

KING HWP120

KING HWP120 Electronic Line Voltage Programmable Hydronic System Thermostat

Model: HWP120

INTRODUCTION

The KING HWP120 is an advanced electronic line voltage programmable thermostat designed specifically for hydronic heating systems. This thermostat offers precise temperature control and energy savings through its 7-day independent programming capabilities, allowing for up to four time and temperature settings per day. Its user-friendly design features an illuminated LCD display and simple two-button operation for setting temperature and navigating menus. The HWP120 is equipped with memory backup to retain settings during power outages, ensuring consistent comfort.



Figure 1: Angled view of the KING HWP120 Electronic Line Voltage Programmable Hydronic System Thermostat, showing its white casing and green illuminated LCD display.

SAFETY INFORMATION

WARNING: To prevent electric shock or damage to the thermostat, disconnect power to the heating system at the main fuse or circuit breaker box before installation or servicing. This thermostat operates on line voltage (120V/240V) and requires careful handling. Installation should only be performed by a qualified electrician in accordance with local electrical codes.

- Always turn off power at the circuit breaker before working with electrical wiring.
- Ensure all wiring connections are secure and properly insulated.

- Do not exceed the specified electrical ratings of the thermostat (12.5 amps / 120 volts, 3000 watts / 240 volts).
- Keep the thermostat away from water and excessive humidity.

INSTALLATION AND SETUP

Proper installation is crucial for the safe and efficient operation of your HWP120 thermostat. It is recommended that a licensed electrician perform the installation.

Mounting Location

Choose a location on an interior wall, approximately 5 feet (1.5 meters) above the floor, away from direct sunlight, drafts, or heat sources (e.g., lamps, appliances, fireplaces). These factors can affect the thermostat's temperature readings.

Wiring Instructions

1. **Disconnect Power:** Turn off the power to your heating system at the main circuit breaker. Verify power is off before proceeding.
2. **Remove Old Thermostat:** Carefully remove your existing thermostat from the wall. Note the wiring connections.
3. **Connect Wiring:** Connect the wires from your heating system to the appropriate terminals on the HWP120 thermostat. Refer to the wiring diagram provided with your thermostat's packaging for specific connections. Ensure all connections are tight.
4. **Mount Thermostat:** Secure the HWP120 thermostat to the wall using the provided mounting screws.
5. **Restore Power:** Once installation is complete and all connections are secure, restore power at the circuit breaker.



Figure 2: Front view of the KING HWP120 Thermostat, highlighting the LCD display and the two control buttons below it.

OPERATING INSTRUCTIONS

The HWP120 thermostat is designed for straightforward operation using its two primary buttons and illuminated LCD display.

Display Overview

The LCD display shows the current room temperature, the set temperature, the time, day of the week, and the active program period (P1, P2, P3, P4). When the heating system is active, a "HEAT" indicator will typically be visible.



Figure 3: Side angled view of the KING HWP120 Thermostat, showing the ventilation grilles on the side and the clear display.

Adjusting Temperature Manually

To temporarily adjust the temperature, press the **Up** (▲) or **Down** (▼) buttons. The display will show the new set temperature. This manual override will typically remain active until the next programmed period begins.

Setting Time and Day

Refer to the detailed programming section for initial setup of time and day, as these are integral to the programming functions.

PROGRAMMING INSTRUCTIONS

The HWP120 allows for 7 independent day programming with 4 times and temperature settings (P1, P2, P3, P4) per day. This feature helps optimize energy consumption by adjusting heating based on your schedule.

Entering Programming Mode

To enter programming mode, press and hold both the **Up** (▲) and **Down** (▼) buttons simultaneously for a few seconds until the display changes to indicate programming mode (e.g., flashing time or day).

Setting Time and Day

1. In programming mode, the hour will typically flash. Use the **Up** or **Down** buttons to adjust the hour.
2. Press one of the buttons (e.g., **Up** or **Down**, depending on the model's specific navigation) to advance to minutes, then adjust.
3. Continue to advance to set the day of the week.

Setting Program Periods (P1-P4)

For each day of the week, you can set four distinct periods:

- **P1 (Wake):** Typically for morning, when you wake up.
 - **P2 (Leave):** For when you leave home.
 - **P3 (Return):** For when you return home.
 - **P4 (Sleep):** For nighttime.
1. While in programming mode, navigate to the desired day (e.g., Monday).
 2. Select P1. Set the desired start time and temperature for P1 using the **Up** or **Down** buttons.
 3. Advance to P2 and repeat the process for its start time and temperature.
 4. Continue for P3 and P4.
 5. Repeat this process for each day of the week (Tuesday through Sunday).
 6. **Exiting Programming Mode:** Once all settings are complete, the thermostat will typically exit programming mode automatically after a period of inactivity, or you may need to press and hold the buttons again to save and exit. Consult the full manual for specific exit procedures.

Important Note: The HWP120 thermostat initiates heating at the programmed time to reach the set temperature. It does not anticipate heating. Therefore, if you desire a room to be at a specific temperature by a certain time, set the program to begin heating approximately 15-30 minutes prior to that desired time, depending on your system's response time.

MAINTENANCE

The KING HWP120 thermostat requires minimal maintenance to ensure optimal performance.

- **Cleaning:** Periodically wipe the exterior of the thermostat with a soft, damp cloth. Do not use abrasive cleaners or solvents, as these can damage the finish or internal components.
- **Dust Removal:** Ensure the ventilation slots on the thermostat casing remain clear of dust and debris to allow for proper air circulation and accurate temperature sensing.
- **Power Outage:** The thermostat features memory backup for power outages, retaining your programmed settings. No action is typically required after a power restoration.

TROUBLESHOOTING

If you encounter issues with your HWP120 thermostat, refer to the following common problems and solutions:

Problem	Possible Cause	Solution
Thermostat display is blank.	No power to the thermostat.	Check the circuit breaker for your heating system. Ensure it is in the "ON" position. Verify wiring connections.
Heating system not turning on/off as programmed.	Incorrect programming; manual override active; system malfunction.	Review your program settings carefully. Ensure no manual override is active. Check your heating system for other issues.
Room temperature inaccurate.	Thermostat location affected by drafts or heat sources.	Ensure the thermostat is not exposed to direct sunlight, drafts from windows/doors, or heat from appliances.
Difficulty programming.	Unfamiliarity with programming sequence.	Carefully re-read the "Programming Instructions" section. Practice the steps without making permanent changes.

If problems persist after attempting these solutions, contact a qualified electrician or KING customer support for assistance.

SPECIFICATIONS

Feature	Detail
Model Name	HWP120
Brand	KING
Voltage	120 Volts / 240 Volts
Amperage	12.5 amps (120V) / 12.5 amps (240V)
Wattage	1500 watts (120V) / 3000 watts (240V)
Temperature Range	44°F to 95°F (7°C to 35°C)
Accuracy	± 1.2°F @ 10 amps, ± .9°F @ 4.2 amps
Programming	7 independent day programming with 4 times and temperature settings per day
Display Type	Digital, Illuminated LCD
Control Type	Push Button
Material	Plastic
Dimensions (L x W x H)	4.88 x 3.13 x 2 inches
Item Weight	10.4 ounces

WARRANTY AND SUPPORT

Warranty Information

The KING HWP120 Electronic Line Voltage Programmable Hydronic System Thermostat comes with a **1-year limited warranty** from the date of purchase. This warranty covers defects in materials and workmanship under normal use. For specific terms and conditions, please refer to the warranty documentation included with your product or visit the manufacturer's official website.

Customer Support

For technical assistance, troubleshooting beyond this manual, or warranty claims, please contact KING customer support. You can typically find contact information (phone number, email, or support portal) on the manufacturer's website or in the product packaging.

It is recommended to have your product model number (HWP120) and date of purchase available when contacting support.

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This manual is for informational purposes only. Specifications are subject to change without notice.

Documents - KING – HWP120

[pdf] Instructions

HWP instructions Pentium 800 Installation Instructions HWP120 K E Electric Supply Corporation
KNGELEINST00073 images tradeservice INSTALLATIONSHEETS DIR100012 |||

Installation and Maintenance This thermostat is intended to be used as a 2 circuit thermostat controlling a circulation pump and a fan coil on a hydronic heating system, though could have other uses needing 2 circuit control. **HWP120** and HWP230 DANGER Day of week PM Displayed AM will be blank T... lang:en score:42 filesize: 363.91 K page_count: 4 document date: 2018-12-03

[pdf] Instructions

HWP instructions Pentium 800 Installation and Maintenance 1 To wire the thermostat determine which pair of wires are coming from breaker panel lead to heater pump 2 Attach with nuts Blue White on 120Volt model HWP120 into white in Junction box HW T installation prodID TSTAT INFO king electric kel product files 80 s

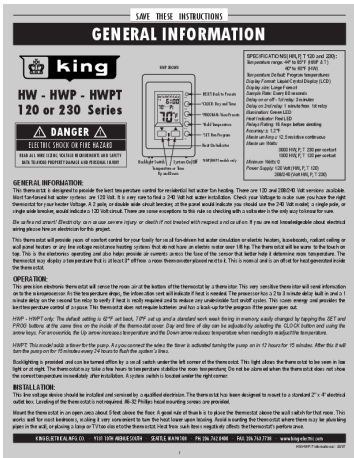
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[pdf] User Manual Instructions Diagram Catalog

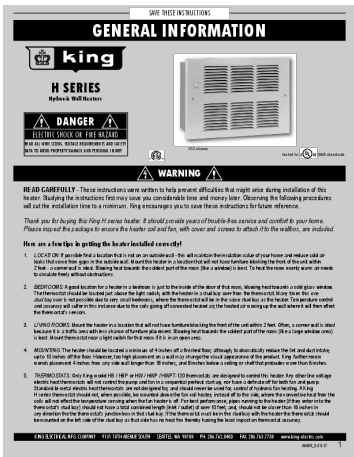
W Optional manual reset available Hold mode operation allows for May be used vacation setback
Detailed wiring diagrams and instructions 1 year limited King Electric Product Catalog king electric kel
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HW120 Non Programmable For Hydronic Heaters **HWP120** Programmable For
Hydronic Heaters HWPT120 Programmable Adds Timer for Pump Dimensional Data
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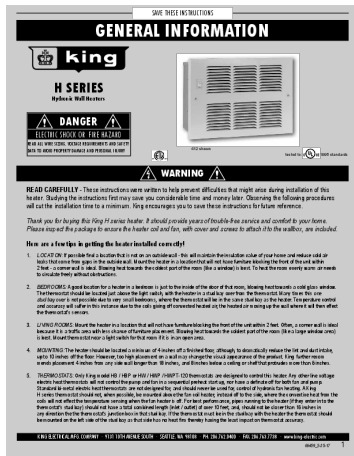
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King heaters. King requires the use of King models HW120, **HWP120**, and one timer
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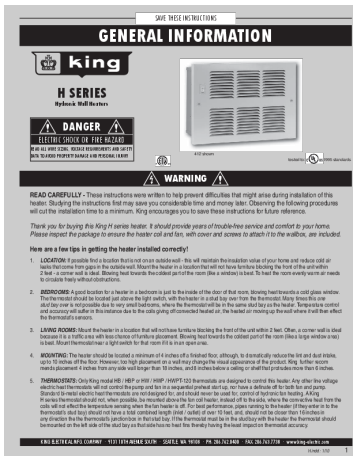
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 Non Programmable For Hydronic Heaters **HWP120** Programmable For Hydronic
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[pdf] User Manual Borchure

HydronicBrochure2012 indd King Electric Home Title Created Date 12 6 2012 2 37 56 PM manual
 adjustment programmable seven day temperature cycles with automatic pump cycle for 15 minutes every
 24 hours Hydronic Brochure king electric kel product files 80 s
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 12AMP, 2 STEP - 3 WIRE 19049 HWPT120 120V 12AMP ELECTRONIC 2 STE...
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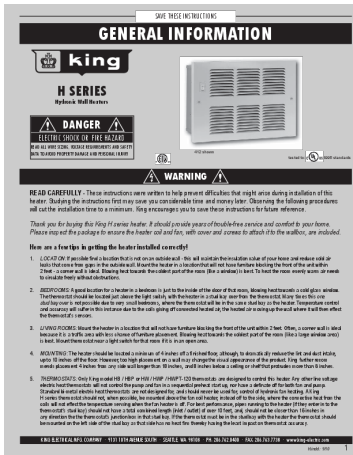
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SAVE THESE INSTRUCTIONS GENERAL INFORMATION H SERIES Hydronic Wall Heaters DANGER ELECTRIC SHOCK O ... t comfort and energy efficiency from your King heaters. King requires the use of King models HW120, **HWP120**, and one timer thermostat per system, the HWPT120, as they were specifically designed for use... lang:en score:20 filesize: 125.21 K page_count: 4 document date: 2010-01-21



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HydronicBrochure2012 indd In wall fan driven zone controlled heat HydronicKing s hydronic heating system uses hot water from your tank any source — gas electric solar etc passes it through highly efficient kem h412 2 3 as fs gw manual2efireplacestore files Manuals kem manual2 srsltid AfmBOopt9tyKoQ6vitMbxmQP h4BinGRx10J1XePcPzRVGFoIFKBRLly Hydronic WebstaurantStoreKing efficient King efficient king brochurekem manual2webstaurantstore documents king brochure AfmBOootZcQfOTk27YiM0OZF2E P0 aRdkDPFCuYaV roQxY0LKNAXxvfireplacestore manual2kem h4BinGRx10J1XePcPzRVGFoIFKBRLlyefireplacestore AfmBOorq8HwVzoqC0r02 ZpP gSWHqg9HFgMeabc0iosD1mU97nzRiK0 AfmBOoplqEnkowsyK00KP4OPTB88RVBVPm5B7NMgQwXF 5rAV7n cm3QPefireplacestore ||| H series HT series HM series HME series HL series HLE series Hydronic In-wall, fan-driven, zone-cont ... PC # 093319 Model Number Description 19048 HW120 120V 12AMP ELECTRONIC, 2 STEP - 3 WIRE 19047 **HWP120** 7-day programmable. 120V 12AMP, 2 STEP - 3 WIRE 19049 HWPT120 120V 12AMP ELECTRONIC 2 STE... lang:en score:20 filesize: 1.83 M page_count: 8 document date: 2013-11-06



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www.king-electric.com PREMIUM 2 CIRCUIT **HWP120** HWP230 ELECTRONIC
PROGRAMMABLE LINE VOLTAGE HYDRONIC Star Hydronic Performer MODEL
HWP230 TYPE 7 DAY ELECTRONIC PROGRAMMABLE WIRE LEADS VOLTS 4
WIRE 208 / 240 AMPS 12.5 TEMP. RANGE 44F 95 F ENERGY STAR WIRING
DIAGRAM BLACK **HWP120** 7 DAY E...

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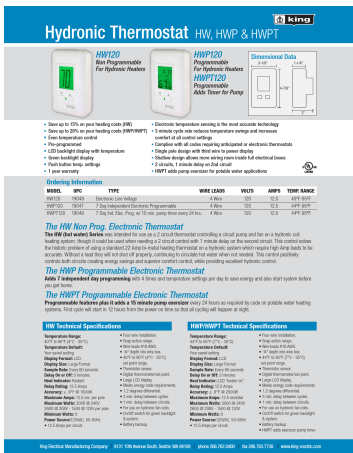
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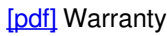
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Hw120 138 HW120 WEB king electric 80 s Hydronic Thermostat HW, HWP HWPT HW120 Non Programmable For Hydronic Heaters **HWP120** Programmable For Hydronic Heaters HWPT120 Programmable Adds Timer for Pump Dimensional Data 3-1/8 1-1/4 4-7/8 2 Save up to 15 on your heating costs HW Save up to 28 on your heating costs HWP/HWPT ... lang:en **score:16** filesize: 140.79 K page_count: 1 document date: 2015-10-15



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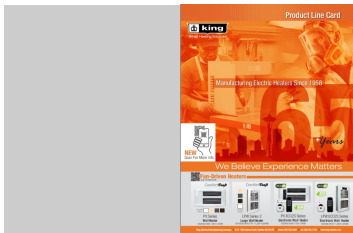
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Non Programmable For Hydronic Heaters **HWP120** Programmable For Hydronic
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