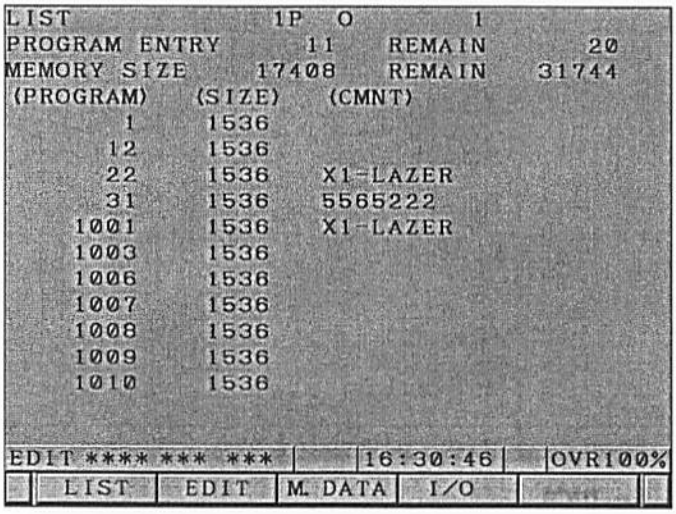
6.7.4 Program input and output (RS-232C)

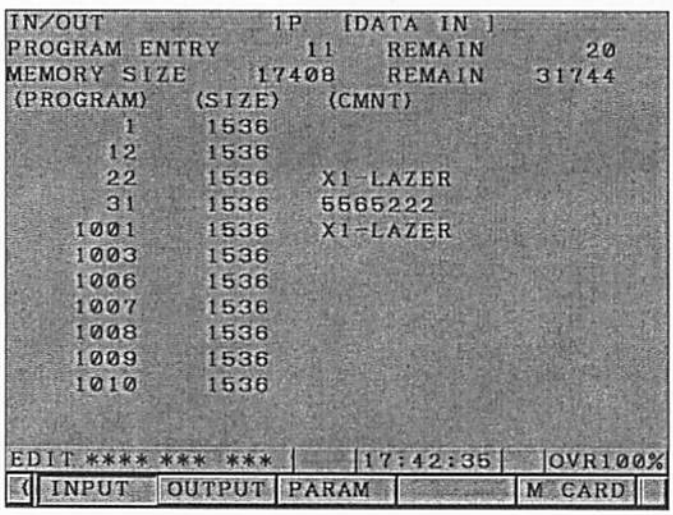
Enables program file transfer between memory and external devices. (Program file input and output, and parameter setting)

Procedure

1. Press the Edit key (EDIT) . The Edit screen is displayed.



2. Press the menu key [I/O]. The In/Out screen is displayed.



Notes

- Press the Menu selection key ◄ to switch the In/Out screen to the initial Edit screen.
- When the program is input/output between A20L and A20R, be sure to select again the "FRONT MACH HOLDER" and "BACK SPINDLE" on the machining data.
  If not, the program selection is disabled with the error message "ILLEGAL VALUE IN MACHINING DATA".

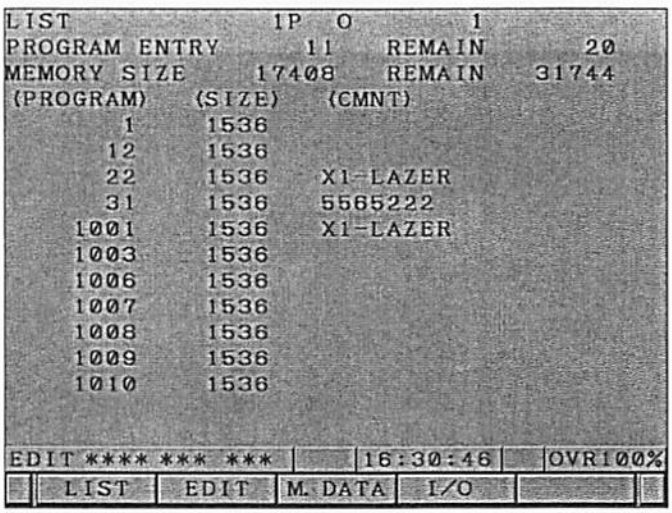
Program file input

Inputs program files from external devices to memory.

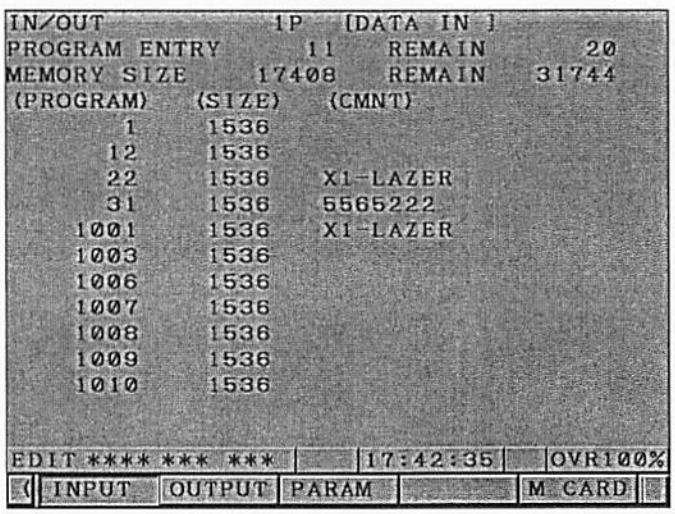
Procedure

1. Press the Edit key 

. The Edit screen is displayed.



2. Press the menu key [I/O].
   The In/Out screen is displayed with the menu key [INPUT] being selected.



3. Press the Input key 

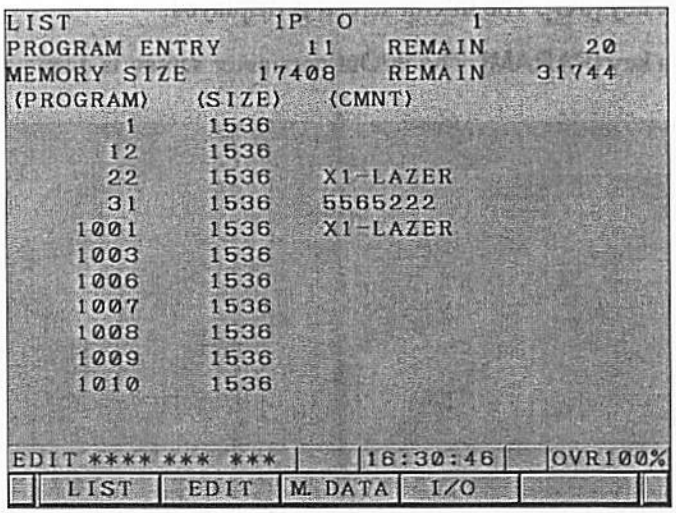
. The program is input.

Program file output

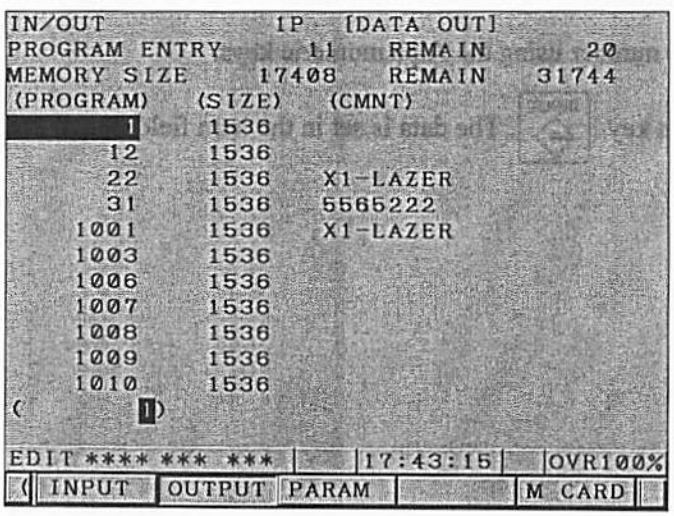
Outputs program files from memory to external devices.

Procedure

1. Press the Edit key (EDIT). The Edit screen is displayed.



2. Press the menu key [I/O].
   The program number on top is reversed. The In/Out screen is displayed with the menu key [INPUT] being selected.
3. Press the menu key [OUTPUT]. The menu key [OUTPUT] is selected.



4. Select the program number using the Cursor move keys (↑ ↓). The selected program number is reversed. You can also select the program number using the Alphanumeric keys.
5. Press the Input key (INPUT). The selected program is output.

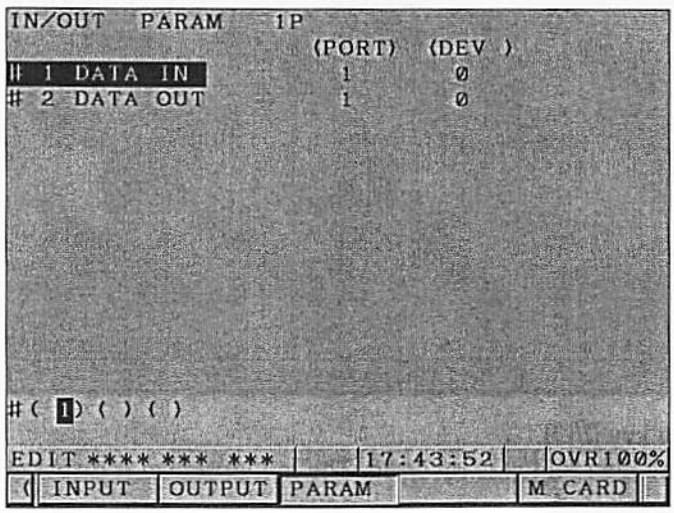
Setting parameters

- Setting a port and device

Procedure

1. Press the Edit key 

. The Edit screen is displayed.
2. Press the menu key [I/O]. The In/Out screen is displayed.
3. Press the menu key [PARAM]. The In/Out parameter screen is displayed.



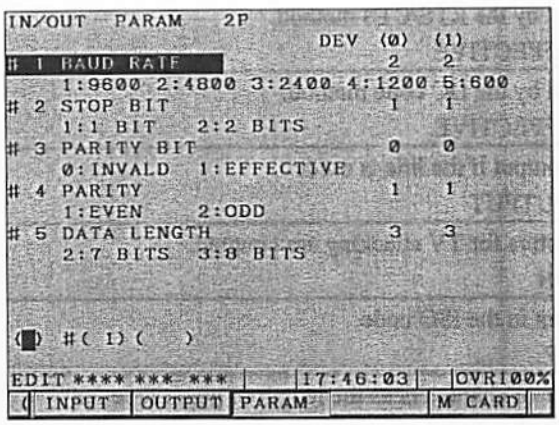
4. Set the number with # using the Alphanumeric keys.
5. Set the port number for input/output operation, using the Alphanumeric keys.
6. Set the device number using the Alphanumeric keys.
7. Press the Input key 

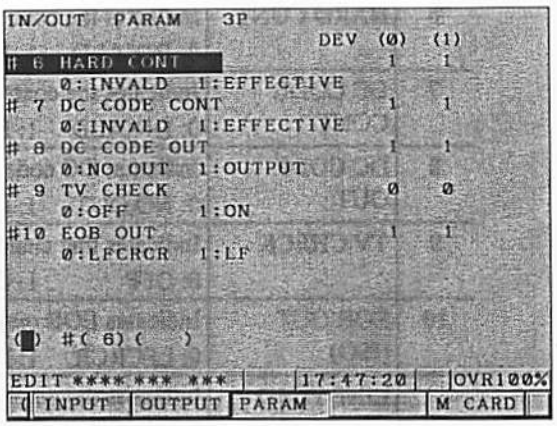
. The data is set in the item fields.

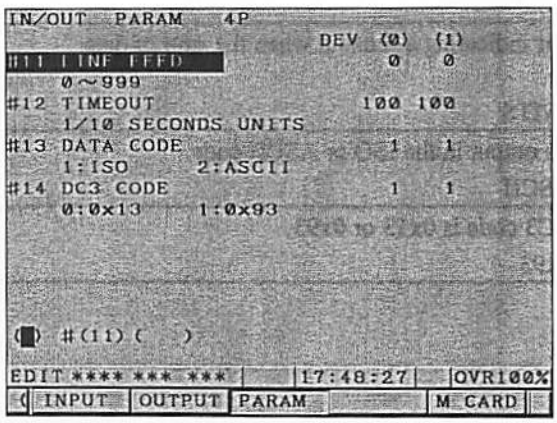
● Setting parameters

Procedure

1. Press the Edit key (EDIT) . The Edit screen is displayed.
2. Press the menu key [I/O]. The In/Out screen is displayed.
3. Press the menu key [PARAM]. The In/Out parameter screen is displayed.
4. Press the Page switching key . The parameter setting item of each device is displayed.







5. Set the device number < > using the Alphanumeric keys.
6. Set the number with # using the Alphanumeric keys.
7. Set the data using the Alphanumeric keys.
8. Press the Input key (INPUT) . The data is set in the item fields.

I/O parameter description

#	Display item	Explanation	Default
1	BAUD RATE	Indicates the data transfer rate. 1: 9600 2: 4800 3: 2400 4: 1200 5: 600	2
2	STOP BIT	Indicates the stop bit length. 1: 1 BIT 2: 2 BITS	1
3	PARITY BIT	Indicates presence or absence of the parity bit. 0: INVALD 1: EFFECTIVE	0
4	PARITY	Indicates odd or even parity if the parity bit is used. 1: EVEN 2: ODD	1
5	DATA LENGTH	Indicates the data bit length. 2: 7 BITS 3: 8 BITS	3
6	HARD CONT	Indicates the control by the RTS/CTS method. 0: INVALD 1: EFFECTIVE	1
7	DC CODE CONT	Indicates the control by the DC code method. 0: INVALD 1: EFFECTIVE	1
8	DC CODE OUT	Indicates DC code output if the line is used. 0: NO OUT 1: OUTPUT	1
9	TV CHECK	Indicates that characters for TV checking are counted. 0: OFF 1: ON	0
10	EOB OUT (ISO)	Indicates EOB output in the ISO code. 0: LFCRCR 1: LF	1
11	LINE FEED	Indicates the number of characters as the length of paper tape fed before and after data output. 0 ~ 999	0
12	TIMEOUT	Indicates the time for indicating a timeout when the stop of data transfer is detected. 1/10 SECONDS UNITS	100
13	DATA CODE	Indicates that data is output in the ISO or ASCII code. 1: ISO 2: ASCII	1
14	DC3 CODE	Indicates that the DC3 code is 0x13 or 0x93. 0: 0x13 1: 0x93	1

RS232C communications parameters

With the D-II produced by Kyoritsu Co., Ltd.

Settings of the machine	
BAUD RATE	4800
STOP BIT	2 BITS
PARITY BIT	INVALID
PARITY	EVEN
DATA LENGTH	8 BITS
HARD CONT	EFFECTIVE
DC CODE CONT	EFFECTIVE
DC CODE OUT	OUTPUT
TV CHECK	OFF
EOB OUT (ISO)	LF
LINE FEED	0
TIMEOUT	100
DATA CODE	ISO
DC3 CODE	0x93

Settings of Kyoritsu D-II	
BAUD RATE	4800
STOP BIT	2 BITS
DC CODE	PROVIDED
TRANSFERCODE	ISO

With the D-III produced by Kyoritsu Co., Ltd.

Settings of the machine	
BAUD RATE	4800
STOP BIT	2 BITS
PARITY BIT	INVALID
PARITY	EVEN
DATA LENGTH	7 BITS
HARD CONT	EFFECTIVE
DC CODE CONT	EFFECTIVE
DC CODE OUT	OUTPUT
TV CHECK	OFF
EOB OUT (ISO)	LF CRCR
LINE FEED	0
TIMEOUT	100
DATA CODE	ISO
DC3 CODE	0x93

Settings of Kyoritsu D-III	
LEFT COUNTER SWITCH	DC CODE (PROVIDED) ISO
RIGHT COUNTER SWITCH	BAUD RATE 4000
PARITY BIT	EVEN PARITY
CHARACTER BIT	7 BITS
STOP BIT	2 BITS
EOB SETTING	LF CR

With the D-V produced by Kyoritsu Co., Ltd.

Settings of the machine	
BAUD RATE	4800
STOP BIT	1 BIT
PARITY BIT	INVALID
PARITY	EVEN
DATA LENGTH	8 BITS
HARD CONT	EFFECTIVE
DC CODE CONT	EFFECTIVE
DC CODE OUT	OUTPUT
TV CHECK	OFF
EOB OUT (ISO)	LF
LINE FEED	0
TIMEOUT	100
DATA CODE	ISO
DC3 CODE	0x93

Settings of Kyoritsu D-V		
LEFT COUNTER SWITCH	XON/XOFF ISO/ASCII	
RIGHT COUNTER SWITCH	BAUD RATE 4800	
STOP BIT	1 BIT	
ISO/ASCII	ISO	
DC3	93H	
DC CODE PROVIDED (IN) PROCESSING AT RECEIVING	DC3, DC1	
DC4	DISABLED	
EOB SETTING	No.6	ON
CR/LF AT SENDING	No.7	OFF
CR/LF AT RECEIVING	No.8	OFF

With the ED-8N produced by Kyoritsu Co., Ltd.

Settings of the machine	
BAUD RATE	4800
STOP BIT	2 BITS
PARITY BIT	EFFECTIVE
PARITY	EVEN
DATA LENGTH	7 BITS
HARD CONT	EFFECTIVE
DC CODE CONT	EFFECTIVE
DC CODE OUT	OUTPUT
TV CHECK	OFF
EOB OUT (ISO)	LF
LINE FEED	0
TIMEOUT	100
DATA CODE	ISO
DC3 CODE	0x93

Settings of Kyoritsu ED-8N	
BAUD RATE	4800
STOP BIT	2 BITS
DATA BIT	7 BITS
PARITY BIT	ON
DC CODE	ON TERMINAL
TRANSFER CODE	ISO

Settings of Kyoritsu ED-8N DIP switch (at the rear of the device)	
No.7	ON
No.8	ON

Note

To set the line feed code to LF, open the rear cover of Kyoritsu ED-8N and set DIP switches No.7 and No.8 to ON.

The counter switch of Kyoritsu ED-8N is set to 16.

With the ETL produced by Hamamatsu Godo Co., Ltd.

Settings of the machine	
BAUD RATE	4800
STOP BIT	1 BIT
PARITY BIT	INVALID
PARITY	EVEN
DATA LENGTH	8 BITS
HARD CONT	EFFECTIVE
DC CODE CONT	EFFECTIVE
DC CODE OUT	NO OUT
TV CHECK	OFF
EOB OUT (ISO)	LF
LINE FEED	0
TIMEOUT	100
DATA CODE	ISO
DC3 CODE	0x93

Setting of Hamamatsu Godo ETL	
CODE	ISO
SPEED	4800
STOP BIT	1
DC CODE	IN
%	ON
STORAGE DESTINATION	MEMORY
DELIMITER CODE	CR LF
TV CHECK	OFF

Alternative settings

Settings of the machine	
BAUD RATE	4800
STOP BIT	2 BITS
PARITY BIT	INVALID
PARITY	EVEN
DATA LENGTH	8 BITS
HARD CONT	EFFECTIVE
DC CODE CONT	EFFECTIVE
DC CODE OUT	NO OUT
TV CHECK	OFF
EOB OUT (ISO)	LF
LINE FEED	0
TIMEOUT	100
DATA CODE	ISO
DC3 CODE	0x93

Setting of Hamamatsu Godo ETL	
CODE	ISO
SPEED	4800
STOP BIT	2
DC CODE	IN
%	ON
STORAGE DESTINATION	MEMORY
DELIMITER CODE	CR LF
TV CHECK	OFF

With MIKUNI

Settings of the machine	
BAUD RATE	4800
STOP BIT	2 BITS
PARITY BIT	INVALID
PARITY	EVEN
DATA LENGTH	8 BITS
HARD CONT	EFFECTIVE
DC CODE CONT	EFFECTIVE
DC CODE OUT	OUTPUT
TV CHECK	OFF
EOB OUT (ISO)	LF
LINE FEED	10
TIMEOUT	100
DATA CODE	ISO
DC3 CODE	0x93

Settings of the MIKUNI	
BAUD RATE	4800
DATA BIT	8 BITS
STOP BIT	2 BITS
PARITY BIT	NONE

With the TACTX K-203

Settings of the machine	
BAUD RATE	4800
STOP BIT	2 BITS
PARITY BIT	INVALID
PARITY	EVEN
DATA LENGTH	8 BITS
HARD CONT	EFFECTIVE
DC CODE CONT	EFFECTIVE
DC CODE OUT	OUTPUT
TV CHECK	OFF
EOB OUT (ISO)	LF
LINE FEED	0
TIMEOUT	100
DATA CODE	ISO
DC3 CODE	0x93

Settings of the TACTX K-203	
COMMUNICATION CODE	ISO
COMMUNICATION SPEED	4800
STOP BIT	2 BITS
DC CONTROL	DC IN
% CONTROL	NONE
EOB	CR LF
NULL CODE	NONE

With the TACTX M-220

Settings of the machine	
BAUD RATE	4800
STOP BIT	2 BITS
PARITY BIT	INVALID
PARITY	EVEN
DATA LENGTH	8 BITS
HARD CONT	EFFECTIVE
DC CODE CONT	EFFECTIVE
DC CODE OUT	OUTPUT
TV CHECK	OFF
EOB OUT (ISO)	LF
LINE FEED	0
TIMEOUT	100
DATA CODE	ISO
DC3 CODE	0x93

Settings of the TACTX M-220	
1. CODE	ISO
2. BAUD RATE	4800
3. STOP BIT	2 BITS
4. DC CONTROL	DC IN
5. % CONTROL	NONE
6. EOB CODE	CR LF
7. TV CHECK	NONE
8. NUL CODE	NONE
9. OVERRIDE	NONE
10. NESTING	NONE
11. EXTENSION	NC
12. FILE NAME	MANUAL

Note

Auto is selected for item 12. File name in the TACTX M-220 standard settings. While Auto is set, all program numbers become 1.NC. (This is because the character following $ is automatically recognized as the program number.)

Select Manual for item 12. File name, and enter the file name in manual mode.

With the Needs98

Settings of the machine	
BAUD RATE	4800
STOP BIT	2 BITS
PARITY BIT	INVALID
PARITY	EVEN
DATA LENGTH	8 BITS
HARD CONT	EFFECTIVE
DC CODE CONT	INVALID
DC CODE OUT	NO OUT
TV CHECK	OFF
EOB OUT (ISO)	LF
LINE FEED	10
TIMEOUT	100
DATA CODE	ISO
DC3 CODE	0x93

Settings of the Needs98	
COMMUNICATION CODE	ISO
COMMUNICATION SPEED	4800
STOP BIT	1 BIT
COMMUNICATION MODE	HOST
% CODE AT RECEIVING	USED
LINE FEED CODE AT SENDING	LF
DELAY AT SENDING	NONE

Note

A timeout error occurs when a program is received. To prevent the error, "INVALID" is selected for "DC CODE CONT" and "NO OUT" is selected for "DC CODE OUT".

With the NC Densuke

Settings of the machine	
BAUD RATE	4800
STOP BIT	2 BITS
PARITY BIT	INVALID
PARITY	EVEN
DATA LENGTH	8 BITS
HARD CONT	EFFECTIVE
DC CODE CONT	EFFECTIVE
DC CODE OUT	OUTPUT
TV CHECK	OFF
EOB OUT (ISO)	LF
LINE FEED	10
TIMEOUT	100
DATA CODE	ISO
DC3 CODE	0x93

Settings of the NC Densuke	
COMMUNICATION CODE	1
COMMUNICATION SPEED	4800
STOP BIT	3 BITS
DC CONTROL	2
COMMUNICATION CODE	1
DEVICE CLASSIFICATION	0