




Thank you for purchasing this RKC product. In order to achieve maximum performance and ensure proper operation of the instrument, carefully read all the instructions in this manual. Please place the manual in a convenient location for easy reference. This manual describes basic key operations of the PF900/901.

For detailed handling procedures and key operations, refer to separate **PF900/PF901 Instruction Manual**.  
The manual can be downloaded from the official RKC website:  
<https://www.rkcinst.co.jp/english/download-center/>

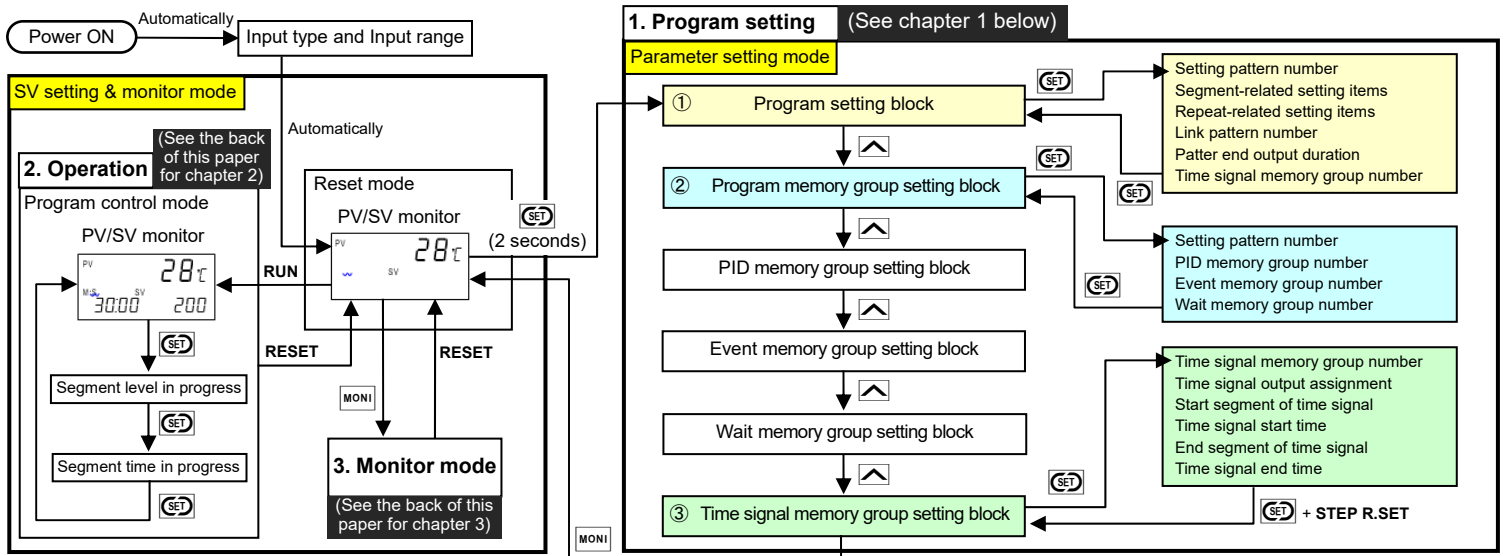
### Notes for the display

- See the following legends for the key operations described in this manual.
 

Legend	
X:	Press X key once
X (n times):	Press X key n times
X (n seconds):	Press and hold X key for n seconds or more.
X+Y:	Press X and Y keys simultaneously
X+Y (n seconds):	Press and hold X and Y keys simultaneously for n seconds or more
- The digit blinking on the setting screen is adjustable. The value can be changed using the  and  keys. The blinking digit can be shifted using the  key.
- The PV/SV monitor screen in the Monitor and Program setting mode is the base screen of this instrument. The PV/SV monitor screen can be reached from any screens by any of the following operations.
  - MONI
  - RESET (When in control, the instrument will stop)
  - SET+<MODE
  - No key operated for 60 seconds.

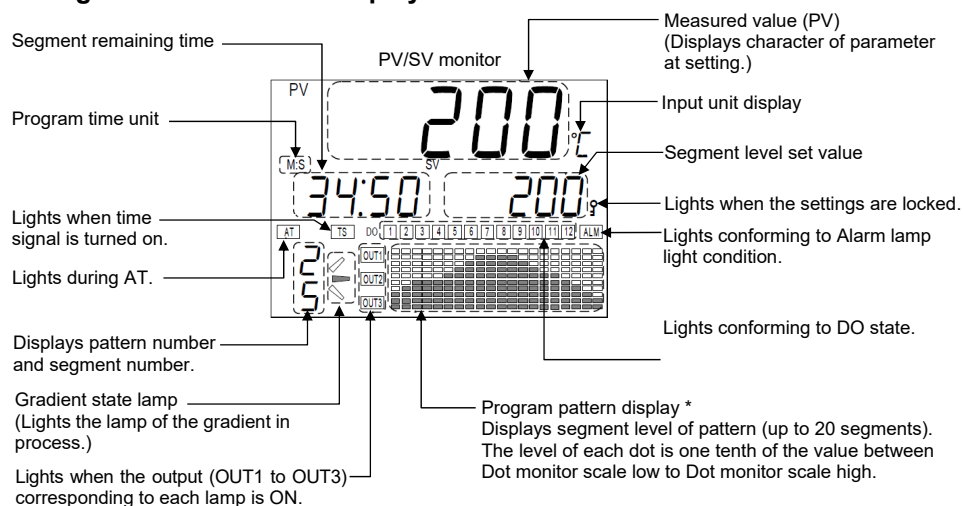
## Programming procedure

After the instrument is powered on, the input type, and the input range are automatically displayed, followed by the "PV/SV monitor" of "SV setting and monitor mode". A program can be set in the "Parameter setting mode." The Operation mode can be switched in the "SV setting & monitor mode."



## 1. Program setting

### 1.1 Program Control Mode Display



## 1.2 Set Up Program Patterns

### ■ Setting example of program pattern

- Setting example of the program pattern is described by using the following data:

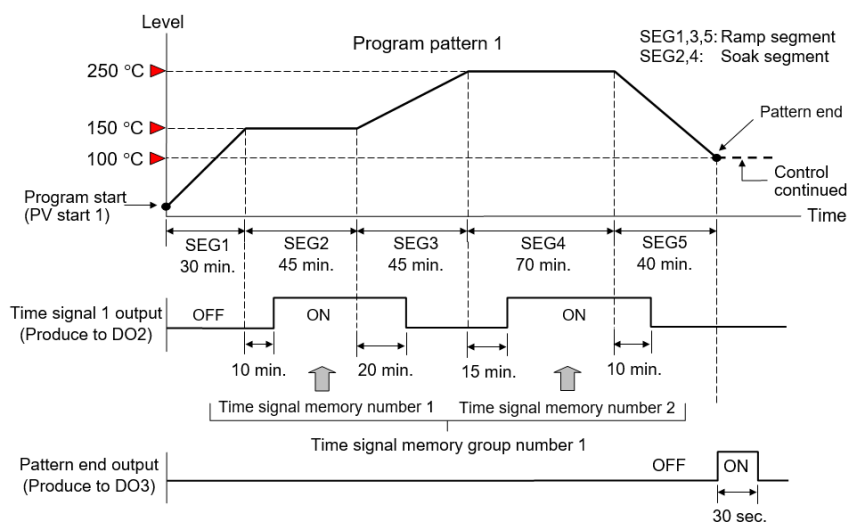
Pattern number	1				
Segment number	SEG1	SEG2	SEG3	SEG4	SEG5
Segment level	150 °C	150 °C	250 °C	250 °C	100 °C
Segment time	30 min.	45 min.	45 min.	70 min.	40 min.
PID memory group number	1	1	2	2	1
Event memory group number	1	1	1	1	1
Wait memory group number	1	1	1	1	1

SEG: Segment  
TS: Time signal

Time signal memory group number	1	
Time signal memory number	1	2
Time signal output assignment	TS1	TS1
Start segment of time signal	2	4
Time signal start time	10 min.	15 min.
End segment of time signal	3	5
Time signal end time	20 min.	10 min.

Pattern repeat execution time	2
Link pattern number	1 (No pattern link)
Pattern end output duration	30 sec.
Wait zone high *	10 °C
Wait zone low *	-10 °C
Wait release trigger selection *	Zone wait 1

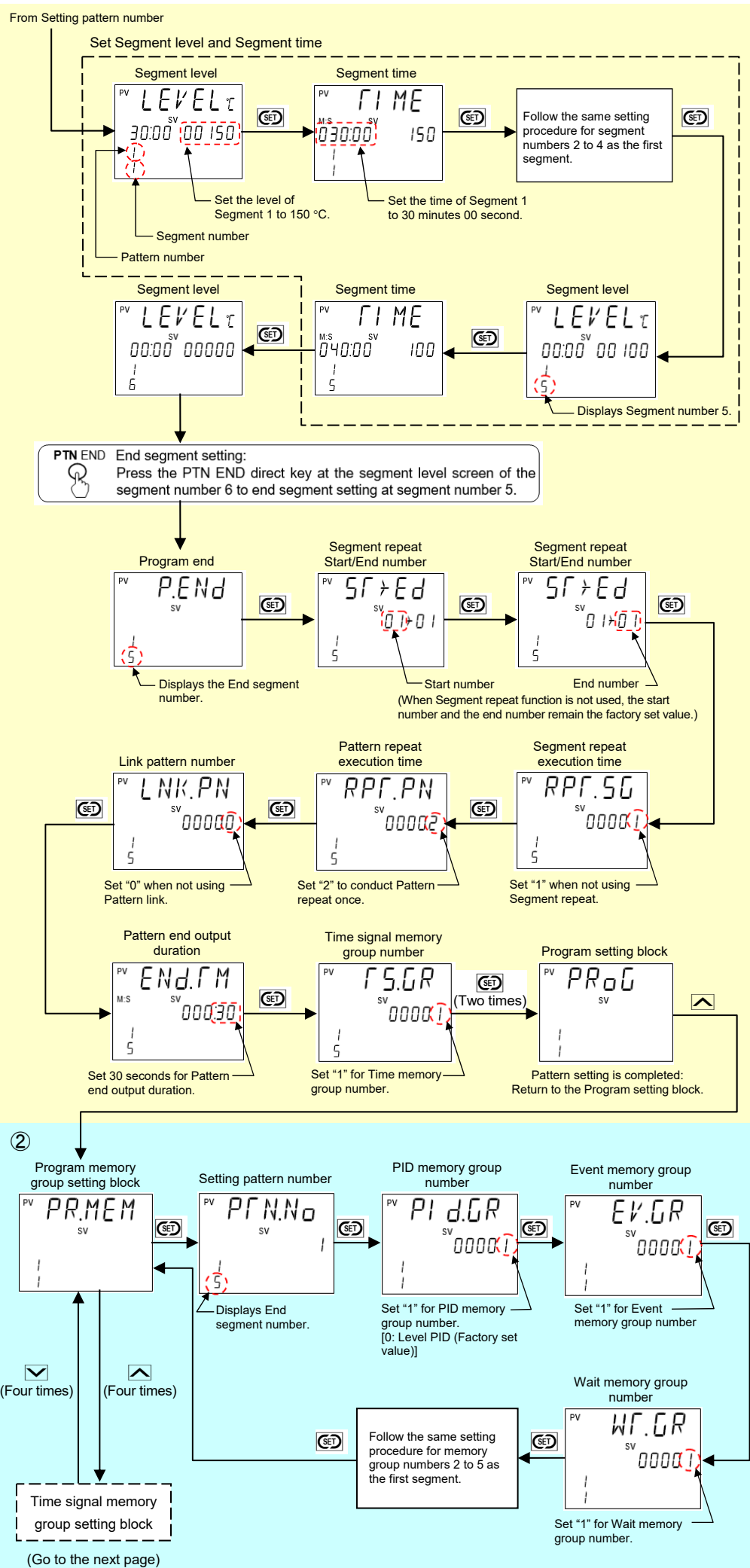
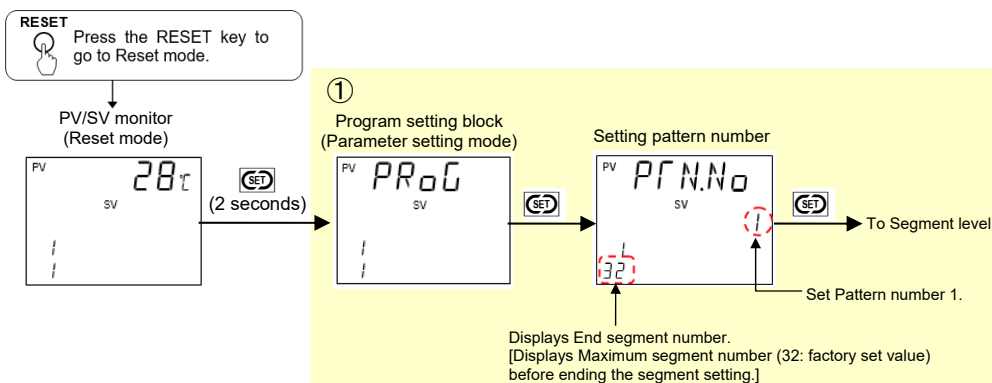
\* For setting details, refer to the separate document,  
**PF900/PF901 Instruction Manual “6.6.6 Wait” (P.6-158).**



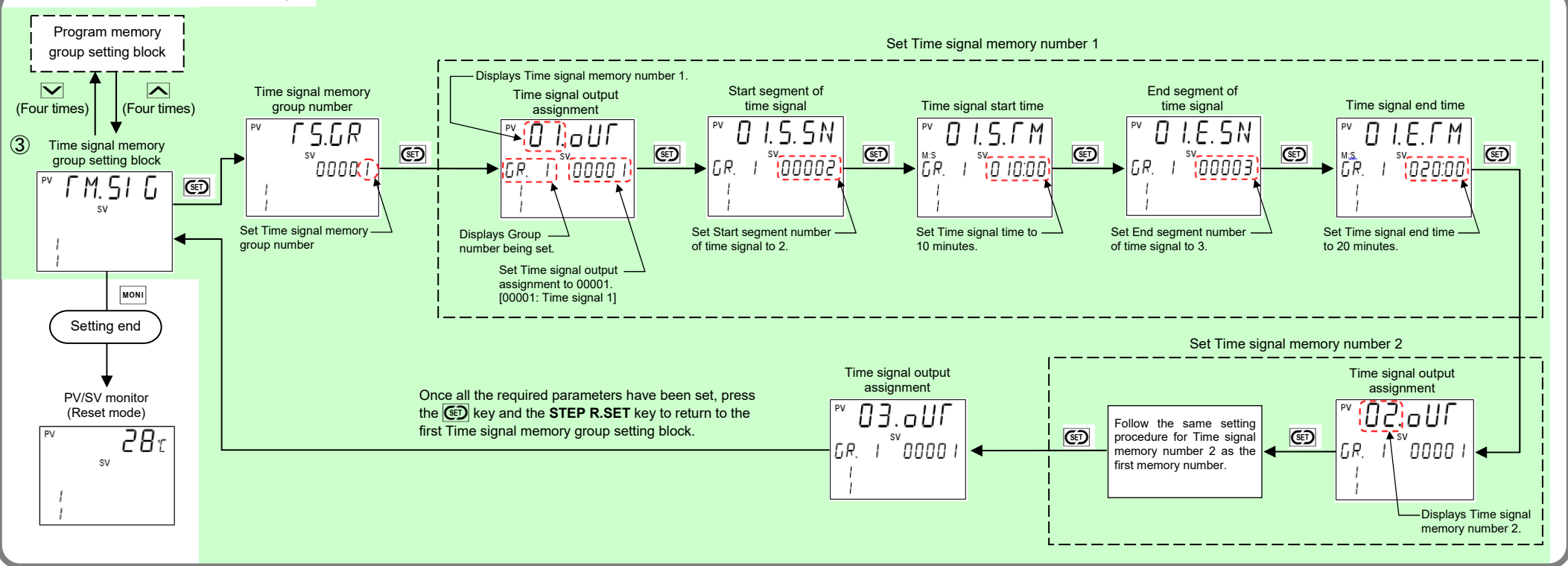
### ■ Setting procedure for program pattern

Setting procedure of the program pattern is described by using the parameters of the setting example and the Partial setting type (Factory set value).

-  For Batch setting type, refer to **Parameter switching [Batch setting type] (P. 4-28)** of the **PF900/PF901 Instruction Manual**.



For setting of PID memory group, Event memory group and Wait memory group, refer to the **Parameter setting procedure for Memory group (P. 5-17)** of the **PF900/PF901 Instruction Manual**.



## 2. Operation

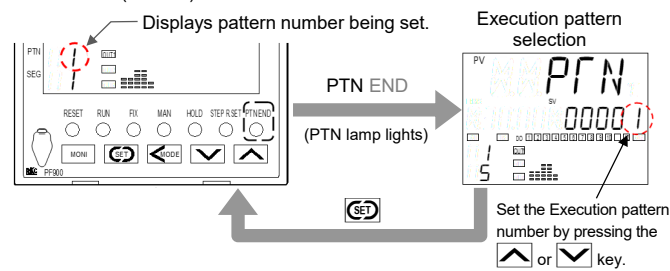
### 2.1 Start/End Program Control

#### ■ Start Program control

##### ● Execution pattern selection

Press the PTN END key at the Reset mode (RESET) to go to the Execution pattern selection screen to set the Execution pattern number.

Reset mode (RESET) screen

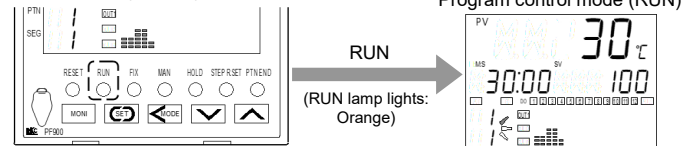


Tag name setting will enable the display to show a tag name instead of the Pattern number. For Tag name, refer to **6.6.12 Tag function (P. 6-191)** of the **PF900/PF901 Instruction Manual**.

##### ● How to switch to the Program control mode

To switch to the Program control mode (RUN) and start operation, press the RUN key in the Reset mode (RESET).

Reset mode (RESET) screen

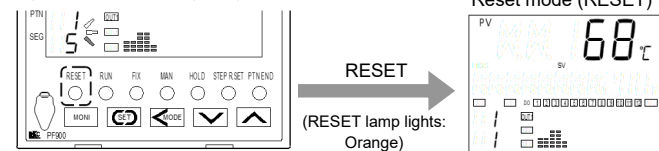


#### ■ Stop Program control

Press the RESET key to switch to the Reset mode and stop the operation. When setting certain values to the following parameters, this instrument produces fixed Manipulated output value.

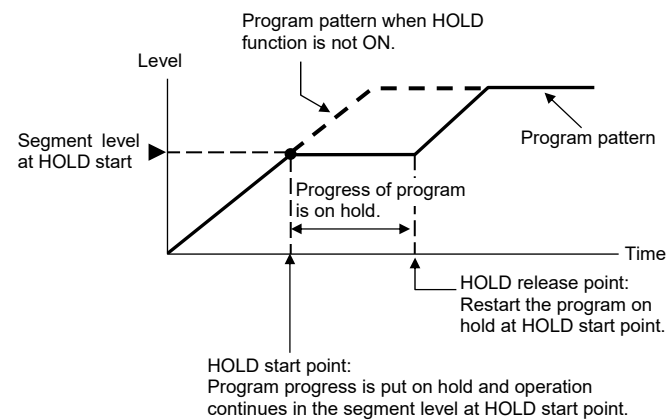
- Set value (SV) in Reset mode (SV) [Factory set value: 0]
- Manipulated output value 1 (MV1) in Reset mode [Factory set value: -5.0 %]
- Manipulated output value 2 (MV2) in Reset mode [Factory set value: -5.0 %]

Program control mode (RUN) screen



### 2.2 Suspending Program Progress (HOLD)

Progress of the program is suspended during the Program control operation. Start or release HOLD function by using the key operation, Digital input (DI) or communication.



#### HOLD start condition

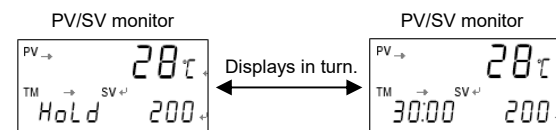
- Operation is in Program control mode (RUN).
- DI being assigned with Reset mode (RESET) is open.
- DI being assigned with Program control mode (RUN) is open.

#### HOLD release condition

- DI being assigned with Reset mode (RESET) is open.
- DI being assigned with Program control mode (RUN) is open.

#### ■ HOLD display

In HOLD state, "Hold" and the Segment remaining time will alternate on TIME monitor display.



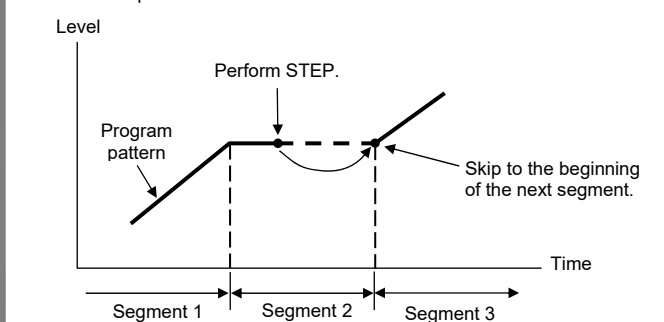
#### ■ Key operation

To switch to HOLD state, press the HOLD key during Program control operation. To continue Program control operation, release HOLD by pressing the HOLD key.

For HOLD function, refer to the **6.6.4 Hold (HOLD) (P. 6-156)** of the **PF900/PF901 Instruction Manual**.

### 2.3 Moving One Segment Forward (STEP)

During the Program control operation, a segment of the program may be skipped by STEP function. Key operation, Digital input (DI) or communication is available to perform STEP function.



#### ■ Key operation

To perform STEP function, press and hold the STEP R.SET key for 2 seconds (factory set value) during the Program control operation.

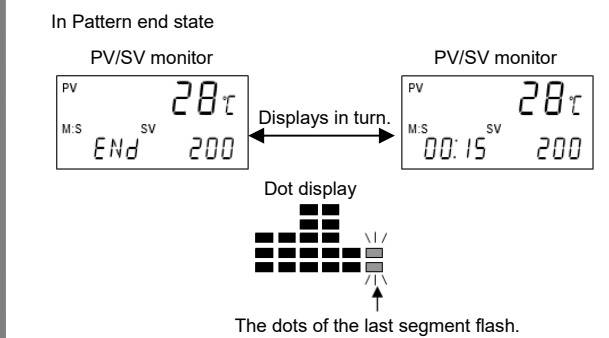
For STEP function, refer to the **6.6.5 Step (STEP) (P. 6-157)** of the **PF900/PF901 Instruction Manual**.

### 2.4 Ending the Program

When the program ends and the instrument enters the Pattern end state, such a screen as shown below is displayed.

#### ■ Pattern end display

Alternately displays "End" and the remaining time of the Pattern end output duration when the operation is in the Pattern end state. After the elapse of Pattern end output duration only "End" flashes. At the Dot display, the dots of the last segment of the Program pattern flash.



HOLD function is operative when the remaining time of the Pattern end output is displayed. When the operation is in HOLD state, time counting of the remaining time is suspended but Pattern end output remains ON. HOLD function is invalidated when the remaining time of the Pattern end output is zero (0).

## 3. Monitor mode

