



Hayward Omni Control Products

Release Notes for Firmware Revision R4.1.0 MSP/WDT/WLT/EPG

June 15th, 2021

Features and Enhancements

Omni now has the ability to configure heaters that support both heat and cool. For this version, the heater can be placed in Heat mode or Cool mode. For future versions, it will be allowed to do both automatically. Solar heater can now run in cool mode when the cool mode is selected.

- **Heat Mode switched ON**
 - The body of water is heated as long as the filter pump is running, the set point has not been met and the water is below the set point by at least 2°F.
- **Cool Mode switched ON**
 - The body of water is cooled as long as the filter pump is running, the set point has not been met and the water is above the set point by at least 2°F.
- **Both Heat Mode and Cool Mode switched OFF**
 - All heaters/coolers are turned off and will not run even if the heater is enabled and switched ON.
- The **Solar Set Point** is a separate set point that applies only to solar devices.
- **In Heat Mode**, the solar set point must be greater than or equal to the main heater set point. Therefore the solar setpoint will move automatically 1°F above the main set point to support heat mode.
- **In Cool Mode**, the solar set point must be less than or equal to the heater main set point. Therefore, the solar set point will move automatically 1°F below the main set point to support cool mode.
- **Solar priority** will allow the solar heater or cooler to run alone to maximize the low cost of solar heat/cool.
- **Solar temperature** is displayed as “roof” on the heater screen.
- The “heater” feature in the BOW screen is now named “heat/cool”.
- Types of devices that support **heating and cooling**:
 - Heat Pumps
 - Geothermal
 - Solar
- Types of devices that support **heating only**:
 - Gas heaters
- Controlling Heat/cool via the **OmniLogic app** requires upgrading to the **latest** version of the app (**4.4.0**)
- Support for the new **ENS610EXT** Engenius HWLAN bridge. NOTE: To use WPS, hold the Engenius reset button for 2-4 seconds and upon releasing the orange LAN and WAN led lights will flash. They will continue the flash pattern until it associates with the router.

Firmware Revisions Included in this Release

R4.1.0 - **MSP_AR_R0401000** - Unified OmniLogic Control (OmniLogic, OmniPL and OmniHub)

After upgrading the MSP controller, the following firmware updates will be available over the air:

R4.1.0 - **WDT_AR_R0401000** - Unified OmniLogic Remote (Wired Wall Mount and Wireless Waterproof) to be downloaded over the air.

R4.1.0 - **EP_AP_R0401000** - OmniLogic Expansion Panel

Upgrade Steps

- Ensure that the MSP is connected to the network and that it is able to be controlled from the mobile app.
- Ensure that the MSP's date and time are set correctly and have the correct time zone selected for release R2.0.0 and later. Enable "Automatic get date from internet" by switching the button to ON and save by selecting the checkmark. For release R1.4.7, if the date and time is not correct, use config->date/time to set it correctly before upgrading.
- Firmware files used for the upgrades should be stored at the top level (root) of the USB (not placed in folders and subfolders).
- The preferred USB drive to use is the Sandisk Cruzer. USB drives must be 16GB or less.
- When swapping hardware, use the config wizard edit function to map the equipment to the new hardware, avoid using Factory Reset.
- The system no longer supports multiple pieces of equipment configured to the same relay, valve actuator or the same pump. They can be installed together, but can only have one icon for activation.
- **Always backup the Omni's configuration prior to upgrading the firmware**

To upgrade Omni Control Products:

Omni MSP Controller firmware to R4.1.0 from Release R3.2.2 and older :

1. Install firmware files onto an Omni compatible USB drive and place the drive into your Omni controller usb port.
2. **Back up your current configuration file by going to “config” > “backup config” > “Backup to USB”**
3. Place the system in service mode by pressing the power button in the lower left-hand corner and then select <service mode>
4. Read the warning message and then select “Yes”
5. Press the down arrow at the bottom of the first service mode screen and then select “Upgrade”
6. Select <MSP> from the list of devices and press the checkmark.
7. Next press <USB>, then navigate to the file <MSP_AR_R0401000>, then press the checkmark (the same image can be used to upgrade both the OmniPL and the Omni Hub controllers)
8. Press the checkmark again to begin the upgrade
9. When the upgrade has finished, press the checkmark and the system will reboot.

Recommended steps to upgrade over the air for Release R4.0.0 and later:

1. Ensure that the MSP is communicating with the mobile app.
2. Ensure that the time clock and time zone on the MSP is correct.
3. When you see the “upgrade available alarm”, follow the instructions below to complete the upgrade. If you dont not see the alarm try rebooting the MSP.
 - a. Tap on the alarm to display the alarm’s details.
 - b. Tap on the **Upgrade** button.
 - c. The system warns you that you are entering Service Mode..
 - d. Select the **checkmark** to continue the upgrade.
 - e. It will bring you to the list of components that have an upgrade available.
 - f. Select **Upgrade All** and press the **checkmark** button.
 - g. The upgrade will start.
 - h. Wait for the upgrade to complete and verify it is successful.
 - i. The screen will display "Your system is up to date".
 - j. Select the **checkmark** and the system will reboot.

Recommended steps to upgrade over the air for Release R4.0.0 and later with no alarm present

1. Enter Service Mode
2. Select Upgrade and press on Upgrade from Internet
3. If there is an upgrade available the new images and new versions will be displayed.
4. Select **Upgrade All** and press the **checkmark** button.
5. The upgrade will start.
6. Wait for the upgrade to complete and verify it is successful.
7. The screen will display "Your system is up to date".
8. Select the **checkmark** and the system will reboot.

Known Issues

1. The heater mode is not saved in the heater schedule. The schedule will run in whatever mode the heater is set when the schedule starts. This feature will be supported in the next release.
2. When the message “Running the backup configuration” alarm after the upgrade is displayed, check to make sure the VSP pumps are still configured properly. If not, reconfigure the VSP pumps.
3. Heater extend and cooldown must be disabled when running back to back filter pump schedules, otherwise the second schedule will fail to run if the heater is running when the first schedule ends.
4. For systems with EPG, EPG loses communication with MSP after upgrade. Power cycle the EPG to regain communication between the EPG and the Omni controller.
5. If the upgrade is cancelled after attempting to upgrade from the alarm screen, the alarm will disappear and will not return. Follow directions above to upgrade without the alarm present.
6. Equipment to equipment interlock that includes a cleaner or water feature with pump and valve does not work consistently if “paused for valve change” is enabled.
7. Control of filter pump speed through valves configured to default to a startup speed does not work from the mobile app.
8. Cannot shutdown MSP from web or mobile app.
9. The VS Omni cannot connect to an access point with a name that appears to have an apostrophe (') but is an accent. This is most likely to happen with Mesh networks that are configured using the iPhone.

Reporting Issues

Please report issues by calling Hayward's Technical Support or emailing