



*The Pool and Spa Heating Experts<sup>SM</sup>*



# **Raypak Digital Low NOx**

## **Pool and Spa Heater**

# The Raypak Di

## Digital Control

### Microprocessor-Controlled Thermostat

Spa Set 104F  
Heating

The Raypak Digital gas heater is equipped with a microprocessor-based control. This control allows you to set your pool and spa temperature precisely at your preferred setting just by pressing an up or down temperature control button.

The digital display tells you when the water is being heated and notifies you when your target temperature has been reached.

Spa Set 104F  
No Demand

### Self-Diagnostic

Spa Set 104F  
Sensor Failure

Troubleshooting a Raypak gas heater has never been easier. The Raypak Digital has on-board diagnostic controls that let the user and the service professional know

what is going on with the heater at all times. The display uses real English, with no cryptic codes to decipher.

Spa Set 104F  
No Pilot Sensed

### Remote-Compatible

Remote Pool 104F  
Water Temp 69F

The Raypak Digital is compatible with most major pool control and remote systems on the market today. Any two- or three-wire remote can connect to the Raypak Digital and be integrated into the pool control system of your choice. The display clearly shows the heater is under control of a remote system.

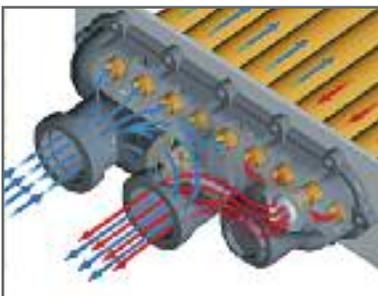
### Run Time and Cycle Meter

Run Time 100h  
Cycles 134

Yet another industry first, the Raypak pool heater can report how long it has run and how many times it has fired. This is valuable feedback for the service professional.

Multi-unit installations can monitor the run time of each unit and balance out the duty load, thus avoiding over working one individual heater.

## Heat Exchanger



### Condensation-Free Operation

Both water temperature and flow rate inside the heater are controlled to help eliminate condensation, sooting and scale buildup that can shorten the life of a heater. Raypak engineered the Unitherm Governor specifically for pool heater applications, regulating low-temperature incoming water to help reduce condensation. The built-in automatic bypass helps prevent scaling and erosion by balancing the flow going into the heat exchanger.

### Rust-Free Waterways

The Raypak Digital, with polymer headers, is equipped with an integral copper finned-tube heat exchanger and stainless steel tube sheets. Even the smallest details such as the studs and nuts are made out of stainless steel. The payoff? A heater that will last year after year and can easily be serviced if the need should ever arise.

## Burners

### Stainless Steel Burners

Burner design is a critical component in any gas heater. The stainless steel burner system used in the Raypak Digital is inherently forgiving and extremely robust.

### Fan-Assisted Combustion

Not all low NOx heaters are made the same. The Raypak Low NOx design uses a fan to provide cool, controlled combustion air to the burners. Other brands use a fan to pull hot flue gases through the heater. The Raypak design outperforms all others during cold starts and provides longer component life.

### Pilot Ignition

The Raypak Digital use a spark-to-pilot ignition system. This is the most reliable and robust ignition system available—an industry proven standard for over 30 years.



### Flame Strength Indicator

Flame Strength  
■■■■■■■■ 8 Good

Raypak leads the way with the first control in the pool industry to monitor and measure the pilot flame signal. Known for our high quality, leading edge commercial boilers, it just made sense for Raypak to use this existing commercial technology on our residential pool heaters. This little tool is a service tech's dream. Raypak also uses this function on the end of line test, making sure every heater leaves with a robust flame signal.

### On Board Voltmeter

Supply Voltage  
28.2

The Raypak Digital monitors the low voltage electrical supply. This helps ensure the heater is wired properly during installation. The heater will also let you know if the voltage has dropped too low to function properly. No other pool heater takes care of you like a Raypak.

Spa Set 104F  
Low Voltage



# Digital Low NOx

## The right tube for the right application

### Copper Fin Tube - Residential

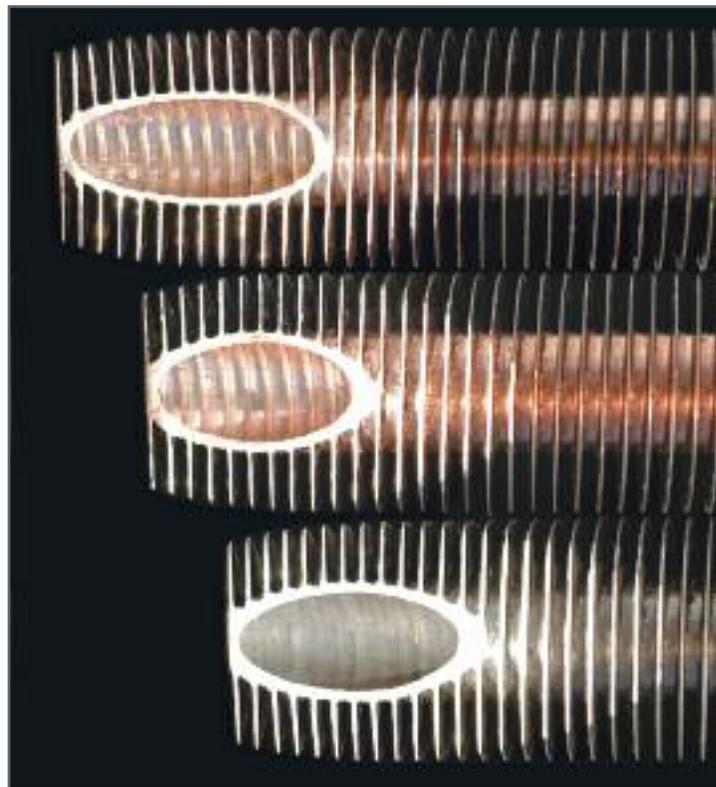
The Raypak Digital is built to last with the highest quality integral copper fin tube available. Copper is well known for its ability to efficiently transfer heat, and is the first choice for pool and spa heat exchanger construction. Pure copper has stood the test of time as the industry standard for efficiency, quality and product life.

### ASME Copper Fin Tube - Commercial

The Raypak Digital ASME is designed specifically to meet State and local code requirements for public pools and commercial applications. This heater is equipped with a thicker walled fin tube allowing it to meet the ASME certification requirements.

### Cupro-Nickel Fin Tube - Commercial Specialty

Raypak ASME Digital heaters can be ordered with cupro-nickel fin tube heat exchangers for added protection against aggressive water chemistry. Although rare, there are certain applications, like health club spa's, where copper is just not the best choice. Cupro-nickel offers superior tolerance to bad and fluctuating water chemistry, thanks to a harder surface and a thicker walled fin tube.



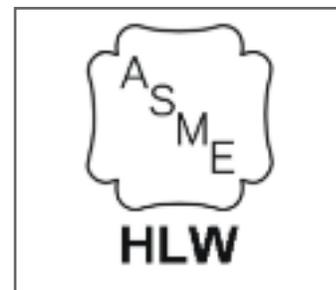
## ASME



On-site state inspectors

### ASME

The Raypak Digital heater is also available in an optional ASME version. Raypak has state inspectors on-site daily performing certifications for our pool heater and commercial boiler production that require ASME. Being in the boiler business for over 60 years truly makes Raypak the leader for your commercial needs. Why ASME? Most local codes require that public pools, pools that are in condominiums, apartments, or other commercial applications, be ASME certified. ASME stands for American Society of Mechanical Engineers, a non-profit group which sets many industrial and manufacturing standards. A pool heater that is made to ASME standards must perform to a set of specifications as determined by ASME, specifically in relation to the operating water pressure the appliance can handle. Each and every ASME heat exchanger that goes into a Raypak heater is certified by a state inspector to make sure it complies with all ASME codes for pool heaters.



Cast iron headers

### Glass-Lined Cast Iron Headers

Raypak has applied its years of commercial boiler experience to the design of the cast iron glass-lined header. A metal header design allows for the higher working pressures required by ASME. Only after the material meets the stress analysis and metal composition tests is it approved for use in an ASME unit.

# Anything But Basic

## Cabinet

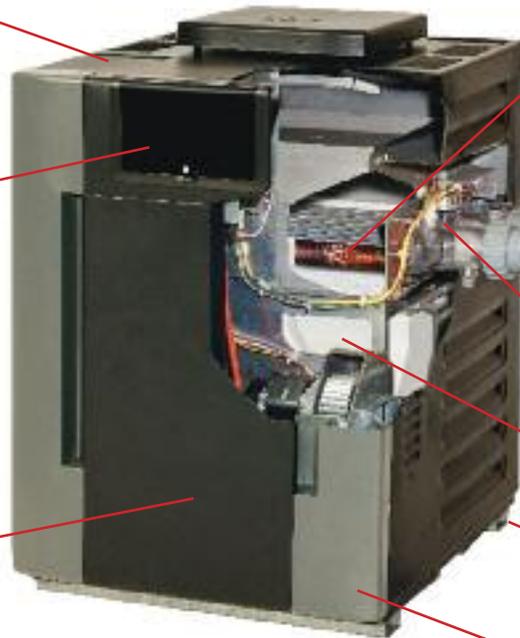
- Outdoor top - (standard)
- Wind-resistant design
- Channels rainwater out
- Textured powder-coat finish
- Optional indoor top

## Digital Controls

- Microprocessor-controlled
- Built-in diagnostics
- Back-lit LCD display
- Pool and spa settings
- Lexan cover- with snap closure
- Remote-compatible
- Flame strength meter
- Cycle and run time log
- Transformer output monitor
- Fault history-last 10

## Burner Tray

- Easily removable
- Stainless steel burners
- Brass orifices
- Aluminized metals
- Stainless steel heat shield
- Spark-to-pilot ignition
- 120/240V Combustion fan motor



## Heat Exchanger

- Integral copper fin tube - (standard)
- Automatic bypass
- Unitherm governor
- Polymer headers
- Stainless steel tube sheet
- Reversible for left-side water connections.
- ASME - (optional)
- Cupro-nickel - (optional)

## 2" CPVC Connections

## High Limits and Controls

- Mounted on the in/out header

## Ceramic Fiber Combustion Chamber

## Non-Combustible Base

- Heater can be installed on a combustible surface

## Base - Interior Floor

- Stainless steel

## 120/240V

- Incoming power can be connected to the right or left side.

	copper (polymer headers) ASME copper and cupro	cupro-nickel (polymer headers)
Model	BTUH Input	BTUH Input
207	199,500	not available
267	266,000	not available
337	332,500	not available
407	399,000	not available

## Optional D-2 Power Vent

### D-2 Power Vent

Sometimes, equipment rooms or unusual venting configurations require the use of a power vent. Being the heater experts, we have this option for you when the need may arise.

### Through-the-Wall Capable

The D-2 Power Vent assembly is a Category III mechanical draft venting system that operates under a positive static pressure and prevents excessive condensate production in the vent. All sizes are capable of relieving flue gases up to a maximum of 100 equivalent feet of vent length. All models have a standard 4"-diameter exhaust connection.

### Multi-Position

Using the Raypak-supplied adjustable 90° elbow, the flue gases may be discharged in any direction (see D-2 Power Vent manual for details). The D-2 Power Vent is also dual-voltage capable (120/240 volt) and engineered for long life and smooth operation.



D-2 Power Vent

**For dimensions and technical specifications, see catalog number 6000.36.**

In keeping with its policy of continuous progress and product improvement, Raypak reserves the right to make changes without notice.



Raypak, Inc. 2151 Eastman Avenue, Oxnard, CA 93030, (805) 278-5300. Fax (800) 872-9725  
www.raypak.com

