

Frequently Asked Questions (FAQ's)

All questions beyond the scope of this text should be directed to D-M-E Company, Electronics Engineering Department, or call (800) 626-6653 to contact customer service.

Controller Modules

Why does the display on my DSS or SSM temperature controller say Sho or Shi?

Most of the time, using a newer control module with an older mainframe that was built before January 1999 causes this. The older frames do not have the anti-arc clip installed in them. All new frames have the clip installed in them from the factory. The newer controls require the anti-arc clip (pin 3) installed in the mainframe. If the clip is missing, the controller will display a shorted input (Shi or Sho) diagnostic code. Other things cause this diagnostic to occur. They are discussed below.

This diagnostic code means that the controller is checking for a 3-degree temperature rise in 60 seconds (fast load mode). If the controller does not see this rate of change, the controller will turn off the output power for that zone and alert the user with the diagnostic code. Also check for bare, pinched or twisted wires, or excessive distance between heater and thermocouple. Also check for insufficient wattage and/or voltage applied to heater. On the DSS unit, try changing the load type to slow load mode, (controller checks for 3-degree rise in 240 seconds), see below for instructions. This is usually caused by large loads, such as manifolds having too small of a heater, or too little voltage. Also check for damage to the electronic circuitry due to excessive input voltage caused by shorted heaters. Check for shorted heater in the mold.

Why does the display on my CSS temperature controller say ShO?

This diagnostic code means that the controller sees a temperature rise even though it is not outputting any power. Check for shorted triac or crossed wired zones (power and thermocouple).

Why does the display on my temperature controller say oPE or oPi?

Check thermocouple and wiring for breaks. Check fusible link resistor on the module. Check for damage to the electronic circuitry due to excessive input voltage caused by shorted heaters. Check for shorted heater in the mold.

Why does the display on my temperature controller say bAc or bci?

Reverse thermocouple wiring. Check fusible link resistor on the module. Check for damage to the electronic circuitry due to excessive input voltage caused by shorted heaters. Check for shorted heater in the mold.

Why does the display on my temperature controller say GFI or 6F1?

Check for wet or shorted heater. Replace heater if necessary.

Why does the display on my temperature controller say oPO?

Check for burned out heater or break in wiring or open triac.

How do I change my temperature controller unit to display the temperature in degrees Centigrade?

A jumper on the board can be soldered on some units. Other units have a dipswitch that can be set. On the DSS unit, it is selected by turning off the power switch, pressing and holding the UP arrow key while toggling the power switch to the on position and then release the UP arrow key when deg F or deg C appears on the display.

How do I stop the temperature from running away (rising) on my controller?

Controller may need to have the triac and/or triac driver replaced. Also check for crossed wired zones.

What is the part number for the fusible link resistor?

D-M-E replacement part number RPM0050 (sold in packs of 10).

What is the part number for the triac?

D-M-E replacement part number RPM0023 or Q6040P.

My module lights up and both fuses are ok, but it won't output any power.

What should I do?

Check that the setpoint value is set to your desired temperature (greater than room temperature) or manual percent power value is greater than zero. Replace the defective open triac. Make sure the anti-arc clip in the mainframe edge connector, position 3, is installed (see anti-arc clip below for more information).

How often should I calibrate my temperature controller?

Calibrate your modules as often as you feel necessary. D-M-E makes no recommendation on the frequency of calibration.

What is a "thermocouple simulator"?

It is used to calibrate your controller. It simulates a thermocouple output at a specific temperature. It is used during the calibration procedure found in the user manual.

The gold fingers on my temperature controllers are burnt off, what should I do?

Nothing can be done. Unit needs to be replaced. To prevent this from happening, turn off the power before inserting or removing modules from the mainframe.

How do I change my DSS temperature controller from fast load mode (FSt) to slow load mode (SLO)?

Turn off the power switch, press and hold the DOWN arrow key while toggling the power switch to the on position, release DOWN arrow key when you see SLO or FST in top display, SHI will appear in lower display.

How do I get service for a module that is not working?

Please send your defective modules to main headquarters for service.

Does D-M-E have a calibration service for my modules?

Yes, please send your modules to main headquarters for calibration.

Mainframes

How do I modify my mainframe to work on single-phase 240V?

The back panel has a full schematic of where each wire should be attached in the mainframe. The brass terminals have “fast-on” connectors attached to the end of each wire that you need to move according to the schematic on the back panel. You can also consult your user manual or section-Q in the D-M-E catalog.

What is the anti-arc clip used for in the mainframe?

The clip is used to inhibit the triac from outputting any power until the module is fully inserted into the mainframe. This will assist in preventing arcing of the gold fingers when the controllers are accidentally inserted or removed while the power is turned on. The clip is installed in the 3rd position of each of the white edge connectors in the mainframe. Newer anti-arc equipped modules will not output any power until this anti-arc clip is installed in the mainframe. All mainframes built after January 1999 have this clip already installed in them.

What is the part number for the anti-arc clip used in the mainframe?

D-M-E replacement part number RPM0046 (sold in packs of 20).

How often should I calibrate my mainframe?

Your mainframe does not require calibration.

What is the replacement part numbers for the pins used in the connectors on the side of my mainframe?

The mainframe uses male pins for the thermocouple connections, D-M-E replacement part number PIN0120, and it uses female pins for the power connections, D-M-E replacement part number PIN0214.

What is the replacement part number for the inserts used in the connectors on the side of my mainframe?

The mainframe uses male inserts for the thermocouple connectors, D-M-E replacement part number RPM0072, and it uses female inserts for the power connectors, D-M-E replacement part number RPM0073.

What is the replacement part number for the card guides used in my mainframe?

The mainframe uses D-M-E replacement part number RPM0044 for the card guides.