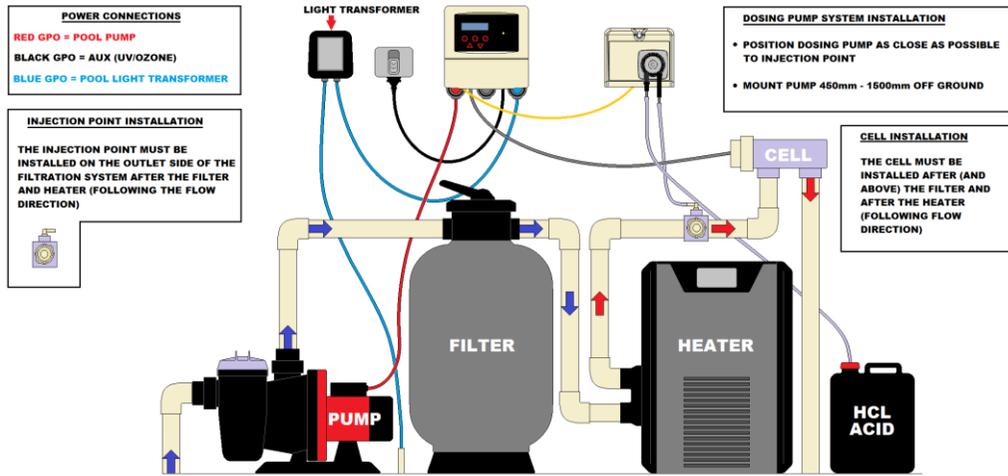


pH Control System – Installation Diagram & Instructions



- 1 Position the dosing pump as indicated in the installation diagram above, ensuring it is NOT too close to other equipment or power outlets (due to corrosive fumes from the acid). Attach the dosing pump to the wall and connect it to the power supply where indicated in the photograph below.

Photo of base of Power Supply indicating where dosing pump is to be connected:



- 2 Place the acid drum away from other equipment to minimize the corrosive atmosphere that may damage equipment. If in an enclosed space, the drum should be vented to the outside. Allow only a very small "breather" area where the feed tube enters the acid drum.
- 3 Fit the injection point, avoiding high pressure areas (ie **not** between pump and filter). It can go prior to the cell if necessary.
- 4 Measure out and cut appropriate lengths of feed tubing – the first to connect the dosing pump outlet to the injection point and the second to run from the base of the acid drum to the dosing pump inlet. Look at how deep the suction point will be in the drum and mark the tube just above the lid.
- 5 Attach one length of tubing to the pump outlet (outlet indicated by the flow arrows on the pump face) and connect it to the injection point.
- 6 Drill a hole for the second length of feed tube in the acid drum lid. Ensure that the hole is large enough to allow the drum to "breathe". Push one end of the feed tube through the drum lid and connect it to the dosing pump inlet. Attach the weight and then the suction point to the other end of the feed tube. Place the weighted suction point into the acid drum and put the lid on.
- 7 Turn on the Power Supply, which will recognise that a pH Control System has been connected and when first installed the LCD will ask "dilute acid?" If full strength is to be used press "N". If you are using diluted acid then press "Y". (See Advanced Menu Settings Supplementary Manual for details of the Acid Dilution Menu)

Priming the Dosing Pump: To prime the acid feed line – go to the +ACID Menu and do a manual feed of 100mL (or more if necessary due to length of feed tube). Note: the dosing pump will only start after the filtration system has been running for 2 minutes' "start delay".

Navigating the +Acid Menu

As chlorine is produced the pool pH will go up slowly. This can be offset by small doses of acid added to the pool. An algorithm calculates the amount of acid per dose that is needed to maintain the pH, and once the system has been adjusted to suit your pool, maintenance should be minimal. Note that the pH must be adjusted correctly for the controller to maintain it. However, **it is vital that the system is initially adjusted to suit your pool and that pool pH is checked regularly.**

Accessing the +ACID Menu

It is only possible to access the +ACID MENU when a dosing device is attached. Press ENT to access the Menu system and use the Y/UP or N/DOWN buttons to scroll through the menu until the LCD Line1 reads "hh:mm +ACID MENU" – press ENT to select.

Acid Dosing System – Turning it ON and OFF

The default setting is for the acid dosing system to be ON.

To turn the Acid Dosing System OFF, access the +ACID MENU as described above and Line 2 of the LCD will read "ADJUST Man DOSE?". Press the N/DOWN button to answer "no". The LCD will now show "ADJUST AutoDOSE?" Press N/DOWN to answer "no" and the LCD will ask "DOSER OFF? Y/N". Press Y/UP if you wish to turn the Acid Dosing System off. To turn the Acid Dosing System back on, access the +ACID MENU as described above and Line2 of the LCD will read "DOSER ON? Y/N". Press Y/UP to answer "yes" and the Acid Dosing System will be enabled.

Adding Acid Manually – the ADJUST Man DOSE Sub-Menu

When you first ENTER the Acid Dosing System, the LCD will ask "ADJUST Man DOSE?"

This sub-menu allows you to adjust the amount of acid added as a manual (immediate) dose. Adjustment is from 0mL (OFF) to 750mL in 15mL increments. This function is useful for priming acid lines after an acid drum change, and for adding a large dose of acid after adding buffer.

If you wish to make a manual dose, or adjust settings, press Y/UP to access this sub-menu.

Line1 of the LCD will display: "hh:mm Man DOSE";
Line2 of the LCD will display: "xxx mL"

Use the Y/UP and/or the N/DOWN buttons to adjust the amount of acid to be dosed manually. Press ENT to confirm and return to the Home Screen. Dosing should begin in approximately 5 seconds.

Automatically Dose Acid – the ADJUST AutoDOSE Sub-MENU

Note: fibreglass and liner pools are unlikely to need to need adjustment of auto dose amounts.

This sub-menu allows you to adjust the amount of acid added as an automatic dose. Adjustment of the DOSE# is in increments of 10.

Press Y/UP when Line 2 of the LCD asks "ADJUST Auto DOSE?" to enter this sub-menu.

Line1 of the LCD will display: "hh:mm Auto DOSE"

Line2 of the LCD will display: "<n> 90 DOSE#" (note that <n> denotes the default value)

Use the Y/UP and/or the N/DOWN buttons to adjust the amount of acid to be dosed automatically. The value will be used by the algorithm to determine how much acid and when to add it automatically. Press ENT to confirm and return to the Home Screen and normal operation.

Adjusting the pH Control for Dilute Acid (Advanced Menu)

If a unit has been installed with the pH Control Dose Pump this setting has likely already been made by the installer.

To enter the Advanced Settings menu hold the OFF-button down for approximately 4 seconds and when Advanced appears in the display press ENTER. Use Y/UP or N/DOWN buttons to scroll through the menu until LCD Line2 shows "ACID Dilution" and press ENTER. The LCD will show:

"Dilution NO"

"Dilution Y/N?" Press Y/UP for dilute acid use.

There are three possible dilution rates to select from using the Y/UP and N/DOWN buttons:

"Acid approx 10%" "Acid approx 14 - 16%" "Acid approx 20%"

"1 Acid : 2 WATER" "1 Acid : 1 WATER" "2 Acid : 1 WATER"

Note that undilute acid is generally 28 – 32%. Dose pump run times are longer when dilute acid is used.