjacent lights creating a wave delay effect. For more information about light features, see Circuit Function in Advanced System configuration > Installation Setup > AUX Circuits > AUX Settings (Circuit Function). See page 56.

Select Circuit to Edit: Tap any of the the light names displayed to change the current light color and delay time (from 0 to 60 seconds). Color options are: White, Light Green Green, Cyan, Blue, Lavender, Magenta and Light Magenta.

Color Name: The name of the light is assigned in the circuits screen. See **See page 56.**

Color: Tap the Color button to display the Select Swim Color screen. Select a different color for the light from the list.

Delays(s): Tap the - /+ button to set the delay for the light from 0 to 60 seconds.

Groups (Feature Circuits (Generic or Spillway) (Settings)

Delete Circuits: Tap Feature Circuits, tap the Trash icon, select the circuit(s) to delete, then tap X to delete the circuit(s) and exit to the previous screen.

Feature Circuits Overview

Up to 32 individual Feature Circuits can be configured to combine various circuits together to a single ON/OFF button so that they can be turned on or off at one time. For example, you could create a Feature Circuit that would turn on the spa, spa light, fountain, and fountain light, and patio lights all from one button in the Feature screen (Home screen). Feature Circuits can be setup to control equipment which is not controlled by an AUX circuit such as pumps and lights. Use Feature Circuits to control multiple valve actuators, a dual speed pump (turn on high speed), or a spa spillway effect (in a pool spa combination, all of the pool water can be diverted to the spa then spill back into the pool). To create a Feature Circuit, first assign the Feature Circuit a name, then assign the circuit a function (Circuit Function).

Restore Factory Defaults: Use this feature to overwrite the system configuration with the default factory settings. Follow the screen prompts.

Guest Security Settings: Displays the guest user(s) that have been assigned a passcode and access to system sections (0 to 24).

Tap 0 /24 Selections to access the next screen to allow the Guest to access 0 to 24 system settings.

System Reboot (Settings)

Tap the System Reboot button to reset the system (applies to Outdoor, Indoor Control Panels and Wireless Remotes. Immediately after tapping System Reboot a message screen is displayed to confirm that you wish to reset the system. If you want to stop the system reset, there is a five second delay in which you can cancel the system reset. Tap cancel to stop the system reset.

This feature has the same system reset function using the Reset Button on the Wireless Remote cradle, and on the front of the Indoor or Outdoor Control Panel. See page 35.

51

Advanced System Configuration (Settings)

Notice: The Advanced System Configuration settings may affect the systems pool and spa operations. Before making changes be sure you have the latest system settings backed up to a memory stick, see Settings > Advanced System Configuration > System. See page 88 for details.



Advanced System Configuration Options Summary:

Installation Setup: Configure the IntelliCenter[™] Control System system. Body Configuration (page 53). Circuits (page 56), Pumps (page 62), Heaters (page 72), Valves (page 76), Chemistry (page 78).

Remotes Setup: Add Spa-Side Remote: Select Spa Command, iS4, iS10, or QuickTouch Spa-Side Remote. See page 80.

Network and WiFi Setup: Configure wireless network (SSID, Ethernet). IntelliCenter Wireless Remote Setup: Configure Ethernet, Connect to a Wireless Network (SSID), Test Internet Connection and Reboot WiFi Device. See page 84.

IntelliCenter Wireless Remote Setup: Set up the wireless remote. See page 86.

Delays: Valve delay settings, Heater Cool Down ON/OFF, Freeze cycle time (min), Spa Freeze override (mins) settings. See page 87.

System: System Information, Detected Hardware, Firmware update. See page 88.

Import / Export: Import System Configuration, Export System Configuration, Export Status Logs, Export Historical Data, Export Debug Data. See page 89.

Restore Factory Defaults: Overwrite the current system configuration with the default factory settings. Follow the screen prompts. See page 91.

Setup Wizard: Configure the system using the step-by-step setup wizard assistant. See page **92**.

Advanced System Configuration (Installation Setup)

Installation Setup: From the Installation Setup screen you can setup pool/spa equipment for the each body of water (pool/spa).



Circuits: Setup the system auxiliary circuits (AUX), **see page 56**.

Pumps: Setup circuits for pumps, **see** page 62.

Heaters: Setup circuits for heaters and heat source, **see page 72.**

Valves: Setup circuits for system valves, **see page 76**.

Chemistry: Enable IntelliChem[®] Controller and/or IntelliChlor[®] SCG, **see page 78**.

Pool Cover: Setup Pool Cover circuit settings, **see page 79**.

Body Configuration: Configure the IntelliCenter[™] Control System Personality Cards, (Main Panel (OCP0), Expansion enclosures 1, 2, and 3), and the body of water capacity for the pool and spa.

Body Config	guration	6
Master Panel	ОСРО	
→ Pool	Body	
₩ Spa	Body	L 🛧
Expansion 1 (disabled)	XCP0	
Expansion 2 (disabled)	XCp1	\downarrow



Master Panel (Panel Identification)

(OCP 0): Tap Master Panel to display the Panel Identification screen.

Expansion 1, 2, and 3 (see page 55):

A maximum number of three expansion enclosures can be connected via RS-485 to the Master Panel (Main Control Board). See page 106 for more information about IntelliCenter Control Panel system configurations.

Panel Identification (Master Panel): Panel Name: Tap Panel Name and

enter the panel name for the main Master Panel. Tap Check to save.

Panel Assignment: Tap Panel Assignment to reassign circuits to another panel. Tap Check to save.

53

Advanced System Configuration (Installation Setup)



Panel Identification (Master Panel) (Continued)



Panel Assignment: Tap Yes to change the panel assignment.

Show Identifier in Other Panels: Tap to select other installed panel to display in other panel screen. Tap Check to save.

Change Panel Assignment: To change the panel assignment, tap on the panel name. Tap Check to save and return to the previous screen.

Pool (Body 0) - For Pool and Spa combination (shared equipment).



Pool (Body 0 Settings): From this screen you can reassign the body type/*, name and capacity.

Body Type: Reassign the body type. Choose either Pool or Spa. Tap Return to return to the previous screen. **Body Name:** Enter the body name. **Body capacity:** Enter the capacity of the body of water from 1000 - 150,000 gallons (US gallons/liters).



Spa (Body 1) - For Pool and Spa combination (shared equipment).

Spa (Body 1 Settings): From this screen you can reassign the body type, name and capacity.

Body Type: Reassign the body type. Choose either Pool or Spa. Tap Return to return to the previous screen. **Body Name:** Enter the body name. **Body capacity:** Enter the capacity of the body of water from 1000 - 40,000 gallons (US gallons/liters).

Installation [Body Configuration]





Expansion Panel Daughter Card	5
i5x (default)	0
i10x (requires i10x kit)	U

Expansion 1 (disabled) (XCP0): equipment).

Expansion 2 (disabled) (XCP0) : For Pool and Spa combination (shared equipment).

Expansion 3 (disabled) (XCP0) : For Pool and Spa combination (shared equipment).

Panel Identification (Expansion 1, 2, and 3): Panel Name: Tap Panel Name and enter the panel name for the Expansion 1 enclosure. Tap Check to save.

Panel Assignment: Tap Panel Assignment to Disable or Enable the Expansion Panel. Tap Check to save.

Expansion Panel Daughter card - i10x (10 Relays): This button displays the Daughter Card attached to the main Personality Card (if available) installed in Expansion enclosure number 1. Tap this button to enable an additional Daughter Card connected to the main Personality board (in this example i10x (10 Relays). Tap the Expansion Panel Daughter Card button to enable the card (Green light on).

See page 106 for more information about IntelliCenter™ Control Panel system configurations.

Circuits

AUX 2 Function: IntelliFlo

Function: Generic

AUX 5 Function: Generic

Waterfall



 $\mathbf{1}$

Pool Pump

AUX 5

Booster Pump

AUX Circuits: Tap the AUX Circuit (Function name) to assign a function to the circuit.

Create individual (AUX) Circuits or Group of Circuits (4 Dots Icon): Tap this icon on right side of the screen to create Groups of circuits. Note: For more about Groups (in Settings), see page 48.

See page 58 for Feature Settings.

Circuit Function: Assign the circuit function. For a complete list of Circuit Functions, **see page 60.**

Circuit Name: Select one of the displayed circuit names and tap Check to save. For a complete list of Circuit Names see page 61. To customize a circuit name, tap on the keyboard icon on the right side of the screen and enter the new name.

Visible in Features (Lights and Generic Circuits only): Select ON to display this circuit in the Home, Features screen, see page 8.

Freeze Protection: Assign freeze protection for this circuit. See page 59 for details.

AUX Circuits	P)	
Feature Circuits	P/V in	?
	AUX Circuits	5
Spa Function: Spa	Spa Spa	_
AUX 1 Function: IntelliBrite	ight	•••
A L IV 2		

F	Pool	6
Circuit Function	Pool	
Circuit Name	Pool Filter Pump	?
Visible in Features	Yes	
Egg Timer	12 hr 0 min.	
Freeze Protection	Yes	

Egg Timer: Tap the Egg Timer button to display the Hours and Minutes button. Tap the Hours and Minutes button to select a manual time-out from 0 to 23 hrs. 59 mins. for the circuit. The Egg Time is a specified time delay (hrs/mins) for the circuit, once it is turned on manually. **Don't Stop:** Tap the Hours button until 23 hours is displayed, then tap the button again to display **Do Not Stop**. The Do Not Stop feature will continuously run the circuit until the it is manually turned off.



Feature Circuits

Up to 32 individual Feature Circuits can be assigned as Generic circuits or Spillway (Pool/Spa) circuits. A Feature Circuit can be assigned to activate the Spa Spillway effect, where in a pool/spa combination, pool water is diverted to the spa then spilled back into the pool. Feature Circuits can be setup to control equipment which is not controlled by an AUX circuit such as pumps and lights.

Use Feature Circuits to control multiple valve actuators, a Dual Speed pump (turn on high speed), or a spa spillway effect (in a pool spa combination, all of the pool water can be diverted to the spa then spill back into the pool).

Home Screen Features Green Badge: Displays the number of active feature circuits. To display circuits in the Features screen, see Settings > Advanced System Configuration > Installation Setup > Circuits > Feature Circuits > Feature Circuit Settings (Visible in Features (Y/N) option).

Feature Circuits (Generic or Spillway): From the Home screen, tap Settings > Advanced System Configuration > Installation Setup > Circuits > Feature Circuits. See page 56 and previous page for details.



+ New Feature Circuit (Generic or Spillway): Tap New Feature Circuit to create a new Feature Circuit (up to 32 total). Select the Feature Circuit Name, from the displayed list or tap the Keyboard icon and enter a custom name.

Circuit Function: Tap **Generic** and select either **Generic** or **Spillway** for the circuit function. Tap Check to return to the previous screen.

Circuit Name: Displays the assigned circuit name. To change the circuit name, tap the name button.

Visible in Features: Select ON or OFF to display the Feature Circuit in the Feature screen (Home screen).

Egg Timer: Set time duration of 0 to 12 hours.

Don't Stop: Tap the Hours Up button until 23 Hours displays, tap once again to display **DO NOT STOP.** Once the circuit is switched on, it will remain on until it is switched off.

Note: The Egg Timer sets a specified time delay (hrs/mins) for the circuit to function once it is turned on. Freeze Protection: Assign freeze

protection for the circuit. See page 59. Create A Feature Circuit (Lights/Circuits): From Settings > Advanced System Configuration > Installation Setup > Circuits > Feature Circuits > Add Group (Four Dots Icon you can create a group of Lights or AUX auxiliary Circuits. These Groups of lights and auxiliary circuits are displayed in the Features > Groups screen. You can also create groups of auxiliary and light circuits in the GROUPS screen (see page 48), which will be displayed in the *Features > Groups* screen.

From the Feature Circuit screen you can create a group of circuits for Lights or Circuits (see page 56).For example, you could create a Feature Circuit assigned to one button to turn on your spa, spa light, fountain, fountain light, and patio lights. A Feature Circuit also has the capability to switch a circuit off. You could also create your own custom name, for example, SPA PARTY could be used if there was a spa fountain which should not be on when spa is on (because it could put cold water in the spa) it can be set up in the Feature Circuit to automatically switch off when Spa Party is switched on. A Feature Circuit can also be used to switch off any number of lights with one button.

Note: A Feature Circuit may not be assigned to light dimmers although they can turn on light dimming circuits.

Note: When setting up Feature Circuits, one Feature Circuit can turn on another Feature Circuit, which might result in the system turning on (or off) a circuit that you don't wish to turn on (or off).

C

AUX Circuits 5 Spa Function: Spa Spa 0 AUX 1 Pool Light AUX 2 Function: IntelliFlo Pool Pump 个 Group Type 5 Light Group 2 **Circuit Group** Light Group Settings 5 Group Name All Yard Lights 2 Included Lights 3 Ohr. Omin. Egg Timer **Color Settings**

Feature Circuits (Create a Group of Lights or Circuits)

(4 Dots Icon): Tap the 4 Dots icon on right side of the screen to display the Add Group screen. Note: For more about creating groups of circuits, see page Groups on page 48.

Select either the Light or Circuit Group. Enter a name form the group of lights or circuits.

Select Included Circuits: Tap Included Circuits (or Lights) and select the available AUX circuits and Features Circuits to be assigned to this group of circuits.

Color Settings (Delays): Adjust the AUX delay time (1-59 seconds) between lights.

Egg Timer: Tap the Egg Timer button to display the Hours and Minutes button. Tap the Hours and Minutes button to select a manual time-out from 0 to 23 hrs. 59 mins. for the circuit. The Egg Time is a specified time delay (hrs/mins) for the circuit, once it is turned on manually.

Don't Stop: Tap the Hours button until 23 hours is displayed, then tap the button again to display Do Not Stop. The Do Not Stop feature will continuously run the circuit until the it is manually turned off.



Feature Circuits

Feature Circuit: A total of 32 Feature Circuits can be assigned to Circuit and Light circuits. A Feature Circuit is assigned special logic to the circuit. can control equipment that is not controlled by AUX circuits. Typically, AUX circuits are used for high voltage equipment like pumps and lights. Feature Circuits are used for low voltage equipment like valve actuators and pump speeds or pump speeds.

For example, an automatic pool cleaner pump, would assign the circuit function *Master Cleaner*. With this cleaner logic the cleaner pump would not run without the filter pump being on first, and, the cleaner pump would automatically shut off whenever the spa is switched on. The cleaner will go on after the five minute delay. Also, the automatic cleaner pump will turn off when the spa and/or solar is turned on. Be careful not to duplicate circuit names with these circuits. A Feature Circuit can be assigned to switch a two-speed Filter Pump from high speed to low speed.

Note: Individual and group circuit buttons only display on the Home Lights screen.

Valve Actuators and Feature Circuits: Feature Circuits can be assigned to control up to five (5) valve actuators per load center. To control a total of eight (8) actuators requires the installation of the optional Valve Modules (see page 106) which includes six (6) additional actuators outputs (C, D, E, F, G, H) per panel enclosure. Note: When using solar heat, note that for shared equipment pool and spa combination, valve A is always used for solar. For dual body dual equipment, valve A is always the pool and valve B is always the spa.

Freeze Protection: Freeze Protection ON, switches on all circuits during, if the outdoor air temperature sensor detects the temperature is getting close to freezing (36°F). The system cycles through all circuits that have been assigned freeze protection, and runs the circuits to stop the pipes from freezing. This is especially important if there is a pool and spa combination. If freeze protection is set to both the spa and pool circuits, the filter pump switches on and the pool and spa valves alternate to keep the water moving in both the pool and spa. This process continues until the freeze condition is over.

Note: Freeze protection is activated when the air temperature drops to 36°F. If the spa is running a schedule or operated manually, this will override freeze protection. During freeze protection, FREEZE PROTECTION is displayed on the Home screen.

The main pool filter circulation pump is freeze protected as long as FREEZE PROTECTION is set to ON. For all other equipment, Freeze Protect must also be specified on the individual device manager screen. Some devices default to freeze protect.

Heater Operation During Freeze Protection: The heater will not activate during a Freeze Protection period unless it is manually turned on.

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Circuit Functions



Generic	No special Logic. Simple On/Off control of a circuit with all the programmable capabilities.
Spillway	For pool/spa combinations where the spa is raised above the pool. This setting moves the return valve so that the filter pump pulls the water from the pool and returns it to the spa, creating a water fall effect. Automatic pool cleaners are turned off when this feature is turned on.
Master Cleaner	 Works with automatic pool cleaner pumps or cleaner valve actuator. This feature will: Force the filter pump on five (5) minutes before the cleaner. Turn the cleaner off when the spa is on. Turn the cleaner off for five (5) minutes when the solar heating begins.
Chem Relay	Assign a dedicated relay for the IntelliChem Controller.
Light	Allows special lighting features to work, such as ALL lights on or ALL lights off.
IntelliBrite	Activates the colors of an IntelliBrite LED light.
GloBrite	Activates a GloBrite Color Light with IntelliBrite 5G LED capabilities.
GloBrite White	Activates a GloBrite White LED light with dimmer capabilities.
MagicStream (IntelliBrite)	Activates a MagicStream laminar water feature with IntelliBrite 5G LED capabilities.
Dimmer	Light with dimmer capabilities. Dimming relay must be installed.
Color Cascade	Activates a ColorCascade water feature with IntelliBrite 5G LED capabilities.
Master Cleaner 2	Works with automatic pool cleaner pumps or cleaner valve actuator. This feature will: - Force the filter pump on five (5) minutes before the cleaner. - Turn the cleaner off when the spa is on. - Turn the cleaner off for five (5) minutes when the solar heating begins.

Circuit Names

None AIR BLOWER AIR BI OWFR 1 **AIR BLOWER 2** AUX Extra **BACK LIGHT** BACKWASH **BBO LIGHT BEACH LIGHT BOOSTER PUMP** BUBBI FR CABANA LIGHT CAVE LIGHT CAVE WATERFALL CHEM. FEEDER CHLORINATOR CLEANER COLORCASCADE COLORWHEEL DECK JET DECK JETS DECK LIGHT DRIVE LIGHT EDGE PUMP ENTRY LIGHT FAN FILL LINE FIRE BOWL FIRE BOWLS **FIRE FEATURE 1 FIRE FEATURE 2 FIRE FEATURE 3** FLOOR CLEANER FOUNTAIN **FOUNTAIN 1** FOUNTAIN 2 FOUNTAIN 3 FOUNTAIN LIGHT FOUNTAINS FRONT LIGHT **GARDEN LIGHT** GAZEBO LIGHT HIGH SPEED HIGH TEMPERATURE **IN-FLOOR CLEANER** INFINITY EDGE JFTS

JETS HIGH JETS LOW JETS MEDIUM LAMINAR LIGHT LAMINARS LANDSCAPE LIGHT LIGHTS LOW SPEED I OW TEMPERATURE MAGICSTREAM BUBBLER MIST MUSIC NOT USED OZONATOR PATH LIGHTS PATIO LIGHT PERIMETER LIGHT POND LIGHT POOL POOL HIGH POOL LIGHT POOL LIGHT 1 POOL LIGHT 2 POOL LIGHT 3 POOL LIGHTS POOL LOW POOL PUMP POOL SAM POOL SAM 1 POOL SAM 2 POOL SAM 3 RAIN EFFECT SECURITY LIGHT SHEER DESCENT SLIDE SPA SPA HIGH SPA LIGHT SPA LOW SPA SAL SPA SAM SPA WATERFALL SPILLWAY SPRINKI FRS

STATUE LIGHT STREAM SWIM JETS ULTRAVIOLET UV WATER FEATURE WATER FEATURE 1 WATER FEATURE 2 WATER FEATURE 3 WATER FEATURE LIGHT WATER FEATURE LIGHT 1 WATER FEATURE LIGHT 2 WATER FEATURE LIGHT 3 WATERFALL WATERFALL 1 WATERFALL 2 WATERFALL 3 WATERFALL LIGHT WHIRLPOOL YARD LIGHT

Pumps (Single Speed, Dual Speed, IntelliFlo® VS, VSF, VF)



Single Speed Pump

+ Add Pump: To add a pump, tap + Add Pump to access the Select New Pump Type screen to setup the pump settings. Pump types are: Single Speed, Dual Speed, IntelliFlo VS, IntelliFlo VSF, and IntelliFlo VF.

Pumps (9 of 16)	5	Select New Pump Type	
+ Add Pump		Single Speed	,
Filter Pump 1 Type: Single Speed	Î	Dual Speed)
Filter Pump 2 Type: IntelliFlo VF	?	IntelliFlo VS	
Filter Pump 3 Type: IntelliFo VS	Τ	IntelliFlo VSF	
Filter Pump 4 Type: Two Speed	\checkmark	IntelliFlo VF	
Single Speed Pump Settings	5	Single Speed Pump Settings: From the	е
Pump Type Single Speed		Single Speed Pump Settings screen	
Pump Name Pool Pump	?	and assign the pump to a body of water	r
		(pool, spa, or pool/spa.	
Pump Circuit Pool		For information about priming the	
Pump Circuit Pool		For information about priming the pump, see page 70.	

Operating a Single Speed Filter Pump: To manually turn the filter pump on or off, tap the Pool Filter Pump button on the second Pool screen (on Home screen). If the heater is on and active, and Heater Cool down feature is enabled; when you tap Pool Filter Pump button to turn off the filter, only the heater will turn off and the pool filter pump will automatically turn off after 5 minutes of heater cool down period. You can override the heater cool down period by taping the button again to turn off the filter pump.

Pumps (Dual Speed)

+ Add Pump: To add a Dual Speed pump, tap + Add Pump to access the pump type screen and select Dual Speed.

Pumps (9 of 16)		5	Dual Speed Pump Settings		5
🛨 Add Pump 💡			Ритр Туре	Dual Speed	
Filter Pump 1 Type: Single Speed		Î	Pump Name	Pool Pump	?
Filter Pump 2 Type: IntelliFlo VF		?	Body	Pool	
Filter Pump 3 Type: IntelliFo VS		Τ	High Speed Circuits	2	
Filter Pump 4 Type: Two Speed		\downarrow			

Dual Speed Pump Settings: Pump Type, Pump Name, Body, and High/Low Speed Circuits. For information about priming the pump, see page 70.

Pump Type: To change the pump type, tap Pump Type button to access the pump type screen. Select the pump for the list. Tap Check to save the new pump type and return to the previous screen.

Pump Name: Tap the Pump Name button and enter the name of the pump. Tap Check to save the name and return to the previous screen.

Body: Assign the pump to a body of water (pool, spa, or pool/spa (shared equipment).

High Speed Circuits: Select a circuit for the high speed. You can choose up to eight [8] high speed circuits. Tap the High Speed Circuits button. Tap Add Circuit and select an AUX circuit to assign the high speed to. Tap Check to save the circuit and return to the previous screen.

Operating a Dual Speed Pump: To manually turn a dual speed filter pump on or off, tap the Pool Filter Pump button on the second Pool screen (on Home screen). When the pump is off, tap the Filter Pump button to turn on the high speed of the filter pump. Tap the button again switch to low speed operation. *Note the pump will run the high speed to prime and establish normal water flow if the pump has been off for more than 30 seconds. If the heater is on and active, and Heater Cool down feature is enabled; when you tap Pool Filter Pump button to turn off the filter, only the heater will turn off and the pool filter pump will automatically turn off after 5 minutes of heater cool down period. You can override the heater cool down period by taping the button again to turn off the filter pump.*

Pumps (IntelliFlo® VS)

+ Add Pump: To add an IntelliFlo VS pump, tap + Add Pump to access the pump type screen and select IntelliFlo VS.

Pumps (9 of 16)		6	VF #3 (IntelliFlo VF) - Address 5	6
🛨 Add Pump			Settings	0
Filter Pump 1 Type: Single Speed	PLA EN	Ŵ	Flow Circuits	
Filter Pump 2 Type: IntelliFlo VF		?	Pump Status	
Filter Pump 3 Type: IntelliFo VS		Т		_
Filter Pump 4 Type: Two Speed		\downarrow		

IntelliFlo VS Settings: Pump Type, Name, Address, Min. Speed (450 RPM), Max. Speed (3450 RPM), Step Size (10-250 RPM), Prime Time (0-5 min.), and Prime Speed (450-3450 RPM). For information about priming the pump, see page 70.

Pump Type: To change the pump type, tap Pump Type button to access the pump type screen. Select the pump for the list. Tap Check to save the new pump type and return to the previous screen.

Pump Name: Tap the Pump Name button and enter the name of the pump. Tap Check to save the name and return to the previous screen.

Pump Address: Assign the pump address from 1-16.

Minimum Speed (RPM): This is the minimum pump speed but still generating sufficient flow in the pool. The system will not run lower than 450 RPM. The lower you can establish this flow rate the better the energy savings. **Note: Other equipment may require higher pump speed to operate.**

Maximum Speed (RPM): This is generally the pump speed required for backwashing the pool filter. The pump will not allow a higher speed of 3450 to prevent damage to the pool system hydraulics.

VS (IntelliFlo VS) - Addr: 1					
Ритр Туре	IntelliFlo VS				
Pump Name	VS #1	?			
Pump Address	2				
Min Speed (RPM)	- 450 +				
Max Speed (RPM)	- 3450 +	\downarrow			
Step Size (I/min)	- 10 +				
Prime Time (min)	- 1 +				
Priming Speed (RPM)	- 2500 +				

Step Size: The pump speed step size can be set from 10-250 RPM.

Priming Time (min): The system priming time can be set from 0-5 minutes.

Priming Speed (RPM): The system priming speed can be set from 450-3450 RPM.
Pumps (IntelliFlo® VS)

C	Circuits (1-8)	←
+ Add Circuit		_
Pool	LOOO RPM	Î
Booster Pump	2500 RPM	
WF Pump	1340 RPM	
		\downarrow



Pump Status RPM Watts 750 100 Image: Constraint of the state of

Speed Circuits: Assign the

speeds to the circuits you wish to use. Tap Speed Circuits and tap Add Circuits to assign a new AUX circuit. To change the pump speed of a listed circuits, tap the AUX name to change the assigned RPM setting. Tap Return to save the setting and return to the previous screen.

Affiliated Circuit Settings:

Circuit: The assign circuit to control the pump speed.

Speed (RPM): Assign pump speed from 450 to 3450 for the selected circuit.

Pump Status: Shows the current power usage in Watts, speed, in revolutions per minute (RPM) while the pump is operating. Tap Return to return to the previous screen. Also see: Tap Status on the Home screen to display the current pump status and error condition. + Add Pump: To an IntelliFlo VSF pump, tap + Add Pump to access the pump type screen and select IntelliFlo VSF.



IntelliFlo VSF Settings: Pump Type, Name, Address, Min. Speed (450 RPM), Max. Speed (3450 RPM), Min. Flow (GPM 20 GPM), Max. Flow (140 GPM), Step Size (10-250 RPM), and Step Size (1-10 GPM). For information about priming the pump, see page 70.

Pump Type: To change the pump type (function), tap Pump Type button to access the pump type screen. Select the pump for the list. Tap Check to save the new pump type and return to the previous screen.

Pump Name: Tap the Pump Name button and enter the name of the pump. Tap Check to save the name and return to the previous screen.

Pump Address: Assign the pump address from 1-16.

Minimum Flow (GPM): This is the minimum flow rate speed but still generating sufficient flow in the pool. The IntelliCenter™ Control System will not run lower than 20 GPM. The lower you can establish this flow rate the better the energy savings.

VSF (IntelliFlo VSF) - Addr: 2 5 IntelliFlo VSF Pump Type Pump Name VSF (?) Pump Address 2 \uparrow Min Speed (RPM) 450 ÷ 3450 Max Speed (RPM) ÷ \mathbf{J} Min flow (GPM) 20 ÷ Max Flow (GPM) 134 100Step Size (RPM) Step Size (GPM) 1

Maximum Flow (GPM): This is generally the flow rate required for backwashing the pool filter. The pump will not allow a higher flow rate of 140 GPM to prevent damage to the pool system hydraulics.

Step Size (RPM): The pump speed step size can be set from 10-250 RPM.

Step Size (GPM): The pump flow rate step size can be set from 1-10 GPM.

Pumps (IntelliFlo® VSF)

(Circuits (1-8)	~
+ Add Circuit		_
Pool		Î
Booster Pump	2500 RPM	
WF Pump	1340 RPM	1
		\downarrow





Speed Circuits: Assign the

speeds to the circuits you wish to use. Tap Speed Circuits and tap Add Circuits to assign a new AUX circuit. To change the pump speed, tap the AUX name to change the assigned RPM setting. Tap Return to save the setting and return to the previous screen.

Affiliated Circuit Settings:

Circuit: The assign circuit to control the pump speed.

Flow (GPM): Assign pump flow rate from 20-140 for the selected circuit. Speed (RPM): Assign pump speed from 450 to 3450 for the selected circuit.

Pump Status: Shows the current power usage in Watts, flow rate in gallons per minute (GPM) or revolutions per minute (RPM) while the pump is operating. Tap Return to return to the previous screen. Also see: Tap Status on the Home screen to display the current pump status and error condition.

Pumps (IntelliFlo® VF)

+ Add Pump: To add an IntelliFlo VF pump, tap + Add Pump to access the pump type screen and select IntelliFlo VF.



IntelliFlo VF Settings: Pump Type, Pump Name, Pump Address, Min. Flow (15 GPM), Max. Flow (130 GPM), and Step Size (1-10 GPM). For information about priming the pump, see page 70.

Pump Type: To change the pump type (function), tap Pump Type button to access the pump type screen. Select the pump for the list. Tap Check to save the new pump type and return to the previous screen.

Pump Name: Tap the Pump Name button and enter the name of the pump. Tap Check to save the name and return to the previous screen.

Pump Address: Assign the pump address from 1-16.



Minimum Flow (GPM): The pump's minimum flow rate can be set from 15-130. This is the minimum flow rate speed but still generating sufficient flow in the pool. The IntelliCenter[™] Control System will not run lower than 15 GPM. The lower you can establish this flow rate the better the energy savings.

Maximum Flow (GPM): The pump's maximum flow rate can be set from 15-130 GPM. This is generally the flow rate required for backwashing the pool filter. The pump will not allow a higher flow rate of 130 in order to prevent damage to the pool system.

Step Size (GPM): The pump flow rate step size can be set from 1-10 GPM.

Pumps (IntelliFlo® VF)

Circuits (1-8)	
🛨 Add Circuit	-
Pool PC 1000 RPM	Î
Booster Pump 2500 RPM	?
WF Pump 1340 RPM	
	1

Affiliated Circuit Settings



IntelliFlo[®] Pump Alarms and Warnings

Alerts and Warnings

The IntelliFlo[®] Variable Speed and Flow Pump displays all alarms and warnings on the control panel display. When an alarm or warning condition exists, the corresponding light will be lit on the display.

In the event of an alarm: The alarm light will illuminate and all control panel buttons will be disabled until the alarm is cleared. Pressing the Reset button will clear the alarm once the fault condition has been resolved.

In the event of a warning: The warning light will illuminate, but the pump will continue to run. The speed, flow or pressure limit that is causing the warning must be adjusted in order to correct the warning.

Power Out/OFF

The incoming supply voltage is less than required. The drive faults to protect itself from over current. The drive contains capacitors that keep it powered up long enough to save the current run parameters. If power is restored during this process, approximately 20 seconds, the drive will not restart until completed.

Continue to next page.

Speed Circuits: Assign the speeds to the circuits you wish to use. Tap Speed Circuits and tap Add Circuits to assign a new AUX circuit. To change the pump speed of a listed circuits, tap the AUX name to change the assigned RPM setting. Tap Return to save the setting and return to the previous screen.

Affiliated Circuit Settings:

Circuit: The assign circuit to control the pump speed.

Flow (GPM): Assign pump flow rate from 15 to 130 for the selected circuit.

Pump Status: Shows the current power usage in Watts, and flow rate in gallons per minute (GPM) while the pump is operating. Tap Return to save the setting and return to the previous screen. Also see: Tap Status on the Home screen to display the current pump status and error condition.

IntelliFlo[®] Pump Alarms and Warnings (Continued)

Priming the IntelliFlo pump:

Note: For more information about troubleshooting, refer to the following manuals: IntelliFlo VF (P/N 350075), IntelliFlo VSF (P/N 356652), and IntelliFlo VS (P/N 354604).

Priming the Pump for the first time or after a service: First release all pressure from filter, pump, and piping system. The pump will prime itself when the suction and discharge valves are opened if the water source is higher than pump. If this is not the case, unscrew and remove pump's lid cover, fill the basket and pump with water. Do not lubricate the lid cover o-ring. The o-ring contains a permanent internal lubricant.

- 1. Turn the pump lid clamp and lid in a counterclockwise direction until it stops and remove them.
- 2. Fill the pump strainer pot with water.
- 3. Reinstall the pump clamp and lid onto the strainer pot. The pump is now ready to prime.
- 4. Make sure all electrical connections are clean and tight.
- 5. Open the air release valve on the filter, and stand clear of the filter.
- 6. Switch the IntelliFlo pump on at the circuit breaker. Ensure that the green power light is on.
- 7. Press the Speed 1 button to select the pump speed of 750 RPM.
- 8. Press the Start button to start the pump. Use the Up/Down button to increase the speed as necessary to prime the pump.
- 9. When water comes out of the air release valve, close the valve. The system should now be circulating water back to the pool without air bubbles showing in either the hair and lint pot or at the pool return fittings.

10. Use the Up/Down button to adjust the operating speed as desired.

Priming Failure

If the pump is not defined as primed within the "Max Priming Time" it will stop and generate a "Priming Alarm" for 10 minutes, then attempt to prime again. The "Max Priming Time" is set in the pump's priming menu. If the pump cannot prime within five attempts it will generate a permanent alarm that must be manually reset.

Overheat

If the drive temperature gets above 54.4° C (130° F) the pump will slowly reduce speed until the over temperature condition clears.

Thermal Mode

When active, the motor will run at the preset RPM until the drive internal temperature increases above the minimum. The pump's internal thermal protection is disabled when connected to an automation system. Thermal protection is provided by selecting Freeze Protection ON in the pump circuit option in the IntelliCenter[™] Control System menu (see page 62). To re-enable the internal thermal protection, the power to the drive must be cycled off then back on.

Over Current

Indicates that the drive is overloaded or the motor has an electrical problem. The drive will restart 20 seconds after the over current condition clears.

Over Voltage

Indicates excessive supply voltage or an external water source is causing the pump and motor to rotate thereby generating an excessive voltage on the drives internal DC buss. The drive will restart 20 seconds after the over voltage condition clears.

IntelliFlo[®] Pump Alarms and Warnings (Continued)

Internal Error

Indicates that the self-monitoring motor control software has encountered an error. Clear the alarm and restart the pump. If this alarm persists, contact Pentair Technical Service at **1-800-831-7133**.

Speed Limit (Warning)

The pump has detected that it has met the maximum allowed speed set in the Min/ Max menu. The pump will continue to run, but it will not achieve the desired speed. Pressure Limit (Warning). The pump has detected that it has met the maximum system pressure set in the Min/Max pump menu (and IntelliCenter menu, see page 62). The pump will continue to run, but it is not achieving the desired flow rate or speed because of the pressure limit. The feature is enabled by default while running a program at a constant flow rate, but must be enabled manually to monitor maximum pressure while running a constant speed program.

Flow Limit (Warning)

The pump has detected that it has met the maximum flow rate set in the Min/Max menu. The pump will continue to run, but it is not achieving the desired speed because it is running at the maximum flow rate. The Maximum Flow can be set in the Max/Min menu. This feature must be enabled in the Min/Max menu to be active while running a speed program.

- **Freeze Protection:** When set to ON, the pump motor will run at a user defined speed. Note: The IntelliFlo pump's internal anti-freeze protection is disabled when connected to the automation control system. To re-enable the IntelliFlo pump's internal freeze protection, the power to the drive must be cycled off then back on.
- **Blocked system:** Detects a blocked suction line. This alarm resets automatically after 30 seconds and the pump restarts.
- **System service soon:** Alerts the operator that the pump discharge pressure has reached the Clean Filter Pressure as setup in the Filter Menu. The filter status will be displayed as 100%. The green warning LED will be on until a backwash cycle is operated. The IntelliFlo pump will automatically reduce speed as necessary to not exceed the Clean Filter Pressure.

Note: The IntelliFlo VS pump alarm and warnings are indicated by flashing LEDs on the pump's 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 continue to run but at a reduced speed. The Green LED displays a sequence of blinks to indicate which alarm or warning has occurred.
- Alarm condition: If an alarm condition occurs the pump will stop running. The red LED flashes continuously to indicate the presence of an alarm. The alarm LEDs will reset when the condition clears.

Heaters (Gas)

Heaters	
🛨 Add Heater	
No Heater	beer of
Gas Heater Type: Gas	Heater 1
Solar Heater Type: Solar	Heater 3
Heat Pump Type: Heat Pump	Heater 2



Gas	Heater	5
Heater Type	Gas	2
Heater Name	Gas Heater 1	
Affiliated Body	Pool/Spa	
Cool Down Delay (min)	- 5 +	

Add Heater: Tap Add Heater to add a new heater type. Up to three heaters can be assigned.

Select New Heater: Select the heater type from the list of heat sources. Heater types are: Off (no heater installed), Gas, Solar Only, Heat Pump, UltraTemp and Hybrid.

Gas Heater Settings:

Heater Type: Displays the Heater Type selected.

Heater Name: Tap the heater name button to change the heater name. Enter the new name and tap Check to save the name and return to the previous screen.

Affiliated Body: Assign the heater to a body of water: Pool, Spa or Pool/Spa.

Cool Down Delay (min): The gas heater Cool Down Delay (min) can be set from 0 to 10 minutes (5 min. default).

Note: Pentair gas heaters do not require a cool down period.

Add Heaters: IntelliCenter[™] Control System supports the following heater configurations:

- Gas Heater
- Solar Heater
- Heat Pump
- UltraTemp
- Hybrid
- Gas Heater + Solar Heater (Solar Preferred)
- Gas Heater + Heat Pump (Solar Preferred)
- Gas Heater + UltraTemp/Hybrid) (UltraTemp/Hybrid Preferred)

Heaters (Off)

Pool/Spa System without a Heat Source: If the pool/spa system does not have heat source installed, the Home screen and Pool and Spa screens will not display the Heating Set Point buttons. The Pool/Spa badge (Yellow, Blue, Green) displays the current water temperature.



Solar and Heat Pump (UltraTemp[®] & Hybrid) Nocturnal Heater Cool Down Delay

For Solar and Heat Pumps: Use the Cooling Set Point temperature control buttons displayed on the Pool and/or Spa screen to adjust the nighttime temperature of the pool/spa water. *See page 74*.



Heaters (Solar Heating)



Solar Heater Settings:

Heater Type: Displays the Heater Type selected.

Heater Name: Tap the heater name button to change the heater name. Enter the new name and tap Check to save the name and return to the previous screen.

Affiliated Body: Assign the heater to a body of water: Pool, Spa or Pool/Spa.

Start Temp. Delta: The minimum temperature difference to start heating. The temperature range is adjustable from 3° - 9°. Factory default is 6.
Stop Temp. Delta: The temperature difference at which heating will stop. The temperature range is adjustable from 2° - 5°. Factory default is 3.
Solar Nocturnal Cooling ON/OFF: ON: Provides automatic nocturnal (nighttime) cooling during night time hours for pools that overheat in hot climates. When enabled, circulates pool water to the collector panels when the solar sensor temperature and the pool temperature is hotter than the high limit setting. This process cools the pool water over time. Circulation will stop when the solar sensor temperature is 3 degrees (default) less than the pool temperature or the pool temperature is cooler than the high limit setting. OFF: SOLAR nocturnal (nighttime) cooling disabled.

Note: Valves A & B and Solar Heating: For Single Body systems, Valve A is used for SOLAR if you choose the Solar Heater. For Dual Body systems, Valve B is used for SOLAR if you choose the Solar Heater.

Solar Heating: Effective solar heat depends on the solar and water temperature and the start and stop differentials, When solar is available, then the system will rotate the 3-Way Valve and turn on the solar booster pump if applicable or increase the RPM's if an IntelliFlo[®] Pump is present. This allows the water to flow to the solar collectors. If a pressure cleaner pump is installed, the cleaner pump will turn off for 10 minutes every time solar turns ON.

The solar roof sensor must be 6° higher (based on Start/Stop Temp. Delta) than the water temperature. The pump must be ON for a few minutes for operation. When the roof sensor and the water temperature are within 3° of each other (based on Start/Stop Temp. Delta), solar heat will switch off. The solar temperature start and stop differential settings are factory at 6° and 3°. These differential settings are adjustable. Refer to your solar service professional for the optimum setting. Changing the differentials could result in the system not working properly.

Heating: Heating will start when the Start differential condition is met and the water temperature is below the target temp. When these conditions are satisfied heating is turned ON. Example: Water Temperature is 75°F; The target temperature is 82°F. When the roof solar collectors temperature exceeds the water temperature by 6° Start Temp Delta (81°F), the solar valve rotates. If a solar booster pump is required, this pump will turn on.

Heaters (Heat Pump)



Heat Pump Settings:

Heater Type: Displays the Heater Type selected.

Heater Name: Tap the heater name button to change the heater name. Enter the new name and tap Check to save the name and return to the previous screen.

Affiliated Body: Assign the heater to a body of water: Pool, Spa or Pool/Spa.



Heaters (Heat Pump & UltraTemp)

UltraTemp (Hybrid) Settings:

Heater Type: Displays the Heater Type selected.

Heater Name: Tap the heater name button to change the heater name. Enter the new name and tap Check to save the name and return to the previous screen.

Affiliated Body: Assign the heater to a body of water: Pool, Spa or Pool/Spa.

Heater Address (1-16): Assign the UltraTemp heat pump address.

Differential Temperature (see table below): The minimum temperature difference to start heating. The temperature range is adjustable from 3° - 9°. Factory default is 6°.

Parameter Name	Description
Temperature Differential	Set how much the water temperature needs to drop below the set temperature, for the heat pump to start up again. E.g. If the set temperature and water temperature is at 82°F (28°C), the heat pump will stop heating and not restart until the water temperature drops to 76°F (24°C) if the Temperature Differential is set to 6° .
Heat Mode Temp	This is the set temperature when in Heat mode.
Cool Mode Temp	This is the set temperature when in Cool mode.

Cooling Enabled (UltraTemp only): On/Off: **On:** Provides cooling for pools that overheat in hot climates. When enabled, circulates pool water through the exchanger and draws heat from the water and expels it through the fan.

Installation [Valves]

Valve Actuators Circuit Assignments: The IntelliCenterTM Control System carcontrol up to four automatic valve actuators (for shared equipment). Six (6) more can be added with Valve Expansion Cards. Two of the valve outputs are dedicated to the pool/spa intake (INTAKE) and return (RETURN) valves. Valve A or Valve B actuators are for general purpose use (solar, water-feature, in-floor cleaner, etc.).

Note: Valve A may not be used with any other circuit when Solar is selected as a heat source. Note: When using solar heat, note that for shared equipment pool and spa combination, Valve A is always used for solar. For dual body dual equipment, Valve A is for pool, and Valve B for spa. Installing the optional Valve Expansion Card provide an additional six (6) valve actuators (C, D, E, F G). See IntelliCenter Control System Models in Settings > Advanced System Configuration > Installation Setup > Body Configuration, see page 55.

Also see Valve Delays: For Valve delay and Heater Cool Down settings and Freeze Cycle Time, *see Settings > Advanced System Configuration > Delays on page 87.*

For Pool and Spa Shared Equipment: Return valve actuator (pool), Spa Return. Intake Valve Actuator (Pool Drain/Skimmer, Vacuum Line, Spa Drain/Skimmer).

· · · · · · · · · · · · · · · · · · ·	/alves	5
Valve A	Standard	
Valve B	Standard	
Intake	Standard	?
Return	Standard	1
Valve A (XPC0)	Standard	\downarrow
Valve	A Settings	6
Valve Type	Standard	
Valve Name	Valve A	?
Assigned Circuit	filter pump	
		1
Select	Circuit	1
Spa	AUX 1	
AUX 2	AUX 3	×
AUX 4	Filter Pump	1
AUX 5	AUX 6	
		\downarrow

Note: Valves A & B and Solar Heating: For Single Body systems, Valve A is used for SOLAR if you choose SOLAR heating. For Dual Body systems, Valve B is used for SOLAR if you choose SOLAR HEATER.

VALVE A Settings: Standard (2-Way/3-Way). Note: For Single Body systems, Valve A is used for SOLAR if you choose SOLAR HEATER. Valve A is displayed if additional valve circuits are available (Depending on the Personality Card installed, *see page 106.* Valve Name: Tap Valve A name to change the valve name. Assigned Circuit: Assign the Pool circuit for VALVE A.

VALVE B Settings: Standard (2-Way/3-Way). Note: For Single Body systems, Valve B is used for SOLAR if you choose SOLAR HEATER. Valve B (1) is displayed if additional valve circuits are available (Depending on the Personality Card installed, *see page 106.* Valve Name: Tap Valve B name to change the valve name. Assign Circuit: Assign the Spa circuit for VALVE B.

Installation [Valves]

Valves: Intake and Return



Intake Settings 5 Valve Type Standard 2 Valve Name Intake Assigned Circuit Rotates on Pool/Spa **Return Settings** 5 Standard Valve Type ? Valve Name Return Assigned Circuit Rotates on Pool/Spa

Intake Settings:

Valve Type: Standard (2-Way/3-Way). Valve Name: Intake (predefined function/name) cannot be changed. Assigned Circuit: Assign to the intake line valve that rotates between the pool and spa to circulate water.

Return Settings:

Valve Type: Standard (2-Way/3-Way). Valve Name: Return (predefined function/name) cannot be changed. Assigned Circuit: Assign to the return line valve that rotates between the pool and spa to circulate water.

Optional Expansion Valve A(XPC0) / Valve B (XPC0)

Valves		5
Valve A	Standard	
Valve B	Standard	
Intake	Standard	•
Return	Standard	1
Valve A (XPC0)	Standard	\downarrow

Additional Valve Circuits: Optional Personality Card can provide additional valve circuits that will be displayed on the Valve screen as Valve A (XPCO) and Valve B (XPCO) depending on the system model. See page 106 for more about IntelliCenter™ Control System models.

Configuring Valve Actuators (Controlled by AUX or Feature Circuit)

The IntelliCenter[™] Control System can control two auxiliary valve actuators (A and B) for applications such as solar heating and water features. With the addition of the Valve Expansion Card, the system can accommodate up to six (6) additional actuators (C, D, E, F, G, H) for a total of eight (8) actuators.

Before configuring auxiliary valve actuators, first assign names to the AUX or FEATURE circuits. Auxiliary valve actuators can be controlled by any AUX circuit or Feature circuit. By using FEATURE circuits to control valve actuators, you can conserve your AUX circuits for high voltage relays for controlling pumps and lights. You can also use a FEATURE CIRCUITS to couple valve actuators with AUX circuits for specific applications.

Chemistry [IntelliChlor® SCG and IntelliChem® Installation]

From the Chemistry screen you can configure one IntelliChlor SCGs and one IntelliChem Controller. *Also see: Home screen(*): Tap Chemistry to access IntelliChlor and IntelliChem operation summary screens, page 8.*



Add IntelliChlor and/or IntelliChem:

Tap Chemistry on the Home screen. Tap Add Chemistry. Select one IntelliChlor SCG and address up to four (4) IntelliChem Controllers on the Select Chemistry Device screen.

IntelliChlor SCG Settings: For dual body systems, each device is assigned to pool/spa. For single body systems, select either Body 1 (pool), Body 2 (Spa).

Chlorination Output Levels: Set the Pool and Spa chlorine output levels. The system can only generate chlorine while the filter pump is operating. Set the percentage to produce chlorine. The Spa outputs 1/20 of the pool output when the Spa mode is switched on.

Note: If using the Filter Pump Relay select Filter Pump Relay and Tap Next. Choose either the Pool or Spa Relay and can set the chlorination output levels and turn Super Chlorination On/Off. Tap the Back arrow to return to the previous screen and Tap Next.

Super Chlorination (1 to 96 hrs.) (ON): Tap the Start Super Chlorination button to temporarily override the current chlorination output levels with super chlorination (100% output for the selected time, typically 24 hours).

IntelliChem Settings:

Address (1-4): Select an address from 1-4 for the IntelliChem Controller. Body Assignment: For dual body systems, the device is assigned to pool/ spa. For single body systems, select either Body 1 (pool), Body 2 (Spa).

(*) Show/Hide IntelliChem Badge on

Home Screen: Go to Settings > General > Chemistry Readings Badge to show pH and ORP readings (set to ON or OFF).

Installation (Pool and Spa Cover)

From the Installation Setup screen, Tap Pool and Spa Cover to display the Pool and Spa Cover Select screen. The system supports two pool or spa covers (Pool/Spa Cover 1 or Pool/Spa Cover 2) one cover for each body of water. From the Pool/Spa Cover settings you select which circuits to switch OFF and ON when the pool or spa cover is closed or open.

Pool or Spa Cover Position: "OPEN" and "COVERED" is displayed on the Home screen to indicate the current position of the cover. The cover connection is via an RS-485 COM Port on the IntelliCenter™ Control System Expansion Card.



Pool Cover Settings:

Cover Enabled: Select either Enabled or Disabled.

Cover State Normally: Select either Closed or Open for the state that the pool or spa cover is usually in.

Affected Circuits: Select the circuits that you want to switch OFF/ON when the pool or spa cover is closed or open. Tap Check to save and return to the Settings screen.

IntelliChlor Active (0-40): Select ON to switch the IntelliChlor SCG circuit OFF when the pool or spa cover is closed.

IntelliChlor Output: While the pool or spa cover is closed, select the IntelliChlor SCG chlorine output from 0 to 50 %.

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iS4 Remote [Advanced System Configuration]

iS4 Spa-Side Remote: To configure an iS4 remote, tap **+ Add Remote** and choose **iS4** from the Select New Remote screen.









Select Circuit	
🔍 Spa	Pool
VSF #1	Edge Pump
VS #2	Spillway Pump



iS4 Settings: From the iS4 Overview screen. Tap Settings to display iS4 setting options.

Remote Type: The Remote Type is assigned as iS4.

Remote Name: To change the name, tap the Remote Name button. Enter the new name and tap Check to save.

Affiliated Body: Tap the Affiliated Body of water button. Select Spa (or Pool). Tap Return to save.

Affiliated Pump: Tap the Affiliated Pump circuit button (Select Pump (iS4 screen). Select the pump circuit that is assigned to the iS4 remote. Tap Check to save. *See Pump on page 62 to assign pump circuits.*

Enable Remote: Tap the Enable Remote ON/OFF button to turn the remote ON or OFF.

Button Assignments (1-4): Tap Button 1, then tap the Unassigned button and choose a circuit function for the selected button. Repeat this step for buttons 2-4. The available AUX circuits displayed are assigned in the Circuits option screen, see page 56 (AUX Circuits and Feature Circuits, see, Settings > Advanced System Configuration > Installation Setup > Circuits).

Delete Remote: From Remotes screen tap the Trash Can icon, select the remotes to delete and tap Check. Tap **Yes** to delete the selected remotes.

Note. The iS4 remote (P/N 521885) requires a wired RS-485 connection to a COM port on main circuit board in the load center.

QuickTouch (QT) Remote [Advanced System Configuration]

QuickTouch Spa-Side Remote: To configure a QuickTouch II remote, tap **+ Add Remote** and choose **QT** from the Select New Remote screen.

Select New Remote	5
iS10	
QT	?
SpaCommand	
OT Overview	

QT Overview	5
Settings	
Button Assignment	?







Remote Type: The Remote Type is assigned as QT.

Remote Name: To change the name, tap the Remote Name button. Enter the new name and tap Check to save. **Affiliated Body:** Tap the Affiliated Body

of water button. Select Spa (or Pool). Tap Return to save.

Affiliated Pump: Tap the Affiliated Pump circuit button. Select the pump circuit that is assigned to the QT remote. Tap Check to save. See Pump on page 62 to assign pump circuits. Enable Remote: Tap the Enable Remote ON/OFF button to turn the remote ON or OFF.

Button Assignments (1-4): Tap Button 1, then tap the Unassigned button and choose a circuit function for the selected button. Repeat this step for buttons 2-4. The available AUX circuits displayed are assigned in the Circuits option screen, see page 56 (AUX Circuits and Feature Circuits, see, Settings > Advanced System Configuration > Installation Setup > Circuits).

Delete Remote: From Remotes screen tap the Trash Can icon, select the remotes to delete and tap Check. Tap **Yes** to delete the selected remotes.

iS10 Remote [Advanced System Configuration]

iS10 Spa-Side Remote: To configure a iS10 remote, tap **+ Add Remote** and choose **iS10** from the Select New Remote screen.



Select Remote	e Channel (iS10)	6
0 1	Q 2	
3	• 4	



Delete Remote: From Remotes screen tap the Trash Can icon, select the remotes to delete and tap Check. Tap **Yes** to delete the selected remotes.

Note: The iS10 remote requires a wired RS-485 connection to a COM port on main circuit board in the load center. **iS10 Settings:** From the iS10 Overview screen. Tap Settings to display iS10 settings options.

Remote Type: The Remote Type is assigned as iS10.

Remote Name: To change the name, tap the Remote Name button. Enter the new name and tap Check to save.

Enable Remote: Tap the Enable Remote ON/OFF button to turn the remote ON or OFF.

Remote Channel: Tap the Remote Channel number and select a channel form 1-4. Tap this button to assign a communication address

(1, 2, 3 or 4). The assigned channel is used to communicate to multiple iS10 remotes to mirror each other or to operate individually with different functions.

Affiliated Pump: Tap the Affiliated Pump circuit button. Select the pump circuit that is assigned to the iS10 remote. Tap Check to save. *See Pump on page 62 to assign pump circuits.*

Body: The remote is assigned to Spa. To reassign to a different body of water go to Advanced System Configuration >Installation Setup >Body Configuration, see page 53.

Button Assignments (1 -10): Tap Button 1, then tap the Unassigned button and choose a circuit function for the selected button. Repeat this step for buttons 2-10. The available AUX circuits displayed are assigned in the Circuits option screen, see page 56 (AUX Circuits and Feature Circuits, see, Settings > Advanced System Configuration > Installation Setup > Circuits).

Address Mode ON/OFF: Tap this button enable or disable the assigned Remote Channel (1-4).

SpaCommand Remote [Advanced System Configuration]

SpaCommand Spa-Side Remote: To configure a SpaCommand remote, tap **+ Add Remote** and choose SpaCommand from the Select New Remote screen.

SpaCommand Overview	5
Settings	
Button Assignment	?



Select Remote Cha	annel (SpaCommand)	5
● 1	2	
3	4	



Delete Remote: From Remotes screen tap the Trash Can icon, select the remotes to delete and tap Check. Tap **Yes** to delete the selected remotes.

Note: The SpaCommand remote requires a wired RS-485 connection to a COM port on main circuit board in the load center.

SpaCommand Settings: From the SpaCommand Overview screen. Tap Settings to display SpaCommand setting options.

Remote Type: The Remote Type is assigned as SpaCommand.

Remote Name: To change the name, tap the Remote Name button. Enter the new name and tap Check to save. **Enable Remote:** Tap the Enable Remote

ON/OFF button to turn the remote ON or OFF.

Remote Channel: Tap the Remote Channel number and select a channel form 1-4. Tap this button to assign a communication address

(1, 2, 3 or 4). The assigned channel is used to communicate to multiple SpaCommand to mirror each other or to operate individually with different functions.

Affiliated Pump: Tap the Affiliated Pump circuit button. Select the pump circuit that is assigned to the SpaCommand remote. Tap Check to save. See Pump on page 62 to assign pump circuits.

Body: The remote is assigned to Spa. To reassign to a different body of water go to Advanced System Configuration >Installation Setup >Body Configuration, see page 53.

Button Assignments (1 -10): Tap Button 1, then tap the Unassigned button and choose a circuit function for the selected button. Repeat this step for buttons 2-10. The available AUX circuits displayed are assigned in the Circuits option screen, see page 56 (AUX Circuits and Feature Circuits, see, Settings > Advanced System Configuration > Installation Setup > Circuits).

Address Mode ON/OFF: Tap this button enable or disable the assigned Remote Channel (1-4).

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Network and WiFi Setup [Advanced System Configuration]

From the Network and WiFi Setup screen you can set up Ethernet settings using DHCP (default on) or a static IP Address to connect to your network. The IntelliCenter[™] Control System Client Bridge Wireless Antenna provides a wireless connection to your home wireless router using an Ethernet (LAN Cat5) cable connected to the main circuit board on the Outdoor Control Panel. *Note: See page 47 for Pentair User Portal > Enable Web & Mobile Interface (ON)*

to enable the PC Web App and Mobile Interfaces to allow local network and Internet communications.

Connect Ethernet: Displays the current IP Address.

Connect Wireless Network: Discover nearby wireless networks.

Adjust Wireless Transmit Power: Auto (Default). Choose the wireless transmit power from 1 to 26 dBm). Use a



higher dBm value to transmit the wireless signal over a longer distance.

Internet Connection Test: Test the Internet connection after the wireless home wireless connection has been setup. If connected to the Internet, the average response time is displayed.

Configure Ethernet Settings (DHCP or static IP Address).

Use DHCP (ON Default): The IP address is obtained automatically and is displayed. OFF: IP address is entered by the user. IP address: Your intelliCenter IP Address (example; 192.168.1.9), Subnet Mask: 255.255.25.0 Use DHCPONIP Address192.168.1.221Subnet Mask255.255.255.0Default Gateway192.168.1.1Primary DNS8.8.8.8

Ethernet Settings

Default Gateway: The Default Gateway is obtained automatically (DHCP) or entered by the user (Static).

Primary DNS: Populated (DNS). Server should be provided by your ISP. **Secondary DNS:** Populated (DNS). Only one DNS server should be configured as primary for a zone, but you can have any number of secondary servers for redundancy. Both primary and secondary servers for a zone serve exactly the same data to clients. Because of this you could easily simulate a secondary server on a single computer with two IP addresses.



6

Network and WiFi Setup [Advanced System Configuration]

5

2



Configure Network Configure Ethernet IP: 192.168.1.9 Connect to a Wireless Network

Adjust Wireless Transmit Power

Internet Connection Test

Reboot WiFi Device

Available Networks		6
SISUKWifi WPA2-PSK	((•	<u>.</u>
NYSAWifi WPA2-PSK	((•	
NTSAUKWifi WPA2-PSK	((:-	1
StarBucks WPA2 Personal	((;•	
WifiMacD WPA2-PSK	((•	\downarrow

Connect Wireless Network: Tap

the Configure Wireless Network button to display the available wireless within range of the IntelliCenter™ Control System wireless antenna.

Available Networks: Displays the available wireless networks within range of the IntelliCenter[™] Control System wireless antenna. To connect to a wireless network, tap the name of the wireless network, the keyboard is displayed to enter a password or leave it blank. The previous screen displays the System IP.

IntelliCenter Wireless Remote Setup [Advanced System Configuration]

The IntelliCenter[™] Control System Wireless Remote requires optional Kit P/N 522036. This kit includes a Wireless Transceiver with antenna which connects to an RS-485 COM port on the Outdoor Control Panel circuit board located in the load center. Note: IntelliCenter Control System settings made on the Outdoor and Indoor Control Panels and the Wireless Remote are synchronized to have the same system settings on each control panel. See Wireless Connections Diagram on page 105.



Address: Display the current wireless channel being used. For most operations address 15 is the default address. If you should need to change the address, tap the Address button to access the Select Wireless Channel screen and select a different channel from 12 through 25. The unique wireless address communicates to the wireless transceiver located at the IntelliCenter Control System load center.

Panel #: Tap this button to select which Wireless Panel to transmit from. Select either Wireless Panel #1 or Wireless Panel #2.

Update FW: Tap Update FW to update the firmware. Abort FW Update to abort the update.

Radio Firmware Mode: Displays the current firmware version of the wireless remote.

Note: The Wireless Remote signal strength and battery icon are displayed on the Home screen.

Delay Settings

Valve Delay ON or OFF (Pool/Spa):

ON: Pool/Spa pump is off (1 minute) during the delay for pool/spa valve rotation.

OFF: No valve delay for Pool/Spa rotation.

Heater Cool Down Delay ON or OFF (Cancel Delay):

Some heaters require a cool-down cycle

before being turned off. This can be accomplished with a setup procedure in the IntelliCenter™ Control System which runs the filter pump an additional five (5) minutes to dissipate residual heat built up inside the heater combustion chamber. The delay feature is mainly for use by service technicians to shut the filter pump off immediately, and know the heater has not been running. **IMPORTANT: Heaters manufactured by Pentair Water Pool and Spa do not require this cool-down period and do not need the delay to be set up.**

ON: Activate the pump during a heater cool down.

Pump on during heater cool-down: Select this option if you have a heater or other equipment that requires that the filter pump stay on for ten minutes after the equipment goes off.

OFF: Heater cool down delay cancel: Shuts OFF the filter pump immediately.

Freeze Cycle Time (min): Set the freeze protection time from 5 to 60 minutes to run the pump during freezing temperatures. Default time is 5 minutes.

Spa Freeze Override Time (min): Set the Spa pump freeze override time from 0 to 240 (mins. - 4 hours). This feature overrides the spa pump circuit that has freeze protection active. This allows you run the pump and heat the spa during freezing temperatures. For more information about using the spa during freeze conditions, see page 12.

Override Delays: Tap this button to override (cancel) any system delays currently in progress. A Yellow badge displayed on the Home screen indicates a Valve delay

Delay Badge (Yellow): A Yellow badge displayed on the Home screen Pool/Spa icon indicates a Valve rotation (delay) is in progress.



Delay Settings		5
Valve Delay	OFF	_
Heater Cool Down	OFF	?
Frz Cycle Time (min)	- 15 +	
Spa Frz Override (min)	- 30 +	
Override Delays	Cancel	

System [Advanced System Configuration]

System: Displays the system firmware version: Version 1.010. Tap System Information to display MAC Address, Serial Number, Manufacturer Date, Firmware Version, IP Address and Release Notes.

Release Note: Information about the current system firmware release.

System	6	System Information
System Information Version: 1	.0	MAC Address: 00-16-76-7D-00-C3
Detected Hardware	?	Manufacturer Date: 4/3/2018
System Diagnostic Information		Firmware Version: v1.010
Firmware Update		OS Release: 3.14.79-te-armv71-j4 IP Address: #9 Tue April 3 14:57:13 PDT 2018
Factory Diagnostics		Release Notes
Detected Hardware	6	Detected Hardware: Displays the
OCP 0 Panel Type: OCP Personality: i5F	s	IntelliCenter [™] Control System Panel
OCP 0 Module: 1 not Detected	d ?	installed): Panel type, and model type
OCP 0 Module: 2 not Detecte	d	Installed Personality CardIsJ, optional modules). Tap Detected Hardware,
OCP 0 Module: 3 not Detecte	d	then OCP 0 information bar to display installed hardware information.
System Diagnostics	-	System Diagnostic Information:
Run Time: 2888 seconds	5	Displays the IntelliCenter Control
ACK (Pumps) 8/9		System diagnostic information.
ACK (IChior) 8/9 ACK (iChem) 8/9		
ACK (UTemp) 8/9		
ACK (others) 8/9		Check for Update: Tap this button to
Slot Time 0		check for the latest IntelliCenter™
System Time: Sat Nov 11 00:51:06 2017		Control System firmware version.
Days Offset: 0 days		Follow the screen prompts
Minutes Offset: 0 minutes		rottow the screen prompts.
Frz Status: 1		
		Update from USB: Tap this button to
Firmware Update	6	display the Select Firmware File for
Current Firmurers v.1.0		Update screen. Using the Up/Down
Current Firmware: V.1.0		arrows, locate the Update file (.pfw).
Use this option to update the current	2	Tan the file name to begin the undate
Infinware to a newer of earlier version.		Tup the file fume to begin the update.
Check for Update		Update from Panel: Tap this button to
Update from USB		update the update the current firmware
Update from Panel		USB device installed in the Outdoor
		Uontrol Panel, Indoor Control Panel, Wireless Remote. Follow the screen

prompts.

Import/Export [Advanced System Configuration]

Import Export System Setup Configuration: Use this feature to import or export a system configuration.



To access the Import/Export screen, tap Settings > Advanced System Configuration > Import/Export.

Note: Once a USB device is detected, a USB icon is displayed on the upper right corner of the screen.

Import System Configuration: Import from USB, or Import from Local Saved. This option will overwrite the system configuration using a configuration file. Navigate to the appropriate folder and select the Configuration file (.cfg) to import. Import for USB: Insert a USB device into the USB Port on the front of the IntelliCenter[™] Control System Outdoor Control Panel or the Wireless Remote. Tap Import from USB and navigate to the system configuration file .cfg). Follow the on screen instructions to import the system configuration files.

Import to Local: Tap Import from Local and follow the on screen instruction



Import/Export [Advanced System Configuration]

Export System Configuration: Export from USB or local. Use this feature to export the system configuration file to a USB device. Select a location for the Configuration file (.cfg) and follow the screen prompts.

Export System Configuration	6	Select Location for Export	6
Use this option to export the current system configuration to a USB device.		Root	
	?	121ndrive	_
Export to USB		556sunsetblvd	•
Save Locally		77pkplace	
Export Local Configuration to USB		1 996nlsd	\downarrow
Select Configuration file to Export	5	Select Configuration file to Export	6
121ndrive		556sunsetblvd\	
556sunsetblvd		120422_556sunsetblvd.cfg	\checkmark
T7pkplace		110802_556sunsetblvd.cfg	1
120323_239elm.cfg			

 \downarrow



120315_41oakst.cfg

Restore Factory Defaults [Advanced System Configuration]

Restore Factory Defaults: Use this feature to overwrite the IntelliCenter[™] Control System configuration with the default factory configuration settings. Tap Settings > Advanced System Configuration > Restore Factory Defaults.

Restore Factory Defaults / Erase History Data Restore Factory Default Settings: Use this option to overwrite the existing system settings with the default factory settings.



6

Restore Factory Defaults Settings

Erase Historical data: Use this option to erase all existing historical data.

Erase Historical Data



All current system settings will be erased and factory system default settings will be restored.

Yes

Are you sure you want to erase the existing system settings and restore factory default settings?

No





Tap the Restore Factory Defaults button to display the next message screen.

Restore Factory Default Settings:

Tap this button to display the next message screen.

YES: Proceed to overwrite the current system configuration with the factory default settings. *Note: ALL current settings will be lost.*

NO: Tap No to exit this screen and return to the previous screen.

The Home screen is displayed after factory defaults are restored.

Erase Historical Data:

Tap this button to display the next message screen.

YES: Proceed to erase all historical data.

NO: Tap No to exit this screen and return to the previous screen.

Expansion Panel: Restore Factory Default Settings:

Tap this button to display the next message screen.

YES: Proceed to overwrite the current system configuration with the factory default settings. *Note: Only Backlight, Times and Theme settings will be erased from this panel. All other settings will be automatically synced to the Outdoor Control Panel.*

NO: Tap No to exit this screen and return to the previous screen.

About the Setup Wizard: The IntelliCenter[™] Control System Setup Wizard provides step-by-step screens to assist in setting up the pool/spa equipment. To complete the Setup Wizard can take about 10 minutes. If you are unsure how to configure a setting, skip that setting or tap and hold the Help button to display the MAIN MENU and select another item and continue with the setup. You can always skip a configuration and go back to the Wizard Setup later to change or edit a configuration setting. After the successful completion of the Configuration Wizard, you can edit any individual option and save the final configuration or exit without saving.

Internet Connection and adding a new account for www.intellicenter.com: For the initial system setup, after you have set your zip code and location, the next screen to display is the **Pentair User Portal** screen. From there you can setup either a Wireless or Ethernet connection to connect to the Internet and add a new account or login using an existing account, which includes setting up a password, pool system's owner's name, address and contact information. This account allows access to **www.intellicenter.com** for remote access to the pool system via a smartphone or PC. For more information about the Pentair User Portal screen, see page 84.

Setup Wizard Screen Navigation:

Note: While in the Configuration Wizard, if a power outage occurs or the screen times out, the system will display the Home Screen. Any changes made in the Wizard up to that occurrence will be saved.

0			
🚓 Wh	at is your Zip (code / Locat	ion
Zip Code			Brooklyn, NY
11220			United States
Latitude	to		40.65°
Longitude	le		
Y Coordinat	te		-73.94°
Time Zone			
Eastern Tim	ne (US & Cana	da)	UTC/GIVIT-5
P Help/ Menu	× Exit Wizard	← Back/ Home	$\rightarrow_{\text{Summary}}^{\text{Next/}}$
2	B	4	6
-	-	-	-

• **Progress Bar Indicator:** The Blue Configuration Wizard progress bar indicates how many options have been completed.

Help/Menu: Help: Tap this button to display brief informative information for the current screen. Menu: Tap hold and release to display the Wizard Setup Main Menu items. From this screen you can select which item to configure during the Wizard setup.

Continue to next page.

Setup Wizard Screen Navigation

Help	Main N	/lenu	4	R.	Wizard Main Menu	I
Location: ZIP code: ZIP code for your location. U.S. Zi	ip	5		Aux Circuits	Feature Circuits	Valves
codeinformation will automatically populate the Lati Longitude coordinates and Time Zone. This feature r	itude and equires			Pumps	Heaters	Remotes
a broadband internet connection.				Chemistry	Schedules	Date/Time
				Location Zip	Import	Export
				Start Page	Exit Wizard 🔶 Back	→ Summary Page

Help Screen/Main Menu Button: From any of the Wizard Setup screens, tap Help to display the help text. Tap the Main Menu button to display the Wizard Main Menu items. Main Menu: Tap the Main Menu button on the Help text screen to display the Main Menu items. Also, tap and hold and release the Help/Main Menu button on any of the Wizard Setup screens to display the Main Menu items.

Start Page: Return to the first Wizard "Welcome" screen.

Exit Wizard: Display the Exit Wizard screen options (see description below). **Back:** Return to the previous screen. **Summary Page:** Go to the Summary screen.

3 Exit Wizard: Tap the Exit Wizard button while to display the following Exit Wizard dialog screen:

	Exit Wizard?			
No: Remain in the Setup Wizard and return to previous Wizard screen and continue with the Setup Wizard configuration				
Yes: Save any changes made up to this point, exit the Setup Wizard and return to the Home screen.				
Discard: Discard all changes made in the Setup Wizard, exit the Setup Wizard and return to the Home screen.				
No	Yes	Discard		

No: Remain in the Setup Wizard and return to previous Wizard screen and continue with the Setup Wizard configuration.

Yes: Save any changes made up to this point, exit the Setup Wizard and return to the Advanced System.

Discard: Discard all changes made in the Setup Wizard, exit the Setup Wizard and return to the Home screen.

Back/Home: Tap to return to the previous screen. Tap and hold and release to return to the Wizard Setup first "Welcome" screen.

S Next/Summary: Tap this button to proceed to the next Wizard Setup screen or item setting. Tap and hold and release to display the Summary screen (last Wizard Setup screen). Example: Before each Wizard configuration screen a YES/NO option screen is displayed. Tap YES then NEXT to enter the item configuration screen. Tap NO then NEXT to continue to the next option.

Setup Wizard [Advanced System Configuration] Outdoor control panel only

Initial System Power Up

First Time Setup: After all required pool/spa equipment has been connected to the IntelliCenter Control System, apply power to the system at the main panel circuit breaker. Upon the initial system power up, the outdoor LCD control panel will display the PENTAIR END USER LICENSE AGREEMENT. Please read this agreement. To continue, tap the Down arrow on the right side of the screen to scroll down to the end of the agreement and tap *IAccept* to accept the agreement. The Home screen is then displayed.

Note: The Pentair End User License Agreement is displayed only one time after the initial system power up.



Note: After you tap I AGREE on the Pentair End User License Agreement the IntelliCenter™ Control System Wizard dialog is displayed.

Setup Wizard (First Time Setup): To start the Setup Wizard for the first time, from the Home screen, tap **Settings > Advanced System Configuration > Wizard**. The following screen is displayed:.





Continue to next page.

IntelliCenter Control System Setup Wizard: The first Setup Wizard

configuration screen, Displays the current system firmware version.

Help/Menu: Tap to display the Help text. Tap hold and release to display the Wizard MAIN MENU options.

Exit Wizard: Tap this button to exit the Setup Wizard and return to the Home screen.

Next: Tap Next to continue with the Setup Wizard and display the Detected Hardware screen.

Import System Configuration:

Yes: Use this option to Import a system configuration file (.CFG) from a USB device plugged into the USB Port on the front of the IntelliCenter Control System Outdoor control panel. *Note: This option will overwrite the current system configuration.*

No: Tap **No** then **Next** to continue with the Setup Wizard.

Import for USB: Insert a USB device into the USB Port on the IntelliCenter™ Control System Outdoor or Indoor control panel. Tap Import from USB and navigate to the system configuration file (.CFG). Follow the on screen instructions to import the system configuration files plugged into the USB Port on the Outdoor or Indoor control panel.

Local or Copy from Remote: These options will overwrite the system configuration using a configuration file. Navigate to the appropriate folder and select the Configuration file (.cfg) to import. For more information, see page 89.

🚸 Detected Hardware		Detected Hardware: Displays the
Setup had detected the following Personality: i5PS Expansion Module1: None Expansion Module2: None	hardware:	installed IntelliCenter™ Control System Personality main circuit board and Expansion Cards (if applicable). See page 106.
Expansion Module3: None Expansion Module4: None		Next: Tap Next to continue to the Zip Code / Location settings screen.
Help/ Menu ★ Exit Wizard ← Back/ Home	\rightarrow Next/ Summary	Back/Home: Tap Back to go to the previous screen. Tap hold and release to the first Wizard screen.
What is your Zip code / Locat	ion Brooklyn, NY	Exit Wizard: Tap this button to exit the Setup Wizard and display the exit options (No, Yes, Discard).
11220 Latitude Y Coordinate	United States 40.65°	Update date & Time: Tap Yes and Next to update the system date and
Longitude Y Coordinate Time Zone	-73.94° UTC/GMT -5	Clock Mode: Select either 12 hour or 24 hour mode.
Help/ Menu ★ Exit Wizard ← Back/ Home	$\rightarrow_{\text{Summary}}^{\text{Next/}}$	Daylight Saving Time: Select UN to automatically set the yearly daylight saving time for your location. Select
🔆 Would you like to set the Date	& Time?	NO to manually change the daylight
Jan. 12, 2018 6:60 pm Update Date & Time YES		savings time for your location. Converting a 12 hr. time to 24 hr. (military time) is from 1:00 PM to 11:59 PM, then add 12 hours, and from 12:00 AM (midnight) to 12:59 AM subtract 12 hours.
Help/ Menu Kexit Kexit Kexit Kexit	$\rightarrow \frac{\text{Next}}{\text{Summary}}$	Zip Code / Location Screen: After the IntelliCenter™ Control System has

Note: If the PC time and date do not match the time and date displayed on the Home screen, you need to reset the PC time to match the date and time of the IntelliCenter Control System. See page 40 for more information

verified the login information successfully, the Location screen is displayed. Tap any setting to update the location information. See page 40.

Continue to next page.



Time Set: Tap the Time Set button and set the current time for your location. Tap Check to save and return to the previous page. Date Set: Tap the Date Set button and set the current date. Tap Check to save and return to the previous page. Offset (min/month: Select ON to

offset (min/month: Select UN to offset the current time (minutes) and month.

Configure AUX CIRCUITS: Setup system AUX circuits.

Create an AUX Circuit?	AUX Circuits-OCP
	Spa Generic Circuit Function: Booster Pump
Configure	AUX1 Circuit Function: Generic
AUX Circuits?	AUX2 Generic Circuit Function: Generic
	AUX3 Generic Circuit Function: Generic
	$\textcircled{Help/}_{Menu} \times \operatornamewithlimits{Exit}_{Wizard} \leftarrow \operatornamewithlimits{Back/}_{Home} \rightarrow \operatorname{Next/}_{Sumary}$

Create AUX Circuit: Tap Yes then **Next** to configure an AUX Circuits. Tap **No** then **Next** to continue to Configure Feature Circuits.

Select an AUX Circuit: Tap on an AUX Circuit name. From the next screen configure the AUX settings:

Circuit Function: Select the Circuit Function.

Circuit Name: Select a Circuit name from the pre-defined list of custom circuits names, then tap Check to save and return to the previous screen. Note: For a complete list of Circuit Names see page 61.

Visible in Features: Yes/No. Select Yes to display the selected circuits in the Feature screen on Home screen.

Egg Timer: Select ON to select a manual time-out of 0-12 hours for this circuit. The Egg Time is a specified time delay (hrs/mins) for the circuit, once it is turned on.

Freeze Protection: Assign freeze protection for this circuit. *See page 56 for details.*



Create / Modify: Tap **Next** after the first AUX Circuit has been configured. The Configure Circuits screen is displayed. Select either **Create** or **Modify** to create a new circuit or modify an existing AUX Circuit. After you have configured all of the available AUX Circuits, tap **Next** to continue to Feature Circuits.

Configure Feature Circuits: Configure Feature circuits (a total of 32).



Create / Modify: Tap **Next** after the first AUX Circuit has been configured. The Configure Circuits screen is displayed. Select either **Create** or **Modify** to create a new circuit or modify an existing AUX Circuit. After you have configured all of the available AUX Circuits, tap **Next** to continue to Configure Valves.

Create Feature Circuit: Tap Yes then **Next** to configure Feature Circuits. Tap **No** then **Next** to continue to Configure Feature Circuits.

Select a Circuit Function: Tap on either Generic or Spillway for the circuit function. From the next screen configure the Feature Circuit settings:

Circuit Function: Select either Generic or Spillway.

Circuit Name: Select a Circuit name from the pre-defined list of custom circuits names, then tap Check to save and return to the previous screen. **Note: For a complete list of Circuit Names see page 61.**

Visible in Features: Yes/No. Select Yes to display the selected circuits in the Feature screen on Home screen. **Tap Next to continue.**

Egg Timer: Select ON to select a manual time-out of 0-12 hours for this circuit. The Egg Time is a specified time delay (hrs/mins) for the circuit, once it is turned on.

Freeze Protection: Assign freeze protection for this circuit. See page 59 for details.

VALVES

Configure Valves: Tap Yes then **Next** to configure a new valve type. Tap **No** then **Next** to continue to Configure IntelliChlor SCG. *See Valve Circuits on page 76.* **Intake (standard), Return (standard):** To change the valve name, tap Intake or Return. Tap Valve name, enter the new valve name then tap Check to save and return to the previous screen.

Valve A and Valve B: If the optional Valve Module installed, Valve A and Valve B are displayed. To change the valve name, and assign a circuit to Valve A and Valve B, tap Valve A or Valve B on this screen.

Valve Name: To change the valve name, tap Intake or Return. Tap Valve name, enter the new valve name then tap Check to save and return to the previous screen.

Assigned Circuit for Valve A or Valve B: Tap *unassigned*, and select an AUX circuit for the valve. Tap Check to return to the previous screen. Tap Valve name, enter the new valve name then tap Check to save and return to the previous screen.

PUMPS

Tap Yes then **Next** to configure a new pump (Tap **No** then **Next** to continue to Configure Heaters. *See Pump Settings on page 62.*

Create: Tap **Create** then **Next** to select a new pump type (Single Speed, Dual Speed, IntelliFlo VS, IntelliFlo VF and IntelliFlo VSF) and configure the selected pump settings.

Modify: Tap **Modify then Next** to display the list of configured pumps. Tap New Pump to add a pump. From this screen you can add or delete pumps from the list. When finished with setting up pump settings, tap **Next** to continue to the Configure Heaters screen.

IntelliFlo VF Settings: Tap **Settings:** Pump Type (select a different type of pump), Pump Name (enter a name for the pump), Pump Address: select an address for the pump (1-16). Tap Back twice. Tap Flow Circuits.

Tap **New Flow Circuits** (to change the pump circuit). **Flow (GPM):** Tap the -/+ button to set the flow rate (15-134 GPM). Tap Next twice to add another pump or tap Next twice to configure a heater.

IntelliFlo VS Settings: Tap **Settings:** Pump Type (select a different type of pump), Pump Name (enter a name for the pump), Pump Address: select an address for the pump (1-16). Tap Back twice. Tap Speed Circuits.

Tap **Speed Circuits**. Tap New Speed Circuits (to change the pump circuit). **Speed** (**RPM**): Tap the -/+ button to set the pump speed (450-3450 RPM). Tap Next three times to configure a heater.

IntelliFlo VSF Settings: Tap **Settings:** Pump Type (select a different type of pump), Pump Name (enter a name for the pump), Pump Address: select an address for the pump (1-16). Tap Back twice. Tap Speed/Flow Circuits.

Tap New Speed/Flow Circuits (to change the pump circuit). Type: GPM/RPM): Select either GPM (20-140) or RPM (450-3450). Tap the -/+ button to set the speed (RPM) or Flow Rate GPM). Tap Next twice to add another pump or tap Next twice to configure a heater.

Single Speed Pump Settings: Pump Type (select a different type of pump), Pump Name, and Body (pool, spa or pool/spa). Tap Return then Next to continue and add another pump or tap No twice to configure a heater.

Two Speed Pump Settings: Tap Settings: Pump Type (select a different type of pump), Pump Name, Low Speed Circuit and High Speed Circuits. Select a circuit for the low speed and the high speed. You can choose up to (4) four high speed circuits.

HEATERS

Tap Yes then Next to configure a new heater (Tap No then Next to continue to Configure Pumps).

Create: Tap **Create** then **Next** to select a new heat source type (Gas, Solar, Heat Pump, UltraTemp or Hybrid) and configure the selected heat source settings. **Heater Name:** Enter a name for the heater. **Affiliated Body:** Pool, Spa, or Pool and Spa.

Modify: Tap **Modify then Next** to display the list of configured heaters. Tap New Pump to add a heat source. From this screen you can add or delete a heat source from the list. When finished with setting up heater source settings, tap **Next** to continue to the Configure Valves screen.

+ Add Heater: Tap Add Heater to display the available heaters. When finished configuring up the heater settings. Tap Next to continue to the Configure Remotes screen.

REMOTES (SPA-SIDE)

QuickTouch Remote: See page 81 for more information.

- To setup a QuickTouch remote, select Yes. If there is no QuickTouch remote installed, select No and tap Next to continue.
- Remote Name: You can change the name of the remote and assign the remote's four buttons equipment functions to control.
- Enable Remote ON/OFF): To enable the remote select ON. Tap Next to continue.
- Button Assignments: Tap Configure. Tap Button 1, then tap the AUX circuit button for this circuit. Tap Back and repeat for buttons 2-4. When all buttons have been assigned, tap Return arrow until SpaCommand remote screen is displayed. Tap Next to continue.

iS4 Remote: See page 80 for more information.

- To setup an iS4 remote, select Yes. If there is no iS4 remote installed, select No and tap Next to continue.
- Remote Name: If needed, you can change the name of the remote.
- Enable Remote ON/OFF): To enable the remote select ON. Tap Next to continue.
- Button Assignments: Tap Configure. Tap Button 1, then tap the AUX circuit button for this circuit. Tap Back and repeat for buttons 2-4. When all buttons have been assigned, tap Return arrow until SpaCommand remote screen is displayed. Tap Next to continue.

REMOTES

iS10 Remote: To setup an iS10 remote, select Yes. If there is no iS10 remote installed, select No and tap Next to continue.

- **Remote Name:** If needed, you can change the name of the remote.
- Enable Remote (ON/OFF): To enable the remote select ON. Tap Next to continue.
- **Remote Channel:** Assign a channel from 1-4. Tap Return.
- Affected Pump: Select pump assigned to this remote.
- Button Assignments: Tap Configure. Tap Button 1, then tap the AUX circuit button for this circuit. Tap Back and repeat for buttons 2-9. When all buttons have been assigned, tap the Return arrow until SpaCommand remote screen is displayed. Tap Next to continue.

SpaCommand® Remote: To setup a SpaCommand remote, select Yes. If there is no SpaCommand remote installed, select No and tap Next to continue.

- **Remote Name:** If needed, you can change the name of the remote.
- Enable Remote (ON/OFF): To enable the remote select ON. Tap Next to continue.
- **Remote Channel:** Assign a channel from 1-4. Tap Return.
- Affected Pump: Select pump assigned to this remote.
- Button Assignments: Tap Configure. Tap Button 1, then tap the AUX circuit button for this circuit. Tap Back and repeat for buttons 2-9. When all buttons have been assigned, tap the Return arrow until SpaCommand remote screen is displayed. Tap Next to continue.

Chemical Controllers: IntelliChem[®] Controller and IntelliChlor[®] SCG

Note: The IntelliCenter[™] Control System supports one IntelliChem Controller and one IntelliChlor[®] SCG.

IntelliChem Controller: Tap Yes then Next to configure one IntelliChem. Tap No for no IntelliChem Controller installed. **IntelliChem Settings:** Select the Channel (1-16) for the device.

Body 1 is assigned Pool/Spa for shared equipment or choose pool or spa for single body systems, **Body 2** is assigned to Spa for shared equipment systems. This screen displays the body of water assigned to the device.

IntelliChlor SCG: Tap Yes then Next to configure one IntelliChlor SCG. Tap No for no IntelliChlor SCG installed.

Body 1 is assigned Pool/Spa for shared equipment or choose pool or spa for single body systems, **Body 2** is assigned to Spa for shared equipment systems. This screen displays the body of water assigned to the device.

Chlorination Output Levels: Pool /Spa Output Levels: Set the Pool and Spa chlorine output levels. The system can only generate chlorine while the filter pump is operating. Set the run time percentage to produce chlorine. The higher the percentage the more chlorine is produced. Lower the percentage for less chlorine production. *Note: See page 78 for information about the IntelliChem Controller and IntelliChlor SCG.*
SCHEDULES



Schedules: See page 20 for more information.

- If Yes then Next to configure system schedules.
- If no schedules are required at this time, tap No then Next to continue to the Setup Wizard Summary screen.

Create / Modify: Tap Create then Next and select a circuit to schedule. Tap Modify to change an existing schedule.

Create a Schedule: Tap **Create** then **Next**. From the Schedules screen, tap **Add Schedule** and choose the circuit. Tap **Next**. From the Schedule Settings screen, tap the Schedule name button (Weekly or One Time) and select the days to run the schedule. Tap **Check** when finished to save the schedule.

Start Time: From the Select Start Time screen, tap the **Up/Down** arrow button to set the Start time for the schedule. Tap **Check** to save and return to the previous screen. Tap **Next** to continue to the Stop Time screen.

Stop Time: From the Select Start Time screen, tap the **Up/Down** arrow button to set the Start time for the schedule. Tap **Check** to save and return to the previous screen. Tap **Next** to continue to the next screen. Tap **Yes** to add more schedules, if not tap **No** to continue to the Setup Wizard Summary screen.

SUMMARY

Setup Wizard Summary (Edit Screen):

From the Setup Summary screen you can review the changes you have made to the system. If modifications are necessary, tap the item and make the changes. If everything appears to be correct, press **Next** to proceed to the Setup Wizard "Finish" screen.

大	Setup Wizard Summary			
Date & Time		Broo	oklyn, NY	
Date & fille	United States 11220			
Zip Code	11220			1
Time Zone	East Time (US & Canada) UTC-4			
AUX Circuits	4 Circuits are configured		\downarrow	
P Help/ Menu	× Exit Wizard	← Back/ Home	→ Next	

Continue to next page.

Setup Wizard [Advanced System Configuration]

Setup Wizard Complete





Back: Return to the previous screen and continue with the Setup Wizard.

Export: Go to the Export System configuration screen. Tap Yes then Next, select a folder location, tap Check to save the export file. Tap OK to return to Wizard Complete screen. Tap No then Next to return to the Wizard Complete screen. Tap No IMPORT / EXPORT screen to save the configuration to a USB. **See page 89.**

Export System Configuration: Tap Export to USB flash drive to export the current system configuration.

Export to Local: Tap Export to Local to save the current system configuration.

Back: Return to the Create Schedule screen.

Finish: Save the configuration and go to the Home screen. "Applying Settings" is displayed, then the Home screen is displayed. The Setup Wizard has been successfully completed.



Home Screen

IntelliCenter™ Control System Remote Access Instructions

Wireless Network Antenna Location

(see IntelliCenter™ Control System Wireless Connections on page 105)

- Check the Wireless Signal at the Equipment Pad: Use a mobile device or laptop to check your home network signal is available in the location of the equipment pad. If your home network name displays in the list with a good signal strength, then mount the antenna at that location. If the network signal strength is low, find an area that has a stronger signal or install a wireless extender and try the process again. Once the antenna is installed in the correct location you are ready to configure the IntelliCenter Control System for remote access.
- Internet Connection and adding a new account for www.intellicenter.com: For the initial system setup, enter your zip code and location. The next screen to display is the Pentair User Portal screen. From there you can setup either a Wireless or Ethernet connection to connect to the Internet. Add a new account or login using an existing account, which includes setting up a password, pool system's owner's name, address and contact information. This account allows access to www.intellicenter.com for remote access to the pool system via a smartphone or PC. For more information about the Pentair User Portal screen, see page 47.

Remote Access Connection Instructions

- 1. From the Home screen, tap Settings > Advanced System Configuration > Network and WiFi Setup, see page 84.
- 2. Tap **Connect to a Wireless Network** to connect to the wireless network. The available networks will be displayed. This can take up to a minute or more to complete.
- 3. Select the wireless network and enter the password.
- 4. Once the antenna has rebooted, tap **Internet Connection Test** to verify the Internet connection.
- 5. Once the Internet connection test passes, press and hold the Return arrow to return to the home screen.
- 6. Tap Settings > Pentair User Portal, see page 47.
- 7. Tap Enable Web & Mobile Interface.



Continue with Step 9 on next page.



IntelliCenter™ Control System Remote Access Instructions (Continued)

- 9. Tap Add New Account.
- 10. Tap **Property Name** and enter the name of the property, and tap the Checkmark.
- 11. Tap **Email** and enter the users Email address, and tap the Checkmark.
- 12. Tap the Checkmark to go to the next screen.
- 13. The users Email address should be shown on the first button. If it is not shown, tap the button and add it as described in the steps above.
- 14. Tap **Enter Password** and enter a Password, then tap the checkmark. Note: The password should have a least one uppercase letter.
- 15. Tap the Re-Enter Password button and retype the password, and tap the Checkmark
- 16. Tap the Checkmark to complete the process. Once the account setup is complete, return to the home screen and wait for the Pentair logo to appear. After the Pentair logo appears you are connected to www.intellcenter.com and should be able to remotely connect to your IntelliCenter Control System using your User Name and Password used previously.

Adjusting the Antenna Power

This feature to adjust the antenna signal power should only be used when the wireless network connection is unstable or your home network name is not displayed in the available list.

- From the Home screen, tap Settings
 > Advanced System Configuration > Network and WiFi Setup.
- 2. Tap Adjust Wireless Transmit Power and choose a transmit power, and tap the Checkmark.
- 3. Once the antenna has rebooted it will transmit using increased the power.
- 4. Repeat Step 1-16 (see previous page) as required to obtain a connection.





IntelliCenter[™] Control System Wireless Connections Diagram

IntelliCenter[®] Control System Configurations and Models

PANEL:	TYPE:	CAPABILITY:
OCP0	i5P	i5P Capabilities: Single body of water (Pool or Spa) Filter pump relay + 4 AUX relays Valve A & B Heater control (Gas & Electric) Solar relay output 2-speed relay output Water, Air, Solar Sensor Two COM ports Ethernet port iS4 port
OCP0	i5PS	i5PS Capabilities: Shared equipment (Pool and Spa) Intake & Return valves Same as i5P (see above for details)
OCP0	i8P	i8P Capabilities: Single body of water (Pool or Spa) Filter pump relay + 7 AUX relays Same as i5P (see above for details)
OCP0	i8PS	i8PS Capabilities: Shared equipment (Pool and Spa) Filter pump relay+ 7 AUX relays Intake & Return valves Same as i5P (see above for details)
OCP0	i10P	i10P Capabilities: Single body of water (Pool or Spa) Filter pump relay+ 9 AUX relays Same as i5P (see i5P for details)
OCP0	i10PS	i10PS Capabilities: Shared equipment (Pool and Spa) Filter pump relay+ 9 AUX relays Intake and Return valves Same as i5P (see i5P for details)
OCP0	i10D	i10D Capabilities: Dual Bodies of water with separate Pumps, Filters and Heaters

IntelliCenter[®] Control System Configurations and Models

PANEL:	CAPABILITY:			
1 or 2 bodies of water:				
OCP0:	Main Circuit board - i5P capability			
XCP1:	Exp Motherboard - i5X or i10X			
XCP2:	Exp Motherboard - i5X or i10X			
XCP3:	Exp Motherboard - i5X or i10X			
3 or 4 bodies of water:				
OCP0:	Master Motherboard - i5P capability. Has to use one of these Personality. Cards: i5PS, i8PS, i10PS or i10D			
OCP1:	Motherboard - i5P + any Personality. Card. Can use any of the 6 Personality Cards. Note: Motherboard in OCP1 same as OCP0 (OCP0 is Master)			
XCP0:	Exp Motherboard - i5X or i10X			
XCP1:	Exp Motherboard - i5X or i10X			
OCP1-4 VALVEXP	Valve Expansion module: six extra valve outputs (C, D, E, F, G & H)			
OCP1-4 A TO DXP Analog/Digital Expansion module:	Allows external input for system control (eg. Pool Cover)			

Glossary

802.11: Refers to a family of specifications developed by the IEEE for Wireless LAN technology. 802.11 specifies an over-the-air interface between a wireless client and a base station or between two wireless clients and provides 1 or 2 Mbps transmission in the 2.4 GHz band using either frequency hopping spread spectrum (FHSS) or direct sequence spread spectrum (DSSS).

802.11b: An extension to 802.11 that applies to Wireless LANs (WLAN) and provides 11 Mbps transmission (with a fallback to 5.5, 2 and 1 Mbps) in the 2.4 GHz band. 802.11b uses only DSSS. Throughput data rate is 5+ Mbps in the 2.4 GHz band.

802.11g: An extension to 802.11 that applies to Wireless LANs (WLAN) and provides 54 Mbps transmission (with a fallback to 1, 2, 5.5, 6, 9, 11, 12, 24, 36, and 48 Mbps) in the 2.4 GHz band. 802.11g uses Orthogonal Frequency Division Multiplexing (OFDM). Throughput data rate is 11+ Mbps in the 2.4 GHz band.

Access Point: An Access Point (AP) is stand-alone wireless hub that allows any computer that has a wireless network adapter to communicate with another computer and to connect to the Internet.

Client computer: The computer that gets its Internet connection by sharing either the host computer's connection or the Access Point's connection.

Expansion Kit: A kit that includes additional auxiliaries to an existing Personality Kit. Requires a Load Center for each Expansion Kit.

Feature Circuits: Programmable circuits that can control non-high voltage circuits, and valve actuators.

Freeze Protection: A circuit with freeze protection circulates water to protect pipes from freezing, if the outdoor air temperature sensor detects the temperature is getting close to freezing (below 36° F).

Gigahertz (GHz): A unit of frequency equal to 1,000,000,000 cycles per second.

High Voltage Compartment: Large lower right compartment of Load Center for all high voltage wiring including circuit breakers, relays, and GFCI.

Host computer: The computer that is directly connected to the Internet using a modem or network adapter.

Indoor Control Panel: The IntelliCenter[™] Control System color touch LCD screen is wired to the Personality board in the Power/Load Center. The control panel can be wall mounted inside a house.

iS4: Four function Spa-Side remote. Can be spa wall or deck mounted.

iS10/SpaCommand: Up to ten function spa-side remote with temperature changing capability. Can be spa wall or deck mounted.

Glossary (continued)

Internet Protocol (IP) address: The address of a computer that is attached to a network. Part of the address designates which network the computer is on, and the other part represents the host identification.

LAN: A Local Area Network (LAN) is a high-speed, low-error data network covering a relatively small geographic area.

Load Center: Metal enclosure with power relays, transformer, and circuit breakers. The Load Center is installed before to Personality Kit installation. Used for distributing power for controlling IntelliTouch[®] Control Systems. Also known as the "sub-panel."

Low Voltage Compartment: Top compartment of Load Center for all low voltage wiring.

Low Voltage Raceway: Vertical space in the left side of Power/Load Center for low voltage cabling.

Megabits-per-second (Mbps): Transmission speed of 1,000,000 bits per second.

Megahertz (MHz): A unit of frequency equal to 1,000,000 cycles per second.

Wireless Controller: Wireless controller for IntelliCenter™ Control Systems with all the functionality of the Indoor Control Panel.

Outdoor Control Panel: LCD color touch control panel with flexible hinge is installed in upper portion of Power/Load Center and connected to the main circuit board (iS5).

Personality Board: The circuit board mounted on top of the Outdoor Control Panel motherboard. The Personality board defines the system capabilities.

Personality Kit: Set of parts to define the capability of a system; may include: Outdoor Control Panel, temperature sensors, actuators, and additional relays.

Power Center: Same as Load Center with the exception of the circuit breaker base.

Relay Circuits: The circuits that control the relays on the Personality Board. Connectors on top edge of the circuit board.

RF: Radio Frequency.

Screw Terminal Connector: Removable connector that may attach to circuit board with multiple sockets (anywhere from 2 to 12) to receive wires from controllers and sensors; wires held by screw terminals; multiple wires of a small enough gauge (usually 22 AWG) may be coupled to a single socket of a terminal connector.

Transceiver: Circuit board with attached antenna that can send and receive radio frequency (wireless) transmissions.

Wi-Fi: Wireless Fidelity is meant to be used generically when referring of any type of 802.11 network, whether 802.11b, 802.11g, 802.11a. WiFi is a seal of approval from the Wireless Ethernet Compatibility Alliance (WECA).

WLAN: Wireless Local Area Network is a type of local-area network that uses high-frequency radio waves rather than wires to communicate between nodes.

Notes



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