Bridgepoint Systems
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Bridgepoint Systems

TES Exhaust Controller Single Stage

Operator's Guide

Revised: 01/29/15

INTRODUCTION:

Model MB230 TES Exhaust Controller is a thermostat designed to be used in conjunction with electrical devices. When the TES Exhaust Controller is activated, it will allow current to pass through and activate an exhaust fan or other electrical equipment connected to the controller.

Manufactured by:
Bridgepoint Systems
4282 South 590 West
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GENERAL SAFETY RULES AND WARNING

Read and understand all instructions. Failure to follow all instructions listed below may result in electric shock, fire, property damage and/or serious personal injury.

**WARNING : Do not use the TES Exhaust Controller to control any device where unexpected or unattended start-up or shutdown could cause serious personal injury and/or property damage. Interference, interruptions, or surges in the electrical system, or malfunction may cause unexpected start-up or shutdown of plugged in devices.

**WARNING : Do not use the TES Exhaust Controller to control any device where failure to operate could cause serious personal injury and/or property damage. Interference, interruptions or surges in the electrical system, or malfunction may cause plugged in devices to fail to operate as expected.

**WARNING : Do not use the TES Exhaust Controller to control any medical device. Using the Remote Exhaust Controller to control any type of medical device could result in serious personal injury.

WARNING : Do not use the TES Exhaust Controller to control any device that exceeds its electrical load rating. Using the Remote Exhaust Controller to control a device that exceeds the electric load rating could result in serious personal injury and/or property damage. The electrical load rating for the MB230 TES Exhaust Controller is 12amps at 120 volts AC.**

**WARNING : To reduce the risk of electric shock or fire, do not expose the TES Exhaust Controller to rain or moisture. If the TES Exhaust Controller is exposed to rain or moisture, immediately disconnect the product from the AC outlet to reduce the risk of electric shock or fire and consult authorized service personnel.

**WARNING : To reduce the risk of electric shock, do not disassemble the Remote Exhaust Controller. No user-serviceable parts are inside.

**WARNING : To reduce the risk of electric shock, this equipment has a grounding type plug, that has a third (grounding) pin. This plug will only fit into a grounding type outlet. If the plug does not fit into the outlet, contact a qualified electrician to install the proper outlet. Do not change the plug in any way. Do not use any type of plug adaptor with this product.

WARNING : Unplug electrical devices from the TES Exhaust Controller before moving, adjusting or servicing electrical devices.

Remember to exercise good common sense when connecting electrical equipment to your TES Exhaust Controller as part of your E-TES drying procedure.

There can be unexpected consequences if the TES Exhaust Controllers are not used with care. For example, the exhaust fan or other electrical device connected to the control can be turned on unexpectedly due to temperature change. If that should happen, your fan or other device could be damaged which in turn could cause a fire or create a risk of electrical shock.

WARRANTY

Your MB230 TES Exhaust Controller is designed to give you years of reliable service. If a problem should arise check the troubleshooting error messages as described in the operation manual to diagnose and correct the problem if possible. If you are unable to determine the cause or solution to the problem contact your distributor or Bridgepoint Systems for assistance.

Bridgepoint Systems warrants the MB230 TES Exhaust Controller to be free from defects in material or workmanship for one year from the date of purchase.

During the warranty period, Bridgepoint Systems will, at its option repair or replace components which prove to be defective.

- This warranty does not provide for replacement of complete units due to defective components.
- Service Labor is only covered for the first 90 days after the date of purchase.
- Any costs for transportation are not covered in this warranty.
- Replacement parts are warranted only for the remainder of the original warranty period.

This warranty **shall not** apply to defects resulting from improper operation, unauthorized modification, misuse or abuse.
This warranty **does not** cover normal wear to items which require replacement as a result of ordinary usage.

To obtain warranty service for the MB230 TES Exhaust Controller, contact your distributor or Bridgepoint Systems. If the unit must be returned to Bridgepoint Systems or an authorized service center, the purchaser shall prepay shipping charges for products returned for warranty service.

- No returned items will be accepted by Bridgepoint Systems without prior authorization. All returns must have a return authorization number, issued by Bridgepoint Systems, clearly marked on the exterior of the package.

Bridgepoint Systems makes no other warranty either expressed or implied with respect to this product. The remedies provided herein are the purchaser's sole and exclusive remedies.

In no event shall Bridgepoint Systems be liable for any direct, indirect, special, incidental or consequential damages.

This warranty gives you specific legal rights. You may also have other rights which vary from jurisdiction to jurisdiction.

Single Stage Thermostat Exhaust Control

1) **Plug Module into wall outlet:**
Male plug into wall outlet provides operating power to thermostat and fans. Bottom plastic stud provides stability.

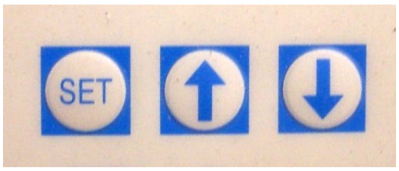
2) **Plug fan cords into one or both of the cord outlets on the module:** Total amp draw from fans connected to both outlets cannot exceed 15amps.

3) **Secure temperature probe in desired location**:
Temperature sensor can be located up to 8 feet away from module.

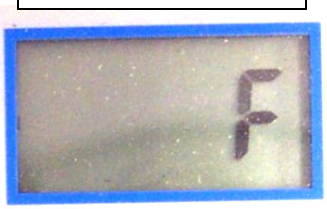
Temperature Probe with 8 foot cord

Controlled Power Outlets

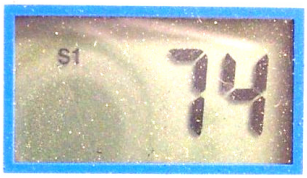
KEY PAD



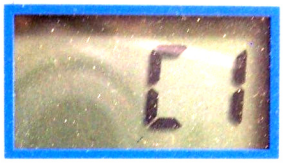
4) **Press SET:** The display will show the current TEMPERATURE MODE setting, either "C" for Celsius or "F" for Fahrenheit. Use the UP ARROW or DOWN ARROW key to switch to the desired mode.



5) **Press SET again:** The display will show the current SET POINT temperature. The "S1" symbol will be blinking on & off to indicate the display is in the SET POINT MODE. The SET POINT is the low temperature at which the outlets will turn off after the room has cooled.
Use the UP ARROW or DOWN ARROW key to switch to the desired SET POINT temperature.



6) **Press SET again:** The display will show the current DIFFERENTIAL setting. The "DIF 1" symbol will be blinking on & off to indicate the display is in the DIFFERENTIAL mode. The DIFFERENTIAL is the temperature differential between the SET POINT and the temperature at which the outlets will turn on and turn on the fans to cool the room. Basically it sets the high temperature at which the outlets will turn on in the cooling mode. The SET POINT is the low temperature at which the outlets turn off. Use the UP ARROW or the DOWN ARROW to adjust the DIFFERENTIAL from 1 to 30 degrees. If the SET POINT is set at 74˚F and the DIFFERENTIAL is set at 5. The outlets will turn on at 79˚F and will turn off when the room temperature returns to 74˚F.



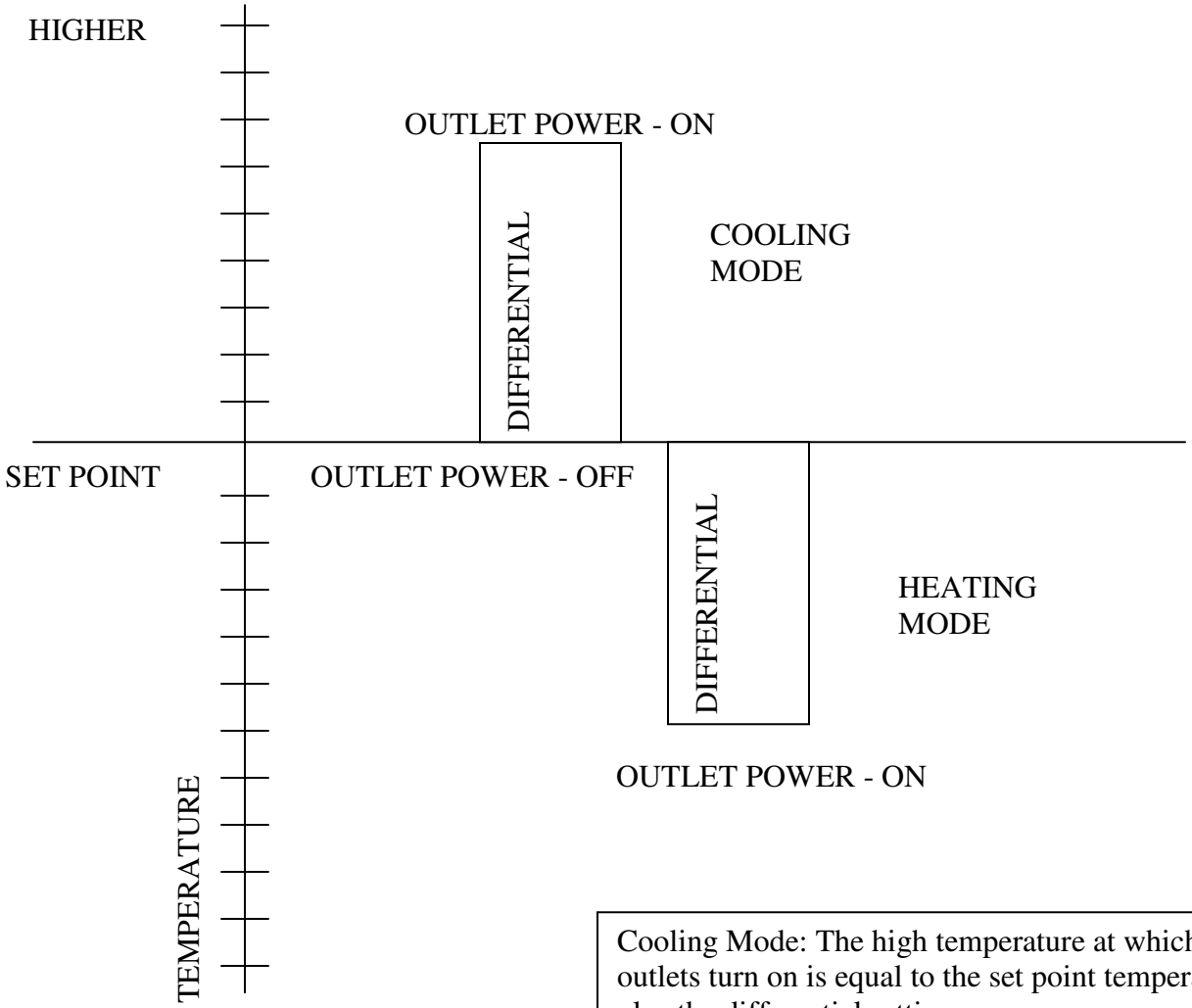
7) **Press SET again:** The display will show the current mode setting:
It will show "C1" for COOLING MODE or "H1" for the HEATING MODE. Use the UP ARROW key or the DOWN ARROW key to display "C1" for the COOLING MODE.
(Our normal use is in the cooling mode. In the heating mode the differential setting is below the set point, meaning that the outlets will turn on when the room temperature is cooler than the set point by the number of degrees at which the differential is set. If the set point is 74˚F and the differential is set at 5. The outlets will turn on when the room temperature reaches 69˚F. The outlets will turn off when the room temperature returns to 74˚F.)

8) **Press SET again** to end programming. (If no keys are pressed for a period of thirty seconds the unit will automatically end programming and any settings entered up to that point will be accepted.)
The display will show the current room temperature.
Control will retain temperature settings even after power is disconnected.
- Keypad can be disabled and control settings locked by and moving Lockout Switch to the LOCK position. To access Lockout Switch disconnect power and remover four cover screws and open thermostat controller. Lockout switch is located on the inside of the cover about two inches above the bottom. To enable the keypad for programming move the switch back to the UNLOCK position.

Troubleshooting Error Messages:

Display message	Description:
E1	Appears when the UP ARROW or DOWN ARROW key is pressed when unit is not in the programming mode. **To correct:** Stop pressing arrow key and press SET key to move into programming mode. If this message appears when no keys are pressed, replace the controller.
E2	Appears if the control settings are not properly stored in memory. **To correct:** Check all settings and correct as needed.
EP	Appears when probe is open, shorted or sensing a temperature that is out of its range. (-20˚F to 140˚F) **To correct:** Check to see if temperature is out of range. If not, check probe for damage by comparing it to known ambient temperature in its range. Replace probe if needed.
EE	Appears if the EEPROM data has been corrupted. **To correct:** Replace the controller.
CL	Appears if calibration mode has been entered.

To correct: Disconnect controller from power outlet for at least 5 seconds. Plug control unit back into power outlet. If the **CL** message still appears, replace the controller.



Cooling Mode: The high temperature at which the outlets turn on is equal to the set point temperature plus the differential setting.

Example:
Set Point = 90˚F
Differential = 10

The outlets will turn on at 100˚F and turn off when the temperature drops below 90˚F.

Heating Mode: The high temperature at which the outlets turn on is equal to the set point temperature minus the differential setting.

Example:
Set Point = 90˚F
Differential = 10

The outlets will turn on at 80˚F and turn off when the temperature rises above 90˚F.