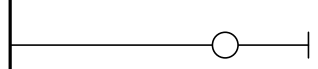
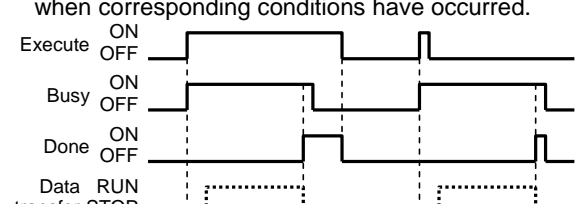


NC2x 401	Write Parameter _NC2x401_WriteParameter
---------------------	--

Basic function	Writes the parameters.																
Symbol	<div style="display: flex; align-items: center;"> <div style="flex: 1;"> <p>Always ON (P_On)</p> <p>Unit No.</p> <p>Start</p> <p>Write source area</p> <p>Write source word</p> <p>Write destination area</p> <p>Write destination address</p> <p>Number of write words</p> </div> <div style="flex: 2; border: 1px solid black; padding: 5px; margin: 0 10px;"> <p style="text-align: center;">_NC2x401_WriteParameter</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 50%;">(BOOL) EN</td> <td style="width: 50%;">(BOOL) ENO</td> </tr> <tr> <td>(INT) UnitNo</td> <td>(BOOL) Done</td> </tr> <tr> <td>(BOOL) Execute</td> <td>(BOOL) Busy</td> </tr> <tr> <td>(WORD) SrcAreaID</td> <td>(BOOL) Error</td> </tr> <tr> <td>(INT) SrcAreaNo</td> <td>(WORD) ErrorID</td> </tr> <tr> <td>(WORD) ParameterID</td> <td></td> </tr> <tr> <td>(INT) ParameterNo</td> <td></td> </tr> <tr> <td>(INT) Size</td> <td></td> </tr> </table> </div> <div style="flex: 1; text-align: right;">  <p>Write completed</p> <p>Busy</p> <p>Error</p> <p>Error code</p> </div> </div>	(BOOL) EN	(BOOL) ENO	(INT) UnitNo	(BOOL) Done	(BOOL) Execute	(BOOL) Busy	(WORD) SrcAreaID	(BOOL) Error	(INT) SrcAreaNo	(WORD) ErrorID	(WORD) ParameterID		(INT) ParameterNo		(INT) Size	
(BOOL) EN	(BOOL) ENO																
(INT) UnitNo	(BOOL) Done																
(BOOL) Execute	(BOOL) Busy																
(WORD) SrcAreaID	(BOOL) Error																
(INT) SrcAreaNo	(WORD) ErrorID																
(WORD) ParameterID																	
(INT) ParameterNo																	
(INT) Size																	
File name	Lib\FBL\omronlib\PositionController\NC2x_NC2x401_WriteParameter10.cxf																
Applicable models	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 30%;">Position Control Units</td> <td>CJ1W-NC214/234/414/434</td> </tr> <tr> <td>CPU Unit</td> <td>CJ1*-CPU**H Version 3.0 or later CJ1M-CPU** Version 3.0 or later CP1H CJ2H-CPU**(-EIP)</td> </tr> <tr> <td>CX-Programmer</td> <td>Version 5.0 or later</td> </tr> </table>	Position Control Units	CJ1W-NC214/234/414/434	CPU Unit	CJ1*-CPU**H Version 3.0 or later CJ1M-CPU** Version 3.0 or later CP1H CJ2H-CPU**(-EIP)	CX-Programmer	Version 5.0 or later										
Position Control Units	CJ1W-NC214/234/414/434																
CPU Unit	CJ1*-CPU**H Version 3.0 or later CJ1M-CPU** Version 3.0 or later CP1H CJ2H-CPU**(-EIP)																
CX-Programmer	Version 5.0 or later																
Languages in function block definitions	Ladder programming																
Conditions for usage	None.																
Function description	<ul style="list-style-type: none"> • For the unit specified in "Unit No. (UnitNo)", the set value of the write source word will be written in the write destination parameter when "Start (Execute)" turns ON. • The write source word will be specified in "Write source area (SrcAreaID)" and "Write source word (SrcAreaNo)". The write destination parameter will be specified in "Write destination area (ParameterID)" and "Read destination address (ParameterNo)". The number of write words will be specified in "Number of write words (Size)". • "Write completed (Done)" is turned ON when the parameter writing operation for the FB has been completed. This flag will not be turned ON if the positioning operation is canceled because another operation has been started from a different instance, for a deceleration stop, or because an error has occurred. • "Busy (Busy)" will be set when the "Start (Execute)" is turned ON. "Busy (Busy)" will be reset when any of "Write completed (Done)" or "Error (Error)" is turned ON. Even if an error occurs when the input variable is out of the range, etc., "Busy (Busy)" will be set for at least one cycle. • "Error (Error)" will be turned ON and "Error code (ErrorID)" will be output if an error occurs for the FB. This will not occur for error in other FBs or other instances of the FB. • These statuses (Done/Error/ErrorID) will be reset when "Start (Execute)" turns OFF. If "Start (Execute)" turns OFF before the positioning operation has been completed, the status will be set for at least one cycle when corresponding conditions have occurred. <div style="margin-top: 10px;">  </div>																
Kind of FB definition	<p>Always execution type.</p> <p>Connect the EN input to the Always ON Flag (P_On).</p> <p>The same instance cannot be used in two or more places.</p>																
EN input condition	<ul style="list-style-type: none"> • Connect the EN input to the Always ON Flag (P_On). • If another bit is connected to EN, the FB outputs will be held when the connected bit turns OFF. 																

<p>Restrictions Other</p>	<ul style="list-style-type: none"> This FB does not recognize the existence of the axis specified in "Unit No. (UnitNo)". If this input variable has not been set correctly, the FB may not work normally. This FB uses bits of the Position Control Unit. Therefore, do not turn these bits ON or OFF. For the same reason, do not use these bits for coil outputs (OUT commands). Refer to the "Used bits list" for the bits used by this FB. You cannot use this FB during a normal operation to write parameters that are enabled only when you turn ON the power supply, restart the PCU, or set up the PCU. You can write these parameters only during PCU setup.
<p>Application example</p>	<p>Turning OFF bit A and then ON will change the parameter (Axis 1 maximum speed) of the Position Control Unit of unit number 0.</p>
<p>Related manuals</p>	<p>CJ-series Position Control Unit Operation Manual (W477) 8-2 Data Write with Data Transfer Bit 12-6 Error Code List</p>

■Variable Tables

Input Variables

Name	Variable name	Data type	Default	Range	Description
EN	EN	BOOL			1 (ON): FB started 0 (OFF): FB not started
Unit No.	UnitNo	INT	&0	&0 to &94	Specify the unit number.
Start	Execute	BOOL	0 (OFF)		↑ : Starts the parameter writing.
Write source area	SrcAreaID	WORD	#0082	Refer to the right.	Specify the area where data for writing in the Position Control Unit is stored. P_CIO(#00B0): CIO P_WR(#00B1): WR P_HR(#00B2): HR P_DM(#0082): DM P_EM00(#0050) to P_EM18(#0068): EM bank 00 to 18
Write source word	SrcAreaNo	INT	&0	&0 to &32767	Specify the beginning word where data for writing in the Position Control Unit is stored.
Write destination area	ParameterID	WORD	#0000	Refer to the right.	Specify the area in the Position Control Unit where data will be written. Refer to "Related manuals" for details. #0100: Common parameter #02xx: Axis parameter (xx: Axis number #01 to #04) #02F1: External encoder axis parameter #03xx: Memory operation parameter (xx: Task number #01 to #04) #04xx: Memory operation data (xx: Task number #01 to #04) #0500: Memory operation condition data
Write destination address	ParameterNo	INT	&0	Refer to the right.	Specify the beginning address in the Position Control Unit where data will be written. Refer to "Related manuals" for details.
Number of write words	Size	INT	&1	&1 to &25000	Specify the number of write words. Refer to "Related manuals" for details.

■Output Variables

Name	Variable name	Data type	Range	Description
ENO	ENO	BOOL		1(ON): FB operating normally 0(OFF): FB not started / FB ended with error
Write completed	Done	BOOL		Turns ON when the parameter writing operation has been completed.
Busy flag	Busy	BOOL		Turns ON when FB is in the process.
Error flag	Error	BOOL		Turns ON when an error has occurred in the FB. Refer to "Error code (ErrorID)" for details.
Error code	ErrorID	WORD		Returns the error code when an error occurred in the FB. Refer to "■Error code list" for details.

■Error code list

Error name	Error code	Probable cause	Clearing method
Input variable out of range	#0001	The value of input variable of this FB is out of valid range.	Set the value of input variable within the specified range.
Unit error	#1001	An error in individual unit has occurred.	Check "Unit common error code". Identify the error cause from the Operation Manual of the Position Control Unit.
Unit initializing	#2001	The Position Control Unit is in process of initialization.	Execute the FB after the Position Control Unit initialization process has been completed.
Command disabled	#2300	FB commands have not been accepted.	Execute the FB after putting the unit in status that can accept commands.
Write data	#300C	"Write data" of the PCU Control Output Memory area has been operated by the outside of the FB.	Do not operate each bit which the active FB is operating, by the external unit of the FB. Do not use it on OUT command.

■Used bits list

Memory area	Name	Data type	Address	Note
PCU Control Output Memory area	Write data	BOOL	n+00.12	
	Number of data transfer words	INT	n+01	
	CPU Data Transfer area type	WORD	n+02	
	CPU data transfer beginning word	INT	n+03	
	PCU Data Transfer area type	WORD	n+04	
	PCU data transfer beginning word	INT	n+05	

■Version History

Version	Date	Contents
1.00	2009.06.	Original production.

■Note

This document explains the function of the function block.

It does not provide information of restrictions on the use of Units and Components or combination of them. For actual applications, make sure to read the operation manuals of the applicable products.