LTTC700 PID Temperature Controller With Timer & Counter User Manual

1. User Parameters:

In normal measurement and control state, press the "MODE" key once to enter the user control target value setting. Press the "MODE" key again to complete the setting.

Code	Code meaning	Description	Range	Default
SV	Heating temperature	When SV window flashing, means setting temperature	-1999-9999℃	150℃
ST	Heating time	When ST window flashing, means setting heating time	0-999 S	5 S

2. Engineering Parameters:

Press the "MODE" key for 3 seconds to enter the engineering parameter setting menu. To exit, press the "MODE" key for 3 seconds. To set the next parameter, press the "MODE" key once. If no key is pressed for about one minute, it will automatically exit.

Engineering Code Explanation:

Code	Meaning	Description	Range	Default
AL1	Alarm 1	There are 12 types of alarm methods, which are specifically determined by OP1.	-1999-9999℃	20℃
P	Proportional value	If it is 0, it is ON/OFF control, and at this time, the "I" and "D" menu will not be displayed, but the "OH" and "OHH" menus will be displayed.	0-999℃	30℃
I	Integral time constant	If it is 0, the integral control effect is canceled.	0-3600 S	240 S
D	Differential time constant	If it is 0, the differential control effect is canceled.	0-3600 S	60 S
AR	Integral limiting	Used for integral limiting	0-100	100
ATU	Auto-tuning switch	OFF: turn off, ON: turn on	ON/OFF	OFF
OH	ON/OFF control	PV < (SP - OH) Control Turns On Output	-	-
OHH	ON/OFF control	PV > (SP + OHH) Control Output is Turned Off	-	-
T	Control cycle	Main control cycle time	1-99 S	20 S
SC	Display value correction	Display value = PB value + internal measurement value	-50-50℃	0
LCK	Parameters lock	**0**: SV and all engineering parameters can be set, **1**: Only SV and time can be set, **911**: Restore factory settings, **199**: Quick access to modify factory parameters, **190**: Quick access to modify hot stamping parameters, **192**: Quick access to modify counting parameters.	0-full scale	0

3. Factory Parameters:

Press the "MODE" key, make LCK=199 to enter the factory menu.

Factory Parameters Description:

Code	Meaning	Description	Range	Default
SL1	Temperature input	**0**: K, **1**: J, **2**: R, **3**: S, **4**: B, **5**: E, **6**: N, **7**: T, **8**: PT100, **9**: CU50	0-9	0
UNIT	Temperature unit	**0**: ℃, **1**: ℉	-	0
DP	Decimal point	When INT is PT100 or CU50, DP=1 means display with decimal point	0-1	0
DF	Filtering coefficient	The larger the coefficient, the deeper the filtering, the more stable the display, but the slower the response	0-250	200
OP1	Alarm 1 working mode	See the next section alarm mode table	0-16	1
AH1	Alarm 1 relay switching differential alarm	Relay switching differential	0-200	1
SCH	Upper limit of range	-	-1999-9999℃	
SCL	Lower limit of range	-	-1999-9999℃	
KEY	Built-in buzzer control mode	-	-	-
DYT	Temperature tracking amount	Brings the displayed temperature closer to the set value within the range of ±DYT	0-20.0	0.6

4. Hot Stamping Parameters:

Press the "MODE" key, make LCK=190 to enter hot stamping parameter menu.

Hot Stamping Parameter Description:

Code	Meaning	Description	Range	Default
RUS	Timing method	**0**: Reverse timing, **1**: Forward timing.	0-1	0
OTS	Hot stamping working method	**0**: The external switch is closed and the countdown starts. When the countdown reaches 0, the time relay is energized and the internal buzzer sounds. **6**: The proximity switch is closed and the countdown starts. When the countdown reaches 0, the time relay is energized and the internal buzzer sounds. **16**: Short press the external switch to start the countdown. When the value reaches 0, the time output is turned off and the buzzer sounds.	0-16	0

5. Counting Parameters:

Press the "MODE" key, make LCK=192 to enter the counting parameter menu

Counting Parameter Description:

Code	Meaning	Description	Range	Default
COK	Clear accumulated password	=120, after ADD is displayed, long press the "RESET" key to reset the accumulated number	0-999	0
ADD	Accumulated value	"ADD" is the current cumulative count, with the time window as the high 3 digits and the count window as the low 5 digits, up to a maximum of 99999999.	COK=120, can press "RESET" button to clear	0
C-T	Window selection	=0: The count window displays the current count value =Others: The count window displays the SP set value	0-3	0
COY	Power-on counting selection	=1: Power on resets the count value (counts from 0) =Others: Power on starts counting from the count value at the time of power loss	0-3	1
SLP	Sleep setting	=0: No sleep function, =30: The screen will go into sleep mode if there is no operation within 30 minutes.	0-999 M	0

6. Alarm Mode Table:

OP1 Code	Function
0	No alarm
1	Upper limit deviation alarmLower limit deviation alarm
2	Alarm outside upper and lower limit deviation
3	Alarm inside upper and lower limit deviation
4	Lower limit absolute value alarm
5	Upper limit absolute value alarm
6	Upper limit deviation alarm with hold
11	Lower limit deviation alarm with hold
12	Upper limit deviation alarm outside hold
13	Upper limit deviation alarm with hold
14	Upper limit deviation alarm inside hold
15	Lower limit absolute value alarm with hold
16	Upper limit absolute value alarm with hold