

# ECONO-HEAT HARD WIRING GUIDE

## ➤ INTRODUCTION

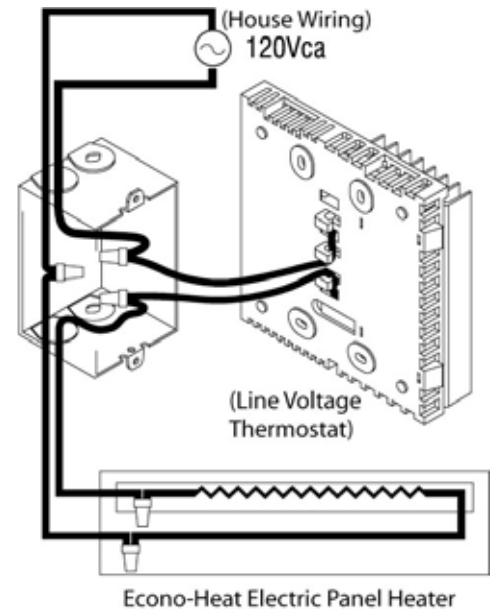
Thermostats, timers and switches can be hardwired to heating equipment to allow ease of use or greater temperature control. We carry a range of line-voltage thermostats and timers. All of our thermostats operate on regular house voltage (120 volts); although some are dual voltage (120/240volt) and either have a digital display or stylish control knob. Please see our website products page for more product information ([Click here for Products Page](#)). Installing a thermostat, timer or switch is a relatively simple task but should be conducted by a licensed electrician. The following description is merely an explanatory guide only.

## ➤ GENERAL DESCRIPTION

The active wires on certain resistive heating equipment can be wired together in parallel and attached to the output side of a line voltage (120 volt) thermostat or switch. The active wire of the household power supply can then be wired into the input side of the thermostat. The neutral wires of the heating equipment should also be wired together back to the neutral of the building wiring.

## ➤ USING A RECEPTACLE

The factory assembled heater power cord contains two wires only and has a molded plug on one end for plugging into a regular 120volt wall outlet. The following is our recommended method for hardwiring. This method involves hardwiring a 120volt receptacle to the thermostat. The receptacle can be of the recessed kind (for clearance) sometimes called a 'clock' receptacle. This will enable installation **behind** the corner of the EconoHeater. Using a standard receptacle will mean that the receptacle will have to be installed **to the side** of the heater. The EconoHeater is then simply plugged into the receptacle and will be controlled by the thermostat as the thermostat turns off power to the receptacle according to its comfort setting. The recessed receptacle should be installed directly behind the circular plastic connection cover on the rear of the EconoHeater (bottom right hand corner). This is safe as there are no electric elements (and therefore no heat) in this area. The diagram to the right shows the schematic of what this would look like.



## ➤ USING A WALL BOX

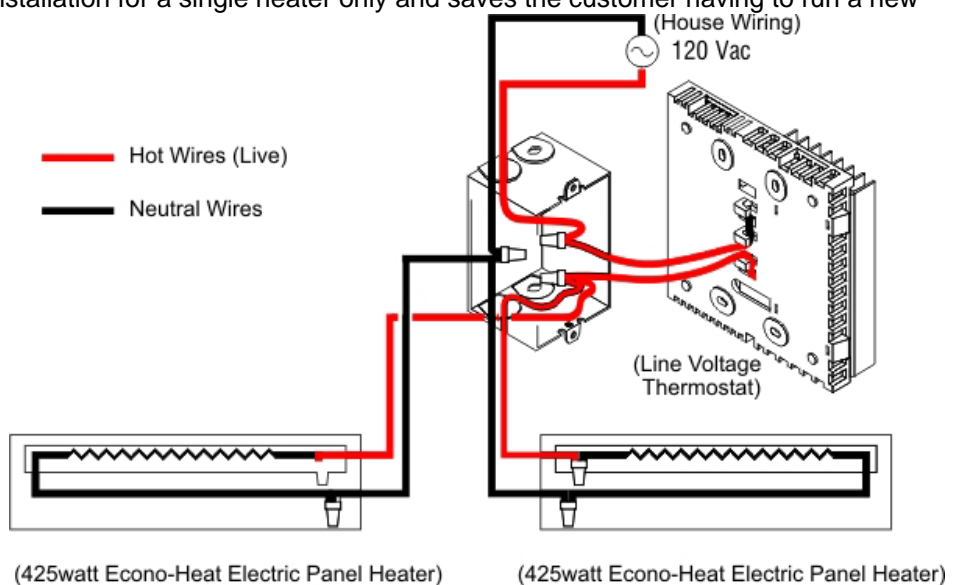
Although not recommended we are aware that many customers choose the 'do-it-yourself' approach to hardwiring. Please be aware that if you do direct wire the factory power cord you should always check with an electrician first and check your local codes for compliance. The following is a guide to ensure the safety of our customers. One of the wires in the cord is the active wire and the other is the neutral wire. Whilst it is not recommended it is possible to directly wire the active and the neutral wires into an electrical wall box which in turn is wired to a thermostat or switch.

## ➤ QUICK & EASY SINGLE HEATER METHOD

The following is a quick but basic hardwiring installation for a single heater only and saves the customer having to run a new power circuit to a heater. You should also check with an electrician and your local codes as to the viability of this method. Install the EconoHeater near an existing power outlet. The outlet has a 4"x2" wall box and power wires behind it that can be utilized to power the thermostat/switch/timer and a second receptacle that the EconoHeater is plugged into. This is a time and money saving method that could prove useful to many customers.

## ➤ HARDWIRING OF MULTIPLE HEATERS ON THE SAME CIRCUIT

The diagram to the right shows a schematic for wiring multiple heaters to one thermostat. Please follow the instructions for your specific thermostat. The technique is the same for wiring a single EconoHeater as described above.



## ➤ WATTAGE CAPACITY

Always be aware of the wattage capacity limits of the thermostat, switch or timer you are using to control the heaters e.g. TH115 (2000 watts). In this example you can only control four (4) EconoHeaters with this thermostat.

## ➤ ADDITIONAL HELP

Please refer to the Thermostat or Timers specific instructions for proper installation for that particular product. The thermostat wiring schematic shown on this page is for the TH106 (120volt) thermostat and was extracted from the instructions for that product. Each of the thermostats we offer may have slightly different wiring schematics shown in the instructions but the principle is essentially the same. PDF versions of thermostat and timer instructions can be downloaded from the specific product page on our website. Any time 120 volt wiring is worked on, extreme care must be taken.