

HOLMAN ENGINEERING

Water Purifier Controller

Holman Engineering has taken many products from concept to successful production. The control system for this water purifier is a good example of a product that was developed from only an initial concept. The water purifier is now being manufactured in three countries, and sold to a world market.

The water purifier uses an energy efficient method of low temperature distillation to provide users with continuous chilled and hot **pure** water.

The control system is responsible for controlling the water purification process, energy recovery process, cooling the chilled water and heating the hot water. The control system allows the user to select the setpoint temperatures of both the chilled and hot water, display the actual temperatures and measure the water purity. The system also has a full suite of maintenance facilities, including calibration facility, diagnosis menus, machine component running times and much more.

At the completion of the development of the control system, the customer received a file that had all of the information necessary to manufacture the system. The file outlined all details including wiring diagrams, circuit board artwork, bills of materials, manufacture and assembly instructions, wiring loom designs, test procedures, pro forma test certificates, operator & maintenance instructions and cost schedules. This facilitated the customer being able to organise the manufacture of the controller in other countries.

The controller is a microprocessor based system, which was developed for a world market. It is configurable after assembly to be 50 or 60 Hz, and the input voltage can be configured to accept either 240 VAC, or 110 VAC. The design had to meet the stringent requirements of the American (UL) Authorities.

The software development, circuit and circuitboard design, circuit-board manufacture and assembly, wiring loom designs, prototyping, pre-production and initial production were all project managed by Holman Engineering on behalf of the customer.

All development (Hardware and software) for this product was done under Holman Engineering's quality system (AS 3901 & AS 3563).

