

## **Fanuc Parameters**

# Serial

## Fanuc RS232 Internal Connections and Parameters

### **OM Control**

The Fanuc 0M control has two RS-232 interfaces. Interface number 1 is for the built-in tape reader interface which must be set to 4800 baud. Interface number 2 is wired to the external DB25 female connector. The baud rate and other parameters are set by the NC parameters.





NFED		-	RSASCI	5		STP2	00000001	00000001
0051	FOR I/O S	ETTING =	• 3	(Optional	Remote B	uffer)		1 1 1 1 1 1 1 1 1
NFED	ECLK	NCKCD	RSASCI	SYNAK	PARTY	STP2	00000000	Don't Care
0552	FOR I/O S	ETTING =	0	(Externial	RS232 Po	rt)		1 1 1 1 1 1 1 1
		BRA	ATE0				10	1
0553	FOR I/O S	ETTING =	1 \TE1	(Externial	RS232 Po	rt)	11	1 1 1 1 1 1 1 1 1 1
0250	FOR I/O S	ETTING =	: 2	(Internial	Tape Read	der)		1 1 1 1 1 1 1 1 1 1
202		BRA	ATE2				10	10
0251	FOR I/O S	ETTING =	3	(Optional	Remote B	uffer)		
							10	Danit Care

RSCMD1	DEVFL1	I/O DEVICE TO BE USED
0	0	Bubble Cassette
0	1	Floppy Cassette
1	0	RS232, PPR
1	1	New Interface

SETTING VALUE	BAUD RATE
1	50
2	100
3	110
4	150
5	200
6	300
7	600
8	1200
9	2400
10	4800
11	9600

STP2	NUMBER OF STOP BITS
0	1 Stop Bit
1	2 Stop Bits

NFED	FEED CODE OUTPUT
0	Feed Is Output
1	Feed Is Not Output

1.000	
*12	*19200
* 19200 Baud is	s for I/O #2 & #3 Only

Fanuc 6M

#### Parameters

Parameter Numbers 310,311,312,313

7 6 5 4 3 2 1 0 RSCB STP2 BAUD

RSCB: If set to 0 the control codes (DC1-DC4) are not used. If set to 1 the control codes are used.

STP2: If set to **0** one stop bit is used. If set to **1** two stop bits is used.

BAUD: Set (or check) the baud rate according to the following chart.

Baud Rate	3	2	1	0
50	0	0	0	0
100	0	0	0	1
110	0	0	1	0
150	0	0	1	1
200	0	1	0	0
300	0	1	0	1
600	0	1	1	0
1200	0	1	1	1
2400	1	0	0	0
4800	1	0	0	1
9600	1	0	1	0

#### Parameter Numbers 340, 341

- 340: IDVICE Selects the input device and setting to be used to input data.
- 341: ODVICE Selects the output device and setting to be used to output data.

Set Value 0	Input/Output Device Input: Tape Reader Output: Facit Puncher
1	I/O: ASR33/ASR43 Set Parameter 310
2	I/O: RS232C Set Parameter 311
3	I/O: RS232C Set Parameter 312
4	I/O: RS232C Set Parameter 313

#### To Read Program into Fanuc from PC

• On setting page set Input Device1 and 2 to a value of 1 and Parameter 340 to 2, 3, or 4 depending on the communications settings.

- In edit mode press the READ button. If program number is not at beginning of data you must enter by hand before pressing READ.
- On PC you must now send data using your software. Note: If using terminal program use 7 Data Bits Even Parity
  using ASCII (text). The Fanuc LF line feed is used to determine EOB end of block so be sure that the software does
  not strip this character.

#### To Send Program from Fanuc to PC

- On setting page set Tape Code to a value of 1 (ISO) and parameter 341 to 2, 3 or 4 depending on the communications settings.
- On thePC you must set computer to read data in using the same software settings as above (7,E, ASCII).
- In edit mode input program number (example: 00012) and press the PUNCH button. The data should now transfer to your computer.

## 10,11,12 Control

Click on pictures for full size version

#### <u> Top</u>

APPENDIX 6

Parameter entry Data format: Byte type Data range: 0 - 127 Specify M codes which do not put the following block in the buffer register. If there is an M code whose next block should not be put in the buffer register until the M function processing terminates, this M code should be specified. M00, M01, M02, and M30 are M codes which do not put the following block in the buffer register even though they are not specified in these parameters.

Data number

Data

2900

Distance between double turrets

Parameter entry (For F10T, 11T and 12T) Data format: 2-word type Data unit:

Increment system	IS-A	IS-B	Unit
Metric system machine	0.01	0.001	mm/min
Inch system machine	0.001	0.0001	inch/min

Data range: 0 - 99999999

If the mirror image for the double turrets function is used, specify the distance between the double turrets.

## - 1 Parameters Related to Reader/Puncher Interface (RS232C, RS422, ASR33/43)

Data number

Data

5001

Reader puncher device No. to be connected to RS232C interface 1

5002	Reader•puncher device No. to be connected to RS232C interface 2
5003	Reader•puncher device No. to be connected to RS232C interface 3
Setting entry Data format: By Data range: 1 Specify the Re 1, 2, or 3. Set device spe data number 51	te type - 6 ader•puncher device No. to be connected to RS232 interface cifications corresponding to an I/O device number 1 - 6 in 10 - 5162.
Data number	Data

5011

Reader•puncher device No. to be connected to 20 mA current loop interface

#### APPENDIX 6

Setting entry
Data format: Byte type
Data range: 1 - 6
Specify the Reader puncher device No. to be connected to 20 mA curre
loop interface.
Set device specifications corresponding to an I/O device number 1 - 6
data number 5110 - 5162.

Data number

5013

Data

Reader puncher device No. to be connected to RS422 interface

Setting entry
Data format: Byte type
Data range: 1 - 6
Specify the Reader puncher device No. to be connected to RS422 interface
Set device specifications corresponding to an Reader puncher device numb
1 - 6 in data number 5110 - 5162.

Data number

Specify

the

corresponding to device number 1.

specification

Data

of

the

Reader/puncher

deti

5110 Specifications number of Reader puncher device corresponding to device number 1 Setting entry Data format: Byte type Data range: 1 - 7

number

The relationships between specification numbers and I/O devices are follows:

Spec. No.	Reader puncher device specifications				
1 2 3 4 5 6 7	Control codes (DC1 - DC4) are used and feed is punched Control codes (DC1 - DC4) are not used and feed is puncha Control codes (DC1 - DC4) are used and feed is not puncha Control codes (DC1 - DC4) are not used and feed is puncha Reserved PPR FUNUC cassette				

Data number

5111

Data

Number of stop bits of Reader puncher device corresponding to device number 1

Setting entry
Data format: Byte type
Data range: 1 - 2
Specify the number of stop bits of the Reader/puncher device corresponding
with device number 1.

APPENDIX 6

Data number

Data

5112 Baud rate of Reader puncher device corresponding to device number 1

```
Setting entry
Data format: Byte type
Data range: 1 - 11
Specify the baud rate of the Reader/puncher device corresponding with
device number 1.
The relationships between specification numbers and Reader/puncher devices
are as follows:
```

Specified number	Baud rate
1	50
2	100
3	110
4	150
5	200
6	300
7	600
8	1200
9	2400
10	4800
11	9600



#### APPENDIX 6

[]	
5141	Number of stop bits of Reader puncher device corresponding to device number 4
<b></b>	
5142	Baud rate of Reader/puncher device corresponding to device number 4
5150	Specification number of Reader puncher device corresponding to device number 5
5151	Number of stop bits of Reader/puncher device corresponding to device number 5
5152	Baud rate of Reader puncher device corresponding to device number 5
5160	Specification number of Reader/puncher device corresponding to device number 6
[	
· ·	

5161

Number of stop bits of Reader puncher device corresponding to device number 6

5162

Baud rate of Reader/puncher device corresponding to device number 6

Set these parameters the same as those for device number 1.

## 4.12 Parameters Related to Stroke Limit



Copyright © 2019 by i-Logic Software

support@i-logic.com