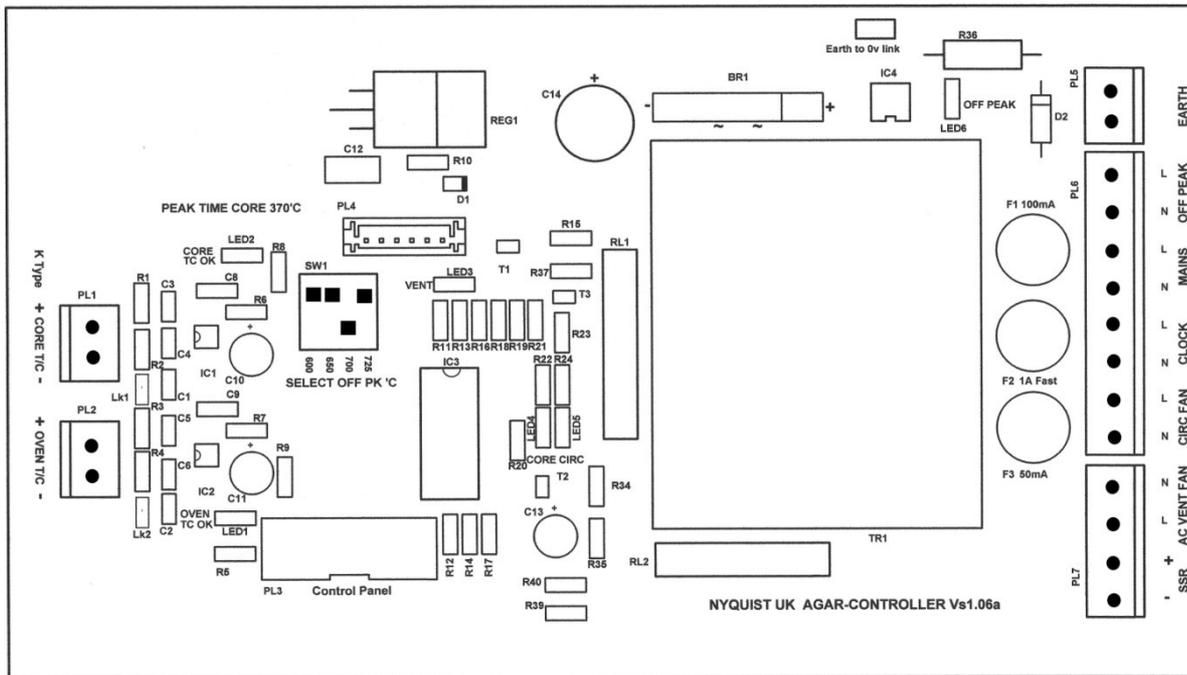


Nyquist AGA Controller Installation Guide

These parts are not to be fitted by unqualified personnel.

Installation

1. Remove existing panels making note of the terminal connections.
2. Take special note of polarity of CORE and OVEN thermocouples and DO NOT confuse them.



3. Refit Control panel and attach new IDC ribbon cable.
4. Fit new PCB assembly to AGA chassis and attach control panel ribbon cable to PL3 on the main PCB.
5. Vent Fan can be either 240vac or DC. Ensure you have asked for correct model. VENT FAN terminals are labelled accordingly.
6. Connect AC feed to circulating fan to terminals CIRC FAN.
7. Connect Day/Night ECO clock mains supply to terminals CLOCK.
8. Connect ECO clock mains output to terminals OFF PEAK (low power).
9. Connect High Power input feed to MAINS terminals and flying wires to element feed. Ensure terminals are fully tightened to prevent overheating.
10. Connect mains earth to terminals EARTH.
11. Select required Core temperature setting using 4way DIL switch SW1. The above diagram shows 700°C selected.

Notes on use

The oven temperature control switch controls the oven temperature to that value displayed on the knob as measured by the oven thermocouple where ever that is placed within the oven. Consequently this may not be the actual oven temperature so small adjustment may be needed by selecting a higher temperature to obtain the required value inside the oven. Please ensure the knob is correctly positioned on the switch so that the OFF position is selected at the fully anticlockwise position.

The main PCB has various LEDs mounted to enable fault diagnosis. These LEDs are labelled and will be lit if that feature should be enabled. There are independent Thermocouple OK LEDs which will light if all is well with that particular thermocouple.

Please check that when power is applied to the OFF PEAK terminals via the ECO clock the 'off peak' LED illuminates. This will ensure the Off Peak CORE temperature setting (via SW1) will be selected as opposed to the peak time temperature of 370°C.

On AGA Mk3 model with DC vent fan the Control Panel may include an ECO (Economy) hidden push switch beneath the panel via a hole. When depressed once the ECO LED will illuminate and the Core temperature will be reduced to a standby value of 120°C. The Oven will not be enabled in this Mode. This will considerably reduce the running cost. Normal operation mode resumes when ECO switch is unlatched by depressing once more. The ECO LED will go off.

A serious fault will be indicated on the Control panel by a flashing power indicator with all other indicators OFF. This will shut down the Core heating completely and consequently there will be no Oven heating.

Should this arise the most likely fault will be from the thermocouples being incorrectly wired or faulty. There is no need to over tighten these terminals as this may sever the brittle thermocouple wires.

To further protect the control SSR a temperature sensor is mounted on the metalwork adjacent to the device. Again this will cut off power to the Core but will reset itself when it has cooled. Should this cycle 'on and off' check for a heater element fault.

If Core or Oven thermocouples read 800°C the Oven is shutdown.

Fuses MUST be replaced with same value. 'Fast' type must be used where indicated.

PLEASE ENSURE all high current terminal points are tightened fully.