

# CONTHERM *Scientific Limited*

TECHNICAL MEMORANDUM

PRODUCT :ZP21 OVENS

No : 0090

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FROM : Contherm Scientific Ltd

DATE : 04/08/2004

TO : ALL AGENTS

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**SUBJECT:** Set Point stuck at '110.0' or '310.0' on ZP21 PCB

There have been a few incidences where a customer has reported that the Set Point on a Contherm Oven (ZP21 App No's 04000 and above) has been 'stuck' at '110.0' or '310.0' and cannot be adjusted. The cabinet may also not control temperature as expected, this can be confirmed by checking the 'roll-over' point where the set point should roll-over from 300.0 to 0.0. If the roll-over does not occur at the right temperatures the problem can be corrected by following this techmemo.

The problem usually occurs on an Oven that is turned ON and OFF regularly. When the Oven is turned on in the morning, the user presses the 'TEMP' button BEFORE the 8888's have gone from the display, accidentally configuring the Oven as an INCUBATOR! If the original Set Point for the oven was above an Incubators allowable limit (110.0°C), the set point display is HELD at this limit. Reconfiguring the cabinet back to an Oven (using the 'RAMP' button) would solve the problem, but usually when the user sees the '110.0' display they attempt to dial up the original setting using the 'UP' button which is actually incrementing their Set Point in the background until it goes above the Oven maximum of '310.0' at which point the set point appears to be locked into the unit.

A solution is as follows: (Assuming the cabinet displaying the fault is an OVEN)

- a) Turn the cabinet off then on again and ensure that it is configured as an OVEN (turn off, turn on and when the 8888's appear on the display, press and hold the 'RAMP' button. A 'beep,beep' should be heard and the cabinet should now be correctly configured as an oven. (Can be tested by checking to see if the 'RAMP' button works).
- b) Call up the cabinet temperature Set Point, (it will probably display '310.0') and press the 'Down' button, if the Set Point does not change just KEEP HOLDING the down button until it begins to change and from there set it to your normal settings. Check that when '0.0' set point is reached it 'rolls over' to '300.0' if it does not you need to keep holding the down button until the correct range and roll over is achieved.
- c) Ensure that when the cabinet is turned on at the switch DO NOT PRESS ANY BUTTON until the initial 8888's have gone, this will prevent someone from accidentally reconfiguring the cabinet.