

Overview

The purpose of this procedure is to guide you through the steps on how to back-up the Fusion control through Data I/O using RS232

Tools Needed

- RS232 Cable
- Laptop

Instructions

- I. Configure settings
 - A. Configuring laptop software settings
 - 1. Set up your software settings (example shows using ProComm Plus)

	Baud rate: 4800
Parity:	C None 📀 Even C Odd C Mark C Space
Data bits:	○8 ●7
Stop bits:	C 1 © 2
	 Use hardware flow control Use software flow control Drop DTR to hangup
	OK Cancel Help

- 2. Set Baud rate to 4800
- 3. Set Parity to Even
- 4. Set Data bits to 7
- 5. Set stop bits to 2

B. Setup Controller

1. Select {DATA I/O}

POSITION TOOL PROGRA LAYOUT	M TOOL DATA	C-COND.	PARAM	DIAGNOS	DATA I/O	VISUAL TOOL MNG	DISPLAY MAP
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2. Select {TAPE}

CHT TAPE	HARD FLOPFY DISK	CARD
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3. Select {PARAM}

LOAD	ALL LOAD	PUNCH	ALLPUNCH	COMPARE	ALL COMP	PARAM.	1 20	8 1000
NC<-TAPE	NC<-TAPE	NC->TAPE	NC->TAPE	NC=TAPE	NC=TAPE			

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4. Set the parameters to the following settings

BAUDRATE:	4800	
.DATA BIT:	8	-
. PARITY:	NONE	٠
4.STOP BIT:	2	*
5. HAND SHAKE:	RTS/CTS	*
6.WAIT TIME:	0.0	SEC
7.FORMAT:	ISO	*
8.SAME WNo.:	ALARM	-
9. PORT:	COM1	-

5. Press the {PARAM DETAIL} soft key

	THE REAL		PARAN	PARAN.
a second se	At the second	and the second s		DELETE .

6. Set the TAP parameters to the following settings

TAP1	1	TAP9	76	TAP17	0	TAP25	00000000
TAP2	0	TAP10	13	TAP18	0	TAP26	00000100
TAP3	0	TAP11	109	TAP19	0	TAP27	00000000
TAP4	1	TAP12	122	TAP20	0	TAP28	00100010
TAP5	0	TAP13	91	TAP21	0	TAP29	5
TAP6	0	TAP14	70	TAP22	0	TAP30	10
TAP7	0	TAP15	26	TAP23	0	TAP31	30
TAP8	0	TAP16	74	TAP24	0	TAP32	0

- 7. On the top left corner of the Data I/O screen. Press the {SETUP} tab
- 8. Press the {Extended Param} setting

DATA I/	0	
File View	Setup Window Help	
NC	Extend Param.	
	HD D Folder	



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9. Set the parameters to the following settings

	-	-		and the second second			
DPRI	4	DPR9	1	IDD1	0	IDD9	0
DPR2	2	DPR10	0	IDD2	0	IDD10	0
DPR3	0	DPR11	0	IDD3	0	IDD11	0
DPR4	3	DPR12	0	IDD4	0	IDD12	0
DPR5	0	DPR13	0	IDD5	0	IDD13	0
DPR6	0	DPR14	0	IDD6	0	IDD14	8
DPR7	0	DPR15	5	IDD7	0	IDD15	0
DPR8	1	DPR16	0	IDD8	0	IDD16	0

C. Output data

- 1. Connect your RS232 cable (Refer to Index)
- 2. Select {DATA I/O}

POSITION	TOOL LAYOUT	PROGRAM	TOOL DATA	C-COND.	PARAM	DIAGNOS	DATA I/O	VISUAL TOOL MNG	DISPLAY MAP
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3. Select {TAPE}

DISK	СМТ	TAPE		HARD	FLOPPY	CARD			
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4. Select {PUNCH NC->TAPE}

LOAD	ALL LOAD	PUNCH	ALLPUNCH	COMPARE	ALL COMP	-	PARAN.	-	
NC<-TAPE	NC<-TAPE	NC->TAPE	NC->TAPE	NC=TAPE	NC=TAPE		1000	1000	

5. Select {PROGRAM FILE}

- 6. Press on {PAGE SAVE} to save all the programs
- 7. With keyboard highlight all the data to transfer

Z DATA I/O				
File View Setup Window -NC- IB 2B IC IC I	W Help	SAVE		ORY: PARA >>
√v 100% <mark>=]</mark> 100%	WM 1008	WORKPI	CE PROGRAM NUMB	S 0 1997/01/01 01:47 ER ?
	A CA	LL NCEL	PROGRAM FILE	START

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- 8. Get your software ready to receive the file
- 9. Press the **{START}** soft key
- 10. You should see the data transferring

🕰 DATA 170		Ŭ					×				
File View Setup Windo	w Help										
NC				CARD << DIR	ECTORY: H	ARA >>					
12 22				12 22							
		SAV	'E								
TOOL DATA	TOOL OFFSET			TOOL DATA		TOOL OFFSET					
TOOL FILE				TOOL FILE							
CUTTING COND.	WORK OFFSET			CUTTING COND.		WORK OFFSET					
USER PARAM.	M. PARAM			USER PARAM.							
ADD WPC	MACRO VAR.										
MAINTENANCE											
					TPS 0 1	1997/01/01	01:48				
√√ 1008 1008 WM 1008											
		ALL		PROGRAM			START				
		CANCEL		FILE							

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CNC Procedure CNC M600 Mazak Fusion M640 backup using RS232

Appendix

RS232 Cable Configuration



If you get alarms such as "541 TAPE PUNCHER MIS-CONNECTED" you need to check your connections. Make sure you are connected to COM1 port on the back of the NC keyboard



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