NOTE: EasyTouch Boards shipped prior to 5/5/08 (i.e. EasyTouch 1) cannot be programmed with version 2.010 or higher.

EasyTouch Boards shipped since 5/5/08 (EasyTouch 2) should be programmed with version 2.010 or higher. Please contact

Technical Support if you have any questions.

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RELEASE VERSIONS

IntelliTouch 1.170 / MobileTouch 2.170

EasyTouch 1 (shipped prior to 5/5/08)
      Wireless 1.060
      Outdoor 1.060
      Indoor 1.060

EasyTouch 2 (shipped 5/5/08 or later)
      Wireless 2.130
      Outdoor 2.130*
      Indoor 2.130

*ComPool to EasyTouch Upgrade System = USES EASYTOUCH 2 OUTDOOR FIRMWARE

SunTouch 2.080

i-Link home automation adapter 1.030

*******IMPORTANT NOTE***********IMPORTANT NOTE*********IMPORTANT NOTE**********
*******IMPORTANT NOTE***********IMPORTANT NOTE*********IMPORTANT NOTE**********
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Updating IntelliTouch to version 1.070 or Greater

An issue can/may occur when updating an IntelliTouch system with a
Firmware version older/less than 1.070 to version 1.070 or newer.
It is important to follow a simple procedure to insure problems don't occur.

In the example we will assume a standard system with one indoor panel and one outdoor panel.

1)   Update the firmware on the indoor panel to the current version 1.070 (or newer).
2)   Erase the memory on the indoor panel.
      a.   Press "Menu"
      b.   Press "Setup"
      c.   Press "Advanced"
      d.   Press the 2nd and 4th bottom buttons at the same time to enter the hidden service screen.
      e.   Press "Erase EEprom – All !!" and follow prompts pressing "Yes" and then "Erase"
3)   Allow the unit to recover the system settings from the outdoor panel. This will take a minute or so.
4)   Update the firmware on the outdoor panel to the current version 1.070 (or newer).
5)   Erase the memory on the outdoor panel.
      a.   Press "Reset" – the 3 LEDs on the left showing system mode will all light at the same time.
      b.   Wait a second or two and then press the AUX 5 button.

       c.   The 3 LEDs will flash off and then back on indicating the erase took place.

6)   Insure the memory retrieval occurs again by looking at the indoor panel, passing the data again. This should ensure a clean update.

       -      If you have multiple indoor panels, simply follow steps 1, 2 and 3 for each panel.
       -      Expansion load/power centers do not require any updating

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EasyTouch Firmware Version History

Version 1.010   12/19/05

Version 1.030   2/15/06

Version 1.040   3/7/06

Version 1.050   6/27/06

- Fixed circuit selection issue with IS4, QuickTouch4, IntelliFlo, & 2 Speed on all models
- Fixed AM/PM/Day of the Week display bug on UIC/UWC
- Allow temp adjust when aux circuits are on
- Corrects "Heater" assignment under valves
- Adds new IntelliChlor menu for separate Pool/Spa % when available
- Indoor/Wireless - fixes Pool turning off when a circuit gets turned off
- Indoor/Wireless - fixes Pool/Spa switching by arrow keys

Version 1.060   8/16/07

- Fixed circuit types for special lighting
- UOC, UIC, & Wireless - Put back in separate Spa/Pool chlorinator % for operation w/1.8 chlorinator
- Added service mode support for 2 stage pump switch allowing 2Spd control. Similar to IntelliTouch. One press takes unit from OFF to ON, second press leaves pump ON and turns on 2Spd (High Speed). The third press turns both off.
- Fixed issue with Floor Cleaner Function. The counter was not being initialized causing a possible wait of up to 4 hour before first switch.
- Added 'freeze_kill_Cleaner' mask (search to see code) - this masks OFF the Cleaner in Freeze mode unless the circuit is specifically calling for it.
- Fixed bug in restarting programs.
- Fixed "HEATER" valve selection.
- Fixed 'Auto' Daylight Saving Time to reflect changes as of 2007 (now starts 2nd Sun of Mar, ends 1st Sunday of Nov).
- IntelliFlo VS now uses HIGHEST RPM as priority of circuits which are ON rather than pump priority of 4 thru 1.
- IntelliFlo VS now honors 30 sec pump OFF for valve turns.
- Freeze mode now goes active if sensor shows error (open or short).
- Fixed issue which caused an UP ARROW in menu mode anytime an iS4 button was pressed if the iS4 was disabled.
- Fixed issue with Cleaner off during freeze / bit was being wiped out & Cleaner masking out other circuits in freeze.
- Fixed bug in schedules where some schedules change to once only.
- Fixed bug where negative air temps display as positive.
- Wireless Cleaner circuits now blink.
- Added "FRZ" on main screen when freeze is active.
- Added "DEL" on main screen when delay is active.

- Display circuit names for POOL and SPA throughout screens.
- Default Pool/Spa names to Lo-t, hi-t for single body systems.
- Rename Pool/Spa Delay to "Cool down".
- Changed maximum temperature from 106F (41C) to 104F (40C).
- Fixed Schedule issue where more than 1 schedule on a circuit can turn to "Once Only" when creating new schedules.
- Fixed problem with circuit names on/off when using custom usernames.
- Fixed Celsius units displaying incorrectly.
- Removed ability to select "Master Pool" and "Master Spa" from Aux1-Aux7 in circuit types.
- Fixed bug in the rollover of the solar start differentials when going from 3 to 9 degrees.

NOTE: EasyTouch Boards shipped prior to 5/5/08 (i.e. EasyTouch 1) cannot be programmed with version 2.010 or higher.

EasyTouch Boards shipped since 5/5/08 (EasyTouch 2) should be programmed with version 2.010 or higher. Please contact Technical Support if you have any questions.

EASYTOUCH 2.0 FIRMWARE (Not compatible with EasyTouch 1.060 and prior systems):

Version 2.010   5/5/08

- New processor upgrade requires version 2.010 and higher. Cannot be applied to older EasyTouch systems.
- Added IntelliBrite Pool/Spa light support.

Version 2.040   11/5/08

- Fixed error when circuit names OFF - when assigning IS4 and QuickTouch4 configurations garbage characters would be displayed.
- Fixed schedule glitch (cannot enter a schedule under certain circumstances). UOC only.

Added several new features:

- Heat/Cool support for ThermalFlo heat pump
- Priming control for IntelliFlo VS pumps
- Support for 2VS or 2VF IntelliFlo pumps (or one of each)
- Added 4 digit Lock out for Indoor control panel and Wireless remotes
- Added 8 feature circuits
- Added iS10 Spa-side remote capability

Version 2.060   2/24/09

- Added Magic Stream laminar controls under lights menu. Sub Menu Has Toggle Thumper, Hold, Reset, and Mode
- Selects - driving the Magic Stream Selected Relays. Also added Magic Streams as a Circuit Type.
- Fixed problem with schedules not saving on UOC or schedules not being able to be entered.
- Added IS10/IS4 Functions of Pump Increase / Decrease, to Step Up / Down IntelliFlo Motor Speed.

- Added a Menu under Settings to control pump selection and speed step size (in RPM or GPM) per said IS4/IS10 controls.
- Previous Definitions of 4SPEED Pump have been removed, IS4/IS10 Controls taking their place.
- Fixed issue with program restarts - failed to fire if the current hour was the same as start hour.
- Added Power up Restore function (so will power back up in Service mode with circuits on - if that is how it powered down)
- Fixed Misalignment of Button - LED, on indoor and wireless for Master Cleaner operation.
- Fixed omission of IntelliFlo Priming Menu for V.S. Mode.
- Removed 'No Comm' and no-Spa modes from IntelliChlor.
- Fixed bug that caused random speeds to fire at random intervals in Freeze.
- Fixed reported problem of special assigned speeds in IntelliFlo (like HEATER) not ramping to the correct speed – this was true for HEATER, POOL_HEATER, FREEZE, etc.
- The Feature circuits failed to turn OFF after being turned on either manually or by program.
- Added support for Valves attached to feature circuits in Freeze.
- Added support for Pump/Valve delay in Freeze mode. Now if Valve delay is selected, it will operate in Freeze also. This is true for standard pumps as well as VS and VF IntelliFlo units.
- Fixed problem where ThermalFlo Menus on Indoor / Wireless would not come up.
- Fixed problem where Solar Preferred was not taking precedence when used.
- Fixed problem where the Delay indicator "DEL" was not showing on the Indoor ICP or Wireless remote.
- Fixed problem with 'Light' Configuration, now appears as a configurable option in Lights Menu (so all on/off works on it)

Version 2.070   8/1/09

- Fixed Feature Circuit Menu on Wireless/Indoor to show correct Feature Status (wasn't updating).
- Fixed issue with Heat Pumps in Heat Pump Preference mode working correctly in cold environments.
- Made improvement to IntelliFlo control in odd setups. If a user has a lower speed set for Spa and higher for Pool. When the Pool is running and the user selects Spa, the pump continues to run at the higher speed because the system still sees the Pool as ON (in the background).
- Pump Filtering Body Size has been updated - bug did not permit full 1-250K range, now does.
- Fixed Bugs in IntelliFlo menus.
- Vacuum Time would not decrement below 2, Flow GPM not able to max range 15 & 130
- Fixed issue with Pump Stopping and restarting every 15 minutes. The flaw would only occur after the unit had been in freeze mode. If the unit was reset, or powered off and on the problem would disappear - until next freeze occurrence. Once Freeze has occurred, and the unit has not been reset - the issue occurs.
- Fixed minor issue with Cleaner which is selected in freeze mode. It still must turn off when in freeze cycle and in Spa rather than Pool position.
- Fixed minor issue with floor Cleaner which made it nonfunctional if assigned to Aux 1
- Fixed issue with the IntelliFlo assignment of POOL_OR_SPA, it was not correctly sensing the state of the Pool/Spa output and was not turning on.
- Fixed issue in outdoor that allowed a user to go beyond maximum calibration values.
- Added support expanded/extended temperature range, up to 420 degrees f on the solar sensor. This is to accommodate the installations with glazed solar panels in which the sensor must be mounted to the panel.
- Added interdicting menu to warn and confirm selection, before entering into the IntelliFlo-Type Menu, as changing type will immediately change pump settings to default.
- Fixed issue with VF solar hold feature, the solar hold off did not re-initialize when leaving service mode. i.e. the Solar and pump were stopped when entering service, and upon exit both restarted, but since the auto mode status had always held in background that pump was ON, the timer was not reloaded.
- Added a clearing of the solar hold and IntelliFlo VS manual prime to the DELAY_CANCEL.
- Corrected function of valves assigned to feature circuits.
- Fixed issue with AUX Extra - it could not be toggled in AUTO mode at the outdoor panel.

- Changed 'CHECK FLOW/PCB' Chlorinator Error to Say 'LOW FLOW'.
- Fixed issue that prevented auto lock by iS10.

Version 2.080   2/1/10

- Changed Pump System Priming Ranges to be more in line with IntelliTouch.
- Added variable to catch 'out of password' on Indoor/Wireless. Before it didn't know when to require user password to continue.
- Fixed problem Preventing Pump Delay in Freeze Mode.
- Fixed problem that caused displays of current temperature (air, Pool, Spa) to show 255 in degrees Celsius.
- Fixed problem that didn't allow the pump run at the lower "FREEZE speed".
- Fixed Spa-Freeze override issue. The Spa Freeze Override never timed out (30 minutes). Now it will time out and resume normal Freeze mode after 30 minutes of 'manual Spa'.
- Fixed problem which occurred if the Pool was freeze protected and Spa was not. In a freeze condition if Spa was turned on (Spa-Freeze Manual Override) the valves failed to turn to Spa.
- Fixed issue in Solar Preferred mode that prevented Solar from being used when water temperature was below 55F.
- Fixed IntelliFlo VS Priming Roll Over Value (would increase to 10, not 5 as required).
- Fixed issue with clock accuracy where a negative value in the clock adjustment would be missed.
- Fixed incorrect display of the 'Up Arrow' Character (Blurred Up Arrow Bug).
- Fixed Lights Menu problem where the three far right characters of long names were not being cleared into subsequent menu's (left character shadow). It now appropriately clears those characters.

Version 2.090   2/14/11

New Features:

- Added support for the new VSF+SVRS IntelliFlo Pump
- Added Support for the New IntelliChem control System
- Added IntelliFlo Circulation pump / Cleaner Booster Pump Interlock
- Added Support For the New SpaCommand Spa side controller
- Added Nocturnal Cooling via the Solar panels
- Added Solar Freeze Protection
- Added support for new SCG Cold Water Cut Off Message
- Support for SpaCommand to properly display Heat Enable and Heat Boost
- Added Heat Boost and Heat Enable to QuickTouch options
- Feature circuit freeze protection of IntelliFlo without a specific FREEZE listing

Fixes:

- Fixed issue that sometimes occurred in degrees F to C conversion
- Fixed issue with MAXTEMP double safety function which caused systems (normally Spa) set to 104F / 42C to cycle on and off when max temp was reached. This was due to the MAXTEMP function failing to have proper hysteresis.
- Fixed issue that allowed the Aux Extra (solar) button on the outdoor top control the solar valve in solar mode even when in Auto mode.
- Fixed issue with programs that had been in place for years and never exposed.
- Fixed issue with assigned Valve function, when assigned to Heat pump it failed to operate when Heat pump was on in Cooling mode
- Fixed long standing issue with Heat pumps when system is set for Degrees C. A simple math error prevented the heat pump from working unless it was already very warm outside.
- Fixed issue when Valve delay (pump hold off) was enabled it activated even when the Pool was starting up with valves already in place. No need to operate, and caused confusion with users

- Fixed issue with IntelliFlo VF solar hold at startup. If the Cleaner was also set to come on, the Cleaner's 5 minute startup delay ran concurrent to the solar hold effectively killing any Cleaner delay. Now in this circumstance the Cleaner delay is started after the solar hold finishes, properly protecting the Cleaner.
- Fixed comlink Error system with SCG unit
- Fixed issue when Spa is on and Pool is in background - Pool was not being masked out
- Fixed issue - in some cases if an IntelliFlo pump was added, it was not recognized until a system reset
- Fixed issue that occurred in some configurations with newer pumps (VS+SVRS, VST, VSF) packets would sometimes get dropped due to timing. If a few in a row were dropped it would cause the pump to stop until packets were no longer being dropped.
- Freeze failed to operate if air temp was negative (less than zero)
- Even with freeze protection disabled, the 30 minute Spa override would activate during freeze. Now the user can use the Spa normally if protection is disabled

Version 2.100   7/12/11

Fixes:
- Changed Spa side IntelliFlo control system. Prior it required the Spa circuit was on much like the temperature change it was dynamic, and forgotten/reset when Spa turned off. Since the customer may want control when Spa is not running, now we only require the assigned pump is on.
- Fixed issue with solar valve and service mode. The valve was not being activated in Service Mode if the circuit was solar.
- Revision of IntelliChem Menus to Allow SI Adjustment during No/Flow Delay, negative sign correction, and LCD character corrections
- Fixed clock setting issue
- Revised Main Menu in code to refresh two custom characters on entry (will be done often unfortunately)
- Revised IntelliFlo-Menu, VF type Pump Filter Circuit, NONE is no Longer an Option (Pump Type would otherwise be ignored if no background circuit is selected)
- Fixed issue, when user is in Spa and the Cleaner turns on. Now it remains in background. Prior it tried to exit Spa mode. This was confusing and users didn't want it out of Spa mode anyway.
- Changed C/F Option to English/Metric, And GPM Readings (IntelliFlo Menu's and Spa-side pump controls). Now support LPM (liters per minute).
- Changed 'VSF+SVRS' Text to 'VSF'

Version 2.130   7/15/13

Fixes:

- Supports new (Mobi II) style radio. Firmware IS backward compatible with all EasyTouch II Wireless units.
- Added exception to Indoor code which ignores "Set heat" packets while it is itself in the midst of changing those packets (bug found with screen logic EZT support).
- Changed range value to allow user to set ORP as low as 400
- Changed response times on Fast Keep Alive to sync with radio chipset
- Fixed temp control issues that allowed the Pool to heat till the 'next' degree, rather than stopping at desired temp + 0.4 degrees. Also implemented C scale to act about the same
- Fixed the valve assignment packet. It was getting incorrectly set by ScreenLogic trying to set valves for expansion units 2, 3, and 4 which are for IntelliTouch only
- Added support for new radio in Wireless including driver, handler, timing, issues/differences, etc.
- Fixed issue of not sending out Chlorinator Name.
- Put in solution for 'cooling temperature' getting set to zero by unknown issue. Found hardcoded

pointer to nowhere in the Cooling menu system, this may likely explain the resetting to 0.
- Added code to the heat pump cooling. It was switching on an edge, so cycling was occurring
- Fixed issue with an IntelliFlo being used as the master Cleaner pump. It was not being held off if Spa was on.

IntelliTouch Firmware Version History

Version 1.050 (UOC & UIC)   7/27/04

> Note: UOC = Universal Outdoor Control board
>   UIC = Universal Indoor Control board

Added Features:

- Dimmer Support: The newly released Dimmer module for the IntelliTouch line is supported. (requires both the UIC & UOC be at Vers 1.050)

- Salt Chlorine Generator: (requires both the UIC & UOC be at Vers 1.050 Salt Chlorine Generators such as GoldLine, Autopilot and others are supported. The addition menu is under the 'Equipment' screen. Any SCG that uses protocol from the Goldline/Jandy combo will work.

  NOTE: Proper Wiring is critical. Jandy used a non-standard wire color code for DC wiring. The user must be informed.

IntelliTouch Connector Marked Saying Wire Color is:	Connect:	SCG connector marked saying wire color is:
RED	< to >	RED
YELLOW	< to >	BLACK
GREEN	< to >	YELLOW
BLACK	< to >	GREEN

- Auto Address Disable: (requires only the UOC be at Vers 1.050). In rare cases wireless 'Mobi' system would lock on neighbors. If this can not be solved at a given job site the entire auto addressing can be shut down.

- This is operated by pressing RESET and the Aux8. The Led over Aux will light indicating the command was honored. Each time the unit is reset, or powered up the Aux8 LED on UOC will be lit to indicate that auto addressing is disabled. In the same way, when the   LED is not lit during power up, it indicates that the system has auto addressing enabled.

- Lights Screen Now 12 Lights: (requires both the UIC & UOC be Vers 1.050). The lighting screen and color functions now support twelve lights.

Fixes:

- Programmed Functions Issue: (requires only the UOC be at Vers 1.050). In some cases if a circuit had a program that ended at the same time as the next start, the second start would fail. For example: Program 1 Started at 8:00am and ended at 10:00am, then program 2 started at 10:00am and end ended at noon. The 10 – noon program may not execute. Older models may work around this by using a start time that is at least 1 minute different, such as 10:01am start time.

- Heater selection in 2 Speed Menu: (requires only the UOC be at Vers 1.050). When 'HEATER' was the selected mode for 2 speed it failed to force HI-Speed in Spa-Heater. Older systems can work around the issue by selecting SPA HEATER and POOL HEATER separately.

- Auto Address Function: (requires both the UOC & UIC be at Vers 1.050). This is really a rare job issue. In some cases of Mobi systems being very close to each other they would lock on each other creating problems. Also the Autolock function is now aware of SCG systems.

- Feature Circuits In Freeze Mode: (requires only the UOC be at Vers 1.050). In some cases FEATURE circuits did not display correct status if Freeze Mode was active. Really only if a customer had turned on a feature circuit, and freeze was active the indoor LED may not light.

- i10+3D Temperature Display: (requires only the UIC be at Vers 1.050). In some cases on the i10+3D when only Pool or Spa was on, and in normal operation the temp display would flash on and off.

- i9+3S / I5S Temperature Display: (requires only the UOC be at Vers 1.050). Changed high/low (Spa/Pool) interlock code prevent low temp program from killing hi temp manual operation. Also changed Single Body version so that turning on the HIGH temp allowed LOW temp to run in background and take over again when high temp is turned off.

Version 1.060 (UOC & UIC)   12/10/04

Added Features:

- Expansion Disable: (requires only the UOC be at Vers 1.060). In rare cases wireless 'Mobi' system would drop from 'Auto' to 'Service'. Additional safety code was added, as well as a lock out for units which this is operated by pressing RESET and the Aux7. The LED over AUX will light indicating the command was honored. Each time the unit is reset, or powered up the AUX7 LED on UOC will be lit to indicate that expansion units are disabled. In the same way, when the LED is not lit during power up, it indicates that the system has expansion enabled.

Fixes:

- Programs Restart Issue: (requires only the UOC be at Vers 1.060). A flaw in the program restart function allowed programs that matched the 'Start Hour' but not the 'Start Minutes' to restart incorrectly. For Example: A program which was set to start at 11:00am and end at 11:30am would restart if the restart occurred at 11:45am. The hour matched, and the code failed to correctly identify that the stop minutes had passed.

- Dimmer Level Display Bug: (requires only the UIC be at Vers 1.060). In cases where multiple UIC's are installed. This may be any combination of ICP and/or Mobi. The unit failed to properly retrieve and display the current dimmer level if it had last been changed at another/different panel. Example: The dimmer is 100%. The user sets the dimmer to 60% from the Mobi. When the user attempts to set the dimmer at the ICP, it displays that it is currently at 100% rather than the correct 60%. Dimmers work correctly, and may be set from either panel. It is a display/status bug only and only occurs with multiple UIC's when the users alternates between them changing the dimmer level.

Version 1.080 (UOC & UIC)   2/15/06

UIC Changes:
- Added IntelliBrite support/screens
- Minor IntelliFlo changes
- Added watchdog time out / Reset after data sync. This will prevent the UIC from getting stuck in repeating loop of updating panel after initial ID.

UOC Changes:
- IntelliBrite LED light support.
- Changed 4 speed code to prevent converting IntelliFlo units to IntelliFlo 4 units.
- Fixed typo in code that caused parameter load to fail.
- Fixed issue that caused programs not to be found resulting in only the default 10 min program on IntelliFlo filter runs.
- Fixed issue that caused 4 speed (IntelliFlo 4 x 160) to miss (not honor) speeds associated with Heater, Solar, and Freeze.

Version 1.090 (UOC & UIC)   3/7/06

- Unified Production code and Trainer code, so all future versions will have matched Trainer code.

UIC Changes:
- Resolved another minor issue with data sync function

UOC Changes:
- Resolved issue in Freeze mode with IntelliFlo pumps. Prior versions didn't honor user requests for speeds assigned to aux circuits.
- Resolved minor issue involving Freeze mode and IntelliFlo pumps which caused speed/flow assigned for Spa (if such an assignment existed) to be used for Pool as well as Spa during Freeze.

Version 1.100   7/18/07

New Features and Fixes:

- Added support for 1% user defined Spa values for SCG - Really only effects the Dual Body Single Equipment systems (i9+3, i7+3, i5). Since the single body doesn't need the function, and the dual body dual equipment is limited to controlling one cell.
- Macros, Feature circuits and ALL light functions are now supported on the i5 and i5s models. In effect making them i5+3 and i5+3s.
- Changed color light functions COLOR SET and COLOR SWIM. Prior these functions forced ALL lights ON, now only color lights are forced ON.
- Added support for valves to be assigned to Heater/Solar/Pool Heater/Spa Heater.
- Improved entry to lights screen so a blank 2nd group doesn't appear if it was last exited in group 2.
- Added code to prevent a light from being assigned twice in the light screen config. This will prevent confusion if a user mistakenly assigns the light twice.
- Daylight saving time changes as of 2007 (Now start the second Sunday of March, and ends first Sunday of November).
- Added 'Mobi Lock' function to address lock. This will set a byte so auto address can't work, and keep 2 backup copies of house address.
- IntelliFlo / IntelliFlo 4 x 160 - Added Cleaner delay to be called when IntelliFlo pumps are shut down during 30 sec reconfig (when time, new programs, or parameter changes).

- Valve Delay for IntelliFlo and IntelliFlo 4 x 160.
- Fireman switch cool down for IntelliFlo and IntelliFlo 4 x 160 - Only Pumps Assigned as POOL or SPA.
- Fixed issue with SuperChlor and IntelliFlo pumps. The IntelliFlo was not being forced on with SuperChlor.
- Freeze Mode - If freeze sensor fails and any device is selected for freeze protection the system now enters freeze.
- Valve delay in Freeze mode if enabled (kill pump during 30 second switch over every 15 minutes) Verified for both standard relay output and IntelliFlo output.

Lighting Control updates:

- Fixed issue with IntelliBrite units, when more than one circuit was assigned as an IntelliBrite, it altered the timing and got lost.
- Fixed lights screen issue, once 3 or more circuits were assigned the 3rd circuit would display in the main lights screen in the upper left rather than the lower right - causing the 6th circuit to be over written by control bar.
- Fixed issue with feature circuit programs when MANUAL OP PRIORITY is set to YES. Which caused the circuits not turn off when programmed.
- UOC now broadcasts a Heat Info Packet after any change. This is to service 3rd Party automation via i-Link interfaces.
- Fixed issue with program restart art a power outage. This only affected a rare program setting.
- Fixed nagging problem with setup/config/use of Switch #4 in iS4 #2.
- Fixed long standing bug in i5 and i7 units with macro screen when showing less than 10 circuits on screen. i.e. LEDs were shown out of place on all switches below Pool on right side. - Is correct now.
- Fixed long standing visual bug in i5 and i7 series macro screens. When switching from 'F' to '1' the blank boxes would display in lower left and right, when they in fact didn't exist in these models.

Version 1.110   7/7/08

New Features and Fixes:

- Added ThermalFlo Support: ThermalFlo Heat pump support via comlink. Includes Heat/Cool and Status display. The ThermalFlo may be connected via the comlink. It must be set as its default of Address 1. Currently only one (1) ThermalFlo may be connected / supported. Once a ThermalFlo is added to the system via the comlink. You must enable and configure it.
Menu/Setup/Equipment/ThermalFlo (4th button on the left). Set 'ThermalFlo Present" to Yes.
Set "ThermalFlo Heating" to Yes – assuming you will be using it for heating. Set "ThermalFlo Cooling" to Yes assuming it is a reversible unit and you would like to use the cooling feature. You may also select "ThermalFlo Cooling" only, and not heating. If you have a reversible unit, and cooling is selected, an option will appear in the heat screen below the Pool heat settings. Labeled as MAX it allows you to set the Maximum Temperature of the Pool before the ThermalFlo Cooling will begin.
- Variable Speed IntelliFlo Pump Priming: The Variable speed pump screen now has a priming parameter available. It allows the user to select a priming speed (400 – 3450RPM) and a priming length/time (0 – 5 minutes, in 1 minute increments).
- If the VS pump is turned on, and a priming parameter is set (a time greater than 0 minutes) the priming speed will be used for that period. Assuming the priming speed is greater than speed being requested.
- IntelliFlo Pump Parameter Changes No Longer Force Shut Down: Changing speeds, flows, and the like will no longer force the pumps to shut down. The user may now enter the IntelliFlo screens, alter the speed(s)/flow(s) and save the changes. The changes will take effect with no

shut down.

- Certain parameter changes will still cause a shutdown, as it is required by the pump. i.e. Pool size, turnovers per day, programs effecting the filter cycle, etc.
- IntelliFlo Speed/Flow Changes are Immediate: When changes are made to speed/flow they are registered immediately (less than 2 seconds) after saved. Note that VF pumps still have some ramp time involved.
- IntelliFlo Freeze Handling: If the unit is ON due to freeze condition (and not due to circuit state) IF a freeze speed/flow is entered in the table it is honored even if it is lower than the default circuit speed. If no Freeze entry exists we still force the pump on at the default circuit speed/flow. Of course any programmed or manual operation that actually turns on a circuit would cause the pump to run at that speed if it is higher.
- IntelliFlo Solar Hold Off: Added 'Solar Hold Off' for VF IntelliFlo pumps. i.e. if the pump is just starting (requiring a prime) and solar is available, solar is held off for 5 minutes to allow the VF unit to prime. This only has effect on the VF pump(s) which have their assignment as Pool.
- IntelliFlo Pumps Stopped in Service: VF and VS pumps are now sent a STOP command when the automation is put in service mode. This was requested, but users must still take precautions as the IntelliFlo pumps are still live.
- FIXED - IntelliFlo Status Screens Showing Zeros: Fixed issue with IntelliFlo status screen on IntelliTouch Indoor panel. In some case (units with ScreenLogic and more than one IntelliFlo) the screen would blank out / show all zeros.
- Fixed issue with programmed/scheduled Macro circuits that would sometimes fail to execute.
- Fixed issue with iS4 configuration and Feature circuits.
- If a Feature circuit was assigned in the iS4 screen after saving and returning to the screen the feature circuit(s) would be cleared to "NONE". This only occurs on firmware version 1.100.
- Improved/Fixed issues with false errors on sensors and iS4 units. This presented as false sensor errors on some MobileTouch units, and in some cases caused false iS4 errors to be displayed and disable the Spa Side unit.
- Fixed unreported issue in i10+3D units which could affect the Spa Solar/Heat pump if the Pool was configured with a heat pump.

IntelliBrite Light Improvements:

- Added 'SmartStart' support for IntelliBrite lights.
- Corrected IntelliBrite functions so they do not force on all circuits defined as 'LIGHTS'

Version 1.130 (must use MobileTouch II Version 2.040)   1/26/09

New Features:

- Added support for "MagicStream" Laminar LED (Splash) engine.
- Added support for Spa side control of IntelliFlo pump. Allows increasing and decreasing the speed or flow of a pump. After assigning those functions to a Spa side remote (is10 or is4).
- Added support for keypad lock (press Reset + AUX 3 on the outdoor panel to disable). Locks ICP or Mobi after 10 minutes of no use. Requires a 4 digit code to unlock.
- Added ability to alter the Spa freeze override from 30 minutes. Now can be 30 to 240 minutes – in 30 Minute increments. Note the screen label changed:
  - WAS: Equipment/ManualHeat (then you toggled yes/no).
  - NOW: Equipment/SPA OPTIONS/ (then you select Spa Manual Heat or Freeze Override Mins).
- Added a keypad lockout bypass to this panel to allow customers that inadvertently lock themselves out of the panel. Please note that the code 6275 (in honor of MARK) always works.

Fixes (must use Mobi II Version 2.040)

- Fixed bug that caused random speeds to fire at random intervals in Freeze.
- Fixed issue with i10+3d – using Spa manual heat feature. Heater turned off if Pool came on - now fixed.
- ThermalFlo cooling will now only occur if the heat pump is enabled via HEATPUMP ONLY or HEATPUMP PREF in the Pool setting.
- Fixed issue with Salt Chlorine Generator – a value/setting of 16% would never be honored.
- Fixed issues with solar hold off & VF pump - array was not being initiated at reset so with no VF pumps installed, it caused a delay.
- Fixed Egg timer bug with IntelliFlo.
- Fixed issue in Macro screen for i5 and 7 models.
- MobileTouch II - seem to have resolved the issue with personality mismatch.

Version 1.160   2/14/11 (must use with MobileTouch II Version 2.160)

New Features:

- Added support for the new VSF+SVRS IntelliFlo Pump
- Added Support for the New IntelliChem control System
- Added IntelliFlo Circulation pump / Cleaner Booster Pump Interlock
- Added New manual Mobi II addressing mode to combat lock on issues
- Added Main Screen display of PH and ORP if IntelliChem is enabled
- Added Support for the New SpaCommand Spa side controller
- Added Nocturnal Cooling via the Solar panels
- Added Solar Freeze Protection
- Added display of Solar Sensor Temperature read outs
- Added support for adjusting Solar Start and Stop differentials
- Added support for new SCG Cold Water cut-Off Message
- Added Random, Party, and Sync Command buttons for MagicStream Laminars
- Added Heat Boost and Heat Enable to QuickTouch options
- Added support for SpaCommand to properly display Heat Enable and Heat Boost

Fixes:

- Fixed/Added Pump Off delay for valve motion in freeze mode.
- Improved function of Heat pump operation in a cold environment while set in Heat Pump Preferred Mode. Prior the unit would often not switch over to Heater as expected due to short coming of Heat Pump. Now a minimum water and air temperature is required to insure that the switch occurs.
- Made improvements to accommodate odd setup in Single Equipment Dual Body systems where the Spa Pump speed is lower than the Pool pump speed. If the user switched toSpa while Pool was running, the Pool continued to run in the background (as it should), but the Pools speed being higher was honored by the IntelliFlo state machine.
- Fixed long standing bug in calibration screen. The min/max temps were 32 and 132, which while fine for degrees F were problematic for degrees C. Now in Degrees C the min/max is 1/55.
- Added ability to handle inputs up to 420 degrees F to accommodate ceramic panels – Max temp read out is limited to 255 degrees F.
- Fixed issue with IntelliFlo VF solar hold at startup. It didn't re-initialize when leaving Service mode if required.

Version 1.170   7/15/13

Fixes:

- Changed Spa side IntelliFlo control system. Prior it required that the Spa circuit was on and much like the temperature change it was dynamic and forgotten/reset when the Spa turned off. Since the customer may want control when Spa is not running, now we only require that the assigned pump is on.
- i10+3D Solar bug : If Pool had Solar, but when it was called for it would start then turn off Solar. The unit had Pump #1 assigned to the Spa (IntelliFlo) and #2 assigned to Pool.
- Added code to the heat pump cooling. It was switching on an edge, so cycling was occurring.
- Changed bottom range of ORP to 400 to accommodate changes to IntelliChem.
- (Mobi) Fixed bug found in dimmer screen of version 2.160.
- (Mobi) Improved odd/false errors that show up on the MobileTouch wireless remote.
- Resolved issue caused when someone pressed SYNC (for example) in the colored lights menu when they had no colored lights.

SunTouch Firmware Version History

Version 1.000   Production Release (on 32K processor)

Version 2.020   9/9/08

- Added Auto, Service, Timeout.
- 32K->64K processor change.
- IntelliFlo Circuits & Speeds reversed for easier programming.
- "Dual Body" changed to "Shared Equipment".
- "Electric Heater" function added to Circuit Types.
- Sensor Errors displayed on main screen.
- Solar Only Mode displays warning if you hit MENU button.
- Fast Clock moved from MENU and RIGHT ARROW to LEFT ARROW and RIGHT ARROW.
- Enhancements to Keep Alive packet to support remote monitoring.
- Added Heat Boost.
- Added Hi-speed to 4X160.
- Solar sensor error was looking at wrong bit - would cause false error messages.

Version 2.030   11/19/08

- Changed Cleaner to stay on all the time (except for 5 min solar on delay), even when solar is off IN SOLAR ONLY MODE.
- Changes solar only mode to display SOL ON, SOL OFF even when controlled by service menu commands.
- Fixed issues with Manual turn off and turn on of circuit during program will initiate a 12 hour program that does not turn off at the programmed stop time.
- Fixed bug where IntelliChlor run time was adding 128 hours (not masking the enable bit).
- Manual Circuit turnoff (12 hours) was not always working because 0 length programs were launching and overwriting use_prog_stop.
- Move Solar ON/OFF/AUTO in solar only mode to EEPROM.
- Fixed bug that launched all circuits that have a program attached regardless of what time of day it is.
- Removed RST error.

- Fixed QuickTouch non-operational except in freeze mode (KA one byte too short).

Version 2.040   1/27/09

- Fixed bug in 2-speed pump assignments

Version 2.050   10/29/09

- Added full support for IntelliFlo VF and VS pumps
- Added 4 Feature Circuits
- Added Nocturnal Cooling support for Pool only
- Added Valve Filter Delay - to kill pump while valves turn
- Added better support for Heat pumps in cold environments
- Added Adjustable Egg timer
- Added IntelliFlo status screen
- Added the solar hold off / VS priming to delay cancel
- Fixed menu error on Circuit Functions menu
- Fixed Heat Enable when using QuickTouch wireless remote

Version 2.060   6/25/10

- Fixed issue that caused displays of the current temperatures (air, Pool, Spa) to show as 255 if the system is Setup for degrees C.
- Fixed negative temperature display problem in both C and F.
- Fixed issue that prevented pump from shutting off for 30 seconds while valves turn in freeze mode (every 15 minutes). This only affected the Pump Relay output. Only single and two speed pumps were affected. IntelliFlo Pumps were correct.
- Fixed issue with Pump Stopping and restarting every 15 minutes in certain circumstances. This would only occur after the unit had been in freeze mode. If the unit was reset or powered off and on - the problem would disappear until next freeze occurrence.
- Fixed issue with 2 speed pump. It went to high speed if freeze was requested and for the forced 5 minutes at startup of pump, solar, Cleaner, etc. But it failed to honor the actual circuit selections listed in the 2 speed setup menu.
- Fixed issues with IntelliFlo pumps and Freeze conditions. If Pool and Spa were protected, the unit would use the SPA speed rather than the POOL speed (assuming no FREEZE was listed and all equipment was off).
- Fixed issue with IntelliFlo Pumps and FREEZE selection. Even when a FREEZE speed was listed and no equipment was on, the FREEZE value wasn't used.
- Fixed issue with SOLAR not being recognized as a valid option in IntelliFlo.
- Fixed issue that would not allow the user to switch to Spa mode if the Cleaner was running. In attempting to switch to Spa, some other issues were created as well, such valves being in the wrong position.
- Removed "Solar", "Feature 1, 2, 3, and 4" from service menu - they served no purpose.
- Allow AUX 3 to operate the output in Service mode. It was listed in menu but didn't operate.
- Allow the User Assignable Valve (C) to be operated in Service mode. It was in menu but didn't operate.
- Prevented Aux 3 from being assigned as a CLEANER. It cannot drive the output so it could create confusion.
- Added 30 Minute Spa Freeze override to allow use of Spa in freeze mode similar to the EasyTouch and IntelliTouch systems.
- Fixed error in pumps menu (VF, Filt. Circ., wrong characters were flashing).
- Changed valve delay (hold off pump) so it doesn't delay on single body units.

- Added a 'change' byte to make the heating function aware the EEPROM settings have changed.
- Changed Valve/Pump delay - no need for it to run when Pool starts and it wasn't coming from Spa. Caused confusion why it took 30 seconds for the pump.
- Added ability to toggle valve delay ON/OFF
- Fixed issue when Spa was running and Pool was turned on the Spa was turned off as expected but failed to start valve delay.
- Fixed issue with IntelliChlor's Super Chlorination mode. IntelliFlo Pumps would continue to run after SuperChlor finished.
- Fixed issue with freeze - if temperature was negative it failed to operate.
- Fixed incorrect temp conversion when using celsius units.
- Fixed issue when heat is in solar-preferred mode, and water temp is 55F or lower, the solar will change to (conventional) heater source.

Version 2.070   2/14/11

New Features:

- Added support for the new VSF+SVRS IntelliFlo Pump
- Added Basic Support for the New IntelliChem control System
- Added IntelliFlo Circulation pump / Cleaner Booster Pump Interlock
- Added Nocturnal Cooling via the Solar panels
- Added Solar Freeze Protection
- Added support for new SCG Cold Water Cut Off Message
- Added support for ScreenLogic monitoring

Fixes:

- Fixed issue that sometimes occurred in degrees F to C conversion
- Fixed long standing issue with Heat pumps when system is set for Degrees C. A simple math error prevented the heat pump from working unless it was already very warm outside.
- Fixed issue with IntelliFlo VF solar hold at startup. If the Cleaner was also set to come on, the Cleaners 5 minute startup delay ran concurrent to the solar hold. Effectively killing any Cleaner delay. Now in this circumstance the Cleaner delay is started after the solar hold finishes, properly protecting the Cleaner.
- Fixed issue with the DOWN arrow in the heat menu, not updating local/running Pool or Spa. So reducing set temp past current temp didn't turn the heater off.
- Fixed issue in heat menu of changing heat source not updating local/running Pool or Spa. For example, if the Spa is running using the heater, and the user went to menu and turned heater off. The heater would continue running until the Spa had been cycled off and back on.
- Fixed comlink Error system with SCG unit
- Fixed issue that created a 60 second window at the stop time of a program, where the circuit could not be turned on.
- Fixed issue with IntelliFlo VF pump setup, if you decrease the volume from 1k gal it rolled to 255k gal rather than the correct 250k gallons.
- Fixed - In some cases if an IntelliFlo pump was added, it was not recognized until a system reset.
- Even with freeze protection disabled, the 30 minute Spa override would activate during freeze Now the user can use the Spa normally if protection is disabled.
- Fixed issue with schedules versus manual on Spa. If system set for solar, and manual heat enabled, when the schedule started, it forced the heater on. The system didn't know it was started by a schedule.
- Fixed issue when Solar is set as a heat pump, it didn't allow use/assignment of user valve.

Version 2.080   7/15/13

Fixes:

- Fixed issue causing cleaner not to run in systems with 1 or 2 speed pumps. This was caused by an error in the menu system which didn't clear Iflo values, leaving the system thinking it had a defective Iflo and stopping the cleaner
- Fixed issue with Iflo VF 3050 not always working correctly. A similar menu system error caused the problem.
- Fixed issue in Solar Only Mode. Service (AUTO/SOLAR ON/SOLAR OFF) when in SOLAR OFF was killing the Cleaner relay. Since Solar is forced off, the cleaner should remain engaged, as we only interrupt the cleaner at Solar start up.
- Fixed issue in Solar Only Mode. Service (AUTO/SOLAR ON/SOLAR OFF) when set to SOLAR ON, the cleaner interrupt did not start as it should.
- Fixed issue of version crossover. Systems that have had version 2.070 installed needed self-correcting code to clear up the bad values (if they existed) and insure the cleaner works as expected.

i-Link Home Automation Adapter firmware

Version 1.030 10/29/09

- Added all of the IntelliBrite and Magic Stream Commands.
- Added COSMSGS support of heat source change on remote panel.
- Changed the circuit change state command to make it act differently if SPA is turned on or off (Basically only allowing one to show as on).
- Fixed minor issue that had been in code since release the TOGGLE command for POOL SOLAR PREF was doing the SPA SOLAR PREF and the Spa was doing a decode as if a command value had been entered.
- Fixed issue when a request was made and the i-Link timed out due to a busy or failed link it would output garbled text.
- Fixed minor never reported issue. If you changed the NRMCHR (default of !) it all worked correctly but reported back the CMDCHR.