

## Power ON

Shows for 4 seconds  
(Warming up)

## Operate mode display

A. Primary displays
Process value PV Setting value SV Set the temperature required
↓ MODE key
B. Priority displays. Refer to Ex.1. SET0 : Priority displays by setting and shows max.9 displays by setting.
↓ MODE key, return to A

FUNC key  
FUNC key operates on the selected setting mode 7.  
Refer to Ex.2.

Ex.1. Priority displays & its setting  
This function is to shift the most essential screens on setting mode into operation mode as a priority. Please select priority displays through priority display setting.  
eg.: Basic display → Output 1 manipulated value  
→ Setting high limit for event Output 1  
\* Screen is shifted when pressing mode key each time.

Ex.2. FUNC key work  
This function is to enable FUNC key to use as a specific key, for the following actions selected in FUNC key setting belonged to setting mode.  
1. Digit shift  
Setting digit shift is enabled when setting value is changed.  
2.RUN/READY  
Control stop (READY) and control performance (RUN) are alternately switched every time FUNC key is pressed. (READY lamp is ON during control stop)  
3.Auto-Tuning (AT)  
AT starts instantly after pressing FUNC key.  
(Start/Reset operation is available, each time FUNC key is pressed)  
4.Timer  
Available for start/reset.

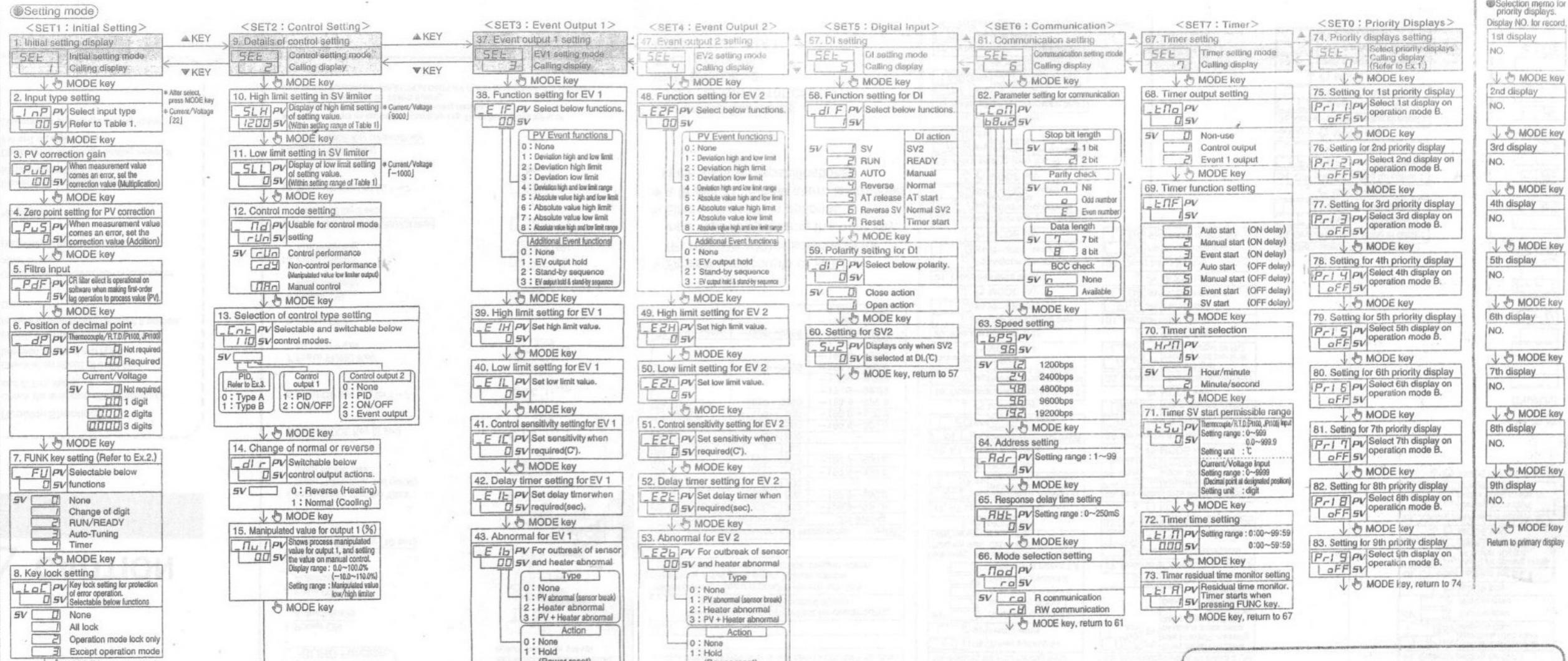
Ex.3. To select PID  
Feature of type A and B  
Type A Ordinary PID  
Type B Over shoot protection PID  
If control is unstable under self-tuning, please change to type A or B and also to ON/OFF control.

Ex.4. ARW  
Anti-reset wind-up take effect for overshooting by over-integral of PID control action.  
→ ARW controls integral action(PV accords with SV).  
If integral value goes down, it takes effects.  
If integral value is set "0", it stops integral action.

Symbol	Low limit~High limit	0.0 Setting
00 K Thermocouple	-200~1372	-199.9~990.0
01 J	-200~850	-199.9~850.0
02 R	-	0~1700
03 T	-200~400	-199.9~390.0
04 N	-200~1300	-199.9~990.0
05 S	-	0~1700
06 B	-	0~1800
10 Pt100	-199~500	-199.9~500.0
11 JPt100	-199~500	-199.9~500.0
20 DCO-5V	-1999~9999	-199.9~999.9 -1.999~9.999
21 DC1-5V	-1999~9999	-199.9~999.9 -19.99~9.999
22 DC4-20mA	-1999~9999	-199.9~999.9 -19.99~9.999 -1.999~9.999

\* Either thermocouple or R.T.D. (Pt 100/JPt 100) is selectable for input type, by pressing the front key.  
\* Either "B" or "P" is optional.  
\* A (Event 1) : Single alarm is provided in the standard specifications.

Conformed Standards  
Safety : EN61010-1(IEC1010-1)  
EMI : EN50081-2  
EMS : EN50082-2  
UL3121-1(UL/CUL)



## CAUTION

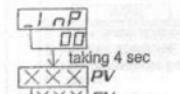
## ERROR MESSAGES AND TROUBLE SHOOTING

(Display)	Description
Err0	Shown whenever input value exceeds the high limit of display range. Also displays when the wire thermocouple, ABB terminal of R.T.D. is snapped off.
Err1	Shown whenever input value exceeds the low limit of display range.
Err2	Display of memory error.
Loc	Display of A/D converter error or incorrect sensor connection with selectable input.
Rt	Display of auto-tuning error.
Su1	Displayed when parameter is changed in key-lock condition.
Su2	Alternately this and SV/PV display are shown.
di	Displayed when setting value is changed on SV2 control.
FUnC	Displayed when changing setting value of shift on DI.
E1 E2	Displayed when making setting value change in control display while function key is on RUN/READY.
OFF	Displayed when altering setting value in control display while being on timer.

### (Trouble Shooting)

- Check the snapping of thermocouple and R.T.D. input.
- Check short circuit of input lines between A-B and A-b R.T.D.
- In case this indication shows after the re-input of power, replace unit if it persists.
- Ditto
- Check sensor connection or change to other tuning.
- Discontinue to change parameter.
- Normality
- Discontinue to change setting value (during control of SV2)
- Discontinue to change setting value of the self on digital input
- Discontinue to change setting value

eg. Release of Timer Setting Mode from BLIND Function before newly its set-up.



4. Immediately after the "Blink", press FUNC Key, and quickly press MODE Key.

5. Press MODE Key (3 sec)

6. Press UP Key (Δ) for 1~7

7. Press FUNC Key for OFF → ON

8. Power OFF

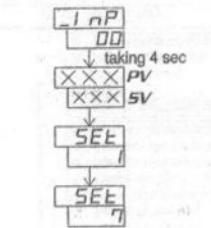
9. Power ON Automatically

10. Initial Display Automatically

11. TIMER Setting Mode (OPERATION Mode)  
Press MODE Key (2 sec)

12. Press UP Key (Δ) for 1~7

13. Go on TIMER Setting  
Press MODE Key consecutively



\*\*1 Please select an appropriate character (eg. Timer Setting etc) being of BLIND Function effect for the demand release.

\*\*2 Character selected for TIMER Setting.

\*\*3 BLIND Function for "SELECTION DISPLAY (Timer Setting Mode)" is released.

Selection memo for priority displays.  
Display NO. for record,  
1st display  
NO.  
↓ MODE key  
2nd display  
NO.  
↓ MODE key  
3rd display  
NO.  
↓ MODE key  
4th display  
NO.  
↓ MODE key  
5th display  
NO.  
↓ MODE key  
6th display  
NO.  
↓ MODE key  
7th display  
NO.  
↓ MODE key  
8th display  
NO.  
↓ MODE key  
Return to primary display