# **Upgrade Information of MPE720 Version 6.05**

## **1. Added and Improved Functions**

## 1.1 Ver.6.05 Upgrade Information

Items added and features improved from MPE720 Ver.6.04 to Ver.6.05 are as follows.

No.	Feature	Classification
1	SGDV Servo Amplifier selection added to Module Configuration	Add function
2	Motion parameter addition	Add function
3	MNET-01 Module addition	Add function
4	Elimination of "Phase Reference" command for MP2400	Add function
5	Communication Port for MPE720 Lite	Add function
6	Parameter "Pn000" for "SJDE-**AN*"	Add function
7	Group definition of sequence program	Improvement
8	Prohibit duplicated register assignment in the User Structure	Improvement
9	Test Run function for Inverter	Improvement
10	Program can be named in the program properties	Improvement
11	Modification of display for CNTR-01 module	Improvement
12	Eliminate the Error Dialog "CpPnlStatus Error"	Preventive
13	Detail display in the Servopack parameter screen	Preventive
14	Modification for 218IFA module definition with the non-protocol	Preventive
15	Modification of C-language property	Preventive
16	Modification of Motion Assist function (ASCII)	Preventive
17	Compare function for user structure	Preventive

## **1.2 Past Upgrade Information**

No.	Upgrade information	Remarks
1	MPE720 version 6.02 upgrade information	ver.6.01 -> ver.6.02
2	MPE720 version 6.03 upgrade information	ver.6.02 -> ver.6.03
3	MPE720 version 6.04 upgrade information	ver.6.03 -> ver.6.04

## 2. Description

## No.1 SGDV Servo Amplifier Selection Added to Module Configuration

"SGDV-\*\*\*\*1\*\*" was added as a new servo amplifier for SVB module.

#### <Controller Version>

Supported Version (Built-in SVB) : MP2000 system software Ver.2.61 or later. Supported Version (Option SVB) : SVB-01 system software Ver.1.22 or later.

😹 E	ngine	ering Manager -	[МЕСНАТ	ROLINK	2300	N	IP 2 3 0 0	Offl	ine Lo	ocal]				
	File Edit View Window													
ll n														
11				.SF   Edt œ	M III # :		ਗ							
		PU#:-									HACK	#01 Slot #	UU	CI
Tran	nsmissi	on Parameters Link.	Assignment	1/0 Map	Status	1								
	ST	# TYPE	D	INPUT	SIZE	D	DUTPUT	SIZE	SCA	N		Comm	ent	
	0	1 SGDV-****1**	-	i					High	-				
	0;	2	-	i i						-				
	0:	3	-	i						-				
	0	4	<b>•</b>	i 🛛						-				
		•												
😹 E	ngine	ering Manager -	[SVB Def	inition	2300	MP	2300	Offlir	ne Loo	al]				
	jie E	dit <u>V</u> iew <u>W</u> indow												
IIn		5 🗗 🕺 🖬		US Mot E	. 🖽	م 1								
11			REFL	.ST   Edt œ.	M ⊏# :		ଆ							
PT#:	:- CF	PU#:-									RACK	#01 Slot #	00	CI
										_				
Axis	s 1	SERVOPACK S	5GDV-***1**	:	Version		7	Serv	/о Туре	Rotary	y 🔽			
Fie	od Pa	rameters Setup Para			l									
		rameters   Setup Faia				1								_
	No.		Name					Input (			U	nit		
	0 Selection of operation modes			_	Jormal o	· ·			-					
		Function selection	-								0000 H			
	2 Function selection flag 2				0000	0000			0000 H					
		Reference unit se							pu	lse 🔻	-			
	5 Number of digits below decimal point 3 -													

## No.2 Motion Parameter Addition

The following motion parameters were added for SGDV servo amplifier on the SVB module.

"Latch completion status clear request (OWxx00)", "Latch mode selection (OWxx01)", "Latch completion sequence number (IWxx44)" and "Number of continuous latch sequence completion cycles (IWxx45)" were added in "Continuous latch".

"Servo driver stop signal input (ILxx02)" and "Stop signal input(HWBB) (IWxx2E)" were added in "Hard wired base block".

Module	Parameter (	(Comment)	Variable Name
Setting	OWxx00	Latch completion status clear request	ClearStatus
Parameter	(bit13)		
	OWxx01	Latch mode selection	ModeSelection
	(bit6)		
Monitor	ILxx02	Servo driver stop signal input	StopSignalInput
Parameter	(bit10)		
	IWxx2E	Stop signal input(HWBB)	StopSignalInput
	(bit10)		
	IWxx44	Latch completion sequence number	CompletionSequenceNumber
	IWxx45	Number of continuous latch sequence completion cycles	CountinuousCycleCount

## No.3 MNET-01 Module Addition

The MNET-01 module was added.

The MNET-01 module has 217IF function and MNET function.

<Controller Version>

Supported Version: MP2000 system software Ver.2.61 or later.

Engineering Manager -	[Module Config	uration 2300	MP 2300	Offl	ine Local]			
<u>    File     V</u> iew <u>O</u> rder <u>W</u> indow								
D 🖬 🚭 🔐 🐰 🖻 I	R CRO DIS Mot		1					
Г#:- CPU#:-								
Controller								
Slot Number	00	01	02		03			
Module Type	MP2300	MNET-01	- UNDEFIN	ED 🔻	UNDEFINED 🔫			
Controller Number	-	-	-		-			
Circuit Number	-	-	-		-			
I/O Start Register								
I/O End Register								
Disable Input	-	-	•	-	-			
Disable Output	•	-	-	-	-			
MNET-01 : This module has F	S232C/MNET Tra	nsfer Function						
,								
-Module Details MNET-01 SL	OT#01	⊂ Module Details MNET-01 SLOT#01						
Slot Number	1	2						
Slot Number I/O End Register	1 	2 0421						
			<b>▼</b>					
I/O End Register	1 	0421	•					
I/O End Register Disable Input	1 	0421 • Enable	•					
I/O End Register Disable Input Disable Output	1   	0421 • Enable	•					
I/O End Register Disable Input Disable Output Motion Start Register		0421 Enable Enable 	• •					
I/O End Register Disable Input Disable Output Motion Start Register Motion End Register		0421 Enable Enable 	•					
I/O End Register Disable Input Disable Output Motion Start Register Motion End Register Details		0421 Enable Enable 	• •					

## No.4 "Phase Reference" Command Invalidation for MP2400

"Phase Reference" command was eliminated from the motion command for MP2400. It is invalid and displayed "Reserved".

xis 1	SERVOPACK SGDV-***1** Version	-	Servo Type Rotary 🔽		
Fixed Parameters Setup Parameters SERVOPACK Monitor					
No	Name	REG	Input Data	U	
0	Run command setting	0W8000	0000 0000 0000 0000 0000 H		
1	Mode setting 1	0W8001	0000 0000 0000 0000 0000 H		
2	Mode setting 2	0W8002	0000 0000 0000 0000 0000 H		
3	Function setting 1	0W8003	0000 0000 0001 0001 0011 H		
4	Function setting 2	0W8004	0000 0000 0011 0011 0033 H		
5	Function setting 3	0W8005	0000 0000 0000 0000 0000 H		
6	Option Setting	0W8006	0000 0000 0000 0000 0000 H		
8	Motion command	0W8008	No Command 🚽 -		
9	Motion command control flag	0W8009	AbsoluteEncoderReset 🛛 🗛 0000 H		
10	Motion subcommand	0W800A	Speed Reference		
12	Torque/Thrust reference setting	0L800C	Torque/Thrust Reference		
14	Speed limit setting at the torque/thrust reference	0W800E	Phase Reference Change position loop intec		
16	Speed reference setting	OL8010	Stored Parameter Write. 10**n refe	ere	
20	Positive side limiting torgue/thrust setting at the speed refer				
			300.00 %		
.xis 1	SERVOPACK SGDV.***1** Version	<b>v</b>	Servo Type Rotary		
xis 1	SERVOPACK SGDV-****1** Version		· · · · · · · · · · · · · · · · · · ·	U	
xis 1 Fixed P	SERVOPACK SGDV-****1** Version arameters Setup Parameters SERVOPACK Monitor   Name Run command setting	<b>v</b>	Servo Type Rotary	U	
xis 1 Fixed P	SERVOPACK SGDV.***1** Version	REG	Servo Type Rotary	U	
xis 1 Fixed P- No 0	SERVOPACK SGDV-****1** Version arameters Setup Parameters SERVOPACK Monitor   Name Run command setting	REG 0W8000	Servo Type Rotary	U	
xis 1 Fixed P- No 0 1	SERVOPACK SGDV.***1** Version arameters Setup Parameters SERVOPACK Monitor   Name Run command setting Mode setting 1 Mode setting 2 Function setting 1	REG 0W8000 0W8001	Servo Type Rotary	U	
xis 1 Fixed P No 0 1 2	SERVOPACK SGDV-****1** Version arameters Setup Parameters SERVOPACK Monitor Name Run command setting Mode setting 1 Mode setting 2	REG 0\V8000 0\V8001 0\V8002	Servo Type Rotary	U	
ixis 1 Fixed P- No 1 2 3	SERVOPACK SGDV.***1** Version arameters Setup Parameters SERVOPACK Monitor   Name Run command setting Mode setting 1 Mode setting 2 Function setting 1	REG 0\V8000 0\V8001 0\V8002 0\V8003	Servo Type Rotary	U	
xis 1 Fixed P 0 1 2 3 4	SERVOPACK SGDV.****1** Version arameters Setup Parameters SERVOPACK Monitor   Name Run command setting Mode setting 1 Mode setting 2 Function setting 1 Function setting 2	REG 0\V8000 0\V8001 0\V8002 0\V8003 0\V8003	Servo Type Rotary		
xis 1 Fixed P No 0 1 2 3 4 5	SERVOPACK SGDV.****1** Version arameters Setup Parameters SERVOPACK Monitor Name Run command setting Mode setting 1 Mode setting 2 Function setting 1 Function setting 2 Function setting 3	REG 0W8000 0W8001 0W8002 0W8003 0W8004 0W8005	Servo Type Rotary	U	
xis 1 Fixed PA No 1 2 3 4 5 6	SERVOPACK SGDV.****1** Version	REG 0W8000 0W8001 0W8002 0W8003 0W8004 0W8005 0W8006	Servo Type Rotary		
xis 1 Fixed P 0 1 2 3 4 5 6 8	SERVOPACK SGDV.****1** Version	REG 0W8000 0W8001 0W8002 0W8002 0W8003 0W8004 0W8005 0W8006 0W8006	Servo Type Rotary  Input Data  0000 0000 0000 0000 0000 H  0000 0000 0000 0000 0000 H  0000 0000 0000 0000 0000 H  0000 0000 0001 0011 H  0000 0000		
xis 1 Fixed P 0 1 2 3 4 5 6 8 9	SERVOPACK SGDV.****1** Version	REG 0W8000 0W8001 0W8002 0W8003 0W8004 0W8003 0W8004 0W8005 0W8006 0W8008 0W8008 0W8009 0W800A	Input Data           0000 0000 0000 0000 0000 0000 H           0000 0000 0000 0000 0000 H           0000 0000 0000 0000 0000 0000 H           No Command           AbsoluteEnceet           Input Data           Input Data		
xis 1 Fixed P. Nn 1 2 3 4 5 6 8 9 10	SERVOPACK SGDV.****1*** Version arameters Setup Parameters SERVOPACK Monitor Run command setting Mode setting 1 Mode setting 2 Function setting 2 Function setting 3 Option Setting Motion command Motion command control flag Motion subcommand	REG 0W8000 0W8001 0W8002 0W8003 0W8004 0W8005 0W8006 0W8006 0W8008 0W8008	Servo Type Rotary           Input Data           0000 0000 0000 0000 0000 0000 H           No Command           AbsoluteEncoderReset           Speed Reference           Input Data           Perserved	U	
xis 1 Fixed P. 0 1 2 3 4 5 6 8 9 10 12	SERVOPACK SGDV.****1*** Version arameters Setup Parameters SERVOPACK Monitor Run command setting Mode setting 1 Mode setting 2 Function setting 2 Function setting 3 Option Setting Motion command Motion command Motion command Motion subcommand Torque/Thrust reference setting	REG 0W8000 0W8001 0W8002 0W8003 0W8004 0W8005 0W8006 0W8006 0W8008 0W8008 0W8009 0W800A	Input Data           0000 0000 0000 0000 0000 0000 H           0000 0000 0000 0000 0000 H           0000 0000 0000 0000 0000 H           0000 0000 0000 0000 0000 H           No Command           AbsoluteEnceet           I oroue/Thrust Reference		

## No.5 Communication Port for MPE720 Lite

In MPE720 Lite, "Ethernet" and "Ethernet(LP)" are available as a communication option, and other communication ports can not be selected.

Communication	s Setting	×
Set the communication	n setting	Connection
Communication port	2 : Ethernet (IP:192.168.1.2)	Setting
	2 : Ethernet (IP:192.168.1.2)	
	3 : Ethernet (IP:192.168.1.7)	Cancel
	- : Ethernet (IP:134.237.4.20) - : Ethernet(LP) (IP:134.237.4.20)	
	- : Ethernet(LP) (IP:134.237.4.20)	Detail >>

## No.6 Parameter "Pn000" for "SJDE-\*\*AN\*"

The user constant was added by support to "MECHATROLINK interface version JUNMA series servo amplifier" of MP2000 series SVB module (built-in CPU, option).

The parameter "Pn000" for "SJDE-\*\*AN\*" was added.

3	a Engin	eering Manager - [SVB Definition 2300 M	2300 Offline Local]					
	<u> </u>	dit <u>V</u> iew <u>W</u> indow						
]]								
Ρ	T#:- CI	PU#:		RACK#01 Slot #00				
	Axis 1 Fixed Pa	SERVOPACK SJDE-**AN* Version	Servo Type Rotary	Y				
١.	No.	Name	Input Data	Unit Curr				
	0000	Basic Function Select Switch 0	0010 H -					
ľ	000A	Filter Setting	0000 H -					
	020E	Electronic Gear Ratio [Numerator]	1 -					
	0210	Electronic Gear Ratio [Denominator]	1 -					
	0304	JOG Speed	500 min	1–1				
	050A	Input Signal Selections 1	2881 H -					
	050B	Input Signal Selections 2	8883 H -					
	0515	Input Signal Selection 5	8488 H -					

Detail			X
Basic Function Sele	lect Switch 0		
Digit 0 Directio	on Selection	Set CCW as forward direction.	•
Digit 1 -			<u>_</u>
Digit 2 -			<u> </u>
Digit 3 -			<u>_</u>
		Cancel	

## No.7 Group Definition of Sequence Program

The following message dialog box appears to encourage group definition setup if Motion Command Assist dialog is operated in a sequence program.

#### (Message)



### (Group Definition)

Group Definition 2400 MP2400 Offline Local	
PT#:- CPU#:-	
Group List Group01	
GROUP1	
Axis Axis Definition	
3 + Axis01 Axis02 Axis03	
Physical 01.01 01.02 01.03 Logical Axis A1 B1 C1	
Please set the number of axes used for the number of control axes [Close]	
The explanation physics axis is set by the line number and the axis number. A logical axis becomes an axis name used in the program.	

## No.8 Prohibit Duplicated Register Assignment in the User Structure

When there are members that have same data type, address, and bit address in a User Structure, they appear pink. The structure cannot be registered and an error dialog appears.

Structure Name test Comment comment Name Type Address Bit Comment test Bit 3 E comment1 test Bit 3 E comment2 Edit Delete OK Cancel	🔢 Structure 🛙	Definitio	n			
Name       Type       Address       Bit       Comment       Add         Lest1       Bit       3       E       comment1       Edit         Lest2       Bit       3       E       comment2       Edit         Lest3       Word       0       OK       Cancel         OK       Cancel       Cancel       Error Generating Information       X         Error code:       0xA00506FE       The address of structure member is overlapped.       [CAUSE]         1. The address of structure member is overlapped.       [SOLUTION]       .         I. Please specify the addres which no overlap to address of structure member.       .	Structure Name	test				
test1       Bit       3       E       comment1         test2       Bit       3       E       comment2         test3       Word       0       OK       Cancel         OK       Cancel       CK       Cancel         Error Generating Information       X       X         Image: Comment is overlapped.       Error code :0xA00506FE       The address of structure member is overlapped.         [CAUSE]       1. The address of structure member is overlapped.       [SOLUTION]         1. Please specify the addres which no overlap to address of structure member.       Image: Comment is overlapped.	Comment	commen	t			
test3       Word       0         Delete       Delete         OK       Cancel         Error Generating Information       Image: Cancel         Image: Cancel       I	test1	Bit	3	Е	comment1	
OK       Cancel         Error Generating Information       Image: Cancel         Error code : 0xA00506FE       The address of structure member is overlapped.         The address of structure member is overlapped.       Image: CAUSE June address of structure member is overlapped.         [CAUSE]       1. The address of structure member is overlapped.         [SOLUTION]       1. Please specify the address which no overlap to address of structure member.					commentz	
Error Generating Information     Error code :0xA00506FE     The address of structure member is overlapped.      [CAUSE]     1. The address of structure member is overlapped.      [SOLUTION]     1. Please specify the addres which no overlap to address of structure member.						Delete
Error Generating Information     Error code :0xA00506FE     The address of structure member is overlapped.      [CAUSE]     1. The address of structure member is overlapped.      [SOLUTION]     1. Please specify the addres which no overlap to address of structure member.						
Error Generating Information     Error code :0xA00506FE     The address of structure member is overlapped.      [CAUSE]     1. The address of structure member is overlapped.      [SOLUTION]     1. Please specify the addres which no overlap to address of structure member.						
Error Generating Information     Error code :0xA00506FE     The address of structure member is overlapped.      [CAUSE]     1. The address of structure member is overlapped.      [SOLUTION]     1. Please specify the addres which no overlap to address of structure member.						
Error Generating Information     Error code :0xA00506FE     The address of structure member is overlapped.      [CAUSE]     1. The address of structure member is overlapped.      [SOLUTION]     1. Please specify the addres which no overlap to address of structure member.						
Error Generating Information     Error code :0xA00506FE     The address of structure member is overlapped.      [CAUSE]     1. The address of structure member is overlapped.      [SOLUTION]     1. Please specify the addres which no overlap to address of structure member.						
Error Generating Information     Error code :0xA00506FE     The address of structure member is overlapped.      [CAUSE]     1. The address of structure member is overlapped.      [SOLUTION]     1. Please specify the addres which no overlap to address of structure member.					ОК	Cancel
Error code :0xA00506FE The address of structure member is overlapped. [CAUSE] 1. The address of structure member is overlapped. [SOLUTION] 1. Please specify the addres which no overlap to address of structure member.						
Error code :0xA00506FE The address of structure member is overlapped. [CAUSE] 1. The address of structure member is overlapped. [SOLUTION] 1. Please specify the addres which no overlap to address of structure member.			e			2
The address of structure member is overlapped. [CAUSE] 1. The address of structure member is overlapped. [SOLUTION] 1. Please specify the addres which no overlap to address of structure member.	Error Gene	rating li	nformatio	on	<b>Ľ</b>	2
[CAUSE] 1. The address of structure member is overlapped. [SOLUTION] 1. Please specify the addres which no overlap to address of structure member.	🔥 Erro	r code :0>	(A00506FE			
<ol> <li>The address of structure member is overlapped.</li> <li>[SOLUTION]</li> <li>Please specify the addres which no overlap to address of structure member.</li> </ol>	😐 The	address o	of structure	membe	er is overlapped.	
<ol> <li>The address of structure member is overlapped.</li> <li>[SOLUTION]</li> <li>Please specify the addres which no overlap to address of structure member.</li> </ol>	[					
<ol> <li>Please specify the addres which no overlap to address of structure member.</li> </ol>	[CAUSE] 1. The address	of structu	re member	is overl	apped.	
Close	1. Please specif	y the add	res which n	o overla	ap to address of structure member.	
Close					( class	
					Llose	

#### No.9 Test Run Function for Inverter

When the jog was stopped at the test run of the inverter, monitoring "Output frequency (IWxx11)" was completely changed to "0".

#### No.10 Program Can Be Renamed In The Program Properties

"Rename" menu was added to the properties of the ladder program, motion program and sequence program. Program name can be changed in the properties of each program.

#### No.11 Modification of Display for CNTR-01 Module

The displayed size of CNTR-01 module definition screen was improved to be appropriate to avoid hiding the setting area even if task manager or watch screen is displayed.

### No.12 Eliminate the Error Dialog "CpPnlStatus Error"

The error dialog "CpPnlStatus Error" will no longer appear. It appeared when a communication was disconnected.



#### No.13 Detailed Display in the Servopack Parameter Screen

The "Details" in the Edit Menu is available for parameters that have detailed information.

😹 Engin	eering Manager - [SVB Definition 2300 M	2300 Offline Local]		
📑 File 🛛	Edit View Window			
	Axis Data Copy Ctrl+C 🕴 🏙 🖬 🛱 🌇	87		
PT#:-(	Details			
Axis 1	Default Set IS115 Version Copy Current Value	Servo Type Rota		
Fixed Pa	arameters Setup Parameters SERVOPACK Monitor			
No.	Name	Input Data		
0000	Basic Function Select Switch 0	0010 H		
0001	Application Function Select Switch 1	0000 H		
0002	Application Function Select Switch 2	0011 H		

### No.14 Modification for 218IFA module definition with the non-protocol

In previous versions, when the protocol setting was changed from the 'Extended MEMOBUS' to "None" in the 218IFA details definition screen, the automatic reception setting (which must be disabled) was enabled.

In 6.05, 'Automatic Receive' setting is changed to "Disabled" when the protocol setting of connection parameter No.1 is changed to "None".

If the protocol setting of connection parameter No.1 is changed to something except "None", 'Automatic Receive' setting is changed to "Enabled" as the default.

## No.15 Modification of C-language Property

In the C language properties, the function for "Enable / Disable" selection of "Automatic task wake-up setting" was not set property.

In 6.05, it is modified to function properly.

#### No.16 Modification of Motion Assist Function (ASCII)

A typo was modified.

"ASCII" in the Motion Command Assist function was displayed "ACSII".

#### No.17 Compare function for User Structure

A "compare error" in the compare function can now detect properly even if one project has a user structure and the other does not.

In previous versions, compare errors were detected.