INSTALLATION AND OPERATING INSTRUCTIONS



Genus IV Pool and Spa Controller (Version 7)

INSTALLATION AND OPERATING INSTRUCTIONS



Melbourne: 03 8796 8600 Sydney: 02 9853 2100 Brisbane: 07 3308 5400 Gold Coast: 07 5552 2600 Townsville: 07 4750 3100 Adelaide: 08 8152 7600 Perth: 08 9350 2600 sales@astralpool.com.au www.astralpool.com.au A division of

OPERATION INTRODUCTION

Introduction	3
Components	3
Touch Pad Console (with filter time clock)	3
Operation	3
Setting the Clock	4
Setting a Timer	
3 Speed Pump(Viron P300 not included)	
Heat Demand	5
Cleaner Interlock	
Override Switch	6
LCD Display	7
Indicator Lights	8
Fault Indication	8
Remote (second) touch pad console	8

INSTALLATION & CONFIGURATION INSTRUCTIONS

Console	9
Plaster Wall Bracket Installation	10
Heater/Pump Connection	10
Power Supply Module Mounting Bracket	
Chlorinator Connection	11
Programming / Configuration	12
Valve Connection and Configuration	
Warranty	

INTRODUCTION

Congratulations! You have purchased a high quality Genus IV Pool and Spa Equipment Centre. Please read the instructions carefully and your purchase will provide you with years of trouble free use.

Note:

The appliance is not intended for use by young children or infirm person without supervision. Please ensure that young children are supervised to ensure that they do not play with the appliance.

COMPONENTS INCLUDED

- 1 x Power Module / Equipment Centre
- 1 x Console / Touchpad
- 1 x 10m Cable for Heater Connection
- 1 x Flush mount Spa Side kit
- 1 x Installation and Operation Manual
- 1 x Set of mounting Screws

TOUCHPAD CONSOLE (WITH FILTER TIME CLOCK)

The touch pad console will display the status of the Heater as well as that of the accessories operated by the Console Unit. The touch pad Console has a Clock with 4 inbuilt timers to control the filter pump which can be set to turn the Aux 1 on and off in multiples of 15 minutes. You can use all four timer periods, only a few or none at all.

OPERATION

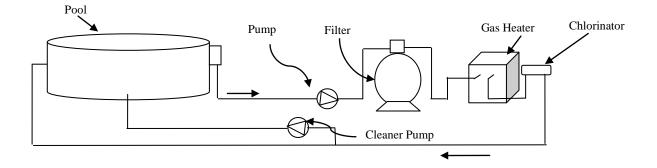
Your touch pad Console has multiple functions which are explained below;

On/Off	Turns the Heater On or Off
Warm	Increases the Pool/Spa Set Temperature
Cool	Decrease the Pool/Spa Set Temperature
Aux 1	1 - Turns Aux 1 permanently ON H, M, L – Changes Pump Speeds if Viron P300 pump is installed
(Normally Filtration Pump)	T –Turns Aux 1 ON during Time Clock hours. (no symbol) – Turns Aux 1 permanently OFF.
Aux 2 or	Turns Auxiliary 2 On or Off or, when enabled or
Cleaner Interlock	Synchronises Aux 1 to turn on during operation.
Aux 3: or	Turns Auxiliary 3 On or Off or, where enabled, or
Pool/Spa	Changes between Pool/Spa Setting
(VX S Model chlorinators ins	talled will automatically change between Pool and Spa Chlorine Output setting also)
Aux 4	1 - Turns Aux 4 permanently ON T - Turns Aux 4 ON during Time Clock hours. (no symbol) – Turns Aux 4 permanently OFF.
or	or
Heat Demand	Turns the dedicated heater circulation pump on to sample water temperature during set hours and maintains desired water temperature.

- 1. Ensure that the Heater On/Off button is in the 'Off' position.
- 2. While holding the "Warm" button down press the "Cool" button momentarily. The screen will display 'Set the Clock'. Press the 'Warm' button for Yes or 'Cool' button for No.
- 3. Set the hour using the Warm and Cool buttons. Once the hour has been set push the On/Off button
- 4. Set the minute using the Warm and Cool buttons. Once the minute has been set push the On/Off button to confirm the time set.
- 5. The system will now ask you if you wish to set the timers. Press the warm button for Yes or Cool button for No.

SETTING THE TIMERS

Introduction: The Genus IV system caters for swimming pools with a dedicated cleaning pump for pressure cleaners. When the dedicated cleaning pump is plumbed in line with the filtration system, the filter pump must always operate at the same time as the dedicated cleaner pump.



The timer settings change depending on the configuration or your system.

If system is set with Cleaner Auxillary on – you will have 2 x Filter Periods 2 x Filter and Clean Periods. 1 x Aux 4 or Heat Demand

If system is set with Cleaner Auxillary off – you will have 4 x Filter Periods 1 x Aux 4 or Heat Demand

- 1. Ensure that the Heater On/Off button is in the 'Off' position.
- 2. While holding the Warm button down press the Cool button momentarily.
- 3. The screen will display 'Set the Clock'. Press the warm button for Yes or Cool button for No.
- 4. If 'No' is pressed, the system will now ask if you wish to set the timers.
- 5. Set the desired Aux 1 start time using the Warm and Cool buttons then press the On/Off button to confirm.
- 6. Set the desired running period. Then press the On/Off button to confirm.
- 7. Repeat steps 3 to 4 to set multiple timers.
- 8. The last timer will be for Aux 4 or Heat Demand if enabled, this can be set in the same manor as Aux 1/Filter Pump timer.
- 9. Press the On/Off button until the screen displays DONE. Release button and console will return to normal operation.

3 SPEED PUMPS (VIRON P300)(NOT INCLUDED)

The Genus IV control system has the ability to control the speed of the Viron P300 3 speed high efficiency pump.

The advantage of the Viron P 300 is its extremely low operating costs, reduced CO2 emissions and low operating noise. The speed of the Viron pump is controlled via the touch pad on the motor of the pump.

However, the your Genus IV Control system will allow speed control of your pump via the touch pad console.

When a Viron P300 pump is installed, the filter timeclock period should be set for 12 hours per day. For example, set the on period for 0800 hours and the operating hours for 12 hour operating period. In this case, the pump will turn on at 8.00 am and turn off at 8.00 pm.

Do not set the pump timer period to span midnight.

To enable the 3 speed function on the system, refer to page 13.

Refer to Viron Pump instructions for explanation of the operation and speed settings of the Viron Pump.

- The Viron P 300 has 3 speed settings low, medium and high. High Speed should be used when vacuuming the pool or operating spa jets or some water features such as water falls. Medium speed can be used for gentle spa jet action, or filtration for the pool. Low speed is the recommended setting for everyday filtration of your pool.
- The Viron P300 will automatically start on high speed for the first 5 minutes to assist in priming and substantially fill the hair and lint pot with water. After 5 minutes the pump will revert to the last speed it was set at before it was turned off.
- 3. During normal operation, it is recommended that the pump be operated on low speed for 12 hours per day. This will achieve the lowest operating costs with the lowest noise level. Should your pool have areas where water is not turning over when pump is on low speed, increase the speed setting.

When selecting Spa mode on the Genus Touch Pad Console the Viron Pump will automatically switch to High Speed to allow effective spa jet action.

If you have a gas heater connected to the Genus IV System, the Viron Pump will automatically switch to medium speed when the heater ignites. This ensures there is sufficient water flow to efficiently operate your gas heater.

When selecting backwash mode on your Hurlcon VX or E Series Chlorinator (if installed) the Viron Pump will automatically switch to high speed to ensure ideal backflow velocity through the filter media bed.

HEAT DEMAND

Heat Demand is an automatic function for maintaining desired water temperature in pool or spa. When configured to be active, the pump supplying water to your heater can be programmed to sample actual water temperature; this sampling period will last for a 3 minute period and will happen every hour. If water temp is below desired or set point temperature and the heater is left in the 'ON' mode, the heater will operate and continue to run until the desired temperature is reached.

The operation hours of the Heat Demand function can be programmed. (see above) This feature is so you can limit the running hours of pump to reduce noise outside of daylight hours

If heater is installed with separate circulation pump, Heat Demand function can be configured to control Auxiliary 4 Heater Pump as your Heat Demand Auxiliary.

CLEANER PUMP INTERLOCK

The Cleaner Interlock Aux 2 (if configured) is for systems with a dedicated Cleaner Pump installed (as described above). When the cleaner pump is activated either by time clock or manually, the Filtration Pump (Aux 1) will automatically turn on and of in unison. If system is left in the spa mode, the cleaning pump will not turn on. This is to stop cold water being returned to the spa. Once system is returned to pool mode, cleaning pump will return to normal operation.

AUX 1 EQUIPMENT CENTRE OVERRIDE SWITCH

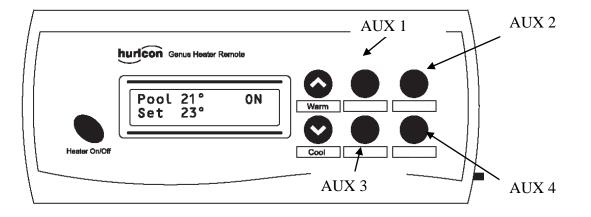
The Aux 1 (Filtration Pump) override switch is located on the front of the control unit in case you should require manual control of the pump for the purposes of backwashing, maintenance, etc.

This switch should be in the "Auto" position for normal remote and timer control.

The "On" position turns the pump on regardless of the timer and remote control settings.

The "Off" position prevents the Aux 1 operating regardless of the timer and remote control settings.

When a VX S model is connected to the system, The Overide switch should remain in the on position during normal operation. When backwashing, the pump can be operated using the On/Off/Auto button of the Salt Chlorinator



The Handset (with or without timer) displays a set of alpha numeric symbols to indicate the operating status of the Heater and Control Unit.

1	Aux 1 is turned on	No action		
CONSTANT	Aux 1 in Timer mode (out of period)	No action		
FLASHING	Aux 1 in Timer mode (in set period)	No action		
2	Aux 2 is turned on	No action		
3 Note: When o	Aux 3 turned on configured as a Pool/Spa System, numbe	No action er 3 will not be displayed.		
4	Aux 4 turned on	No action		
4 FLASHING	Aux 4 in Heat Demand/Timer mode	No action		
	Aux 2 in Cleaner mode (in set period)) No action		
н	High Speed (Only with 3 speed Pump)	No action		
Μ	Medium Speed (Only with 3 speed Pump)	No action		
Low Speed (Only with 3 speed Pump) No action				
\bigcirc	Sufficient water pressure to operate heater.	No action		
*	Thermostat calling for heat. Electronic Ignition operating. f	No action, heater should ignite in a few seconds.		
HX, JX & MX & Viron Heaters Only:				

Burner system has ignited and

is operating.

No action

INDICATOR LIGHTS

Constant Indicator Light -	Aux Channel is in auto and will run during timer periods.
Flashing Indicator Light-	Aux Channel is in auto and is operating during a timer period.
No Indicator Light-	Aux Channel has been turned off and will not operate even during a timer period.

FAULT INDICATION

Under fault conditions, the thermostat display will indicate a set of alpha numeric symbols to indicate the status of the heater. The meaning of each symbol and action to be taken are listed as follows:

SYMBOL	MEANING	ACTION
Temp Display	Unit has power.	No action.
F0	Heater locked off, thermistor wire disconnected or water at 0°C (freeze condition)	If water temperature greater than 0°C, call for service.
F1	Thermostat reads greater than 45°C.	Allow water to cool, turn heater off then on again.
F2	Mechanical Hi Limit greater than 45°C. o	Allow water to cool, turn heater off then n again.
F3	Thermistor fault	Phone for Service
F4	Flame Rollout Protection	Phone for Service
L	Heater locked out on time delay for 2 minutes.	No action. Heater will automatically reset after time delay. Or switch off then on again for immediate ignition.

REMOTE (SECOND) TOUCH PAD CONSOLE

A second touch pad console may be installed to allow operation of your pool equipment from another location. To operate, the second touch pad must have the time clock programs disabled. This prevents two touch pad consoles conflicting with each other. Timer and set up programming of the Genus System MUST be done via one console only. The second console is used only to operate equipment once the system has been set up. Refer to page 13 for instructions on how to disable time clock programs on your second touch pad console.

POOL AND SPA EQUIPMENT CENTRE

INSTALLATION AND CONFIGURATION

WARNING!

- The Genus IV timer console, additional console, FM remote and Plus 4 console are connected to the Power Supply Module, Hurlcon Heater and Salt Chlorinator and Viron P300 Pump by 6 wire flat cable with RJ12 connectors.
- The Cable with RJ12 Connection to the Pool Heater and Handset must be installed before power is supplied to the Power Supply Module.
- The combined load of equipment operated must not exceed 40 Amps.
- The Power Supply Module must be hard wired by a licensed electrician. To avoid a safety hazard, the supply cord if damaged, must only be replaced by Hurlcon, or its service agent or a suitably qualified person.
- An approved Isolation Switch must be installed in the electrical supply to the Power Supply Module.
- The Pool and Spa Equipment Centre 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 Pool and Spa Equipment Centre.
- The FM Control handset is not water resistant. Therefore water must be avoided.

TOUCH PAD CONSOLE CONNECTION

The method of installation will depend on the surface the Remote Control is intended to be fixed to. Below is a guide to where each method would be most suitable.

The Handset is supplied with two types on mounting systems. Surface Mount and Flush Mount Kits. The flush mount kit is attached during shipping. Unscrew the Flush Mount cover of the Handset and feed the 6 wire flat cable through the round hole in the back cover on the mounting bracket selected for installation. Connect it to the RJ12 socket on the PCB. If the Surface mount bracket is used, attach this to the wall using appropriate fixing screws, once RJ 12 Cable is attached clip the console into place.

If the Surface Mount Bracket is used, feed the cable under the off-set plastic tabs or directly through the wall. Then attach the RJ 12 Cable and clip the console into place.

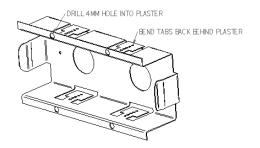
The Remote Control is supplied with a Flush mount Spa Side kit containing rubber grommets and double sided tape for mounting in wet areas. Grommet is to be fitted on the rear of the unit where the RJ12 cable connects to the rear of the housing. The double side gasket should be fitted around the flange or the unit.

Note – when installing into plaster or similar use the plaster wall mount bracket. See below for installation instructions.

The cut out size for flush mounting is 182mm x 70mm.

PLASTER WALL BRACKET INSTALLATION

- 1. Cut hole in plaster 182mm x 70mm
- 2. Using mount bracket as a guide drill 4 screw holes 4mm diameter.
- 3. Feed RJ12 cable through left side square cutout. Push bracket back into hole and bend the four tabs behind the plaster.
- 4. Screw 4 off 6# Countersunk screws (supplied) through the top and bottom holes into the tabs. The tabs will tighten behind the plaster.
- 5. Remove the back cover of the Flush mount style heater remote. Feed the RJ12 cable through the back cover.
- 6. Connect cable to RJ12 connection on circuit board and re-assemble remote console.
- 7. Push complete console assembly into Plaster wall bracket.



MX HEATER CONNECTION

- 1. Turn power off to heater.
- 2. Remove front heater door.
- 3. Remove the 2 screws securing the control panel and detach.
- 4. Feed RJ12 cable through hole located just above the gas inlet hole and through one of the holes in the underside of the control box.
- 5. Connect the RJ12 cable to either one of the RJ12 Sockets on the thermostat.
- 6. Re-assemble the control panel and door.
- 7. Your Remote Control is now ready for operation.

HX HEATER CONNECTION

- 1. Feed the RJ12 cable though the whole located in the bottom left hand corner of the front door.
- 2. Connect the RJ12 cable to either one of the RJ12 Sockets on the thermostat.
- 3. Replace front heater door.
- 4. Your Remote Control is now ready for operation.

JX HEATER CONNECTION

- 1. Feed the RJ12 cable though the whole located on the bottom of the heater.
- 2. Connect the RJ12 cable to either one of the RJ12 Sockets on the rear of the thermostat.
- 3. Close the front heater door.
- 4. Your Remote Control is now ready for operation.

3 SPEED PUMP CONNECTION -

- 1. Turn power off to Pump.
- 2. Loosen gland at rear of capacitor cover on P300 pump.
- 3. Connect RJ12 cable in connection socket (Cable not supplied)
- 4. Your Remote Control is now ready for operation.

POWER SUPPLY MODULE MOUNTING BRACKET

The Power Supply Module comes with a wall mounting bracket so it can be securely fixed to any wall. The Power Supply Module must be hung where it is protected from direct sunlight and rain (IPX3).

- 1. Remove wall mounting bracket from Power Supply Module by un-doing the screw located near the pump socket.
- 2. Screw mounting Bracket to wall.
- 3. Engage the Power Supply Module's top rear edge with the joggled section on the top of the bracket.
- 4. Align the screw hole in the underside of the Power Supply Module with the hole in the lower face of the mounting bracket and secure.

Total load of equipment connected the Genus IV unit is not to exceed 40 amps.

CONNECTION TO HURLCON SALT CHLORINATORS

The VX s Model Chlorinator control needs to be connected to the equipment centre via a remote cable. To connect the cable from the Chlorinator Control to the equipment centre, do the following:

- 1. Turn off the mains supply to the equipment centre.
- 2. Plug one end of the RJ12 cable into the RJ12 socket that can be found on the underside of the Power Supply Module. (Cable not supplied)
- 3. The other end of the cable must be plugged into the VX 'S' model chlorinator.
- 4. Connect the chlorinator mains plug into the pump outlet of the Power Supply Module.
- 5. Plug the pump into the power socket located on the underside of the VX chlorinator.
- 6. Set the Pump override switch to the **Off** position.
- 7. Turn on the mains to the Equipment centre.
- 8. Whilst holding down the Backwash and Power level up buttons, turn the Pump override switch to **ON**. The Chlorinator should indicate a S for system after the model setting.

NOTE: The pump Override switch should no longer be used in the "Auto" Position. It should be left in the On position for normal operation and off for maintenance.

INTERFACE FOR NON HURLCON SALT CHLORINATORS (OPTION)

- 1. Connect the male 4 pin plug into one of the female 4 pin sockets of the Power Supply Module.
- 2. Cut the sense wire on Salt Chlorinator and crimp in blue wires from Salt Chlorinator Interface.
- **Note:** If Chlorinator output is disabled when in Pool mode, swap white and red leads inside Salt Chlorinator Interface.

The Genus IV control needs to be correctly configured to suit the setup that you require As a default, it is set-up as a 4 function system with no Pool/Spa valve actuation, no Heat Demand and no Cleaner Pump. To reconfigure, follow the procedure below:

ON THE HEATER

While the Heater Thermostat displays "Off", hold the "On/Off" button and press the following combination:

Configuration	Button Sequence	Thermostat Displays Briefly	
4 Function Mode(default)	Warm, Cool, Warm, Cool	RLY - AUX 2	
Pool/Spa + 3 Function Mode	Warm, Cool, Warm, Warm	RLY – POOL SPA OFF	

Temperatures can be displayed in either Celsius or Fahrenheit. Again

While the Heater Thermostat displays "Off", hold the "On/Off" button and press the following combination:

"Warm, Cool, Cool, Cool"	\rightarrow	Degree Celsius (Default Setting)
"Warm, Cool, Cool, Warm"	\rightarrow	Degree Fahrenheit

If a 3 speed pump, Plus 4 system, Infloor Cleaning Pump or Heat Demand configuration required, the following programming instructions must be followed.

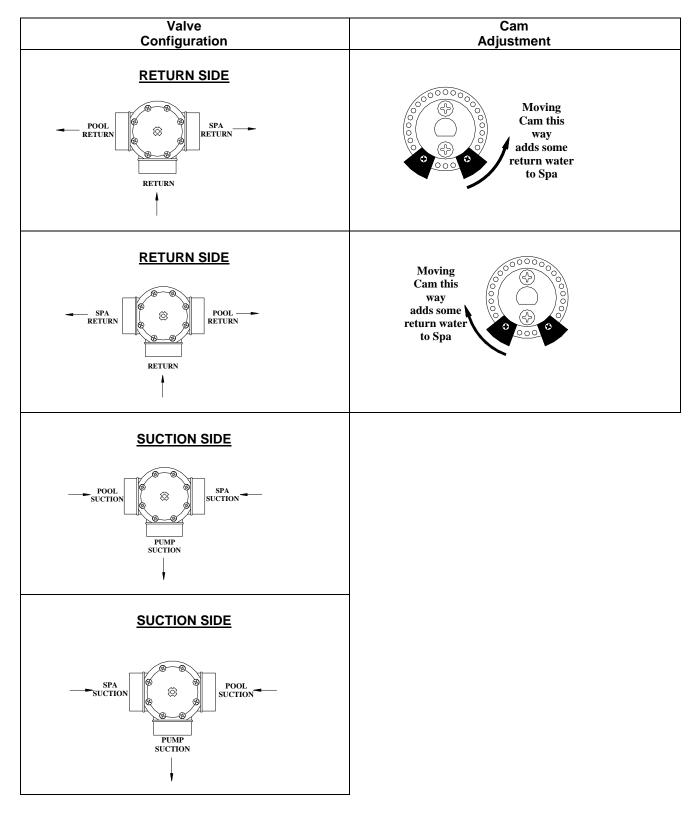
(See next Page)

ON THE CONSOLE

While the Genus III/IV Console Heater setting displays "OFF", hold the "ON/OFF" button down and press Cool, Warm, Cool

Configuration	Button Sequence		
Timer Console	Warm		
or	or		
No Timer Console (second console)	Cool		
Note: Only one console per system can be activate			
programmed in timer mode , syste	m will fail without warning.		
8 function mode (Plus 4 unit connected)	Warm		
or	or		
4 function mode (no Plus 4 unit)	Cool		
Cleaner ON	Warm		
or	or		
Cleaner OFF	Cool		
Heater Pump CH1	Warm		
or	or		
Heater Pump CH4	Cool		
Heat Demand ON	Warm		
or	or		
Heat Demand OFF	Cool		
3 Speed Pump	Warm		
or	or		
No 3 Speed Pump	Cool		
If no is selected, The menus changes will be comp seconds, system will resum			
Pump Filter Speed Medium - YES	Warm		
or	or		
Pump Filter Speed Medium - NO	Cool		
Pump Filter Speed High - YES	Warm		
or	or		
Pump Filter Speed High - NO	Cool		
Pump Filter Speed Low - YES	Warm		
or	or		
Pump Filter Speed Low - NO	Cool		

Valve Connection and Configuration



Your Function Remote with Temperature Adjustment is covered by a limited 12 month warranty against defective parts and faulty workmanship (plus 30 days to allow for installation).

To make a warranty claim you must return your Pool & Spa Equipment Centre to Hurlcon's factory freight prepaid and Hurlcon will repair or replace it (at its option) and return it to you.

Should a fault occur, call Hurlcon or an Authorised Hurlcon Service Agent. There are no user serviceable parts. Always turn off and disconnect power supply when removing Power Supply Module.

Limitations

All warranties only apply if the equipment is installed and operated in complete compliance with the installation and operating instructions.

Specific limitations and exclusions include but are not limited to, water ingress into Power Supply Module and Remote Control, excessive appliance current load on any one or number of power outlets, misuse or abuse whether intentional or accidental.

Hurlcon assumes no liability for consequential damages of any kind. In field labour warranty is applicable in capital city metropolitan areas and within a 20 km radius of Hurlcon Authorised Service Agents. Should you request a warranty service call and the problem is diagnosed as non-warrantable, you will be charged for a diagnostic service call plus any parts and labour required to repair the Multi-Function Remote Controller. No person is authorised to make any representations on behalf of Hurlcon.

Commercial Installation

On Commercial Installations, such as health clubs, motels/hotels and hydrotherapy facilities, parts and in field labour warranty (in capital city metropolitan areas and within a 20 km radius of Hurlcon Authorised Service Agents) is 12 months from the date of purchase plus 30 days to allow for installation.

ASTRALPOOL Pty. Limited. A.B.N. 97 007 284 504 www.astralpool.com.au email: service@astralpool.com.au Information and specifications subject to change without notice.

Victoria:	New South Wales:	Queensland:	South Australia:	Western Australia:	Gold Coast:	Townsville:
Ph: (03) 8796 8600	Ph: (02) 9853 2100	Ph: (07) 3308 5400	Ph: (08) 8152 7600	Ph: (08) 9350 2600	Ph: (07) 5552 2600	Ph: (07) 4750 3100
Fax: (03) 8796 8670	Fax: (02) 98532170	Fax: (07) 3308 5470	Fax: (08) 81527670	Fax: (08) 9350 2670	Fax: (07) 5552 2670	Fax: (07) 4750 3170

Genus IV Pool & Spa Controller (Version 7)

16