











## ZL-6217A Digital Controller

### Instruction:

ZL-6217A digital controller adopt PID control, small temperature inertia, with high precision. It equips a time switch output, also can connect with fan to improve temperature balance. This controller is suitable for incubator and heating equipment in Lab.




### Specification:

 Power Supply: AC185~245V 50HZ	 Input Signal: NTC Sensor
 Setting range: -40~130°C	 PID Temperature Input: 7A 250Vac
 Working Temperature: -20~60°C    RH ≤ 90%	 Time Switch Output: 7A 250Vac (Resistive loads)
 Dimension: 78*34.5*71(mm)	 Case: PC + ABS Fire proof
 Hole Size: 71*29(mm)	 Protection Level: IP65(Front Panel)

### Display Indication

#### Display Signal Indication

◇ If do not press any key for 30 seconds, the display will turn off to enter power save mode

Icon	Function	On	Blinking
	Heating output	Heating start	----
	Timing	Start timing	----
	Warning	----	Warning
E1	Warning	----	Sensor warning
Hi	Warning	----	High temp. warning
Lo	Warning	----	Low temp. warning
iA	Warning	----	Outside input warning
UnL	Hint	Restore default factory setting	----

### Key Operation

#### Temperature setting

Keep [S] pressed for 3 seconds to enter temperature setting mode(digital blinking means setting the temperature), press [▲] or [▼] to set the value.

After setting, press for 3 seconds to exist and saving the value. If do not press any key for 30 seconds, the mode will exit without saving all the set data.

Default value: 35°C;

#### System setting

Press [P] for 3 seconds to enter parameter setting(show parameters code), press [▲] or [▼] to set parameter.。

After setting parameters press[S] show the value. Press [▲] or [▼] to adjust. After that press[S] return parameters codes choose.

After setting, press[P] for 3 seconds to exist and save parameters. If do not press any key for 30 seconds, the mode will exit without saving all the set data.


Note: If passwords function on, enter parameters setting digital shows [---0] .Press [▼] to choose change which one, press

【▲】 to set the value(0-9). Than press 【▲】 to confirm.(If passwords is “0000”, turn this function off.)


**ZL-6217A parameters code:**

No.	Code	Function	Range	Instruction	Default
1	U10	Set temperature minimum value	-40℃~130℃		-40℃
2	U11	Set temperature maximum value	-40℃~130℃		130℃
3	U12	Low temperature warning value	-40℃~130℃		-40℃
4	U13	High temp. Warning value	-40℃~130℃		130℃
5	U20	Sensor revise value	-20~+20℃		0
6	U40	Timing on unit	0 ~ 2	0:Sec; 1:Minute; 2:Hours	1
7	U41	Timing value	1 ~ 9999		120
8	U42	Timing off unit	0 ~ 2	0:Sec; 1:Minute; 2:Hours	1
9	U43	Timing value	1~ 9999		120
10	U60	Outside input warning mode	0~2	0:Forbidden;1:On 2:Off	0
11	U99	Passwords	0000~9999	0000: No passwords	0000

**Control function:**

 **Heating control**


◇ Controller adopt PID control to control heating output.

 **Cycle timer control:**

- ◇ When enter timing function time, timing output(R2) start.
- ◇ When its not timing time, timing output(R2) off.

 **Over temperature alarm**

- ◇ When temperature lower than warning value, controller blinking with buzzer alarm, heating control and timing output keep working.
- ◇ When temperature high than warning value, controller blinking with buzzer alarm, heating control stop and timing output keep working.

 **Output input warning**


- ◇ Forbidden: no warning;
- ◇ On: Normal state is on, off will warning, stop heating control output. Timing output keep working.
- ◇ Off: Normal state is off, on will warning, stop heating control output. Timing output keep working.

 **Buzzer alarm function**

- ◇ When the system comes wrong or external alarm input, the buzzer alarm function will be off if system returns normal. Press [P] to cancel the buzzer noise.

 **Temperature correct function**

- ◇ Correct measuring temperature value by 【Sensor revise value】 , correct range is ±20℃.

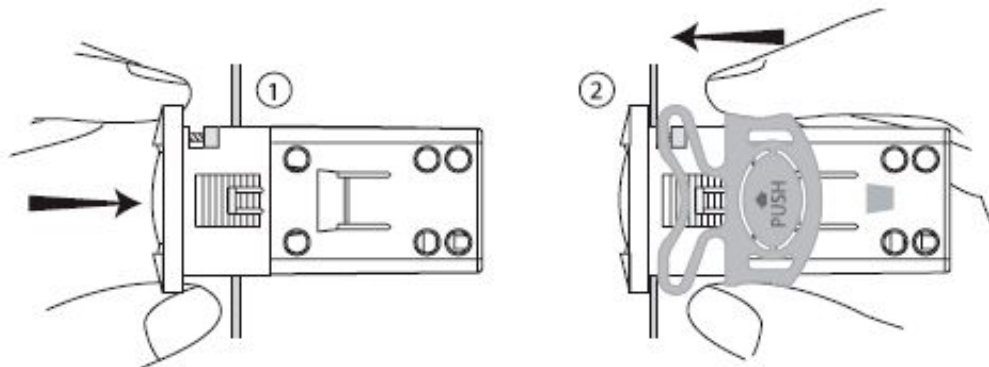
 **Restore default factory setting:**

- ◇ Press【P】and【▲】 for 5 seconds, digital shows『UnL』, than press【▼】twice. Controller will restore the factory parameters

with the default password "0000".

### Installation Procedure

Insert the controller into hole      Slide the bracket to fix the device



### Warning

- Electrical wiring must be manipulated by certified electrician.
- Wrong power supply may damage the device and system seriously.
- Try with effort to layout the sensors and switches line apart from inductive load lines and power supply lines. The sensors and switches lines are not allowed go with the power supply lines and inductive load lines in a same pipeline, and are not allowed to pass near the contactor, breaker and the similar.
- Reduce the length of sensors' wiring as possible, avoid forming a spiral shape near the power devices.
- Avoid direct contact with the internal electronic components.
- After finish and check the electrical wiring layout, before connect them to the device, please follow this instruction: Pay attention the "electrical wiring diagram" below, wrong connection possibly damages the device and the system, and may be dangerous to the user. All security and protecting device for the equipments are necessary. They are very important to protect the equipments, and the user's safety.

### Wiring Diagrams

