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1300 SPATEX

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# Spa & Hot Tub Topside Touchpad Error Messages & Fault Codes

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The spa/hot tub messages and codes listed here are a combination of error or fault codes, operational and reminder messages for ALL (that we've managed to source) brands of spa equipment from around the world, from the late 1980's to Present.

It includes brands manufactured in USA, Canada, UK, Italy, Israel, Australia, and China, including inflatable spas, portable spas and in-ground spa control systems.

Many have been used on spas sold or imported into Australia, but many others have only been used in Europe or North America. There is still a very large number of unknown Chinese spa systems we are yet to identify and acquire manuals and codes for.

Along-side each code is a brief description of its meaning.

Under no circumstances should you use this information to attempt a repair unless properly qualified to do so. We have provided this information as a reference, and for qualified tradesmen to utilise as required.

Causes of the most common following spa / hot tub error fault codes

**Flow/Pressure switch open** – dirty filters, blockages, switch failure, low water level, pump failure.

**Flow/Pressure switch closed** – switch failure, pump PCB relay stuck closed

**Hi-Limit fault** – dirty filters, blockage, low flow, sensor fault, failed pump – sensor reads 45C+ / 112F+

**Temperature sensor fault** – sensor failed, low flow, incorrectly positioned sensor

**Over heat fault** – Same as sensor fault, pump not running, relay failed – sensor reads 38-45C / 100-112F

**Spa/Hot Tub topside touchpad messages and codes are listed by brands.**



## Gecko Aeware topside touchpad error codes & messages

### in.xe and in.y series

If the code is a 'Slave' code, it's a fault with the slave unit – same error cause as the main unit

AOH or AO2 (swim spa slave)	Spa pack temperature too high
Prr / Pr or Pr2 (swim spa slave)	Temperature sensor failure
OH or OH2 (swim spa slave)	Over heat 43c
FLO / CFLO or FL2 (swim spa slave)	Flow error
LO1 FLO / LO2 FLO	Flow error
NO FLO	Persistent flow error
HL or HL2 (swim spa slave)	Hi-limit 48c
Hr / HR or Hr2 (swim spa slave)	Internal hardware error - Thermal Fuse
HR / HRA or HR2 (swim spa slave)	Internal hardware error - Stuck relay
FCL	Pressure switch closed
SPin	Input voltage too low
PoUP	Power Up
Lxx / LLxx	Low level software setting
UPL / BL	No low level software loaded
Er1 (swim spa)	Communication between Master & Slave failure
SLA (swim spa)	Main touchpad has been connected to the slave unit
LLxx (swim spa)	Unable to select LL program – reverts to menu – faulty Slave
LLEr (swim spa)	LL program is not a swim spa config & slave unit detected
StbY	Standby mode
OFF	30 min all outputs off
Fx, FFxx	Filter cycle frequency per day
FSxx	Filter cycle start time
Fdxx, dx	Filter duration in hours
EP 0 or 1	Economy mode on/off
ESxx	Economy mode start time
Edxx	Economy mode duration in hrs
EExx	Economy mode end time
Econ	Economy mode set
rLY	Stuck relay
Comm / CoE	Verify cable connections, touchpad communication error
Supp	Connect power to 240v
HiBr / HiBr	Add fresh water
LoBr / NoBr	Add BromiCharge
HP1-99	Heat pump error service code
Wipe Screen Animation	Too much water on in.k1000 touchscreen
Switch/Buzzer (or other random message)	Touchpad factory test mode triggered – faulty touchpad
HP01-99	Heat pump error service code
nt	Quiet mode – Watkins
5555	Unlock Settings
3732	Unlock a locked touchpad

### in.xm

SP-br	Incorrect input current set
SP-Ot	in.xm Spa pack under spa too hot
SP-OH	Over heat – water temp 48c
SP-Hr	Internal hardware error
SP-in	Input voltage too low
SP-Fx (x=1, 2, or 3)	Fuse 1-3 blown
SP-OC	Overcurrent by more than 10%
rH-Hr	Hardware error in in.therm heater
rH-HL	Hi-limit circuit tripped
rH-nF	No flow detected
rH-Pr	Regulation temperature sensor failed

rH-nC  
 rH-nH  
 rH-ld  
 Px-Er  
 CP-Er  
 bL-Er  
 Fn-Er  
 Sc-Er  
 LLxx  
 Ph- xP  
 brxx  
 - - - (after initial priming)  
 Switch/Buzzer (or other random message)  
 Cycling Heat & Thermometer symbols

## in.xm2

rH-ld  
 Hr  
 HR  
 HL  
 OH  
 rH-nC  
 Rh-Er  
 Pr-r / Pr  
 AO-H  
 SP-in  
 FL-O / CFLO  
 LO1 FLO / LO2 FLO  
 NO FLO  
 FL-C  
 Fx  
 Sc-Er  
 Fr-Er  
 Sc  
 bL  
 P9  
 UP-Ld  
 UPL / BL  
 Comm  
 Supp  
 HP01-99  
 HIBr / HiBr  
 LoBr / NoBr  
 Wipe Screen (Animation)  
 Switch/Buzzer (or other random message)

Communication error - heater to pack  
 Not heating – no temp increase detected  
 No match between heater and pack models  
 No detection of Pump current draw P1-5-Er  
 No detection of current change on circ pump  
 No detection of current change on blower  
 No detection of current change on fan  
 System learning error  
 Low level software setting  
 Incoming power – number of phases 1-3  
 Input current setting  
 Possible broken or bent heater sensor pin(s)  
 Touchpad factory test mode triggered – faulty touchpad  
 Reg slope temperature check issue – clean/align heater element or replace in.therm heater

No match between heater and pack models  
 Hardware error detected - thermal fuse  
 Hardware error detected – stuck relay  
 Hi-Limit circuit tripped 50c  
 Overheat. Water temp at 44.5c  
 Communication error – heater to pack  
 Lazboy hot tub remote heater fault  
 Temperature sensor failed  
 Spa pack under spa too hot  
 Input voltage too low  
 No flow detected  
 Flow error  
 Persistent flow error  
 Flow switch closed  
 Fuse blown F1-3  
 Scan error detected / system learning error  
 Input power frequency 50/60hz out of range  
 System scanning – 1<sup>st</sup> power up  
 No firmware downloaded into system  
 Programming firmware into system  
 No valid low level software uploaded  
 No valid low level software uploaded  
 Verify cable connections  
 Connect power to 240v  
 Heat pump error service code  
 Add fresh water  
 Add BromiCharge  
 Too much water on in.k1000 touchscreen  
 Touchpad factory test mode triggered – faulty touchpad

## in.temp Heat Pump

HP01	System 1 exhaust temp sensor fault
HP05	Coil temp sensor fault
HP09	System 1 return gas temp fault
HP18	Water outlet temp sensor fault
HP19	Water inlet temp sensor fault
HP22	Ambient temp too low
HP41	Water flow protection
HP42	System 1 high pressure protection
HP46	System 1 low pressure protection
HP51	System 1 exhaust temp too high
HP55	Water inlet-outlet temp differential protection
HP56	Water outlet too cold for cooling
HP63	Water outlet temp too low when defrosting
HP65	Ambient temp too low





## ACC topside touchpad error codes & messages

CoLd	Temperature approaching zero
OH	Over Heat condition
HLEr	Hi-limit over heat sensor failure
SEoP	Temperature sensor open circuit
SESH	Temperature sensor short circuit
PSoC	Pressure switch open circuit with circ pump
PSoL	Pressure switch open with low spd pump
PSoH	Pressure switch open with high speed pump
CboH	Control box over heat 115f / 46c
ToE	Time out error – system shutdown
CLDN	Cool down cycle
ECL	Energy saving cycle
CHCL	Air blower Channel clear
UTO	User time out
PUF	Post use filtration
MENU	Menu access
CANC	Cancel/discard changes
SEND	Save changes
CALB	Calibration for temp
FPx (1-4)	Filtration period
SIL	Silence period start time
FPxd (1-4)	Filter duration
SILd	Silence timer duration





## Arcadia A-tech topside touchpad error codes & messages

Water tap icon crossed out

Bell icon & HEAT

Bell icon & ICE

ICE

Bell icon & LD F

Bell icon & LEAK

CLDF

FHL

RPH

RSA

RCL

RT9

RDR

RCO

RTR

Low water level detected

Water temperature above 45c

Water temperature below 5c

Winter mode

Load failure

Faulty wiring detected

Low flow

Temperature difference over 5c – low flow

Reminder – test pH

Reminder – sanitise spa

Reminder – clean the filter

Reminder – test RCD safety switch

Reminder – drain / refill

Reminder – clean spa cover

Reminder – treat / clean spa cabinet





## Arctic Spas topside touchpad error codes & messages

Prr	Temperature probe failure or disconnected
HL (flashing)	Over temperature 44.5 degrees
HL (solid)	High Limit 48 degrees
FLO	Flow switch open circuit
FLC	Flow switch closed circuit
OtH	Heater barrel rate of heating is too fast
FrEEzE ProtEct (scrolling)	Water temp below 10 degrees – freeze protection mode
dEcL	Circuit breaker setting overload error
GF	Ground/Earth Fault
LocP	Partial touchpad lock
LocF	Full touchpad lock
tSt	System testing hi-limit probe on start up
HPt	Heater probe test failed – re-attach to heater
Hd	Hi Limit probe disconnected
pH	pH error – pH above 8.2
----	Damaged PCB processor
Spa light flashing	Error code/condition present



## Astrel Modo topside touchpad error codes & messages

FLC	Pressure / Flow Switch Closed
FLO	Pressure / Flow switch Open
Ho or HL (flashing)	Over Temperature 44C
HoH, HOH or HL (steady)	High Limit 55C (48C for HL)
H2O	Low water level
HPF	Hi Limit sensor failure
rPF or Prr	Temperature sensor failure
Ferr	System error
FULL	Compensation vat detecting water
Fus1	Fuse 1 failure
Fus2	Fuse 2 failure
Fus3	Fuse 3 failure
Er1	Wrong pump configured with heater
Er2	2 speed pump low and high reversed
Er3	Output load not detected





## Balboa topside touchpad error codes & messages

### M7 messages

---	or	---	Temperature not available
-- F, -- C, or --			Temperature not available – priming
BUF			Internal problem detected
CFE or CONFIG ERROR			Configuration error
CrC or CHKSUM FAIL			Firmware installation failure
dr, HEATER MAY BE DRY WILL RETEST SHORTLY			Possible inadequate water detected
drn, DRAINING			Indicating pump is on while draining
drY, dY, HEATER DRY SERVICE REQD			Inadequate water detected
Ecn, Ec			Economy mode set
gFI, GFCI FAILURE			Spa could not trip RCD
HFL, HL, HTR FLOW LOW			Substantial difference between sensors
Hot, HOT-CALL SVC			Possible pump stuck on
ICE, IC, 1C, FREEZE COND			Potential freeze condition – pumps run
LF, LOW FLOW			Persistent low flow problem
OHH, HH, HTR TEMP LMT SERVICE REQD			Overheat – spa shut down
OHS, OH, SPA TEMP LMT			Overheat – spa shut down
PHH, PH IS HIGH LOWER PH			pH is high
PHL, PH IS LOW RAISE PH			pH is low
Pr, PRIMING MODE TAKES 4 MIN			Initial priming mode active
PSt, PERSIST FAIL			Hardware failure
r9, TEST GFCI			Reminder – test RCD
rCA, CHANGE MINERAL CARTRIDGE			Reminder – change Nature 2 cartridge
rCH, NEW FILTER			Reminder – replace filter
rCL, CLEAN FILTER			Reminder – clean filter
rCO, CLEAN COVER			Reminder – clean spa cover
rdr, DRAIN WATER			Reminder – drain & refill spa
rPH, CHECK PH			Reminder – test/adjust chemical levels
rSA, CK SANITIZER			Reminder – test/adjust sanitiser levels
rC, RTC FAILURE			Hardware Failure
rtr, TREAT WOOD			Reminder – wood retreatment required
SAH, SANITIZER HIGH			Sanitiser level is high
SAL, SANITIZER LOW			Sanitiser level is low
SbY, Sy, STANDBY MODE			Spa is in 'standby' mode
SE, STANDARD ECONOMY			Spa is in 'Standard-Economy' mode
SF, SAFETY FAULT			Suction protection fault
SLP, SL			Spa is in 'sleep' mode
SnA, SA, SnR, SENSOR A SERVICE REQD			Sensor A not working
Snb, Sb, SENSOR B SERVICE REQD			Sensor B not working
SnH			High Limit sensor fault
Snt			Temperature sensor fault
SnS, Sn			Sensors out of balance
Std, St, STANDARD			Spa is in 'standard' mode
StU, STUCK ON			Pump appears to be stuck on
Spa Light(s) flashing – user warning			Stuck relay, sensor fault, GFCI fault – visual warning

### Non M7 messages (older controllers with pressure switch)

pd	Power down, on battery back up
OH	Overheat
Flo, FI	Flow problem
Cool	Spa is 11 degrees below set point
ICE, IC	Possible freeze condition

Sn1, Sn  
Sn3, Sn  
ILOC  
Ec, Econ  
Std, St  
Sl, Slp

Hi-limit fault  
Temperature sensor fault  
Interlock fault  
Spa is in 'economy' mode  
Spa is in 'standard' mode  
Spa is in 'sleep' mode

## Flashing LED messages - Balboa

1 flash, 3 second gap – D1 spas  
2 flashes, 3 second gap - D1 spas  
3 flashes, 3 second gap - D1 spas  
4 flashes, 3 second gap - D1 spas  
Flash – 1 second on, 1 second off  
Flash – briefly OFF once per second  
Flash – briefly ON once per second  
Spa Light(s) flashing – user warning

Hi-limit fault  
Pressure switch closed (FLC)  
Pressure switch open (FLO)  
Temperature sensor fault  
Hi-limit, OH  
Sensor fault  
Pressure switch fault  
Stuck relay, sensor fault, GFCI fault – visual warning



## onga (Balboa) topside touchpad error codes & messages

### Onga 4352, 4353, 4395

LED 1 flash per second  
LED 3 flashes per second

Pressure switch open circuit, insufficient flow  
Temperature sensor or pcb fault

### Director & Turbo series

Jet LED slow Green (2-3 sec interval)  
Jet LED fast Green (1 sec interval)  
Jet LED slow Red 2-3 sec interval)  
Jet LED fast Red (1 sec interval)

Initial prime fail, pressure switch open cct  
Pressure switch open beyond initial start  
Temperature sensor failed  
Hi-limit over temperature cut out

### Bathmaster Series

LED green flashing 'Power' indicator  
LED orange flashing 'Jets / Pump' indicator  
LED red flashing – 3 flashes

Low or high voltage condition or pump in 'lock out'  
Loss of prime. Pressure switch open  
PCB fault





## Bestway Lay-Z-Spa topside touchpad error codes & messages

GCF	Not grounded/earthed correctly
-.-. and RED heater light	Over temp condition
-.-. and GREEN heater light	Water temperature detected below 4 degrees C
All lights flash	Safety circuit operation – ‘Test’ button pressed
E01 (some models)	System error
E01	Flow sensor closed circuit
E02	Flow sensor open circuit
E03	Water temperature below 4 degrees C
E04	Water temperature over 50 degrees
E05	Thermometer sensor fault
E06	Power supply fault
E08	Manual reset thermal cut out fault
E09	104C Fuse Fault
E10	High salt level alarm
E11	Low salt level alarm
E12	Water leak inside the pump
E13	Signal line disconnected between touchpad and PCB
End	System stops after 72 hrs operation. Press ‘Unlock’ 3 secs





## Brett Aqualine topside touchpad error codes & messages

### BL-46 / BL-70 / BL-80

OH	Over temperature
Fr	Freeze condition detected 4 degrees
FL / FLo	Pressure switch open circuit
E0	Temperature sensor short circuit
E1	Temperature sensor open circuit
E2	Hi-limit sensor short circuit
E3	Hi-limit sensor open circuit
E4	Flow switch short circuit
E7	Improper electrical connection
Fc	Filter cycle in operation
diS / time remaining alternating	Disable / standby mode and time remaining

### BL-45 / BL-50 / BL-60

All LED's Flashing	48 degrees Overtemp
Orange 98 & Red 104	Low Flow error
Red 102 & Red 104	Temperature Sensor fault
Orange 100 & Red 104	Hi-Limit Sensor fault

### Other models

PCB LED flashes 1 time every 3 seconds	High Limit condition
PCB LED flashes 2 times every 3 seconds	Pressure switch closed condition
PCB LED flashes 3 times every 3 seconds	Pressure switch open condition
PCB LED flashes 4 times every 3 seconds	Temperature sensor fault

## Caldera Spas topside touchpad error codes & messages

'TEMP' flashing  
 \_ \_ \_ \_ flashing  
 \_ \_ \_ \_ or \_ \_ \_ \_  
 \_ \_ \_ \_

\_ \_ \_ \_  
 Orange Ready light flashing  
 Grey Power & Ready lights flashing  
 Grey Power light flashing

Pressure switch or temperature sensor failed  
 Hi limit tripped  
 Pressure switch open circuit  
 Pressure switch open circuit  
 Pressure switch closed circuit (jets operate)  
 Temperature sensor fault  
 Low flow. Pressure switch open circuit  
 High limit fault





## Cleverspa

FC  
SL / HL  
SH

Change filter – 168 hours of running – Press filter to reset  
Temperature fault  
Temperature sensor fault





## Custom Molded Products - Nexxus Bath Control systems

No H2O / Warning icon / pump won't operate  
Too Hot

Insufficient water level  
Water temperature exceeds 43.9C







## Coates heater error codes & messages

Err

Temperature sensor fault





**SPA<sub>2</sub>GO**

**SPA-N-A-BOX**

## Comfort Line Products CLP topside touchpad error codes & messages

EN1 / OH  
EN2

Sensor 1 failure  
Sensor 2 failure



## Correct-Tech CTI topside touchpad error codes & messages

th1 / 39 or - - - / 39	Freeze protection – temp under 39F / 4C
th2 / 39 or - - - / 39	Both thermistors detecting below 39F / 4C
th1 / “current water temp” or - - - / “current water temp”	Temperature sensor error – connected to J2
th2 / “current water temp” or - - - / “current water temp”	Temperature sensor error – connected to J1
th3 / 39	Both thermistors detecting below 39F / 4C
OH or HOT	Over heat 112 F / 44C
HL	Hi-limit 118 F / 47C
HL / 210	Thermistor short circuit
0	Electronic failure of touchpad or pcb – check J8
FLO or - -	Flow switch open circuit
FLC or - -	Flow switch





## Ampac, Aquaswim, AquaPacific

### Davey Spa-Quip topside touchpad error codes & messages

#### Pulsar, 2095 & Intuitive Series

Red/green flashing on two LED's  
Green/Green, or Orange flashing LED  
Red/green flashing pump LED

Hi-limit sensor tripped, electronic fault  
Insufficient water detected  
Insufficient water detected (some models only)

#### Digital 2000 (stainless steel heater tube with pressure switch)

01	Stuck touchpad button
02	Touchpad Communication error
03	Temperature sensor failure mk2 sensor
04	Pressure switch closed circuit
05	Over temperature condition
06	Heater thermal cut-out overheat
07	Stuck heater relay
08	Temperature sensor failure mk1 sensor
09	Prime failed, pressure switch open circuit

#### Spa Power 1000 & 2000

01	Stuck touchpad button
02	Touchpad communication error
03	Temperature sensor failure
04	Optical water sensor failure
05	Over temperature condition detected
06	Heater thermal cut-out overheat
07	Stuck heater relay
08	Temperature sensor failure (on some models)
09	Prime failed, insufficient water detected
Display contrast too Light or Dark to read (SP2000)	
Hold down 'Display' button and Up or Down to adjust	

#### Spa Power 400, 500, 600, 601, 750, 800, 1200

Error 1 (H2O or Prime Failed)	Prime failed, insufficient water detected
Error 2 (Spa Power 800 & 1200 only)	Variable Speed Drive fault
Error 3	Stuck touchpad button
Error 4	Optical water sensor failure
Error 5	Over temperature condition detected
Error 6	Heater thermal cut-out overheat
Error 7	Stuck heater relay
Error 8	Temperature sensor failure
Error 9 (Spa Power 800 & 1200 only)	Clock fault
Warning 1 (Spa Power 800 & 1200 only)	Temperature sensor failure (pool OR heater)
Ht.d (Spa Power 500 only)	Heating mode - Demand Heating
Ht.F (Spa Power 500 only)	Heating mode – Filtration Only Heating
Green Pump LED flashing (SP400/600/601 only)	Sleep mode active
Display contrast too Light or Dark to read (SP800,1200)	Hold down 'Light' button and Up or Down to adjust

#### Xcelsior Spa Pool System QX350

Error 1 (H2O/CHE)	Prime failed, insufficient or 'too pure' water
Error 3	Stuck touchpad button

Error 5  
Error 6  
Error 7  
Error 8  
Error 9

Over temperature condition detected 45c  
Pump heater thermal cut out overheat  
Stuck heater relay  
Temperature sensor failure  
Heater control circuit failure

### **Celsior Bath Pumps**

Pump stops 10 secs after heater button engaged

Sensor fault/unplugged

### **Xcelsior Bath Pumps**

Jet 1 LED flashing

Dry run protection – fill bath & wait 5 mins

### **SPSVB Variable Speed Blower**

Error 2 (2 LED flashes / beep)  
Error 3 (3 LED flashes / beep)

Communication or electronic failure  
Stuck touchpad button





DIMENSION ONE SPAS®

## Dimension One (D1) Spas

### 2017 Bay series spas - in.yt / in.k1000

HL  
CFLO  
FLO  
HR  
HRA  
OH  
Pr  
AOH  
FCL  
SPin  
UPL  
Comm  
Supp  
PoUP

High Limit 48C  
No flow  
No flow for over 2 hours  
Hardware error – thermal fuse  
Hardware error – stuck relay  
Over heat 43C  
Temperature sensor fault  
Elevated controller temperature  
Pressure/flow switch closed  
Input voltage low  
No valid software installed  
Communication error  
Connect to 240v  
Power Up



### **Eezi-Touch**

Green 'Power' LED on, Blue 'Pump' LED flashing once per second  
Touchpad or cable fault

### **Sensa-Touch**

Green 'Power' LED on, Blue 'Pump' & 3 x red heater LED's flashing once per second in unison  
Touchpad or cable fault

Green 'Power' LED on, Blue 'Pump' LED off & 3 x red heater LED's flashing three times per second in unison  
Temperature sensor fault

Green 'Power' LED on, Blue 'Pump' LED on, low & high red heater LED's flashing twice per second in unison  
Circuit board program fault. Power off 30s to attempt reset





## FLUID DYNAMICS

### Elecro Optima Compact & Titan Optima Tecnologic Z31SE thermostat error codes & messages

noF	No flow – flow switch open
E1	Temperature probe Open circuit
EPr	EEPROM memory error
Ln	Locked – Press 'P' and 'Up' simultaneously 5 secs to unlock







# Zink

## Ethink / Zink topside touchpad error codes & messages

### KL6600 and KL8000 series except KL6200 & KL8500B

ESA	Temperature sensor error
ESb	Water flow sensor error
Eob	Water flow sensor error
EHH	Heater error over heat 48 degrees
EOH	Heater error over heat 43.5 degrees
EPL	Water flow error
ECP	Water flow error
EUH	High input voltage 280v
EUo	High input voltage 260v
Elo	Lamp current over limit
CPo	Circulation pump current over limit
LLL	Low water level
ICE	Freeze warning – below 44F / 7C
EIn	Auto moisturizing overtime
InF	System is refilling
InP	Water refilling Paused
out	Auto drainage process is running

### KL6200 series

E1	Temperature sensor fault
E2	Flow sensor fault
E3	Actual temperature is higher than set temperature
Temp Key LED flash 0.5 sec on/0.5 sec off	Water flow not detected
Temp Key LED flash 1 sec on/1 sec off	1C over set temperature reached, heater off

### KL8500B series

SnA	Temperature sensor error
Snb	Water sensor error
oHb	Water sensor over limit
oHH	Heater error over heat 48 degrees
oHS	Heater error over heat 43.5 degrees
HFL	Water flow is too low
LF	Low flow
dry	Insufficient water level
ICE	Freeze warning – below 7C
InF	System is refilling

### Ethink KL8-2 and KL8-3 series

E1	Temperature sensor open / short circuit
E2	Flow sensor open circuit
EP	Low flow through Ethink heater
FF	Over temperature fault
00	Touchpad Locked: Press Power-Music-Volume Up-Power
P Control	Entered Testing Mode – Power Off to reset
LV Protect	Entered Testing Mode – Power Off to reset



## EvoHeat heat pump error codes & messages Fusion, Force & DHP-R Series

P01	Water inlet temp sensor open or short circuit
P02	Water outlet temp sensor open or short circuit
P04	Ambient temp sensor open or closed circuit
P05	Coil temperature sensor fault
P07	Suction temperature sensor fault
P08	Exhaust temperature sensor fault
E01	High pressure switch fault or Low water flow
E02	Low pressure switch fault or Loss of refrigerant
E03	Flow switch fault or Low water flow
E06	Inlet/Outlet temp differential >13C
E07	Anti freeze protection <2C
E08	Communication error controller to PCB
E19	Primary anti freeze protection – ambient temp too low
E29	Secondary anti freeze protection – ambient temp too low

## CS Series

P01	Water inlet temp sensor open or short circuit
P02	Water outlet temp sensor open or short circuit
P04	Ambient temp sensor open or short circuit
P15	System 1 coil temp sensor open or short circuit
P17	System 1 Absorb temp sensor open or short circuit
P19	System 1 anti freeze temp sensor open or short circuit
P25	System 2 coil temp sensor open or short circuit
P27	System 2 Absorb temp sensor open or short circuit
P29	System 2 anti freeze temp sensor open or short circuit
P35	System 3 coil temp sensor open or short circuit
P37	System 3 Absorb temp sensor open or short circuit
P39	System 3 anti freeze temp sensor open or short circuit
P45	System 4 coil temp sensor open or short circuit
P47	System 4 Absorb temp sensor open or closed circuit
P49	System 4 anti freeze temp sensor open or short circuit
P101	System 1 economizer inlet temp sensor open or short circuit
P102	System 1 economizer outlet temp sensor open or short circ.
P151	System 1 coil inlet temp sensor open or short circuit
P181	Discharge 1 temp sensor open or short circuit
P182	System 1 exhaust high temp protect/Compressor high amps
P191	System 1 using side anti freeze temp sensor fault
P201	System 2 economizer inlet temp sensor open or short circuit
P202	System 2 economizer outlet temp sensor open or short circ.
P251	System 2 compressor over current protection
P281	Discharge 2 temp sensor open or short circuit
P282	System 2 exhaust high temp sensor / compressor overheat
P291	System 2 using side anti freeze temp sensor fault
P351	System 3 coil inlet temp sensor open or short circuit
P391	System 3 using side anti freeze temp sensor fault
P451	System 4 coil inlet temp sensor open or short circuit
P491	System 4 using side anti freeze temp sensor fault
E03	Water flow failure
E04	Electrical heat overheat fault
E05	Protection system fault
E06	Inlet / outlet temp differential too high, low water flow
E08	Communication failure between controller and PCB
E11	High pressure 1 switch fault
E12	Low pressure 1 switch fault

E19	Primary anti freezing protection
E21	High pressure 2 switch fault
E22	Low pressure 2 switch protection
E29	Secondary anti freeze protection
E31	High pressure 3 switch fault
E32	Low pressure 3 switch fault
E41	High pressure 4 switch fault
E42	Low pressure 4 switch fault
E151	System 1 compressor current protection
E171	System 1 anti freeze temp sensor open or short circuit
E251	System 2 compressor current protection
E271	System 2 anti freeze temp sensor closed or short circuit
E371	System 3 heat source side anti freeze / low water flow
E471	System 4 heat source side anti freeze / low water flow





## Fasco pump motor error codes & messages

### imPower Lockout Codes (on numerous variable speed pool pumps)

None	Eeprom load failure
1 blink	Micro processor failure
2 blinks	Under voltage below 180v AC
3 blinks	Temperature – over 100C or under -20C
4 blinks	Over current tripped
5 blinks	Over voltage above 269v AC
6 blinks	Shaft seized
7 blinks	Self check – self testing failed
8 blinks	Motor fault – phase disconnected
10 blinks	Other fault





## Gao Er Da – GD topside touchpad error codes & messages

HEAT  
ICE  
CLDF  
LD F  
E1, FF  
Water pump or tap ICON flashing  
Thermometer ICON flashing  
CALB  
S.C.

Hi-limit over 45c  
Water temperature below 5c  
Circulation pump problem / flow problem  
Load Failure – faulty pump, heater, etc  
Temperature sensor failure  
Water level too low  
Low flow  
Temperature calibration mode  
System wiring fault





Imperial Spas

Swift River Spas

## Gatsby topside touchpad error codes & messages

dCP  
FC  
FLO  
Ht  
HtS  
HtS-OHt  
OHt  
tS-0-tS  
tS-255-Ht-OHt  
PS1  
PS2

No DC power at master relay  
Freeze condition under 15 degrees C  
No circ pump current draw  
Over 43 degrees C  
Open hi-limit sensor  
Short hi-limit sensor  
Overheat 48 degrees C  
Open temp sensor  
Short temp sensor  
Pressure switch closed  
Pressure switch open





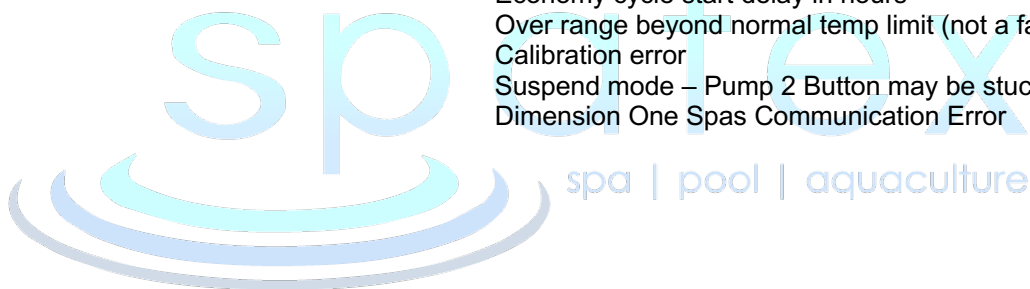
**GECKO**

**SPA BUILDERS**

**Class Series**

## Gecko topside touchpad error codes & messages

FLO	Flow / pressure switch open circuit
FLC	Flow / pressure switch closed circuit
Err	Electronic software error
Prr	Regulation temp sensor failure
HL	Hi-limit sensor failure
FrE	Possible freeze condition
*** 3 flashing dots on display	FLO or FLC
*** with red LED lit on pcb	Hi-limit sensor failure
0.0 / 32F	Regulation temp sensor failure
H2O	Insufficient water level
BOO	Pump 1 boost mode
CLE, CF	Reminder – clean filter
SbY	Spa is in 'standby' mode – 1hr shutdown
LOC	Touchpad panel keys locked
LocP / LoP	Touchpad partial lock
LocF / LoF	Touchpad full lock
Fxx, Fdxx	Filter cycle duration in hours
dx, Fdxx, Fsxx	Filter cycle start delay in hours
Pxx	Purge cycle duration in hours
Exx, Edxx	Economy cycle duration in hours
Edxx, Esxx	Economy cycle start delay in hours
Orxx (2.5-9)	Over range beyond normal temp limit (not a fault)
CAL	Calibration error
SUS	Suspend mode – Pump 2 Button may be stuck
---- F	Dimension One Spas Communication Error





## Hercules topside touchpad error codes & messages

OH  
FLO  
ICE  
SN1  
SN2

Over temperature condition detected  
Flow problem  
Freeze condition detected  
Hi-limit sensor failure  
Temperature sensor failure







*Tiger River Spas*

## Hot Spring Spas & Tiger River Spas topside touchpad error codes & messages

'Ready' & 'Power' Logo lights flashing

'Power' blue light flashing

'Power' light flashing

'Ready' green (or red) light flashing

Pressure switch open circuit

Hi limit fault – spa hi limit or heater hi limit

Spa cabinet door open / faulty magnetic door switch

Temperature sensor fault





## Hot Spot Spas & Solana Spas topside touchpad error codes & messages

'Ready' icon flashing

— — — — & power icon flashing

==:==:==:

= = = = & power & ready icons flashing

= = = =

----- & power & ready icon flashing

ut1 – ut4

Control sensor open or short circuit

Hi limit (nothing operates)

Pressure switch open circuit

Pressure switch open circuit

Pressure switch closed circuit

Pressure switch closed circuit

Temp over-range setting above 40c





## Hurlcon Astral topside touchpad error codes & messages

F0	Open circuit thermistor or 0c detected
F1	Thermostat reading 45c overheat
F2	Mechanical Hi-limit 45c
F3	Thermistor fault
F4	Flame Rollout detected
L	Heater locked out 2 minutes



# Hurricane topside touchpad error codes & messages

PS	Pressure switch failure
SH	Shorted sensor
OP or OS	Open sensor
LO	Low temp, potential freeze
HL	Hi-limit
OH	Overheat
FLO	Flow problem
ICE	Freeze condition detected
SN1	Hi-limit sensor failure
SN2	Temperature sensor failure



# HYDROQUIP™

## Hydroquip topside touchpad error codes & messages

FLO	Flow / pressure switch open circuit
FLC	Flow / pressure switch closed circuit
HL, PrH	Hi-limit, OH sensor failure
Prr	Regulation temp sensor failure
FrEE	Possible freeze condition
Loc	Touchpad key lock
CL	Current time of day
Econ	Economy mode on
ECdu	Economy cycle duration
Flon	Filter cycle turn on
Fldu	Filter cycle duration in hours
*** 3 flashing dots on display	FLO, or FLC
*** with red LED on pcb	Hi-Limit
0.0 / 32F	Regulation temp sensor failure





## Infinity Megastore topside touchpad error codes & messages

### HLW-15B

COOL  
FREEZING  
ERR  
E1

Anti freezing mode – power off  
Anti freezing mode – power on  
Temperature sensor probe failure  
Temperature sensor probe failure





## Intex Purespa topside touchpad error codes & messages

E81	Transmission signal fail – rechargeable touchpad
E90	No water flow
E91	Low salt alarm, electrolytic cell failure
E92	High salt alarm
E94	Low temperature under 0c
E95	Temperature too high
E96	System error
E97	Dry fire protection
E99	Temperature sensor fault
END	After 72 hours of heating, system hibernates
No display (rechargeable touchpad models)	Charging failed, flat battery





## Jacuzzi Hot Tubs topside touchpad error codes & messages

OH	Over Temperature detected
COOL	Water temp is 11 degrees below set point
FLO	Flow / pressure switch open circuit
Hold	Panel buttons pressed to frequently
HOT	PCB temperature too high
ICE	Freeze protection
ICE2	Freeze protection
PnL	Touchpad – pcb communication error
----	'Watchdog' major fault, spa de-activated
Sn1	Hi-limit sensor failure
Sn3	Temperature sensor failure
FLO2	Shorted flow / pressure switch
PluG	Test sensor plug left plugged in after service







## Joyonway topside touchpad error codes & messages

E1		Temperature sensor fault
E2		Temperature too high
E4		Heater thermostat tripped
E5		Communication error – touchpad to control box
F1		Temperature sensor open circuit
F2		Temperature sensor closed circuit
F3		Temperature too high
F4		Temperature too low
F5		Auto reset thermoswitch open
F6		Manual reset thermoswitch open
F8		Eprom memory error
F9		System settings error
F10		Communication error – touchpad to control box
Loc	PB557	Press & hold any button for 3 seconds
Lock	PB553 & 555	Press & hold 'OK' button for 3 seconds
Lock	PB554	Press & hold the Tick button for 3 seconds





## K-Star Electric Heater error codes & messages

OFF	Temperature below lowest set point 20C
PSI	Low/no water pressure
LO	Low water temperature detected
HI, HAUT	High water temperature detected
LOC	Lock mode – press up or down to unlock
RA	Temperature range access
P	Pool range 20-31C
S	Spa range 20-40C
---	Set point mode
SC	Temperature scale access
C	Celsius scale
F	Fahrenheit scale



# LaMotte ColorQ error codes

Er3	Insufficient light reaching detector
Er7	Blank not properly set, dirty tube, damaged tube
SUN	Bright sunlight penetrating chamber.
Lo	Result is below measuring range
Hi	Result is above measuring range
bAt	Battery is low
bLA	Set 'Blank'





## Len Gordon topside touchpad error codes & messages

### Spa touchpads

Flashing display  
00

Damaged temp sensor or heat circuit failure  
Memory loss – reset required

### Lennovator

NC  
SP  
PO  
--  
OP  
SH  
OH  
IP  
FP  
Temperature flashing on/off  
WAIT

No communication  
Spa mode  
Pool mode  
Data is being sent to master unit  
Temperature sensor open circuit  
Temperature sensor short circuit  
Overheat – water temperature over 120 F  
Insufficient Power  
Freeze point  
High water temp 109 F – 120 F  
Valve turning or fireman's timeout





## **LX LXX series spa controls**

ER01 / SNSR Axxx  
ER02 / SNSR Bxxx  
ER03 / SNSR AxBx  
ER04 / HRT TOO HOT  
ER05 / TOO HOT  
ER06 / SNSR OUT OF SYNC  
ER07  
ER08 / HRT MAY BE DRY  
ER09 / TOO COLD  
ST1

Sensor A faulty  
Sensor B faulty  
Sensor A & B Fault  
Overheat Hardware Condition > 45c  
Overheat Software Condition > 45c  
Sensors out of Sync – more than 2c  
Freeze error under 0c  
Dry / lack of water flow  
Low temp. Ice condition < 7c, pumps run 30s in turn  
High limit thermostat protection > 60c

## **LX LXXA series spa controls**

SNSR A FAIL  
SNSR B FAIL  
NO COMM  
SNSR BLANCE  
ST1  
DRY  
COLD  
HIGH  
HOT

Temp sensor A faulty  
Temp sensor B faulty  
Communication fault between touchpad & PCB  
Temp sensors out of sync > 2c differential  
High limit thermostat protection > 60c  
Dry / lack of water flow  
Low temp. Ice condition < 7c  
Overheat Condition > 45c  
Overheat Condition > 60c





Maddox Enterprises, Inc

*TurboTouch*

## Maddox LA Spas topside touchpad error codes & messages

-40	Temperature sensor open circuit
122	Temperature sensor short circuit
HI	Hi-limit fault above 117F / 47C
HI / temp display – alternating	Over temp above 112F / 44C
J11	Temp sensor plugged in Jack 11 is faulty or dangling
J12	Temp sensor plugged in Jack 12 is faulty or dangling
PSC	Pressure switch closed
PSO	Pressure switch open
Flashing 'heat' light	Hi-limit fault on older units – reset with light or pump key





**Monarch Spas, Paramount Pool Equipment, S&P  
Ultima Micro Controlled Spa Command Centre topside touchpad error codes  
& messages**

'Heater On' LED Flashing

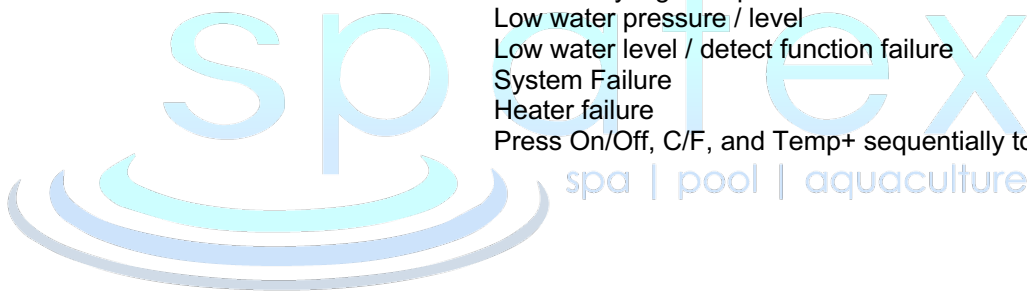
Temperature sensor fault





## MSpa topside touchpad error codes & messages

FEF	Filter Pump system failure
FEF0	Filter system short circuit
FEF1	Filter system open circuit
FEF2	Overcurrent / Blocked pump
FEF3	Water pressure switch open circuit
EEP / 888 / - - -	Communication error
F0	Temp below 0c or above 50c, or temp sensor fault
F1	Water pressure switch open circuit
F2	Filter system open circuit
F3	Overcurrent / Blocked pump
F4	Filter system short circuit
F7	*Possible pressure switch short circuit
BBF	Blower failure
BBF0	Blower short circuit
BBF1	Blower open circuit
BBF2	Blower overcurrent
CEF	Communication error between panel and pcb
HEF0 / HFB	Heating system short circuit
HEF1	Heating system open circuit
HEF2	Heating system overcurrent
SPL / E0	Temp below 0c – Freeze condition
SPH / E0	Abnormally high temperature detected 60c
E1	Low water pressure / level
E2	Low water level / detect function failure
E3	System Failure
E4	Heater failure
E3 flashing	Press On/Off, C/F, and Temp+ sequentially to reset





## Pahlen Electric Heaters

E1	Low / No Flow
E2	Temperature sensor fault
E6	Hi-Limit thermostat open circuit
E7	Control circuit contactor, overheating limit control
E10	Pump is inactive
E12	Communication error
HC	High temperature on pcb 40C
HP / Hi	Overtemperature condition 45C



## Peips Spas – France

Water tap icon crossed out

HH

H

CL

E1

FL

Low water level

Overheat 45C

High Limit 42C

Cold – under 0C

Temperature sensor or PCB failure

Filter cycle active





## Wanaka Spring Spas

### Perfect Spa Pool topside touchpad error codes & messages

EE01	Temperature sensor failure
EE02	High Limit – over 42C
EE03	Low water level
EE04	Insufficient/no water pressure
EE05	Heater fault
EE06	Circulation pump fault
EE07	Jet 1 pump fault
EE08	Jet 2 pump fault
EE09	Air blower fault
EE10	Light fault
EE11	Ozone fault
Reset	Hold 'P' for 5 secs





## Pinnacle topside touchpad error codes & messages

OH	Over heat 110F / 43C
SN	Sensor failure
FL	Flow switch closed





## Presair topside touchpad error codes & messages

Er	Topside or control failure or temp sensor not connected
HI	Temp over 44.4C
Lo	Temp under 7.2C
FC	Filter cycle
FL	Flow error or pressure switch fail
FL (flashing)	Pressure switch closed
Fr	Freeze protection mode – very low temp detected



## Jilong Prompt Set topside touchpad error codes & messages

### Older units

E1	Temperature sensor fault
E2	Temperature Protection Sensor Fault (HL)
E3	High Temperature Protection (OT) over 38C
E4	Low Temperature Protection under 20C
E5	No Heating – flow / thermal tripped

### 2014+

E1	Temperature sensor open/short circuit
E2	Temperature sensor open/short circuit
E3	Temperature exceeds 45 degrees C
E4	Temperature under 2 degrees C
E5	Temperature over 50 degrees C
E6	Pressure switch open circuit
E7	Dry Run – lack of water
CH6 FIL (CHG FIL)	Filter clean reminder 150 hrs. Hold 'heat' 5 sec.
BUB	Massage pump on





## Blue Lagoon Spas, Oceane Spas

### S&G Spa topside touchpad error codes & messages

E0 or E1 (depending on model)

E1 or E0 (depending on model)

Filtration pump icon flashing

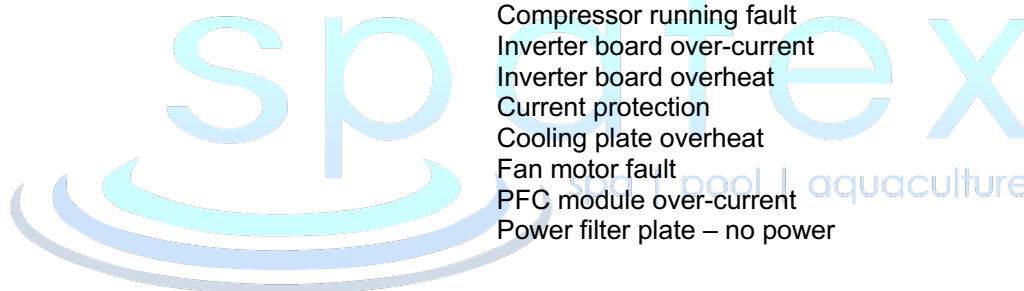
Temperature sensor open circuit

Temperature sensor short circuit

Low flow – press on/off to reset



E1	Water pressure too high
E2	Water pressure too low / No water pressure
E4	3 phase power error
E5	Input voltage too high or too low
E6	Excessive temp difference between inlet & outlet
E7	Water outlet temp too high or too low
E8	High exhaust temp
EA	Heat exchanger or evaporator overheat
Eb	Ambient temp too high or too low
Ed	Anti-freezing reminder
P0	Controller communication fault
P1	Water inlet sensor fault
P2	Water outlet sensor fault
P3	Gas exhaust temp sensor fault
P4	Evaporator coil pipe temp sensor fault
P5	Gas return temp sensor fault
P6	Cooling coil pipe temp sensor fault
P7	Ambient temp sensor fault
P8	Cooling plate temp sensor fault
P9	Current sensor fault
PA	Reset memory failure
F1	Compressor driver module fault
F2	PFC module fault
F3	Compressor start fault
F4	Compressor running fault
F5	Inverter board over-current
F6	Inverter board overheat
F7	Current protection
F8	Cooling plate overheat
F9	Fan motor fault
FA	PFC module over-current
FB	Power filter plate – no power







## Softub topside touchpad error codes & messages

IPS or IP5  
LED display flashing  
00  
P01  
SP1

Insufficient power supply voltage  
Water too hot or control fault  
Touchpad connection fault  
Heat call exceeds 4 hours without increase in temperature  
Special temp mode set to 40.5C or 41C





## **SOWO topside touchpad error codes & messages**

E0	Temperature sensor short circuit
E1	Temperature sensor open circuit
P1	Pump 1 fault
P2	Pump 2 fault
P3	Pump 3 fault
H1	Heater fault
B1	Blower fault
S1	Low water level
FF	Temperature sensor not connected





## Spa Builders topside touchpad error codes & messages

### LX Series

SN1, -01, 131 , -07 , or -8  
SN2, -02  
FL1, -03  
FL2, -04  
COL  
ICE  
OH  
---

Hi-limit sensor failure  
Temperature sensor failure  
Flow / pressure switch open circuit  
Flow / pressure switch closed circuit  
Cool condition 11 degrees below set point  
Freeze condition detected  
Over heat condition  
'Watchdog' major fault, spa deactivates

### Class Series (Gecko)

FLO  
FLC  
Err  
Prr  
HL  
FrE  
\*\*\* 3 flashing dots on display  
\*\*\* with red LED lit on pcb  
0.0 / 32F  
H2O  
BOO  
CLE, CF  
SbY  
LOC  
LocP / LoP  
LocF / LoF  
Fxx, Fdxx  
dxx, Fdxx, Fsxx  
Pxx  
Exx, Edxx  
Edxx, Esxx  
Orxx (2.5-9)  
CAL  
SUS  
---- F

Flow / pressure switch open circuit  
Flow / pressure switch closed circuit  
Electronic software error  
Regulation temp sensor failure  
Hi-limit sensor failure  
Possible freeze condition  
FLO or FLC  
Hi-limit sensor failure  
Regulation temp sensor failure  
Insufficient water level  
Pump 1 boost mode  
Reminder – clean filter  
Spa is in 'standby' mode – 1hr shutdown  
Touchpad panel keys locked  
Touchpad partial lock  
Touchpad full lock  
Filter cycle duration in hours  
Filter cycle start delay in hours  
Purge cycle duration in hours  
Economy cycle duration in hours  
Economy cycle start delay in hours  
Over range beyond normal temp limit (not a fault)  
Calibration error  
Suspend mode – Pump 2 Button may be stuck  
Dimension One Spas Communication Error



## spaGEAR – Monarch Pool Systems topside touchpad error codes & messages

EC  
LP  
00  
--

Start up checks in progress  
Insufficient water in heater  
Temperature sensor fault  
Flush cycle active





## Spanet topside touchpad error codes & messages

In addition to the below error codes, both XS & SV series have a 'heartbeat' LED that flashes to indicate the error condition. On, Off, On, Off is normal. 'On, On, On, Off, On, On, On, Off' indicates error 3.

### XS series

ER-2	Heater sensor plug connection fault
ER-3	Water prime failed, insufficient water
ER-4	Heater thermal trip, over heat
ER-5	Over temperature. Sensor reading over 45c
ER-6	Heater temperature sensor failed
ER-7	In-pool sensor failed
ER-8	Controller software fault, stuck heater relay
99.9	Temperature sensor failed

### SV Series

ER-2	Heater sensor failed
ER-3	Water prime failed, insufficient water
ER-4	Heater thermal trip, over heat
ER-5	Over temperature. Sensor reading 45c
ER-6	12v overload – too many LED lights
ER-8	Stuck heater relay
ER-10	Over current – excessive power draw
99.9	Temperature sensor failed

### SV Heat Pump

HEAT PUMP AMB	Ambient thermistor sensor error
HEAT PUMP COND	Condenser thermistor sensor error
HEAT PUMP FLOW	No water flow detected
HEAT PUMP LOW P	Compressor low pressure switch open
HEAT PUMP HIGH P	Compressor high pressure switch open
HEAT PUMP COMP	Compressor thermal cut out open
HEAT PUMP EXCH	Heat exchanger thermal cut out open

# Spa-Tech & SpaRelax & Yang Control

## Spa-Tech topside touchpad error codes & messages

### C-I Control System – S1 & L1 Touchpads

E0	CPU is fully loaded or loose cables
E1	Heater temperature sensor fault
E2	Heat pump temperature sensor fault
E3	Environmental temperature sensor fault
E4	Water level sensor detecting insufficient water level
E5	Unmatched power input or voltage fluctuations
E6	Water pressure sensor fault – FLO error
C	Cold / freeze – water below 7 degrees C
H	Overheat – water temperature over 43 degrees C
HH	Overheat – water temperature over 45-47 degrees C

### C-II Control System Blue & Grey (used on Oasis Spas, Classic Spas and others)

E1	Temperature sensor 1 fault
E2	Temperature sensor 2 fault
E3	Heat pump temperature sensor fault
E4	Water level sensor detects insufficient water
E5	Input voltage either too high or too low
E6	Flow switch fault
E8	Heat pump compressor pressure fault
E9	Insufficient water flow
C	Low water temp below 7c
H	High temperature hi-limit 43c
HH	Overheat 47c
PL	Panel locked
HPL (and flashing snowflake icon)	Defrost Cycle

### C-III Control System – Black (used on Oasis Spas, Classic Spas and others)

E0	Communication Error touchpad to control pack
E1	Temperature sensor 1 fault
E2	Temperature sensor 2 fault
E3	Heat pump temperature sensor fault
E4	Water flow switch open circuit
E5	Input voltage either too high or too low
E8	Heat pump compressor pressure fault
E9	Insufficient water flow
C	Low water temp below 6c
H	High temperature hi-limit 43c
HH	Overheat 47c
PL	Panel locked – press Warm & Cool to unlock
HPL (and flashing snowflake icon)	Defrost Cycle

# Spa-Tron

Mode = Off  
Heat = Red  
Pump = Off

Hi Limit fault

Mode = Green  
Heat = Off  
Pump = Red

Flow/Pressure switch open

Mode = Yellow  
Heat = Off  
Pump = Red

Flow/Pressure switch closed

Mode = Yellow or Green  
Heat = Red  
Pump = Off

Temperature sensor fault





## **Splash Pool Accessories (S.P.A.) topside touchpad error codes & messages**

HE  
Red, Green, Yellow LED's flashing  
LEH

Temperature sensor failed  
Insufficient water detected  
? possibly same as HE otherwise unknown







## Sundance Spas topside touchpad error codes & messages

ILOC	Interlock failure
FLO	Flashing - flow switch open, solid – closed
FLO2 / ICE2	Flow switch closed circuit
Hold	Touchpad buttons pressed too frequently
HOT	PCB temperature too high
ICE	Freeze condition detected
PnL / PNL	Panel – PCB communication error
Sn1	Hi-limit sensor failure
Sn3	Temperature sensor failure
COOL	water temp 11 degrees below set point
PLuG	Test sensor plug left plugged in after service
----	'Watchdog' major failure. Spa deactivated
LOC	Panel locked
PF	Power Failure
blb	UV bulb/lamp replacement required





## Tecmark TDI topside touchpad error codes & messages

Flashing display  
OP or OB  
SP, SB, SPb  
8888

Over heat 110F / 43C  
Open probe  
Short probe  
Voltage spike



## Trinity Electronic Labs touchpad error codes & messages

### Apollo 11

HEATING  
FILTER  
OVERHEAT  
FTR ONLY  
NO FLOW  
SENSOR FAILURE  
HEATER  
TEST  
PROGRAM

Heater is on  
Filter cycle on  
Water temperature above 112 F  
Heating safety component failure – filtering only  
Insufficient water flow  
Invalid sensor value  
Heater not working  
Test mode – press / hold Jets 1 to access  
Program mode – press / hold Jets 1 to access





## United Spas topside touchpad error codes & messages

### T5 Touchpad

oH	Over heat 48C
Fr	Freeze – temp below 4C
Flo	Flow switch open circuit
Er0, Er1	Regulation temperature sensor failure
Er2, Er3	Hi-limit sensor failure
Fc	Filter Cycle

### T7 Touchpad

Fr	Freeze – temp below 8C
SOH	Software Over heat – temp above 45C
HOH	Hardware Over heat – hi-limit above 46C
tS	Temperature sensor error
LS	Hi-limit sensor error
FL	Flow switch open circuit





## Valtherm error codes & messages

### Models A and C

PO	Overtemp 110F / 43C
AL	Alarm mode after PO. Press up or down to reset
PSI	Water pressure too low
LO	Low temp below 65F / 18C. Warning lights lit = heater on.
Warning light	Indicates heating or economic mode

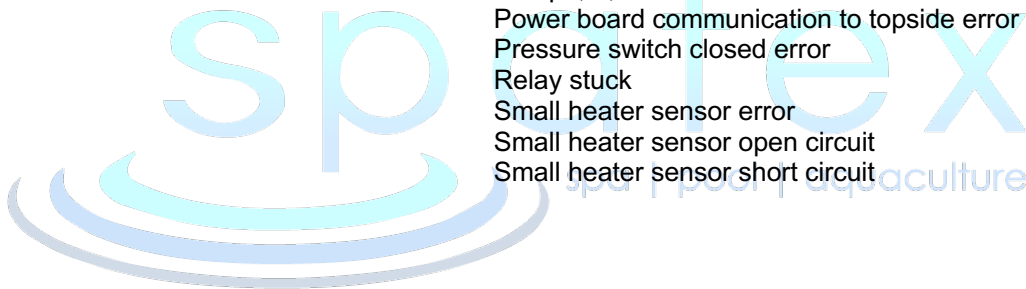




DM Industries

## Vita Spas topside touchpad error codes & messages

BJ2P	Purging notification
BLO	Air blower error. Fuse blown or defective blower
BUS	Communication error
CP	Circulation / HEET pump fault
CS	Current sensor error
F1 or F2 or F3 or F4	Fuse 1, 2, 3, or 4 blown
FLO	Pressure switch open – low flow
HC or H1 or H2	Heater error
HILI	Hi Limit senses above 112F / 44C
HP	High voltage observed
HS1	Pump 1 high speed fault
HS2	Pump 2 high speed fault
ICE	Water temp below 50F / 10C
LB or LI	Light fault
LP	Low voltage observed
LS1	Pump 1 low speed fault
LS2	Pump 2 low speed fault
LS	Large water sensor error
LS=O	Large water sensor open circuit
LS=S	Large water sensor short circuit
O3U or O3	Ozonator error
P1 or P2 or P3	Pump1, 2, or 3 fault
Pb or PB or P6	Power board communication to topside error
PS	Pressure switch closed error
REL	Relay stuck
SS	Small heater sensor error
SS=O	Small heater sensor open circuit
SS=S	Small heater sensor short circuit





Water, the Liquid of Life

## Waterco topside touchpad error codes & messages

### Portapac SSC

00	Temperature sensor fault
'Heat' indicator flashing	Over temperature sensor fault
'Power' indicator flashing	Over temperature resettable device tripped out 45 degrees
SP1 or SP2	Blower speed adjustment (do not alter – press 'Demand')

### Digi-Heat Heaters

nFL	No flow detected, pressure switch open circuit
o/t	Over temperature Tripped 45c
00	Temperature sensor failed





## Waterway Plastics topside touchpad error codes & messages

### Neo series

Plumbing error	Swap sensors 1 & 3 for flow direction change
Insufficient flow	No water
Low flow	Lack of water flow
Water Overheat	Overtemp 48 degrees reached
Heater Overheat	Overtemp within heater
Potential Freeze	Temp too low – freeze protection enabled
Sensor 1 open	sensor 1 open circuit
Sensor 1 short	sensor 1 short circuit
Sensor 2 open	sensor 2 open circuit
Sensor 2 short	sensor 2 short circuit
Sensor 3 open	sensor 3 open circuit
Sensor 3 short	sensor 3 short circuit

### Signature Series

CoLd	Temperature approaching zero
OH	Over Heat condition
HLEr	Hi-limit over heat sensor failure
SEoP	Temperature sensor open circuit
SESH	Temperature sensor short circuit
PSoC	Pressure switch open circuit with circ pump
PSoL	Pressure switch open with low spd pump
PSoH	Pressure switch open with high speed pump
CboH	Control box over heat 115f / 46c
ToE	Time out error – system shutdown
CLDN	Cool down cycle
ECL	Energy saving cycle
CHCL	Air blower Channel clear
UTO	User time out
PUF	Post use filtration
MENU	Menu access
CANC	Cancel/discard changes
SEND	Save changes
CALB	Calibration for temp
FPx (1-4)	Filtration period
SIL	Silence period start time
FPxd (1-4)	Filter duration
SILd	Silence timer duration





## Zeng ZNG Spa Controls

ER2	Sensor A short circuit or water temp over 80 degrees
ER3	Sensor A open circuit or water temp below 10 degrees
ER4	Heater safety sensor short circuit or over 80 degrees
ER5	Heater safety sensor open circuit or below 10 degrees
ER6	Short Jumper/Bridge to determine fault
ER7	Open Jumper/Bridge to determine fault
ER8	Flow switch closed when there is no water flow
FLO	Flow switch open when there is water flow
HL	Hi Limit water temp over 44 degrees
FCL	Filter clean reminder message – clean filters
LOC	Full touchpad lock
3 blinks on display	Partial touchpad lock – can operate pumps, blower, light
3 horizontal lines on display	General / Technician's lock

If you have additional codes and messages for inclusion, or think our listing is incorrect, please feel free to email information to [sales@spatex.com.au](mailto:sales@spatex.com.au) so that we may correct / update accordingly.

Whilst we endeavour to ensure codes and messages listed above are correct, we cannot be held responsible for the accuracy of the information listed. The data above has been collated over many years from hundreds of sources assumed to be correct.

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