



### LEER Y GUARDAR ESTAS INSTRUCCIONES

Guía Del Propietario El Calentador Para Ambientes

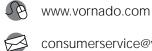
www.vornado.com



model TVH600

Designed, engineered and supported in Andover, Kansas. Pensado, diseñado y respaldado en Andover, Kansas.

Questions or comments? ¿Prequntas o comentarios?



consumerservice@vornado.com



800.234.0604

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### IMPORTANT INSTRUCTIONS READ ALL INSTRUCTIONS BEFORE USING.

Please visually inspect all internal and external components before connecting to electric current. If any damage is found, DO NOT USE THIS UNIT and contact Vornado Air LLC at 1-800-234-0604.

This product is equipped with a 3-prong plug, with a grounding pin as a safety feature. To reduce the risk of electric shock, this plug is intended to connect to properly grounded outlets only. This plug will fit into a grounded outlet only one way. Do not alter the plug. Do not attempt to defeat this safety purpose of the grounding plug.

When using electrical appliances, basic precautions should always be followed to reduce the risk of fire, electric shock, and injury to persons, including the following:

- This heater is hot when in use. To avoid burns, do not let bare skin touch hot surfaces. Use handles when moving this heater. Keep combustible materials, such as furniture, pillows, bedding, papers, clothes, and curtains at least 3 feet (0.9 m) from the front of the heater and keep them away from the sides and rear.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be supervised to ensure that they do not play with the appliance. Extreme caution is necessary when any heater is used by or near children or invalids and whenever the heater is left operating and unattended.
- > Always unplug heater when not in use.
- Do not operate any heater with a damaged cord or plug or after the heater malfunctions, has been dropped or damaged in any manner. Discard heater, or return to authorized service facility for examination and/or repair in order to avoid a hazard.

- > Do not use outdoors.
- This heater is not intended for use in bathrooms, laundry areas and similar indoor locations. Never locate heater where it may fall into a bathtub, shower, swimming pool or other water container.
- Do not run cord under carpeting. Do not cover cord with throw rugs, runners, or similar coverings. Do not route cord under furniture or appliances. Arrange cord away from traffic area and where it will not be tripped over.
- > To disconnect heater, turn controls to off, then remove plug from outlet.
- > **Do not** insert or allow foreign objects to enter any ventilation or exhaust opening as this may cause an electric shock or fire, or damage the heater.
- To prevent a possible fire, do not block air intakes or exhaust in any manner. Do not use on soft surfaces, like a bed, where openings may become blocked.
- > A heater has hot and arcing or sparking parts inside. Do not use it in areas where gasoline, paint, or flammable liquids are used or stored.
- > Use this heater only as described in this manual. Any other use not recommended by the manufacturer may cause fire, electric shock, or injury to persons.
- Always plug heaters directly into a wall outlet/receptacle. Never use with an extension cord or relocatable power tap (outlet/power strip). Operate this heater only in its upright position.
- > **Do not** operate this heater on an elevated surface such as a shelf or desktop. Use only while placed on the floor.
- This heater is equipped with a thermal safety shut-off system, designed to turn off the heater when an internal overheating condition is detected (see How To Use "RESETTING YOUR VORNADO HEATER," to determine how to check and reset the heater).
- > Do not use this heater on a circuit that has a variable speed device operating, such as a blender or a variable speed fan.
- > **Do not** use heater to dry human or animal hair/fur or articles of clothing.
- $\succ$  This product must be grounded. If the product malfunctions, grounding

### IMPORTANT INSTRUCTIONS READ ALL INSTRUCTIONS BEFORE USING.

provides a path of least resistance for the electric current to reduce the risk of electric shock. The 3-prong plug must be inserted into a grounded outlet that has been properly installed in accordance with all electric codes and ordinances. If you are in doubt as to whether or not an outlet is properly grounded, contact a qualified electrician.

- This heater operates with an infrared remote control. Interference between this remote and other remote-control-operated electrical appliances in your home is possible.
- CAUTION: In order to avoid a hazard due to inadvertent resetting of the thermal cutout, this appliance must not be supplied through an external switching device, such as a timer, or connected to a circuit that is regularly switched on and off by the utility.
- This heater is for use on 120 volts. The cord has a plug as shown at A in Figure 65.1. An adapter as shown at C is available for connecting three-blade grounding-type plugs to two-slot receptacles. The green grounding lug extending from the adapter must be connected to a permanent ground such as a properly grounded outlet box. The adapter should not be used if a three-slot grounded receptacle is available.

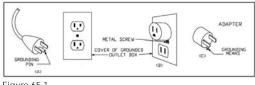


Figure 65.1

**WARNING:** Changes or modifications to this unit not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Note: This equipment has been tested and found to comply with the limits for Class B digital device, pursuant to part 15 of the FCC Rules. These limits

are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- > Reorient or relocate the receiving antenna.
- > Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help. This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) his device must accept any interference received, including interference that may cause undesired operation.
- > Do not use this heater in an RV, a boat, or in any application where a DC/AC converter is converting battery power to AC power.
- > Do not use the heater on any Ground-Fault Circuit Interrupted (GFCI) circuit. A GFCI circuit has a reset button in the middle of the outlet.
- > Do not use this heater on a surge protected circuit.
- > Do not use the heater with any kind of timer to turn the unit on or off.
- Do not use this heater on a circuit that is shared with a high power device, such as a vacuum or a circular saw.
- CAUTION: A loose fit between the outlet (receptacle) and plug may cause overheating and distortion of the plug. Discontinue use of the product. Contact a qualified electrician to replace loose or worn outlet.

# SAVE THESE INSTRUCTIONS

## Trust.

It is said that trust isn't given, but earned. For decades Vornado has been earning the trust of our customers by offering them only the best. Vornado provides the highest level of performance, coupled with the highest level of support available. Complete satisfaction with no exceptions – this is Vornado's promise to you. If you are not satisfied for any reason, please contact us. Knowledgeable representatives are available at 1-800-234-0604 from 7:00 AM to 6:00 PM CST. A wealth of additional support is also available online at www.vornado.com. On behalf of myself and the entire staff at our Andover, Kansas headquarters – thank you for selecting Vornado.

Sincerely, Bill Phillips CEO, Vornado Air



Find our complete product line at www.vornado.com

## Vornado<sup>®</sup> Vortex Action



Ordinary heaters provide only localized heat. Heat immediately rises to the ceiling, resulting in cold and hot spots in the room. Vornado's unique Vortex Action delivers continuous, uniform heat surrounding everyone in the room in a warm, comfortable temperature.

# Getting Started

# Advanced Safety Features

#### **Remote Control Quick Start Guide**

- 1. Remove static cling decal from the Heater Touch Screen Display.
- 2. Plug Heater into approved wall outlet. DO NOT turn Heater on.
- **3.** Place 2 AA batteries (included) into Remote. Aim Remote at Heater. Recommended to be within 3 feet for programming the Heater.
- **4.** Press and hold the Remote POWER button for approximately 3 seconds, until display flashes one time. The Remote now has generated a new communication signal.
- 5. Press and hold the Heater POWER button for approximately 3 seconds, until the display begins to flash. The Heater is now ready to receive the new communication signal.
- Press the Remote Mode button one time. The Heater display will stop flashing and glow solid. The Remote and Heater are now linked.
- 7. Set the Heater to desired heat setting, temperature setting and timer duration. The Remote does not need to be programmed for the Heater to function properly using only the main touch-screen display.

**Note:** You should only need to set up the connection one time upon first use of your Heater. If for some reason the Remote loses its connection – repeat the Remote Control Quick Start Instructions.



REMOTE POWER BUTTON Press and hold for 3 seconds



HEATER DISPLAY POWER BUTTON Press and hold for 3 seconds



H REMOTE MODE BUTTON Press Once



**Tight Grill Spirals** Resists curious fingers.



**Cool Touch Case** Safe to touch, even on high heat setting.



Automatic Safety Shut Off System If airflow becomes blocked and overheating occurs, power to the heating element and fan is shut off.



**Tip-Over Protection** If tipped over, power to the heating element and fan motor is reduced to prevent overheating.



Ideal 120°F Exit Air Temperature Warm enough to heat an entire room.



Grounded Heavy-Duty Power Cord Adds durability and a more secure wall connection.

# <u>Controls</u>





#### Touch Screen Controls: Power Button

Press to turn unit ON or OFF, red light illuminates when power is ON.

#### Heat Mode

To select the heat level you desire, press HIGH HEAT for up to 1500 watts, or LOW HEAT for up to 750 watts of maximum power.

#### Fan Only Mode

Select FAN ONLY mode to operate the heater with no heat.

#### Set Temperature

To select the desired room temperature, press the (+) or (-) to raise or lower the temperature by one degree at a time.

#### **Room Temperature**

The Touch Screen also indicates room temperature. The temperature displayed is the approximate temperature at the location of the Smart Remote. The base unit will always attempt to operate using

the sensor information from the Remote, if a signal cannot be obtained, the base unit will function on its own. (See Smart Remote Temperature Sensor below.)

#### Timer

The timer function allows you to set the unit to automatically turn off in one-hour intervals up to 9 hours. Press the (+) to add hours of operation, or the (-) to remove hours of operation. The unit will completely shut off when the set time has expired.

### Smart Remote Controls:

#### Power

Press the ON/OFF button to turn the unit ON or OFF.

#### Heat Mode

Press the HEAT UP or HEAT DOWN arrows to adjust heat settings one degree at a time.

#### Timer

Press the TIMER UP or TIMER DOWN arrows to adjust timer by one hour at a time.

#### Mode

Press the center MODE button to select HIGH HEAT, LOW HEAT or FAN ONLY.

#### **Battery Replacement**

Screen will indicate when the batteries need to be replaced. The Remote requires 2 AA batteries. To replace the batteries remove the cover located on the bottom side of the remote. Note: The SMART REMOTE SENSOR sends frequent signals to the base unit; this uses more power than ordinary remotes so more frequent battery replacement will be required.

### Smart Remote Temperature Sensor

This innovation incorporates continuous monitoring of the temperature at the location of the remote. This temperature reading is then transmitted back to the base unit. The TVH600 automatically adjusts heat output and fan speed to meet and maintain the desired temperature set. The benefit of this technology is when you position the Smart Remote Temperature Sensor near you, the heater will automatically adjust to meet your desired temperature at that location. The base unit will always attempt to operate using the sensor information from the remote, if a signal cannot be obtained, the base unit will function on its own. Fully control the TVH600 remotely with the Smart Remote Temperature Sensor with illuminated screen. Turn the unit ON and OFF select mode - FAN ONLY, LOW HEAT or HIGH HEAT, adjust the desired set temperature up or down, and set the automatic-off timer, all from up to 30 feet away. As you adjust the remote, the base unit will "beep" to indicate it has received your signal. The screen-light will dim after just a few seconds, to minimize room illumination. The Remote does not require "line-of-site" to operate.

### Illuminated Touch Screen

Innovative and easy to use, the Touch Screen provides complete control at the base unit. Just touch the screen to "wake-up" or turn on the screen. Follow the intuitive display and touch the screen to adjust mode, desired temperature, and timer. The Timer can be set to turn the unit off automatically in hour intervals up to 9 hours. The screen-light will dim after just a few seconds to minimize room illumination. Both the remote and the base unit feature one-button ON/OFF control.

### Automatic Climate Control

With this unique technology, the TVH600 does not cycle on and off like most ordinary heaters, but uses continuous variable heat and air output to maintain the set temperature. This allows the unit to often run on less than high power, minimizing noise and energy use, all while maintaining your set comfort level.

### **Resetting Your Vornado Heater**

Your Vornado Heater has a multi-level safety shut-off system designed to prevent overheating. Overheating may occur when the inlets or outlet are blocked, a foreign object prevents the blade from turning, or the appliance tips over. If this happens, the safety shut-off system will cut power to the heat element and you will need to manually reset the heater.

- 1. Set the POWER switch to OFF and unplug the unit.
- 2. Remove any obstructions.
- 3. Wait 5–10 minutes, allowing the unit to cool down.
- 4. Plug in the unit and place in desired position.
- **5.** Set the POWER switch to ON. Your Vornado Heater should now function normally.

**Note:** If the safety shut-off system repeatedly shuts off your heater or if it will not reset after following the above procedure, DO NOT ATTEMPT TO DISASSEMBLE THE UNIT. Call Vornado Consumer Services Department toll-free at 1-800-234-0604.

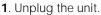
# Cleaning and Storage

# **Operating Tips**

### How to Clean

- > Your heater has no user serviceable parts. Do not disassemble the unit. This will void your warranty. If service is required, return your heater to Vornado (see WARRANTY for instructions).
- > The motor is permanently lubricated and requires no oiling.

Because your heater moves a substantial amount of air, it will need regular cleaning. To clean follow these simple instructions:



**Note:** Do not use gasoline, thinners, solvents or other chemicals for cleaning.



mobile device.

**2.** Use the brush attachment on your

household vacuum cleaner to vacuum any accumulated dust off the Front Angled Outlet Grill and Side Inlet Grill. Wipe down the entire surface with a soft cloth.

**Note:** Vacuuming the outside of the heater is recommended on a bi-weekly basis. You may also blow the heater out with high pressured air. This can be purchased from your local hardware store.

### Storage

During the off-season or after extended periods of non-use, you may choose to store your heater. To ensure long life of the product, it is recommended to store your heater by following these instructions:

- 1. Unplug power cord and bundle loosely.
- 2. Thoroughly clean your heater (see instructions above).
- **3.** Cover, or place back in retail carton if available. This will prevent the unit from accumulating dust overtime.
- 4. Store unit in a cool and dry location.

- The Smart Remote Sensor can be turned off to save battery life or to stop the remote from sending information to the base unit. Slide switch on the back of the remote to the Off position to turn the remote Off, slide the switch to On position to allow the remote to send signals.
- The Smart Remote Sensor uses RF (radio frequency) to send the signals, so line-of-sight is not required for the unit to function. However, to obtain the best remote temperature sensing, position the remote where it can sense an accurate temperature. Setting the remote too close to other heat sources, even under a warm lamp or in your lap, will cause the remote to sense the temperature as warmer than the air. Inversely, setting the remote too close to cold drafty areas, like a cold window or door, will cause the remote to sense the temperature in the room as cooler. Placing the remote in a drawer or other similar locations will not allow the unit to sense the true typical temperature. Be sure to place the remote out in the open.

**Note:** Even though the remote sensor may send a signal for additional heat, the Remote Temperature Sensor cannot put the Heater into an unsafe heat mode. Performance is always limited by maximum power settings and multi-level safety shut-off systems. The remote is not a toy and should only be used in the prescribed manor intended for the use of this heater.

**Note:** If a room is very large or has too much heat loss, the heater may not be able to obtain the desired set temperature at the remote, even with the unit running continuously. To properly carry the heater, place one hand in the back handle opening and use your other hand to hold from the front.

In smaller areas, you might prefer to set the unit in Low Heat mode. In larger spaces you might prefer to set the unit on High Heat

10 English

# **Operating Tips**

# **Troubleshooting**

| mode. A vortex beam of air will gently keep the air circulating in the room for even, uniform heating.   | Problem  | Possible Cause and Solution  |
|--|--|--|
| <ul> <li>To use the TVH600 as a personal fan, press the "Fan Only" mode on the touch screen.</li> <li>The TVH600, like any other 1500-watt electric heater, draws up to 12.5 amps of electric current. If using your TVH600 on High heat setting causes your home circuit breaker or fuse to trip, we offer the following suggestions: <ol> <li>Try turning off other electrical appliances that run on the same electrical circuit as your TVH600.</li> <li>Run the TVH600 on Low Heat mode.</li> <li>Have your electrician add an additional circuit to your homes electrical system. ALWAYS USE COMMON SENSE WHEN USING THIS AND/OR ANY ELECTRICAL APPLIANCE.</li> <li>Do not use more than one heater at a time.</li> <li>Never ignore or take lightly the signs of an electrical problem, such as:</li> <li>Warm outlet cover plates</li> <li>Sparking at outlet when plugging in or during operation</li> <li>Light flickering or dimming (indicates a shared circuit or problem) Investigate the cause of these before continuing to use the heater.</li> </ol> </li> </ul> |  |  |
|  | Unit fails to<br>power on.                                   | Unit is not plugged in. Plug Power Cord into electrical outlet.  |
|  |  | Household circuit breaker / ground fault interrupter has<br>tripped or blown a fuse. Reset circuit breaker / ground<br>fault interrupter, or replace fuse (See OPERATING TIPS).  |
|  |  | The unit has overheated. Automatic Safety Shut-Off has initiated (See RESETTING YOUR VORNADO HEATER).  |
|  |  | Unit is damaged or in need of repair. Cease usage and unplug. Contact Consumer Service for assistance.   |
|  | Unit is not<br>producing<br>sufficient<br>amount of<br>heat. | Ensure unit is set to High Heat and thermostat is set to highest Temperature setting.  |
|  |  | Close all doors and windows to retain heat.  |
|  |  | Allow the unit to fully circulate the heat throughout the room, may take several minutes.  |
|  |  | If using remote sensor, ensure it is placed out in the open,<br>not too close to other heat sources or old drafts.   |
|  | Unit power<br>on but there<br>is no heat.                    | Power off and unplug the unit. On the bottom of the<br>unit, there is a black disk. Push in 4-5 times ensuring it is<br>not stuck. Set unit down on flat surface. Be sure power<br>cord is not under unit. Plug unit in and power on. Turn to<br>highest heat setting. |



### Whole Room Heater • 5 Year Limited Warranty

Vornado Air LLC ("Vornado") warrants to the original consumer or purchaser this Vornado<sup>®</sup> Whole Room Heater ("Product") is free from defects in material or workmanship for a period of five (5) years from the date of purchase, depending on model. If any such defect is discovered within the warranty period, Vornado, at its discretion, will repair or replace the Product at no cost. Repairs not covered by the warranty or outside the warranty period will require a fee to cover the cost of materials, labor, handling and shipping.

This warranty does not apply to defects resulting from abuse of the Product, modification, alteration, repair or service of the Product by anyone other than Vornado, mishandling, improper maintenance, commercial use of the Product, damages which occur in shipment or are attributed to acts of God.

REPAIR OR REPLACEMENT AS PROVIDED UNDER THIS WARRANTY IS THE EXCLUSIVE REMEDY OF THE CONSUMER. VORNADO SHALL NOT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES FOR BREACH OF ANY EXPRESS OR IMPLIED WAR-RANTY ON THIS PRODUCT. EXCEPT TO THE EXTENT PROHIBITED BY APPLICABLE LAW, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON THIS PRODUCT IS LIMITED IN DURATION TO THE DURATION OF THIS WARRANTY.

Some states do not allow the exclusion or limitation of incidental or consequential damages, or allow limitations on how long an implied warranty lasts, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights, and you may have other rights that vary from state to state.

For warranty or repair service, call 1-800-234-0604 or email

consumerservice@vornado.com to obtain a Return Authorization ("RA") form. Please have or include your Product's model number and serial number, as well as your name, address, city, state, zip code and phone number when contacting Vornado for warranty service. After receiving the RA form, ship your Product to:

Vornado Air LLC Attn: Warranty & Repair 415 East 13th Street Andover, KS 67002

For your convenience, please have your model number and serial number when contacting Vornado with service inquiries. To assure proper handling, packages must be clearly marked with the RA number. Packages not clearly marked with the RA number may be refused at the receiving dock.

Please allow 1-2 weeks for repair and return of your Product after the Product is received. For your records: Staple or attach your original sales receipt to this Owner's Guide. Please also write your products's serial number below (located on product specs decal).

Serial No. \_\_\_\_\_

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