



AT02 SERIES PID TEMPERATURE CONTROLLER User's Manual

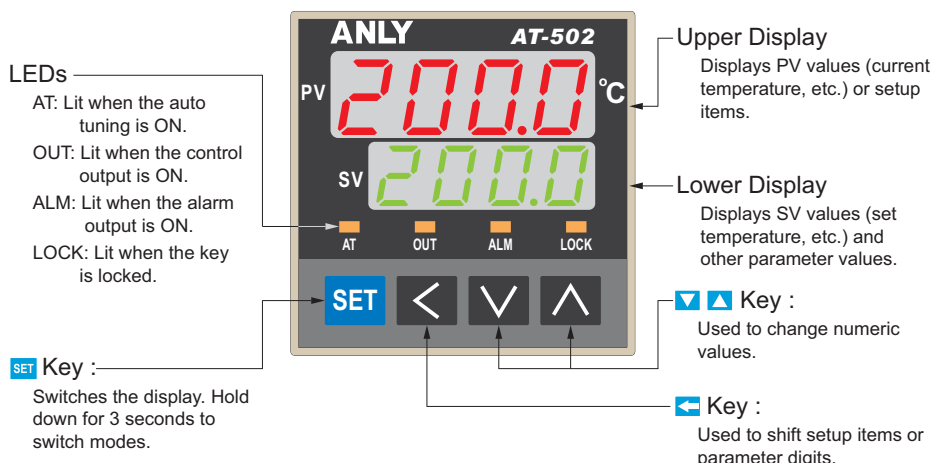
RESTRICTIONS ON USE

When using this product in applications that require particular safety or when using this product in important facilities, please pay attention to the safety of the overall system and equipment. Install fail-safe mechanisms, perform redundancy checks and periodic inspections and adopt other appropriate safety measures when it is necessary.

ATTENTION !

1. Please read the SAFETY PRECAUTION section on reverse side before use of this product.
2. Please read this user's manual before use for proper operation.
3. Please safe guard this user's manual.

* Names and Functions of Parts *



* Function Setting *

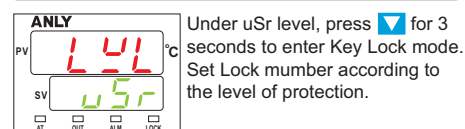
Warning! Please make sure the power is off, before making any changes on the DIP switch.

			DIP Switch					
			1	2	3	4	5	6
Input type	K Type	0~1200°C	ON	OFF	OFF			
	J Type	0~500°C	ON	ON	OFF			
	R Type	0~1700°C	ON	OFF	ON			
	PT-100	-50~400°C	OFF	ON	ON			
Control Mode	ON/OFF CONTROL					OFF		
	PID CONTROL					ON		
Output	RELAY						OFF	
	DC 24V(for SSR driven)						ON	

List of Alarm Mode :

1	Deviation High Alarm
2	Deviation Low Alarm
3	Process High Alarm
4	Process Low Alarm
5	Deviation High/Low Alarm
6	Band Alarm
7	Deviation High Alarm (Standby)
8	Deviation Low Alarm (Standby)
9	Process High Alarm (Standby)
10	Process Low Alarm (Standby)
11	Deviation High/Low Alarm (Standby)
12	Band Alarm (Standby)

* Key Lock Setting *



List of Key Lock Mode :

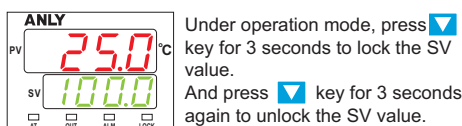
	LL	usr	Pid	SEt	ArG
Others	○	○	○	○	○
0022	○	○	○	○	○
0111	○	○	○	○	○
1122	○	○	○	○	○

Symbol—○: Can display and can be set
X: Can't display nor can't be set

* User Level Setting *

- ① **Power ON**
The initial screen is displayed for about 3 seconds.
- ② The IC version is displayed for about 6 seconds.
- ③ The operation mode is displayed.
- ④ Press **SET** key for 3 seconds to the Alarm range setting mode.
- ⑤ Press **SET** key once to the Auto Tuning switch mode.
- ⑥ Press **SET** key once to the PV Offset mode.
- ⑦ Press **SET** key once to the SV Offset mode.
- ⑧ Press **SET** key once to the operation mode.

* SV Lock Setting *



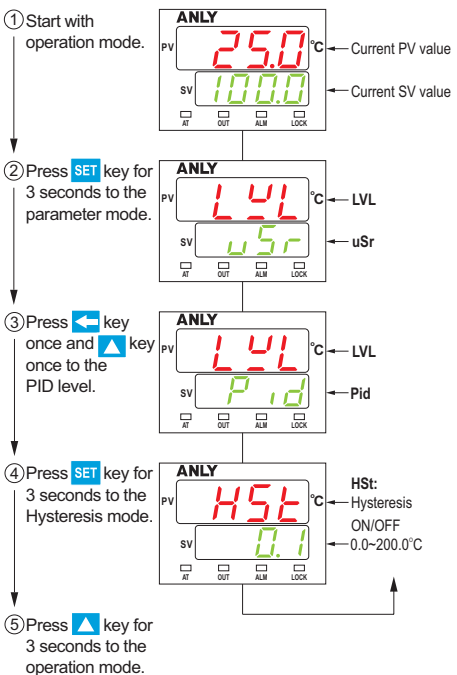
* PID Control Setting *

Ensure the DIP switch is set to PID control mode before proceed further.

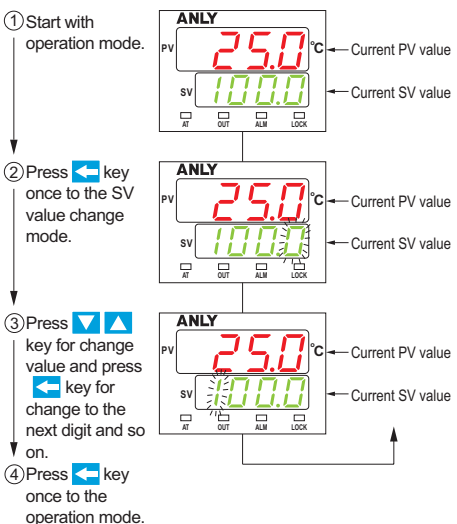
- ① Start with operation mode.
- ② Press **SET** key for 3 seconds to the parameter mode.
- ③ Press **Key** once and **Key** once to the PID level.
- ④ Press **SET** key for 3 seconds to the P mode.
- ⑤ Press **SET** key once to the I mode.
- ⑥ Press **SET** key once to the D mode.
- ⑦ Press **SET** key once to the Relay output cycle mode.
- ⑧ Press **SET** key once to the SSR output cycle mode.
- ⑨ Press **Key** for 3 seconds to the operation mode.

*** ON/OFF Control Setting ***

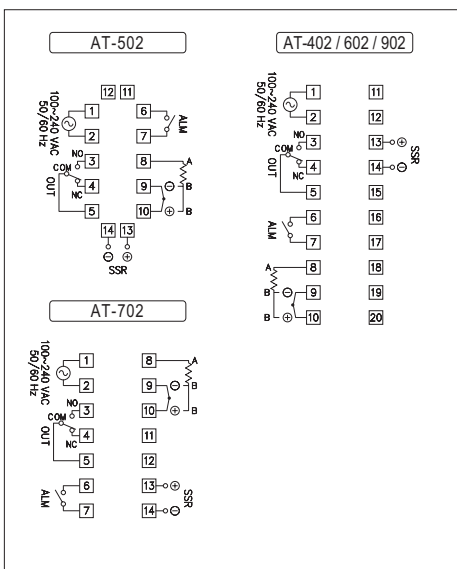
Ensure the DIP switch is set to ON/OFF control mode before proceed further.



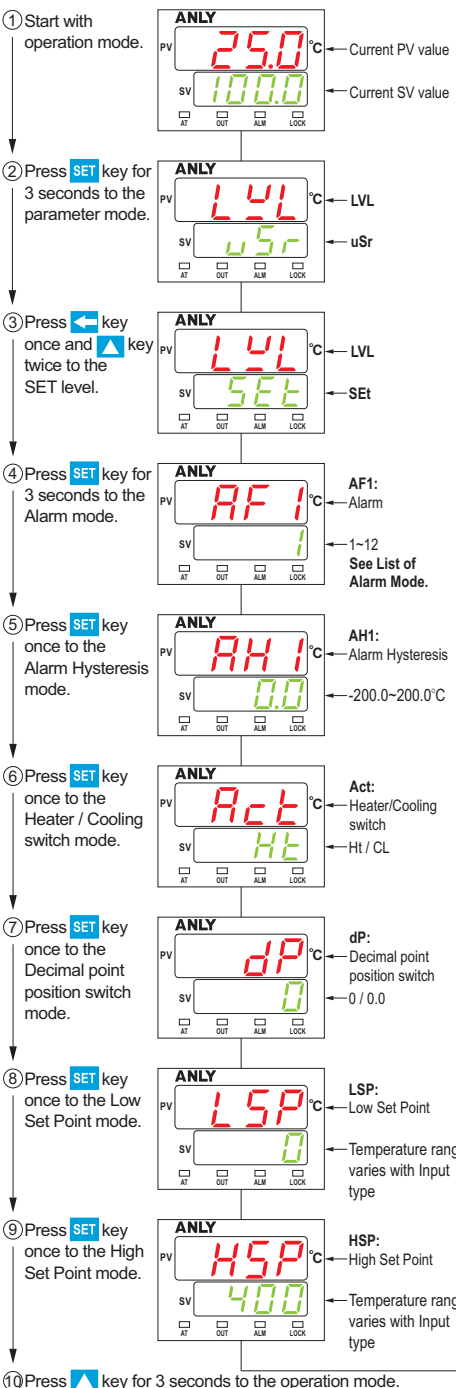
* SV Value Setting *



*** TERMINAL LAYOUT ***

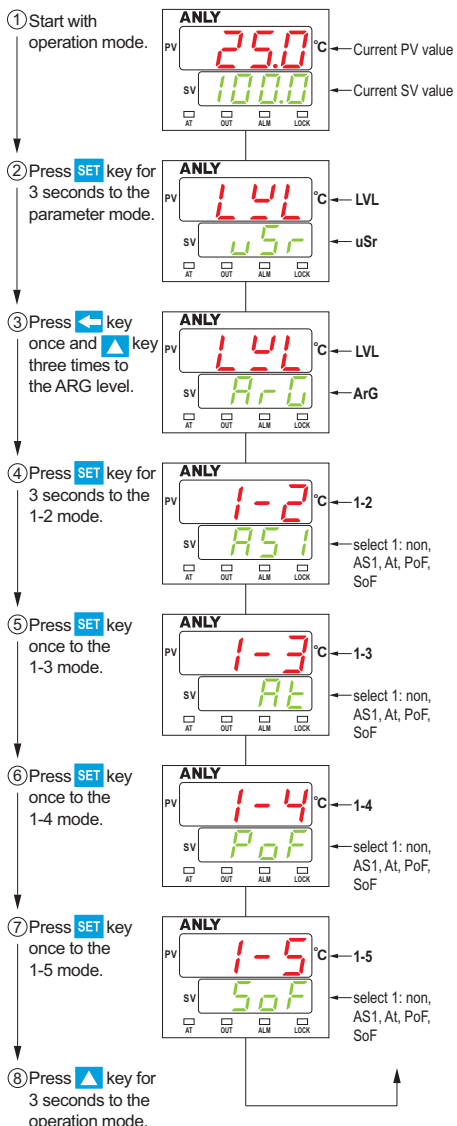


* Set Level Setting *

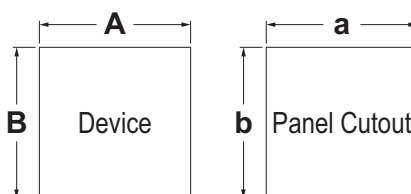


* Argument Level Setting *

This is used to display or hide arguments under user level. Arguments can be arranged in any order, but may not repeated.



* DIMENSIONS(mm) *



AT02 series	A	B	a	b
AT-402	48	96	$45.5^{+0.5}_{-0.5}$	$91^{+0.5}_{-0.5}$
AT-502	48	48	$45.5^{+0.5}_{-0.5}$	$45.5^{+0.5}_{-0.5}$
AT-602	96	48	$91^{+0.5}_{-0.5}$	$45.5^{+0.5}_{-0.5}$
AT-702	72	72	$67.5^{+0.5}_{-0.5}$	$67.5^{+0.5}_{-0.5}$
AT-902	96	96	$91^{+0.5}_{-0.5}$	$91^{+0.5}_{-0.5}$

*** SAFETY PRECAUTION ***

This manual uses the following symbols to ensure safe operation of this controller.

⚠ WARNING Warnings are indicated when mishandling this controller might result in death or serious injury to user

CAUTION Cautions are indicated when mishandling this controller might result in minor injury to the user, or only physical damage to the controller.

WARNING

⚠ Note this incorrect wiring of this controller can damage it and lead to other hazards. Make sure the controller has been correctly wired before turning the power ON.

⚠ Before wiring, or removing / mounting the controller, be sure to turn the power OFF. Failure to do so might cause electric shock.

 Do not touch electrically charged parts such as the power terminals. Doing so might cause electric shock.

ⓘ Do not disassemble the controller. Doing so might cause electric shock or faulty operation.

CAUTION

① Use the controller within the operating ranges recommended in the specification (temperature, humidity, voltage, shock, mounting direction, atmosphere and etc.). Failure to do so might cause fire or faulty operation.

⊗ Do not block ventilation holes. Doing so might cause fire or faulty operation.

⊘ Do not allow lead clippings, chips or water to enter the controller case. Doing so might cause fire or faulty operation.