Installation, Operation and Maintenance Instructions
Controller Tuning
3508 Controller
Contents

This manual is for guidance on the use of the Carbolite Gero product specified on the front cover. This manual should be read thoroughly before unpacking and using the furnace or oven. The model details and serial number are shown on the back of this manual. Use the product for the purpose for which it is intended.

1.0 Controller Tuning .................................................................................................................. 3
1.1 Auto-tune ............................................................................................................................... 3
1.0 Controller Tuning

Note: Refer to the instrument operating instructions when reading this supplementary manual.

As some furnaces are not tested to full temperature, there is a possibility that the pre-set PID parameters may require some tuning.
Tuning is only required if it is found that the furnace temperature oscillates around the setpoint, rather than holds a steady value.

1.1 Auto-tune

It is best to start the tuning process at ambient conditions.
To access auto-tune the controller must be set to supervisor level (Level 2).
Set the setpoint to the value at which you will normally operate your process.

Press page \[ \square \] until the display shows "Auto-tune Enable". Using up \[ \triangleup \] or down \[ \nabla \] selected ON. Auto-tune will start one minute after being turned on.

During tuning, the home display will show the measured temperature, setpoint temperature, % power output and while heating up, text flashing between "Auto-tune" and "toSP". While auto-tuning the text will flash between "Auto-tune" and "Wait Max", then "Wait Min" until the auto-tune is complete. When the auto-tune is complete the display will stop flashing and show the standard home menu (see controller instructions) as the controller brings the measured temperature up to the setpoint.

When auto-tuning is complete return the controller menu to operator level 1. See section "Understanding User Levels" within the controller instructions.
## Service Record

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The products covered in this manual are only a small part of the wide range of ovens, chamber furnaces and tube furnaces manufactured by Carbolite Gero for laboratory and industrial use. For further details of our standard or custom built products please contact us at the address below, or ask your nearest stockist.

For preventive maintenance, repair and calibration of all furnace and oven products, please contact:

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