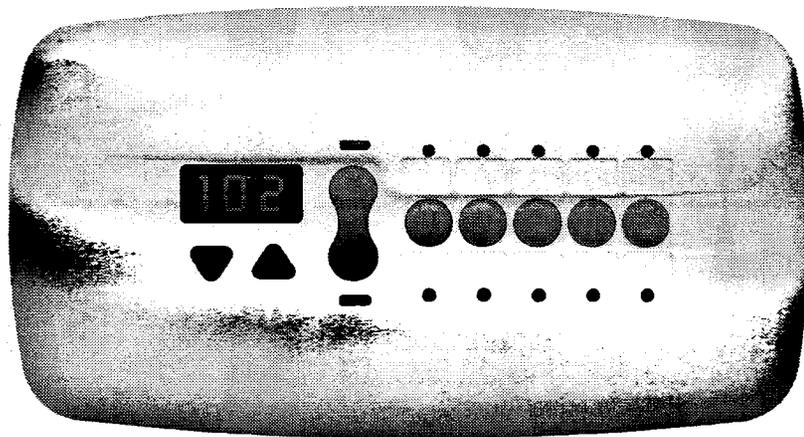


iS10 Spa-Side Remote

(For IntelliTouch and CP3800 series systems)



Installation Guide

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

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 - 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.

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P/N 520208 - Rev B - 05/5/2006

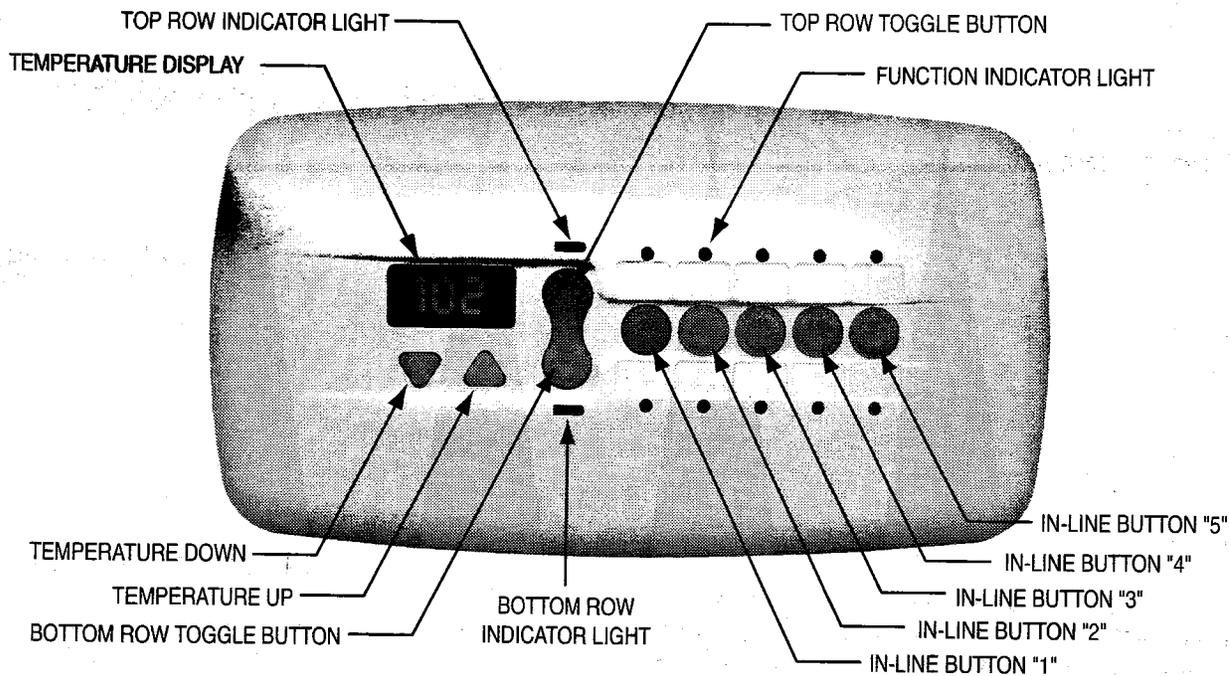
iS10 spa-side remote controller overview

The iS10 spa-side remote is a double-insulated device UL and ETL listed to UL 1563 for use with the IntelliTouch pool and spa control system, and the Compool CP series systems. The iS10 spa-side remote provides control of ten functions from the spa location. The spa temperature can also be adjusted from the remote. Up to four iS10 remotes may be installed using the IntelliTouch model i7+3, i9+3, i9+3S and i10+3D. The i5 and i5S IntelliTouch system, and the compool CP3 series systems can support one iS10 remote. It is possible to use two iS10's on an i5, i5S and CP3 system, however, the two iS10 remotes will mirror each other in functionality.

Operating the iS10 remote controller

The iS10 remote controller can control up to ten system functions, depending on the system being used. Each circuit function can be labeled above or below the buttons to identify the button function. Pressing the "peanut-shaped" middle button toggles between which row of circuit functions to activate when one of the five in-line buttons are pressed. An LED indicator light above and below the toggle button indicates which row (top or bottom) is active. When one of the in-line buttons is pressed, the adjacent LED indicator will be on indicating that the circuit has been activated. The default circuits activated by each button are shown below. To change the default circuit function settings or configure different settings for multiple iS10 remotes with IntelliTouch only, see page 2.

Spa temperature is displayed in the temperature display. The spa temperature may be adjusted up or down by pressing the appropriate up or down arrow button. The current temperature display will blink while it is being adjusted. After setting the desired temperature, the display shows the actual temperature as it adjusts to the set temperature. This only functions while in the "Spa" mode. The temperature set by the iS10 is only temporary. When the "Spa" mode is switched OFF, the temperature set at the IntelliTouch Indoor Control Panel will resume the next time the spa mode is activated using the "Set manual heat" function (see the IntelliTouch User's Guide (P/N 520102) for details. The "Spa" mode will automatically switch off after 24 hours.



Default IntelliTouch Settings

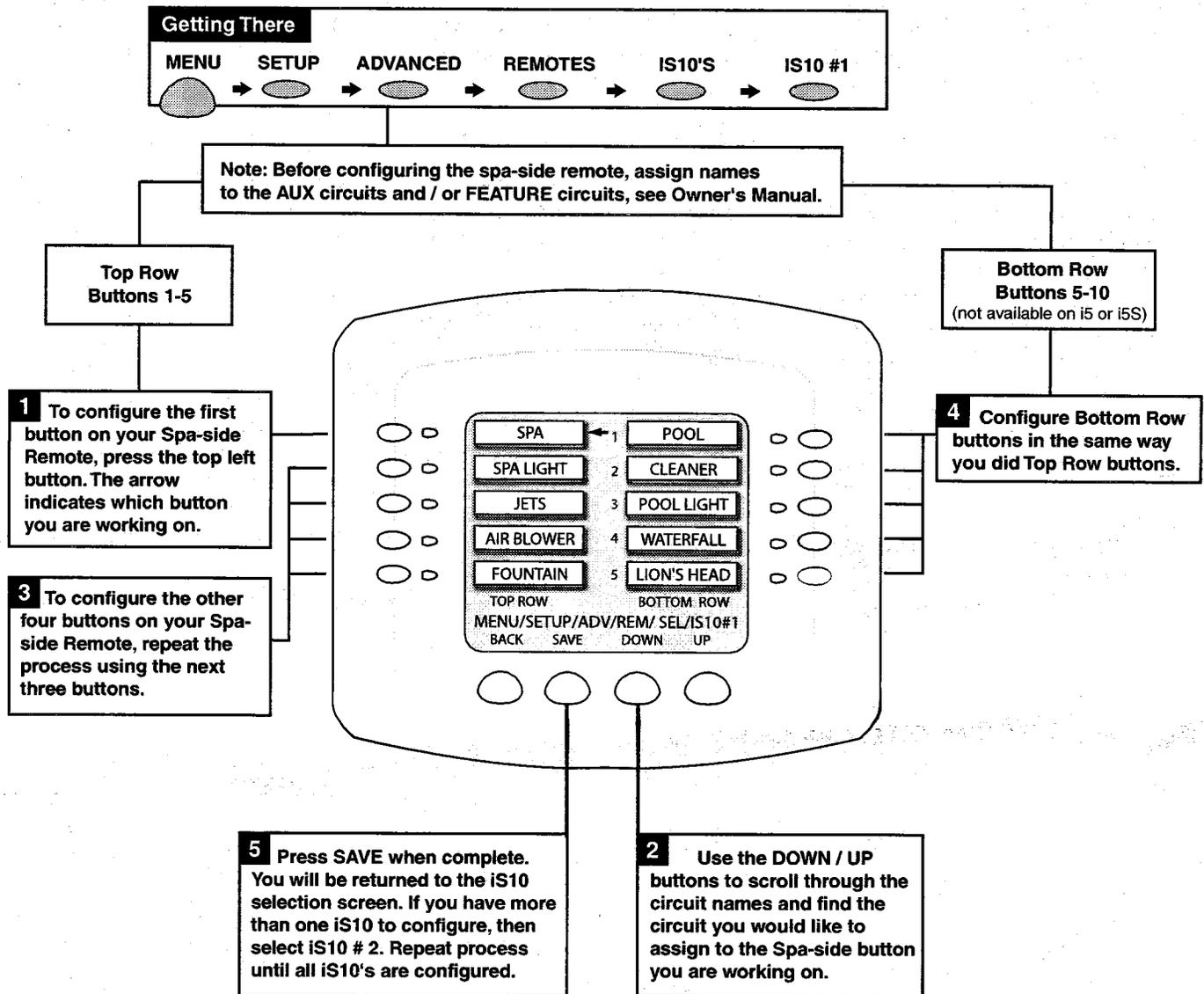
	TOP ROW	BOTTOM ROW
BUTTON 1 i5, i7+3, i9+3, i10+3D i5S, i9+3S	SPA HI-TEMP	POOL LO-TEMP
2	AUX 1	AUX 5
3	AUX 2	AUX 6
4	AUX 3	AUX 7
5	AUX 4	AUX 8

Default Compool CP3XXX Settings

	TOP ROW	BOTTOM ROW
BUTTON 1	SPA	AUX 4
2	POOL	AUX 5
3	AUX 1	AUX 6
4	AUX 2	AUX 7
5	AUX 3	UNAVAILABLE

Setting up the iS10 spa-side remote from the IntelliTouch indoor control panel

The iS10 spa-side remote buttons can be configured from the IntelliTouch indoor control panel. You can configure the remote to operate ten functions.

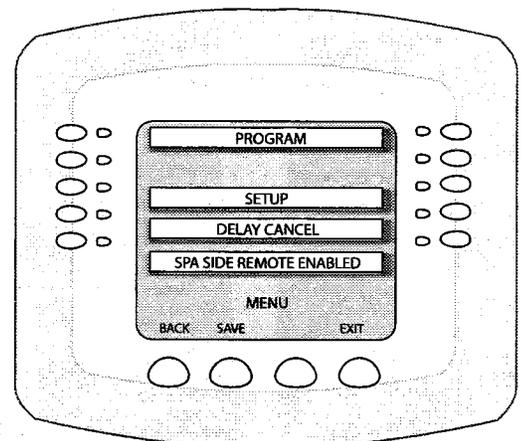


Disable/Enable the iS10 spa-side remote

This feature is useful for families with young children. It gives you an easy way to switch off the Spa-Side Remote so it cannot affect the system. You can enable and disable the Spa-Side Remote with the same button. Each time the button is pressed it toggles to either DISABLED or ENABLED.

Go to **Menu > Setup > Advanced > Remotes > Spa Side Remote Disable/Enable:**

- To Disable:** Press SPA SIDE REMOTE ENABLED. Screen will immediately respond and display SPA SIDE REMOTE DISABLED. Remote is now off.
To Enable: Press SPA SIDE REMOTE DISABLED. Screen will immediately respond and display SPA SIDE REMOTE ENABLED. Remote is now on.
- Press the **Exit** button when finished.



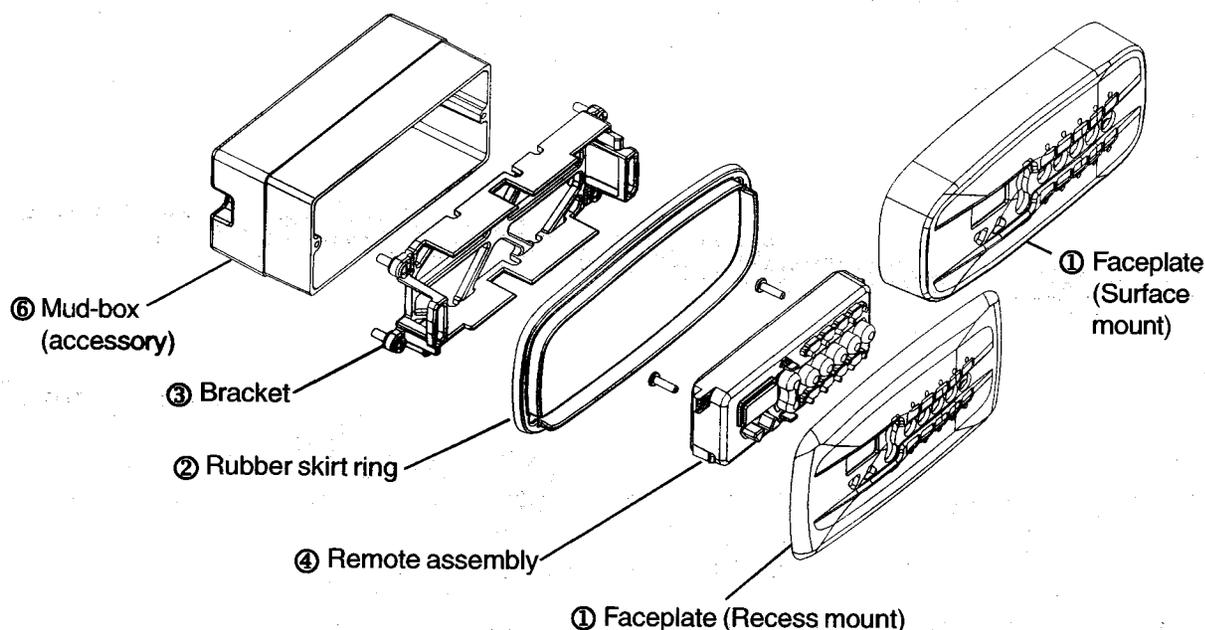
iS10 spa-side remote controller Installation

The following describes how to install the iS10 spa-side remote controller. Read through the procedure before starting. The iS10 is splash-proof and weatherproof but is **NOT** submersible. The iS10 remote must be installed above the highest sustained water level. Also, when installing the iS10 with a recessed mount, the mud-box should not be submerged below the water level.

Kit Contents

The iS10 spa-side remote kit includes parts to install the iS10 remote using a recess or surface mount.

1. Two faceplates (Surface mount P/N 520355. Recess mount P/N 520354).
2. Rubber skirt ring (P/N 520443Z).
3. One bracket assembly with four screws and O-rings (P/N 520426Z).
4. One remote assembly with two attached screws and 150 ft. of four wire 22 conductor cable (P/N 520420 for IntelliTouch - P/N 520421 for CP3xxx)
5. Washer, flat nylon #6, Qty. 6 (P/N 520353).
6. Mud-box (P/N 520335) - Accessory not included in kit.
7. CP3xxx Adapter Kit in kit (P/N 520001).



iS10 required mounting space

In order to install the iS10 spa-side remote into the wall of a gunite spa, provision must be made while the spa is being plumbed. For recessed mounting (even with tile, plaster, or other flat installation only), a mounting enclosure (mud-box, P/N 520335 sold separately) and flat faceplate must be used. For surface mounting (protruding from deck, tile or uneven surface), a skirted faceplate is used without the use of a mud-box. When installed, the iS10 remote requires the following space:

Flat Faceplate:	6-1/2" x 3-1/2"
Skirted Faceplate:	6" x 2-5/8" x 1-1/4" high
Mud-box:	5-1/2" x 2-1/2" x 2-7/8" deep
Material:	ABS plastic

Note: If the IntelliTouch load center to which the spa-side remote is connected is not located above the spa water level, a junction box should be provided (above water level).

Recess mount installation

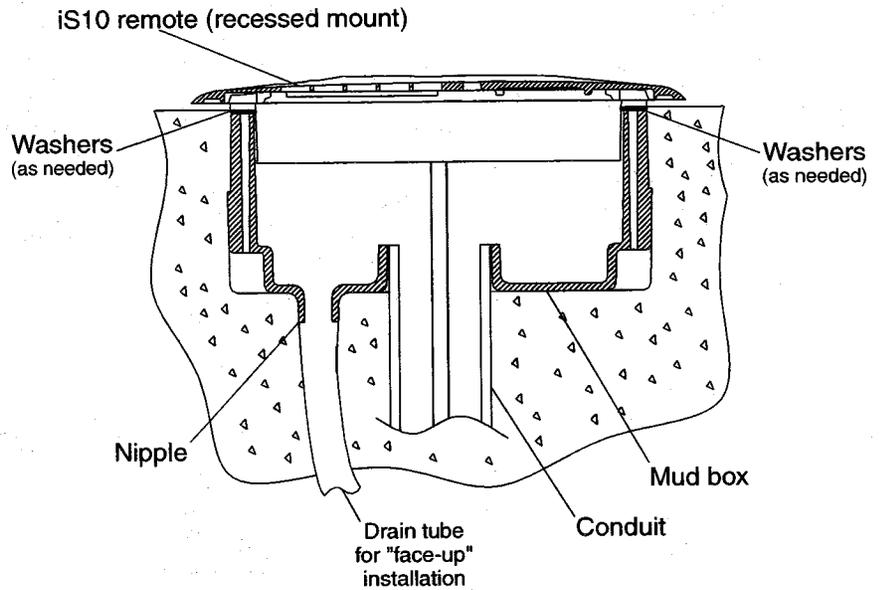
CAUTION - The iS10 is splash-proof/weatherproof and is **NOT** submersible. The iS10 must be installed above the highest sustained water level. Do not allow mud-box to be submerged.

Step 1: Install Conduit

Prepare the mounting location near the spa by installing a 1 in. conduit where the remote control is to be located. Conduit may be reduced down to $\frac{3}{4}$ in. or $\frac{1}{2}$ in. after the first three inches cast into the spa area. Run the conduit from the spa to the low voltage raceway of IntelliTouch load center using sweep elbows for turns.

Step 2: Install Mud-Box

Slide the mud-box over the conduit. Trim the conduit so that it just protrudes into the mud-box. The fit will be loose. Orient the mud-box so the iS10 spa-side remote will be even with the deck or spa wall. Secure the mud-box and plumbing together using NEUTRAL CURE caulking or RTV. Insert the mud-box cover (secure with two screws) until the deck or spa wall are finished, discard insert when completed (keep the screws for bracket installation). Cut away the mud-box wall protruding from finished deck or spa wall.

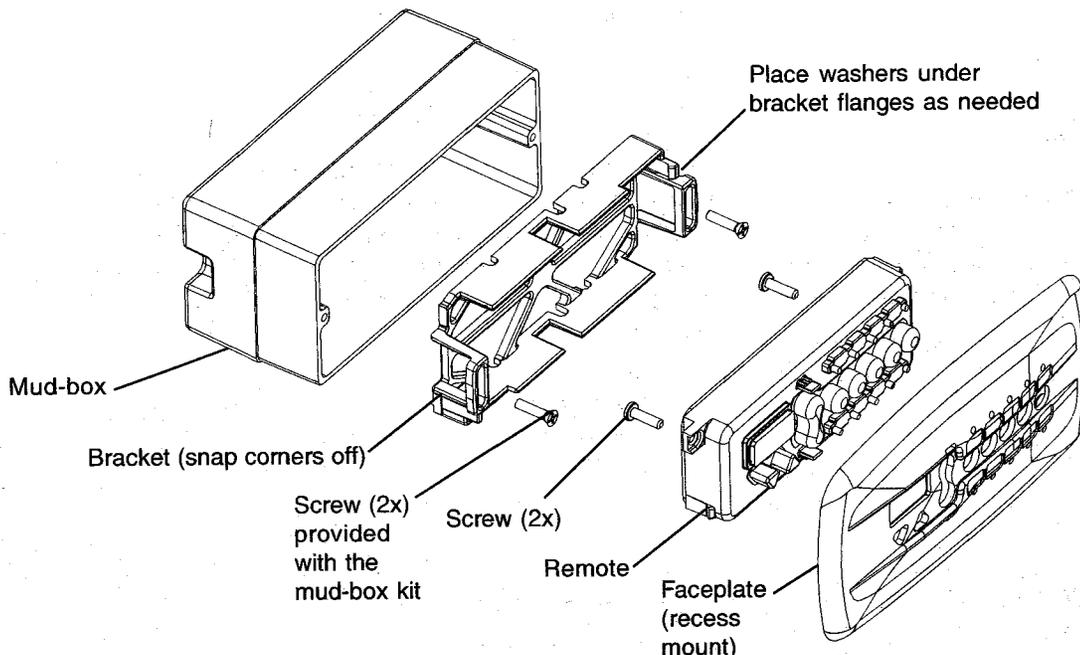


A nipple has been added to the mud-box for drainage if necessary. Cut the end of the nipple and attach a piece of $\frac{1}{2}$ in. tubing. Run the tubing to appropriate drainage location away from the remote before finishing the deck or spa wall.

Step 3: Mount the iS10 remote

Recess mount using a mud-box

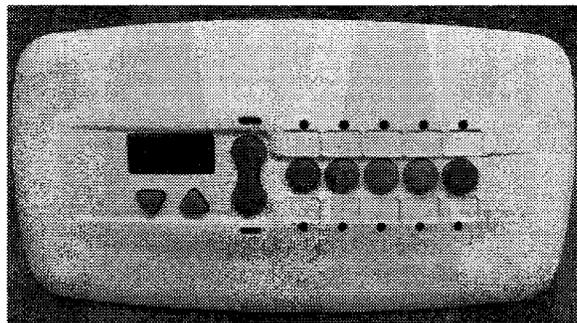
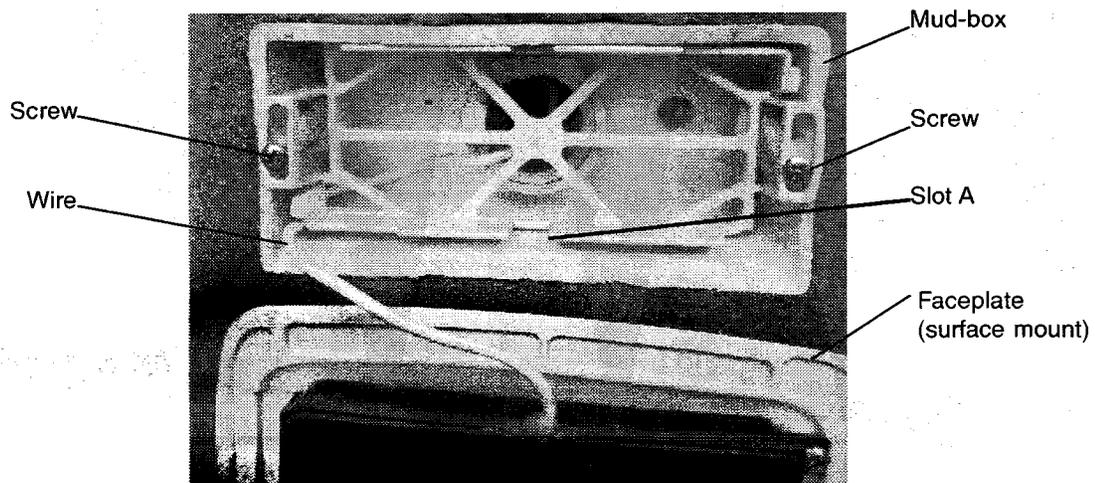
1. Feed the wire into the conduit. Leave about eight inches of wire slack for installation.
2. Mount the faceplate onto the remote. Secure it with the two screws provided in the kit.



Recess mount installation (Continued)

Recess mount using a mud-box (Continued)

3. Snap off the four corners of the bracket where the screws holes are. Insert the bracket inside the mud-box. Be sure that it is level. Secure the bracket to the mud-box with two screws.
4. Route the wire around the outside of the bracket as shown. Note: Wire comes out of the remote through slot A in the bracket.
5. Place the faceplate over the bracket and press down evenly to secure in place. Be sure that the wire is not pinched. If the remote has difficulty snapping in place, use the washers (provided in the kit) as necessary underneath flanges to allow attachment of remote.
6. If necessary, you can "dress-up" the faceplate edges by placing a bead of NEUTRAL CURE caulking or RTV underneath the flat faceplate around the edges.



Faceplate (surface mount)

Step 4: Wiring the iS10 remote

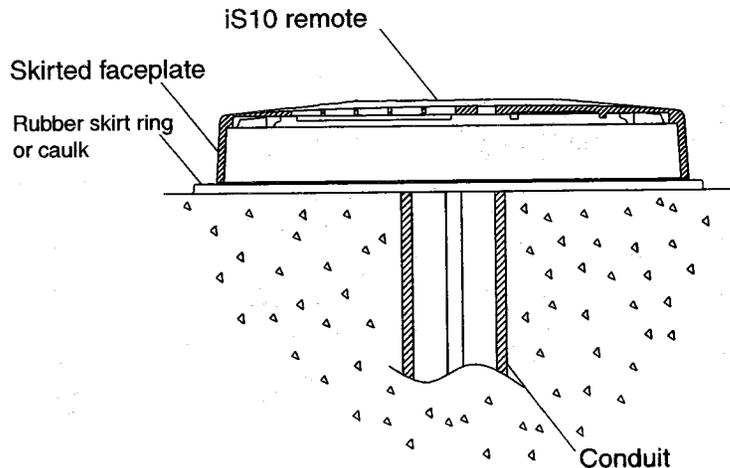
See "Wiring the iS10 remote to the IntelliTouch load center," page 8.

Surface mount installation

CAUTION - The iS10 is splash-proof/weatherproof and is **NOT** submersible. The iS10 must be installed above the highest sustained water level.

Step 1: Install Conduit

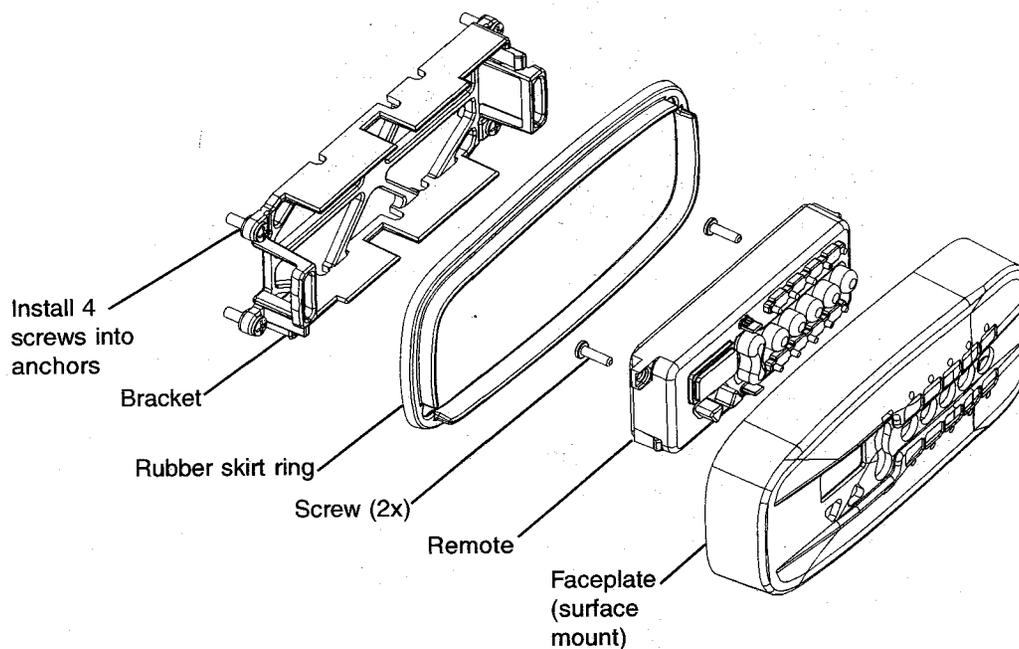
Prepare the mounting location near the spa by installing a 1 in. conduit where the remote control is to be located. The plumbing must protrude from the deck or spa wall. Conduit may be reduced down to $\frac{3}{4}$ in. or $\frac{1}{2}$ in. after the first three inches cast into the spa area. Run conduit from spa to low voltage raceway of Load Center using sweep elbows for turns. When the deck or spa wall have been finished, carefully trim the plumbing back to be flush to the deck or spa-wall.



Step 2: Mount the iS10 remote

Surface mount installation

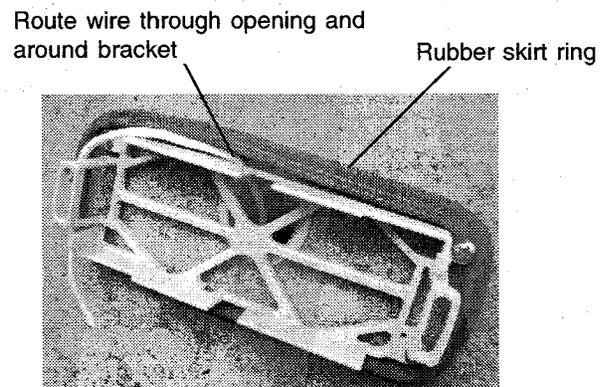
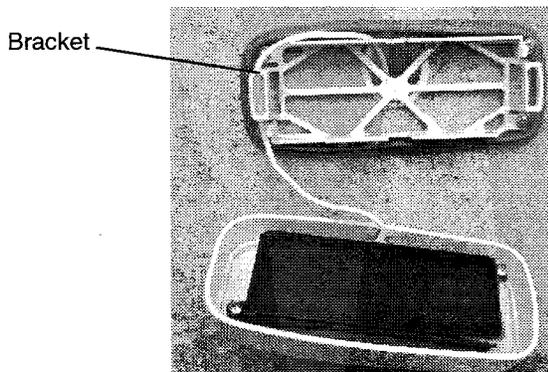
1. Feed the wire into the conduit. Leave about eight inches of wire slack for installation.
2. Mount the faceplate onto the remote. Secure it with the two screws provided in the kit.



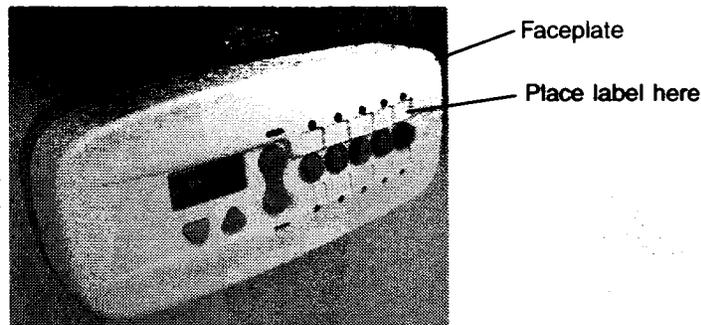
Surface mount installation (Continued)

Step 2: Mount the iS10 remote (Continued)

3. Drill four 3/16 inch holes in the wall or deck using the bracket template provided as a guide (see page xx). Insert the four wall anchors provided in the kit.
4. Install the bracket on the spa wall. Be sure that it is level. Secure the bracket with the four screws.
5. Place the rubber skirt ring over the bracket.
6. Route the wire around the outside of the bracket.



7. Snap on the faceplate over to remote. Press down evenly on the faceplate to secure in place.



8. **If the rubber skirt ring is not used:** Place a bead of NEUTRAL CURE caulking or RTV underneath the faceplate around the edges. Wipe away excess caulking and allow bonding to set.
9. Attach appropriate labels to faceplate.

Step 3: Wiring the iS10 remote

See "Wiring the iS10 remote to the IntelliTouch load center," page 8.

Wiring the iS10 remote to the IntelliTouch load center

WARNING - RISK OF ELECTRICAL SHOCK

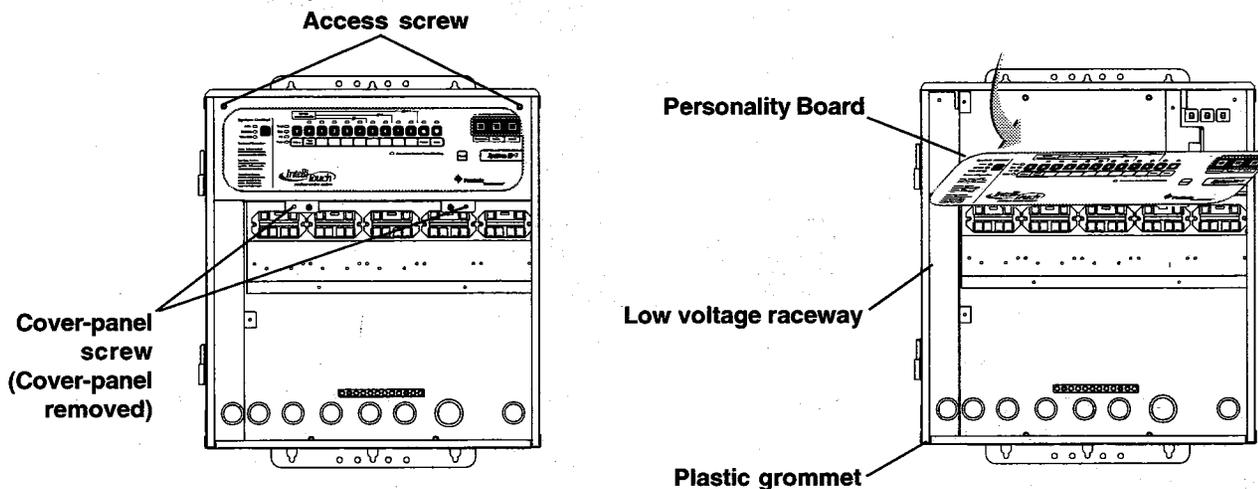


Shut off power to system if High Voltage Cover Panel is removed. Failure to do so could result in personal injury and/or death. Shorting wires may permanently damage unit. Close all panels and Load Center Door when installation is complete. Failure to do so may damage system.

The iS10 spa-side remote is connected to the IntelliTouch system via the RS-485 four wire communication cable. For more information about setting up the iS10 remote, refer to the IntelliTouch User's Guide (P/N 520102).

To connect the iS10 remote communication cable to IntelliTouch load center:

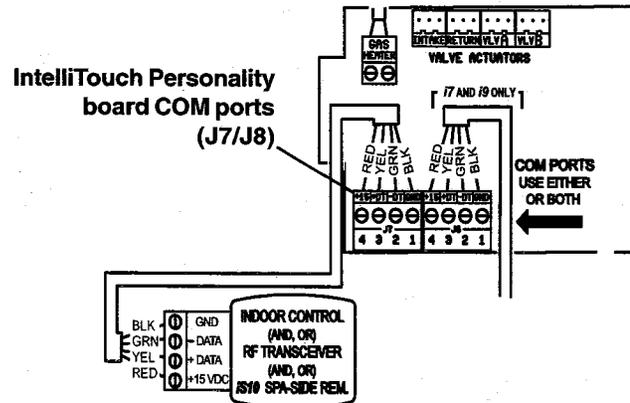
1.  **CAUTION - Switch the main power off to the IntelliTouch load center.**
2. Unlatch the IntelliTouch load center front door spring latches, and open the front door.
3. Remove the cover-panel screws securing the high voltage cover-panel, and remove it from the enclosure.
4. Loosen the two control panel access screws and fold down the outdoor control panel.
5. Insert the four-wire cable into plastic grommet on the bottom of the enclosure and route the wire up through the low voltage raceway to the Personality board.



IntelliTouch Load Center

Wiring the iS10 remote to the IntelliTouch load center (Continued)

6. Strip back the iS10 remote cable jacket 1" and the cable conductors ¼". Insert the wires into either of the **COM PORTS (J7 and J8)** screw terminals located on the left side of the Personality board. Secure the wires with the screws. Be sure that the wire color code is correct as shown on the screw terminal. *Note: Multiple wires may be inserted into a single screw terminal.*



7. Close the IntelliTouch control panel and secure it with the two access screws.
8. Install the high voltage panel cover and secure it with the two retaining screws.
9. Close the load center front door and secure with the two latches.
10. Switch power on to the IntelliTouch load center.
11. For iS10 remote configuration information, refer to "Adding an iS10 remote controller to IntelliTouch," on page 10.

Adding an iS10 spa-side remote controller to IntelliTouch

Up to four iS10 Spa-Side remote controllers can be installed to allow each iS10 to operate different functions or to the same functions at different locations. Each iS10 can be assigned as number 1, 2, 3, or 4. If a different number is not assigned to each installed iS10, then all iS10's are assigned as number iS1. This is useful if you wish to have the same functions available at different iS10 locations.

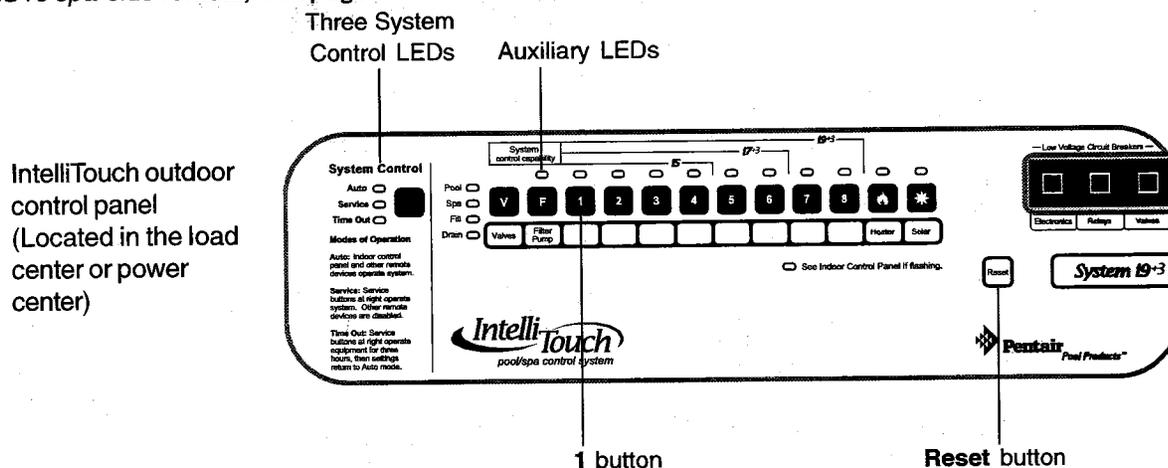
The following steps describe how to manually assign each iS10 a number 2, 3, or 4 as required.

Note: If the first iS10 was installed with the main Load Center or Power Center, it will automatically be assigned as number **iS1**. Other additional iS10 remotes need to be manually assigned.

To assign additional iS10 remotes as iS2, iS3, or iS4:

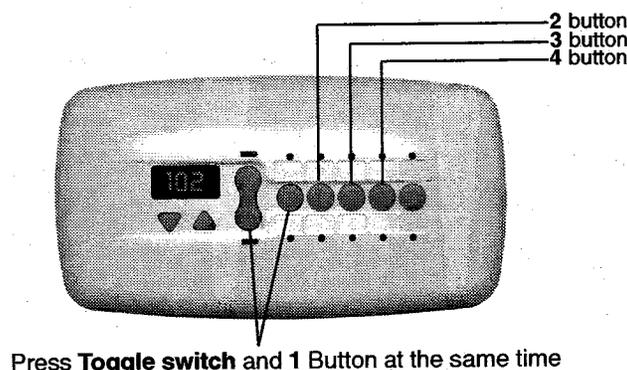
1. On the IntelliTouch outdoor control panel, press the **Reset** button then press the **1** button. The three "System Control" LEDs will start flashing.
2. On the iS10, press the bottom part of the "peanut shaped" toggle switch and the **1** button at the same time while the outdoor control panel LEDs are flashing.
3. The iS10 temperature display will show **SHA**.
4. The four red iS10 LEDs adjacent to the in-line buttons will be on. Do one of the following:
 - If this is the second iS10, press **2**. The temperature display reads **IS2**.
 - If this is the third iS10, press **3**. The temperature display reads **IS3**.
 - If this is the fourth iS10, press **4**. The temperature display reads **IS4**.
5. The iS10 red LEDs will start to flash for about a minute. Wait until they stop flashing. Repeat steps 2-4 for each remote.
6. On the outdoor control panel, press the **Reset** button. The iS10 is now configured.

Note: To configure the buttons on the iS10 remote controller, refer to "Setting up the iS10 remote from IntelliTouch indoor control panel" see page 2. To disable or enable the iS10 remote from the indoor control panel, refer to "Disable/Enable the iS10 spa-side remote," see page 2.



IntelliTouch outdoor control panel
(Located in the load center or power center)

iS10 spa-side remote



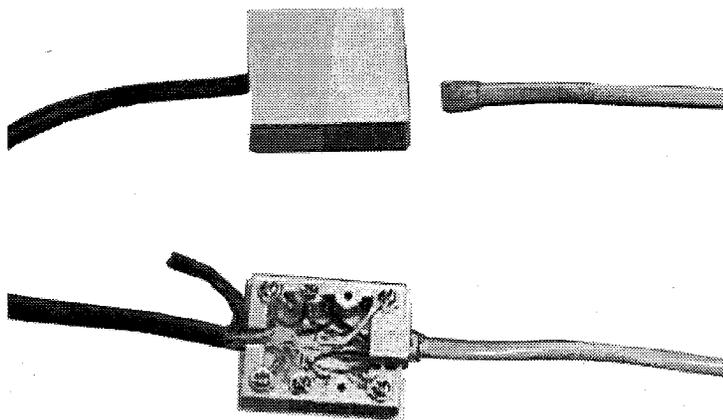
Adding an iS10 remote controller to a CP3xxx system

Connecting to the CP3xxx load center using the adapter

Strip back the cable 1" and ends of leads ¼ in. Open the cable adapter (P/N 520000, included in kit). Insert the iS10 spa-side remote cable into the adapter and attach wires to the terminals (see the wiring diagram below). Attach the six conductor flat cable pig-tail between cable adapter and the COM port connector on the circuit board in the load center.

iS10 WIRING	
iS10	ADAPTER
RED	YEL
YEL	RED
GRN	GRN
BLK	WHT

iS10 wiring diagram



Compool connector block with cables

Upgrading from the SS8 to the iS10 remote

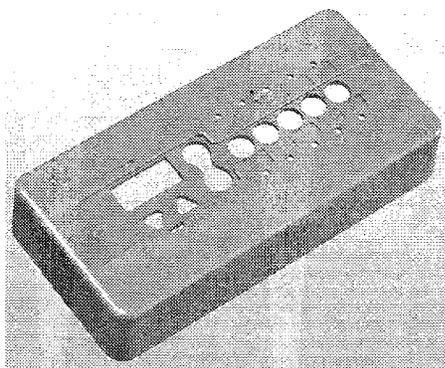
The iS10 spa-side remote may be used to replace the SS8 spa-side remote on the CP3XXX family of systems. Note: The iS10 remote will still only control up to eight functions. The SS8 must also have been plumbed with a minimum 1-inch conduit.

Remove SS8 remote

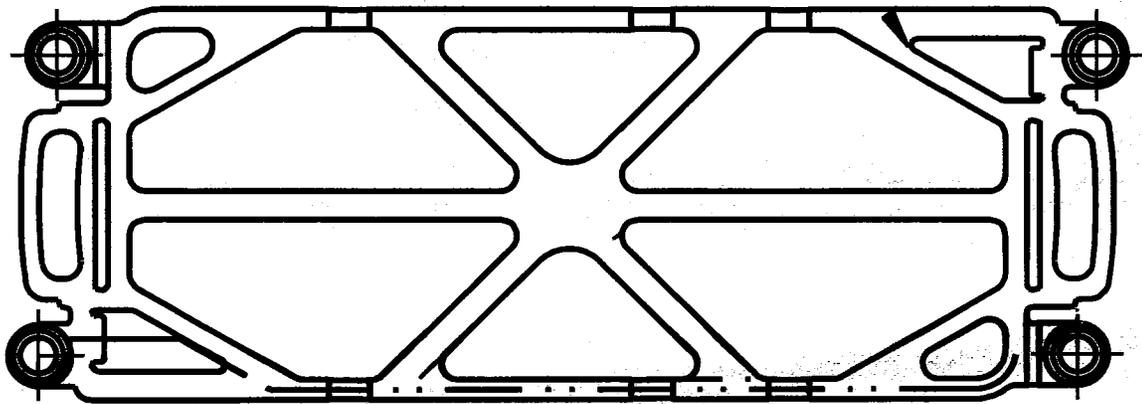
Unplug the SS8 from the load center then pull out the unit from spa-side location. Remove the SS8 mounting bracket from spa-side location (two screws). All that should be left is a minimum of 1-inch diameter conduit.

Install the iS10 remote

The installation is identical as the iS10 surface mounting of a new installation (see pages 4 through 7) except for the faceplate (P/N 520427) to match the SS8 footprint. Run spa-side remote cable through conduit and into the load center.



SS8 faceplate



iS10 bracket guide template