

# Competition 5000 B, or C, Controller Replacement kit

This new controller kit will replace faulty, water damaged, or burnt out Competition 5000 “B” or “C” series Heat Pump Controllers. It is the only kit available to replace the Competition 5000 “B” or “C” series of Heat pump controllers used on DPL Heat Pumps.

This Competition 5000 “B or C” kit will **not** replace faulty DPL 5000 “D” series controllers.

The kit comprises of a pre-programmed Ellewell ID 974, 12 vac digital micro-processor controller, plus all parts needed to fit the controller, including easy to understand step by step fitting instructions.

The Ellewell ID 947 controller is versatile and reliable, built in Italy to exacting European standards; its case conforms to IP65 moisture ratings. The screen is made of UV stabilized poly- carbonate resin, the display is bright with a decimal point and will not fade. Millions are in use worldwide.

It retains the same degree of protection as the original controller, namely high pressure, low pressure and water flow protection.

It is very easy to fit, no special skills or tools are needed.

**Please read all the fitting instructions before attempting to fit the kit.**

\* It has been found that a few units have different coloured wires to the black & green 5 pin plugs on the original controller, and to the fan 240vac supply wires, this will not stop the new controller kit from working.

\* A few units were wired incorrectly at the factory in China, and **not** as the wiring diagram, if this is the case the wiring needs to be changed so it is **exactly** the same as the wiring diagram.

\* The controller and interface will become warm when working, this is quite normal and is not a problem.

## Step 1

Turn off the mains supply to the Heat pump.

Remove the 2 screws from the side panel where the faulty controller is fitted. Disconnect the black and green 5 pin plugs from the faulty controller. Remove the controller from the panel. Apply the super glue gel supplied, sparingly to the OUTSIDE of the panel. Moisten the black Perspex adaptor plate, then press onto the panel firmly. Place aside to allow the super glue gel to set.

## Step 2

Disconnect the 9 coloured wires from the back of the new Ellewell controller and thread the cable through the previously glued black adaptor plate.

Fit the new controller into the black Perspex adaptor plate which was glued to the panel, and secure with the two sliding side clips.

Reconnect the 9 wires to the Eliwell. It is VITALY important that the wires are connected in exactly the same position that they were taken out. Recheck that they are correct using the list below. If they are wrong it may destroy the new Ellewell controller ----- This will void the warranty.

Ellewell Wire configuration; ***See Fig 1***

Terminal 0	Orange	Fan relay
Terminal 1	Yellow	Compressor contactor.
Terminal 2	Red	12vac supply.
Terminal 3	Black	Defrost Relay.
Terminal 4	Empty	
Terminal 5	Empty	
Terminal 6	Blue	12vac input.
Terminal 7	Brown	12vac supply.
Terminal 8	Purple	Defrost probe.
Terminal 9	Grey	Water probe.
Terminal 10	Green	Common probe.
Terminal 11	Empty.	

### Step 3

Reconnect the black & green 5 pin plugs into the new Interface. **See Fig 2**

### Step 4

The fan relay needs to be fitted and wired.

Disconnect the red (wire colours may vary) fan 240 volt AC supply wire, from the compressor contactor **See Fig 3** and connect onto the empty contact on the fan relay. The pre-fitted red wire on the fan relay fits onto the compressor from where the red wire was removed. **See Fig 4**

### Step 5

Recheck that all wiring / plugs fan relay are correctly fitted and secure.

Switch on the mains power. The display will flash as it performs a self and system check.

The display will then go solid and will display the actual pool temperature to an accuracy of .05%.

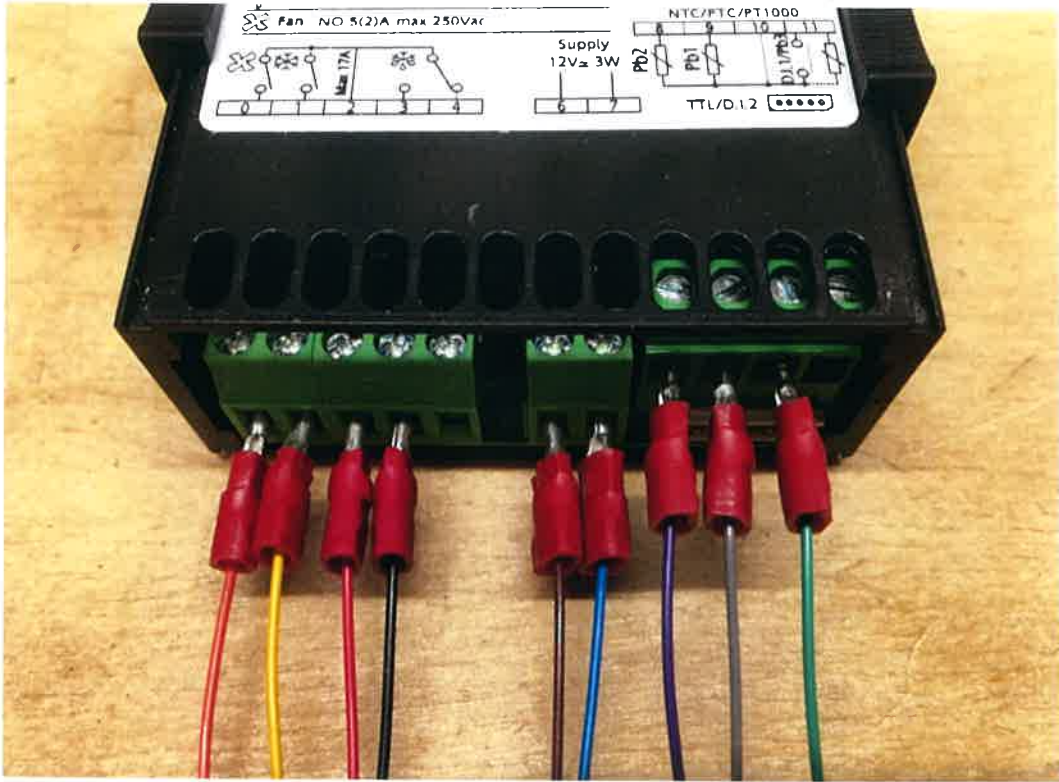
The Ellewell controller is pre programmed to a water target temperature 29 degrees C, but a new pool target temperature can be programmed in the following way:

Press the "up" key twice. The existing pool target temperature will be displayed.

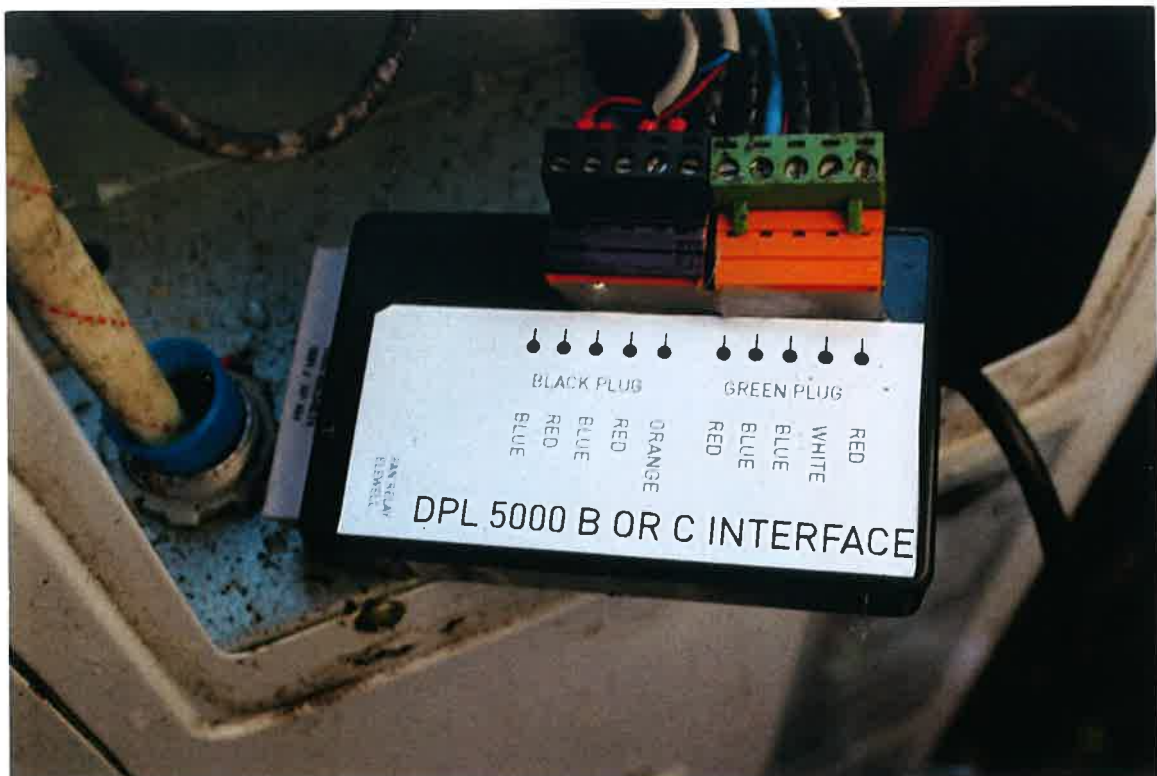
Use the "UP" or "Down" buttons to program in a new target temperature.

Display will then revert back to displaying the current pool temperature.

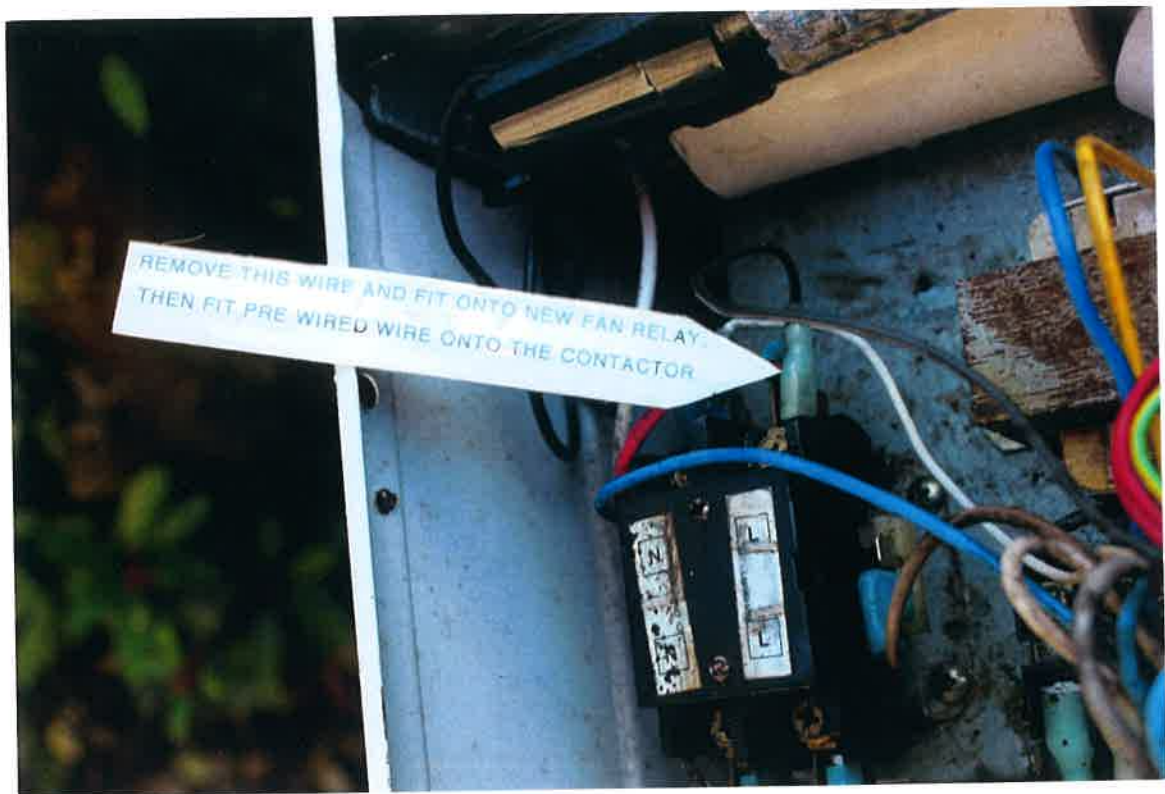
**Fig 1**



**Fig 2**



**Fig 3**



**Fig 4**

