AQUAHEAT 5 RO

Instruction Manual





DESCRIPTION

The H5RO controller will operate a pump and heater from a Sanitiser timeclock. A heater cool-down is performed when the chlorinator output switches off.

The system temperature is controlled by the Gas Heaters internal control system.

The H5RO is fitted with an LCD screen which displays whether the pump or heater is on or off, when it displays 'cooldown' the pump is running with the heater switched off.

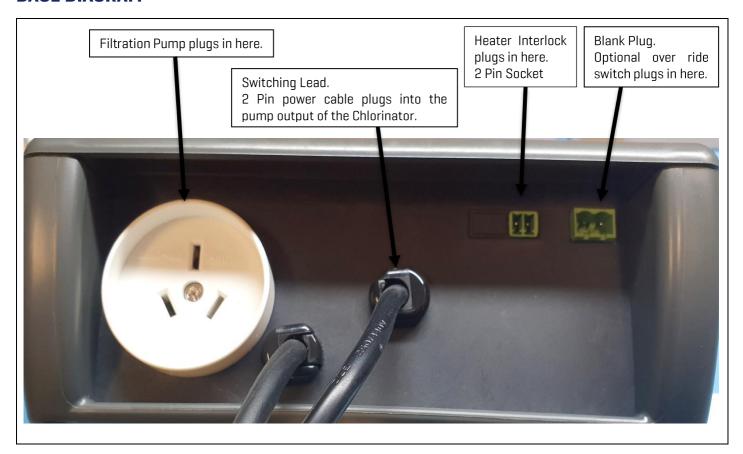
INSTALLATION INSTRUCTIONS

THIS APPLIANCE IS NOT INTENDED FOR USE BY YOUNG CHILDREN OR INFIRM PERSONS WITHOUT SUPERVISION. PLEASE ENSURE THAT YOUNG CHILDREN ARE SUPERVISED TO ENSURE THAT THEY DO NOT PLAY WITH THE APPLIANCE.

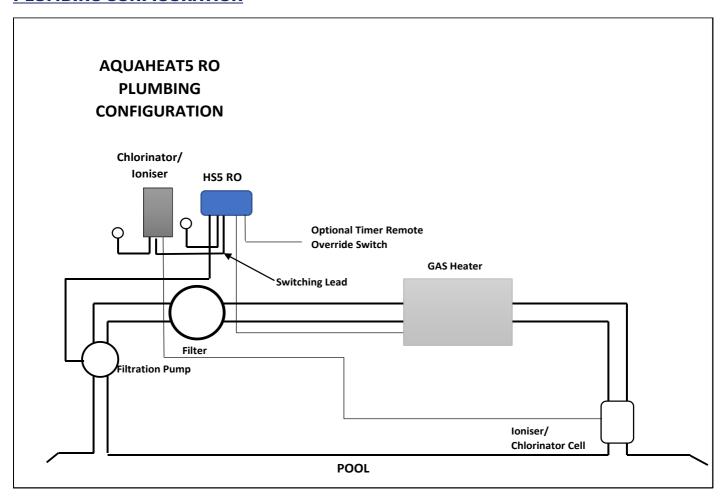
Ideally, as with all pool equipment, the controller should be installed out of direct weather.

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CONTROLLER MOUNTING	Find a suitable location to mount the control box. The controller should be no closer than 3m from the water's edge and a minimum 600mm above ground. The power cable is 1.8m long and should be plugged into a general power outlet, not into an extension lead. Fix the mounting bracket to a solid structure with the screw and wall plug kit provided. Slide the controller on, locking it into place. Adjust the screws on the back of unit to ensure a snug fit. To remove unit, lift and gently pull away from structure.	
PUMP CONNECTION	The Filtration pump plugs into the 240V socket labelled OUTPUT. The maximum load is 9.98 AMPS at 2395W.	
SANITISER CONNECTION	The sanitiser (Ioniser, Chlorinator, etc.) connects directly into a general power outlet, not in an extension lead . Plug the Black (2 Pin) power lead from H5RO into the pump output of the sanitiser. Set the sanitiser to operate the required filtration and dosing requirements.	
HEATER CONNECTION	Set the heaters temperature limit to maximum (40°C). The heaters internal control will be interrupted, to turn off heating. The heater interlock cable connects to the green socket marked INT which switches on (closes) the voltage free NO/C relay contacts when the heater is to be turned on. The heater end of the interlock cable connects in series with the heater's pressure/flow or fireman's switch. However, contact the heater manufacturer for the best location to connect to. The heater interlock is for extra low-voltage (MAX 24V at 1Amp) switching only. Note: If the heater's Flow, Pressure or External switching circuit is 240Vac, an external relay kit (can be purchased separately), is to be installed by a licensed electrician. For Internal connection to pool heater (check with heater manufacturer). Illustration of a typical installation to the heaters pressure or flow switch. Pressure or Flow Switch Wiring Loom CONTROLLER CONTROLLER CONNECTION Heater Internal Pressure or Flow Switch	

BASE DIAGRAM



PLUMBING CONFIGURATION



OPERATING INSTRUCTIONS

LCD SCREEN	The LCD screen displays the current mode of operation, pump on status, and the on/off/locked-out status	
LCD INDICATORS	There are arrow icons on the LCD screen that indicate what actions the controller should currently be doing. These arrows point to text on the label.	
MODE BUTTON	Pressing this button changes to the next mode of operation. Once the mode button is no longer being pressed then the selected mode of operation is automatically saved. • Auto Mode (Auto) is the normal operating mode for heating the pool during the sanitisers set run time. • Backwash Runs pump manually for maintenance. Best performed outside of the sanitisers set run time. • Heat Off operation is for off-season/holiday maintenance or if pool heating is not required, and will not perform heating when control is called for. Note: This is a better option than turning the controller off, as it will flush treated pool water through the heating system, prolonging circulation pump bearing and mechanical seal life. Pump will run for 3 minutes a day at 12pm. **The factory default MODE is AUTO MODE	
ENTER BUTTON	Pressing the ENTER button will turn on the LCD backlight. Pressing the ENTER button while the backlight is lit will enter the SETTINGS MENU. The following will be displayed: 1) EXIT, the menu system can be navigated using the ↑ or ↓ buttons. All selectable and changeable values will flash on the LCD screen. Press the ENTER button to accept the currently displayed (flashing) item.	
OPTIONAL OVERRIDE SWITCH	An optional override switch can be installed in a different location that is convenient (ie: inside a house or closer to the pool) so that the controller can override the pre-set times and heat the pool on demand. Using the optional override switch function will turn the heater and pump on even if the controller is set to Heat Off. The controller will display - Override, then Heat On, then Pump On. When the override switch function is used, the controller will continue to run the pump and heater until the override switch is turned off. The controller will then run the pump for its set cool down period. Once the cool down period is finished, the controller will return to its automatic operation. The Optional Override Switch is connected to the controller using the red plug located in the bottom panel of the controller. **Override switch and cable are Not included with the controller and need to be purchased and installed separately.	



All menu items are shown below:

1) EXIT

2) SYSTEM

1) EXIT	Will save changes and return to automatic operation.	
	EXIT - Press ENTER on this menu to return to automatic operation. INSTALL -	
	• SET RUN ON TIME - OFF MINUTE(S) (RANGE = OFF-30 MINUTES)	
	When the heater switches off the pump is locked to run for a time period without heating, this is to cool down the heater and prevent damage to the heater (and pipes) from heat soak.	
2) SYSTEM	Set run-on time (R XX MIN) is adjustable from 1 to 30 minutes. • SET HEATER DELAY - OFF MINUTE(S) (RANGE = OFF-30 MINUTES)	
	When the system is set to heat, the pump is started but the heater start is delayed. Delay time (P XX MIN) is adjustable from 0 to 30 minutes, with 0 being OFF (no delay).	
	LCD TIME – Adjust the number of seconds the backlight remains on after the time a button was pressed. [Select NONE for always on.]	
	DEFAULT – Restore the controller back to factory defaults.	

- 1. If any of the menu items are left unattended for 3 minutes the menu will time out and automatically save all settings and return to automatic operation.
- 2. Should power be interrupted for any reason, the controller will resume normal operation when power is restored. All settings are kept for up to 10 days.
- 3. If the controller has stopped the pump and is displaying a higher temperature than expected it may be caused by a pump which is failing to prime. Check the pump and if necessary, prime the pump as per the pump manufacturers' instructions. Then reset the controller by turning it off/on.

NOTES:

- 4. MAX combined rated output load for the 240V socket(s) is 9.98 Amps / 2395 Watts.
- 5. Degree of protection against moisture: IP33.
- 6. Store pool chemicals safely, at least 3 metres away from all pool equipment.
- 7. On power-up there is a counter next to the revision number that displays the number of interrupted heater cool-down cycles. This number cannot be reset.
- 8. A voltage free switch can be wired into the right-hand (Red) plug, which will force heating outside of the set Heating Run times. The Override switch will need to be turned off for the controller to return to normal operation. Otherwise the controller will continue heating the system.

WARRANTY

- This range of product is covered by a limited 3 year warranty against component failure or faulty workmanship from the date of installation.
- Faulty units should be returned in the first instance to the dealer from which the unit was purchased. (Return to Base)
- Damage to the unit due to misuse, power surges, corrosion from pool chemical fumes, lightning strikes and or installation that is not in accordance with the manufacturer's instruction may void the warranty.
- Warranty does not include on-site labour or travel costs to or from installation site.

If the power cord is damaged, do not use the controller. Return the unit to the supplier for repair.

CUSTOMER RECORD (To be retained by the customer)

DEALER/INSTALLER NAME				
SERIAL NUMBER				
DATE INSTALLED				

For service assistance visit www.dontek.com.au

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TROUBLE SHOOTING

NO POWER TO THE DISPLAY:

Power point is faulty. Test power point with a known working appliance. If the power point is operational, check the controller in another power point and if there is still no display then send the controller for repair.

RTC-FAIL – This can occur if the unit has been turned off for a prolonged period of time, leave the unit on for ~30 seconds, then turn it off for ~30 seconds before turning it back on.

PUMP FAULTS:

PUMP WILL NOT START:

The pump will only ever run for the purpose of automatic heating if the pool is below the temperature limit.

Check the set run times in the sanitiser.

The pump may also run for Backwash and Override operations. If the pump does not operate then plug the pump into a power point and test operation, if the pump is OK then the controller requires repair.

PUMP WILL NOT STOP:

Turn off power to the controller and ensure the pump stops. If the pump continues to operate then unplug it from the power point and connect it to the 240Vac socket marked PUMP at the bottom of the controller.

POOL NOT HEATING:

Check the Sanitiser settings to ensure that the filtration settings are correct.

Check and ensure that the Heater Interlock cable is connected to the plug properly and that the plug is pushed in.

Check and make sure that the heater has power connected, and has appropriate heat limit settings installed.

Check and ensure that the Heater Interlock cable is connected to the appropriate position inside the heater, <u>according to the heater manufacturer's instructions.</u>

If the controller is in Heat Off, the controller won't heat the pool using the heater. If heating is wanted or required, switch the controller back into Auto Mode to constantly heat the pool. The other option is to use the Override switch option to heat your pool if it will be a once only occasion.

FACTORY RESET:

Hold down ENTER when power is off, hold down after powering up, releasing after 5 seconds.

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