



# HAYWARD®

## Technical Updates for Pool Professionals

**See below for this month's updates.**

And visit our Support Center on Hayward.com for immediate access to Troubleshooting Guides, Quick Reference Guides, Manuals, Parts Diagrams, and Instructional Videos.

<https://www.hayward-pool.com/shop/en/pools/support-center>

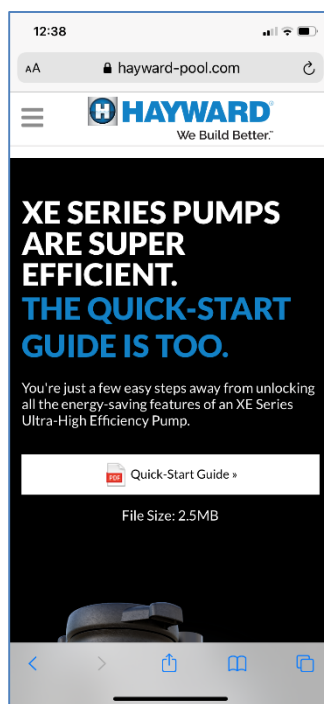
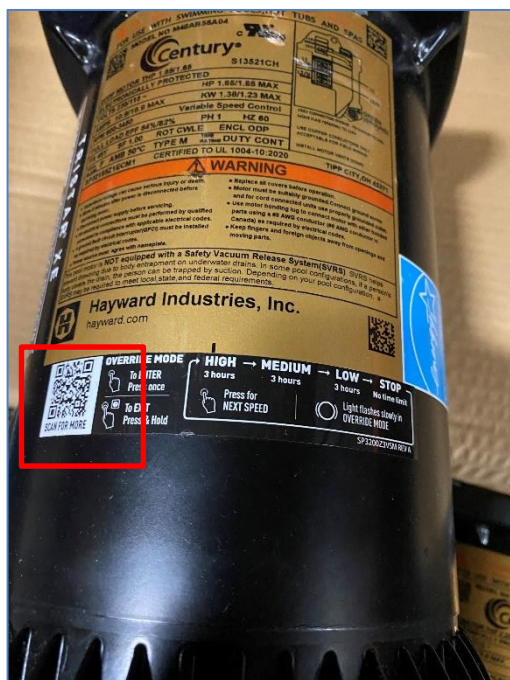
Product Info

### *October/2021*

- 1. Pumps: XE Pumps**  
Info to help with installation and programming
- 2. Heat Pumps: HP31204T**  
Info on the new control!
- 3. Controls: OmniLogic**  
Support for Omni firmware 1.4.7 and below to be discontinued.
- 4. Chemical Automation: AQR100**  
Information on repairing vs replacing this device

## XE Pumps have a QR code on the motor

The XE pump line has a QR code on the motor that will take the installer to a page that shows the quick start guide that has information on installation and programming the pump.



## HP31204T H/C heat pump control update

Beginning with serial number 21132110XXXXXX001 the HP31204T heat pumps will have control capability in cooling mode when paired with an OmniLogic controller.

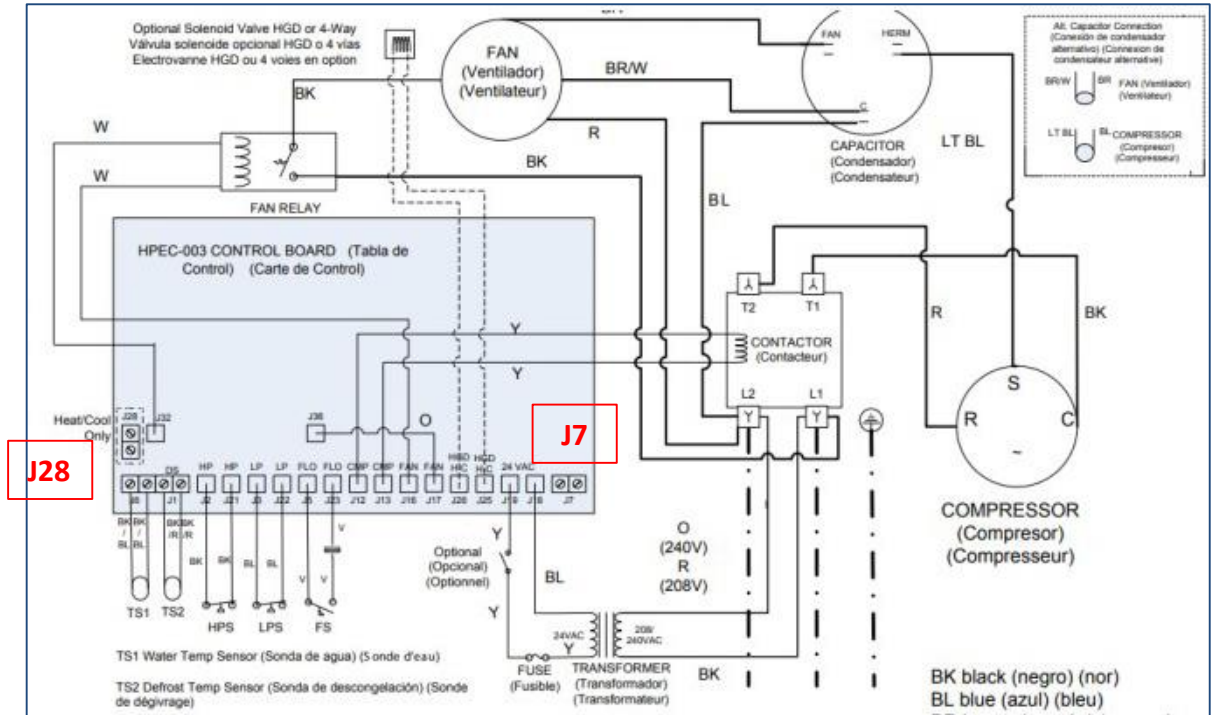
### **Key features of the new control:**

- **Auto setting:** This means that the user can set a single temperature and the control will shift from heat to cool as needed to keep the pool at that desired temperature.
- **Active Defrost:** This feature will allow the heat pump to heat at much lower ambient temperatures than previous HP31204T models. When defrost is needed the heat pump will temporarily reverse the refrigerant flow direction and divert the hot gas from the compressor into the evaporator coil to thaw any frost that may have formed. To make the heat pump as quiet as possible the heat pump will turn off briefly as it switches into and out of defrost mode.
- **Cooling function controllability:** This is a big one! The user will now be able to control the heat pump in cooling mode when connected to an OmniLogic control. This will require connection to **TWO** low voltage relays. One for heating and one for cooling.
  - The OmniLogic must be running R4.1.0 firmware
  - OmniHub will not support heat/cool at this point, but plans are in the works at a future date.
  - The minimum set point has been lowered to 55 on the OmniLogic .
  - The user must choose heat or cool on the OmniLogic at this point, but an auto change over is in the works for in a future firmware update.
- **Not Backwards Compatible:**
  - The new board is based on the existing heat only square platform heat pump board, and as such uses 4.8k temperature sensors. The previous HP31204T board uses a Goldline style 10k temperature sensor for water temperature, and it didn't have a defrost temperature sensor. There is not a 4.8k water temperature sensor available that will take the place of the 10k sensor. The 4.8k water temperature sensor is installed in a bulbwell that is molded into the heat exchanger.
  - The new control board will not mount in place of the existing control board so the entire electrical box would need to be swapped.
  - Other components within the electrical box have also changed, requiring rewiring the heat pump if there were to be a retrofit kit.
  - New control board part number is HPX51100026601

## HP31204T H/C heat pump control update

Connecting the new control to OmniLogic:

- Requires four wires total.
- Two for heating connected at terminals J7
- Two for cooling connected at J28
- Requires two low voltage relays



1. Connect the Heating remote relay to the J7 connection and the Cooling remote relay to J28 connection L(if applicable) on the control board.
2. Turn the unit on. Press and hold both the “MENU” and the “+” buttons until “bo” appears. This enables the bypass operation.
3. In bypass operation, when the relays are open the heater will be off. When the heating relay (J7) is closed, the heater will operate in heating. When the cooling relay (J28) is closed, the heater will operate in cooling. The temperature control is done remotely through the remote relays.
4. It does not matter which mode the heat pump is in (heat, cool, auto) when operated remote.
5. The heater will shut off when both relays are open or the inlet temperature exceeds 104°F.
6. If both relays are closed, the heater will operate in heating mode.

**Note: The unit must be “On” to operate in bypass mode.** In bypass operation “bo” mode, the heater will only respond to the remote relay closure. To return to local set point control at the heater, press and hold both the “MENU” and the “+” buttons until “n” appears. This enables the normal operation mode and the heater will respond to the local set point.

**Note:** All remote wiring must be run in a conduit separate from incoming power. Use 22 AWG wire for runs less than 30 feet. Use 20 AWG wire for runs over 30 feet. The maximum allowable run is 200 feet.

**The updated manual for all square heat pumps (Heat only and H/C ) is attached to email**

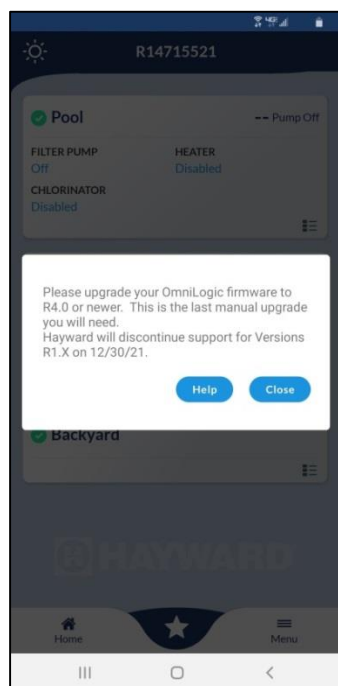
# Support for Omni firmware 1.4.7 or below will be discontinued 12/30

## What is changing:

- Will be discontinuing support for Omni FW version R1.0 to R1.4.7 at the end of this year.
- Anyone that still using firmware versions R1.0 to R1.4.7, will continue to be able to control their OmniLogic from the controller's display, but will no longer be able to use the app until they upgrade their Omni's firmware. As soon as the upgrade is performed, app connectivity will automatically resume.
- Hayward is not paying partners for this upgrade.
- There are 9247 users with firmware R1.4.7 or below installed.
- We are moving to upgrade our servers and are going to need to have everyone upgraded to R4.x.x very quickly. We are starting with firmware R1.0 to R1.4.7, but will be looking to upgrade all R2.x.x next year.

## How are users being notified:

- We have been informing pool owners about this upgrade since mid year. They have been receiving the pop ups shown below in their apps. If they press "Help", it will direct them to instructions on how to perform the upgrade. We always recommend that they use a professional.
- Anyone that has not upgraded between now and the end of the year, will receive three emails monthly directing them to upgrade their firmware.



## Servicing the AQR100

There has been a recent increase in whole unit replacements of the AQR100. After evaluating some of the returned units, the only problem discovered was a blown fuse.

Whenever possible, the AQR100 can and should be repaired in the field. Parts are available( see below ) to make repairs. Also available is a guide to assist with troubleshooting.

## Replacement Parts

Replacement Part Number	Description
CCELL	Replacement Cell Only
GLXAQR100CCABLE	Cell Cable
GLXAQR100PCORD	Power Cord
GLXAQR100CTL	AQR 100 Control Center Only
GLXAQR100DOOR	Door Flap for Display
GLXAQR100PCB	Main PCB
GLXAQR100VESNUT	Vessel/ Cell Nut
GLXAQR100XFMR	Transformer
SP3200UNKIT	Vessel Unions Kit
GLXAQR100VESSEL	Replacement Vessel(w/o cell)
GLX-F20A-10PK	Fuse Kit,20A/Yellow (10 pack)
GLX-DRK	Rectifiers