HYDRONIC SEQUENCING CONTROLS

HWRQ Platinum

With
- *Built-in Domestic Hot Water Priority*
- *8-Stage Control and Up To 24 Stages with Lockout*
- *Space Feedback with Logic*
- *Internet, BACnet, Phone, RS232 Communication*

Description:

A unique Microprocessor Control to manage a Multi-Stage Hydronic Heating System Based on Outdoor Reset or a Set Point. The HWRQ Platinum Control series provides buildings with comfortable, even heat, yet maximizing fuel savings. In addition, it incorporates many additional features and flexibilities that can be customized to each application's unique characteristics.

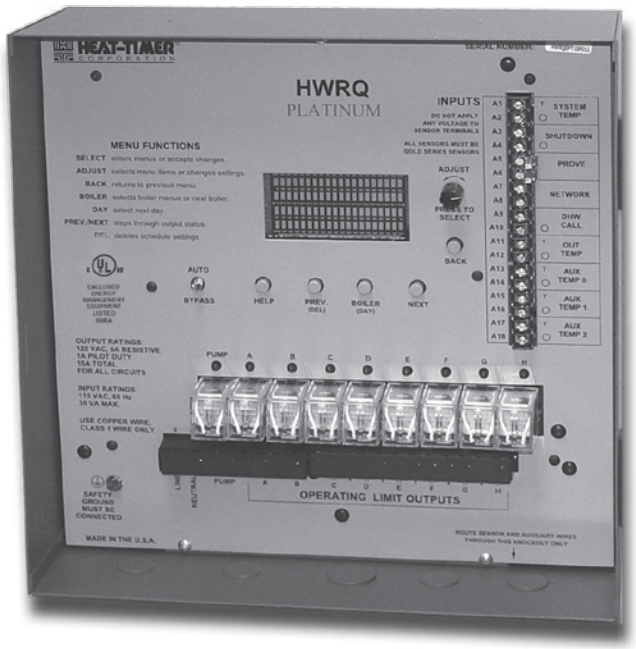
- ***Hydronic Heating using Outdoor Reset or Set Point.*** The HWRQ Platinum control series is designed to sequence multiple hot water single or multi-stage boilers. It can operate based on Outdoor Reset or a specified Set Point. Each of the options has a set of pre-configured, but adjustable settings to meet the specific needs of each heating application.

- ***Rotates up to 24 Boilers with Optional Lockout.*** The HWRQ Platinum can rotate 8 stages as a stand-alone. By adding up to 2 Extension Panels each with 8 stages, it can rotate a total of 24 boilers. Furthermore, by using an Extension Panel, additional features, like Boiler Lockout, will be available.

- ***Domestic Hot Water with or without Priority.*** The HWRQ Platinum can be configured with Domestic Hot Water call option. It will increase system water temperature when Domestic Hot Water is needed. In addition, it allows for optional priority of the domestic hot water over heating.

- ***Multiple Day and Night Schedules.*** The control has an adjustable Night Setback setting to help reduce fuel consumption. The built-in 7-day programmable schedule, with 4 Day settings and 4 Night Setback settings per day, can be used to customize the operation for even further temperature control and fuel savings.

- ***PID Sequencing or Oversize Sequencing (OSS).*** The first looks at the rate of change resulting in a more comfortable and stable building heat in addition to preventing stage short cycling. The OSS is a proportional sequencing. It relies on how far the System Temperature is from the Target Temperature to sequence the stages. It can be used for oversized systems.



- ***Optional Remote Communication Add-On with Modem or Internet Connection Package.*** Imagine being able to not just control your building heat from anywhere, but to be able to see boiler status, domestic hot water calls and temperature logs. In addition, you will be able to change schedules, set and monitor wireless and hard wired sensors, configure and receive alarms, configure and view histories, activate or deactivate sensors, and more. Well, imagine no more. The HWRQ Platinum can be ordered with any of the communication packages that fit your needs. With that you can configure, set alarms and monitor a variety of sensors ranging from wireless, water meter, oil level, temperature, switch, and stack sensors.

- ***BACnet IP Communication.*** With the BACnet option, an HWRQ Platinum can act as node in a BACnet network. A proprietary communication EMS/BMS can use their BACnet integration to place the HWRQ on their network.

- ***Vari-Boost with Early Shutdown.*** Another saving feature, the HWRQ Platinum allows buildings to switch to Night Setback mode earlier than scheduled based on mild outdoor temperatures.

Ask About The Internet or The BACnet Communication Options

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- ***Digital Display and Password Protection.*** The HWRQ Platinum's 80 character alphanumeric digital display names each system parameter in plain English and shows its precise value. The easy to follow menu system allows users to quickly make changes to any system setting without having to learn any specialized codes or keyboard commands. Password protection is available to prevent unauthorized users from making adjustments to control settings.

- ***Memory.*** With a built-in E-Prom, the HWRQ Platinum will never lose your settings even after a power outage or loss of battery power.

- ***Space Feedback and Vacation Settings for Internet Applications.*** Whenever an HWRQ Platinum is connected to the Internet, Space feedback from multiple space sensors can be activated for better temperature control, in addition to a Vacation space temperature with start and end dates and times.

- ***Boost and Vari-Boost.*** To bring a building quickly back to comfortable temperatures after the cooler night period, the control has a built-in Boost feature. The Boost allows the system to rise to an increased temperature for a calculated time period based on outdoor temperature.

Features:

- Built-in Outdoor Reset or Set Point - That, combined with the PID or OSS sequencing options Makes the HWRQ Platinum the control of choice for a variety of Hydronic applications.

- Rotates up to 24 Stages with Boiler Lockout Option - The HWRQ Platinum will rotate stages using different options. Moreover, when used with the Extension Panels to control more stages, you'll get the opportunity to utilize the Boiler Lockout feature that is built-in the Extension Panels.

- Boiler Standby with Delay - Now you can set individual boilers to be either continuously On or Off in addition to the Automatic option. Further more, any boiler can be set to be a Standby with an adjustable delay.

- Adjustable Pump Delay. - Allows the System Pump an additional Run-On time to disburse residual heat in boilers.

- Scheduling - For additional savings, the HWRQ Platinum can control the Setback, Boost, and Early-Shutdown settings based on a 4 Day and 4 Night settings per day for a whole week.

- Built-in Prove and Shutdown - The Prove can be used to check the status of other equipment, such as the end switch on a combustion air damper prior to firing the boilers. Furthermore, Shutdown can be activated from any safety control feed back.

- Manual Bypass - Allow installers and contractors to test and override control settings when needed.

- Domestic Hot Water Priority Option - On a DHW Call the HWRQ Platinum will increase system temperature. And depending on the Priority setting, will either dedicate all output to domestic hot water alone or in addition to heat.

- Manual Shift - Allows for a temporary adjustable override of boiler operating schedule by switching from Day to Night Setback or the opposite.

- Minimum and Maximum System Temperature Adjustment - Another safety feature that adds to boiler and system protection. The Minimum Temperature should be set to manufacturer's suggested minimum boiler temperature. When in Reset Mode, the Maximum Temperature is to protect system components from excessive heat.

Remote Communication

- Remote Communication Option - Now you can connect your HWRQ Platinum panel to the Internet, BACnet IP systems, or to Visual Gold software package using RS232, RS485, modem, or Ethernet and be able to read, change, monitor, and analyze your settings in a variety of ways from virtually anywhere. (Requires either the Visual Gold or the Internet communication options.)

- Use Existing Sensors and/or Wireless Sensors and MIG Sensors - (Additional sensor capability is available with Visual Gold or Internet Communication Packages.)

- Connect to as many as 64 sensors - When purchased with Visual Gold or the Internet options, the HWRQ Platinum can monitor, activate, and deactivate alarms of up to 64 additional sensors. Some of these sensors can be wireless while others can monitor fuel levels, water meters, stack temperature, or smoke detectors.

Specifications:

Voltage Input: 120 VAC 60 Hz
Power Consumption: 30 VA Max
Pump Output: 1 N.O. S.P.D.T
Heating Output: 8 N.O. S.P.S.T. for Burner stages
Output Relay Ratings: 1 Amp inductive, 6Amp resistive at 120 VAC 60 Hz, 15A total for all circuits
Temperature Display: Fahrenheit or Celsius.
Display: 80 character Alphanumeric (4 rows with 20 characters each)
Sensor Ranges: Outdoor temperature sensor -35°F/-37°C to 250°F/121°C
Heating system sensor -35°F/-37°C to 250°F/121°C
Outdoor Cutoff Range: 30°F/-°C to 75°F/24°C, ON and OFF
Control Operating Mode: Outdoor Reset or Set Point
Control Logic: PID Logarithm or Oversize System
Reset Ratio Range: A (1:3) to J (4:1) (Outdoor : System Water)
Offset Adjustment: -40F°/-22C° to plus 40F°/22C°
Night Setback: 0F°/0C° to 80F°/44C°
Minimum Water Temperature: 70°F/21°C to 170°F/77°C
Maximum Water Temperature: 90°F/32°C to 240°F/116°C (available in Reset Mode only)
Reaction Time: 1 to 10 minutes
Minimum Boiler Run Time: 1 to 10 minutes
Stage Operation Modes: On, Off, Standby, Auto
Standby Time Delay: 0 to 60 minutes
Stage Rotation Modes: Manual, First-On/First-Off, Auto (from 1 Hour to 41 days)
Stage Sequencing: Lo/Hi/Lo/Hi or Lo/Lo/Hi/Hi
Last Stage Hold: 0F°/0C° to 30F°/17C°
Purge Delay: 1.0 to 10.0 minutes
Pump Run-On: 0 to 60 minutes
Schedules: 4 Day Time and 4 Night Time (Setback) settings per day
Night Setback: 0F°/0C° to 80F°/44C°
Morning Boost: Vari-Boost - Self-adjusting from 0 to 90 minutes - Water temperature increase 0F°/0C° to 60F°/33C°
Early Shutdown - Self-adjusting from 0 to 90 minutes
Power Backup: Lithium coin battery, 100 days minimum 5 year replacement (Maintains Clock in power outages).
Remote Communications: 1 RS232 and 2 RS485 (RI and RIM controls)
Modem (RIM only)
Internet (RINet)
BACnet IP (BAC)
External Inputs: 1 Network Input, 3 Aux Inputs, DHW Call Input, Shutdown Input, and Prove Input.
Network Input Maximum Sensors: 64 Neuron Sensors including MIG Sensors.
Season: Winter and Summer.
Enclosure: NEMA 1
Dimensions: 5-⅛" x 13" x 13"
Weight: 14 pounds

Item Description	Part #
HWRQ Platinum	926800-00
HWRQ Platinum with Visual Gold and Modem	926800-RIM
HWRQ Platinum with Visual Gold less Modem	926800-RI
HWRQ Platinum - Internet	926800-RINet
HWRQ Platinum - BACnet IP	926800-BAC

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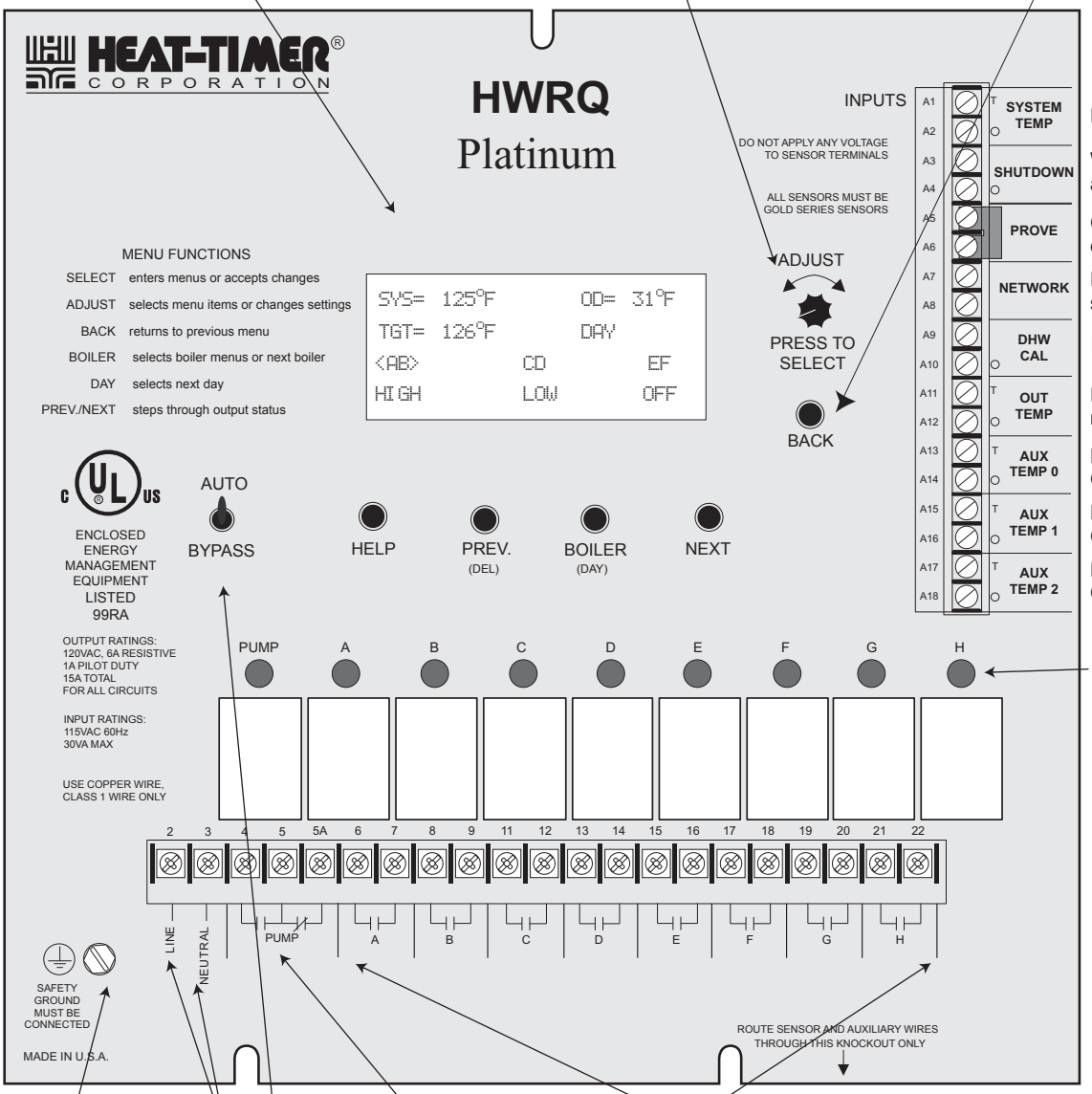
HWRQ PLATINUM PANEL

Digital display shows the system status, Target, outdoor, and system temperatures. To view and adjust settings, press the Adjust/Select button.

Depress the knob to move forward through the menus and to accept changes. To change a setting's value, rotate the knob.

Depress the button to go back through the menus



From heating system sensor

When closed, all stages are turned off*

Checks status of system components*

From Heat-Timer network sensors**

From DHW Control*

From outdoor sensor mounted in the shade

Remote Communication Option**

Remote Communication Option**

Remote Communication Option**

Red lights indicate when the associated stage relay is activated

Green Ground screw must be connected to Earth Ground

120VAC Power

BYPASS position overrides outputs so the burners are always active

Pump Output is active when HWRQ requires heat and during optional Run-On

Burner Stages Outputs are active when HWRQ requires Heat

* DRY CONTACT ONLY
** Only available with the Remote Communications package

ISO 9001:2000 CERTIFIED

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