



EasyTouch® 8 and 4 Indoor Control Panel



Installation and User's Guide

IMPORTANT SAFETY INSTRUCTIONS
READ AND FOLLOW ALL INSTRUCTIONS
SAVE THESE INSTRUCTIONS



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IMPORTANT SAFETY PRECAUTIONS



Important Notice:

Attention Installer: This manual contains important information about the installation, operation and safe use of this product. This information should be given to the owner and/or operator of this equipment.



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



WARNING - Water temperature in excess of 100 degrees Fahrenheit may be hazardous to your health. Prolonged immersion in hot water may induce hyperthermia. Hyperthermia occurs when the internal temperature of the body reaches a level several degrees above normal body temperature of 98.6° F (37° C). The symptoms of hyperthermia include drowsiness, lethargy, dizziness, fainting, and an increase in the internal temperature of the body.

The effects of hyperthermia include: 1) Unawareness of impending danger. 2) Failure to perceive heat. 3) Failure to recognize the need to leave the spa. 4) Physical inability to exit the spa. 5) Fetal damage in pregnant women. 6) Unconsciousness resulting in danger of drowning.



WARNING - To reduce the risk of injury, do not permit children to use this product unless they are closely supervised at all times.



WARNING - The use of alcohol, drugs, or medication can greatly increase the risk of fatal hyperthermia in hot tubs and spas.



WARNING - Control System is intended to control heaters with built-in high limit circuits **ONLY**. Failure to do so may cause property damage or personal injury.



WARNING - Do not use this product to control an automatic pool cover. Swimmers may become entrapped underneath the cover.



WARNING - For units intended for use in other than single-family dwellings, a clearly labeled emergency switch shall be provided as part of the installation. The switch shall be readily accessible to the occupants and shall be installed at least 10 feet (3.05 m) away, adjacent to, and within sight of, the unit.



CAUTION - Except for listed spa-side remote controls, install a minimum of five (5) feet from the inside wall of the pool and spa.


Two Speed Pump Controls Notice (Title 20 Compliance)

Please read the following important Safety Instructions (See page 26 for pump speed setup)

When using two-speed pumps manufactured on or after January 1, 2008, the pump's default circulation speed **MUST** be set to the **LOWEST SPEED**, with a high speed override capability being for a temporary period not to exceed one normal cycle, or two hours, whichever is less.

IMPORTANT SAFETY PRECAUTIONS (Continued)

General Installation Information

1. All work must be performed by a licensed electrician, and must conform to all national, state, and local codes.
2. Install to provide drainage of compartment for electrical components.
3. If this system is used to control underwater lighting fixtures, a ground-fault circuit interrupter (GFCI) must be provided for these fixtures. Conductors on the load side of the ground-fault circuit-interrupter shall **not** occupy conduit, junction boxes or enclosures containing other conductors unless such conductors are also protected by a ground-fault circuit-interrupter. Refer to local codes for details.
4. A terminal bar stamped  is located inside the supply terminal box. To reduce the risk of electric shock, this terminal must be connected to the grounding means provided in the electric supply service panel with a continuous copper wire equivalent in size to the circuit conductors supplying this equipment (no smaller than 12 AWG or 3.3 mm). The bonding lug(s) provided on this unit are intended to connect a minimum of one No. 8 AWG for US installation and two No. 6 AWG for Canadian installations solid copper conductor between this unit and any metal equipment, metal enclosures or electrical equipment, metal water pipe, or conduit within 5 feet (1.5 m) of the unit.
5. The electrical supply for this product must include a suitably rated switch or circuit breaker to open all ungrounded supply conductors to comply with Section 422-20 of the National Electrical Code, ANSI/NFPA 70.1987. The disconnecting means must be readily accessible to the tub occupant but installed at least 10 ft. (3.05 m) from the inside wall of the pool.
6. Supply conductor must be sized to support all loads. Maximum supply conductor current must be 125 Amps at 125 VAC.

EasyTouch Indoor Control Panel Kit Contents

The following items are included in the EasyTouch indoor control panel kit. If any items are missing please contact Pentair Technical Support (see page vi).

- EasyTouch indoor control panel
- Plastic anchors and mounting screws
- EasyTouch Indoor Control Panel Installation and User's Guide (this manual)

Related Manuals

- EasyTouch 8 and 4 Pool and Spa Control System User's Guide (P/N 520584)
- EasyTouch 8 and 4 Installation Guide (P/N 520583)

EasyTouch Accessories

EasyTouch Indoor Control Panel, 4 Circuits	(P/N 520548)
EasyTouch Indoor Control Panel, 8 Circuits	(P/N 520549)
EasyTouch Wireless Control Panel, 4 circuits	(P/N 520546)
EasyTouch Wireless Control Panel, 8 circuits	(P/N 520547)
iS4 Four-Function Spa-Side remote, 150 ft. cable	(P/N 520094)
iS10 Ten-Function Spa-Side remote, 150 ft. cable	(P/N 520149)
Two-Speed Three HP Relay up to three additional valve actuators	(P/N 520198)
Three HP Power Relay	(P/N 520106)
QuickTouch® four-function wireless remote kit with transceiver assembly	(P/N 520148)
IntelliChlor Acid Cleaning Kit	(P/N 520670)
IntelliChlor Spacer pass-through cell for new pool start-up	(P/N 520588)



EasyTouch 4 Indoor Control Panel (P/N 520548)



EasyTouch 8 Indoor Control Panel (P/N 520549)



EasyTouch Wireless Control Panel (8 circuit) (P/N 520547)



iS10 Spa-Side Remote Controller (P/N 520149)



iS4 Spa-Side Remote Controller (P/N 520094)



QuickTouch wireless remote controller (P/N 520148)

Technical Support

Contact Technical Support at:

Sanford, North Carolina (8 A.M. to 5 P.M.)

Phone: (800) 831-7133

Fax: (919) 566-8920

Moorpark, California (8 A.M. to 5 P.M.)

Phone: (800) 831-7133 (Ext. 6312)

Fax: (805) 553-5515

Web sites: visit www.pentairpool.com and www.staritepool.com

Section 1

EasyTouch Indoor Control Panel Overview

EasyTouch® Indoor Control Panel

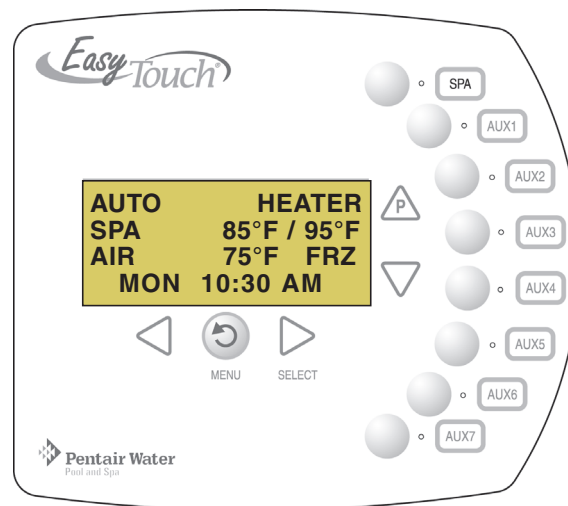
The EasyTouch Indoor Control Panel provides you with one touch automatic control for all of your pool and spa daily operations from inside your home. The EasyTouch Indoor Control Panel is designed to be used with the EasyTouch 8 or EasyTouch 4 system.

Operating EasyTouch

The EasyTouch system can automatically control your pool and spa equipment, lights and other optional equipment. You can also control all of the EasyTouch system operations from the outdoor control panel located in the Load Center at the pool equipment pad. Using the outdoor control panel buttons you can manually override any automatic settings. For more information, refer to the EasyTouch User's Guide (P/N 520584). If required, the EasyTouch Indoor Control panel can be password protected. To access a password protected control panel, the correct four digit password must be entered before access is granted (see page 42).

EasyTouch Systems

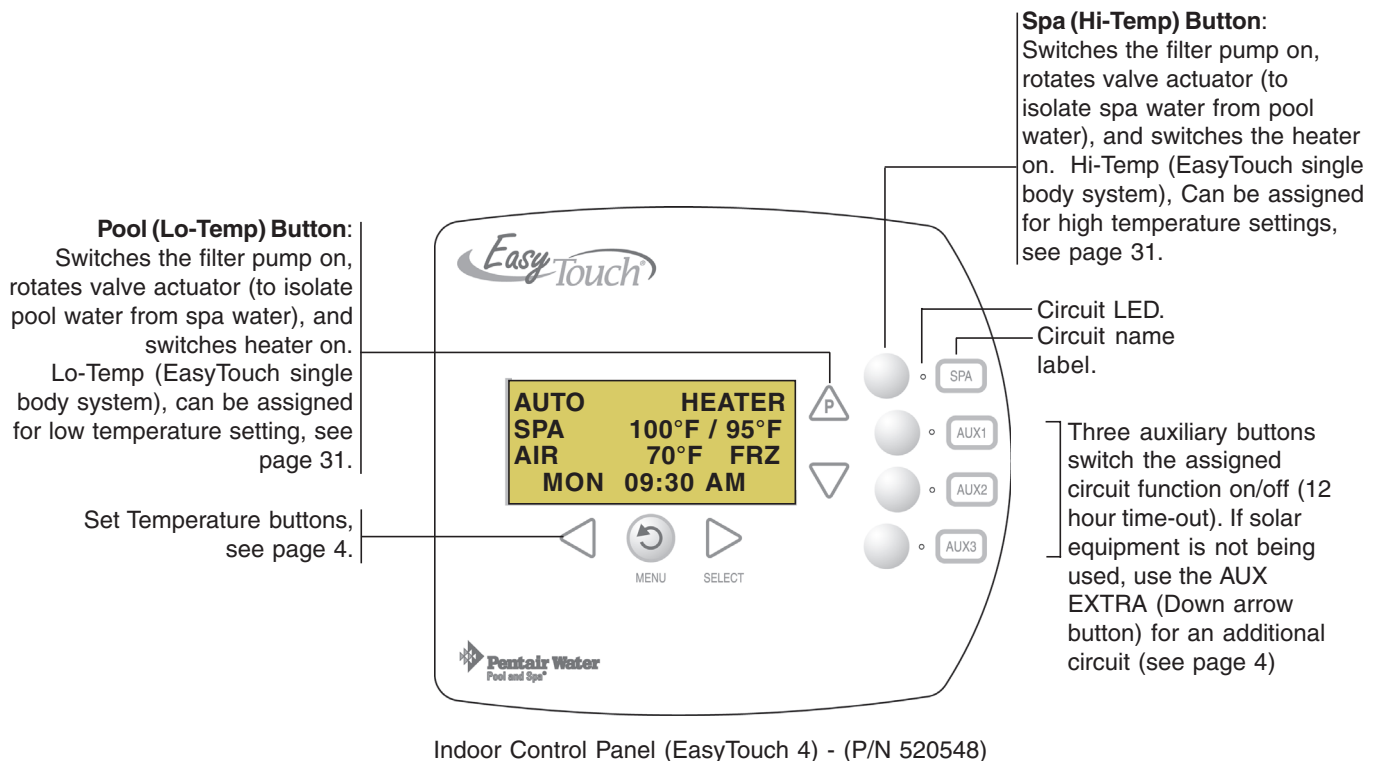
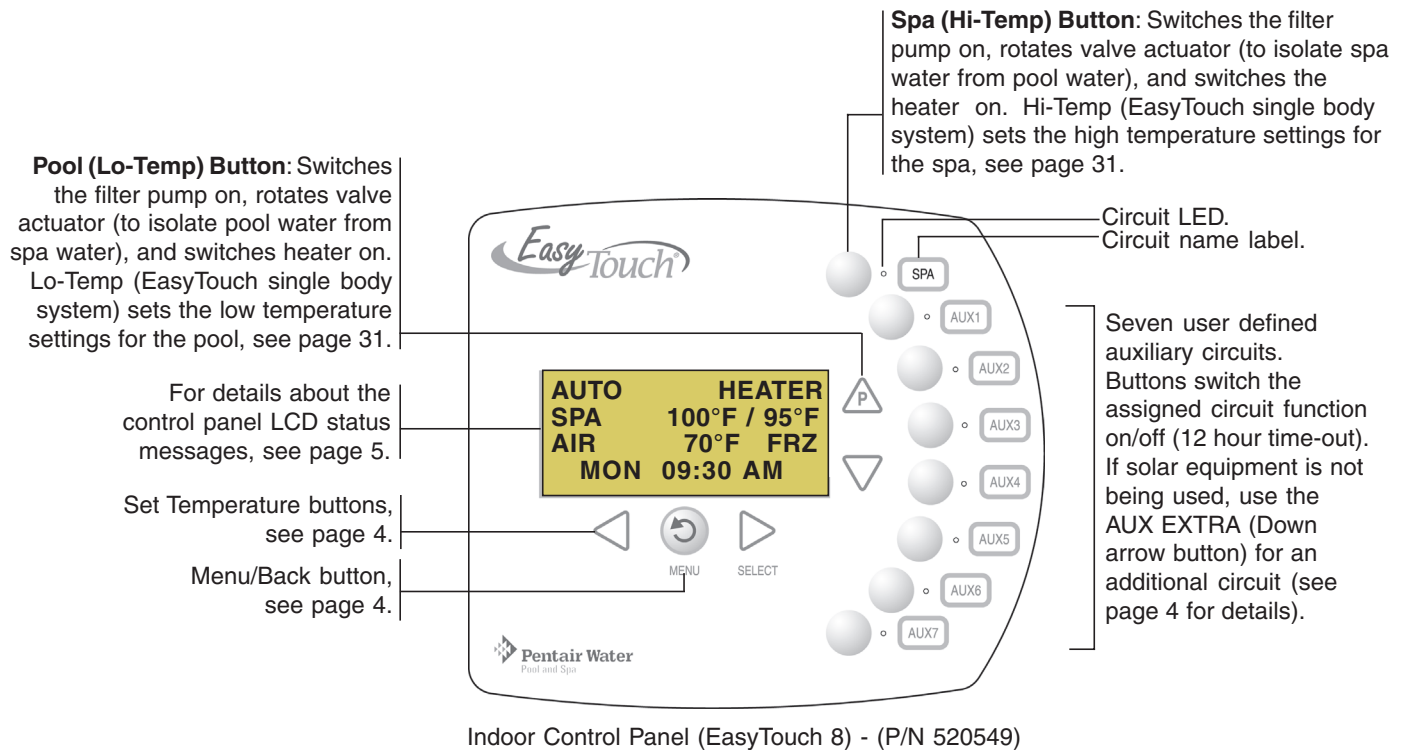
There are two EasyTouch system configurations available; EasyTouch 8 (auxiliary circuits) and EasyTouch 4 (auxiliary circuits). The EasyTouch system is factory configured to operate with a “shared” equipment system or with a “single body” system. For EasyTouch 4 and EasyTouch 8 menu settings, see page 11.



EasyTouch 8 Indoor Control Panel

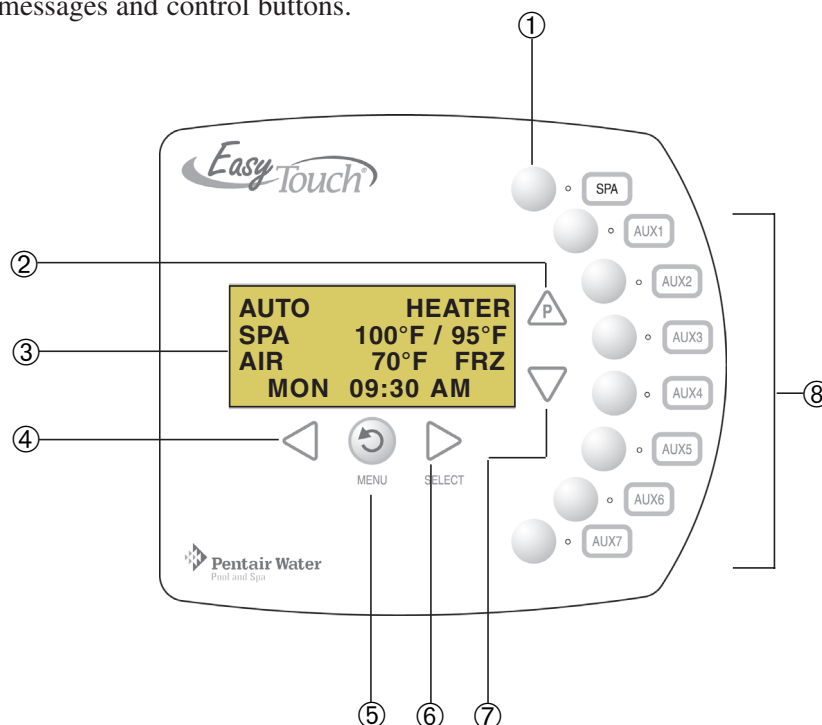
EasyTouch Indoor Control Panel Overview

The EasyTouch Indoor Control Panel makes it easy for you to control your pool and spa daily operations from inside your home. Using the “Pool” and “Spa” buttons allows one touch control to heat and filter your spa and pool. EasyTouch automatic system operations can be performed either at the Indoor Control Panel or from the outdoor control panel. The Indoor Control Panel connects to the motherboard in the EasyTouch load center.





EasyTouch Indoor Control Panel Buttons

You can fully automate your pool, spa, and lighting operations from the EasyTouch Indoor Control Panel or from the EasyTouch outdoor control panel located at the pool equipment pad. The EasyTouch menu features let you create customized schedules for your pool and spa equipment, heat temperatures, and chlorination settings to switch on and off at a set day and time. Scheduled automatic operations can be performed at the EasyTouch Indoor Control Panel or from the outdoor control panel. For menu options, refer to “EasyTouch Menu Structure,” on page 11. Before operating the EasyTouch Indoor Control Panel, familiarize yourself with the LCD status messages and control buttons.



EasyTouch Indoor Control Panel

EasyTouch Indoor Control Panel Buttons

- ①  **Spa button/LED:** For spa operations. Press the Spa button to activate the filter pump, rotate the pool/spa valve actuators and circulate the spa water (LED on). Press the button again to switch the filter pump off (LED off). While the valves are rotating into position the filter pump will switch off. For service or testing purposes, if the heater is enabled in the Heat menu, pressing this button will also activate the heater. For normal spa operations the heater is automatically switched on with the filter pump (see Man Heat page 33) regardless of the Heat menu setting. When this button is pressed the circuit is activated, the LED is on and “SPA” is displayed on the screen with the current and set point water temperatures. Once the filter pump is switched on it will run for 12 hours unless it is switched off. When this button is pressed, the LEDs on the outdoor control panel Filter Pump (F) button, Valves (V) button, and Heater button (if enabled in the Heat menu) will be on. If this display line is blank, it indicates no spa or pool function is currently active.
- ②  **Pool Button:** For pool operations. Press the Pool (P) button to activate the filter pump, rotate the pool/spa valve actuators and circulate the pool water and switch on the heater (if enabled in the Heat menu). Press the button again to switch the filter pump off. While the valves are rotating into position the filter pump will switch off. When this button is pressed the circuit is activated and “POOL” is displayed on the screen with actual and set point water temperatures. When the filter pump is switched on it will run for 12 hours unless it is switched off. When this button is pressed, the LEDs on the outdoor control panel Filter Pump (F) button, Valves (V) button, and Heater button (if enabled in the Heat menu) will be on. If this display line is blank, it indicates no pool or spa function is currently active.


Controls and buttons (Continued)


Pool button (Continued)


- **Single-Speed Filter Pump:** If the pump is currently off, press the Pool button to switch the pump on. Press the Pool button again to switch the pump off. However, if the heater is operating, and a delay is enabled for valves, this allows the heater to cool down (heater cool-down), then when you press the Pool button to switch off the pump, only the heater will turn off, then the filter pump will automatically switch off after 10 minutes to allow the heater to cool down. Pentair heaters do not require a cool down time. To override the “heater cool-down,” press the Pool button again to switch off the pump.
- **Two-Speed Filter Pump:** Press the Pool button to switch the two-speed pump on in high speed. Press the Pool button again to run the pump in low speed. In order to use the “2-Speed Pump” menu assignments (see page 36), the 2-Speed relay option must be installed in the EasyTouch Load Center.

Notes about Freeze Protection: This function protects the pool, plumbing, and equipment against freeze damage. If the outside air temperature sensor falls below 36° F (2° C), “Freeze Protection” is activated and the Filter Pump relay is switched on to circulate the pool water. To enable freeze protection for a circuit, see “Settings Menu: Circuit Functions,” on page 33.

- ③ **Liquid Crystal Display (LCD):** The main system display consists of a 16 x 4 alphanumeric character LCD with EL backlighting for easy viewing of the menu items, and status messages. Press the Menu button twice to refresh the display. For main screen status information, see page 5.

- ④  **Left button:** When in pool or spa mode, press the Left button to lower the set point water temperature. Press the Spa or Pool (Up arrow **P**) button (page 3) to display the current water temperature. While in the main menu, press the Left button to scroll through sub-menu selections, setting and values. While editing settings, press and hold the Left button to fast reverse through settings and values.

- ⑤  **Menu/Back button:** Press the Menu/Back button to access, save and exit the EasyTouch system menu settings. Use this button to exit from main menu or sub-menu items. Pressing the Menu/Back button while in a menu item will return to the main status screen. If no menu activity is detected after five minutes, the main screen is displayed. All menu settings are permanently saved and retained in the control panel even after power is removed from the control panel. Control panel buttons are disabled while in menu mode.


- ⑥  **Right button:** When in pool or spa mode, press the Right button to raise the set point water temperature. Press the Spa or Pool (Up arrow **P**) button (page 3) to display the current water temperature. Press the Right button to select a sub-menu item for editing. After pressing the Menu button to access the main menu items, press the Right button to select the menu item and access the sub-menu items for adjustment. While editing a settings, press and hold the Right button to fast forward through settings and values.

- ⑦  **Up/Down buttons:** Press the Up and Down buttons to scroll through the main menu items and to adjust or change settings. Use these buttons after pressing the Menu button to access the main menu items. While editing settings, press and hold the Up or Down button to fast forward or fast reverse through settings and values.



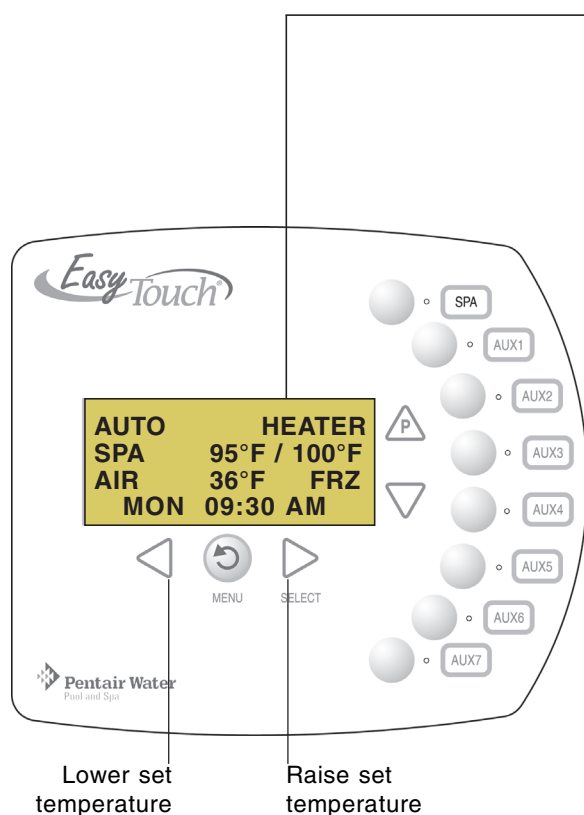
Down arrow button (Aux Extra): This button switches the assigned circuit on or off. This “extra” auxiliary circuit shares the solar circuit and is only available if the solar output plug (J17) on the motherboard is not being used for solar equipment. Refer to the EasyTouch User’s Guide (P/N 520584) for more information.

Controls and buttons (Continued)

- ⑧  **AUX buttons/LEDs:** The auxiliary output circuit buttons operate the pool and spa system valve actuators, lights and other equipment. The auxiliary (AUX) relay circuits are assigned in the “Circuit Functions” menu, see page 33 for details. There are three auxiliary circuits (AUX 1- 3) on the EasyTouch 4 indoor control panel and seven auxiliary circuits (AUX 1- 7) on the EasyTouch 8 indoor control panel. The Down arrow button can also be used as an “extra” auxiliary circuit if solar equipment is not being used. Refer to “Down arrow button” on page 4 for more information. Labels can be affixed next to each auxiliary button to identify the circuit function. When an auxiliary circuit is activated or the button is pressed, the LED is on. Pressing an auxiliary circuit button will activate the corresponding circuit in either “Auto” or “Service” mode. When a circuit relay is switched on manually, it remains on until either you switch it off manually, or the next time the relay is scheduled to be switched off. For example, if the filter pump is scheduled to automatically run from 9:00 AM to 5:00 PM daily then the filter pump is switched on manually at 9:00 PM, it will run continuously until the next day at 5:00 PM then switch off. The schedule will then continue from then on. AUX buttons are disabled while in the main menu.

EasyTouch Indoor Control Panel Display

The Indoor Control Panel screen displays when the system is in automatic mode (AUTO) or in service mode (SERVICE). Service mode is enabled from EasyTouch outdoor control panel at the pool equipment pad. The following describes the main status screen.



AUTO (Automatic): The system is in normal operating mode. Scheduled programs will run automatically. SERVICE or TIMEOUT mode are displayed when the system is being serviced. These modes are activated from the EasyTouch Outdoor Control Panel.

HEATER: Heater is switched on. Displays when the Pool (P) or Spa button is pressed. For pool operations the heat source must be enabled in the Heat menu (see page 19). Displays “Solar” or “Solar Prf” if solar is enabled. The heater is active when the set temperature is higher than the water temperature. The heater will switch off when the water temperature rises above the set temperature.

SPA (Hi-T) or POOL (LO-T) : Displays when the Spa/Hi-T or Pool/LO-T button is pressed to rotate valve actuators and activate the filter pump and heater. This line on the screen is blank when no spa or pool function is active. Note: Depending on the EasyTouch system, the screen displays SPA (shared equipment), HI-T (single body of water system), POOL (shared equipment), LO-T (single body of water system).

95° F / 100° F: Displays the actual spa or pool water temperature (95° F) and the set point temperature (100° F) as set in the Heater menu. Degree units are displayed in either Fahrenheit or Celsius.

AIR: Displays the actual outside air temperature (70° F) as read by the air sensor located near the EasyTouch Load Center. Degree units are displayed in either Fahrenheit or Celsius (see page 38).

FRZ: Displays when freeze protection is active. To protect pool system equipment, freeze protection must be enabled for the filter pump circuit. If the outside air temperature sensor detects the temperature is getting close to freezing point (below 36° F (2° C)), the freeze protection feature switches on the filter pump circuit to circulate water through the system. For more information, see page 33.

DEL: Displays when “Delay Cancel” is active. For more information, see pages 20 and 37.

Date and Time: Displays the EasyTouch system day and time as specified in the “Clock” menu setting (see page 25).

Quick Start - Pool and Spa Operations (Shared Equipment)

The following describes how to adjust heat temperature for the spa and pool water, schedule a daily run time for the pool/spa filter pump and control lights.

Heating the Spa

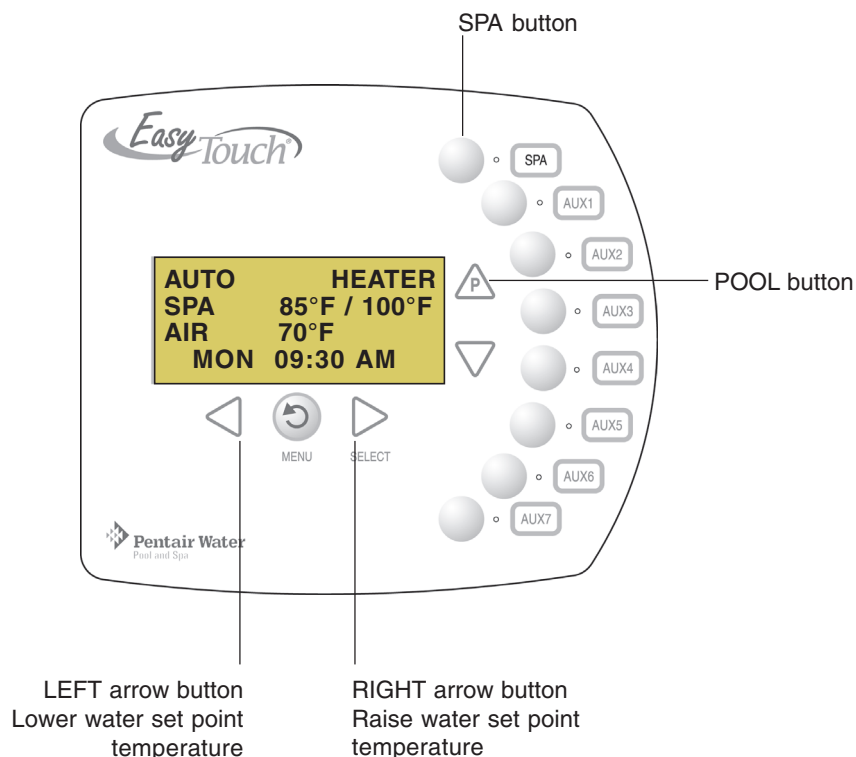
Heating the spa water on demand is easy, just press the **SPA button** to switch the heater on and display the current temperature settings on the EasyTouch Indoor Control Panel. “Heater” will be displayed on the screen when the heater is active. The heater is active when the set temperature is higher than the water temperature. The heater will switch off when the water temperature rises above the set temperature. For more information about the spa manual heating “MAN HEAT” feature, see page 41. Pressing the Spa button will switch the filter pump on and rotate the spa valve actuator to isolate and circulate the spa water from the pool water.

Heating the Pool

Heating the pool water is normally part of the daily scheduled program (see page 21). However, if you need to adjust the pool water temperature, press the **Pool (P) button** to display the current temperature settings on the EasyTouch Indoor Control Panel. “Heater” will be displayed on the screen when the heater is active and a heat source has been selected in the Heat menu. The heater is active when the set temperature, as specified in the Heat menu, is higher than the water temperature. For more information about selecting a heat source and setting the pool water temperature setting, see page 19. Pressing the Pool button will switch the filter pump on and rotate the pool valve actuator to isolate and circulate the pool water from the spa water.

Adjusting the water temperature setting

To adjust the set temperature setting for the pool or spa water, either use the **Left arrow button** to lower the temperature setting or the **Right arrow button** to higher the temperature setting.



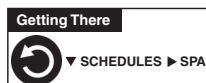
EasyTouch Indoor Control Panel

Quick Start - (Pool and Spa Operations (Shared Equipment) Continued

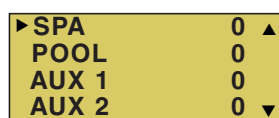
Schedule start and stop times for equipment

From the Schedules menu you can set the a start and stop time to automatically run pool and spa equipment and control underwater and backyard lights. For example, the filter pump relay circuit can be scheduled to run the daily pool and spa filtration at a specific time and day(s) of the week. Up to 12 total program schedules may be created for all relay circuits combined. The pool and spa circuits can also be scheduled to switch on the heater to heat the pool or spa water up to the set point temperature as set in the “Heat” menu (see page 19). If the pool has a separate jet pump or blower controlled by AUX 1 and/or AUX 2 , these need to be scheduled separately.

Schedules

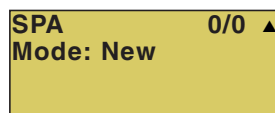


To create a schedule to heat the spa:



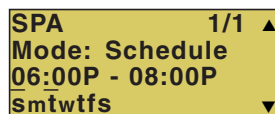
Right button: Select the **Spa** circuit. The standard generic circuit names are: Spa, Pool, Aux1-7, Features 1-8, (EasyTouch 8), Aux 1-3, Features 1-4 (EasyTouch 4), and Aux Extra “Aux Extra” is only available if the Solar output (J17) plug on the EasyTouch motherboard is not being used for solar equipment.

Right button: Select **Mode** if there are existing programs. Skip this step to create a new program.



Up/Down button: Select **New** to create a new program.

Right button: To create a new program and enter the Mode settings.



Up/Down button: 1/1 indicates that this circuit has one program. If there are existing programs assigned to this circuit, use these buttons to view and select the existing program settings.


Right button: To select the Schedule settings. **Right button:** Move to start and stop time settings.

Up/Down and Right buttons: Set start and stop hour (A/P), minutes.

The A (AM) and P (PM) time is set when setting the start and stop hour (6:00 PM to 8:00 PM).

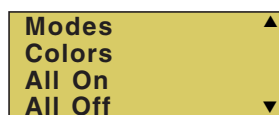
Right button: Move to days of the week to run the program.

Right and Up/Down buttons: By default the program is set to run all the days of the week. If you wish to edit which days to run the program, select the day of the week, then press the **Up/Down** button to remove the bar from the top of the letter. A bar on top of the letter indicates the day selected to run the program. In this example Sunday and Tuesday are scheduled.

 Press the Back button to save the settings and to return to the Schedules menu options. Press the button again to return to the main menu options or press again to return to the Main screen.


Controlling Lights

From the Lights screen you can manually switch all lights on or off, configure and synchronize colored lights. For more information about setting up IntelliBrite colored show modes, fixed colored lights, SAm and SAL Color Swim and Color Set modes, refer to the Lights Menu on page 12.



To manually switch on or off all lights:

Up/Down button: Select: **All Off** or **All On**.

 Press the Back button save the settings and to return to the main menu items or press the button again to return to the Main screen.

EasyTouch Wireless Control Panel (Optional)

The EasyTouch wireless control panel (8 or 4 circuits) gives you the freedom to control your pool and spa daily operations from around your pool and spa area. The wireless device can operate up to 300 feet from the EasyTouch transceiver module which is typically located near the EasyTouch load center. There is enough battery power to operate the whole summer season without changing batteries. Using the power saving menu options you can also reduce power consumption and extend battery life. The EasyTouch wireless control panel is water resistant, however, is not intended to be submersible. The EasyTouch wireless control panel is designed to be used with the EasyTouch 8 or EasyTouch 4 system.



EasyTouch wireless control panel,
eight circuit (P/N 520547)

QuickTouch® QT4 Wireless Remote Controller (Optional)

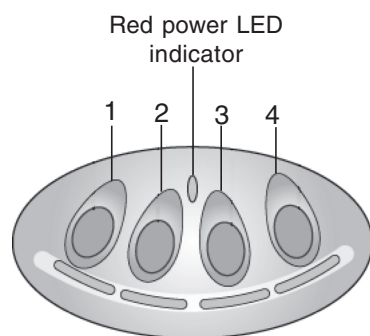
The QuickTouch QT4 wireless controller provides switching of up to four circuits. You can use the QT4 wireless controller to activate the spa circulation, and for operating three auxiliary pieces of equipment (such as lights, jet pump, air blower, waterfall, etc.). Each of the four functions on the QT4 wireless controller has an on and an off button. For more about assigning circuits to the QT4 buttons, refer to “Settings Menu: QuickTouch (QT4) Wireless Remote,” on page 32. Note: The QT4 wireless controller may be used with wet hands, but should never be submersed in water as this could damage the QT4. If accidental submersion occurs, dry the QT4 out by removing battery cover and removing battery. Position the QT4 so that water can drain out. Reassemble when the QT4 is completely dry.



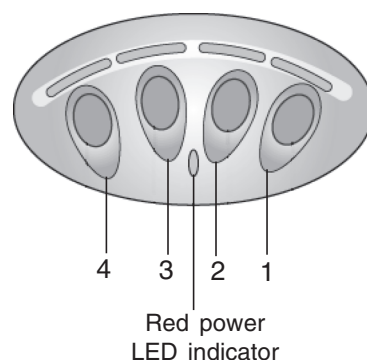
QuickTouch (QT4) wireless
remote controller (P/N 520148)

iS4 Spa-Side Remote Controller (Optional)

The iS4 Spa-Side remote controller is a double-insulated, waterproof device that is UL (1563) listed for installation at the water's edge. Pentair recommends that the iS4 always be installed above the water line of the spa wall, or in the deck within arm's reach of a spa occupant. The iS4 provides remote switching of up to four control circuits from the spa location. It is typically used for activating spa circulation and any three auxiliary pieces of equipment (such as lights, jet pump, air blower, etc.). The red status LED indicator glows steady when in Spa mode and flashes while the spa is heating. For more about assigning circuits to the iS4 buttons, refer to "Settings Menu: iS4 Spa-Side Remote controller," on page 31. The iS4 two installation choices are shown:



iS4 Spa-Side Remote Controller
(Wall or tile mount)



iS4 Spa-Side Remote Controller
(Deck mount)

iS10 Spa-Side Remote Controller (Accessory)

An iS10 Spa-Side remote controller can control up to ten functions including a spa temperature adjustment. The iS10 Spa-Side remote controller is listed UL (1563) for use with the IntelliTouch systems at the water's edge. Five (5) in-line buttons control up to ten (10) system functions numbered one through five from left to right. The middle peanut-shaped button toggles between the top and bottom row of buttons. The iS10 includes an LED display shows the current spa water temperature. The spa temperature may be increased or decreased by pressing the up or down arrow button located under the display. The temperature display will blink while being changed. After setting the desired temperature, the display will return to steady and show the actual temperature as it meets the set point. The temperature set by the iS10 is only temporary. When the Spa mode is switched OFF, the temperature set at the EasyTouch control panel will resume the next time the spa mode is activated (see Man Heat menu). The Spa Mode will automatically turn off after 24 hours. For iS10 setup and configuration information, see page 39.

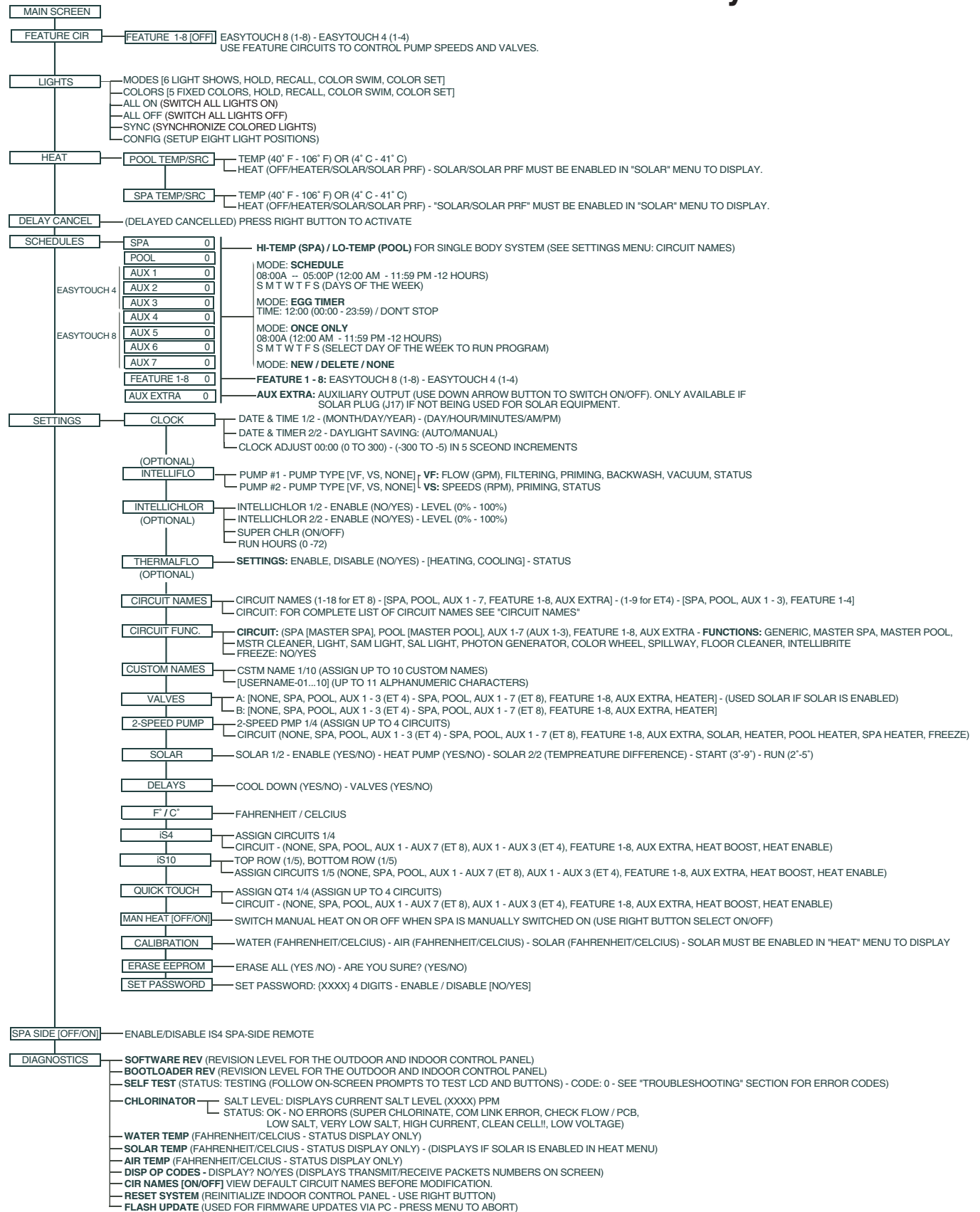


iS10 Spa Side Remote
Controller (P/N 520149)

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Section 2

EasyTouch Menus



EasyTouch Menus

Use the EasyTouch wireless control panel menus to schedule when to heat and filter your pool and spa automatically. Lights can also be switch on and off. The main screen shows the pool (or spa), temperatures and the system day and time. The main screen is automatically displayed if there is no menu control panel activity for five minutes. The “Settings” and “Schedule” menus are typically used most often for daily spa and pool operations. The “Settings” menu is used by the pool installer to setup installed equipment which is connected to each output relay (filter pump, auxiliary relays, heater, valves, lights, etc.). For installation instructions See the EasyTouch Installation Guide (P/N 520584).

Main Screen

AUTO	HEATER
SPA	95°F / 100°F
AIR	70°F
MON	09:30 AM

AUTO	
AIR	70°F
MON	09:30 AM

The main screen shows the mode of operation (AUTO/SERVICE), the heat source being used. The spa (or pool) actual water temperature (95° F) and the current heater set point temperature (100° F) are displayed. The current air temperature is also displayed in either Fahrenheit or Celsius. If the second display line is blank and the heat source is not displayed, there is no spa or pool function currently active. If the IntelliChlor salt chlorinator generator option is installed, pool and spa sanitizer settings, and salt level is shown in the Diagnostics, “Chlorinator,” settings.

Main Screen Description

AUTO: EasyTouch is in normal (automatic) operating mode.

HEATER: The selected heat source as selected in the “Heat” menu (see page 19). The heat options are:

- **OFF** - No heating even though pump and other circuits may be operating.
- **HEATER** - Gas heater only.
- **SOLAR ONLY** - Solar heating system to be the only heat source. In order to display “Solar Pref.” on the main screen, you must first enable solar in the “Solar” menu (see page 36).
- **SOLAR PREF.** - (Solar Preferred) - For when solar and gas heating are combined, and you want to use solar heating only when it is most effective. In order to display “Solar Pref.” on the main screen, you must first enable solar in the “Solar” menu.

SPA: “SPA” is displayed after the **Valves (V)** button is pressed to set in “spa” mode then the **Filter (F)** button is pressed to switch the filter pump on, rotate the valve actuator (to isolate spa water from pool water), and switch the heater on (if enabled in the “Heat” menu). Pressing the **Valves (V)** button alternates between “Pool” and “Spa” mode. The temperature unit displayed on the left side is the actual water temperature (95° F) and the set point temperature (100° F) as set in the “Heat” menu is displayed on the right side. Degree units are displayed in either Fahrenheit or Celsius (see page 38). If this display line is blank, it indicates no spa or pool function is currently active. For Hi-Temp controls (EasyTouch single body system), see page 31.

POOL: “POOL” is displayed after the **Filter (F)** button is pressed to switch the filter pump on, rotate the valve actuator to isolate the pool water from the spa water, and switch the heater on (if enabled in the “Heat” menu). Pressing the **Valves (V)** button alternates between “Pool” and “Spa” mode. The temperature unit displayed on the left side is the actual water temperature (95° F) and the set point temperature (100° F) as set in the “Heat” menu is displayed on the right side. Degree units are displayed in either Fahrenheit or Celsius. If this display line is blank, it indicates no spa or pool function is currently active. For Lo-Temp controls (EasyTouch single body system), see page 31.

AIR: Displays the actual outside air temperature (70° F) as recorded by the air sensor located near the EasyTouch load center. Degree units are displayed in either Fahrenheit or Celsius (page 38).

DAY and TIME: The current system day and time (AM/PM). See the “Clock” menu to set the system day and time (page 25).

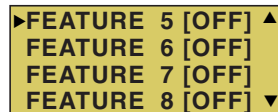
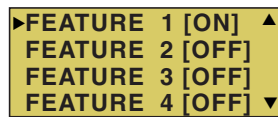
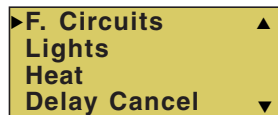
Feature Circuits Menu

There are eight “Feature Circuits” available for settings IntelliFlo pump speeds and selecting valves. Unlike an auxiliary circuit a feature circuit does not connect directly to a relay. A feature circuit can be used to change pump speeds for the IntelliFlo VF and IntelliFlo VS. For example, the IntelliFlo VS can be configured for eight different pump speeds (RPM) using eight feature circuits. For more information about setting up an IntelliFlo pump, see page 26.

Feature Circuits




To configure a feature circuit:



Right button: Select FEATURE 1 (On/Off) to enable the feature circuit.

Up/Down buttons: Choose FEATURE 1 - 8 circuits. Note: Feature 1 - 8 (EasyTouch 8), Feature 1 - 4 (EasyTouch 4).

Right button: Select the Feature Circuits (ON or OFF).

 Press the Menu button to setup other lights or press Menu button four times to return main screen.

Lights Menu

From the Lights screen you can manually switch all lights on or off, and synchronize colored lights. Up to eight (8) lights (EasyTouch 8) or 4 lights (EasyTouch 4) can be independently controlled from the **Lights** screen. Each light requires a separate auxiliary relay circuit. Up to four lights can be assigned on each auxiliary circuit. A circuit name must be assigned to the AUX relay circuits which controls the light. Verify that IntelliBrite, *SAm* and/or *SAL*, and/or *FIBERworks* have been selected in “Circuit Functions”. If *FIBERworks* lighting is being used, it also has to be set up as a “PHOTON GENERATOR” for the circuit controlling the light bulb, and *COLOR WHEEL* for the circuit controlling the color wheel. For more information about setting up lights, see “Settings Menu: Circuit Functions,” on page 33.

The Color Swim and Color Set Lighting Features

The Color Swim and Color Set lighting features can be selected in the **LIGHTS > MODES** menu. At least two (2) Pentair Water Pool and Spa®, IntelliBrite®, *SAm*® and/or *SAL*®, and/or *FIBERworks*® lights are required to use these lighting features.

- **Color Swim** - Select the Color Swim feature in the **MODES** and **COLORS** menus to start lights to transition through colors in sequence to give the appearance of colors dancing through the water. You can adjust the delay of each light to make the colors move at different speeds using the **LIGHTS > CONFIG** option. This lighting feature requires a separate relay for each light. To switch off the Color Swim feature, select the AUX button assigned to the light circuit or select **ALL OFF** in the Lights menu.
- **Color Set** - Select the Color Set feature in the **MODES** and **COLORS** menus to switch the light on using specific color as selected in the **COLORS** menu. This feature requires a separate relay for each light. To switch off the Color Swim feature, select the AUX button assigned to the light circuit or select **ALL OFF** in the Lights menu.
- **Sync** - Select the Sync feature in the **LIGHTS** menu to switch on all IntelliBrite, *SAm*, *SAL*, or *FIBERworks* color changing lights and synchronize their colors.
- **Smart Start** (SS: Yes/No) - Select Smart Start in the Schedules menu (see page 21). The Smart Start feature automatically starts changing colors when the lights are programmed to switch on. Smart Start is used when Color Swim and IntelliBrite show modes are being used. For more information see page 16.

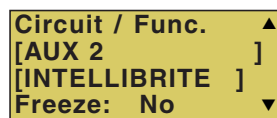
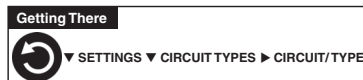
Setting up Lights

The following section describes how to assign a light circuit function and name to control Pentair IntelliBrite, *Sam* and/or *SAL*, and/or *FIBERworks* lights.

Assign the Circuit Function and Name

The first step in setting up a light is to assign the circuit function as a light circuit. The light circuit functions are: Light, SAM, SAL, Photon Generator, Color Wheel, Spillway, and IntelliBrite (see page 34). After assigning the circuit function, assign the circuit name for the AUX light circuit. The light circuit name will appear on the main screen.

To assign a circuit function:

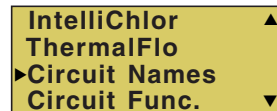


Up/Down buttons: Choose the circuit to assign it as a light of circuit. The circuits are: Aux 1-7, Feature 1-8 (EasyTouch 8), Aux 1-3, Feature 1-4 (EasyTouch 4), and Aux Extra. “Aux Extra” is only available if the Solar output (J17) plug on the EasyTouch motherboard is not being used for solar equipment. Use the **Down arrow** button to switch the “extra” auxiliary circuit on and off.

Right button: Move to circuit function setting to select the type of logic needed for your light circuit.

Up/Down buttons: Set the type of light circuit to use. For a complete list of preset circuit functions, see “Preset Circuit Functions,” on page 34. The light circuit names are: Light, SAM Light, Photon Generator, color Wheel, and IntelliBrite. *Note: To use the Color Swim or Color Set feature you need to select IntelliBrite, SAM, SAL, Photon Generator or Color Wheel.*

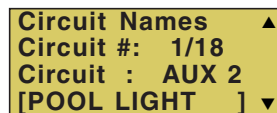
Press the Menu button to return to the Settings menu and name the light circuit.



Up button: Select Circuit Names. For a complete list of circuit names, see “EasyTouch Circuit Names,” on page 31.

Right button: Move to Circuit Names.

To assign a circuit name:



Up/Down buttons: Change AUX circuit name to a name that describes where the light is located, such as “Pool Light.” Select the circuit number 1 of 10 (1/18). The generic circuits names are: Spa, Pool, Aux 1-7 (EasyTouch 8), Aux 1-3 (EasyTouch 4), Auxx (Aux Extra). The circuit number (1/18) corresponds to its assigned circuit name. The name can be changed to suite the function. “Aux Extra” is only available if the Solar output (J17) plug on the EasyTouch motherboard is not being used for solar equipment. Use the Down arrow button to switch the “extra” circuit on and off. Use the Down arrow button to switch the “extra” circuit on and off.

Right button: Move to EasyTouch preset circuit names and user defined custom circuit names.

Up/Down buttons: Scroll through the list of alphabetical programmed names. If you cannot find a name to match your circuit, you can create your own custom name (see page 35). Repeat steps above for all the circuit buttons that you wish to assign names to.

Press the Back button to save the settings and to return to the Settings menu options. Press the button again to return to the main menu options or press again to return to the Main screen.

Setting up lights

From the Lights screen you can manually switch all lights on or off, synchronize colored lights, and activate color light shows. Up to eight (EasyTouch 8) or four (EasyTouch 4) light circuits can be configured from the “Config” light menu. Each light must have its own relay and separate circuit.

Setting up IntelliBrite Light Circuits

Before configuring the lights, be sure the auxiliary (AUX) circuits that control the IntelliBrite lights have been assigned as an “IntelliBrite” light. For more information about “Circuit Functions” and “Circuit Names,” see pages 31 and 33.

Lights Menu

To access the Lights menu screen, press **Menu > Lights**. The Lights menu settings are: MODES, COLORS, ON/OFF, SYNC, CONFIG:

Modes (IntelliBrite Color light shows, Color Swim, Color Set)

To access the Modes menu, press **Menu > Lights > Modes**. There are six pre-programmed color light shows to choose from. From the “Modes” screen you can select various preset show color lighting effects, such as “American mode” and “Sunset mode”, “Color Swim” or “Color Set.” Using the “Hold” and “Recall” feature (see page 17) you can also capture and save a unique color light show effect to recall at a later time.

The IntelliBrite color mode light shows are:

- **Party:** Rapid color changing building the energy and excitement
- **Romance:** Slow color transitions creating a mesmerizing and calming effect
- **Caribbean:** Transitions between a variety of blues and greens
- **American:** Patriotic red, white and blue transition
- **Sunset:** Dramatic transitions of orange, red and magenta tones
- **Royalty:** Richer, deeper, color tones

IntelliBrite Light: If the IntelliBrite light was not previously on, after selecting a color show mode, no illumination will occur for up to ten (10) seconds (depending on the selection), then a white light will momentarily illuminate, followed by the color show mode selection. If the light was previously on, selecting the a color show mode button will momentarily illuminate the previously selected color before changing to the selected color show.

Modes (Color Swim)

The Color Swim feature cycles through white, magenta, blue and green colors. Using IntelliBrite lights, Color Swim emulates the Pentair SAM and SAL Color Swim feature (see page 18)).

IntelliBrite Light Color Swim/Color Set: If the light was not previously on, after selecting Color Swim, no illumination will occur for approximately six (6) seconds followed by the selection. If the light was previously on, after selecting the Color Swim feature, the previously selected color will momentarily illuminate, no illumination will occur for approximately six (6) seconds followed by the selection.

Setting up lights (Continued)

Modes (Color Set)

The “Color Set” feature allows any combination of up to eight (EasyTouch 8) or four (EasyTouch 4) IntelliBrite lights, and Pentair SAM, SAL and or Fiberworks lighting to be preset to specific colors. Fixed light colors are selected and activated from the Colors screen.

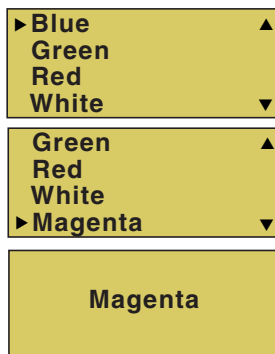
IntelliBrite Light: *If the light was not previously on, after selecting the fixed colored light, no illumination will occur for approximately six (6) seconds followed by the selection. If the light was previously on, after selecting the colored light, the previously selected color will momentarily illuminate, no illumination will occur for approximately six (6) seconds followed by the selection.*

Colors

Choose any one of the five fixed colors to create a spectacular underwater lighting effect. The fixed colors are: **Blue, Green, Red, White** and **Magenta**. You can switch each fixed colored light on or off from the Colors screen.

IntelliBrite Light: *If the light was not previously on, after selecting a fixed colored light, no illumination will occur for up to ten (10) seconds (depending on the selection), then a white light will momentarily illuminate, followed by the color selection. If the light was previously on, selecting the a color button will momentarily illuminate the previously selected color before changing to the selected color.*

To select a fixed color press: **Menu > Lights > Modes > Colors:**



Up/Down buttons: Choose a color for the light.

Right button: Switch the selected colored light ON. To switch the light off, go to the main Lights menu and select **All Off**, or press the AUX button assigned to the light. The AUX button will also switch the light on.



Press the Menu button three times to return main menu.

⚠ WARNING - IntelliBrite Lights: During the off/on switching process, before the selected color is displayed, no illumination will occur. This operating mode is normal during the switching process. During this period the pool and spa will be dark and precautions should be taken to avoid unforeseen accidents. Failure to observe this warning may result in serious injury or death to pool and spa users.

Hold/Recall

Select Hold and Recall from the “Modes” or “Color” screen to capture and save a unique color effect and recall it at a later time. For example, while a light show (Romance Mode) is active, select “Hold” to save the exact colors that are being displayed, then later, to recall the exact color effect, select “Recall.”

Note: *After selecting Hold or Recall, no illumination will occur for up to 10 seconds, then a white light will momentarily illuminate, followed by the saved color.*

All On / All Off (Lights Menu)

Select All On or All Off from the Lights screen to manually switch all light on or all lights off. Pressing the AUX button assigned to a light circuit will also switch a light on or off.

Sync

Select the Sync from the Lights screen to synchronize all IntelliBrite, SAM, SAL, or FIBERworks color changing lights and synchronize their colors.

Setting up lights (Continued)

Config

From the “Config” screen you can setup the IntelliBrite light position, and specify the color of each pool and spa light. Any combination of up to eight (EasyTouch 8) or four (EasyTouch 4) IntelliBrite lights, Pentair SAM, SAL and or Fiberworks lights can be preset for specific colors and position when using the “Color Swim” and “Color Set” feature. Fixed light color are selected and activated from the Colors screen.

To select configure a light position and color: **Menu > Lights > Config:**

1-	[POOL]	▲
2-	[SPA]	
3-	[BACK YARD]	
▶4-	[AUX 4]	▼

5-	[NONE]	▲
6-	[NONE]	
7-	[NONE]	
8-	[NONE]	▼

[AUX 4]
[LAVENDER]
[1ST POSITION]
[DELAY 5 SECS]

Up/Down buttons: Choose the light circuit (1-8) to configure. Select an available auxiliary circuit (NONE). For more about assigning an auxiliary circuit to a light, see Circuit Functions (page 31) and Circuit Names (page 33). EasyTouch 8 supports up to eight (8) auxiliary circuits, EasyTouch 4 supports up to four (4) auxiliary circuits.

Right button: Select the light to setup.

Up/Down buttons: Select the light circuit.


Right button: Move to the light color selection.

Up/Down buttons: Select the light color (**Blue, Cyan, Green, Lt. Green, White, Lt. Magenta, Magenta, Lavender**).

Right button: Move to the light position selection.

Up/Down buttons: Select the light position. A light can be assigned to any position from 1 through 12. To ensure that the “Color Swim” and “Color Set” lighting feature color effects are correct, set the position of the light according to where it’s located in the pool or spa. **Position 1** will lead all the other lights in the color changing sequence. **Position 2** follows Position 1 and so on. There are 12 position to choose from. More than one light may be assigned to the same position number so that their colors may be synchronized. For example, to make the colors swim right to left, make your right most light Position 1. You may need to go back to and scroll through your lights to find the right most light, and set it as Position 1.

Right button: Move to the light delay selection. The Delay time between two or more lights can be set from 0 to 60 seconds. Use a higher delay time for lights spread further apart. Try five seconds for all lights and observe the effect. Use different time settings to achieve unique lighting moods and effects.

 Press the Menu button to setup other lights or press Menu button four times to return main screen.

Setting up SAM, SAL, PG2000, Color Wheel Lights

Before using the lighting feature “Color Swim” or “Color Set” with Pentair Water Pool and Spa SAM or SAL lights, make sure the AUX relay circuits which control the lights have been assigned as “light” circuit and that the name (AUX 1, AUX 2) has been changed to best fit the light being used. Verify that *SAM* and/or *SAL*, and/or *FIBERworks* have been assigned in “Circuit Functions” as SAM or SAL lights. If *FIBERworks* lighting is incorporated, it also has to be set up as a “PHOTON GENERATOR” light function for the circuit controlling the light bulb, and COLOR WHEEL for the circuit controlling the color wheel it self. The circuit light functions are: Light, SAM, SAL, Photon Generator, Color Wheel, and IntelliBrite, see page 34 for more information.

Heat Menu

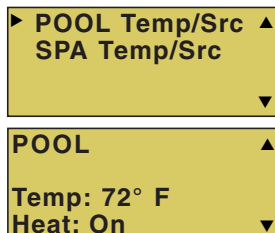
Use the heat menu settings to specify the set point temperature and select the heat source to heat the pool and spa water. The water will begin to heat when the heater is manually switched on, by pressing the Pool, Spa button on the Wireless Control Panel or the Valves (V) button on the Outdoor Control Panel, regardless of the heater selection (off) in the Heat menu. The optional iS4, iS10 Spa-Side remote or QuickTouch QT4 wireless remote can be used to switch the heater on. The EasyTouch system supports gas, electric and solar heating systems. The EasyTouch will use the heating source that is selected. The heat source selections are:

- **OFF** - No heating even though pump and other circuits may be operating.
- **HEATER** - Gas heater only. When the heater is active it will continue heating the water until the heater's current highest set point temperature triggers the heater sensor (approximately 104° F (40° C). Do not activate the heater without running the pump. The heater will not run if water flow is not detected.
- **SOLAR ONLY** - Solar heating system to be the only heat source. In order to display "Solar Pref." on the main screen, you must first enable solar in the "Solar" menu (see page 36).
- **SOLAR PREF. (Solar Preferred)** - Use this option when solar and gas heating systems are installed, and you want to use solar heating only when it is most effective. In order to display "Solar Pref." on the main screen, you must first enable solar in the "Solar" menu.

POOL Temp/Src



To set the pool temperature and select the heat source:




Right button: Select pool temperature and heater options.

Up/Down button: Set the pool temperature from 40° F to 104° F (4° C to 40° C).

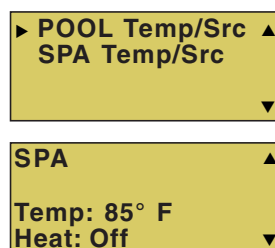
Right or Left button: Move to Heater option.

Up/Down: Select heater option: **Off, Heater, Solar, or Solar Preferred.**

 Press the Back button save the settings and to return to the previous menu or press the button again to return to the Main screen.

SPA Temp/Src

To set the spa temperature and select the heat source:




Right button: Select spa temperature and heater options.

Up/Down button: Set the spa temperature (from 40° F to 104° F or 4° C to 40° C).

Right or Left button: Move to Heater option.

Up/Down: Select heater option: **Off, Heater, Solar, or Solar Preferred.** For spa operations select Off. By default, the spa "Manual Heat" feature (page 41) is always set to "On." This allows the spa to begin to heat whenever the Spa (Up arrow) button is pressed, regardless of the of the heat source setting in the Heat menu. This feature allows the spa water to be filtered daily with the heater switched off.

 Press the Back button save the settings and to return to the Heat menu or press the button again to return to the Main screen.

***Note:** For an EasyTouch single body system, "Pool" and "Spa" modes are Lo- Temp (Pool) and Hi-Temp (Spa) temperature controls. For more information, see "Hi-Temp/Lo-Temp Controls for Single Body Systems," on page 31 .*

Delay Cancel Menu

Use the Delay Cancel feature for service or testing purposes. For convenience, on a one time basis, the Delay Cancel feature will cancel the following safety delays. Please note, generally there is no need to cancel any of the following delays except for servicing or testing the system.

- **Heater Cool-Down Delay Cancel:** Shuts Filter Pump off immediately.
- **2-Speed Filter Pump five-minute START on HIGH SPEED Delay Cancel:** Shifts pump to low speed.
- **Automatic Pool Cleaner START Delay:** Starts Cleaner Pump immediately, without normal delay in which the filter pump first runs for 5 minutes.
- **Automatic Pool Cleaner SOLAR Delay:** Allows Cleaner Pump to run even though solar delay has shut it off for five minutes.

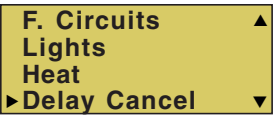
Some heaters require a cool-down cycle before being switched off. This can be setup in the menu to run the filter pump an additional ten minutes to dissipate residual heat built up inside the heater combustion chamber. The Delay Cancel feature is mainly for use by service technicians when it’s necessary to shut the filter pump off immediately, and know the heater has not been running. 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.


Note: For Information about assigning delays to the pool and spa valves, refer to “Settings Menu: Delays” on page 37.



Delay Cancel

To activate Delay Cancel:



- Up/Down button:** Select Delay Cancel.
- Right button:** Use this button activate Delay Cancel for one time only. “Delay Cancelled” is displayed after pressing the Right button.
-  **Press the Back button** to return to the Main screen.

Schedules Menu

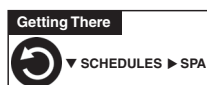
Use the Schedules menu to create programs that automatically run equipment such as the pool and spa pump or to control lights. Any relay circuit can be programmed to switch on and off at a specific time and day of the week. The number of programs that can be created for circuits is as follows:

- Up to 12 total programs can be created for all circuits combined.
- One circuit can have up to a maximum of nine (9) programs (9/9), which leaves three (3) programs that can be used by one circuit or three separate circuits for a total of 12 programs.

Note: For more about scheduling programs, “Scheduling Programs” on page 7.

Using the Schedules menu settings and options

The Schedules menu settings and options are as follows:



▶ SPA	0	▲
POOL	0	
AUX 1	0	
AUX 2	0	▼

Choose the circuit to program

Up/Down button: Select the generic circuit name to program: Spa, Pool, Aux 1-8, Feature 1-8 (EasyTouch 8), Aux 1-4, Feature 1-4 (EasyTouch 4) and Aux Extra. “Aux Extra” is only available if the Solar output is not being used (see page 4).

The current number of programs for each circuit is displayed opposite the circuit name. A circuit can have up to 9 programs (9/9). Three additional programs can be assigned to another circuit or three separate circuits for a maximum of 12 programs.

SPA	0/0	▲
Mode: None		

Create a new program

The current number of programs for each circuit is indicated opposite to the circuit name. 0/0 indicates no programs assigned to this circuit.

Right button: To move to the Mode selection.

SPA	0/0	▲
Mode: New		▼

Up/Down button: Select **New** to create a new program. Use **None** when a circuit has existing programs and you wish to exit the Mode selections without modifying the existing programs.

SPA	1/1	▲
Mode: Schedule		
08:00A - 05:00P		
smtwtfs SS: N		▼

Choose the type (Mode) of program to run

After selecting **New** the current program number (1/1) for this circuit is displayed.

Right button: To move to the Mode selections.

SPA	1/1	▲
Mode: Egg Timer		
Timer: 12:00		▼

Up/Down button: Choose the program to run: **Schedule, Egg Timer, Once Only, New, Delete, and None**. If there are existing programs assigned to this circuit, use these buttons to view and select the existing program settings.

Mode Selection:

SPA	1/1	▲
Mode: Once Only		
08:00A		
smtwtfs		▼

Schedule (page 22): Set start, stop times and the day(s) of the week to automatically switch the circuit on or off. The default run time for a schedule feature is 8:00 AM to 5:00 PM. If you program the start and stop times the same the schedule is will run for 24 hours. Note: For a light circuit, Smart Start (SS: N/Y) is displayed (see page 14)

SPA	1/1	▲
Mode: New		▼

Egg Timer (page 248): A one time program that switches on a function at a specific time, and counts down the preset time to the switch off the function. After the Egg Timer schedule has finished, the system can be operated in manual mode. The DON'T STOP option allows a circuit to run continuously until its switched off manually.

SPA	1/1	▲
Mode: Delete		▼

Once Only (page 23): Schedule a circuit to switch on at a particular time on a onetime basis.

SPA	1/1	▲
Mode: None		▼

New: press the **Right** button to create a new program.

Delete: Select the program and press the **Right** button to delete it.

None: Press the **Right** button to exit the Mode selections without modifying the program.

Schedules Menu (Continued)

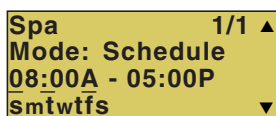
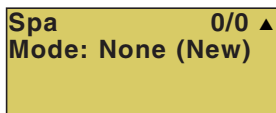
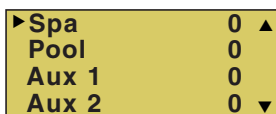
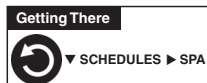
Program your Spa or Pool

You can use the “Schedule” feature to set the time and day(s) when to switch the filter pump on and rotate the pool or spa valves into the “Spa” or “Pool” position. The heater will automatically heat the spa or pool water up to the set point temperature as set in the “Heat” menu (see page 19). If the pool has a separate jet pump or blower controlled by AUX 1 and/or AUX 2, these need to be scheduled separately.

Schedules

You can create schedules to automatically run equipment like pool filtration or lights. Any circuit can be set to switch on and off on every day of the week. When a relay is switched on manually, it remains on until you either switch it off manually, or the next time the relay is scheduled to be switched off. For example, if the filter pump or any circuit is scheduled to run from 9 AM to 4 PM and the programmed schedule is turned OFF at 1:00 PM and then turned on at 1:10 PM, the circuit will turn OFF at its programmed OFF time of 4:00 PM. But if the circuit is turned on after 4:00 PM, the factory set Egg Timer of 12 hours is now engaged. So if the circuit was turned on at 6:00 PM that circuit will turn off at 6:00 AM (12 hours later). If the circuit was turned ON at 5:00 PM and because a programmed OFF time had been set to turn off at 4:00 PM, the circuit would operate for 11 hours. A spa or pool program can be overridden using the Spa button or Pool button to switch the circuit on. If you program the start and stop times the same, the schedule will run for 24 hours if scheduled to run for one day. In “Service” mode, a pool or spa program can be overridden using the Filter (F) button and pool/spa Valves (V) button on the outdoor control panel in the EasyTouch load center. **Note:** The following example describes how to use the “Schedule” feature to program the spa circuit to switch the filter pump on and rotate the valves into the “Spa” position and switch the heater on. This example can also be used to program when to filter and heat your pool, and switch light or auxiliary circuits on or off.

To create a schedule for your spa:



Right button: Select the **Spa** circuit. The generic circuit names are: Spa, Pool, Aux 1-7, Feature 1-8 (EasyTouch 8), Aux 1-3, Feature 1-4 (EasyTouch 4), and Aux Extra “Aux Extra” is only available if the Solar output (J17) plug on the EasyTouch motherboard is not being used for solar equipment.

Right button: Select **Mode** if there are existing programs. Skip this step to create a new program.

Up/Down button: Select **New** to create a new program.

Right button: To create a new program and enter the “Mode” settings.

Up/Down button: 1/1 indicates that this circuit has one program. If there are existing programs assigned to this circuit, use these buttons to view and select the existing program settings.

Right button: To select the “Schedule” settings.


Right button: Move to start and stop time settings.

Up/Down and Right buttons: Set start and stop hour (A/P), minutes.

The A (AM) and P (PM) time is set when setting the start and stop hour.

Right button: Move to days of the week to run the program.

Right and Up/Down buttons: By default the program is set to run all the days of the week. If you wish to edit which days to run the program, select the day of the week, then press the **Up/Down** button to remove the bar from the top of the letter. A bar on top of the letter indicates the day selected to run the program.

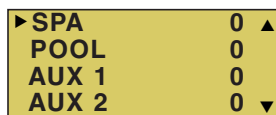
 Press the Back button to save the settings and to return to the Schedules menu options. Press the button again to return to the main menu options or press again to return to the Main screen.

Using the Once Only feature

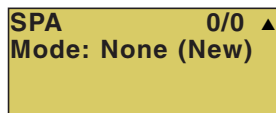
The “Once Only” feature allows you to program a circuit to switch on at a particular time and day on a onetime basis. A typical use for this feature is to have the spa and heater switch on before you get home from work for one evening. Unlike the regular “Schedule” timer, this feature does not repeat. After this event has finished, the program is automatically erased. The circuit must be switched off manually or wait for the 12 hour automatic shut off. If you wish to override the 12 hour default shut-off time you can extend the time by using the “Egg Timer” countdown feature (page 24).

Note: The following example describes how use the “Once Only” feature to program the spa circuit to switch the filter pump on and rotate the valves into the “Spa” position and switch the heater on for one time only. This example can also be used if you wanted to program when to filter and heat your pool, and switch light or auxiliary circuits on.

The set a “Once Only Timer” program for the spa.



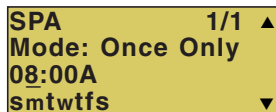
Right button: Select the **Spa** circuit. The generic circuit names are: Spa, Pool, Aux 1-7, Features 1-8 (EasyTouch 8), Aux 1-3, Features 1-4 (EasyTouch 4), and Aux Extra “Aux Extra” is only available if the Solar output (J17) plug on the EasyTouch motherboard is not being used for solar equipment.



Right button: Select **Mode** if there are existing programs. Skip this step to create a new program.

Up/Down button: Select **New** to create a new program.

Right button: To create a new program and enter the “Mode” settings.



Up/Down button: 1/1 indicates that this circuit has one program. If there are existing programs assigned to this circuit, use these buttons to view and select the existing program settings.


Right button: To select the “Once Only” settings.

Right button: Move to start time settings.

Up/Down and Right buttons: Set the start hour (A/P) and minutes. A (AM) and P (PM) time is set when setting the start hour. Note: if the Start Time is set to an hour which has already passed, then the program will be executed the following day. Another day of the week may also be chosen. The stop time will be 12 hours later, or can be turned off manually. The 12-hour shut off can be changed to any length of time by entering another program using the “Egg Timer” program (page 24).

Right button: Move to day of the week to run the program.

Right button: Select which day to run the program then press the **Up/Down button** to enable the bar on top of the letter. A bar on top of the letter indicates the day selected to run the program.

 Press the Back button to save the settings and to return to the Schedules menu options. Press the button again to return to the main menu options or press again to return to the Main screen.

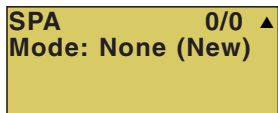
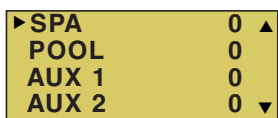
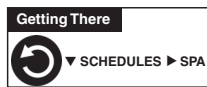
Using the Egg Timer (countdown) Feature

The “Egg Timer” feature allows you switch off a circuit automatically after a specified time. The time period can be anywhere from one minute to 24 hours or run continuously. The “Egg Timer” (countdown) feature is useful for switching off lighting and spa therapy jets. For example, a jet pump can be set to switch off in 15 minutes, even when switched on by the iS4 Spa-Side remote control or whenever you switch your spa on, you would like it to automatically switch it off in two hours. All Egg Timer programs are factory set to switch off after 12 hours. You also have the option to use the “Don’t Stop” feature to run a circuit continuously until manually switched off.

Please note that in the event of a power failure, the “Egg Timer” feature will not switch the circuit back on. Use the “Service” mode to turn the equipment back on. For running the filter pump continuously during new pool start up, it is recommended to use the “Service” mode, which will automatically restart the filter pump in the event of a power failure.

The following example describes how to program the “Egg Timer” for the spa. The same applies when selecting the pool or any auxiliary circuit.

To set the Egg Timer feature:

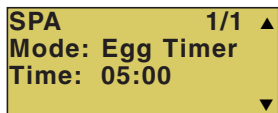


Right button: Select the **Spa** circuit. The generic circuit names are: Spa, Pool, Aux 1-7, Feature 1-8 (EasyTouch 8), Aux 1-3, Feature 1-4 (EasyTouch 4), and Aux Extra “Aux Extra” is only available if the Solar output (J17) plug on the EasyTouch motherboard is not being used for solar equipment.

Right button: Select **Mode** if there are existing programs. Skip this step to create a new program.

Up/Down button: Select **New** to create a new program.

Right button: To create a new program and enter the “Mode” settings.




Up/Down button: 1/1 indicates that this circuit has one program. If there are existing programs assigned to this circuit, use these buttons to view and select the existing program settings.

Right button: To select the “Egg Timer” settings.

Right button: Move to the time settings.

Up/Down and Right buttons: Set the hour and minutes for the program to run. The count down time can be set from 00:01 to 23:59 and Don’t Stop. The “Don’t Stop” feature allows the circuit to run continuously until manually switched off.

 Press the Back button to save the settings and to return to the Schedules menu options. Press the button again to return to the main menu options or press again to return to the Main screen.

Scheduling a Program

You can create schedules to automatically run equipment like pool filtration or lights. Any circuit can be set to switch on and off on every day of the week. When a relay is switched on manually, it remains on until you either switch it off manually, or the next time the relay is scheduled to be switched off. For example, if the filter pump or any circuit is scheduled to run from 9 AM to 4 PM and the programmed schedule is turned OFF at 1:00 PM and then turned on at 1:10 PM, the circuit will turn OFF at its programmed OFF time of 4:00 PM. But if the circuit is turned on after 4:00 PM, the factory set Egg Timer of 12 hours is now engaged. So if the circuit was turned on at 6:00 PM that circuit will turn off at 6:00 AM (12 hours later). If the circuit was turned ON at 5:00 PM and because a programmed OFF time had been set to turn off at 4:00 PM, the circuit would operate for 11 hours. A spa or pool program can be overridden using the Spa button or Pool button to activate the circuit.

Settings Menu: Clock

Use the “Clock” menu to set the EasyTouch system date and time. The day, time and AM/PM is displayed on the main screen. The system clock settings are used for the EasyTouch system scheduled operations. The EasyTouch system clock will continue to run even if power is removed from the EasyTouch system at the load center.



Clock

To set the system date and time:

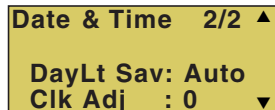


Right button: Move to the month setting.

Up/Down buttons: Select the month.

Right button: Move to the date setting.

Up/Down buttons: Set the date of the month.



Right button: Move to the year setting.

Up/Down buttons: Select the year.

Right button: Move to the day of the month setting.

Up/Down buttons: Select the day.

Right button: Move to the hour setting.

Up/Down buttons: Set the hour.

Right button: Move to the minutes setting.

Up/Down buttons: Select the minutes.

Right button: Move to the AM/PM setting.

Up/Down buttons: Select AM or PM.

Right button: Move to the next page settings (2/2).


Up/Down buttons: Select the next page settings (2/2).

Right button: Move to the Daylight Savings settings.

Up/Down buttons: Set Daylight Savings to **Auto** or **Manual**. Auto keep track of the semi annual time changes. If you do not live in an area that observes daylight savings time, choose Manual.

Right button: Move to the clock adjustment setting. If the internal system clock loses time during the month, use this setting to set the number of seconds in five second increments per month to automatically adjust the clock to the correct time.

Up/Down buttons: Adjust the offset in five second increments.

 Press the Back button to save the settings and to return to the Settings menu options. Press the button again to return to the main menu options or press again to return to the Main screen.

Settings Menu: IntelliFlo

The EasyTouch system communicates with the IntelliFlo pump via a two-wire RS-485 cable (PN 350122). For more information about the IntelliFlo pump see the IntelliFlo VS Installation and User's Guide (P/N 357269), for the IntelliFlo VF pump, see the IntelliFlo VF Installation and User's Guide (P/N 350075). From the IntelliFlo menu setting the following pumps can be programmed to run at specific U.S. gallons per minute (GPM) or speed (RPM):

- The IntelliFlo® VF (15-130 GPM) and IntelliPro® VF (15-130 GPM)
- The IntelliFlo VS+ SVRS (1100-3450), IntelliFlo VS3050 (400-3110 RPM) and IntelliPro VS3050 (400-3450 RPM)

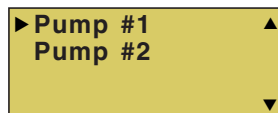
How many IntelliFlo pumps will IntelliTouch support?

IntelliTouch can support up to eight IntelliFlo VF and four IntelliFlo VS pumps in any combination with up to eight GPMs or RPMs per pump. For example pumps can be connected to IntelliTouch as follows:

- 8 IntelliFlo VF
- 7 IntelliFlo VF + 1 IntelliFlo VS
- 5 IntelliFlo VF + 3 IntelliFlo VS
- 4 IntelliFlo VF + 4 IntelliFlo VS

IntelliFlo

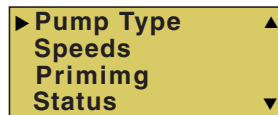
To access the IntelliFlo VS menu:



Up or Down button: Choose Pump #1 or Pump #2

Right button: Select Pump #1 to assign as IntelliFlo VF or IntelliFlo VS.

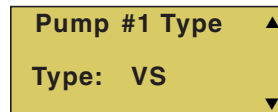
Right button: Select Pump Type.



Up/Down buttons: Choose VS or VF. Select VS (IntelliFlo VS).

Menu button: Press the menu button to save selection and go to the IntelliFlo VS menu settings.

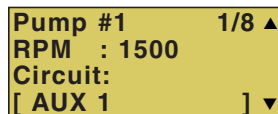
Down button: Choose **Speeds**.



Right button: Access the IntelliFlo VS settings for Pump #1.

Up/Down button: Select the circuit number 1 of 8 (1/8). The default speed for each circuit correspond to the four speed buttons on the IntelliFlo VS control panel. The preset speed for each button is: Speed 1 button 750 RPM, Speed 2 button 1500 RPM, Speed 3 button 2350 RPM, and Speed 4 button 3110 RPM.

Right button: Move to RPM to change the pump speed.



Up/Down buttons: Set speed of the pump from 400 to 3110 RPM in increments of 10 RPM (For the IntelliFlo VS3050) - 400-3450 RPM (IntelliPro VS3050).

Right button: Move to the circuit names.

Up/Down buttons: Assign the circuit: None, Spa, Pool, Aux 1-7, Feature 1-8 (EasyTouch 8), Aux 1-3, Feature 1-4 (EasyTouch 4), Aux Extra (only if Solar is not selected, see page 36), Heater, Pool Heater, Spa Heater, Freeze, and Hi-Speed. "Aux Extra" is only available if the Solar output (J17) plug on the EasyTouch motherboard is not being used for solar equipment.

Right button: Press the Up arrow button and go to the next circuit page settings (2/8) and repeat the previous steps.

When finished setting up the circuits, press the **Back** button to save the settings and to return to the Settings menu options. Press the button two times to return to the main screen.

IntelliFlo VF

To access the IntelliFlo VF menu:



► Pump #1
Pump #2

Up or Down button: Choose Pump #1 or Pump #2

Right button: Select Pump #1 to assign as IntelliFlo VF or IntelliFlo VS.

Right button: Select Pump Type.

► Pump Type
Flow
Filtering
Priming

Up/Down buttons: Choose **VS** or **VF**. Select VF (IntelliFlo VF).

Menu button: Press the menu button to save selection and go to the IntelliFlo VS menu settings.

Down button: Choose **Flows**.

Pump #1 Type
Type: VF

Right button: Access the IntelliFlo VF flow settings.

Up/Down buttons: Assign the circuit: None, Spa, Pool, Aux 1-7, Feature 1-8 (EasyTouch 8), Aux 1-3, Feature 1-4 (EasyTouch 4), Aux Extra (only if Solar is not selected, see page 36), Heater, Pool Heater, Spa Heater, Freeze, and Hi-Speed. "Aux Extra" is only available if the Solar output (J17) plug on the EasyTouch motherboard is not being used for solar equipment.

Pump #1 1/8
GPM : 30
Circuit:
[AUX 1]

Right button: Press the Up arrow button and go to the next circuit page settings (2/8) and repeat the previous steps.

When finished setting up a parameter, press the **Menu** button to save the settings and to return to the IntelliFlo VF setting menu. See page 26 for parameter descriptions

When finished setting up all of the IntelliFlo VF pump parameters, press the **Menu** button until the main screen displays.

Pump Filtering
Size : 1500
Turns : 2
Man Filt: 0

Description	Value
Pool Size/Gallons The pool size value is expressed as 1000's of gallons (Kgal). Enter from 1 to 1000 Kgal for the pool volume. The volume number can be a close estimate, although the more accurate the better the turns will be done when employing filter mode. Filter mode uses this value in coordination with the parameters from Filter mode to sustain turn rates, flows, and times.	0-255
Turnovers per day You can set up to up to eight turns per day. It is recommended to set one turn per day for energy conservation for most common residential pools. Also, refer to your sanitizer recommendation for additional information.	1-8
Manual Filter GPM (Default is 30 GPM) Manual Filter sets the flow at which the pump will run if it is turned on manually. The IntelliFlo pump will only run in the 'Filter' mode during the programmed times. For example, if the pump is programmed (start/stop times) for the pool circuit to run from 8:00 AM to 4:00 PM everyday. This program or programs are used by IntelliFlo to calculate at what speed it must run given those 'ON' times to achieve the turnover(s) for that sized pool for the basic filter mode.	15-130

GPM: 73
1927 RPM 1980 W
Filter: 7
Status: NORMAL

Status screen

Pump Priming	▲
Max Flow : 55	
Max Time : 5	
Sys time : 0	▼

Description	Value
Max Prime Flow GPM - (Default is 55 GPM) Every time the pump starts this parameter will negotiate the maximum flow of the pump. If the flow is too high, equipment damage can occur. If the flow is too low the pump will not prime. This "flow" is system dependent and may require adjustment. The pump will never flow more than this parameter is set to, however, it is common for the pump to ramp up and down quickly while priming. Always try to keep this flow as low as possible for cost savings and safety.	15-130 GPM
Max Prime Time - (Default is 15 min.) Use this parameter to set the time that you want IntelliFlo try and prime before it reports an error. Remember that the IntelliFlo will attain prime every time it starts and goes through this cycle. The IntelliFlo mechanical seal can withstand about 15 minutes before severe damage occurs. The lower the time the quicker you will get a priming error if the system is difficult to prime. A well plumbed pool without having the strainer removed should prime in less than 30 seconds. If the strainer has been removed for cleaning and a substantial amount of air is in the system it should prime in about 60 to 90 seconds on the average, however, all systems will be different.	1-15 minutes
System Prime Time - (Default is 0 min.) Remember that the average unit will prime in a short period of time because the IntelliFlo has the ability to monitor itself to make sure it is primed. "System Prime Time" is for systems that require high flows that priming flow can provide but it is deemed that more time is needed to fully relieve all the air. The builder can program a pre determined amount of time, up to 5 minutes, to aid in relieving the air from difficult filters or complex vertical plumbing. The "System PrimeTime" should only be used where large air traps become problems within the system. The display will inform the user when this is engaged and when it is finished during the priming cycle at each start up cycle.	0-5 minutes

Backwash	▲
Clean Filt : 10	
Flow GPM : 60	
Duration : 5	▼

Description	Value
Clean Filter PSI - (Default is 14 PSI) The average PSI setting is between 10 PSI and 20 PSI for most pools and filters. The entered PSI value splits the percentage meter for the filter. When the "clean filter" value is reached, IntelliTouch displays an alert message and the pump stops monitoring flow rates and starts managing pressure. The value represents the change in pressure over time from start up (system clean) to present day (system getting dirty). The changes can come from anywhere in the system, for example clogged skimmers or pots in pumps. Setting this parameter at a lower level will cause the alert message to come up sooner and you will have to clean your filter (cartridge) or backwash your filter (sand or DE) sooner.	1-50 PSI
Backwash Flow GPM - (Default is 60 PSI)	15-130 GPM
Backwash Duration - (Default is 5 minutes)	1-60 minutes
Rinse Time - (Default is 1 minute)	1-60 minutes

Pump Vacuum	▲
Flow (gpm) : 50	
Time (min) : 10	▼

Description	Value
Vacuum Flow GPM (default is 50 GPM) This setting sets the GPM that the pool vacuum will use.	15-130 GPM
Vacuum Time Mins. (Default is 10 minutes) This parameter can be set from 1 to 600 minutes. The typical setting is 10 minutes. This setting sets the amount of time you wish to run the pool vacuum.	1-600 minutes (10 hours)

Settings Menu: IntelliChlor

The IntelliChlor electronic chlorination system must be connected to the EasyTouch system to use the following IntelliChlor settings. While in normal operating mode “Pool,” “Spa” mode or “Spa Fill (Spillway),” EasyTouch will control the chlorinator output level. When IntelliChlor is connected to the EasyTouch outdoor control panel, chlorination levels can only be changed from the outdoor control panel or the Wireless Control Panel. The amount of chlorine introduced into the pool is determined by the amount of salt in the water, water temperature, and the amount of time the pool operates in “Pool” mode. Note: While in “Freeze Protection” mode, IntelliChlor will not operate during the time that the filter pump is operating. For more information, refer to the IntelliChlor Electronic Chlorine Generator User’s Guide (P/N 520589).

IntelliChlor

To setup the IntelliChlor system:



IntelliChlor 1/2▲
 Enable: Yes
 Pool Mode: 60%
 Spa Mode: 3% ▼

Right button: Move to Enable/Disable settings. (To select the second page settings, press the **Up/Down** button to change the first digit to 2/2).

Up/Down buttons: Select **Yes** or **No** to enable or disable the IntelliChlor system.

Right button: Move to the “Level” settings.

IntelliChlor 2/2▲
 Super Chlr: Off
 Run Hours: 24 ▼

Up/Down buttons: Set the chlorination output level for the pool/spa water from 0 to 100%. EasyTouch will determine the chlorinator output level when the system is operating in “Spa” or “Pool” mode. The amount of chlorine introduced into the pool/sap is determined by the amount of salt in the water, water temperature, and the amount of time the pool/spa operates in these modes mode.

Right button: Move to the next page settings (2/2).

Up/Down buttons: Select 2/2.

Right button: Move the Super Chlorination settings.

Up/Down buttons: Set Super Chlorination **On** or **Off**. See note below about Super Chlorination.

Right button: Move to “Run Hours” setting.

Up/Down buttons: Set the number of hours to run Super Chlorination. 24 hours is the default setting. Run hours can be set from 0 to 72 hours.

Press the Back button to save the settings and to return to the Settings menu options. Press the button again to return to the main menu options or press again to return to the Main screen.

***Note:** For IntelliChlor status messages, see “Diagnostics: Chlorinator” on page 45.*

About Super Chlorination: The Super Chlorination feature is used to introduce large amounts of chlorine into the pool water if there has been heavy rain fall, many bathers in the pool, cloudy water conditions, etc. When Super Chlorination is enabled, the system will switch on the filter pump, set the pool/spa valves to the correct position, and set the IntelliChlor chlorine generator to maximum output. This process continues for 24 hours. At the end of the Super Chlorination process, the pool will return to normal operation. It is possible to manually stop the Super Chlorination process and switch off the filter pump using the Filter (F) button on the control panel. When the filter pump is switched on again using the Filter (F) button, the Super Chlorine process will resume for the duration of time left.

Settings Menu: ThermalFlo

ThermalFlo screen

From the ThermalFlo® screen you can view the current ThermalFlo operation status, and set the unit to operate with for heating only, cooling only, or both heating and cooling if the unit is reversible. Connection from ThermalFlo is via the COM PORT on the EasyTouch motherboard. See page 55 for ThermalFlo to EasyTouch COM port wiring information. The ThermalFlo must be set to default ADDRESS 1. One ThermalFlo unit can be connected to EasyTouch.

***Note:** Once the ThermalFlo is enabled, use the EasyTouch control panel **Left** and **Right** arrow buttons to adjust the ThermalFlo temperature and cooling, (see page 4).*

ThermalFlo

To access ThermalFlo settings menu:



► Settings Status ▼	<p>Right button: Access the “Settings” menu.</p> <p>Up/Down buttons: Select Yes or No to enable or disable ThermalFlo.</p> <p>Right button: Move to the “Heating” setting.</p> <p>Up/Down buttons: Select Yes or No to use for heating.</p>
ThermalFlo Enable : Yes Heating : Yes Cooling : Yes	<p>Right button: Move to the “Cooling” setting.</p> <p>Up/Down buttons: Select Yes or No to use for cooling only or if the unit is reversible select both heating and cooling.</p>

Press the **Menu** button to save the settings and to return to the ThermalFlo Settings and Status menu options.

Press the **Menu** button three times to return to the main screen.

To access ThermalFlo Status menu:



Settings ► Status ▼	<p>Right button: Access the “Status” menu.</p> <p>Press the Menu button to return to the main screen.</p>
Status ▲ [OP NORMAL] <MENU> = EXIT ▼	

Settings Menu: Circuit Names

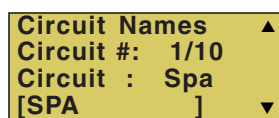
Labeling Circuit Buttons on the Wireless Control Panel

EasyTouch is factory configured to display each output circuit by its generic name (e.g. AUX 1, AUX 2, etc.). These generic circuit auxiliary names can be assigned a new names which are more descriptive of the equipment being used. This makes it much easier to operate all of the pool/spa equipment and lights without having to memorize what each output circuit controls.

Space for circuit name labels are provided next to each auxiliary control panel button. Use the written list of circuit names (buttons) you made while setting up the EasyTouch load center to identify button 1, button 2 etc. The circuit names you assign should match the labels you put next to the control panel buttons and the outdoor control panel buttons. Note that examples shown below use the factory generic names, for your system you can change these generic names to suit the equipment being used.

Circuit Names


To assign a circuit name:



Up/Down buttons: Select the circuit number 1 of 10 (1/10). The generic circuits names are: Spa, Pool, Aux 1-7, Feature 1-8 (EasyTouch 8), Aux 1-3, Feature 1-4 (EasyTouch 4), Auxx (Aux Extra). The circuit number (1/10) corresponds to its assigned circuit name. This name can be changed to suite the function. “Aux Extra” is only available if the Solar output (J17) plug on the EasyTouch motherboard is not being used for solar equipment. Use the Down arrow button to switch the “extra” circuit on and off. Use the Down arrow button to switch the “extra” circuit on and off.

Right button: Move to EasyTouch preset circuit names and user defined custom circuit names.

Up/Down buttons: Scroll through the list of alphabetical programmed names. If you cannot find a name to match your circuit, you can create your own custom name (see page 35). Repeat for all the circuit buttons that you wish to assign names to. For a complete list of EasyTouch circuit names, see page 36.

 Press the Back button to save the settings and to return to the Settings menu options. Press the button again to return to the main menu options or press again to return to the Main screen.

***Note:** After a generic circuit name is changed and saved, the new name is displayed in the menu settings. You can view the default generic circuit names in the menu settings before they were changed by enabling “Cir Names.” Refer to “Diagnostics: Cir Names (Off),” on page 46.*

HI-T/LO-T Circuit Names for Single Body System

For EasyTouch single body systems, the display will show HI-T (Spa) and LO-T (Pool) and the current temperature settings. See page 5 for single body system menu settings.

EasyTouch Circuit Names

AERATOR	NOT USED	Custom Circuit Names (11 characters maximum)	
AIR BLOWER	OZONATOR	USERNAME-01	_____
AUX 1	PATH LIGHTS	USERNAME-02	_____
AUX 2	PATIO LTS	USERNAME-03	_____
AUX 3	PERIMETER L	USERNAME-04	_____
AUX 4	PG2000	USERNAME-05	_____
AUX 5	POND LIGHT	USERNAME-06	_____
AUX 6	POOL PUMP	USERNAME-07	_____
AUX 7	POOL	USERNAME-08	_____
AUX 8	POOL HIGH	USERNAME-09	_____
AUX 9	POOL LIGHT	USERNAME-10	_____
AUX 10	POOL LOW		
AUX EXTRA	POOL SAM		
BACKWASH	POOL SAM 1		
BACK LIGHT	POOL SAM 2		
BBQ LIGHT	POOL SAM 3		
BEACH LIGHT	SECURITY LT		
BOOSTER PUMP	SLIDE		
BUG LIGHT	SOLAR		
CABANA LTS	SPA		
CHEM. FEEDER	SPA HIGH		
CHLORINATOR	SPA LIGHT		
CLEANER	SPA LOW		
COLORWHEEL	SPA SAL		
DECK LIGHT	SPA SAM		
DRAIN LINE	SPA WTRFLL		
DRIVE LIGHT	SPILLWAY		
EDGE PUMP	SPRINKLERS		
ENTRY LIGHT	STREAM		
FAN	STATUE LT		
FIBER OPTIC	SWIM JETS		
FIBERWORKS	WTR FEATURE		
FILL LINE	WTR FEAT LT		
FLOOR CLNR	WATERFALL		
FOGGER	WATERFALL 1		
FOUNTAIN	WATERFALL 2		
FOUNTAIN 1	WATERFALL 3		
FOUNTAIN 2	WHIRLPOOL		
FOUNTAIN 3	WTRFL LGHT		
FOUNTAINS	YARD LIGHT		
FRONT LIGHT			
GARDEN LTS			
GAZEBO LTS			
HIGH SPEED			
HI-TEMP			
HOUSE LIGHT			
JETS			
LIGHTS			
LOW SPEED			
LO-TEMP			
MALIBU LTS			
MIST			
MUSIC			

Settings Menu: Circuit Functions

Assigning Circuit Functions

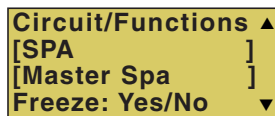
From the “Circuit Functions” menu you can assign special logic to the circuits. For example, when setting up an automatic pool cleaner pump, you would assign the circuit function “MASTER CLEANER.” With this “Cleaner” logic the cleaner pump would force the filter pump on, and the cleaner pump would start after a delay of five minutes. The cleaner pump would automatically shut off whenever the spa and/or solar is switched on.

Freeze Protection

Freeze protection switches on a circuit if the outside air temperature sensor detects the temperature is getting close to freezing (below 35° F). The system will switch on all circuits that have been assigned freeze protection, and runs the circuits for 15 minutes 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 every 15 minutes to keep the water moving in both the pool and spa. This process continues until the freeze condition is over.

Circuit Functions

To assign a circuit function and freeze protection:



Up/Down buttons: Choose the circuit and assign it a function. The generic circuits names are: Spa [Master Spa], Pool [Master Pool], Aux 1-7, Feature 1-8 (EasyTouch 8), Aux 1-3, Feature 1-4 (EasyTouch 4), and Aux Extra. “Aux Extra” is only available if the Solar output (J17) plug on the EasyTouch motherboard is not being used for solar equipment. Use the Solar button to switch the “extra” auxiliary circuit on and off (see page 5).

Right button: Move to the “Circuit Function” setting to select the circuit function for the circuit.

Up/Down buttons: Set the circuit function. This is the circuit that you wish to assign the function logic to. For a complete list of preset circuit functions, see “Preset Circuit Functions,” on page 34.

Right button: Move to Freeze Protection setting.

Up/Down buttons: Select **Yes** or **No** to assign freeze protection to this circuit. If “Yes” is selected, the circuit will switch on if the air temperature drops to 35° F.

***Note:** for the POOL circuit the filter pump will have freeze protection. For the SPA circuit the filter pump will run and the pool/spa valves will switch between pool and spa at 15 minutes intervals throughout the freeze condition. For the MASTER CLEANER circuit freeze protection is generally not needed for pool cleaner pumps since they get water flow from the filter pump. Just make sure that POOL has freeze protection.*

Press the **Back** button to save the settings and to return to the Settings menu options. Press the button again to return to the main menu options or press again to return to the main screen.

Preset Circuit Functions

Generic	No special Logic. Simple On/Off control of a circuit with all the programmable capabilities.
Master Spa	Works with automatic pool cleaner pumps or cleaner valve actuator. It does the following: <ul style="list-style-type: none"> - Forces the filter pump on 5 minutes before the cleaner pump switches on. - Switch the cleaner off when the spa is on. - Switch the cleaner off for 5 minutes when the solar heating begins.
Master Pool	Works with automatic pool cleaner pumps or cleaner valve actuator. It does the following: <ul style="list-style-type: none"> - Forces the filter pump on 5 minutes before the cleaner pump switches on. - Switch the cleaner off when the spa is on. - Switch the cleaner off for 5 minutes when the solar heating begins.
Master Cleaner	Works with automatic pool cleaner pumps or cleaner valve actuator. It does the following: <ul style="list-style-type: none"> - Forces the filter pump on 5 minutes before the cleaner pump switches on. - Switch the cleaner off when the spa is on. - Switch the cleaner off for 5 minutes when the solar heating begins.
Light	Allows special lighting features to work, such as ALL lights on or ALL lights off.
SAM Light	Activates special color lighting programs on other screens on the Indoor Control Panel when used with SAM pool lights. For example, you can have ALL lights on or ALL lights off.
SAL Light	Activates special color lighting programs on other screens on the Indoor Control Panel when used with SAL spa lights. For example, you can have ALL lights on or ALL lights off.
Photon Generator	Photon® Generator light source allows the Pentair Fiberworks fiber optic bulb be operated by the Lights menu features Sync, Rotate, ALL ON and ALL OFF when used with SAM and SAL lighting.
Color Wheel	Activates special color lighting programs on other screens on the Indoor Control Panel when used with Pentair Fiberworks. For example, you can have ALL lights on or ALL lights off.
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.
Floor Cleaner	This setting moves a 3-way valve every 20 minutes alternating flow between 2 cleaner system valves that feed the pop-up heads.
IntelliBrite	Activates an IntelliBrite LED light.

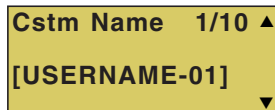
Settings Menu: Custom Names

There are nearly 100 circuit names available to choose from. If you cannot find one to fit your application you can create up to 10 custom names. Each name can be up to 11 alphanumeric characters. After a custom name is saved, it is then available for selection in the Schedules, 2-Speed Pump, iS4 and QuickTouch menus.



Custom Name


To assign a custom circuit name:



Up/Down buttons: Select a custom circuit name number (1-10). You can create up to 10 custom circuit names.

Right button: Move to custom circuit name setting.

Up/Down/Right buttons: Enter the custom circuit name (11 characters maximum).

 Press the Back button to save the settings and to return to the Settings menu options. Press the button again to return to the main menu options or press again to return to the Main screen.

Settings Menu: Valves

This feature lets you assign a circuit to Valve A or B. The EasyTouch system can drive two auxiliary valve actuators (A and B) for applications such as solar heating and water features. By assigning AUX circuits to control valve actuators, you can conserve auxiliary circuits for high voltage relays for controlling pumps and lights.

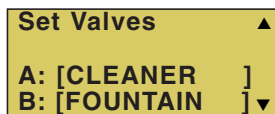
Valve A: Resides on the motherboard. If solar heating is setup and is not configured as a heat pump, then this Valve A is dedicated for controlling the solar heating valve actuator.

Valve B: Resides on the motherboard. Can be configured to be controlled by any circuit.



Valves


To assign a circuit to Valve A and Valve B:



Up/Down buttons: Select a circuit to assign to Valve A. The generic circuit selections are: The generic circuits names are: None, Spa, Pool, Aux 1-7, Feature 1-8 (EasyTouch 8), Aux 1-3, Feature 1-4 (EasyTouch 4), Aux Extra and Heater. “Aux Extra” is only available if the Solar output (J17) plug on the EasyTouch motherboard is not being used for solar equipment.

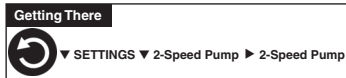
Right button: Move to Valve B setting.

Up/Down buttons: Select a circuit to assign to Valve B. The generic circuits names are: None, Spa, Pool, Aux 1-7, Feature 1-8 (EasyTouch 8), Aux 1-3, Feature 1-4 (EasyTouch 4), Aux Extra and Heater. “Aux Extra” is only available if the Solar output (J17) plug on the EasyTouch motherboard is not being used for solar equipment.

 Press the Back button to save the settings and to return to the Settings menu options. Press the button again to return to the main menu options or press again to return to the Main screen.

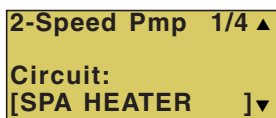
Settings Menu: 2-Speed Pump

Equipment circuits selected in this menu will automatically switch a two-speed filter pump to high speed when these circuits are on. If a two-speed pump is assigned to solar, a cleaner or a pump, when activated the pump will automatically run for five minutes in high speed then switch to low speed. For example, when on, the filter pump will switch to high speed whenever the JETS or CLEANER is on. There must be a two-speed relay installed in the EasyTouch Load Center in order for the “2-Speed Pump” menu settings to function.



2-Speed Pump

To configure a two-speed pump to a circuit:



Up/Down buttons: Select a circuit that will switch the filter pump to high speed. You can set up to four circuits to use a two-speed pump (1/4, 2/4, 3/4, 4/4).

Right button: Move to assign a circuit setting.


Up/Down buttons: Select the circuit to assign to a two-speed pump. The generic circuits names are: None, Spa, Pool, Aux 1-7, Feature 1-8 (EasyTouch 8), Aux 1-3, Feature 1-4 (EasyTouch 4), Aux Extra, Heater, Pool Heater, Spa Heater and Freeze. “Aux Extra” is only available if the Solar output (J17) plug on the EasyTouch motherboard is not being used for solar equipment.

Right button: Assign the next circuit (2/4).

Up/Down buttons: Select the first digit for the circuit number (1/4, 2/4, 3/4, 4/4).

Right button: Move to circuit setting.

Up/Down buttons: Select the next circuit. When finished press the **Menu** button.

 Press the Back button to save the settings and to return to the Settings menu options. Press the button again to return to the main menu options or press again to return to the Main screen.

Settings Menu: Solar

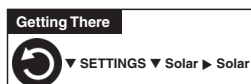
Use the solar settings to setup solar or configure solar as a heat pump:

Setting Up Solar Control: Ensure that the solar temperature sensor is installed.

About Installing Solar Heating: First, install the solar sensor at the collectors and connect to the EasyTouch load center. If “HEAT PUMP” is selected and is being used in place of a solar heating system, install Solar sensor near the EasyTouch Load Center. Connect the wires to the SOLAR screw terminals. Plug the solar valve actuator cable into three-pin socket marked VLV A on the EasyTouch motherboard. If a solar booster pump is being installed, connect the pump to a power relay and plug a low voltage cable from relay into the two-pin socket marked SOLAR on the EasyTouch motherboard.

***Note:** If Solar is not selected (No), the EasyTouch menu selections display “AUX EXTRA” instead of “SOLAR.” This allows the solar plug (J17) on the EasyTouch motherboard to be used as an “extra” auxiliary output circuit. The **Down arrow** button is used to switch the “extra” auxiliary circuit on and off.*

To access the Solar menu:



Solar

To enable a solar heater and set the temperature start and run time settings:

Solar	1/2	▲
Enable:	Yes	
Heat Pump:	No	▼
Solar	2/2	▲
Start:	6°	
Run :	4°	▼

Up/Down buttons: Select **Yes** or **No** to enable solar (1/2). In order to display the solar selection as a heat source on the main screen, select **Yes**.

Right button: Move to the Heat Pump setting.


Up/Down buttons: Select **Yes** or **No** to enable solar as a heat pump. **Heat Pump Control instead of Solar:** Select **Yes** if a heat pump is being used in place of a solar heating system. If Solar is set to heat pump, Valve A is free for other circuits.

Right button: Select page 2 of 4 (2/4) to access the solar temperature differential start up and run settings.

Up/Down buttons:

Start: Set the temperature differential to start heating from 3° to 9°. For example, if “Start” is set to 3°, this ensures that the temperature has to deviate by 3° at least to the specified set point temperature (in the Heat menu, page 19) before it switches on. Once the solar comes on it will start converging as it is heating. This ensures that it will not continually be switching on and off.

Run: Set the temperature differential to stop heating from 2° to 5°. This setting sets how close to the target set point temperature to switch off solar heat.

 Press the Back button to save the settings and to return to the Settings menu options. Press the button again to return to the main menu options or press again to return to the Main screen.

Settings Menu: Delays

Setup which functions (pool/spa, and valves) to assign the delay feature. Delays can be assigned to the following equipment.

- **Heater Cool-Down Delay Cancel:** Shuts Filter Pump off immediately.
- **2-Speed Filter Pump five-minute START on HIGH SPEED Delay Cancel:** Shifts pump to low speed.
- **Automatic Pool Cleaner START Delay:** Starts Cleaner Pump immediately, without normal delay in which the filter pump first runs for 5 minutes.
- **Automatic Pool Cleaner SOLAR Delay:** Allows Cleaner Pump to run even though solar delay has shut it off for 5 minutes.

Some heaters require a cool-down cycle before being switched off. This can be setup to run the filter pump an additional ten minutes to dissipate residual heat built up inside the heater combustion chamber. You can also cancel the delay feature. For information about using the cancel delay feature, refer to “Delay Cancel” on page 20.




Delays

To enable the delay feature:

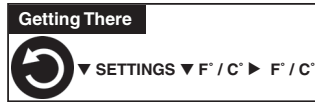
Delays		▲
Pool/Spa:	No	
Valves:	No	▼

Press the **Up/Down buttons** to select **Yes** or **No** to enable or disable delays for the pool and spa circuits. Press the **Right button** to move to the valves setting. Press the **Down buttons** to select **Yes** or **No** to enable or disable delays for valves. Press the

 Back button to save and to return to the Settings menu options. Press the button again to return to the main menu or press again to go to the main screen.

Settings Menu: F° / C° (Fahrenheit/Celsius)

The temperature settings for the water, solar and air can be displayed in either Fahrenheit or Celsius.




F° / C°

To change the temperature units:



Up/Down buttons: Select either Fahrenheit or Celsius.

 Press the Back button to save the settings and to return to the Settings menu options. Press the button again to return to the main menu options or press again to return to the Main screen.

Settings Menu: iS4 Spa-Side Remote Controller

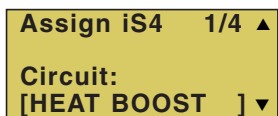
You can specify any iS4 Spa-Side remote button to control different functions by assigning each button to a specific circuit. For example, you can use the iS4 Spa-Side remote to activate the spa circulation, and for operating three auxiliary pieces of equipment (such as heat enabled, lights, jet pump, heat boost, air blower, waterfall, etc.).



Assign iS4

Before configuring the iS4 Spa-Side remote controller assign names to the circuits (see page 35).

To assign iS4 Spa-Side buttons:



Up/Down buttons: Select a circuit to one of the iS4 buttons. You can set up to four circuits (1/4, 2/4, 3/4, 4/4).


Right button: Move to the circuit setting.

Up/Down buttons: To configure the first button on the iS4 Spa-Side Remote, scroll through the circuit names and find the circuit that you would like to assign to the first button on the iS4. The generic circuits selections are: None, Spa, Pool, Aux 1-7, Feature 1-8 (EasyTouch 8), Aux 1-3, Feature 1-4 (EasyTouch 4), Aux Extra, Heat Boost and Heat Enable. Selecting “None” does not assign a circuit. “Aux Extra” is only available if the Solar output (J17) plug on the EasyTouch motherboard is not being used for solar equipment.

Note: The “Heat Boost” feature will switch on the heater for seven minutes to increase the spa water temperature. Each time the spa Heat Boost button is pressed, the temperature will increase about 1° F. The temperature will not go beyond the 104° F limit.

Right button: Assign the next circuit (2/4).

Up/Down buttons: Select the first digit for the circuit number (1/4, 2/4, 3/4, 4/4) and repeat the procedure for the other three buttons.

 Press the Back button to save the settings and to return to the Settings menu options. Press the button again to return to the main menu options or press again to return to the Main screen.

Note: To disable or enable the iS4 Spa-Side remote, see Settings Menu: Spa Side,” on page 43.

Settings Menu: iS10 Spa-Side Remote Controller

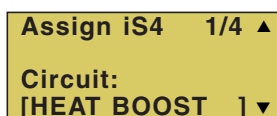
You can specify any iS10 Spa-Side remote button to control different functions by assigning each button to a specific circuit. The iS10 has ten assignable circuit buttons; five button on the top row and five buttons on the bottom row.

Assign iS10



Before configuring the iS10 Spa-Side remote controller assign names to the circuits (see page 26).

To assign iS10 Spa-Side buttons:



Up/Down buttons: Select the “Top” or Bottom” row to assign circuits to.

Right buttons: Select a circuit to one of the iS10 buttons. Five top row buttons can be assigned circuits (1/5, 2/5, 3/5, 4/5 and 5/5). See “iS10 button assignments” below for details.

Right button: Move to the circuit setting.

Up/Down buttons: To configure the first button on the iS10 Spa-Side Remote, scroll through the circuit names and find the circuit that you would like to assign to the first button on the iS4. The generic circuits selections are: None, Spa, Pool, Aux 1-7, Feature 1-8 (EasyTouch 8), Aux 1-3, Feature 1-4 (EasyTouch 4), Aux Extra, Solar, Heat Boost and Heat Enable. Selecting “None” does not assign a circuit. “Aux Extra” is only available if the Solar output (J17) plug on the EasyTouch motherboard is not being used for solar equipment. Use the Solar button to switch the extra circuit on and off (see page 5).

Note: The “Heat Boost” feature will switch on the heater for seven minutes to increase the spa water temperature. Each time the spa Heat Boost button is pressed, the temperature will increase about 1° F. The temperature will not go beyond the 104° F limit.

Right button: Assign the next circuit (2/5).

Up/Down buttons: Select the first digit for the circuit number (1/5, 2/5, 3/5, 4/5) and repeat the procedure for the other three buttons.

Press the **Menu** button to save the settings and to return to the Settings menu options. Press the button twice to return to the main screen.

iS10 button assignments

Button 1	SPA	POOL
	HI-TEMP	LO-TEMP
Button 2	AUX 1	AUX 5
Button 3	AUX 2	AUX 6
Button 4	AUX 3	AUX 7
Button 5	AUX 4	AUX 8

Settings Menu: QuickTouch (QT4) Wireless Remote

The QuickTouch QT4 wireless remote controller provides switching of up to four circuits. For example, you can use the QT4 wireless remote to activate the spa circulation, and for operating three auxiliary pieces of equipment (such as heat enabled, lights, jet pump, heat boost, air blower, waterfall, etc.).

Each of the four functions on the QT4 wireless controller has an on and an off button. To switch a circuit on or off, press and hold the appropriate button for at least a full second.

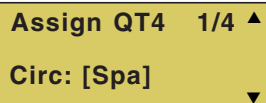
The QT4 buttons can be assigned to any available circuit. However, the QT4 has the following preset circuits assigned to the four buttons:

- **Spa button:** Activates the spa circuit
- **A button:** Activates **Auxiliary 1** circuit
- **B button:** Activates **Auxiliary 2** circuit
- **C button:** Activates **Auxiliary 3** circuit

Assign QT4



To assign circuits to the QuickTouch wireless controller buttons:



Up/Down buttons: Select a circuit to assign to one of the QuickTouch wireless remote buttons. You can set up to four circuits (1/4, 2/4, 3/4, 4/4).


Right button: Move to the circuit setting.

Up/Down buttons: To configure the first button (1/4) on the QuickTouch wireless remote. Use these buttons to scroll through the circuit names and find the circuit that you would like to assign to the first button. The generic circuits selections are: None, Spa, Pool, Aux 1-7, Feature 1-8 (EasyTouch 8), Aux 1-3, Feature 1-4 (EasyTouch 4), Aux Extra, Heat Boost and Heat Enable. Selecting “None” does not assign a circuit. “Aux Extra” is only available if the Solar output (J17) plug on the EasyTouch motherboard is not being used for solar equipment. Use the **Down arrow** button to switch the “extra” auxiliary circuit on and off.

***Note:** The “Heat Boost” feature will switch on the heater for seven minutes to increase the spa water temperature. Each time the spa Heat Boost button is pressed, the temperature will increase about 1° F. The temperature will not go beyond the 104° F limit.*

Right button: Assign the next circuit (2/4).

Up/Down buttons: Select the first digit for the circuit number (1/4, 2/4, 3/4, 4/4), then repeat the procedure for the other three buttons.

 Press the Back button to save the settings and to return to the Settings menu options. Press the button again to return to the main menu options or press again to return to the Main screen.

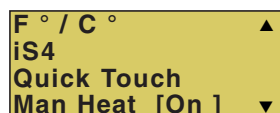
Settings Menu: Man Heat (Off/On)

By default, the spa Man Heat (*Manual Heat*) feature is always set to “On.” This allows the spa to begin to heat whenever the Spa button is pressed, regardless of the of the heat source setting in the Heat menu (see page 19). This feature allows the spa to be filtered daily with the heater switched off. The optional iS4 Spa-Side remote or QuickTouch QT4 wireless remote can also be used to switch the spa heater on.



Man Heat

To enable or disable spa manual heat:



Right button: Select **Off** to disable or **On** to automatically begin spa heating when the Sap button is pressed.

Press the Back button to save the settings and to return to the Main screen.

Settings Menu: Calibration

The EasyTouch system includes two temperature sensors (10 kΩ) for water and ambient air temperature. An additional sensor for solar heat can also be installed. Generally, these sensors are accurate and do not require calibrating. However, long plumbing runs and water features can cause temperatures at a body of water to be different from the temperature sensor reading. You can manually recalibrate the sensors to adjust for this. You only need to calibrate one body of water, since the temperature sensor is common to both the pool and spa. The system must be in “Service” mode to calibrate sensors.

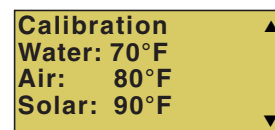


Calibration

Before you start, you need an accurate all weather thermometer. If you are calibrating the air sensor, wait until the sensor is not in direct sunlight. For the air temperature sensor, make sure that the sensor is located in the shade for accurate readings.

To calibrate the water, air and solar temperature sensors:

1. Press the **Mode** button on the control panel to place the system in “Service” manual mode.
2. Press the **Filter Pump (F)** button to switch on the pool/spa filter pump.
3. Place the thermometer in the spa or pool water. Take an accurate temperature reading. When calibrating the air sensor, place the thermometer next to the air sensor. The air sensor is normally located near or under the EasyTouch load center enclosure, not inside the enclosure. Take an accurate temperature reading in the shade.
4. Use the **Up** or **Down** buttons to raise or lower the water temperature to match the corresponding thermometer temperature reading.
5. After calibrating the water sensor, use the **Right** button to move to the “AIR” setting and repeat step 4 and repeat the procedure for the solar sensor. Ensure that the solar sensor is in the sun for accurate readings.
6. After calibrating all the sensors, press the Back button to save settings and to return to the Settings menu options. Press the button again to return to the main menu options or press again to return to the Main screen.



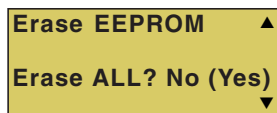
Settings Menu: Erase EEPROM (Erase System Memory)

EasyTouch system configuration data is stored and retained in “Flash” memory in an EEPROM located on the control panel motherboard and optional Indoor Control Panel. The EasyTouch user system configuration data can be erased to restore the factory defaults settings. System information automatically downloads from programmed components to non-programmed components in case of accidental memory loss and to ease board replacement. Any optional controllers (iS4, iS10, QuickTouch QT4 controller) that were configured will need to be reconfigured.

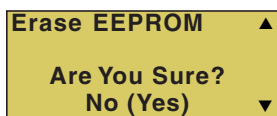
Erase EEPROM

The following procedure describes how to erase the system memory from either the main EasyTouch control panel or the EasyTouch Indoor Control Panel.

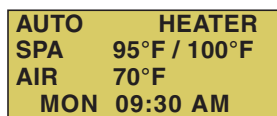
CAUTION: This procedure will erase all system settings. Any optional controllers will need to be reconfigured.



Up/Down button: Select **Yes**.



Right button: The message “Erase EEPROM Are You Sure? No” is displayed.
Up/Down button: Select **Yes**.



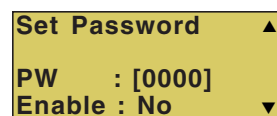
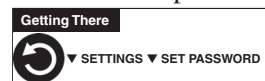
Right button: Press this button to erase system data and restore the factory defaults. The display will go blank, then the main screen will be displayed.

Settings Menu: Set Password

If required, the password feature allows you to password protect the EasyTouch wireless control panel. To access a password protected control panel, you must enter the correct four digit password before access is granted.

Password

To enable the password feature:



Up/Down button: Select the password **first** digit (0-7) of the four digit password.

Right button: Select the next password digit. Repeat the previous step to enter each of the password digits.

Right button: After you are finished entering the four password digits, press the Right button to enable the password feature.

Up/Down button: Select **Yes** enable the password feature.

Press the **Menu** button three times to save the settings and to return to the main screen.

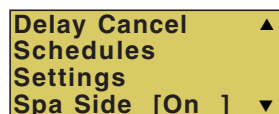
Note: If the password feature is enabled, the current four digit password can be viewed from the EasyTouch outdoor control panel in the “Set Password” setting.

Spa Side [On/Off]


Enable or disable the iS4 Spa Side remote. This feature is useful for families with young children or when you go on vacation. It allows you to switch off the iS4 Spa Side remote at the control panel so that the remote cannot be used.

Spa Side

To enable or disable the iS4 Spa Side remote:

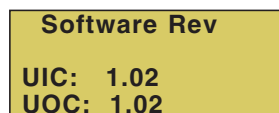
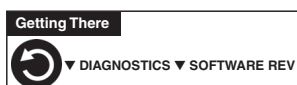


Right button: Select **On** or **Off** to enable or disable the spa side remote.

 Press the Back button to save the settings and to return to the Main screen.


Diagnostics Menu: Software Rev

Displays the current software revision for the EasyTouch main control panel and the optional indoor control panel.



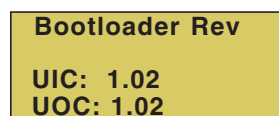
UIC: Displays the current software revision level for the indoor control panel.

UOC: Displays the current software revision level for the outdoor control panel.

 Press the Back button to return to the Settings menu options. Press the button again to return to the main menu options or press again to return to the Main screen.


Diagnostics Menu: Bootloader Rev

Displays the current bootloader revision for the indoor control panel and the main EasyTouch control panel.



UIC: Displays the current bootloader revision level for the indoor control panel.

UOC: Displays the current bootloader revision level for the outdoor control panel.

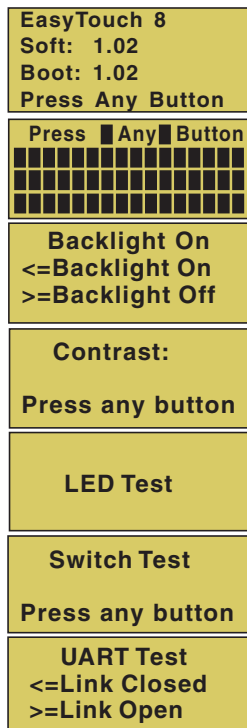
 Press the Back button to return to the Settings menu options. Press the button again to return to the main menu options or press again to return to the Main screen.

Diagnostics Menu: Self Test

Tests the control panel LCD and buttons. Follow the on-screen prompts to perform the tests.



Note: If the Indoor Control Panel is connected to the EasyTouch outdoor control panel, select “LINK CLOSED” in the UART test to abort the UART test. This allows the test to complete with and display PASSED.



Press the **Right** button to display the current software and bootloader revision levels for the EasyTouch indoor control panel.

Press the **Right** button to start the test:

Display Test: Press any button to start the LCD test.

Backlight Test: Press the **Left** then **Right** button.

Contrast Test: Press any button to continue.

LED Test: Press any button to continue. All of the button LEDs will be tested.

Switch Test: Press any button to continue. As prompted, press the appropriate buttons.

UART Test: Select “LINK CLOSED” to abort this test if the optional Indoor Control Panel is connected to the EasyTouch load center.

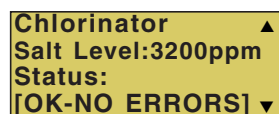
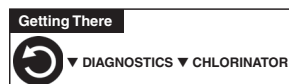
Status: Passed - Code: None After you have completed the test an error code is displayed. If the test was successful, “Passed” is displayed. For error code descriptions, see “Self Test Error Codes,” on page 50.




Press the Back button to return to the Settings menu options. Press the button again to return to the main menu options or press again to return to the Main screen.

Diagnostics Menu: Chlorinator

Displays the current IntelliChlor chlorination system status. For more information, refer to the IntelliChlor Electronic Chlorine Generator User's Guide (P/N 520589).



 Press the Back button to return to the Settings menu options. Press the button again to return to the main menu options or press again to return to the Main screen.

SALT LEVEL: Displays the current salt level. Values from 0 to 12750 ppm in 50 ppm increments.

IntelliChlor Status messages:

SUPER CHLORINATE: IntelliChlor is in “Super Chlorination mode (see page 24 for details)

COM LINK ERROR: Check cable from IntelliChlor to EasyTouch motherboard.

Check FLOW/PCB: Check IntelliChlor electrolytic cell controller. Refer to IntelliChlor User's Guide troubleshooting information.

LOW SALT: Add salt to pool water. The water salt level is between 2500 ppm and 2900 ppm. The IntelliChlor will continue to produce chlorine at a reduced level.

VERY LOW SALT: Not enough salt in pool. The water salt level has fallen below 2500 parts per million (ppm). IntelliChlor will not produce chlorine until additional salt is added manually.

HIGH CURRENT: Check IntelliChlor electrolytic cell controller. Refer to IntelliChlor User's Guide troubleshooting information..

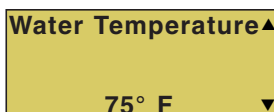
CLEAN CELL!!: Cell has calcium build up and requires cleaning. Refer to IntelliChlor User's Guide for cleaning instructions.


LOW VOLTAGE: Check IntelliChlor electrolytic cell controller. Refer to IntelliChlor User's Guide troubleshooting information.

OK - NO ERRORS: IntelliChlor is in normal operating mode.

Diagnostics Menu: Water Temp

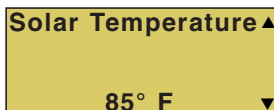
Displays the current water temperature for the pool and spa.




 Press the Back button to return to the Settings menu options. Press the button again to return to the main menu options or press again to return to the Main screen.

Diagnostics Menu: Solar Temp

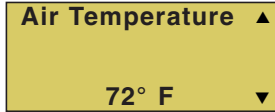
Displays the current temperature.



 Press the Back button to return to the Settings menu options. Press the button again to return to the main menu options or press again to return to the Main screen.

Diagnostics Menu: Air Temp

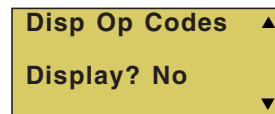
Displays the current outside air temperature.



Press the Back button to return to the Settings menu options. Press the button again to return to the main menu options or press again to return to the Main screen.

Diagnostics Menu: Disp Codes

Perform a communications test with installed equipment. Use this feature when testing the system.



To start the test:

Down button: Select **Yes** to enable the feature.

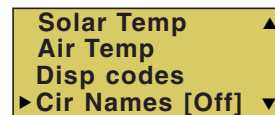
or Right button: Press either of these buttons to start communications test.

Digits display on the right side of all menu screens indicating verification transmit and received packets.

To stop test: Go to the “Disp Op Codes” menu and select **No**, then press the back button to exit.

Diagnostics Menu: Cir Names: [Off/On]

This feature is useful if you have renamed many circuits and want to view the original factory default circuit names.



To enable:

Right button: Select **On** to view the factory default circuit names.

Press the Back button to exit.

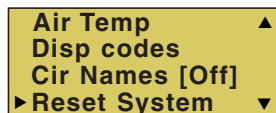
To disable:

Right button: Select **Off** to disable the feature.

Press the Back button to exit.

Diagnostics Menu: Reset System

Reset the Indoor Control Panel. Resetting the Indoor Control Panel will not affect the stored system configuration settings.



Right button: Press the Right button to reset system. The main screen will be displayed and communication will be established with the EasyTouch outdoor control panel at the pool equipment pad.

Diagnostics Menu: Flash Update

Use this feature to update the EasyTouch wireless control panel firmware. The unit must be connected to a personal computer (PC) in order to update the firmware.



Press  to exit the flash mode.

Setting up the System for the First Time

Use the following steps if you are setting up the EasyTouch system for the first time.

***Note:** The following setup steps assume that the EasyTouch Load Center is installed at the equipment pad and ready for operation. For EasyTouch Load Center installation instructions, refer to the EasyTouch 8 and 4 Load Center Installation Guide (P/N 520583).*

The recommended first time installation steps for the EasyTouch system are:

1. Set the system date and time (page 25)

Set the current date and time.

2. Assign circuit names (pages 31)

Assign the generic default circuit names for output auxiliary equipment. Rename (if necessary) and assign circuit names to the auxiliary (AUX 1, AUX 2) connections. Note the factory set auxiliary names correspond to the plug-in location of the relay on the EasyTouch motherboard. Assign circuit names from the available of circuit names. There are nearly 100 circuit names available, see page 32 for the complete list).

3. Creating custom names for auxiliary circuits (page 35)

If you cannot find a circuit name that fits your application you can create up to 10 additional customized names that can be created before assigning circuit names.

4. Assign a “Circuit Function” to a “Circuit Name” (Page 33)

Assign “Circuit Functions” to circuits. From the Circuit Function” menu (page 33), you can assign special logic to a circuit by selecting one of the available circuit functions. For the complete list of preset Circuit Functions see page 34. If an auxiliary circuit (AUX) is assigned GENERIC (simple ON/OFF when the button is pushed) then nothing needs to be done.

5. Configure valve actuators (controlled by AUX circuit) (page 35)

The EasyTouch system can drive two auxiliary valve actuators for applications such as solar heating and water features. Assign which circuits that will activate valves A and B. Auxiliary valve actuators can be controlled by any AUX circuit. Valve A is automatically assigned to solar if “Solar” is enabled in the “Solar” menu.

6. Set up optional equipment, solar, 2-speed pump (page 36)

Set up additional equipment such as solar, 2-speed pump, and optional equipment if required. Set up the control panel to operate with the optional IntelliChlor chlorine generator. To configure EasyTouch for special equipment:

- Is solar heating available? Is solar being used for a heat pump?
- What circuits will turn 2-Speed pumps to High Speed?
- Cool-down cycle for the heater - Lets you set circuits that switch the filter pump to high speed.
- Do you want to delay turning off the filter pump for 10 minutes when the heater is turned off?
- Do you want the spa to heat whenever the Spa button is pressed?

7. Configuring the heater system options (page 19)

Set the type of heat source being used (Heater, Solar, Solar Preferred).

8. Configure the iS4, iS10 spa-side remote, QuickTouch wireless remote buttons (page 38 and 39)

Assign circuits to the iS4, iS10 or QuickTouch remote buttons. Once you have checked that all buttons operate properly, place labels on remote buttons.

9. Set the delays feature (page 37)

Enable the one time “delay” feature for the heater, 2-speed pump, and automatic pool cleaner.

10. Schedule on/off times for circuit (page 21 - 24)

Set times for automatic circuit activation. Up to 12 total programs can be created for all circuits combined. One circuit can have up to a maximum of 9 programs (9/9), which leaves 3 programs that can be used by one circuit or three separate circuits for a total of 12 programs. All user created programs are active all the time; so check that there are not conflicting automated times.

11. Setup the lighting settings (page 14)

From the lighting menu you can enable special control of your pool and yard lighting, such as rotating colored lights, and synchronized colored lights.

Section 3

Troubleshooting

Troubleshooting

Use the following troubleshooting information to help resolve problems that may occur when using the EasyTouch system. If by following the recommended actions you are still unable to resolve the problems, please contact Technical Support (see page viii - iv).

Frequently Asked Questions (FAQ)

How do I setup a two-speed pump?

A two-speed pump operates using two relays and one or more circuits. The first relay turns the pump on or off. Assuming this is a filter pump, this circuit is controlled by the pool and spa circuits or any other circuit that may be tied to the filter pump (such as circuits with freeze protection, etc.). The second relay switches the pump from low speed to high speed. The default condition is low speed. Up to seven circuits (EasyTouch 8), three circuits (EasyTouch 4) may be assigned to trigger the pump to high speed. Note: These circuits do not switch the pump on.

To configure a two-speed pump relay, refer to “Settings Menu: 2-Speed Pump,” on page 36. The 2-Speed pump relay connector is plugged into the 2-SPD output on the EasyTouch motherboard.

Can I switch the heater on and change the temperature from the spa?

The heater may be switched on from the spa location using the iS4 Spa-Side remote or by the QuickTouch wireless remote controller. To learn more about these remotes and controllers, see page 6. However, the iS4 and QuickTouch wireless remote controller cannot adjust the water temperature.

How do I switch on solar heating?

The system must first be configured for solar heating. Go to the “Heat” menu (see page 19) and enable “Solar” as the heat source (**Settings Menu: Heat > Solar**). Note: Do not set solar as a heat pump. Then the heating method must be selected for each body of water.

EasyTouch Error Messages

Error Messages

If the system detects that a sensor is not connected to the EasyTouch load center or it is defective, an error message is displayed in the “Diagnostics” menu. The following lists the sensor errors.

Error Message	Possible Cause	Solution
Air Err (Displays on the Main Screen)	Air sensor not connected to the EasyTouch motherboard.	Check that the air sensor plug is connected to J21 connector on the motherboard. Check that the sensor wire is connected properly.
Air Temperature Err (Displays in the "Diagnostics" menu)	Air sensor not connected to the EasyTouch motherboard.	Check that the air sensor plug is connected to J21 connector on the motherboard.
Water Temperature Err (Displays in the "Diagnostics" menu)	Water sensor not connected to the EasyTouch motherboard.	Check that the water sensor plug is connected to J21 connector on the motherboard.
Solar Temperature Err (Displays in the "Diagnostics" menu)	Solar sensor not connected to the EasyTouch motherboard.	Check that the solar sensor plug is connected to J21 connector on the motherboard.

Self Test Error Codes

The “Self Test” feature is intended for use by service personnel. If after performing a control panel self test (see page 36) there were no errors detected, Code 0 is displayed, indicating that there were no problems and the test was successful. If a problem is detected during the test, an error code is displayed upon completion of the test. For example Code 3 would indicate a problem with the LEDs on the control panel. If multiple errors are detected, multiple code numbers are displayed. For example, Codes 4, 2, 1, would indicate problems detected with the buttons, LEDs, and the LCD backlight on the control panel.

The following lists the control panel self test error codes.

Error Code Table

Error Code	Description
Code 0	PASS - The control panel has no problems
Code 1	LCD backlight
Code 2	LCD contrast
Code 3	LEDs
Code 4	Switch (buttons)
Code 5	UART loopback test

Maximum Programs Exceeded

The “Maximum Programs Exceeded” message displays in the “Schedules” menu if you try to create a new program after exceeding the 12 program limit. To create a new program you must first delete an existing program. For information about deleting a program, refer to “Schedule Menu” on page 21.

IntelliChlor Error Messages

IntelliChlor status and error messages are displayed in the “Chlorinator” menu (see page 45). Use the following information to resolve IntelliChlor system problems. To access the IntelliChlor menu, press **Menu > Diagnostics > Chlorinator**.

Status Message	Possible Cause	Solution
OK-NO ERRORS	IntelliChlor normal operating mode.	N/A
SUPER CHLORINATE	IntelliChlor is in "Super Chlorination" mode for 29 hours.	IntelliChlor is in “Super Chlorination mode (see page 29 or details)
COM LINK ERROR	IntelliChlor communication error with EasyTouch motherboard.	Check cable from IntelliChlor to EasyTouch motherboard.
CHECK FLOW/PCB	Check IntelliChlor electrolytic cell.	Refer to IntelliChlor User’s Guide troubleshooting information.
LOW SALT	Add salt to pool water.	The water salt level is between 2500 ppm and 2900 ppm. The IntelliChlor will continue to produce chlorine at a reduced level. See IntelliChlor User's Guide for details.
VERY LOW SALT	Not enough salt in pool.	The water salt level has fallen below 2500 parts per million (ppm). IntelliChlor will not produce chlorine until additional salt is added manually. See IntelliChlor User's Guide for details.
HIGH CURRENT	Check IntelliChlor electrolytic cell.	Check IntelliChlor electrolytic cell controller. Refer to IntelliChlor User’s Guide troubleshooting information.
CLEAN CELL!!	Cell has calcium build up and requires cleaning.	Cell has calcium build up and requires cleaning. Refer to IntelliChlor User’s Guide for cleaning instructions.
LOW VOLTAGE	Check IntelliChlor electrolytic cell.	Refer to IntelliChlor User’s Guide troubleshooting information.

System Problem Diagnosis

Use the following information to resolve system problems.

Problem: The system works in Service Mode, but Indoor Control Panel fails to operate.

Symptom	Possible Cause	Solution
Indoor Control Panel has no power - (screen, blank, no LEDs, buttons not working).	Bad wiring run from Outdoor Control Panel/motherboard in the Load Center.	Verify cable and ensure no connections are broken. In some cases a wire is broken under the insulation. The two center wires of the four conductor cable are suspect (Green and Yellow)
Indoor Control Panel lights up, but fails to operate correctly. The unit will not turn equipment on/off, or may turn some items on, but not off and may not LEDs near buttons on control panel.	Defective Cable/wiring	Verify cable and ensure no connections are broken. In some cases a wire is broken under the insulation. The two center wires of the four conductor cable are suspect (Green and Yellow)

Problem: iS4 fails to operate.

Symptom	Possible Cause	Solution
iS4 fails to operate equipment.	iS4 is disabled.	See page 43 to enable the iS4.
	Defective Wiring	Verify iS4 setup. Ensure the iS4 in question has the expected circuit assignments, and is not assigned to unused circuits.
	Incorrect configuration or button setup.	See page 43 to setup the iS4 buttons.
	Defective iS4	Replace defective iS4
iS4 fails to operate only some of the switches, but others work fine.	Defective wiring on one or more iS4 leads	Verify wiring on motherboard and iS4.
	Incorrect configuration or circuit to switch assignment.	Verify motherboard connection.

Problem: iS10 fails to operate.

Symptom	Possible Cause	Solution
iS10 fails to operate equipment.		
	Defective Wiring	Verify iS10 setup. Ensure the iS4 in question has the expected circuit assignments, and is not assigned to unused circuits.
	Incorrect configuration or button setup.	See page 39 to setup the iS10 buttons.
	Defective iS10	Replace defective iS10
iS10 fails to operate only some of the switches, but others work fine.	Defective wiring on one or more iS10 leads	Verify wiring on motherboard and iS10.
	Incorrect configuration or circuit to switch assignment.	Verify motherboard connection.

Problem: The Quick Touch remote will not work, or will not work dependably.

Symptom	Possible Cause	Solution
POWER LED does not light on the Receiver board located in the plastic clam shell.	EasyTouch Load Center does not have power	Ensure power is being supplied and that the power center operates correctly without the receiver installed
	Defective cable or connection to the Load Center	Verify the function of the board using known good cable set. Check all wiring
	Defective Receiver board	Contact Technical Support
COMM LINK LED does not light or blink. In normal operation LED will blink at least every 2 seconds	Defective cable or connection to the Load Center	Verify the function of the board using known good cable set
	Defective receiver board	Replace receiver board
Address switches are incorrectly configured	Verify that the address switches on the transmitter and handheld receiver board are correct and match	Transmitter battery has failed
	Replace Transmitter battery	Defective Transmitter or Receiver
	Unit functions, but some circuits do not work, or operate the incorrect circuit	QuickTouch configuration is incorrect
Unit functions, but some circuits do not work, or operate the incorrect circuit	QuickTouch configuration is incorrect	See page 40 to setup buttons Unit fails to operate, or fails to operate dependably at range
Unit fails to operate, or fails to operate dependably at range	Excessive electrical noise	Relocate the receiver away from "noisy" electrical equipment such as blower motors
	Too many obstructions between the transmitter and receiver	Relocate the receiver away from ground metal and obstructions
	Receiver unit is too near the ground	Relocate the receiver to maximize the distance between the receiver antenna and the ground

Problem: The Quick Touch remote will not work, or will not work dependably (Continued).


Symptom	Possible Cause	Solution
Unit seems to turn on or off circuits without the user / transmitter	A near by home is operating a similar wireless unit	Select an alternate address code for the transmitter and receiver. Change the switches on both receiver and remote to an alternate, but matching setting.
Unit dependably turns equipment ON, but once equipment is running it does not dependably turn equipment OFF, or range is greatly reduced when equipment is running	Undue electrical noise is being produced by one or more pieces of equipment in close proximity to the receiver.	Relocate the Receiver away from equipment such as blower motorsRelocate the Receiver in a location that provides fewer obstructions to the area the user commonly operates the transmitter.
Unit operates, but has greatly reduced range compared to prior function	Transmitter Battery is failing.	Replace Transmitter battery (type 2032 3V).

Synchronizing control panels

If the EasyTouch outdoor has been previously setup with specific pool and spa information and you install the EasyTouch indoor control panel with factory default information, the outdoor control panel will automatically download the existing system information to the indoor control panel. If the indoor control panel has a different firmware revision level than the outdoor control panel or it contains previous setup information, you can choose which system image to upload or download.


Synchronizing the control panels is initiated from the indoor control panel. The following describes how to synchronize the indoor control panel with the outdoor control panel.

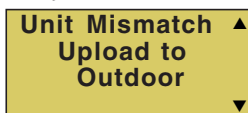
Download from outdoor to indoor control panel

- Press the  Menu button to download the system image from the EasyTouch outdoor control panel to the indoor control panel.



Upload to outdoor from indoor control panel

- Press the **Up/Down** button to access the “Upload” screen.
- Press the  Menu button to upload the system image from the indoor control panel to the EasyTouch outdoor control panel.



Note: To erase existing control panel system information, use the “Erase EEPROM” feature. Refer to “Erase EEPROM” on page 42 for more information.

Wiring ThermalFlo to EasyTouch

Be sure to check the ThermalFlo terminal block wire colors and pinouts (located on the back of the Auto Set board) before connecting it to the EasyTouch COM port on the motherboard. See the wiring table below for the pin configuration.

IMPORTANT: On the ThermalFlo AutoSet board **ONLY CONNECT PIN 3 (YELLOW) and PIN 2 (GREEN) to the EasyTouch COM port pins YELLOW and GREEN respectively. Do not use pin 1 or pin 4 on the AutoSet board or the EasyTouch motherboard. These pins are not used.**

Wiring Description

EasyTouch COM port wire color	Description	ThermalFlo pin number and wire color
PIN 4 (RED) NOT USED	+15 VDC	PIN 4 (RED) NOT USED
PIN 3 (YELLOW)	+ DATA	PIN 3 (YELLOW)
PIN 2 (GREEN)	- DATA	PIN 2 (GREEN)
PIN 1 (BLACK) NOT USED	GROUND	PIN 1 (BLACK) NOT USED

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Section 4

EasyTouch Indoor Control Panel Installation

Installing the EasyTouch Indoor Control Panel

Use the following procedure to install the EasyTouch Indoor Control Panel. Read through the installation procedure before starting.

The EasyTouch indoor control panel provided one touch controls for your pool, spa, lights and other functions from inside your home or a sheltered location. Select a convenient wall location inside your the house or other weather-protected location for mounting the control panel.

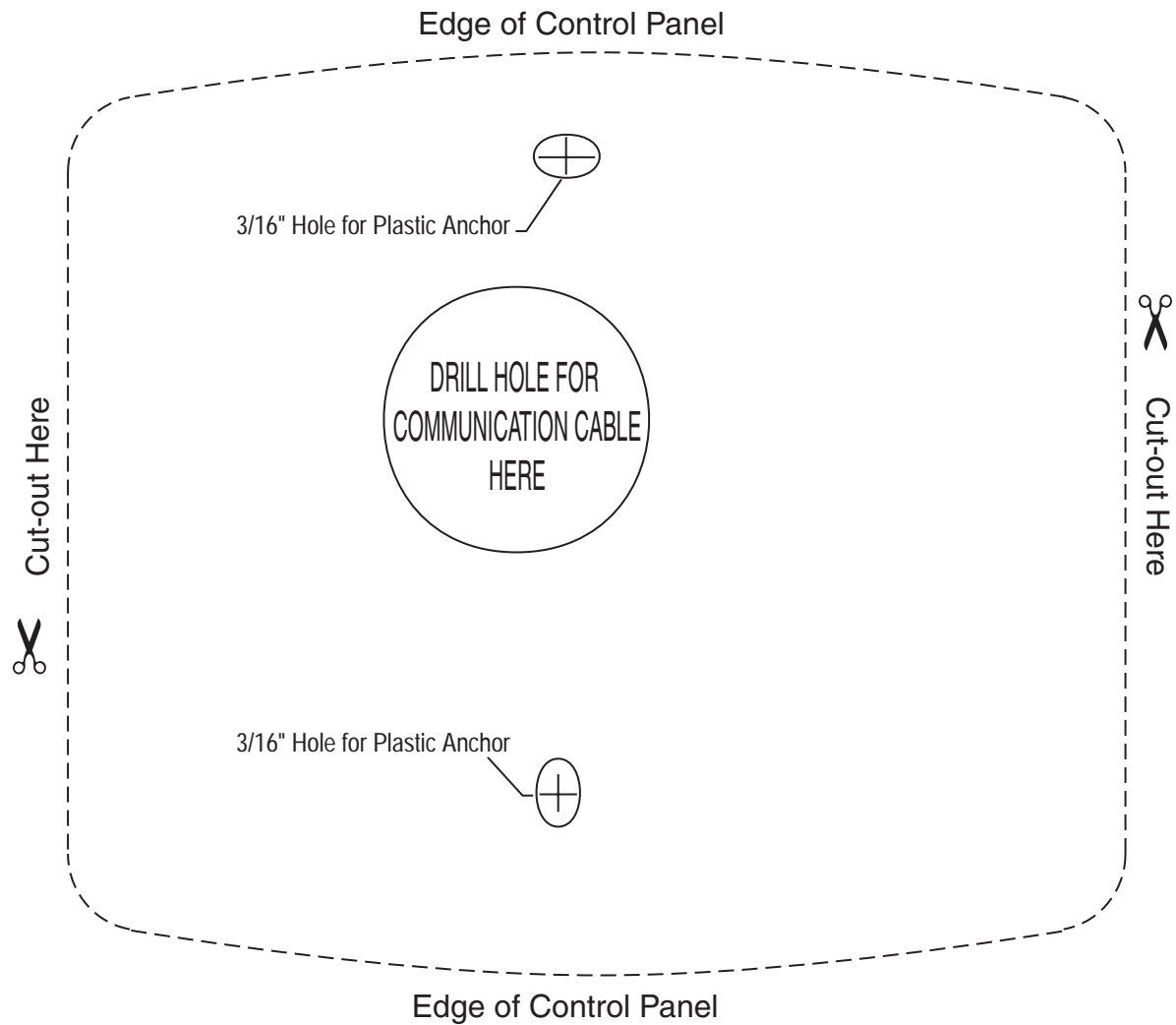
Drill control panel wall mounting holes

To drill the control panel mounting holes:

1. The control panel is 5 ¾" wide. Using the cutout template (shown on the following page), mark the two screw locations on the wall for the mounting holes. Drill the two mounting holes. If the screws are not being screwed into studs, drill 3/16" holes and insert wall anchors as required.
2. Drill a 1 inch hole in the area shown in the template for the communication cable to feed through.

EasyTouch Indoor Control Panel Cut-Out Template

Cut out template along dotted lines.

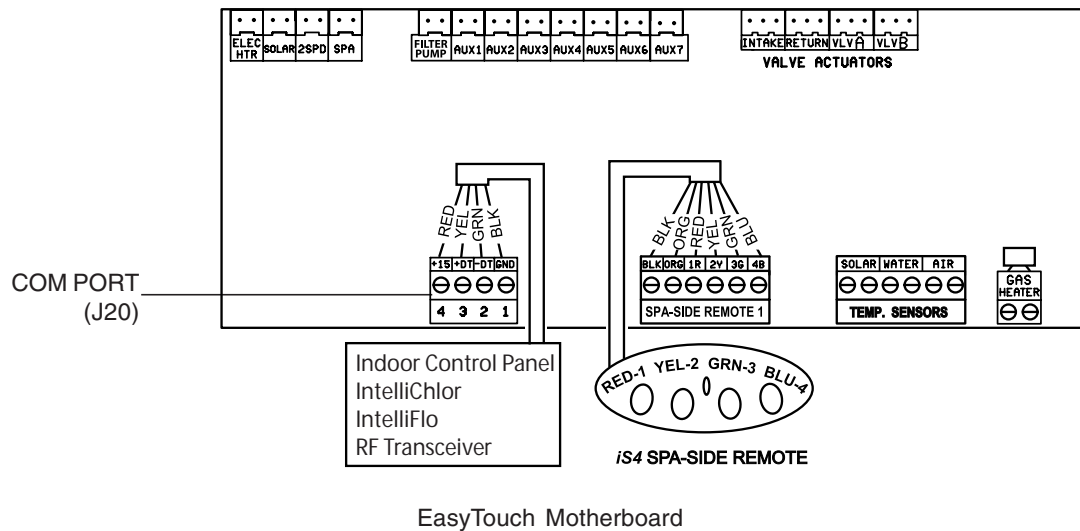


EasyTouch Indoor Control Panel Template

Cabling the Indoor Control Panel at the Load Center

To connect the indoor control panel cable to the motherboard:

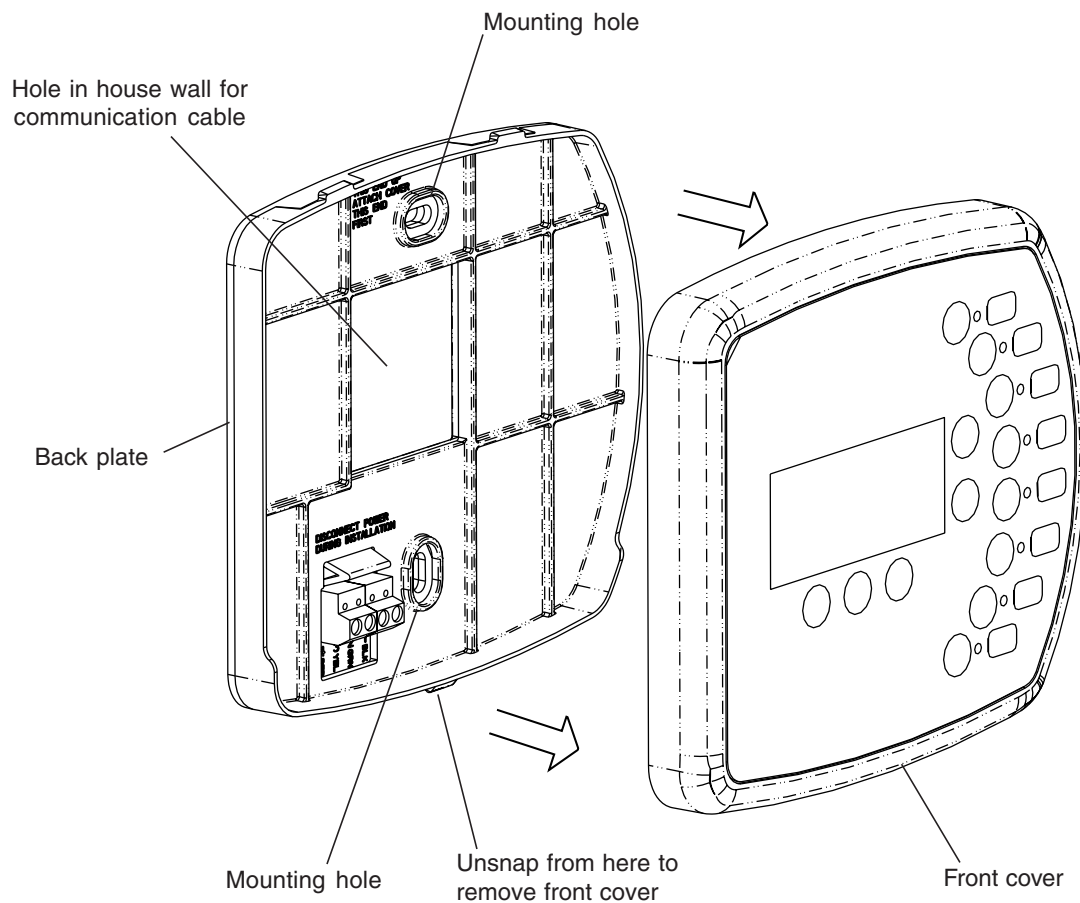
1. Turn off the main system power before making any connections.
2. Run a UL approved four conductor cable (22 AWG) from the indoor control panel to the Load Center. The preferred wire color scheme is: Red, yellow, green, and black.
3. Route the cable up through the low voltage raceway to the motherboard.
4. Strip back the communication cable conductors ¼ in. Insert the wires into the screw terminals (provided in the kit). Secure the wires with the screws. Make sure to match the color-coding of the wires: Red = +15, Yellow = +DT, Green = -DT, and GND = Black.
5. Insert the cable plug onto the **COM-PORT (J20)** connector.
6. Proceed with **Mount and Cable the Indoor Control Panel**, page 60.



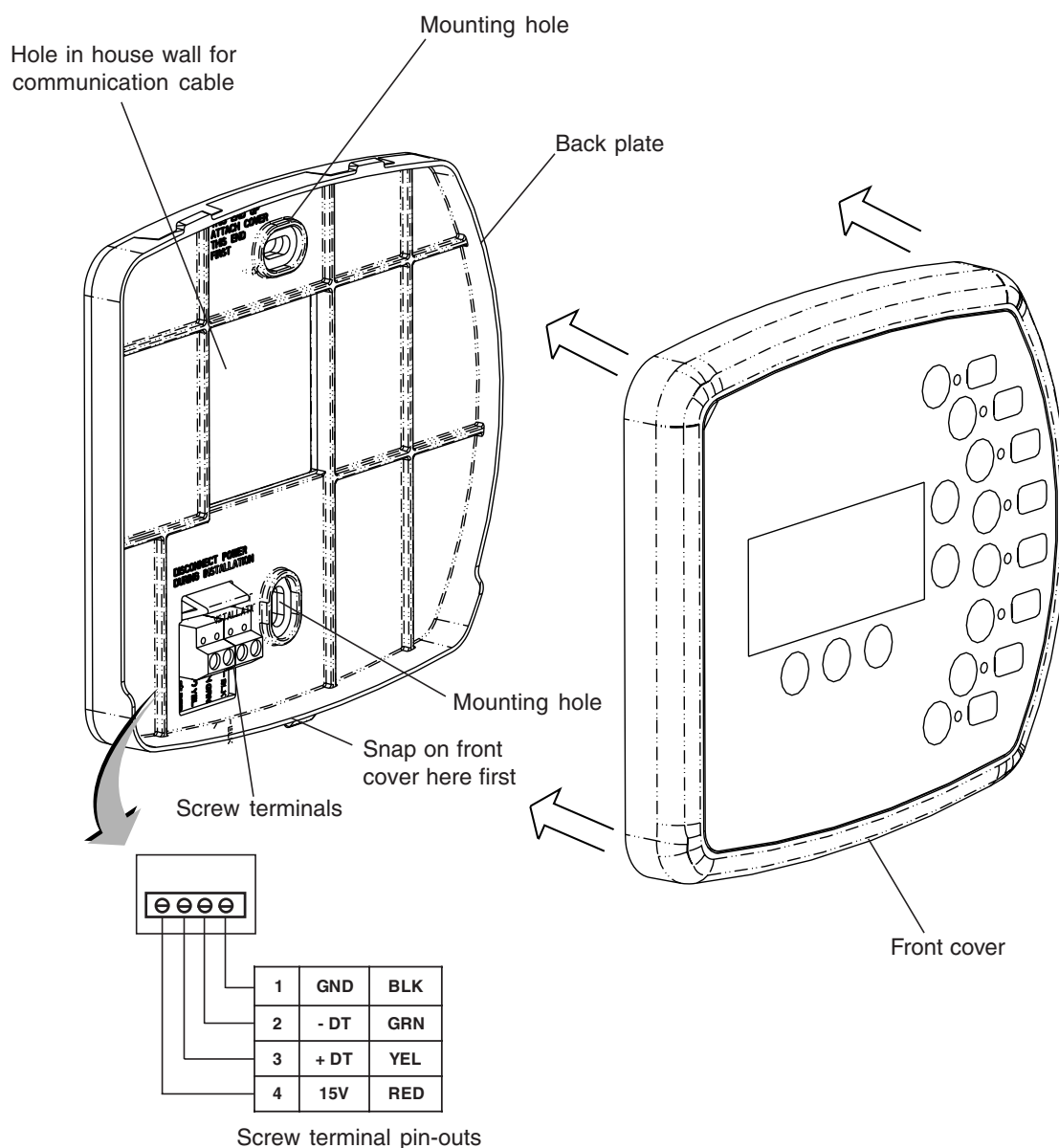
Mount and Cable the EasyTouch Indoor Control Panel

To mount and connect the communication cable to the EasyTouch Indoor Control Panel:

1. Route the cable through the house wall to the location of the indoor control panel. Pull a working length of the communication cable out of the wall.
2. **Remove the control panel front cover from the back plate:** Unsnap the bottom edge of the front of the control panel cover from the back plate.



3. Strip the leads of the communication cable wires $\frac{1}{4}$ in. Insert the four wires into the screw terminals. Make sure to match the color-coding of the four wires as shown on the screw terminal.
4. Feed the cable back into the wall so that the remainder left outside the wall fits behind the back plate. Mount the control panel back plate on the wall. Secure the back plate with the two retaining screws.
5. Install two pan head retaining screws in the back plate holes. Tighten the two screws to secure the back plate on the wall.
6. Mount the control panel cover over back plate and snap in place to secure.
7. After the EasyTouch load center is powered up the indoor control panel will automatically synchronize system information from the outdoor control panel then the indoor control panel is ready for operation. Note: If “Unit Mismatch” display on the indoor control panel you have the choice to download the system image from the outdoor control panel or upload system information from the indoor control panel to the outdoor control panel. For more information about synchronizing control panels, see page 54.



Glossary

Aux Extra: An additional auxiliary output circuit that uses the Solar socket (J17) on the EasyTouch motherboard. Uses the Down arrow button on the indoor control panel to switch circuit on and off. Only available if solar equipment is not being used.

High Voltage Compartment: Large lower right compartment of Load Center for all high voltage wiring including circuit breakers, relays, and GFCI.

Indoor Control Panel: Nine or 14 button remote controller with LCD (liquid crystal display) wired to the EasyTouch motherboard in the load center. The Indoor control panel can be wall mounted inside the house.

iS4: Four function Spa-Side remote. Can be spa wall or deck mounted.

Load Center: Metal enclosure with power relays, transformer, and circuit breakers. Used for distributing power for controlling the EasyTouch system. 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 EasyTouch load center for low voltage cabling.

Motherboard: The circuit board mounted on top of the EasyTouch control panel. The EasyTouch motherboard defines the system capabilities.

Outdoor Control Panel: EasyTouch control panel with flexible hinge installed in upper portion of EasyTouch Load Center to control the EasyTouch system.

Receiver/Antenna: Used with the QuickTouch (QT4) to receive radio frequency (wireless) transmissions.

RF Transceiver: Used with the EasyTouch wireless control panel to transmit and receive radio frequency (wireless) transmissions.

Relay Circuits: The circuits that control the relay outputs on the EasyTouch motherboard. Connectors are located on the top edge of the circuit board.

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. Sockets are located on the EasyTouch motherboard.

