How to use Smart Active Parts (Device Library)

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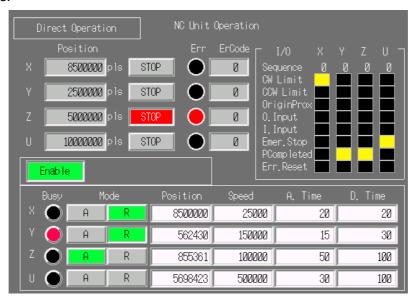
Revision History

Date	Page	Contents						
April 25,2003	All	Original Production						
May 27, 2003	8	Addition of information related to the communications setting						
July 23,2003	All	Name defined as Device Library has been changed to Smart Active						
		Parts.						
	6,7	Images of NS-Designer changed						
	10	Addition of information related to connection between NS						
		Hardware and PLC.						

Section 1 Overview

1-1 What are Smart Active Parts (Device Library)?

Smart Active Parts (Device Library) are generic name of libraries contained setting/monitor screens (E.g. Position Controller Units and Temperature Controllers). Users can make setting/monitor screens simply reusing Smart Active Parts which should have created according to Units for PLC before. Since Smart Active Parts are the sophisticated libraries which include communication settings, refer to Section 3 precautions for use of Smart Active Parts and Section 4 precautions for details on editing Smart Active Parts.



Features

Smart Active Parts has the following features.

- Smart Active Parts have communication functions so that no communication programs are required (Programless communication) to communicate with units (Temperature Controller, Position Controller Unit, DRT2 etc...).
- Smart Active Parts can be reused from the Use Library under Tools in the NS-Designer. All communication addresses for setting/monitor screens are automatically set just specifying Match No. or Unit No. of destination when reusing it. It is not necessary to check those using manuals as ever.
- Setting/monitor screens for NC and DRT2 can be created simply combining device libraries so that they work like the dedicated tools, such as CX-Position and Configurator, with PT.

Section 2 Procedure for Reusing Smart Active Parts

2-1 The following smart active parts are provided

CJ1M

Functions for Built-in Input Setting, Origin Search and Origin Return

DRT2

ID16/ID16S/ID08/ID08C/HD16C/OD16/OD08/OD08C

DeviceNet, E5ZN

PID Setting, Commands, SP Setting, Setting Area 0, and Front Panel

Network Monitor

CLK Network Status Monitor and DeviceNet Status Monitor

Position Controller Unit

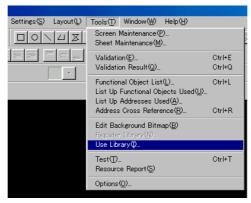
Direct Operation, JOG Operation, Origin Search, Origin Return, Teach, Changing Present Value, and Input Data Screens

2-2 How to Use Smart Active Parts

To use Smart Active Parts, select *Use* in the Use Library dialog box under *Tools* and paste the selected Smart Active Parts on the screen.

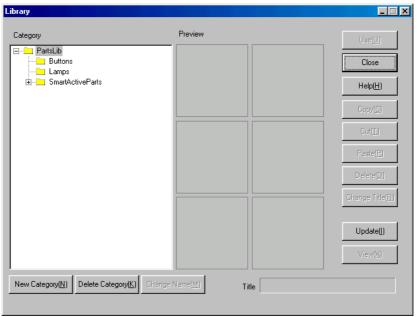
The procedure for pasting Smart Active Parts is as follows.

1. Select Tools-Use Library on the tool bar.

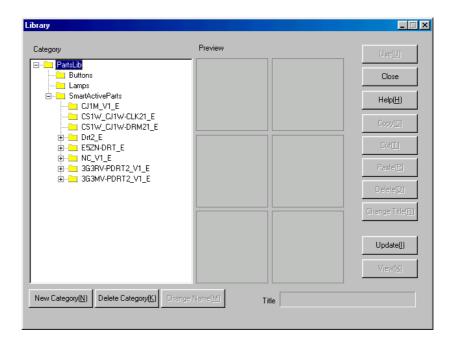


2. Select the desired Smart Active Parts

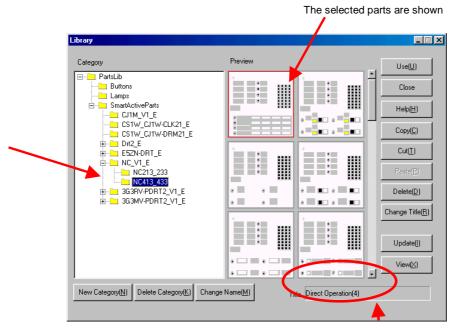
When selecting Use Library, the following Library dialog box appears.



When double clicking on the SmartActiveParts folder in the list box of Category, the installed device libraries will appear.

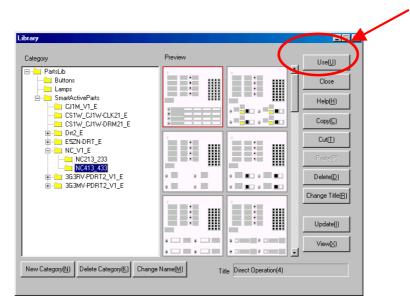


Select the desired device folder under the SmartActiveParts, and then libraries relating to the selected device will be displayed in thumbnail-size images. Click the thumbnail-size image to show the desired Smart Active Parts. The title of the selected Smart Active Parts will be shown in the title field at the bottom of the dialog.

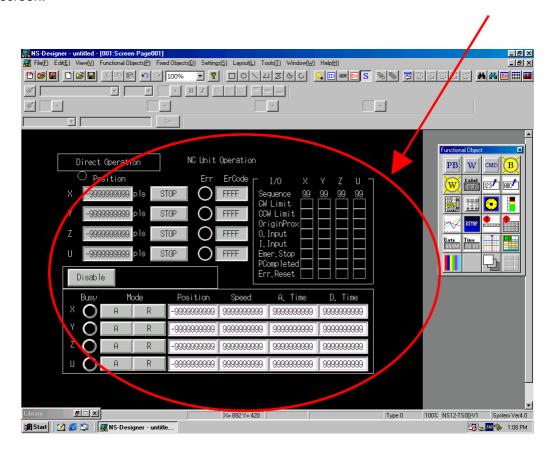


The selected title is shown

3. Select the desired library in the preview box and click the Use button at the top right of the dialog box.



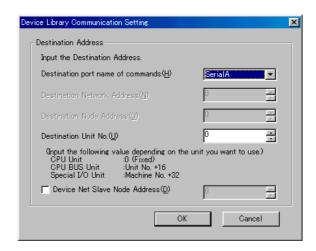
4. When clicking the Use button, the selected Smart Active Parts will be pasted on the top left of top left of the screen.



5. Communication settings

Click the Smart Active Parts after pasting it on the screen. Smart Active Parts Communication Setting dialog box appears. Make the settings for the following items.

No.	Item	Details						
1	Destination port name	Selects the port name of PT connected to the PLC						
	commands							
2	Destination Unit No.	Sets Unit No. or Match No., such as Position						
		Controller Unit						
		* Make sure that the number must be 16 or higher for						
		CPU Bus unit and 32 or higher for Special I/O unit.						
3	DeviceNet Slav	e Check if the selected Smart Active Parts is						
	Address	DeviceNet Slave and then set the address						



In a series of sharing Smart Active Parts have been completed.

Refer to Section 3 precautions for use of Smart Active Parts and Section 4 precautions for details on editing Smart Active Parts.

Section 3 Precautions for Use of Smart Active Parts

Please note that the following precautions when using Smart Active Parts.

3-1 Operating Environment

- 1. NS-Designer Ver.4.0 is required.
- 2. Project data version 3.0 or later (version shown beside the System Version in the Project Property dialog under Settings in the NS-Designer) is required for operating project (screen data).
- If you try to paste Smart Active Parts on the screen with project data version 2.0 or earlier, a warning message dialog appears and Smart Active Parts cannot be pasted on the screen.
- 3. When connecting the PLC and PT by a Serial network (1:N NT Links), set *NT/PC Link Max* on the *Settings-Host Link Port* tab Page in the CX-Programmer to a value greater than 1.

3-2 Precautions for use of Smart Active Parts

Smart Active Parts have the following restrictions unlike other functional objects, such as buttons and lamps.

Smart Active Parts cannot be copied, pasted, or cut.

To place the same Smart Active Parts more than one, select *Tools-Use Library* and click the desired sample.

Screens contained Smart Active Parts cannot be duplicated or deleted in the Screen Maintenance. Delete the Smart Active Parts first and then perform screen maintenance.

Section 4 Precautions for Editing Smart Active Parts

Please note that the following precautions when using Smart Active Parts.

To edit Smart Active Parts, check the Open property dialog for the Smart Active Parts in the Edit/Disp tab of Options dialog box under the Tools.

▼ Open property dialog for the device library(□)

Note) Do NOT change address settings of the object(s) which composes the device library.

Smart Active Parts cannot be edited without checking it.

To edit objects grouped as Smart Active Parts, double click on the desired object. The appropriate property dialog box appears and you can edit it.

Make sure that size and position will NOT be reflected to the Smart Active Parts even if the value has been changed. (Size and position for objects grouped as Smart Active Parts are fixed.) However, size and position for Smart Active Parts itself can be changed.

Color and text attribute set for Smart Active Parts cannot be copied.

Section 5 Manipulating Smart Active Parts	
This section describes functions, setting items and operations for Smart Active Parts (Devi	ce Library).

Model	CJ1M	Location	ocation SmatActiveParts \CJ1M_V1		Settime PLC->NS				
Function	Sets time and date information (year, month, date, time, minute, and second) in the PLC to								
Function	the internal clock of PT.								



No.	Item	Setting/ Display	Details
1	PLC >> NS	Setting	Sets time and date information (year, month, date, time, minute, and second) in the PLC to the internal clock of PT. A day of the week is calculated by date information in the PT. If a day of the week and date set in the PLC are not matched, a day of the week calculated by date will be reflected to the PT so date information for PLC and PT may vary according to preset data in the PLC.

[Note]

CS/CJ Series PLCs are supported.

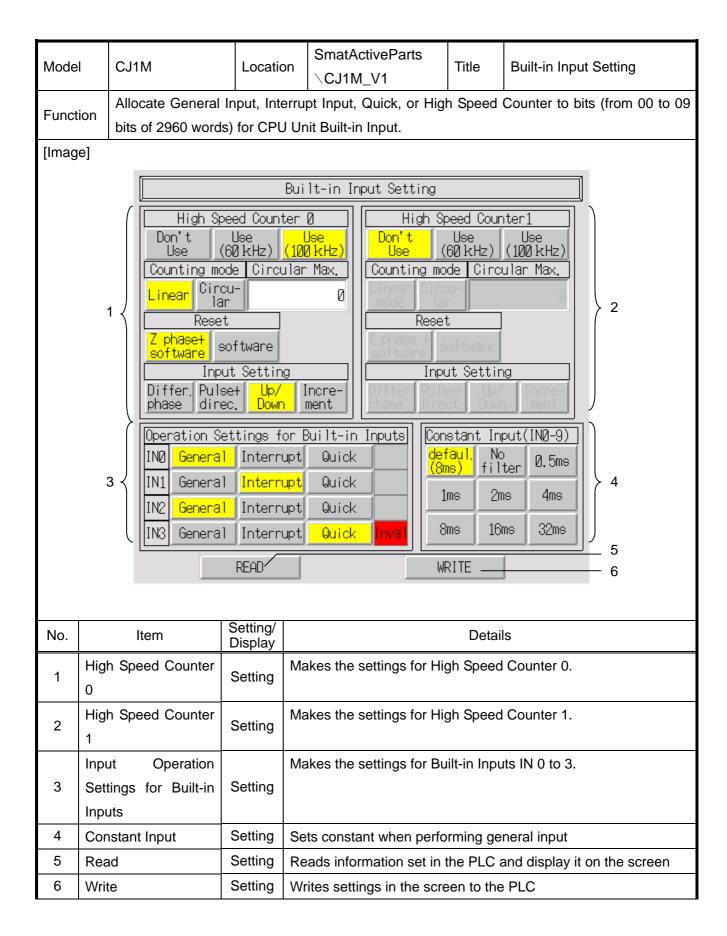
Model	CJ1M	Location SmatActiveParts \CJ1M_V1		Title	Settime PLC->NS				
Function	Sets time and date information (year, month, date, time, minute, and second) in the PT to the								
Function	internal clock of PLC.								



No.	Item	Setting/ Display	Details
1	NS >> PLC	Setting	Sets time and date information (year, month, date, time, minute,
			and second) in the PT to the internal clock of PLC.

[Note]

- CS/CJ Series PLCs are supported.



When Z phase and software reset are selected in the Input Setting for High Speed Counter 0, Z phase (reset input) will be allocated to IN3.

When Z phase and software reset are selected in the Input Setting for High Speed Counter 1, Z phase (reset input) will be allocated IN2.

Mode	el CJ1M	Locatio	n	natActiveParts J1M_V1	Title	Define Origin 1, Define Origin 2					
Funct	tion Makes settings	Makes settings for Origin Search function and Origin Return function.									
[lmag	ge]										
			Defin	ne Origin 1							
	Origin Search	0FF	ON T			1					
	Search Direction	n CW	CCW	Search	/Return al Speed						
	Detection Method	MethdØ 1	Methd1	Mathd2	n High Spe	eed 80 pps					
	Search Operation		Invrs2	Sneed	Proximi1	60 pps					
	Operation Origin Input		Mode1	Mode2 Srch.C	Compensati						
	Signal Proximity Input	NC NC	NO NO	l Ratio	oce lerati	30					
	Limit Input	NC NC	NO NO	Srch.L Ratio Positi	ecelerati	20					
	Signal	<u></u>	140		or Time	0 msec					
	Origin Return										
	Speed Acceleration	500 p 30	ps			3					
	Decelaration	20									
	READ				اما	RITE 4					
	NERD				V	_ 3					
No.	Item	Setting/ Display	Details	3							
1	Origin Search	Setting	Sets w	hether the Pulse	Output 0	/1 Origin Search is used or not.					

No.	Item	Setting/ Display	Details			
1	Origin Search	Setting	Sets whether the Pulse Output 0/1 Origin Search is used or not.			
2	Parameters for	Catting	Sets parameters used for Origin Search.			
2	Origin Search	Setting				
3	Parameters for	Cotting	Sets parameters used for Origin Return.			
3	Origin Return	Setting				
4	Read	Setting	Reads information set in the PLC and display it on the screen			
5	Write	Setting	Writes settings in the screen to the PLC			

When selecting ON for Pulse Output 0 Origin Search, interrupt input 0 and 1, PMW output o cannot be used. However, those can be used for High Speed Counter 0 and 1.

When selecting ON for Pulse Output 1 Origin Search, it occupies IN2, IN3, and OUT5 besides pulse output so it cannot be used for other functions.

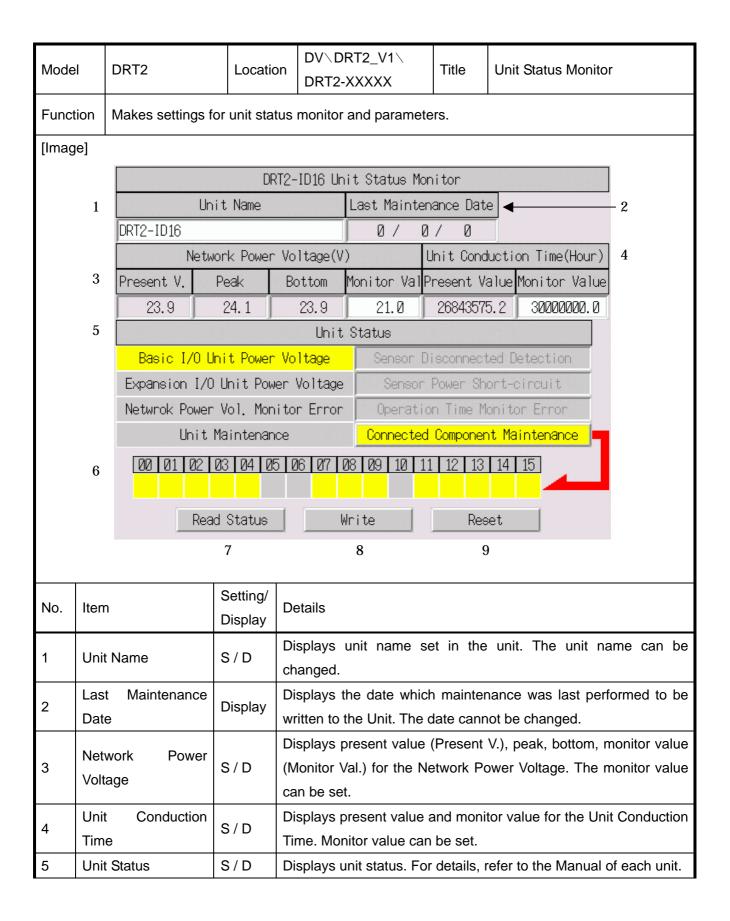
Mode	el	CS1W-CLK21 CJ1W-CLK21	Location	n	\ C		ivePaı /_CJ1\		Title	Network Status Monitor
Func	tion	Monitors CLK networking status.								
[lmag	ge]									
		D			4				1	2
		Controller L	ink Stati	us	Po	llir	ng Noo	de No	o. 1Sta	rtup Node No. 1
	3	Local Setting				_				Node Address##
		Local Data Lii Node Address	nk Partio				⊕ Pa <u>Mosto</u>		© No 10 10 80	ot (inactive) 4 111112113114115116
	5	Network Parti	cipation	_	102		J4 20 E	00 N L	00 09 TG	11 12 13 14 13 10
	6	Data LinkPart								
	7	Communication:	s Error							
		Node Address		1	7 18	19 2	20 21 2	22 23	24 25 26	6 <mark>27</mark> 28 29 30 31 32
		<u>Network Parti</u> Data LinkPart		+			+			
		Communication:		1						
	•									
No.	Item	n	Setting/	Det	ails					
No.			Display			s po	lling no	ode N	o. for CLI	K network.
	Poll	n ling Node No. rtup Node No.	Display Display	Dis	play	-				K network. K network.
1	Poll	ling Node No.	Display Display Display	Dis Dis No	play play item	s sta	irtup n	ode N ed. U	lo. for CL	
1 2	Poll Star Loc	ling Node No. rtup Node No. eal Setting	Display Display Display Display	Dis Dis No ser Dis	play play item can	s sta n is d n mak rs da	irtup n isplaye	ode Ned. Uinal se	lo. for CL	K network.
1 2 3	Poll Star Loc Loc Par	ling Node No. rtup Node No. ral Setting	Display Display Display Display Display	Dis Dis No ser Dis not	play play item can play par	rs stantis di makers da di makers da di makers da di makers da di cipa	isplaye se orig ta link	ode Ned. Uinal son particular.	lo. for CL ettings wh	K network.
1 2 3 4	Poll Star Loc Loc Par Net Par Data	ling Node No. rtup Node No. ral Setting ral Data Link ticipation work ticipation	Display Display Display Display Display Display	Dis Dis No ser Dis not	play play item can play par	rs sta n is d n mak rs da ticipa rs ne	artup na isplaya ke orig ta link ate (No twork p	ode Ned. Uinal se partie	ettings when the cipation states	K network. nen creating a screen. status either participate (part.) or
1 2 3 4 5	Poll Star Loc Loc Par Net Par Data	ling Node No. rtup Node No. ral Setting ral Data Link ticipation work ticipation a Link ticipation mmunications	Display Display Display Display Display Display Display	Dis Dis No ser Dis not Dis	play play play can play par play	rs stanis d n is d n mak rs da ticipa rs ne	irtup niisplaye ke orig ta link ate (No twork j	ode Ned. Uinal se partici	ettings when the cipation states	K network. nen creating a screen. status either participate (part.) or atus by node.
1 2 3 4 5	Poll Star Loc Par Net Par Cor Erro	ling Node No. rtup Node No. ral Setting ral Data Link ticipation work ticipation a Link ticipation mmunications	Display Display Display Display Display Display Display	Dis Dis No ser Dis not Dis	play play play can play par play	rs stanis d n is d n mak rs da ticipa rs ne	irtup niisplaye ke orig ta link ate (No twork j	ode Ned. Uinal se partici	ettings when the cipation states	K network. nen creating a screen. status either participate (part.) or atus by node. atus by node.
1 2 3 4 5 6	Poll Star Loc Par Net Par Cor Erro	ling Node No. rtup Node No. ral Setting ral Data Link ticipation work ticipation a Link ticipation mmunications	Display Display Display Display Display Display Display	Dis Dis No ser Dis not Dis	play play play can play par play	rs stanis d n is d n mak rs da ticipa rs ne	irtup niisplaye ke orig ta link ate (No twork j	ode Ned. Uinal se partici	ettings when the cipation states	K network. nen creating a screen. status either participate (part.) of atus by node. atus by node.

Model	CS1W-DRM21	Location	DV\CS1W_CJ1W-	Title	Network Status Monitor	
Model	CJ1W-DRM21	Location	DRM21_V1	Title	Network Status Mornitor	
Monitors Device network communication status when using CS1W-DRM/CJ1W-DRI						
Function	master.					

		De	vic	æ I	Vet	; S	tat	jus									
	Node Address	00	01	02	Ø3	04	05	Ø6	07	08	Ø9	10	11	12	13	14	15
1	Registered Slave																
2	Normal Slave																
	Node Address	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
	Registered Slave																
	Normal Slave																
	Node Address	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47
	Registered Slave																
	Normal Slave																
	Node Address	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63
	Registered Slave																
	Normal Slave																

No.	Item	Setting/ Display	Details
1	Registered Slave	Display	Displays slave node address registered in the scan list of the master.
2	Normal Slave	Display	Displays slave node No. which is being communicated normally.

[Note]

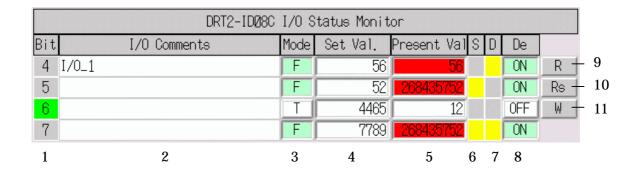


			Disconnection detected, short-circuit, operation time monitor						
		ļ	error, and connected component maintenance under unit status						
6	I/O Status	Display	flag are touch switches. When they are pressed, start reading						
O	(00 to 15)	Display	each I/O status and display. (Applicable items vary from units.)						
			The red arrow indicates the contents of I/O status which is being						
			displayed.						
7	Read Status	Cotting	Reads unit status from 1 to 5 above mentioned at once when it is						
'	Read Status	Setting	pressed.						
0	Mrito	Setting	Writes unit name, network power voltage, and monitor value for						
٥	8 Write		the unit conduction time.						
	Deast	Cotting	Resets peak and bottom for network power voltage and present						
9	Reset	Setting	value for unit conduction time.						

Select **Settings-Unit & Scale** Setting and set 0.1 for the scale at the unit No. 1000 when using those parts.

The contents of unit status flag differ from units. For details, refer to DRT2 series manuals.

Model	DRT2	Location	DV\DRT2_V1\ DRT2-XXXXX	Title	I/O Status Monitor
Function	Displays and make	es settings f	or I/O status by 4 bits.		



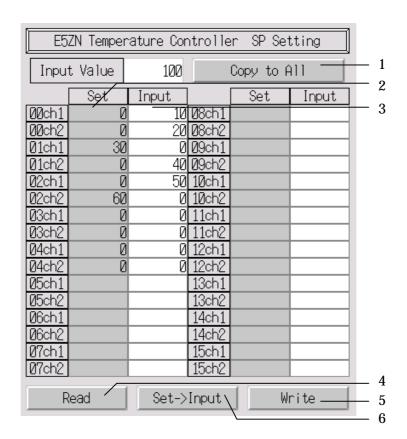
No.	Item	Setting/ Display	Details					
1	Bit	Display	Displays an appropriate bit and ON/OFF status with lamp.					
2	I/O comments	S/D	Displays I/O comments set for bits. This can be changed.					
3	Mode	S/D	Displays maintenance mode either Time (T) or Frequency (F).					
4	Set value (Set V.)	S/D	Displays the monitor value for maintenance. The value can b changed.					
5	Present Value	S/D	Displays the present value in the maintenance counter. The value					
5	(Present Val)	3/0	can be changed.					
			Displays short-circuit detection flag for environment-resistive					
6	Short-circuit (S)	Display	units. When using IN unit, it detects sensor power sort-circuit.					
			When using OUT unit, it detects external load short-circuit.					
7	Disconnected (D)	Display	Displays the detected sensor disconnected flag for IN unit.					
8	Disconnection	Display	Displays whether the sensor disconnected detection flag for IN					
	Detected (D.D.)	Display	unit has been set or not. This setting can be changed					
9	Read	Setting	Reads an appropriate 4-bit data at once.					
10	Reset	Setting	Resets present value in the maintenance counter.					
			Writes information, such as I/O comments, maintenance mode,					
11	Write	Setting	set value/present value in the maintenance counter, for an					
			appropriate 4-bit data at once.					

[Note]

Please use an appropriate Smart Active Parts in accordance with units to be connected (environment-resistive unit, IN unit, and OUT unit etc...).

This is not supported for an expansion unit.

Model	E5ZN-DRT	Location	DV\E5ZN-DRT_V1\	Title	SP Setting 00 to 15					
Model	LJZIN-DIKI	Location	SPSetting	11110						
	Performs reading a	Performs reading and writing from and to SP for the maximum 16 temperature controllers								
Function	connected to the E5ZN-DRT by pressing buttons. Reading and writing from and to E5ZN									
Function	temperature controller cannot be performed when it is not connected to the E5ZN-DRT or a									
	communication error has been occurred.									



No.	Item	Setting/ Display	Details
1	Copy to All Device (Copy to All)	Setting	Sets the input values on top to the input value for each Ch.
2	Set Value (Set)	Display	Displays SP which is read from E5ZN temperature controller. The value will be updated when reading or writing values.
3	Input Value (Input)	Setting	Sets SP to be written to the E5ZN temperature controller.
4	Read	Setting	Reads SP to the set value display area.
5	Write	Setting	Write input values to the SP. After writing the values, those will be read to the columns under Set.
6	Set -> Input	Setting	Sets values under Set to the Input.

Set 6 seconds or more for *Comm.Time-Out* in the PT when using those Smart Active Parts.

Mode	el E5	ZN-DRT	Location	on	DV\E5ZN PIDSettin	N-DRT_V1\ g	Title	PID Setting (Unit 0 to	7)		
	Pe	rforms reading	and writi	ng fi	rom and to	PID of E5ZN	l unit 00 t	o 07 connected to E52	ZN-DRT		
	by pressing buttons. Reading and writing from and to E5ZN temperature controller canno										
Funct	tion I	performed when it is not connected to the E5ZN-DRT or a communication error has been									
	'		It is not	IIIOO	nectea to t	Ne ESZIN-UR	(I Ora o	ommunication error na	as been		
	OC	curred.									
[Imag	[Image]										
E5ZN Temperature Controller PID Setting (Unit Ø to 7)											
		EDZIN Tell		Cont	troller Pi		Init 19 to	7)			
		Input Valu	Je P	.0	1 1 466	D 00	opy to Al	1			
			Set V				t Value	2			
		F		arue		Р Т	ı vanue T	<u>D</u> 3			
		00ch1	8.0	233		16.0	466	80			
		00ch2	8.0	233		16.0	466	80			
		Ø1ch1	4.0	116	20	16.0	466	80			
		01ch2	2.0	58		16.0	466	80			
		Ø2ch1	0.0	0	=	8.0	233	40			
		Ø2ch2 Ø3ch1	0.0 0.0	0		8. Ø Ø. Ø	233 Ø	40 0			
		Ø3ch2	0.0	0		0.0	0	0			
		04ch1	0.0	0		0.0	0	0			
		Ø4ch2	0.0	0		0.0	Ø	0			
		Ø5ch1	0.0	0		0.0	0	0			
		05ch2	0.0	0	0	0.0	0	0			
		Ø6ch1									
		06ch2 07ch1						—			
		07ch2									
					A : \ I	. 1		4			
		Read´			Set ->Inp	out \	Write	5			
								6			
			Setting/								
No.	Item		Display	Det	tails						
1	Copy to	λ Λ II		The	o sot input	values on tor	o to the in	nut values for each Ch	2		
'	Copy to	All	Setting		•	•		put values for each Ch			
				Displays the read values in the PID from E5ZN temperature							
2 Set Value Display controller. The value will be updated when reading of					writing						
		values.									
					Set PID to be written to the E5ZN temperature controller. Text and						
3 Input Value Setting			Setting	background color will be changed if a value out of range has been							
	5 Imput value				_	0.0 20 0.		a raide ear ei railge ii			
			set.								
4	Read		Setting	Rea	ads values	set for PID to	o the colu	mns under Set Value.			
		Writes input values to PID in the E5ZN temperature controlle					ontroller.				

values.

Those will be read to columns under Set Value after writing

Setting

Write

6	Set -> Input	Setting	Sets set values to input values.
	_		

- 1. Set 6 seconds or more for Comm.Time-Out in the PT when using those Smart Active Parts. Also, select **Settings-Unit & Scale** Setting and set 0.1 for the scale at the unit No. 1000 when using those parts library.
- 2. Please use E5ZN Temperature Controller PID Setting (Unit 08 to 15) for Temperature Controller unit 08 to 15.

Mode	I E5ZN-DRT	Location	ion DV\E5ZN-DRT_V1\ Command Title RUN/STOP
Funct	temperature conion (STOP) commar by word (Ch) in controller which	itrollers conds can be	RUN) and control stop (STOP) commands for the maximum 16 connected to the E5ZN-DRT. Control start (RUN) and control stop be executed for all temperature controllers at once and for each unit y. These commands cannot be executed for E5ZN temperature nnected or a communication error is occurred.
[Imag	RUN ALL 00ch1 00ch RUN RU 02ch1 02ch RUN RU 04ch1 04ch RUN RU 06ch1 06ch RUN RU 08ch1 08ch RUN RU 10ch1 10ch RUN RU 11ch1 11ch RUN RU 11ch1 11ch RUN RU 11ch1 11ch RUN RU 11ch1 11ch RUN RU 11ch1 11ch	RI 12 101ch1 N RUN 12 103ch1 N RUN 12 107ch1 N RUN 12 109ch1 N RUN 12 11ch1 N RUN 12 11ch1 N RUN 12 13ch1 N RUN 12 15ch1	RUN STOR STOP STOP STOP
No.	Item	Display	Details
1	RUN ALL	Setting	Executes start control command (RUN) for all temperature controllers connected to E5ZN-DRT.
			Executes stop control command (STOP) for all temperature

2

3

ALL STOP

RUN

STOP

Set 6 seconds or more for *Comm.Time-Out* in the PT when using those Smart Active Parts.

Setting

Setting

Setting

controllers connected to E5ZN-DRT.

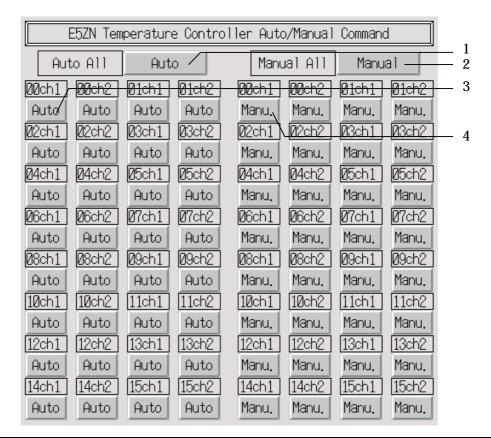
Executes start control (RUN) for word in an appropriate Unit No.

Executes stop control (STOP) for word in an appropriate Unit No.

Mode	E5ZN-DRT	Locatio	on DV\E5ZN-DRT_V1\ Command Title AT Execute/Stop								
Funct	connected to the temperature control cannot be exected communication endings.	e E5ZN- rollers at c uted for	op commands for the maximum 16 temperature controllers DRT. AT execute/Stop commands can be executed for all once and for each unit by word (Ch) individually. These commands E5ZN temperature controller which is not connected or a urred.								
	E5ZN Temperature Controller AT Execute/Stop Command										
	Execute Al Much1 Much2 Exec. Exec. Exec. Exec.	Execution Exec	1								
No.	Item	Setting/	Details								
1	Execute All	Display Setting	Executes AT execute command for the maximum 16 temperature controllers connected to the E5ZN-DRT.								
2	Stop All	Setting	Executes AT stop command for the maximum 16 temperature controllers connected to the E5ZN-DRT.								
3 Execute Setting			Executes AT execute command for word in an appropriate Unit No.								
4	Stop	Setting	Executes AT stop command for word in an appropriate Unit No.								
[Note]]										

Set 6 seconds or more for *Comm.Time-Out* in the PT when using those Smart Active Parts.

Model	E5ZN-DRT	Location	DV\E5ZN-DRT_V1\ Command	Title	Auto/Manual					
	Executes Auto/Manual commands for the maximum 16 temperature controllers connected to									
Functio	the E5ZN-DRT. Auto/Manual commands can be executed for all temperature controllers at									
n	once and for each unit by word (Ch) individually. These commands cannot be executed for									
	E5ZN temperature controller which is not connected or a communication error is occurred.									
[]	flore and									



No.	Item	Setting/ Display	Details
1	Auto All	Setting	Executes automatic operation command for the maximum 16 temperature controllers connected to the E5ZN-DRT.
2	Manual All	Setting	Executes manual operation command for the maximum 16 temperature controllers connected to the E5ZN-DRT.
3	Auto	Setting	Executes automatic operation command for word in an appropriate Unit No.
4	Manual	Setting	Executes manual operation command for word in an appropriate Unit No.

[Note]

Set 6 seconds or more for *Comm.Time-Out* in the PT when using those Smart Active Parts.

			1			1				
Mode	el I	E5ZN-DRT	Location	on DV\	E5ZN-DRT_V1	Title	Setting Area 0 for Unit 0			
	,,		2004	SettingArea0			County rises o for Other			
		Performs reading	and writing	ng from a	nd to setting are	ea o for te	emperature controller connected			
Funct	tion	to E5ZN-DRT by pressing buttons. Reading and writing from and to E5ZN temperature								
runci	lion	n controller cannot be performed when it is not connected to the E5ZN-DRT or a								
		communication error has been occurred. Provided this library for each unit.								
[lmag	[Image]									
	E5ZN Temperature Controller Setting Area 0 for Unit 0									
	Ш		1		Г		1			
		/CH1 Se/t I	npu/t Se/	CH2 (Input		CH1 Set In	OH2 2 put Set Input 3			
	SP	/ 90	1/00	0 200	Temperature		0.0 0.0 0.0 4			
		m Value1 0	80	0 0	Input Offset	0.0	0.0 0.0 0.0			
		er Limit1 0 er Limit1 0	90 70	0 0	Upper Limit Tem. Offset	0.0	0.0 0.0 0.0			
	Alar	m Value2 0	0	0 0	Lower Limit	0.0	0.0 0.0 0.0			
		er Limit2 0 er Limit2 0	0	0 0	Tem. Offset PropotionalB		8.0 8.0 16.0			
		m Value3 Ø	0	0 0	IntegralTime		233 233 466			
	Manu	ia 1Mani.V 0.0	0.0 0	.0 0.0	Derivative T	20	40 40 80			
	Heat SPØ	er Burn. 0.0	0.0 0 0	.0 0.0 0 0	Cooling Coe. Dead Band		0.00 0.10 20.00 0.0 0.0 0.0			
	SP1	0	0	0 0	Manua 1RstVa 1		0.0 0.0 0.0			
					Heating		0.0 10.0 20.0			
					Hysteresis Cooling					
					Hysteresis	5.0 1	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			
		CH1/CH2		ÇH1			CH2 8			
		Read /	Set->	Input	Write /	Set->Inp	ut Write ——— 9			
			Setting/							
No.	Item	1	Display	Details						
			- iopiay	Displays	value for settir	ng area o	read from CH1. The value will			
1	CH1	Set	Display		ted when readir	_				
				-						
2	CH1	Input	Setting		•		ne CH1. T Text and background			
							ut of range has been set.			
3	CH2	2 Set	Display			_	read from CH2. The value will			
			. ,	-	ted when readir					
4	CH2	2 Input	Setting		•		ne CH1. T Text and background			
-	-	12-2-2		color wil	be changed if	a value o	ut of range has been set.			
5 CH1/CH2		/CH2 Read	Setting	Reads s	etting area 0 se	ettings in	the CH1/2 and displays them in			
	0,11	7.0112 11000	Setting	the columns under Set.						
6	CLIA	Cot > Innut	Setting	Set valu	ies displayed ir	displayed in the columns under Set to appropriate				
6	6 CH1 Set -> Input			columns under Input.						
7	CH1	Write	Setting	Writes in	nput values for (CH1 to se	etting area 0. The values will be			

			read columns under Set after writing those.		
8	CH2 Set-> Input	Setting	Set values displayed in the columns under Set to appropriate		
			columns under Input.		
9	CH2 Write	Setting	Writes input values for CH2 to setting area 0. The values will be		
9			read columns under Set after writing those.		

Set 6 seconds or more for *Comm.Time-Out* in the PT when using those Smart Active Parts.

Select **Settings-Unit & Scale** Setting and set 0.1 for the scale at the unit No. 1000 when using those parts.

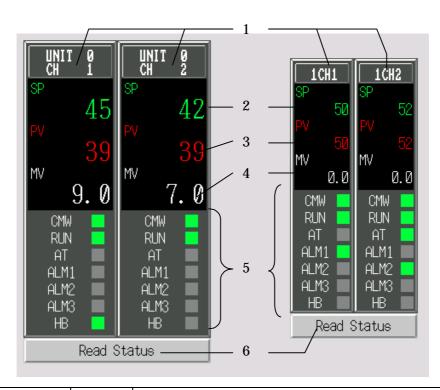
Mode	E5ZN-DRT	Location	DV\E5ZN-DRT_V1\ SettingArea0 Title Setting Area 0 (Unit 0 to 15)						
	Performs reading	and writi	ng from and to setting area o for temperature controller connected						
to E5ZN-DRT by pressing buttons. Reading and writing from and to E5ZN temp									
Funct	controller canno	t be pei	formed when it is not connected to the E5ZN-DRT or a						
		communication error has been occurred.							
[lmag									
Įag									
	No. 10 E5ZN	V Temperat	ture Controller Setting Area Ø (Unit Ø to 15)						
	(CH1		- 2						
		npyt Set							
	SP / Ø	/ 0 /	15 <u>15 Temperature и и и и и и и 5</u>						
İ	Alarm Value1 0 Upper Limit1 0	0	20 Upper Limit						
	Lower Limit1 0	0	10 10 Tem. Offset 0.0 0.0 0.0 0.0						
	Alarm Value2 0 Upper Limit2 0	0	0 0 Lower Limit 0.0 0.0 0.0 0.0						
	Upper Limit2 0 Lower Limit2 0	0	0 0 PropotionalB 0.0 8.0 0.0 8.0						
	Alarm Value3 🛛 🗓	0	0 0 IntegralTime 0 233 0 233						
	ManualMani.V 0.0 Heater Burn. 0.0		.0 0.0 DerivativeT. 0 40 0 40 .0 0.0 Cooling Coe. 0.00 10.00 0.00 10.00						
	SP Ø	0	0 0 Dead band 0.0 0.0 0.0 0.0						
	SP 1 0	0	0 0 ManualRstVal 0.0 0.0 0.0 0.0						
			Heating Hysteresis 0.0 10.0 0.0 10.0						
	_		Cooling 0.0 10.0 0.0 10.0 6						
	CH1/CH2		CH2 8						
	Read	Set->	Input Write Set->Input Write 10						
No.	Item	Setting/	Details						
140.	Item	Display	Details						
1	Unit No.	Setting	Input unit No. to be displayed/set.						
2	CH1 Set	Display	Displays value for setting area o read from CH1. The value will						
2	CITI Set	Display	be updated when reading/writing.						
3	CH1 Input	Sotting	Sets value for setting area 0 to the CH1. T Text and background						
3	CH1 Input	Setting	color will be changed if a value out of range has been set.						
1	CH2 Set	Display	Displays value for setting area o read from CH2. The value will						
4	OUS OFF	Display	be updated when reading/writing.						
5	CH2 Input	Sets value for setting area 0 to the CH1. T Text and backgro							
i)	CH2 Input	Setting	color will be changed if a value out of range has been set.						
			Reads setting area 0 settings in the CH1/2 and displays them in						
6	CH1/CH2 Read	Setting	the columns under Set.						

7	CU1 Cot > Input	Setting	Set values displayed in the columns under Set to appropriate
	7 CH1 Set -> Input		columns under Input.
0	8 CH1 Write		Writes input values for CH1 to setting area 0. The values will be
0			read columns under Set after writing those.
0	9 CH2 Set-> Input		Set values displayed in the columns under Set to appropriate
9			columns under Input.
10	CH2 Write	Setting	Writes input values for CH2 to setting area 0. The values will be
10			read columns under Set after writing those.

Set 6 seconds or more for *Comm.Time-Out* in the PT when using those Smart Active Parts.

Select **Settings-Unit & Scale Setting** and set 0.1 for the scale at the unit No. 1000 when using those parts.

Model	E5ZN-DRT	Location	DV\E5ZN-DRT_V1\ FrontPanel(L) / FrontPanel(S)	Title	FrontPanel(L) Unit 0 / FrontPanel(S) Unit 0				
Function		Displays status of the E5ZN temperature controller connected to the E5ZN-DRT. The status cannot be read when it is not connected to the E5ZN or a communication error had been							
[lmaga]									



No.	Item	Setting/ Display	Details			
1	Unit No./CH type	Display	Displays unit No. and CH type which is being monitored.			
2	SP	Display	Sets SP read from CH1/CH2 of the E5ZN temperature controller. The value will be updated when performing read status.			
3	PV (Present Value)	Display	Sets the present value read from CH1/CH2 of the E5ZN temperature controller. The value will be updated when performing read status.			
4	MV (Manipulated Variable)	Display	Sets manipulated variable read from CH1/CH2 of the E5ZN temperature controller. The value will be updated when performing read status.			
5	Status	Display	Sets status read from CH1/CH2 in the E5ZN temperature controller. The value will be updated when performing read statu			
6	Read Status	Setting	Read SP, present value, manual manipulated variable, and status from CH1/CH2 in the E5ZN temperature controller.			

Set 6 seconds or more for *Comm.Time-Out* in the PT when using those Smart Active Parts.

Select **Settings-Unit & Scale Setting** and set 0.1 for the scale at the unit No. 1000 when using those parts.

Model	E5ZN-DRT	Location	n DV\E5ZN-DRT_V1\ PVHold	Title	PV Hold			
	Executes PV ho	old comma	nd, reads PV for each uni	t and d	displays them. This command			
Function	cannot be executed for E5ZN temperature controller which is not connected or a							
	communication e	error is occ	urred.					
[Image]								
			E5ZN PV Hold					
			PV Hold Execution	— 1				
		00ch1 00ch2 01ch1 01ch2 02ch1 02ch2 03ch1 03ch2 04ch1 04ch2 05ch1 05ch2 06ch1 06ch2 07ch1	Value Value 97 Ø8ch1 95 Ø8ch2 102 Ø9ch1 99 Ø9ch2 104 1Øch1 106 10ch2 96 11ch1 102 12ch1 101 12ch2 100 13ch1 98 14ch1 14ch2 15ch1 15ch2 15ch2	\right\} 2 3				
No. Iter	m	Setting/ Display	Details					
1 PV	Hold Execution	Settina	Executes PV hold comman connected to the E5ZN-DR		E5ZN temperature controllers			
2 PV (Va	Hold Value llue)	Display	Displays PV hold value controller.	read f	from the E5ZN temperature			
3 Rea	ad	Setting	Reads PV hold value saved	in an E	5ZN temperature controller.			
[Note]								
Set 6 seco	onds or more for C	Comm.Tim	e-Out in the PT when using	those S	Smart Active Parts.			

- Position Control Units

Smart Active Parts of Positon Control Units described in this section can be used only when beginning word of the operating data area destination is determined (fixed) by the unit number.

E.g. Case that the unit number is two.

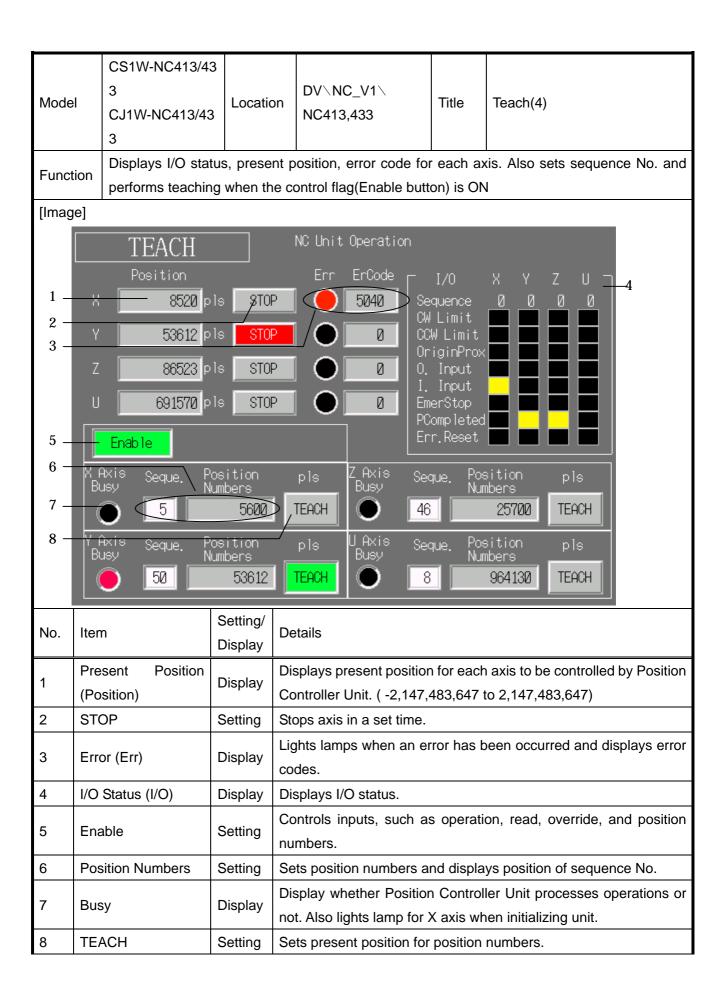
The operating data area is fixed from m + 116 to m + 187.

Set 0000 for operating data area (m) to fix the beginning word.

m=D2000+100xunit number

	CS1W-							
l.,	NC413/433		DV\NC_V1\		1000 0 11 (4)			
Model	CJ1W-	Locatio	NC413,433	Title	JOG Operation(4)			
	NC413/433							
	Displays I/O stat	tus, preser	nt position, error code f	or each a	kis. Also switches between RUN			
Function	on and STOP, CW a	and CCW a	and sets override when	the contro	I flag(Enable button) is ON			
[lmage	[Image]							
	JOG Operation NC Unit Operation							
		211	Fan Fa0ada					
1	Position - X 5632102	n lo 0	Err ErCode		$\begin{array}{cccccccccccccccccccccccccccccccccccc$			
2	7 3002102	bia 3	TOP 0	Sequenci CW Limi				
3	Y 60000	pls S	TOP 5040	CCW Lim				
		pls S	TOP 0	OriginP O.Input				
				I. Input				
	90000	pls S	TOP 0	Emer.St PComple				
5	Enable Enable			Err.Res	et 🔳 🔳 🔳 📗			
6	6 X Axis Override Z Axis Override							
7	Busy DIN L	CCW	Busy B	STOP =				
/		CW /	500 %		CW			
8	Y Axis	CCW /)verride U Axis		Ocw Override			
	Busy STOP	CH	250 % Busy	STOP =	D 800 %			
		CW	, <u> </u>		CW 800 %			
9								
No.	Item	Setting/	Details					
140.	Ttem	Display	Details					
1	Present Position	Display	Displays present position	on for each	n axis to be controlled by Position			
'	(Position)	Diopidy	Controller Unit. (-2,147	7,483,647	to 2,147,483,647)			
2	STOP	Setting	Stops axis in a set time	9.				
3	Error (Err)	Display	Lights lamps when an	error has b	peen occurred and displays error			
		,	codes.					
4	I/O Status (I/O)	Display	Displays I/O status.					
5	Enable	Setting	•	as operati	on, read, override, and position			
		_	numbers.					
6	RUN/STOP	Setting	Switches between RUN		,			
7 Busy Display whether Position Controller Unit processes operation				·				
			not. Also lights lamp for					
-	CW/CCW	Setting	Specifies rotative direct	•	•			
9	Override	Setting	Sets values for over	ride and	switches between enable and			

			disable.
[Note]]		
Those	e parts can be used for	· 4 axes ui	nit only. They cannot be used for 1 axis or 2 axes.



Select **Settings-System Setting-Initial** tab page in the NS-Designer, click System Memory List button, and check the Basics for the \$SB before using this library.

Do NOT use as an initial screen.

	CS1W-NC413/4	3							
	3		DV\NC_\	/1\					
Mode	CJ1W-NC413/43	Location	n NC413,43		Title	Origin Search			
	3								
	Displays I/O status, present position, error code for each axis. Also enables origin search								
Funct	ion operation when	•	-			Ç			
[lmag	e]								
	Origin Search		NC Unit Op	eration					
	Position		Err Er	Code FI/	Λ	X Y Z U ¬ ,			
1 –	X 8630 p	ls STO			quence				
2 -	Y 89000 p	ls STO			Limit W Limit				
3 —				Or	iginProx				
	Z 65000 p	ls STO			Input Input				
	U Øp	ls STO		Ø Em	er.Stop				
5 _	5 — Enable PCompleted Fire Reset Fire Fire Fire Fire Fire Fire Fire Fire								
l l	X Axis		Z f						
	Busy Origin			Busy T	Origin				
7 –	Search				Search				
6 -	Y Axis Busy Contains			Axis Busy 🕝					
	Origin Search			~ 1	Origin Search				
No.	Item	Setting/	Details						
		Display							
1	Present Position	Display		•		n axis to be controlled by Position			
	(Position)			•	483,647 1	to 2,147,483,647)			
2	STOP	Setting	Stops axis in a						
3	Error (Err)	Display		vhen an er	ror has b	peen occurred and displays error			
4	I/O Status (I/O)	Dienlay	codes. Displays I/O status.						
7	I/O Status (I/O) Display Displays I/O status. Controls inputs, such as operation, read, override, and position								
5 Enable Setting numbers.					on, road, override, and position				
6	Origin Search	Setting		earch oper	ation whe	en it is pressed.			
	Display whether Position Controller Unit processes operatio					•			
7	Busy	Display	not. Also lights lamp for X axis when initializing unit.						
						3			

Mode	CJ1W-NC413/43	Location	DV\NC_V1\ NC413,433	Title	Origin Return(4)
Funct	tion l	•	ent position, error code e when the control flag (axis. Also enables origin search
[lmag			3 (,
			NC Unit Operation		
	Origin Return				
1 —	Position	1- OTO	Err ErCode	I/0	X Y Z U $\frac{1}{4}$
2 -	X 59651 p			Sequence W Limit	
3 -	Y 256 p	ls STO		CW Limit DriginProx	
	Z Øp	ls STO). Input	
	U 26328 p	ls STO		. Input mer.Stop	
	20020			Completed	
5 —	Enable Enable		<u> </u>	rr.Reset	
6 -	X Axis	Overni	de Z Axis		Override
7 _	Busy Origin Return	E		Origin Return	E 999 %
8 -					
8 -	Y Axis Busy Origin	Üverri	Rugu 📼	Origin	Override
	Return	D		Return	D 700 %
		Setting/			
No.	Item	Display	Details		
	Present Position		Displays present position	on for each	n axis to be controlled by Position
1	(Position)	Display	Controller Unit. (-2,147	,483,647	to 2,147,483,647)
2	STOP	Setting	Stops axis in a set time	-	
3	Error (Err)	Display	Lights lamps when an	error has b	peen occurred and displays error
	Lifor (Lif)	Display	codes.		
4	I/O Status (I/O)	Display	Displays I/O status.		
5	Enable	Setting	•	as operati	on, read, override, and position
			numbers.		
6	Origin Return	Setting	Axis returns from any p		
7	Busy	Display	. ,		ler Unit processes operations or
not. Also lights lamp for X axis when initializing unit. Sets values for override and switches between enable					
8	Override	Setting	disable.	iue aliu	switches between enable and
			disable.		

		1			, 			
	CS1W-NC413/43	3						
Model	3	Location	DV\NC_V1\	Title	Changing Present Value(4)			
Wiode	CJ1W-NC413/43	B	NC413,433	Title	Changing Fresent value(4)			
	3							
	Displays I/O stat	us, presen	t position, error code fo	r each axis	s. Also presets position numbers			
Func	when the control	flag (Enal	ole button) is ON.					
[lmag	[Image]							
	Changing Present \	/a lue	NC Unit Operation	n				
	Position		Err ErCode	┌ I/0	X Y Z U ¬ ,			
1	5860 × 5860	pls §	TOP 5040	Sequence				
2	Y 569180	nle S	TOP Ø	CW Limit CCW Limi				
3	3			OriginPr				
	Z 86920	bje 8.	CP 0	0. Input				
	U 9650	pls S	TOP Ø	I. Input Emer.Sto				
				PComplet				
5	Enable			Err.Rese	t			
6	U_UVIS 1,500	tion	pls Z Axis	Posit				
7		oers 586Ø	Preset Busy	Numb 2000				
8		tion bers	pls U Axis Busy	Posit Numba	ion ers pls			
		63320	Preset		9650 Preset			
				J.				
No	Itom	Setting/	Details					
No.	Item	Display	Details					
1	Present Position	Dienler	Displays present pos	ition for e	each axis to be controlled by			
1	(Position)	Display	Position Controller Unit	t. (-2,147,4	483,647 to 2,147,483,647)			
2	STOP	Setting	Stops axis in a set time) .				
2	Error (Err\	Diopley	Lights lamps when an	error has b	een occurred and displays error			
3	Error (Err)	Display	codes.					
4	I/O Status (I/O)	Display	Displays I/O status.					
Controls inputs, such as operation, read, override, and position								
5 Enable Setting numbers.								
6	Position Numbers	Setting	Sets position numbers	to preset.				
7 Disales			Display whether Position Controller Unit processes operations or					
7	Busy	Display	not. Also lights lamp for X axis when initializing unit.					
Changes position form present position to position			position to position numbers					
8	Preset	Setting	forcibly.					

	CS1W-NC413/4	13						
	3		DV\NC_V	′ 1\		5 1		
Mode	CJ1W-NC413/4	Location 3	on NC413,43	3	Title	Direct Ope	ration(4)	
	3							
_	Displays I/O sta	itus, presei	nt position, erro	r code for	each axi	s. Also sets	operation m	node and
Func	tion other data wher	the contro	ol flag (Enable b	outton) is C	N.			
[lmag	ge]							
	Direct Opera	tion	NC Unit	Operation				
İ	Position		Err	ErCode _	I/0	ΧΥ	Z U ¬	١,
1	4 - X 8 50000	10 pls S	TOP		Sequence	. 0 0	0 0	4
2	250000	Model S	TOP		CW Limit CCW Limi		HHI	
3	3				OriginPr			
İ	Z 500000	Moles S			0.Input I.Input	нн	нн	
	U 100000	M/pls S	TOP O	0	Emer.Sto			
5	5 Enable				PComplet Err.Rese			
6				L				
	Riney /	Mode	Position	Speed			. Time	11
,	7 × O A	R	8500000	2500		20	20	-1 11
	Y () A	R	562430	15000	10	15	30	10
	Z 🔘 🔼	R	855361	10000	10-11-0	50 ∬	100	- 9
	U A	R	5698423	50000	10	30	100	-8
		Setting/						<u> </u>
No.	Item	Display	Details					
	Present Position	1	Displays prese	ent position	for each	axis to be o	controlled by	/ Position
1	(Position)	Display	Controller Unit	•			•	
2	STOP	Setting	Stops axis in a	set time.			,	
•	F (F)	Diamlass	Lights lamps v	vhen an er	ror has b	een occurre	ed and displ	ays error
3	Error (Err)	Display	codes.					
4	I/O Status (I/O)	Display	Displays I/O s	tatus.				
5	 Enable	Setting	Controls input	s, such as	s operati	on, read, ov	erride, and	I position
	Enable	Octung	numbers.					
6	Operation Mode	Setting	Switches move		operation	data area b	etween Abs	solute (A)
	(Mode)	1 3	and Relative (,				
7	Busy	Display	Display wheth			-	· ·	ations or
			not. Also lights				g unit.	
8	Position	Setting	Sets target po	sition for e	ach axis.			

9	Speed	Setting	Sets target speed for each axis.
10	Acceleration Time (A. Time)	Setting	Sets acceleration time for each axis.
11	Deceleration Time (D.Time)	Setting	Sets deceleration time for each axis.

	CS1W-NC413/4	3	DV() NO. 1/4)					
Mode	3 CJ1W-NC413/43	Location	DV\NC_V1\ NC413,433	Title	Memory Operation(4)			
	3	,	100413,433					
		atus, pres	ent position, error c	ode for eac	h axis. Also sets override and			
Func	tion sequence No. a	nd starts o	pperation with the set	conditions by	y pressing RUN button when the			
	control flag (Ena	ble button) is ON.					
[Imag	ge]							
	Memory Operat	ion	NC Unit Operat	ion				
	Position		Err ErCode	로 I/0	X Y Z U 🗆 4			
1	- - X 6 982 0 0	pls 9	STOP 0	Sequence				
2	Y 6100	pls 9	STOP 5031	CW Limi	t 📰 📟 📟 📗			
3	3			■ COW LIM ■ OriginPi				
	Z 25000.	7 pis 8	STOP 0	. 0.Input - I.Input				
	U 96 0 0	pls S	STOP 0	■ EmerStop				
5	5 — Enable PCompleted PCompleted Frr. Reset Fig. 188							
	X Axis	0	verride Z Axis		Override 9			
8	Busy RUN		Puou	RUN	D 800 %			
7	Position Number	<u> </u>	5600 Posit	ion Numbers:	56 350000			
	Y Axis		verride U Axis		Override 6			
	Busy RUN		Dugu.	RUN	E 700 %			
	Position Number	°s 25	2560000 Posit	ion Numbers	99 54000			
			1					
No.	Item	Setting/	Details					
	Present Position	Display	Displays present pos	eition for each	n axis to be controlled by Position			
1	(Position)	Display	Controller Unit. (-2,1		·			
2	STOP	Setting	Stops axis in a set tir					
2	Error (Err)	Dianter	Lights lamps when a	n error has l	peen occurred and displays error			
3	Error (Err)	Display	codes.					
4	I/O Status (I/O)	Display	ay Displays I/O status.					
5 Enable Controls inputs, such as operation, read, override, and p					on, read, override, and position			
numbers.								
6 Position Numbers Setting					llor I luit proposes assetians an			
7	Busy	Display	not. Also lights lamp		ller Unit processes operations or			
8	RUN	Setting	Starts memory opera					
	1							

0	9 Override	Setting	Sets v	/alues	for	override	and	switches	between	enable	and
9	Override	Setting	disable	Э.							

- 1.Select **Settings-System Setting-Initial** tab page in the NS-Designer, click **System Memory List** button, and check the **Basics** for the \$SB before using this library.
- 2. Do NOT use as an initial screen.
- 3. Those parts can be used for 4 axes unit only. They cannot be used for 1 axis or 2 axes.

Mode	CS1W-NC213/2 3 CJ1W-NC213/23	Location	DV\NC_V1\ NC213,233	Title	JOG Operation(2)				
Funct	Function Displays I/O status, present position, error code for each axis. Also switches between RUN and STOP, CW and CCW and sets override when the control flag(Enable button) is ON								
[lmag	je]								
	JOG Operat	ion	NC Unit Operati	on					
	Position Position For ErCode Sequence W Limit CCW Limit OriginProx O. Input I. Input Emer. Stop PCompleted Err. Reset W Axis Busy RUN CW D 450 %								
No.	Item	Setting/ Display	Details						
1	Present Position (Position)	Display	Displays present po Controller Unit. (-2		n axis to be controlled by Position to 2,147,483,647)				
2	STOP	Setting	Stops axis in a set	time.					
3	Error (Err)	Display	Lights lamps when codes.	an error has l	peen occurred and displays error				
4	I/O Status (I/O)	Display	Displays I/O status						
5	5 Enable Setting Controls inputs, such as operation, read, override, and position numbers.								
6	6 RUN/STOP Setting Switches between RUN and STOP (0: STOP, 1: RUN).								
7	Busy	Display whether Position Controller Unit processes operations o							
	1	· —		-					

Specifies rotative direction (0: CW, 1: CCW).

8

CW/CCW

Setting

	CS1W-NC213/23	3							
	3		DV\NC_V1\						
Model	I CJ1W-NC213/23	Location	n NC213,233	Title	Teach(2)				
	3		,						
Displays I/O status, present position, error code for each axis. Also sets sequence No. a									
Functi	ion l	•	e control flag(Enable butte		·				
[Image	e]								
	TEACH NC Unit Operation Position For ErCode Position NC Unit Operation								
1	-	100 pls	STOP 0		uence Ø Ø Limit 🕅 📶				
	n 000e	bia T	0101	CCW	Limit 🔣 🔛				
2		/			ginProx Input				
3	- Y 589	100 p 1 s _	STOP 6000		Input Input				
					rStop 🔳				
5	5 - Enable PCompleted Err.Reset								
6			. V Ovio						
	Trinning Sealise I	osition umbers	pls Y Axis Sec Busy		sition pls mbers				
7		236200	TEACH 99	3	2369500 TEACH				
8									
No.	Item	Setting/	Details						
		Display							
1	Present Position	Dieploy	Displays present positi	on for e	each axis to be controlled by				
<u> </u>	(Position)	Display	Position Controller Unit.	(-2,147,4	183,647 to 2,147,483,647)				
2	STOP	Setting	Stops axis in a set time.						
	Ε	Diagram	Lights lamps when an er	ror has b	een occurred and displays error				
3	Error (Err)	Display	codes.						
4	I/O Status (I/O)	Display	Displays I/O status.						
5 Enable Controls inputs, such as operation, read, override, and position									
5 Enable Setting numbers.									
6	Position Numbers	Setting							
		5	Display whether Position	n Controll	er Unit processes operations or				
7	Busy	Display	not. Also lights lamp for X axis when initializing unit.						
8	TEACH	Setting	Sets present position for						
	-								

- 1.Select **Settings-System Setting-Initial** tab page in the NS-Designer, click **System Memory List** button, and check the **Basics** for the \$SB before using this library.
- 2. Do NOT use as an initial screen.
- 3. Those parts can be used for 2 axes unit only. They cannot be used for 1 axis or 4 axes.

_								
Model	CS1W-NC213/2 3 CJ1W-NC213/23	Locatio	DV\NC_V1\ NC213,233	Title	Origin Search(2)			
Function Displays I/O status, present position, error code for each axis. Also enables origin sea operation when the control flag(Enable button) is ON								
[lmage	e]							
Origin Search Position Position From ErCode CW Limit CCW Limit CCW Limit Origin Prox O. Input I. Input Emer. Stop PCompleted Err. Reset The Enable Code of the E								
No.	Item	Setting/ Display	Details					
1	Present Position (Position)	Display			each axis to be controlled by 483,647 to 2,147,483,647)			
2	STOP	Setting	Stops axis in a set time.		_			
3	Error (Err)	Display	Lights lamps when an error has been occurred and displays error codes.					
4	I/O Status (I/O)	Display	Displays I/O status.					
5	Enable	Setting	Controls inputs, such a numbers.	s operation	on, read, override, and position			
6	Origin Search	Setting	Starts origin search oper	ation whe	en it is pressed.			
1		1						

Display

7

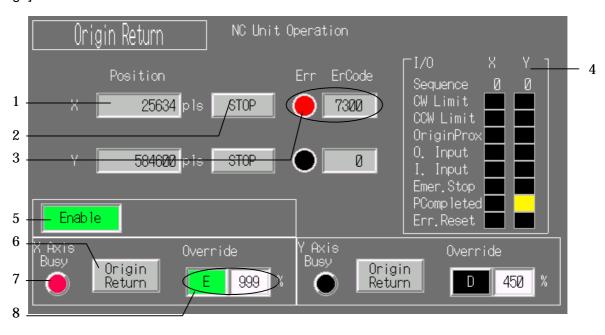
Busy

Display whether Position Controller Unit processes operations or

not. Also lights lamp for X axis when initializing unit.

Model	CS1W-NC213/23 3 CJ1W-NC213/23 3	Location	DV\NC_V1\ NC213,233	Title	Origin Return(2)			
Function	Displays I/O status, present position, error code for each axis. Also enables origin search operation and sets override when the control flag (Enable button) is ON.							
F1								

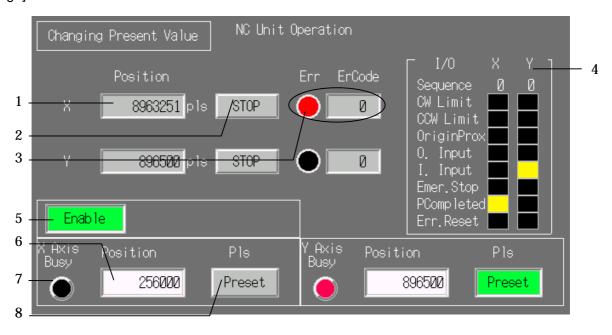
[Image]



No.	Item	Setting/ Display	Details		
1	Present Position	Diaploy	Displays present position for each axis to be controlled by		
	(Position)	Display	Position Controller Unit. (-2,147,483,647 to 2,147,483,647)		
2	STOP	Setting	Stops axis in a set time.		
3	Error (Err)	Dioploy	Lights lamps when an error has been occurred and displays error		
٥	Error (Err)	Display	codes.		
4	I/O Status (I/O) Displa		Displays I/O status.		
5	Enable	Sotting	Controls inputs, such as operation, read, override, and position		
5	Enable	Setting	numbers.		
6	Origin Return	Setting	Axis returns from any position to the origin.		
7	Puov	Diaploy	Display whether Position Controller Unit processes operations or		
'	Busy	Display	not. Also lights lamp for X axis when initializing unit.		
0	Override	Setting	Sets values for override and switches between enable and		
٥	8 Override		disable.		

	CS1W-NC213/23								
Model	3	Location	DV\NC_V1\	Title	Changing Propert Value(2)				
iviodei	CJ1W-NC213/23	Location	NC213,233		Changing Present Value(2)				
	3								
Function	Displays I/O status, present position, error code for each axis. Also presets position numbers								
Function	when the control flag (Enable button) is ON.								
[lmaga]									

[Image]



No.	Item	Setting/ Display	Details		
1	Present Position	Display	Displays present position for each axis to be controlled by Position		
I	(Position)	Display	Controller Unit. (-2,147,483,647 to 2,147,483,647)		
2	STOP	Setting	Stops axis in a set time.		
3	Error (Err)	Display	Lights lamps when an error has been occurred and displays error		
3	3 Ellor (Ell)		codes.		
4	I/O Status (I/O) Di		Displays I/O status.		
5	Enable	Setting	Controls inputs, such as operation, read, override, and position		
3	Lilable	Setting	numbers.		
6	Position Numbers	Setting	Sets position numbers to preset.		
7	Bucy	Dieploy	Display whether Position Controller Unit processes operations or		
	Busy	Display	not. Also lights lamp for X axis when initializing unit.		
8	Preset Setting		Changes position form present position to position numbers forcibly.		

	CS1W-NC2	13/23						
Mode	3		_ocation	DV\NC_V1\	Title	Direct Operation(2)		
Wiode	CJ1W-NC2	13/23	Location	NC213,233	Title	Direct Operation(2)		
	3							
Func	Displays I/C) status, p	present p	osition, error code for e	each axis	s. Also sets operation mode and		
1 0110	other data w	vhen the	control fla	ag (Enable button) is O	N.			
[lmag	ge]							
	Direct Op	peration	'	NC Unit Operation				
	Pos	sition		Err ErCode		I/O X Y 1 4		
1	L — × = 80	33000000	pla /S	TOP 0		puence 0 0 Limit -		
		×0000000				Limit E		
2		42507		TOP 0		ginProxnput		
	,	43391	hia 🔼			nput		
ı						er.Stop i de mpleted i de		
5	5 — Enable					Reset 🔳 🔳		
6	Dasy	Mode	F	osition Speed	A. Ti			
7		1 \	R	56000 250		20 150 11		
	Y 🔴 📑	A F	R	85320 <u>600 50 200</u> 9				
İ					,	8		
	1							
No.	Item	Se	tting/	etails				
			splay					
1	Present Posi	ition Dis	splav			ach axis to be controlled by		
	(Position)		Po	osition Controller Unit.	(-2,147,4	183,647 to 2,147,483,647)		
2	STOP	Se		ops axis in a set time.				
3	Error (Err)	Dis	splay I		ror has b	een occurred and displays error		
			cc	odes.				
4	I/O Status (I/O)	Dis	. ,	splays I/O status.				
5	Enable	Se	ttina	•	operation	on, read, override, and position		
	On anation NA	1 -		ımbers.		-l-4 b-4 Abb-4- (A)		
I 6				data area between Absolute (A)				
	(Mode)			nd Relative (R).	Controll	or Unit processes enerations or		
7	Busy	Dia		Display whether Position Controller Unit processes operations or not. Also lights lamp for X axis when initializing unit.				
1	Dusy	Dis	ъргау ПС	or. Also lights lamp for 7	N axis Wii	en milianzing unit.		
8	Position	Se	tting Se	ets target position for ea	ach axis.			
9	Speed	Se	tting Se	ets target speed for eac	ch axis.			
	ı	1	II.					

10	Acceleration (A. Time)	Time	Setting	Sets acceleration time for each axis.
11	Deceleration (D.Time)	Time	Setting	Sets deceleration time for each axis.

- 1.Select **Settings-System Setting-Initial** tab page in the NS-Designer, click **System Memory List** button, and check the **Basics** for the \$SB before using this library.
- 2. Do NOT use as an initial screen.
- 3. Those parts can be used for 2 axes unit only. They cannot be used for 1 axis or 4 axes.

_									
Model	CS1W-NC213/23 3 CJ1W-NC213/23	Location	DV\NC_V1\ NC213,233	Title	Memory Operation(2)				
Functi	ion sequence No. ar	Displays I/O status, present position, error code for each axis. Also sets override and							
[lmage	e]								
1 2 3 5 8 7 6	Y Enable	on 63 pls Overri		CCW Ori O. I. Eme	4				
No.	Item	Setting/ Display	Details						
1	Present Position (Position)	Display			each axis to be controlled by 483,647 to 2,147,483,647)				
2	STOP	Setting	Stops axis in a set time.						
3	Error (Err)	Display	Lights lamps when an er codes.	ror has b	een occurred and displays error				
4	I/O Status (I/O)	Display	Displays I/O status.						
5 Enable Setting Controls inputs, such as operation, read, override, and ponumbers.					on, read, override, and position				
6	Position Numbers	Setting	Sets position numbers a	nd displa	ys position of sequence No.				
7	Busy	Display	Display whether Position Controller Unit processes operations or not. Also lights lamp for X axis when initializing unit.						

disable.

Starts memory operation when it is pressed.

Sets values for override and switches between enable and

Setting

Setting

RUN

Override

8

9

- 1.Select **Settings-System Setting-Initial** tab page in the NS-Designer, click **System Memory List** button, and check the **Basics** for the \$SB before using this library.
- 2. Do NOT use as an initial screen.
- 3. Those parts can be used for 2 axes unit only. They cannot be used for 1 axis or 4 axes.

Model	CS1W-NC413/43 3 CJ1W-NC413/43 3	Location	DV\NC_V1\ NC413,433 Title Change Positioning Sequence(4)				
Functi	on Sets sequence completion code		th as position destination, axis destination, output (Out.), and ion.				
[lmage	e]						
	Change Positioning Sequence 1 Change Y Thange Change Write to F-ROM						
	3 No. 5 Dest	ition ination Desolute	Position Destination Out. Completion Code 8 563200 U A I.F.(F) 9				
	No. 7	Relative Absolute	890000				
		Relative	2500000 Y 7 Spd Ctrl				
No.	Item	Setting/ Display	Details				
1	Axis	Display	Displays axis which settings should be made.				
2	Sequence No.	Setting	Input the desired sequence No.				
3	Sequence No.	Display	Displays sequence No. to be set.				
4	Position	Setting	Sets the position for the selected axis.				
5	Position Destination	Setting	Sets whether the position is absolute or relative.				
6	Change	Setting	Writes the disaplayed data to parameter area in the Position Controller Unit.				
7	Write to F-ROM	Display	Saves data written to the parameter area to F-ROM. Make sure to perform this before turning OFF the power.				
8	Completion Code	Setting	Sets completion codes.				
9	Axis Destination	Setting	Specifies axis to be startedup.				

- 1.Select **Settings-System Setting-Initial** tab page in the NS-Designer, click **System Memory List** button, and check the **Basics** for the \$SB before using this library.
- 2. When changing sequence No., press **Change** button and write it to parameter area. Unless the sequence No. is written to the parameter area, data will NOT be saved.
- 3. Unless F-ROM button is pressed, data will be deleted before turning OFF the power. Data to be saved in the Position Controller Unit by pressing the Write to F-ROM button is sata saved in the parameter area of PLC, NOT displaying on the screen.
- 4. Do NOT use as an initial screen.
- 5. Those parts can be used for 4 axes unit only. They cannot be used for 1 axis or 2 axes.

Model	odel CS1W-NC213/23 3 CJ1W-NC213/23 3		DV\NC_V1\ NC213,233	Title	Change Sequence(2)	Positioning		
Function	Function Sets sequence data, such as position destination, axis destination, output, and completicode, and position.							
[lmage	· 							
	1 — 2 — 4 — 4 —	ing Sequen X 89 Position estination	Change Change Position Axis Desti	Write t F-ROM	ompletion Code			
	3 No. 89	Ab/solute	58000 XV	A	Continu. 8			
	5 No. 90	Relativ		E	Auto.			
					=			
	No. 91	Relativ	250000 Y	4	I.F. (R)			
	No. 92	Abso lute	6800000 X Y	9	Continu.			
	No. 93	Relative	1500000 X	1	Spd Ctrl			
No.	Item	Setting/ Display	Details					
1	Axis	Display	Displays axis which setti	ngs shou	ld be made.			
2	Sequence No.	Setting	Input the desired sequer	nce No.				
3	Sequence No.	Display	Displays sequence No. t	o be set.				
4	Position	Setting	Sets the position for the	selected	axis.			
5	Position Destination	Setting	Sets whether the position is absolute or relative.					
6 Change Setting Writes the displayed data to param					meter area in the I	PLC.		
Write to F-ROM Saves data written to the parameter area to F-R Display Position Controller Unit. (Make sure to perform this be OFF the power.)								
8	Completion Code	Setting	Sets completion codes.					
9	Axis Destination	Setting	Specifies axis to be start	ed up.				

- 1.Select **Settings-System Setting-Initial** tab page in the NS-Designer, click **System Memory List** button, and check the **Basics** for the \$SB before using this library.
- 2. When changing sequence No., press **Change** button and write it to parameter area. Unless the sequence No. is written to the parameter area, data will NOT be saved.
- 3. Unless F-ROM button is pressed, data will be deleted before turning OFF the power. Data to be saved in the Position Controller Unit by pressing the Write to F-ROM button is data saved in the parameter area of PLC NOT displaying on the screen.
- 4. Do NOT use as an initial screen.
- 5. Those parts can be used for 2 axes unit only. They cannot be used for 1 axis or 4 axes.

Mode	CJ1W- NC413/433/213	3/233	ocation	DV\NC_V1\ NC413,433/NC2	•	Title	·	Positioning (2axes,4axes)
Funct	tion			d target speed nu			.o mambol, (200101UIIOII IIIIIO
[lmag		<u>'</u>		<u> </u>				
	Change Positioning 1	Sequence	e	Change		ite to F-ROM-		6 7
	2	TimeNo.	A.Time I	No. D.Time Nø.	Ini.Spd	l No. T	rgtSpd No.	_ 8
	N E	6		2	8	. 1.0.	99 _	
	3 10.5	0]					39 +	- 9 - 10
	5 No. 6	5	5	8	4		52	
		,			,			
	No. 7	5	9	7	6		55	
		10						
	No. 8	12	8	4	6		8	
	No. 9	3	7	5	8		42	
				J .	,			
No.	Item	Setting/ Display	Details	S				
1	Axis	Display	Display	ys axis which sett	ings sho	uld be	made.	
2	Sequence Number	Setting	Input th	he desired sequer	nce No.			
3	Sequence Number	Display	Display	ys sequence No. 1	to be se	t.		
4	Dwell Time Number (Dwell Time No.	Setting	Sets d	well time number	to be se	elected		
Acceleration Time Sets acceleration time number to be selected. 5 Number (A.Time Setting No.)								
6	Change	Setting	Writes	the displayed dat	a to para	ameter	area in the	PLC.
	Write to F-ROM		Saves	data written to th	e param	eter a	rea to F-RO	M in the Position
7		Setting	Contro	oller Unit. (Make s	sure to p	erform	this before	turning OFF the
			power.)				
8	Deceleration Time Number (D.Time	Setting	Sets de	eceleration time n	iumber t	o be se	elected.	

	No.)			
	Target	Speed		Sets target speed number to be selected.
9	Number (Trgt Spd	Setting	
	No.)			
	Initial	Speed		Sets initial speed number to be selected.
10	Number	(Ini.Spd	Setting	
	No.)			

- 1.Select **Settings-System Setting-Initial** tab page in the NS-Designer, click **System Memory List** button, and check the **Basics** for the \$SB before using this library.
- 2. When changing sequence No., press **Change** button and write it to parameter area. Unless the sequence No. is written to the parameter area, data will NOT be saved.
- 3. Unless F-ROM button is pressed, data will be deleted before turning OFF the power. Data to be saved in the Position Controller Unit by pressing the Write to F-ROM button is data saved in the parameter area of PLC NOT displaying on the screen.
- 4. Do NOT use as an initial screen.

Mode	CJ1W- NC413/433/2		Location	DV\NC_V1\ NC413,433/NC213,233	Title	Changing Acceleration / Deceleration Time
Func	tion Sets accelera	ation time a	and decele	eration time for x, Y, Z, and	d U axis.	
[Imag	ge] 1 — 2 — 7 — 3 — 4 —	×	Accelera ation Time Update telera 50 100 500	Change Write F-F Change Write F-F Change Write F-F Change Write F-F Change Ch	ROM	6 5
No.	Item	Setting/ Display	Details			
1	Axis	Display	Displays	axis which settings should	d be mad	de.
2	Sequence Number	Setting	Input the	desired sequence No.		
3	Sequence Number	Display	Displays	sequence No. to be set.		
4	Deceleration Time (Decelera.)	Setting	Sets dec	eleration time.		
5	Change	Setting	Writes th	e displayed data to param	neter area	a in the PLC.
6	Write to F-ROM	Setting		•		to F-ROM in the Position s before turning OFF the
7	Acceleration Time (Accelera.)	Setting	Sets acc	eleration time.		

- 1.Select **Settings-System Setting-Initial** tab page in the NS-Designer, click **System Memory List** button, and check the **Basics** for the \$SB before using this library.
- 2. When changing sequence No., press **Change** button and write it to parameter area. Unless the sequence No. is written to the parameter area, data will NOT be saved.
- 3. Unless F-ROM button is pressed, data will be deleted before turning OFF the power. Data to be saved in the Position Controller Unit by pressing the Write to F-ROM button is data saved in the parameter area of PLC NOT displaying on the screen.
- 4. Do NOT use as an initial screen.

Mode	CJ1W- NC413/433/2	213/233	Location	DV\NC_V1\ NC413,433/NC213,233	Title	Changing Speed (2 axes,4axes)				
Function Sets speed for each axis(X, Y, Z, and U).										
[Image]										
		1 — No. 2 — No. 3 — No. 4 — No. No.	9 Spe	Change Write to F-ROM	6 5 5					
No.	Item	Setting/ Display	Details							
1	Axis	Display	Displays axis which settings should be made.							
2	Sequence Number	Setting	Input the desired sequence No.							
3	Sequence Number	Display	Displays sequence No. to be set.							
4	Speed	Setting	Sets the desired speed.							
5	Write to F-ROM	Setting	Saves data written to the parameter area to F-ROM in the Position Controller Unit. (Make sure to perform this before turning OFF the power.)							
6	Change	Setting	Writes the displayed data to parameter area in the PLC.							

- 1.Select **Settings-System Setting-Initial** tab page in the NS-Designer, click **System Memory List** button, and check the **Basics** for the \$SB before using this library.
- 2. When changing sequence No., press **Change** button and write it to parameter area. Unless the sequence No. is written to the parameter area, data will NOT be saved.
- 3. Unless F-ROM button is pressed, data will be deleted before turning OFF the power. Data to be saved in the Position Controller Unit by pressing the Write to F-ROM button is data saved in the parameter area of PLC NOT displaying on the screen.
- 4. Do NOT use as an initial screen.

Mode	CS1W- NC413/433/213 CJ1W- NC413/433/213		Location	DV\NC_V1\ NC413,433/NC213,233	Title	Dwell Time Setting (2axes,4axes)				
Funct	Function Sets well time for each axis(X, Y, Z, and U).									
[Image] Dwell Time Setting No. Dwell Time No. Dwell Time 6 No. 10 1.50 No. 14 8.00 No. 11 2.00 No. 16 9.00 No. 12 5.00 No. 17 9.00 No. 13 7.50 No. 18 9.99										
No.	Item	Setting/ Display Details								
1	Axis	Display Displays axis which settings should be made.								
2	Sequence Number	Settin	g Input	Input the desired sequence No.						
3	Sequence Number	Displa	ay Displa	Displays sequence No. to be set.						
4	Dwell Time	Setting Sets the desired dwell time.								
5	Write to F-ROM	Settin	g Contro	Saves data written to the parameter area to F-ROM in the Position Controller Unit. (Make sure to perform this before turning OFF the power.)						
6	Change	Settin	g Writes	Writes the displayed data to parameter area in the PLC.						

- 1.Select **Settings-System Setting-Initial** tab page in the NS-Designer, click **System Memory List** button, and check the **Basics** for the \$SB before using this library.
- 2. When changing sequence No., press **Change** button and write it to parameter area. Unless the sequence No. is written to the parameter area, data will NOT be saved.
- 3. Unless F-ROM button is pressed, data will be deleted before turning OFF the power. Data to be saved in the Position Controller Unit by pressing the Write to F-ROM button is data saved in the parameter area of PLC NOT displaying on the screen.
- 4. Do NOT use as an initial screen.