

Installation and Operating Instructions

LV-240HD/55NL

LV-240HD/68NL

Digital Line Voltage

2 POLE MODEL WITH POSITIVE OFF SWITCH

General Information:

This thermostat is designed to operate line voltage electric resistance type heating.

It is also designed to meet the "Disconnect Means" criteria specified in the 1993 National Electric Code Article 424-19 ("Disconnect Means for Fixed Electrical Space Heating Equipment"). When properly installed this thermostat breaks all non-neutral load conductors when switched to the "Off" position. While in this "Off" position it is safe to perform replacement or service work on the heater load. However, if replacement or service work is to be performed on the thermostat, the power source to the thermostat must first be disconnected.

A precision thermistor is employed to sense temperature. The thermistor resistance is read by a microprocessor to determine if there is a need for heat. If heat is required, the microprocessor turns on a relay within the thermostat. This relay switches power to the connected load.

Once the need for heat is satisfied, the thermistor senses the change in temperature and causes the microprocessor to turn the relay off.

The microprocessor will keep the relay off for at least three minutes before allowing a temperature change to turn the relay on again. As a result of using this method of temperature control, the thermostat can provide greater comfort and energy savings. This control does not require batteries to operate. The thermostat has a set point of 55°F* when the thermostat is initially turned on. The set point is easily changed to suit the needs of the user.

*See spec sheet for other default set points.

SPECIFICATIONS:

Temperature Range: 40°F to 90°F (5°C to 32°C)

Temperature Default: 55°F (12.7°C) or 68°F (20°C)

Display Format: Liquid Crystal Display (LCD)

Sampling Rate: Every 15 seconds

Accuracy: ±1.5°F

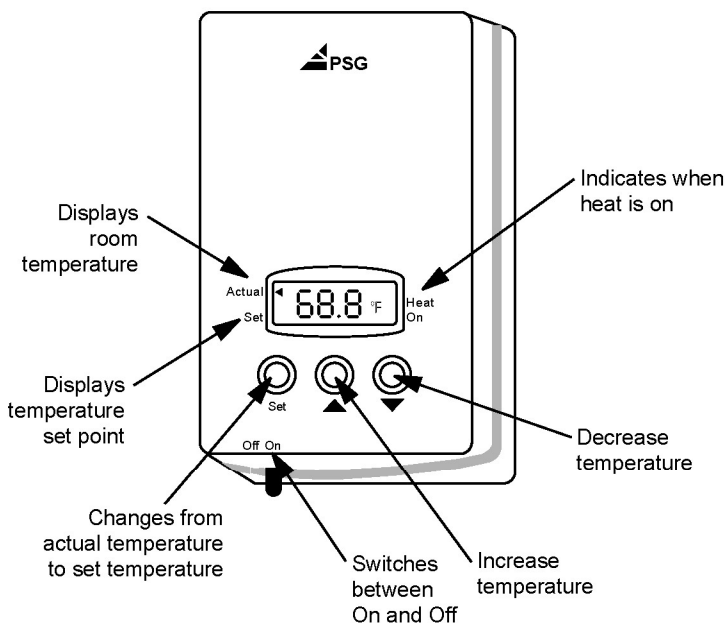
Power Source: 220VAC - 240VAC, 50 - 60Hz

Load: 16 amps resistive

Installation:

This line voltage device should be installed and serviced by a qualified electrician.

The thermostat has been designed to mount to a standard 2" X 4" electrical outlet box. Leveling of the thermostat is not required. Mounting screws are provided. Mount the thermostat about five feet above the floor in an area with good air circulation. Avoid mounting the thermostat where it will be affected by drafts, air from ducts, and radiant heat sources such as appliances or the sun.



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PSG Controls, Inc. (Hereinafter referred to as "PSG") warrants the following:

Only cataloged products sold to distributors are warranted to the original purchaser, to conform with specifications furnished or approved by PSG, and to be free from defects in material and workmanship, for a period of one (1) year from the date of purchase, unless specified in writing for a different period.

Any PSG product that proves defective within the above described warranty period will be repaired or replaced (at PSG's option) free of any charge if returned to the PSG factory at 1225 Tunnel Road, Perkasie, PA. 18944 with transportation charges prepaid. Prior to returning this product to PSG, the purchaser shall give PSG notice in writing stating how this product fails to fulfill this warranty. No product shall be accepted for repair or replacement without a required written notice and without prior written authorization and shipping instructions having been received by the purchaser from PSG. Only PSG's factory is authorized to perform services under this warranty.

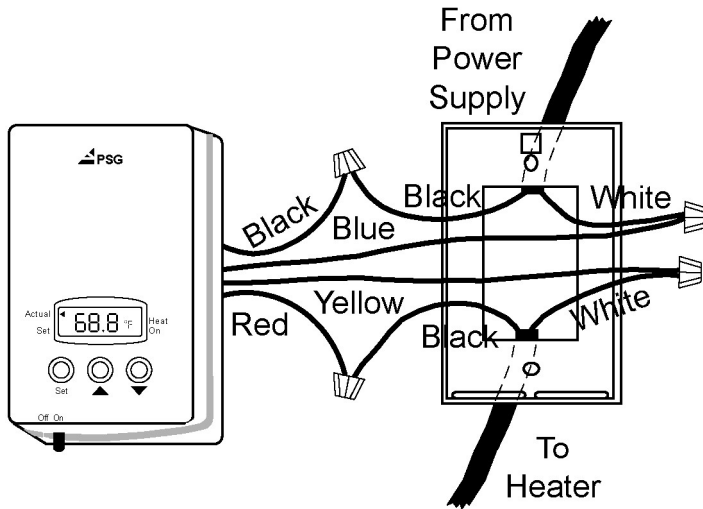
This warranty does not extend to any product that has been subjected to misuse, abuse, neglect, accidents, alterations, improper installation or use in violation of the printed instructions furnished by PSG. This warranty neither applies to batteries nor deterioration of, nor damage to the product caused by the use of faulty batteries. Final determination as to whether any product is actually defective rests solely with PSG.

This warranty is expressly in lieu of all other agreements and warranties, expressed, implied, or statutory and PSG has no other obligations or liabilities in connection with this product. In no event shall PSG's obligation or liability hereunder exceed the purchase price of this product. PSG SHALL NOT IN ANY EVENT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES. This warranty gives you specific legal rights, and you also have other rights which vary from state to state. Some states do not allow the exclusion or limitation of incidental or consequential damages, or implied warranties, so the above limitations or exclusion may not apply to you.

User Note: The top of this unit will become warm to the touch. This is a normal operation. Internal heating is employed to continuously convect air through the thermostat, thereby improving room air temperature measurement.

Installation:

- Read "General Information" on reverse side before beginning.
- Turn electrical power "OFF" where installation is being done!!
- Screw thermostat mounting plate to outlet box.



- Attach wires per diagram above.
Note:
Provide proper wire size and overload protection to meet code and safety requirements.
Insure proper line voltage for model being installed (220VAC to 240VAC).
- Push excess wires into outlet box.
- Insert groove on bottom of thermostat into lip on bottom of mounting plate.
- Tilt thermostat up and flat against mounting plate.
Drive holding screw into top of thermostat.
- Installation is now complete.



Toll free technical assistance is available
via our technical hotline: 1-800-523-2558
(in PA: 215-257-3621)

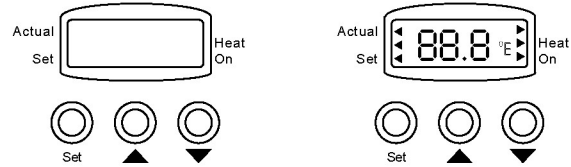
Mon-Fri, 8:00 A.M. to 4:30 P.M. Eastern Standard Time

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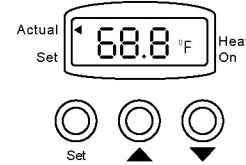
SETTING NEW STANDARDS IN TEMPERATURE CONTROLS

Setting Temperature:

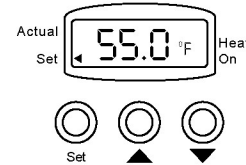
- After installation has been completed, power can now be turned "ON".
- LCD will, at first, be blank, then will display all 8's,



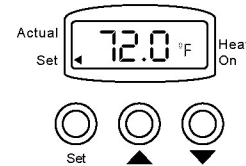
then actual room temperature.



- Press "Set" button to display set point.
Display arrow moves to "Set".



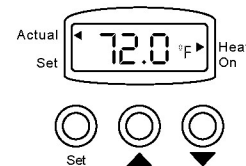
- Press up ▲ button to raise temperature set point.
Press down ▼ button to lower temperature set point.
- Note that if thermostat switch is turned to the "Off" position or a loss of power occurs, the set point resets automatically to 55°F. (See spec sheet for other default set points.)



- Display will automatically return to room within 15 seconds.
If room temperature is 100°F or higher the display will not show the 1.

Example: 100.0°F will appear as 00.0
102.5°F will appear as 02.5

The thermostat will now precisely control at your set point.
A display pointer will indicate when heat is turned on.



- Note:
There is a built-in 3 minute time delay between "Off" and "On" to prevent rapid cycling.

Normally it takes about 30 minutes after start-up for the thermostat to stabilize the room temperature.