## 25) Parameter related to service

Parameter No.	Contents
8000	Parameters setting which can not be specified by setting input are forbidden or allowed.  CRT screen is automatically changed or not to the error message screen when an error is caused.  When parameter PWE is 1, an error is indicated or not.
8010	When power is turned off, parameter at data number 8000 is set to 0 or maintained.

## 5.5 PMC Data Setting and Display (PCPRM)

Parameters of timer, counter, keep relay, data table, and positioning module are set and displayed from CRT/MDI unit.

For this operation, depress soft key PCPRM of PC basic menu to bring up the following menu.

TIMER	COUNTER	KEEPRL	DATA	POS
1	i			

In case of PMC-I, NC must be set to the MDI mode or emergency stop status for data setting.

#### 5.5.1 Timer setting and display

The variable timer time is set and displayed. If timer screen does not appear, depress TIMER soft key to bring up the timer screen.

mana a Na	TIMER				
Timer No.	NO	DATA	NO	DATA	
(1 - 40)	001	2000	016	1000	
	002	10000	•	•	
		•	•	•	
	•	•	•	•	
	•	•	•	•	
	•	•	•	•	
	•	•	•	•	
	015	0	030	0	

Fig. 5.5.1 Timer screen

Specifi- cations Timer No.	Minimum setting time	Maximum Setting time
1 - 8	50 ms	1638.3 sec
9 - 40	8 ms	262.136 sec

- 1) Setting and display from CRT/MDI unit
  - 1 For timer setting in the case of PMC, set NC to MDI mode or emergency stop status, and turn on the NC parameter for writing parameters (Data No. 8000, PMW). This operation is not required for display.
  - 2 Display the timer screen (see Fig. 5.5.1) by depressing the PCPRM soft key of PMC basic menu.
  - 3 Bring data of necessary timer No. on the screen by depressing page key Stop 4 and subsequent steps are required for timer setting.
  - 4 Set the cursor to the setting point on the screen by the cursor key operation.
  - 5 The timer is set by depressing INPUT key after entering timer data by numeric keys. For subsequent data setting, repeat the operation, starting with step (3).
  - 6 After setting timer data, turn off the NC parameter for writing parameters. Depress RET key to return to the PMC basic menu.

### 5.5.2 Counter setting and display

Set and display the preset values and integrated values of the counter. If counter screen does not appear, depress COUNTR soft key to bring the counter screen.

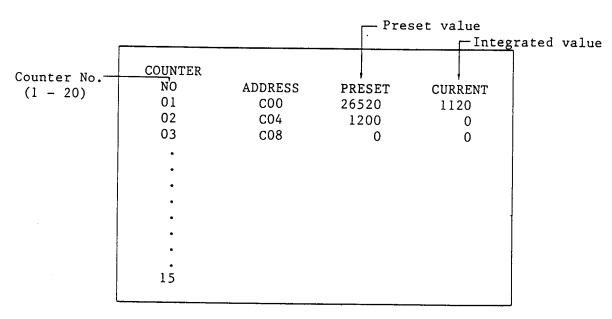


Fig. 5.5.2 Counter screen

- 1) Setting and display from CRT/MDI panel
  - After changing a menu by depressing PCPRM soft key of PMC basic menu, depress COUNTR soft key to bring the counter screen. (See Fig. 5.5.2).
  - 2 Display data of necessary counter number by depressing page key +. The operation in 3 and subsequent steps are required for setting counter data.

- 3 Set NC to MDI mode (emergency stop status in case of PMC-I). Set key signal KEY4=1 in case of BMI interface. Set KEY=1 for an interface corresponding to FS3 or FS6.
- 4 Set the cursor to the setting point on the screen by using the cursor key.
- 5) The counter is set by depressing INPUT key after entering counter data by numeric keys. For setting subsequent data, repeat the operation starting with step 4.
- 6 After setting counter data, depress RET key to return to the PMC basic menu.

#### 5.5.3 Setting and display of keep relay and nonvolatile memory control data

Set the display keep relay and nonvolatile memory control data. If keep relay screen is not displayed, depress KEEPRL soft key to bring the keep relay screen.

KEEP	RELAY		
NO	ADDRESS	DATA	
01	K00	10100011	
02	K01	00011100	
•	•	•	
•	•	•	
•	•	•	
•	•	• .	
•	•	•	
•	•	•	
•	•	•	
15	K14	11000101	

Fig. 5.5.3 Keep relay screen

- 1) Setting and display of keep relay
  - 1) For data setting in the case of PMC-I, set NC to the MDI mode or emergency stop status and turn on the NC parameter for writing parameters. This operation is not required for display.
  - 2 After changing the menu by depressing PCPRM soft key of PMC basic menu, depress KEEPRL soft key to display the keep relay screen. (See Fig. 5.5.3.)
  - 3 Bring data of necessary keep relay on the screen by depressing page key

    1. The operation in 4 and subsequent steps are required for setting the keep relay and nonvolatile memory control data.
  - 4 Set the cursor to the setting point on the screen by the cursor key operation.
  - (5) Set keep relay data by depressing INPUT key after inputting numeric keys. Perform operation from (4) for setting subsequent data.
  - (6) After setting keep relay data, depress RET key to return to the PMC basic menu.
- 2) Setting and display of nonvolatile memory control data Set and display nonvolatile memory control data in the same way as in setting and displaying the keep relay. Nonvolatile memory control data are displayed at No. 17 address K16 on the

keep relay screen and only data of bit 6 and 7 are used.

## 5.5.4 Setting and display of data table

If no data table screen is displayed, the data table control data screen (see Fig. 5.5.4 (a)) appears by depressing the DATA soft key of PMC parameter menu. If correct data are being set as data table control data, data contents (see Fig. 5.5.4 (b), (c)) of data table #1 are displayed first by depressing page key, and the data of data table #2, #3, ... #n are displayed each time page key is depressed hereafter.

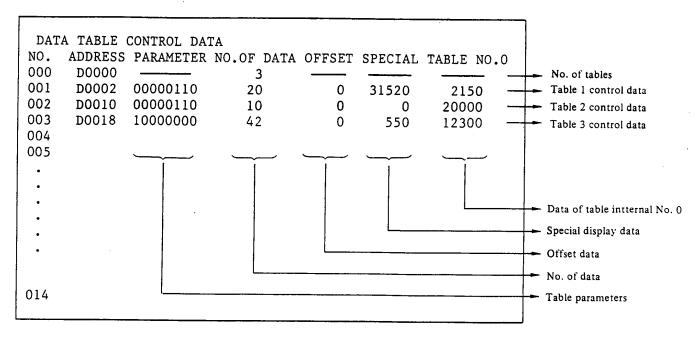


Fig. 5.5.4 (a) Data table control data screen

Table internal Indicates the number of data table group. No. DATA TABLE DATA #001 NO. ADDRESS DATA NO. ADDRESS DATA 0000 D0026 12550 0015 0001 D0028 120 0002 D0030 1500 0014 0029

Fig. 5.5.4 (b) Data table data screen

```
DATA TABLE OF MONITOR #0.04
      ADDRESS
                 TOOL NO.
                              MAX.
                                     AVERAGE
NO.
01
       D0320
                  11252
                              250
                                        80
02
       D0324
                      14
                              190
                                        62
                                        73
                              200
03
       D0328
                   1240
15
```

Fig. 5.5.4 (c) Monitor data table screen

(Display screen of each data for monitor control MONI (SUB 47))

1) Setting and display of data table control dat
Only control data of each data table are displayed in the format shown in
Fig. 5.5.4 (a). Data of data number 0 are data of the number of data tables.
Only NO. OF DATA column is used for setting the number of data tables. No. 1
and subsequent data serve as table control data of each data table.
The following data are set and displayed from the CRT/MDI.

PARAMETER : Table parameter

NO. OF DATA: No. of data (Set the number of tables used in case of No=0

line.)

OFFSET : Offset data

SPECIAL : Special display data

TABLE NO. 0: Data of table internal number 0

- 1) For setting data in the case of PMC-I; set NC to MDI mode or emergency stop status, set KEY4=l in the case of BMI interface, or KEY=l in the case of FS3 or FS6 interface.
- (2) Depress PCPRM soft key of PMC basic menu and depress DATA soft key after changing the menu.
- (3) The data table control screen appears as shown in Fig. 5.5.4 (a). For displaying the table control data screen after No. 15, depress page key + to display the next data. For data setting, the operations in 4 and subsequent steps are
- required.

  4 Set the cursor to the setting data point by using the cursor key of CRT/MDI panel.
- (5) Depress INPUT key after setting data by numeric keys.

(6) Data are changed at the designated cursor position.

- (7) For setting subsequent data, repeat operation starting with (4).
- 8 For setting data table data after setting control data, depress page key to display the data table screen. See 2) in the next paragraph. To return to the PMC basic menu, depress RET key.
- 2) Setting and display of data table
  - 1) For setting data in the case of PMC-I set NC to MDI mode or emergency stop status, set KEY4+1 in the case of BMI interface, or set KEY=1 in the case of interface corresponding to FS3 or FS6.

This operation is not required for data dispaly.

- 2 Depress DATA soft key after changing the menu by depressing PCPRM soft key of PMC basic menu.

  The data control data screen shown in Fig. 5.5.4 (a) appears first.

  Depress page key to display the data table screen. See Fig. 5.5.4 (b).
  - Data of data table 1 appears on the data table screen. By depressing page key again, data of table 2 appears. Data tables 3, 4, ... are sequentially selected, each time page key is depressed.

Display the data table screen of corresponding table.

- 3 If 30 or more data table data are present, display the next data by depressing page key +.
- The operations in 4 and subsequent steps are required for data setting.

  Set the cursor to the setting data point by using the cursor key of the CRT/MDI panel.
- Depress INPUT key after setting data by numeric keys.

6 Data are rewritten at the designated cursor point.

- Repeat operation, starting with step 4, if data are to be set sequentially.
- 8 After setting data table, depress RET key to return to the PMC basic menu.

# 5.5.5 Setting and display of positioning MODULE parameters

Set and display positioning module parameters. If the positioning module screen is not displayed, depress POS soft key to display the screen.

PMC system automatically reserves parameter area of 66 bytes/unit from the end of data table.

Positioning module No. (#1, #2, ... sequentially from a module having a lower input address of PC in the POS module connected to I/O unit.)

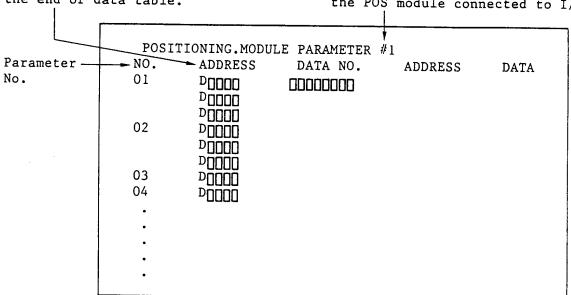


Fig. 5.5.5 Positioning module parameter screen

Note) When setting a parameter to parameter, No. 1, 2, H, M, and L parameters are set sequentially from the top of the CRT screen.

For H, M, and L parameters, refer to the positioning module in Section V.

- 1) Setting and display from CRT/MDI panel Positioning module parameters are classified into bit type and numeric type according to parameter numbers and entered from CRT/MDI panel in the format. For details of parameters, refer to Appendix 20.
  - 1 For setting parameters in the case of PMC-I, set NC to the MDI mode or emergency stop status and turn on an NC parameter for writing parameters. This operation is not required for displaying parameters.
  - 2 After changing the menu by depressing PCPRM soft key of PMC basic menu, depress POS soft key to bring the positioning module parameter screen. (See Fig. 5.5.5.)
  - 3 Depress page key + to bring necessary positioning module No. screen. The operations in 4 and subsequent steps are required for setting parameters.
  - 4 Set the cursor to the setting point on the screen by cursor key operation.
  - (5) Set parameters by depressing INPUT key after entering data of the specified format correspoinding to parameter numbers by numeric keys. For subsequently setting data, repeat operation starting with step (4).
  - 6 After setting parameters, depress RET key to return to the PMC basic menu.