



STEC Industrial Solutions Inc.

TMF6 / TMF12 Series

Hot Runner Temperature
Controller Operation Manual

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We focus on hot-runner temperature controller
Provide world-class temperature control solution for hot runner mold

1-844-310-STEC (7832)
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Show interface and panel

■ Control panel



■ Interface type



Warning!

- 1.The main power on backboard must be closed before you replace die and pull out connecting cable !
- 2.The main power on backboard must be closed before you replace or maintain control card uni !
- 3.Please close battery main switch if you don't use this product for a long time !
- 4.The control cabinet must have reliable earthing before it is used !
- 5.Please confirm the arrangement mode of heater and thermocouple of control cabinet and die before connection of die .

This product is of metal shell; there shall be good earthing while it is used so as to avoid electric shock! !

Operation interface

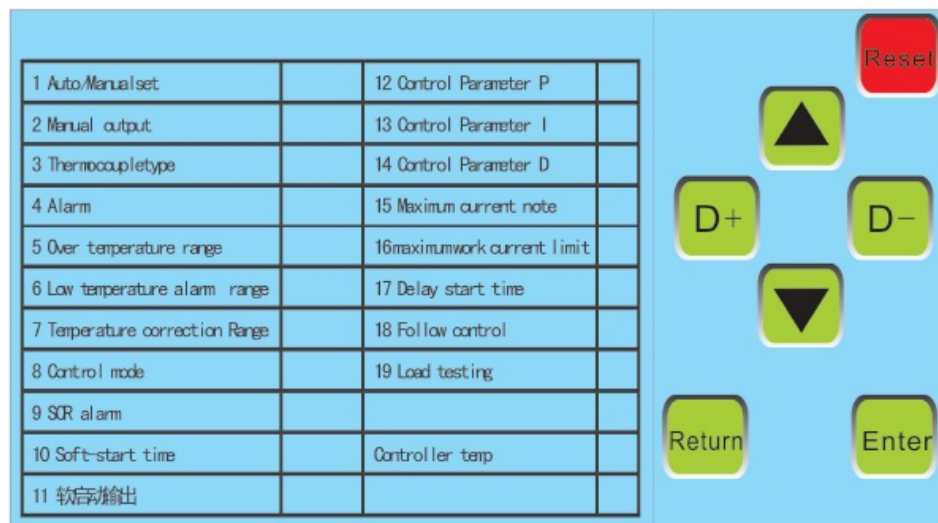
■ The main display interface



■ Setting temperature interface



■ Single-circuit parameter setting interface



Specification

- Control error : $\pm 1^{\circ}\text{C}$
- Cold junction compensation error : $\leq \pm 1^{\circ}\text{C}$ temperature coefficient
- Scope of temperature control : 0-400 $^{\circ}\text{C}$ for K-type thermocouple; 0-400 $^{\circ}\text{C}$ for J-type thermocouple
- Total output power: : 3KW x each zone
- Maximum output current of single circuit: 15A
- Alarm scope: freely set within 0-100 $^{\circ}\text{C}$
- Applicable model of thermocouple: K and J
- Working power supply: AC220V (three-phase four-wire)
- Digital PID adjustment
- Working environment: -10 $^{\circ}\text{C}$ -60 $^{\circ}\text{C}$, relative humidity of 35%-85%RH, occasion without corrosiveness or strong radiation of electromagnetic field

Function

- Large-screen visual display of LCD graph
- Touch key-press control
- Display of current and output proportion
- Prompt of fuse damage
- Malfunction detection on thermocouple
- Malfunction detection on heating tube
- SCR temperature detecting
- SCR temperature detecting
- Maximum current limiting function
- The linear voltage is adopted to control the output so as to provide better protection for heating tube

Alarm description

- Acoustic alarm:
Acoustic alarm: interrupted alarm sound—communication fault
Continuous alarm sound—control alarm

Prompt symbol of alarm:

Over voltage
Low temperature
Communication fault
Fuse damage
Heating open-circuit
Heating short-circuit
SCR high temperature
SCR open-circuit
SCR short-circuit
TC Reverse
Overtemperature
TC open

"Off", said the circuit is not working condition
"Run" the working state of the loop is in automatic temperature control
"Follow" said output voltage with the circuit, the output voltage is equal to being followed circuit output voltage
"Disabled", said the loop are forbidden to use, if used, into the temperature control screen, press the ON/OFF button
"Manual" said manual output performance of the circuit

Status symbol:

OFF RUN FLW DIS MT

Note: Please turn off the main power on backboard if you don't use this machine for a long time !

Operation instructions

1.Startup & shutdown:

① Move the power main switch on backboard .
of control cabinet to the position ON .

As shown in figure



② If you need to set up single loop switch, enter the page 2, press the "ON/OFF" button

As shown in figure

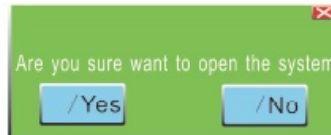


③ Press down "Open/Close" button on main display interface of screen. As shown in figure .



In the picture and then click the "yes" can open the heating system.

As shown in figure



2.Temperature setting

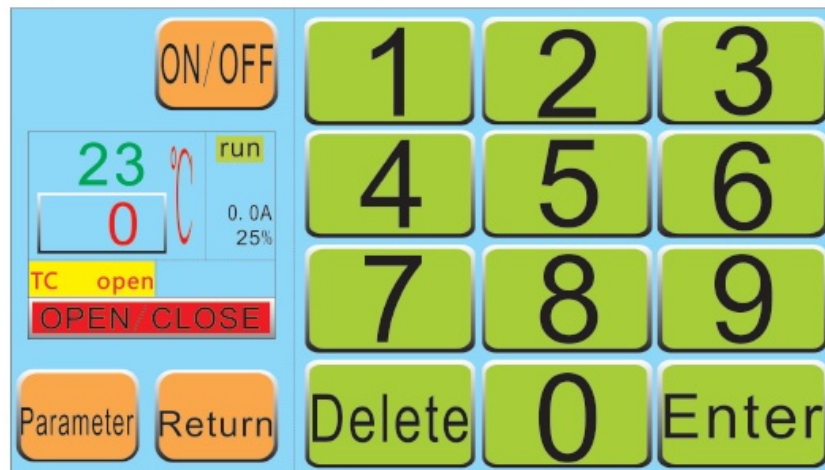
Press down "SV" key, and then the keyboard setting interface will appear on the screen press down the required temperature, and then press down "enter" key.

As shown in figure :



3.Parameter setting:

If you need to adjust the parameter of this control circuit, enter into temperature setting interface and press down "parameter" key . As shown in figure:



After you enter into parameter setting interface,  move the cursor, after you move the cursor to the parameter to be set, press left and right key   to select setting parameter . If

you've been press D + or D -, is set value will be automatically added or automatically, set after

press "Enter" key.  If you need to recover this circuit to factory settings, it is ok to press down

"reset" key.



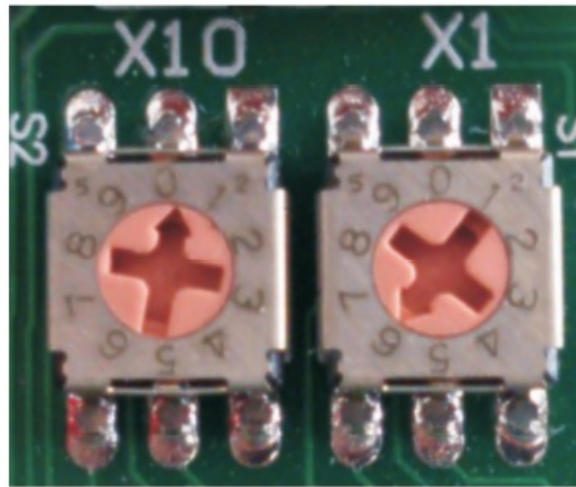
■ 4.Lock the screen:

After the temperature set in order to prevent wrong operation, you can press the red button, the screen will be locked , then the screen display lock screen hints.

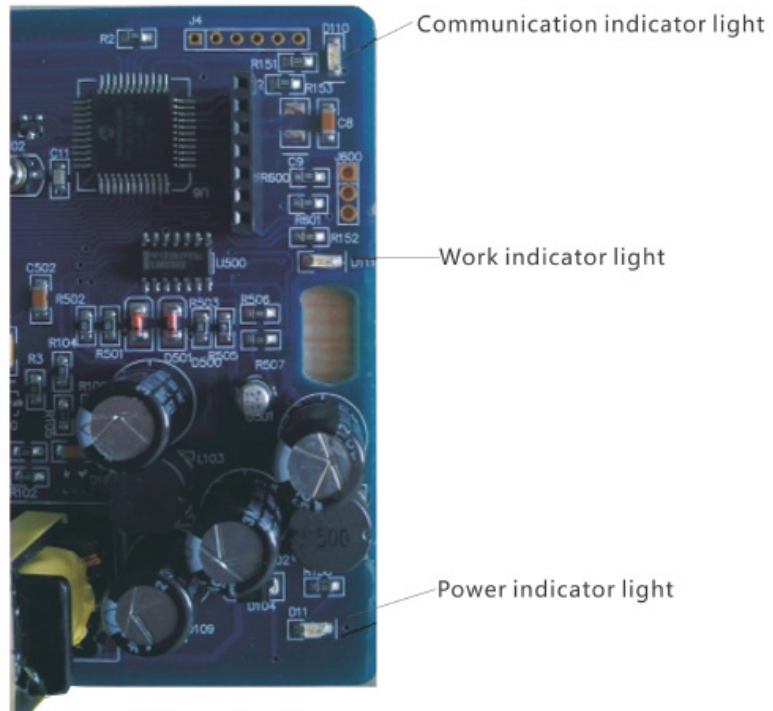
Maintenance

■ Replacement of control card

If it is found that there is any damage in control card in the use process, you can pull out the control card and replace it of standby control card. Before the standby control card is inserted, it is required to set address code of control card; see figure below as for address setting:



■ Description on indicator light of control card



Statement of responsibility

- Although we have designed many design measures in the control cabinet, the user still shall set suitable protective device in application system of control cabinet. In full consideration of loss which may be caused due to reliability of controller, we state that we will not bear responsibility of compensation for all losses (including personal or property, etc.) caused due to reliability of controller or other reasons except the control cabinet itself.



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