

Pi^π Technical Note 11

AquaSense Operator Notes (Firmware Version x.xx)

Introduction

The AquaSense pool controller is a sophisticated device capable of controlling many aspects of the pool including the chlorine level, the pH, and if fitted, the speed of the recirculating pumps. Please read these notes before you make any changes to the controller settings.

On the front of your controller display there is a button labelled 'Menu'. This button provides access to system controls. To access specific system settings you may be asked to enter a password. Please contact your installer/manager for access.

Calibration

To calibrate a sensor first select the sensor you wish to calibrate from the main menu e.g. Free Chlorine Sensor or pH Sensor. Selecting a sensor will take you to the sensor overview, press 'Calibrate' to open the calibration settings.

The chlorine sensor is calibrated by inputting results from a manual test. The manual test must be taken from the sample point at the controller and should be repeated three times. All the results should be within 0.05ppm or you should not use them to calibrate the controller. If the controller is reading within 0.15ppm or 15% (whatever is larger) of the average of the three readings, then there is no need to calibrate the sensor.

The chlorine sensor requires power, flow and chlorine to work properly. In the event of power loss, loss of flow or loss of chlorine in the sample water, the sensor should be allowed to recover for two hours prior to calibration.

The pH sensor can be calibrated using pH Standards (2-5 point calibration) or standardized using a Test Kit (Phenol Red - 1 point standardization). Selecting 'calibration' will take you to the 2-5 point calibration setup. Selecting 'Options'>'Maintenance'>'Standardization' allows you to carry out the single point standardization. It is recommended to perform at least a 2 point calibration whenever possible.

Boost

This option lets you boost the injection of chlorine in the pool when needed (e.g. when there's a faecal incident). The boost goes on for a fixed time or the maximum value set in Threshold 1 and cannot be repeated within another user configured fixed time.

Setpoint

The pH or Free Chlorine setpoint is altered through the PID settings from the sensor 'Options' menu.

Backwash

When selecting this option you can suspend chlorine or pH dosing or alarms during the backwash of filters. To operate press 'Start' and then complete your filter backwash process and then press 'Stop' when you have finished the backwash. The backwash feature will also timeout and the controller will return to 'Auto' dosing control after a predetermined time.

Filters/Strainers

Pool water quality varies greatly between facilities. The sample water filter/strainer will therefore have varying cleaning/replacement requirements depending on individual pool water quality. A dirty filter/strainer can reduce the free chlorine level at the sample point and show a discrepancy between sensor readings and actual pool values. The filter element should be replaced and a strainer cleaned as and when required, typically monthly.

