



# Operation for E5□N/E5□N-H/E5□N-HT

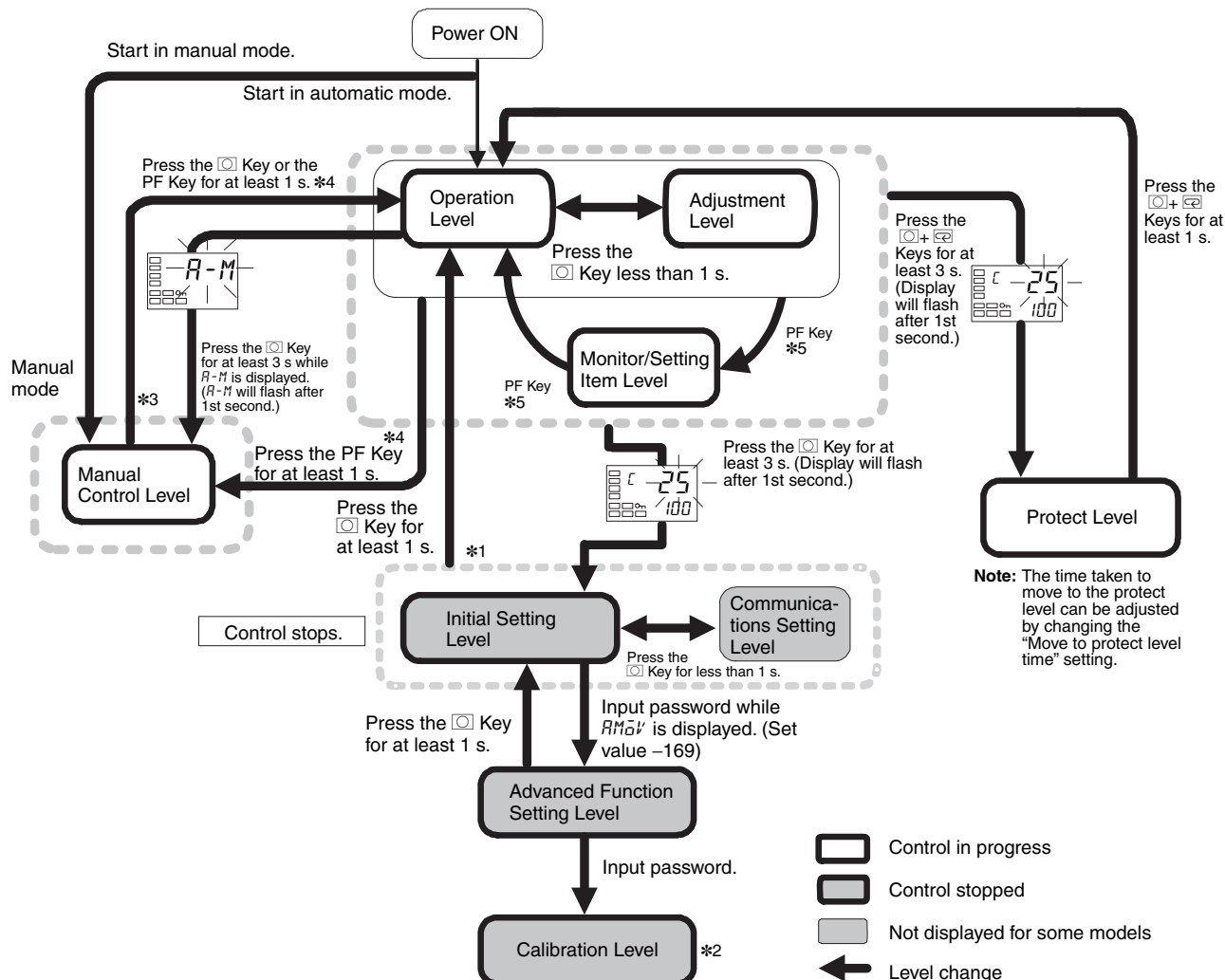
## Operation

### Setting Levels Diagram

This diagram shows all of the setting levels. To move to the advanced function setting level and calibration level, you must enter passwords. Some parameters are not displayed depending on the protect level setting and the conditions of use. Control stops when you move from the operation level to the initial setting level.

#### Basic Type

#### E5CN/E5CN-U/E5AN/E5EN/E5GN



\*1. You can return to the operation level by executing a software reset.

\*2. It is not possible to move to other levels from the calibration level by operating the keys on the front panel. It can be done only by first turning OFF the power.

\*3. From the manual control level, key operations can be used to move to the operation level only.

\*4. When the PF Setting parameter is set to A-M for a Controller with a PF Key (E5AN/E5EN).

\*5. When the PF Setting parameter is set to PFDP for a Controller with a PF Key (E5AN/E5EN).

## Error Displays (Troubleshooting)

When an error occurs, the No.1 display shows the error code. Take necessary measure according to the error code, referring the table below.

No.1 display	Meaning	Action	Status at error	
			Control output *1	Alarm output
S.ERR (S. Err)	Input error *2	Check the setting of the input type. Also check the input wiring and check for broken wires or short-circuits in the temperature sensor.	OFF	Operates as above the upper limit.
E333 (E333)	A/D converter error *2	Turn the power OFF then back ON again. If the display remains the same, the controller must be repaired. If the display is restored to normal, then a probable cause can be external noise affecting the control system. Check for external noise.	OFF	OFF
E111 (E111)	Memory error	Turn the power OFF then back ON again. If the display remains the same, the controller must be repaired. If the display is restored to normal, then a probable cause can be external noise affecting the control system. Check for external noise.	OFF	OFF

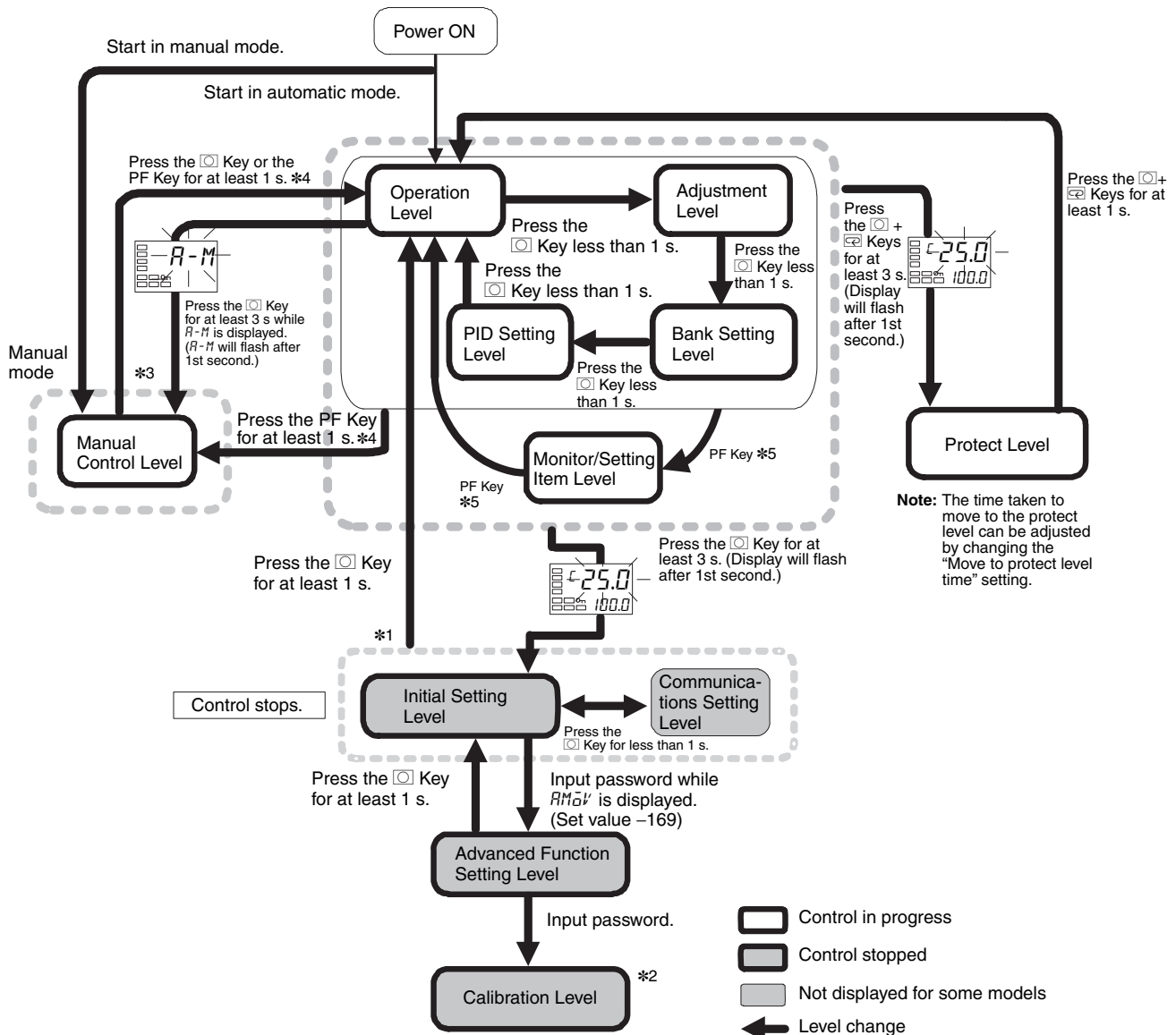
**Note:** If the input value exceeds the display limit (-1999 to 9999), though it is within the control range, EEEE will be displayed under -1999 and EEEE above 9999. Under these conditions, control output and alarm output will operate normally.

For details on the control range, refer to the E5CN/E5AN/E5EN/E5GN Digital Temperature Controllers User's Manual Basic Type (Cat. No. H156).

\*1. If the control output is assigned to the transfer output and the transfer output type is set to the present value, the upper limit value will be output for the present value when there is an input error.

\*2. Errors are shown only when the display is PV, PV/SV, or PV/MV. Errors are not shown for any other status.

**Advanced Type**  
**E5CN-H/E5AN-H/E5EN-H**



- \*1. You can return to the operation level by executing a software reset.
- \*2. It is not possible to move to other levels from the calibration level by operating the keys on the front panel.  
It can be done only by first turning OFF the power.
- \*3. From the manual control level, key operations can be used to move to the operation level only.
- \*4. When the PF Setting parameter is set to A-M for a Controller with a PF Key (E5AN-H/E5EN-H).
- \*5. When the PF Setting parameter is set to PFDP for a Controller with a PF Key (E5AN-H/E5EN-H).

## Error Displays (Troubleshooting)

When an error occurs, the No.1 display shows the error code. Take necessary measure according to the error code, referring the table below.

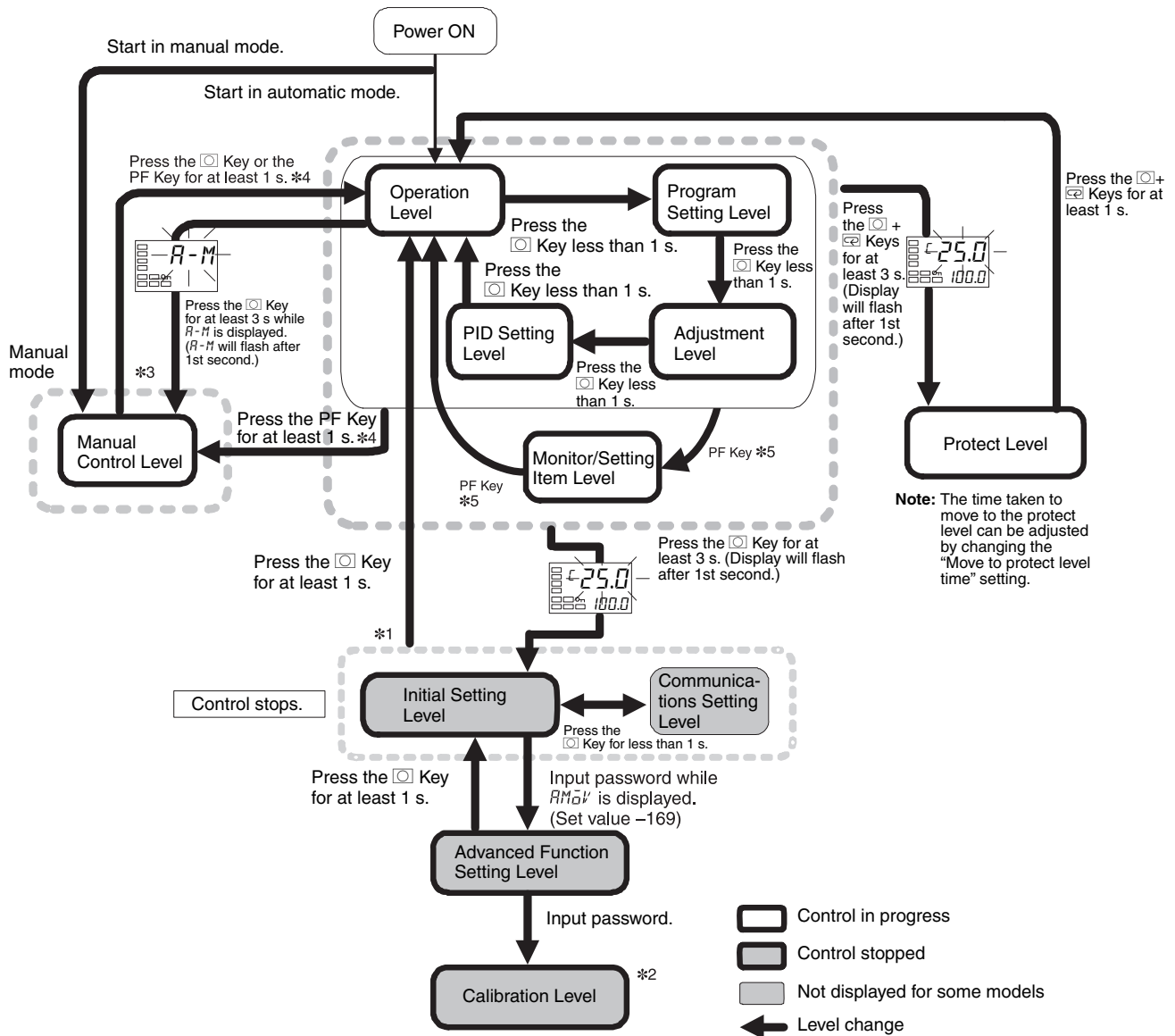
No.1 display	Meaning	Action	Status at error	
			Control output *1	Alarm output
<i>5.ERR</i> (S. Err)	Input error *2	Check the setting of the input type. Also check the input wiring and check for broken wires or short-circuits in the temperature sensor.	OFF	Operates as above the upper limit.
<i>E333</i> (E333)	A/D converter error *2	Turn the power OFF then back ON again. If the display remains the same, the controller must be repaired. If the display is restored to normal, then a probable cause can be external noise affecting the control system. Check for external noise.	OFF	OFF
<i>E111</i> (E111)	Memory error	Turn the power OFF then back ON again. If the display remains the same, the controller must be repaired. If the display is restored to normal, then a probable cause can be external noise affecting the control system. Check for external noise.	OFF	OFF

**Note:** If the input value exceeds the display limit (-19999 to 32400), though it is within the control range, CCCC will be displayed under -19999 and 3333 above 32400. Under these conditions, control output and alarm output will operate normally.

For details on the control range, refer to the *E5CN-H/E5AN-H/E5EN-H Digital Controllers User's Manual Advanced Type* (Cat. No. H157).

- \*1. If the control output is assigned to the transfer output and the transfer output type is set to the present value, the upper limit value will be output for the present value when there is an input error.
- \*2. Errors are shown only when the display is PV, PV/SV, or PV/MV. Errors are not shown for any other status.

## Programmable Type E5CN-HT/E5AN-HT/E5EN-HT



- \*1. You can return to the operation level by executing a software reset.
- \*2. It is not possible to move to other levels from the calibration level by operating the keys on the front panel. It can be done only by first turning OFF the power.
- \*3. From the manual control level, key operations can be used to move to the operation level only.
- \*4. When the PF Setting parameter is set to A-M. For the E5CN-HT, press the  $\square$  +  $\square$  Keys at the same time to implement the PF Key.
- \*5. When the PF Setting parameter is set to PFDP. For the E5CN-HT, press the  $\square$  +  $\square$  Keys at the same time to implement the PF Key.

## Error Displays (Troubleshooting)

When an error occurs, the No.1 display shows the error code. Take necessary measure according to the error code, referring the table below.

No.1 display	Meaning	Action	Status at error	
			Control output *1	Alarm output
S.ERR (S. Err)	Input error *2	Check the setting of the input type. Also check the input wiring and check for broken wires or short-circuits in the temperature sensor.	OFF	Operates as above the upper limit.
E333 (E333)	A/D converter error *2	Turn the power OFF then back ON again. If the display remains the same, the controller must be repaired. If the display is restored to normal, then a probable cause can be external noise affecting the control system. Check for external noise.	OFF	OFF
E111 (E111)	Memory error	Turn the power OFF then back ON again. If the display remains the same, the controller must be repaired. If the display is restored to normal, then a probable cause can be external noise affecting the control system. Check for external noise.	OFF	OFF

Note: If the input value exceeds the display limit (-19999 to 32400), though it is within the control range,  $\square\square\square\square$  will be displayed under -19999 and  $\square\square\square\square$  above 32400. Under these conditions, control output and alarm output will operate normally.

For details on the control range, refer to the *E5CN-HT/E5AN-HT/E5EN-HT Digital Controllers User's Manual Programmable Type* (Cat. No. H169).

- \*1. If the control output is assigned to the transfer output and the transfer output type is set to the present value, the upper limit value will be output for the present value when there is an input error.
- \*2. Errors are shown only when the display is PV, PV/SV, or PV/MV. Errors are not shown for any other status.

## Parameters

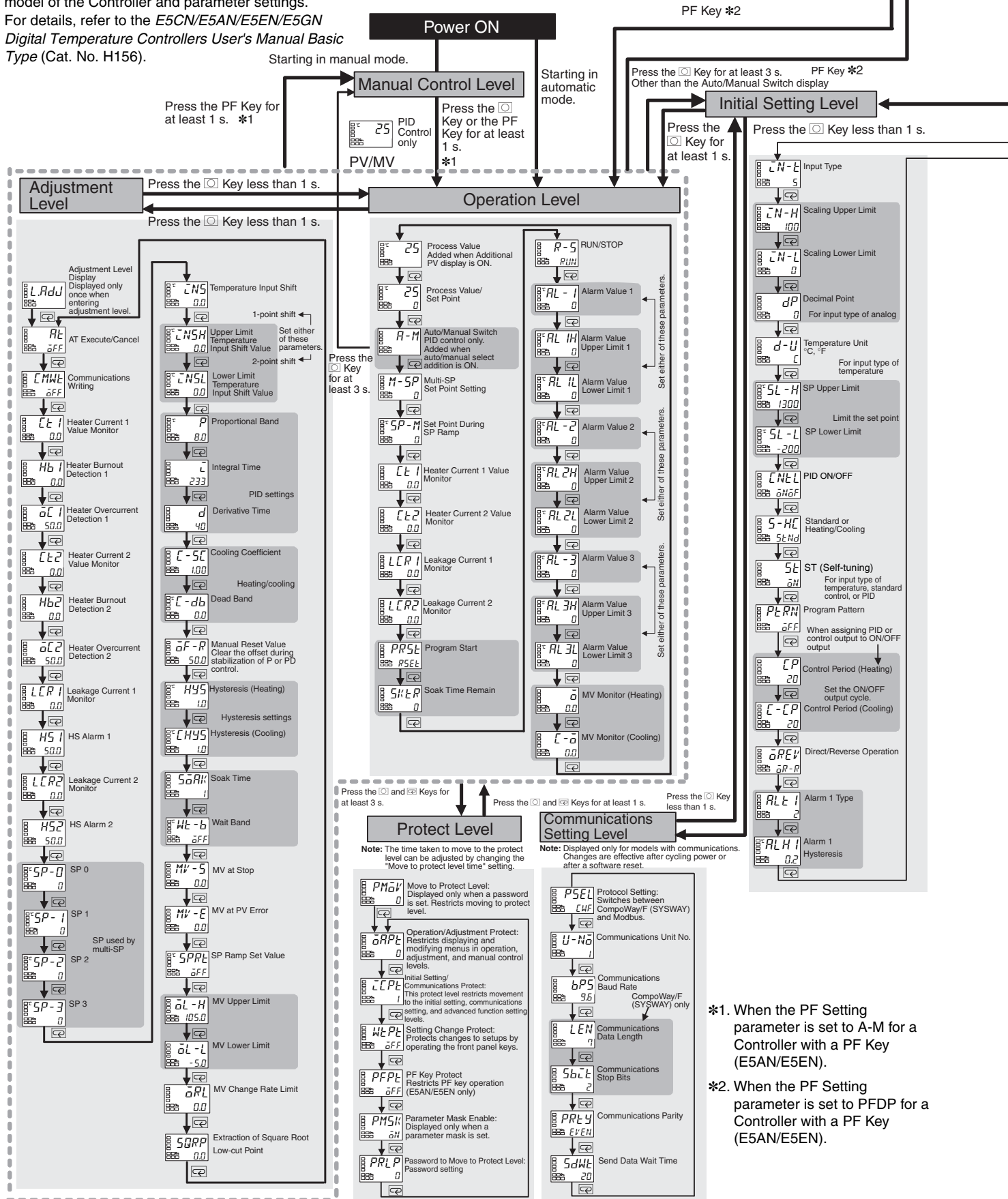
### Basic Type

#### E5CN/E5CN-U/E5AN/E5EN/E5GN

Some parameters are not displayed depending on the model of the Controller and parameter settings.

For details, refer to the *E5CN/E5AN/E5EN/E5GN*

*Digital Temperature Controllers User's Manual Basic Type* (Cat. No. H156).



- \*1. When the PF Setting parameter is set to A-M for a Controller with a PF Key (E5AN/E5EN).
- \*2. When the PF Setting parameter is set to PFDP for a Controller with a PF Key (E5AN/E5EN).

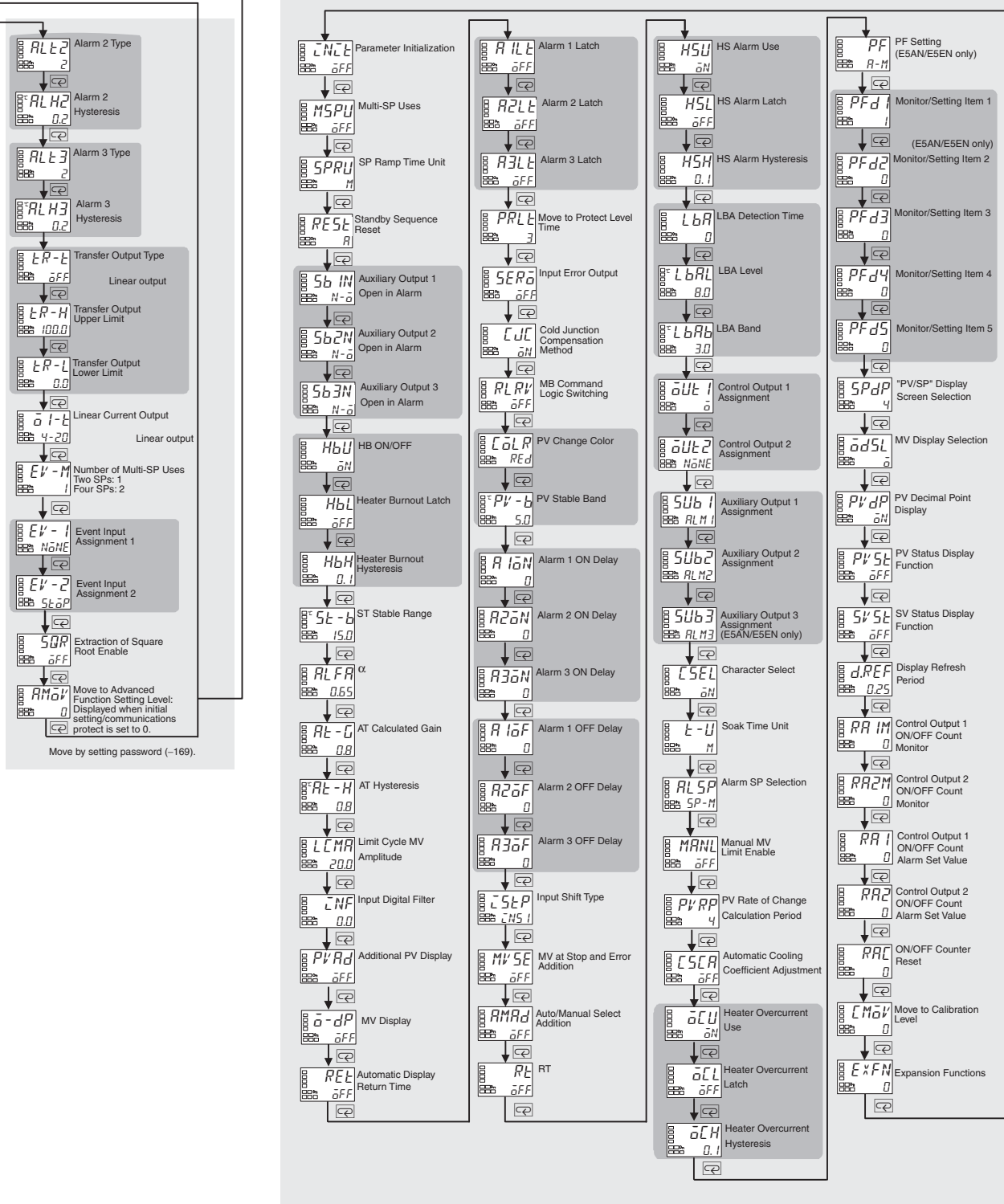
## Monitor/Setting Item Level (E5AN/E5EN only)



Note: The monitor/setting items to be displayed is set in the Monitor/Setting Item 1 to 5 parameters (advanced function setting level).

Press the Key for at least 1 s.

## Advanced Function Setting Level

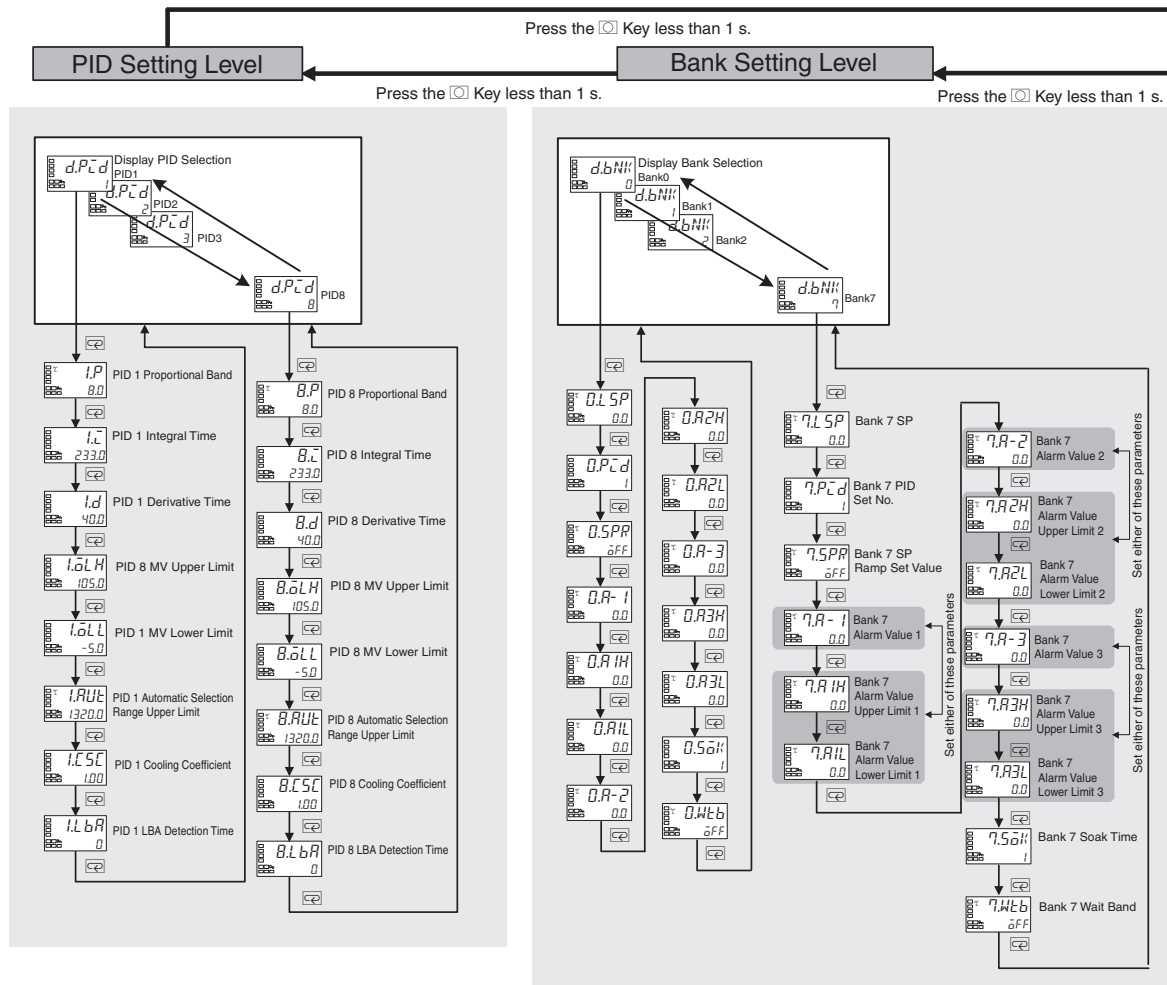
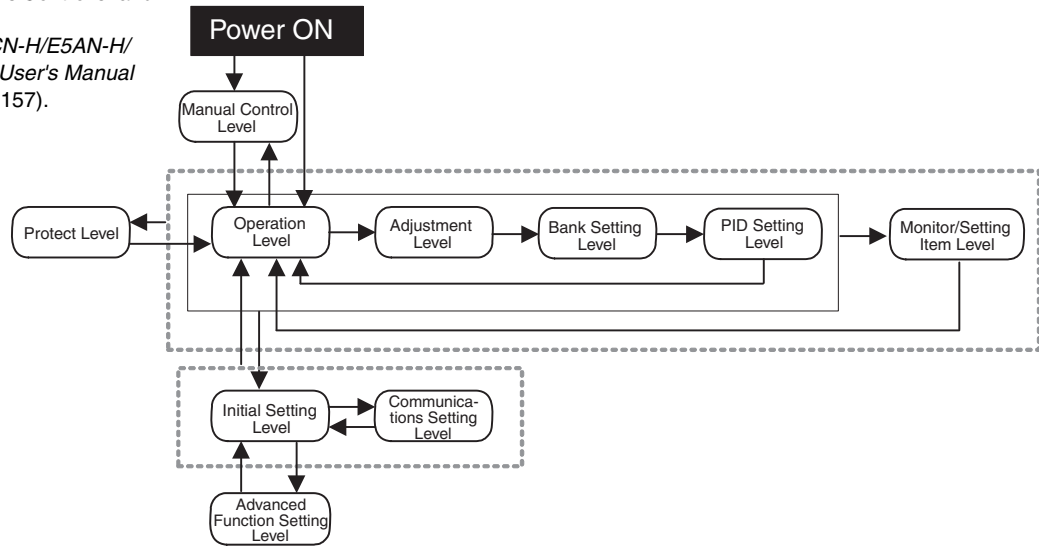


## Advanced Type

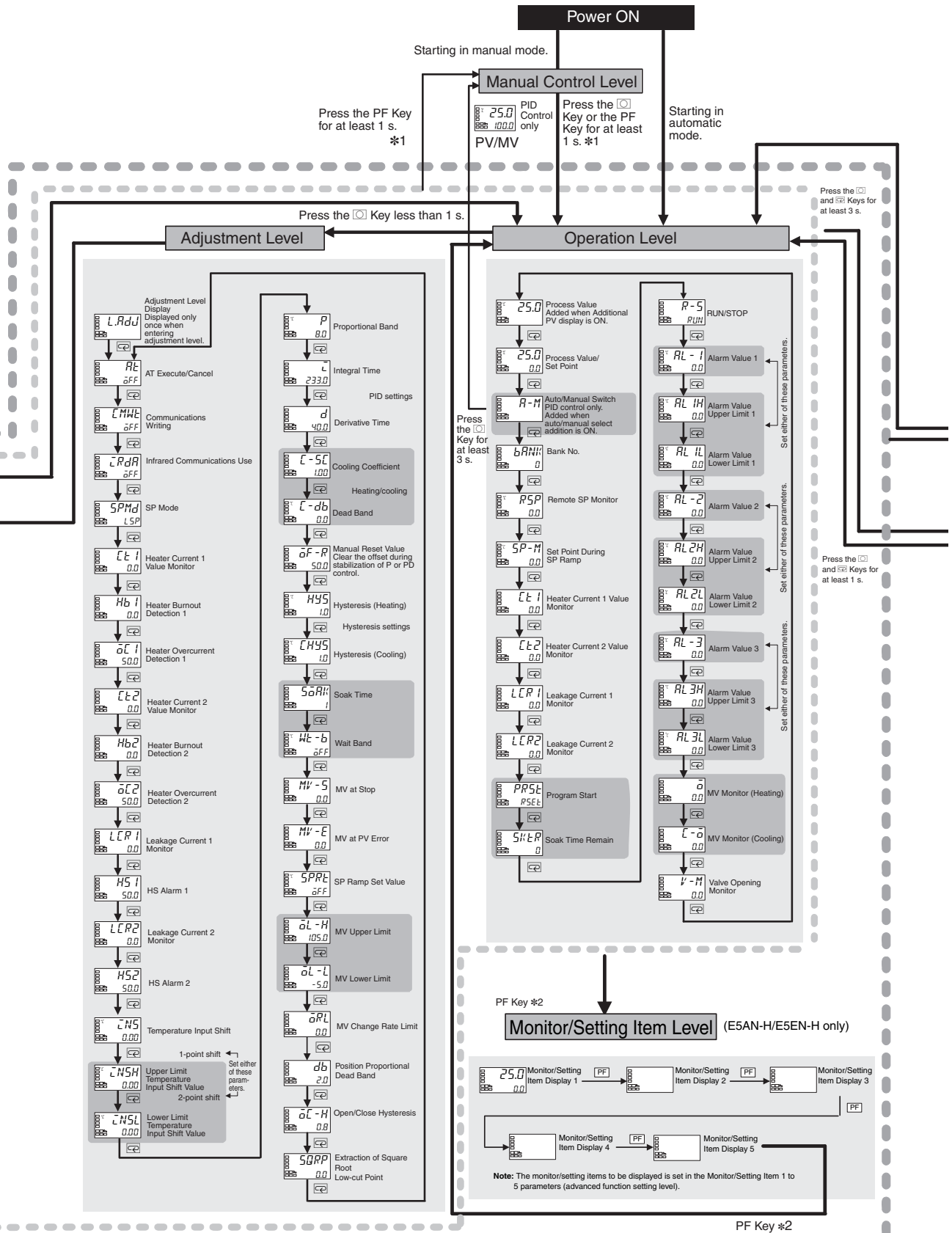
### E5CN-H/E5AN-H/E5EN-H

Some parameters are not displayed depending on the model of the Controller and parameter settings.

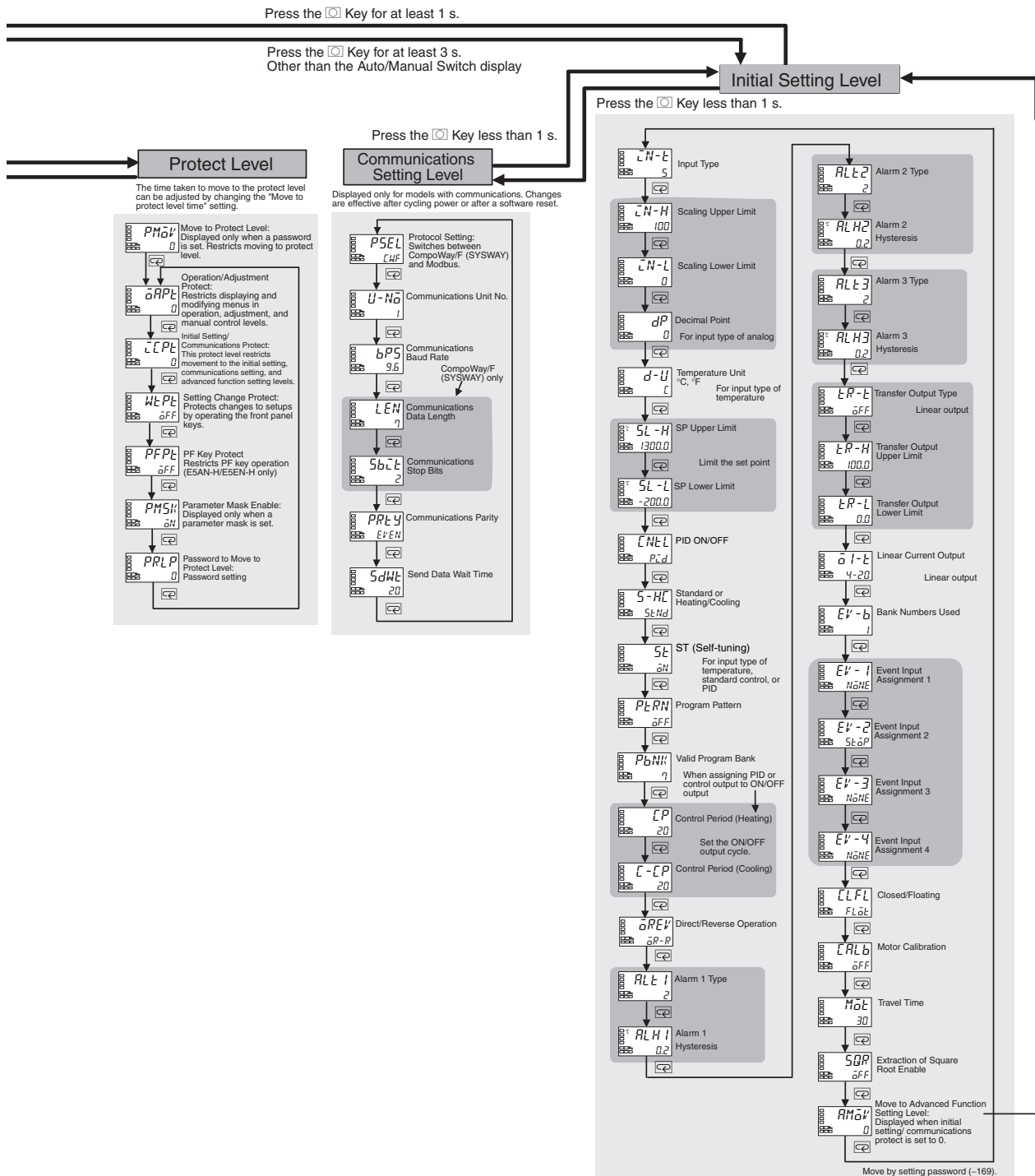
For details, refer to the *E5CN-H/E5AN-H/E5EN-H Digital Controllers User's Manual Advanced Type* (Cat. No. H157).



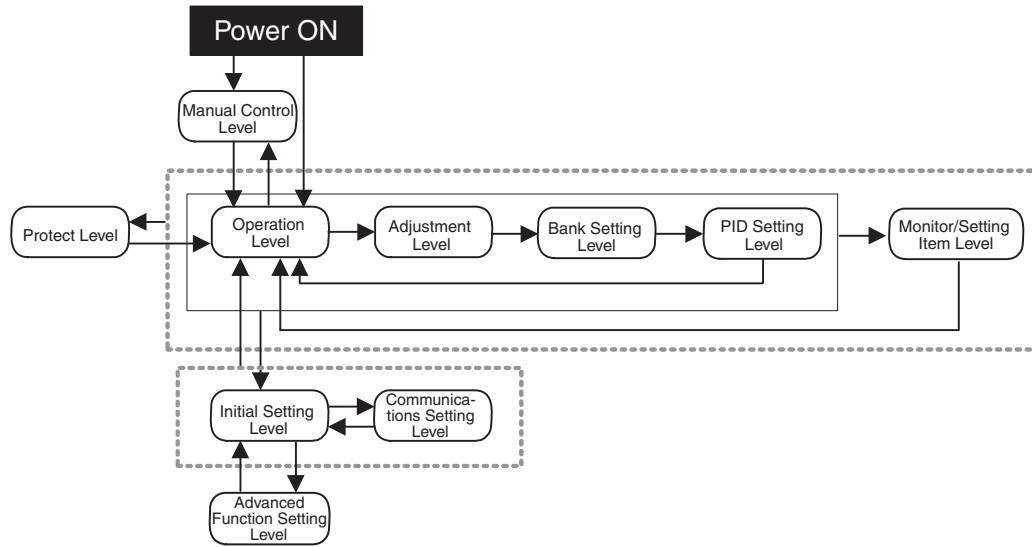




\*1. When the PF Setting parameter is set to A-M for a Controller with a PF Key (E5AN-H/E5EN-H).  
 \*2. When the PF Setting parameter is set to PFDP for a Controller with a PF Key (E5AN-H/E5EN-H).

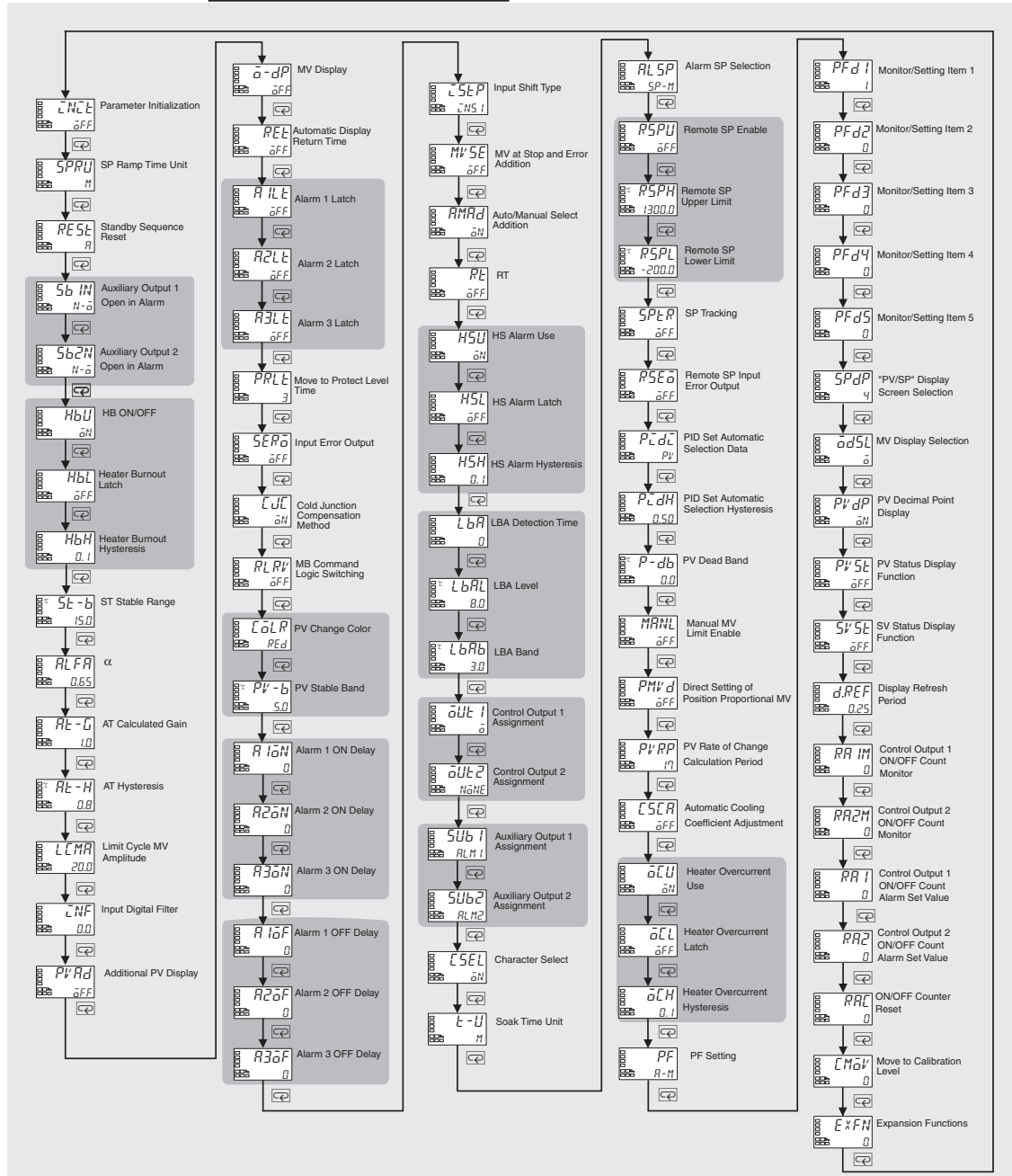






Press the Key for at least 1 s.

## Advanced Function Setting Level

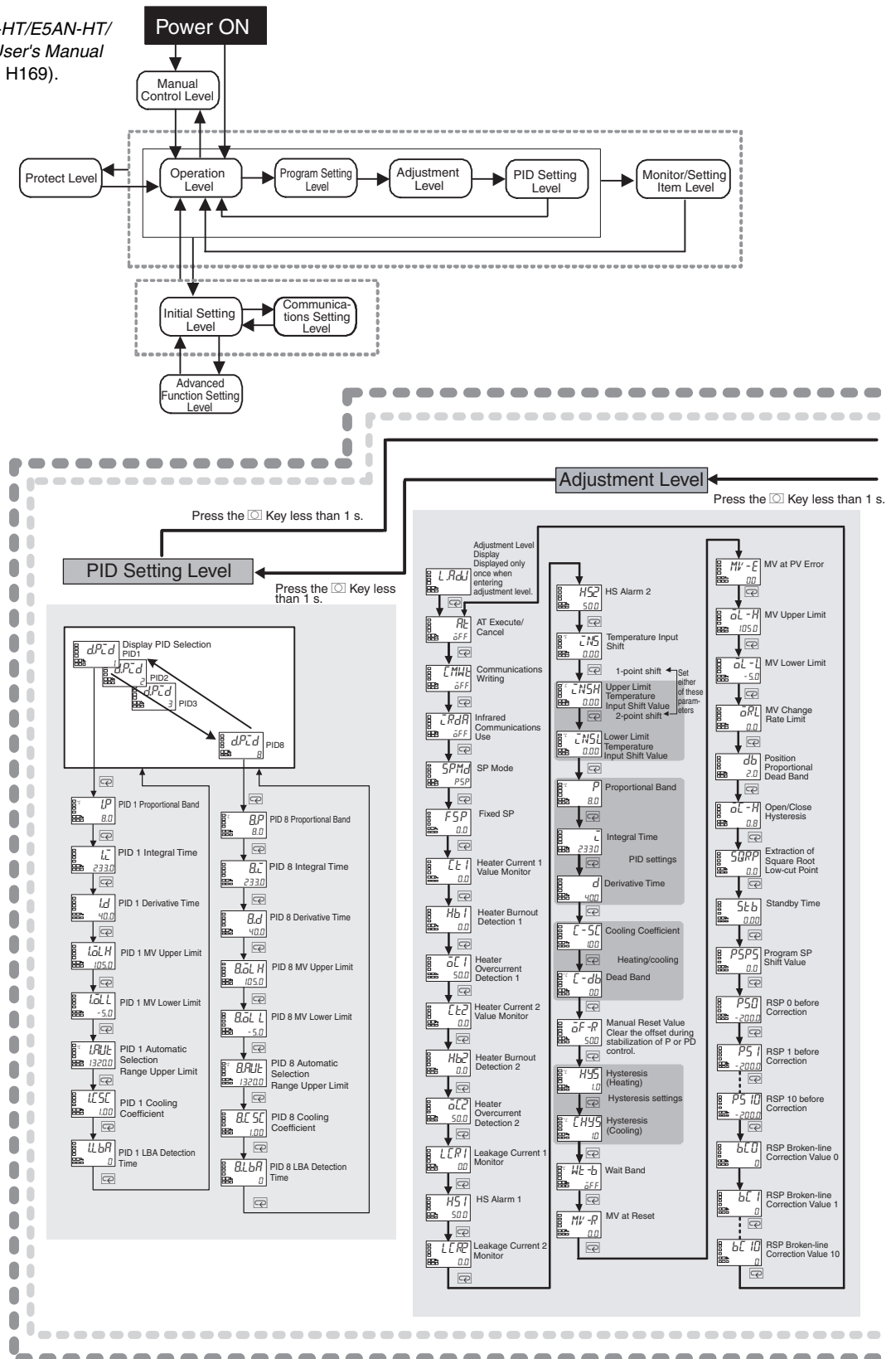


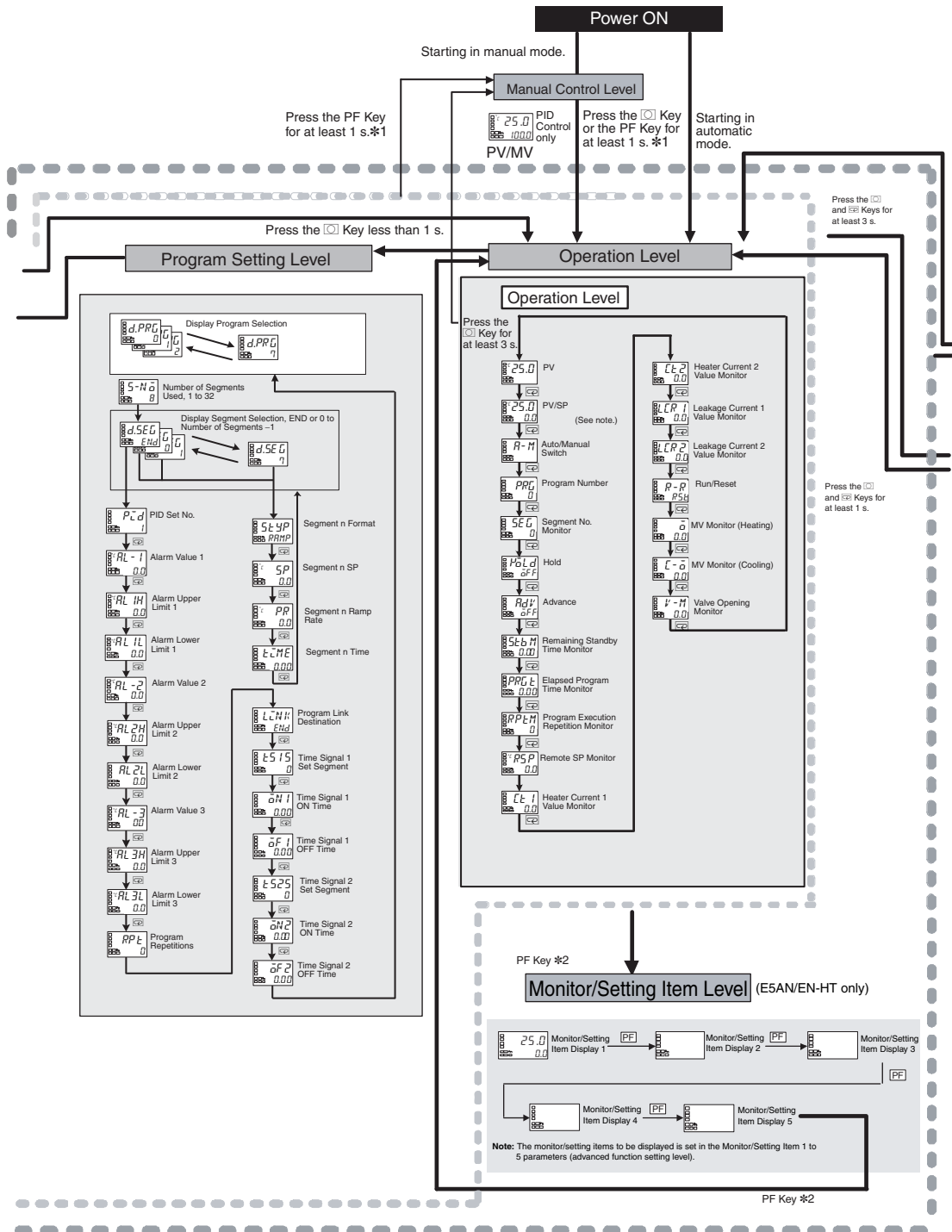
## Programmable Type

### E5CN-HT/E5AN-HT/E5EN-HT

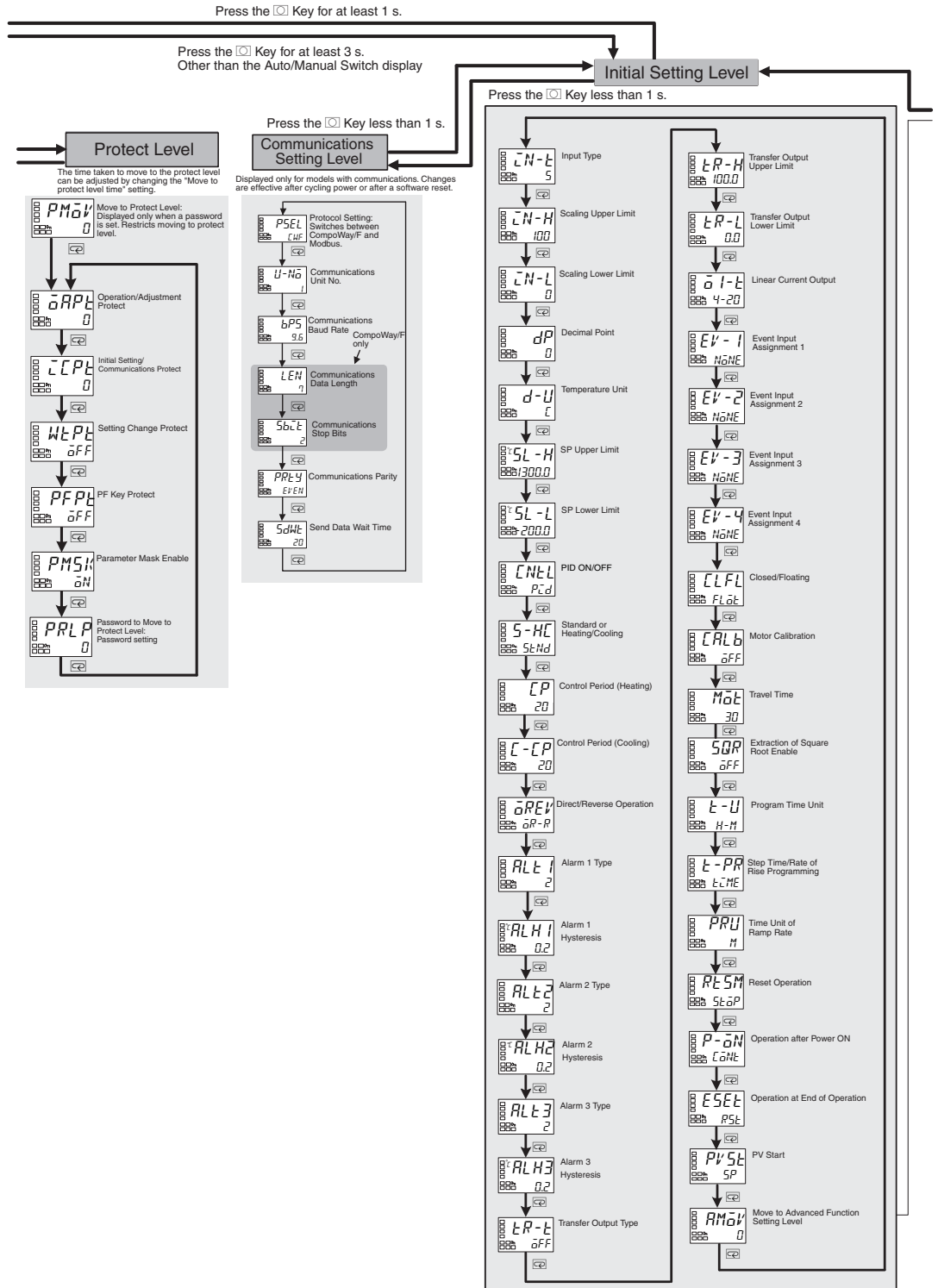
Some parameters are not displayed depending on the model of the Controller and parameter settings.

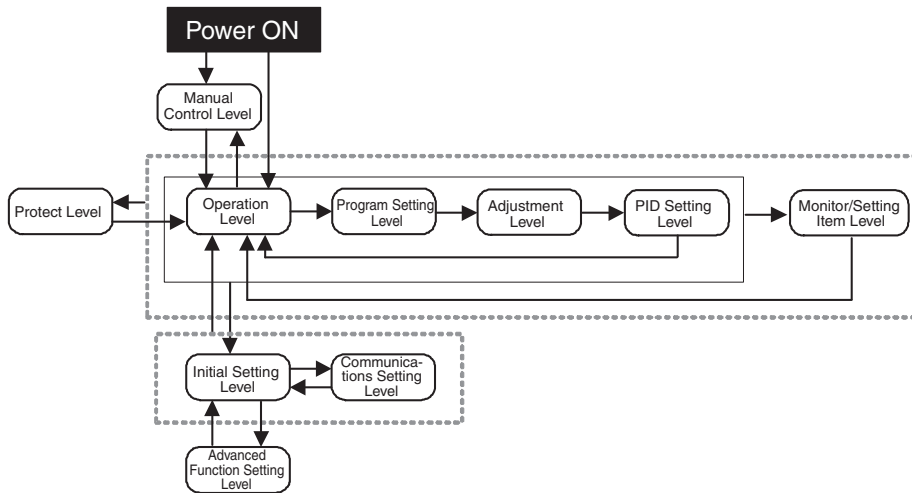
For details, refer to the *E5CN-HT/E5AN-HT/E5EN-HT Digital Controllers User's Manual Programmable Type* (Cat. No. H169).





- \*1. When the PF Setting parameter is set to A-M for a Controller with a PF Key (E5AN/EN-HT).  
 \*2. When the PF Setting parameter is set to PFDP for a Controller with a PF Key (E5AN/EN-HT).





Press the Key for at least 1 s.

**Advanced Function Setting Level**

