

SMC Corporation  
Step Data Input Type Controller  
JXC51/JXC61 Series

Technical Guide  
For VGA

# Revision

Revision	Date	Description
01	2022-10- <del>31</del> <sup>6</sup>	New Creation

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# 1 Overview

This is a sample project connection with the Step Data Input Type controller, JXC51/JXC61 Series manufactured by SMC.

When using the actuator, we provide the following features to help improve understanding.

1. Actuator status (such as current position and current speed) can be checked on the Display Unit.
2. The basic operations, such as JOG operations, return to an original position and error reset, can be controlled from the Display Unit.
3. Step data and parameters can be configured, edited, and stored on the Display Unit.
4. Details of current alarm and alarm history can be viewed on the Display Unit.
5. Up to 16 units can be connected at once with multiple axis support within the Indirect Device setting feature.

## 2 Restrictions and Notes

### 1) Restrictions

This screen data is taken from screenshots showing the representative features and functions of the GP4000 Series.

When using the sample project file, be sure to reference our product manual or the connection device manual, including the usage restrictions and safety precautions. In addition, please be aware that we are unable to accept responsibility for damage arising from reasons that cannot be attributable to us, loss of customer opportunity or profit arising from the malfunction of our product, damage arising from special circumstances regardless of whether we had foreknowledge of those circumstances, secondary damage, compensation for accidents, damage to our products, or other business-related guarantees.

### 2) Notes

- The intellectual property rights for the files provided by Schneider Electric belong to us.
- Downloaded files and the data extracted from those files are no guarantees of our product specifications. Please be aware of this fact.
- The liability for use of this service lies with the customer.
- In any case, this is not intended as a warranty for any work for a system that makes use of the data on these screens.
- For models that can operate in this sample project, please refer to the chapter "5.2. Target device with touch panel" in this manual.
- Any modifications made to this service by a customer are entirely at the responsibility of the customer.
- Please be aware that we cannot respond to any inquiries for the purpose of modifying these data.

- The content and information in the data on these screens and documentation are subject to change without prior notification.

### 3 How to use this project file

When using this project file (henceforth known as “the file”), be sure to confirm the following details:

1) When using the file as-is

Confirm the communication settings.

When using this file as-is, transfer it in GP-Pro EX to a display console with a Display Unit.

2) How to combine with other files

In GP-Pro EX, select [Project] → [Utilities] → [Copy from Another Project].

3) Screen numbers when combining

There may be times when things get overwritten, such as when there are duplicate screen numbers.

When combining the file with a file currently being created, be aware of the screen numbers.

Refer to section “Screen transitions” for screen numbers that are being used by the file.

When combining with 2), it is possible to designate a copy destination screen number before starting to copy. Before combining, be sure to either designate a screen number when copying or change the screen number in advance.

When changing a screen number, be sure to also change the screen number for the screen replacement switch.

Be aware that if no changes are made to the screen replacement destination screen number, unexpected operations may occur.

4) Changing addresses

When changes are made to the address of a connection device that has been configured on the screen, it will not operate properly.

Do not make changes to these addresses.

5) Project capacity

The image font is used so that display quality cannot be deteriorated even when screen resolution is changed. Therefore, the project capacity is large and it may take some time to transfer the data to the Display Unit.

Please understand that the capacity will further increase when the resolution is greatly changed.

6) Resolution Convert

When Resolution Convert is executed, a screen (drawing and text) is extended mechanically. In this process, deviation may occur to the surrounding drawing parts due to drawing parts and coordinates. Adjust the size of the parts and coordinates in a manual mode, if necessary.

“Medium” is set for the size of the system keyboard. Change the size in System Settings, when necessary.

## 4 Device Configuration

### 4.1 System Structure

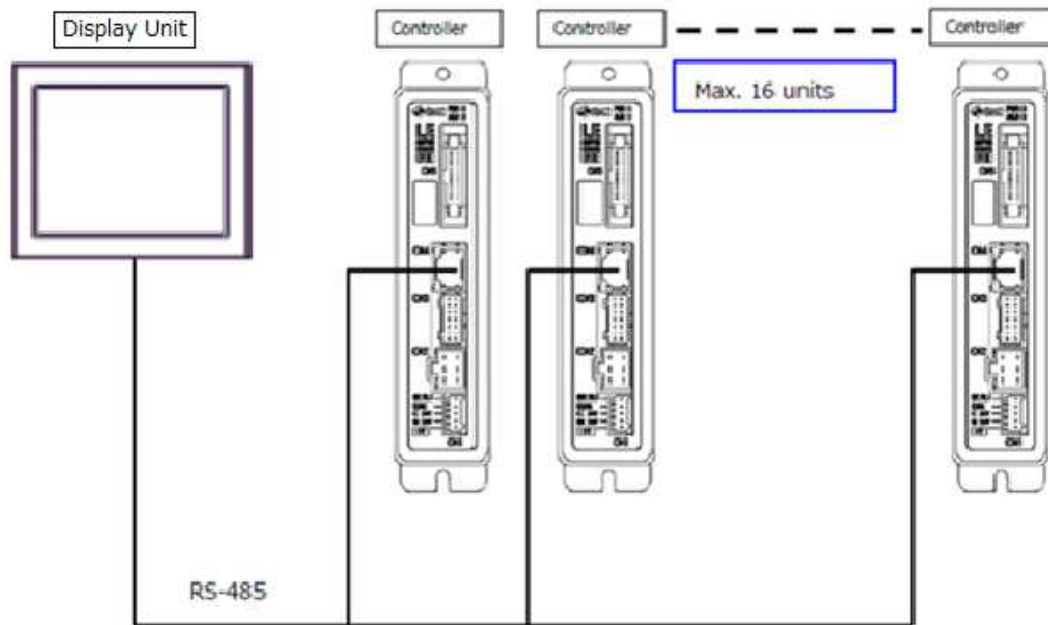


Figure 4-1 system configuration

The communication driver "General-purpose MODBUS RTU SIO Master Driver" used in this project data is a driver for general-purpose connection with devices that comply with MODBUS communication, and up to 32 devices can be connected.

This project data sets up 16 units of devices.

For details, see the instruction manual for the communication driver "General-purpose MODBUS SIO Master Driver"

## 4.2 Target HMI Device

The model's name described here refers to the name selected in GP-Pro EX.

The table is created based on GP-Pro EX Ver4.09.350.

The sample project file is available for the models as shown below.

VGA : connection\_gp4501\_v\_SMC-JXC51/JCX61\_ml

Table 4 -1 Target Display Model with Touch Panel

Series	Model	Target	Note
		VGA	
GP41** Series	GP-4104		
	GP-4105		
	GP-4106		
	GP-4107		
	GP-4114T		
	GP-4115T		
	GP-4115T3		
	GP-4116T		
GP-42** Series	GP-4201T		
	GP-4201TM (Modular Type)		
	GP-4201TW		
	GP-4203T		
GP-43** Series	GP-4301T		
	GP-4301TM (Modular Type)		
	GP-4301TW		
	GP-4303T		
	GP-4311HT	✓	*1
GP-44** Series	GP-4401T	✓	
	GP-4401WW		
GP-45** Series	GP-4501T (Analog Touch Panel)	✓	*1
	GP-4501T (Matrix Touch Panel)	✓	*1
	GP-4501TW	✓	*1
	GP-4503T	✓	*1
	GP-4521T	✓	*2
GP-46** Series	GP-4601T (Analog Touch Panel)	✓	*2
	GP-4601T (Matrix Touch Panel)	✓	*2
	GP-4603T	✓	*2
	GP-4621T	✓	*1



GP-4G** Series	GP-4G01 VGA (640*480)	✓	*1
	GP-4G01 SVGA (800*600)	✓	*2
	GP-4G01 WVGA (800*480)		
GP-Rear Module Series	GP-4000M (Rear Modular Type)		
LT-42** Series	LT-4201TM (Modular Type DIO)		
	LT-4201TM (Modular Type Analog)		
LT-43** Series	LT-4301TM (Modular Type DIO)		
	LT-4301TM (Modular Type Analog)		
LT-Rear Module Series	LT-4000M (Rear Module DIO)		
	LT-4000M (Rear Module Analog)		
SP5000 Standard BOX (SP-5B00)	SP-5400WA WVGA (800*480)		
	SP-5500TP VGA (640*480)	✓	*1
	SP-5500TP SVGA (800*600)	✓	*2
	SP-5500WA WXGA (1280*800)		
	SP-5600TA XGA (1024*768)		
	SP-5600TP VGA (640*480)	✓	*1
	SP-5600TP SVGA (800*600)	✓	*2
	SP-5600TP XGA (1024*768)		
	SP-5600WA WXGA (1280*800)		
	SP-5660TP VGA (640*480)	✓	*1
	SP-5660TP SVGA (800*600)	✓	*2
	SP-5660TP XGA (1024*768)		
	SP-5700TP VGA (640*480)	✓	*1
	SP-5700TP SVGA (800*600)	✓	*2
	SP-5700TP XGA (1024*768)		
	SP-5700WC FWXGA (1366*768)		
	SP-5800WC FWXGA (1366*768)		
	DC Power Supply Adapter SVGA (800*600)	✓	
	DC Power Supply Adapter XGA (1024*768)		
SP5000 Power BOX (SP-5B10)	SP-5400WA WVGA (800*480)		
	SP-5500TP VGA (640*480)	✓	*1
	SP-5500TP SVGA (800*600)	✓	*2
	SP-5500WA WXGA (1280*800)		
	SP-5600TA XGA (1024*768)		
	SP-5600TP VGA (640*480)	✓	*1
	SP-5600TP SVGA (800*600)	✓	*2

	SP-5600TP XGA (1024*768)		
	SP-5600WA WXGA (1280*800)		
	SP-5660TP VGA (640*480)	✓	*1
	SP-5660TP SVGA (800*600)	✓	*2
	SP-5660TP XGA (1024*768)		
	SP-5700TP VGA (640*480)	✓	*1
	SP-5700TP SVGA (800*600)	✓	*2
	SP-5700TP XGA (1024*768)		
	SP-5700WC FWXGA (1366*768)		
	SP-5800WC FWXGA (1366*768)		
	DC Power Supply Adapter SVGA (800*600)	✓	
	DC Power Supply Adapter XGA (1024*768)		
SP5000 Open BOX (SP-5B40)	SP-5400WA WVGA (800*480)		
	SP-5500TP SVGA (800*600)	✓	*2
	SP-5500WA WXGA (1280*800)		
	SP-5600TA XGA (1024*768)		
	SP-5600TP SVGA (800*600)	✓	*2
	SP-5600WA WXGA (1280*800)		
	SP-5660TP SVGA (800*600)	✓	*2
	SP-5660TP XGA (1024*768)		
	SP-5700TP SVGA (800*600)	✓	*2
	SP-5700TP XGA (1024*768)		
	DC Power Supply Adapter SVGA (800*600)	✓	*2
	DC Power Supply Adapter XGA (1024*768)		
SP5000 Open BOX (SP-5B41)	SP-5400WA WVGA (800*480)		
	SP-5500TP SVGA (800*600)	✓	*2
	SP-5500WA WXGA (1280*800)		
	SP-5600TA XGA (1024*768)		
	SP-5600TP SVGA (800*600)	✓	*2
	SP-5600TP XGA (1024*768)		
	SP-5600WA WXGA (1280*800)		
	SP-5660TP SVGA (800*600)	✓	*2
	SP-5660TP XGA (1024*768)		
	SP-5700TP SVGA (800*600)	✓	*2
	SP-5700TP XGA (1024*768)		
	SP-5700WC FWXGA (1366*768)		
	SP-5800WC FWXGA (1366*768)		

	DC Power Supply Adapter SVGA (800*600)	✓	*2
	DC Power Supply Adapter XGA (1024*768)		
	DC Power Supply Adapter HD720p (1280*720)		
	DC Power Supply Adapter WXGA (1280*800)		
	DC Power Supply Adapter SXGA (1280*1024)		
	DC Power Supply Adapter FWXGA (1360*768)		
	DC Power Supply Adapter FWXGA (1366*768)		
	DC Power Supply Adapter WXGA+ (1440*900)		
	DC Power Supply Adapter WXGA++ (1600*900)		
	DC Power Supply Adapter Full HD (1920*1080)		
SP5000X eXtreme BOX (SP-5B90)	SP-5490WA WVGA (800*480)		
	SP-5690WA WXGA (1280*800)		
	SP-5790WA FWXGA (1366*768)		
ST6000	ST-6200WA (480*272)		
	ST-6400WA WVGA (800*480)		
	ST-6500WA WSVGA (1024*600)		
	ST-6600WA WXGA (1280*800)		
	ST-6700WA FWXGA (1366*768)		
STM6000	STM-6200 WA WQVGA(480*272)		
	STM-6400 WA WVGA (800*480)		
	STM-6B00 WQVGA(480*272)		
	STM-6B00 WVGA (800*480)		

\* The model with the “\*1” mark can be used when “Change Display” is executed and connection device changed.

\* The model with the “\*2” mark can be used by changing the display of the project and converting the resolution, but change the layout, connected device settings, etc. as necessary.

\* SD card or USB memory is required to use this project. SD card is required for Open Box (SP-5B40, SP-5B41)

#### 4.2.1 Notes for using the Open Box(SP-5B40)

- An appropriate performance may not be attained due to loads of the program executed at the same time. Customers are requested to perform sufficient operation check in the usage environments in customer’s responsibility.
- Set “Save device” is “SD” on the setting screen.
- In “Display Unit-Win GP Settings” in the GP-Pro EX. Please refer to the “Historical Data Retentive Settings-Save in” to “SRAM”. “Display Settings” is set as required.
- USB memory cannot be used with WINGP.

- If the write filter settings are enabled, disable them before transferring the project file.
- SP5000-specific functions such as "launcher" and "Write Filter", please refer to the "SP5000 series Open Box Reference Manual "

## 4.3 Software

Table 4 -2 Software

No	Manufacture	Product name	シリーズ	Model	Comment
1	Schneider Electric HD	GP-PROEX		PFXEXEDV40	Ver 4.09.350

These screen samples were created in GP-Pro EX Ver. 4.09.350. Be sure to update to the latest version if using versions prior to Ver.4.09.350. (< V.4.09.350). The communication driver is [MODBUS IDA general-purpose MODBUS RTU SIO master driver].

## 4.4 Connectable Device

Supported JXC Series models of products manufactured by SMC are as follows.

Table 4 -3 Product Models

No	Type		Series
1	Electric Actuator	Slider Type (ball screw drive)	LEFS
2		Slider Type (Belt drive)	LEFB
3		Low Profile Slider	LEM
4		Guide Rot Slider	LEL
5		Rod Type	LEY/LEYG
6	Electric Slide Table		LES/LESH
7	Miniature		LEPY/LEPS
8	Gripper		LEH
9	Electric Rotary Table		LER

For details, refer to the catalogs and manuals of SMC.

## 4.5 Connecting Diagram

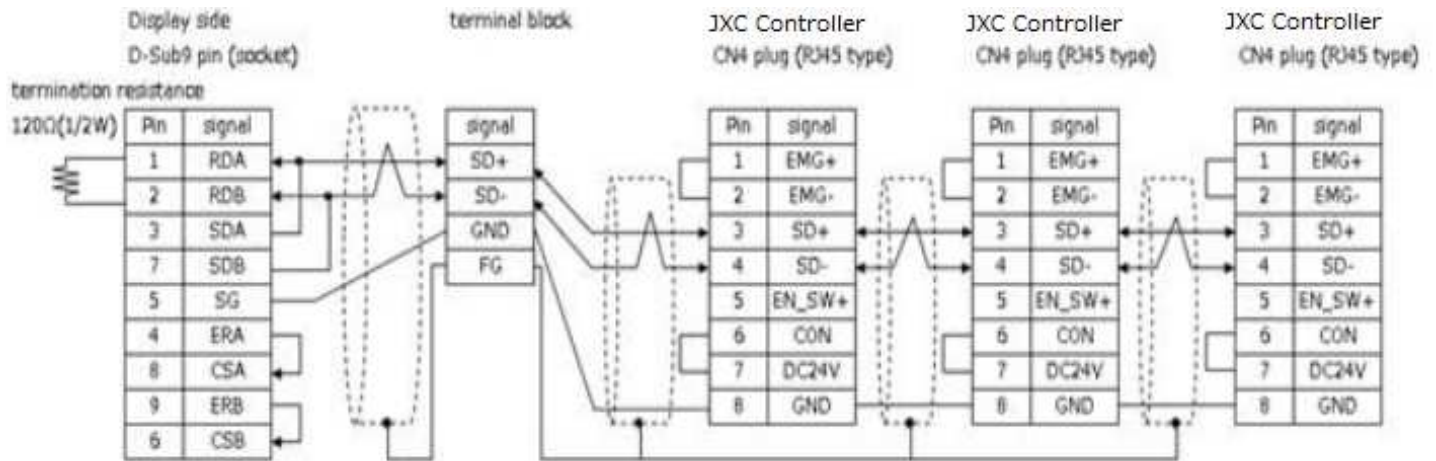


Figure 4-2 Connecting Diagram

- It is possible to operate from display by shorting CON (6) and DC24V (7) of the controller. The stop signal, EMG + (1) and EMG-(2) will activate, the stop switch must be connected if necessary.
- The shield of RJ45 type connector is connected to the 0V line of JXC, be careful when connecting the shield to FG.

## 4.6 Network Setting

### 4.6.1 Connected Device Setting

Use RS422/485 port for connecting between Display Unit and JXC controller.

Driver: MODBUS IDA general-purpose TCP master"

(Please refer to the "Device/PLC Connection Manual" for details of communication setting.)

No.	Item	Setting value
1	Driver	MODBUS IDA general-purpose MODBUS RTU SIO master
2	Port	COM1 RS-422/485 (two wire system)
3	Communication speed	38400bps
4	Data length	8 bit
5	Parity bit	none
6	Stop bit	1 bit
7	Flow control	none
8	Transmittal weight	10ms
9	Device name	JXC01 to JXC16
10	Indirect device name	Indirect
11	Device specified address	[#INTERNAL]USR28000
12	Initially-ID	1

#### 4.6.2 Individual Device Setting

Individual Device Settings

JXC01

Equipment Configuration Function Code and Max Query

Equipment Address

Slave Equipment Address 1

Bit manipulation (set/reset) to Holding Register:

Rest of the bits in this word ☐ Clear ☒ Do not clear

Note on when selecting "Do not clear" :  
If the ladder program writes data to Holding Register during the read/write process, the resulting data may be incorrect.

☐ IEC61131 Syntax

Address Mode: 0-based (Default)

If you change the setting, please reconfirm all address settings.

Variables

Double Word word order: High word first (H/L)

[Import](#) [Export](#) [Default](#) [OK \(O\)](#) [Cancel](#)



## 5 Screen Structure

### 5.1 Base Screen

Table 5-1 Base Screen

No.	Base No.	Screen List	Description
1	8600	Status Monitor	Screen title when booting up power for three seconds
2	8601	Main	status screen, actuator operation
3	8610	Step Data 1/2	Editing of data step, upload, download, USB storage, USB read
4	8611	Step Data 2/2	
5	8620	Parameters 1/3	Editing of Parameters, upload, download, USB storage, USB read
6	8621	Parameters 2/3	
7	8622	Parameters 3/3	
8	8630	Alarm	Details for alarm activation
9	8640	I/O Status	I/O status information
10	8650	Axis	connect axis, connect/ disconnection setting
11	8701	Step Data Common	Common screen for step data
12	8702	Parameters Common	Common screen for parameters

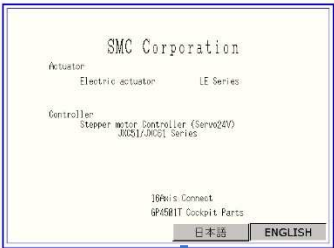
## 5.2 Window screen

Table 5-2 Window screens

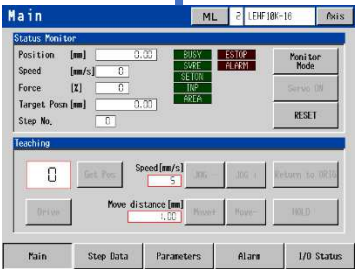
No.	Window No	Screen List	Description
1	1960	Numeric Operation Area	When checking numeric specified operation area
2	1961	Move/Method	When setting [Move Method] of step data
3	1964	Para protect Setting	When setting parameter protect
4	1972	Set units Setting	When setting units for parameters
5	1973	Axis	When setting axis or connect axis
6	1974	I/O Status (Serial)	When changing over to serial
7	1975	USB Access Error	When an error occurs in (Load / Save) USB access
8	1976	Step Data (can not download)	When parameter protect is "2:common"
9	1977	Parameters (can not download)	Different version between loaded parameters and controller.
10	1980	Mode Switchover Warning1	When switching to TestMode from MonitorMode
11	1981	Mode Switchover Warning2	When switching to MonitorMode from TestMode
12	1982	Get Pos 1	When [Move Method] is not set to specified STEP No.
13	1983	Get Pos 2	When changing target pos of specified STEP No.
14	1984	Get Pos 3	When specified STEP No. of [Move Method] was INC setting
15	1985	Data reread after axis switchover	When reloading STEP DATA and PARAMETER
16	1986	STEP DATA Upload	Checking whether STEP DATA Upload was completed from JXC (Controller) to Display Unit.
17	1987	STEP DATA Download	Checking whether STEP DATA Download was completed from Display Unit to JXC (Controller).
18	1988	STEP DATA Load	Checking whether STEP DATA Load was completed from USB storage to Display Unit.
19	1989	STEP DATA Save	Checking whether STEP DATA Save was completed from Display Unit to USB storage.
20	1990	PARAM Upload	Checking whether PARAMETER Upload was completed from JXC (Controller) to Display Unit.
21	1991	PARAM Download	Checking whether PARAMETER Download was completed from Display Unit to JXC (Controller).
22	1992	PARAM Load	Checking whether PARAMETER Load was completed from USB storage to Display Unit.
23	1993	PARAM Save	Checking whether PARAMETER Load was completed from Display Unit to USB storage.

5.3 Screen Transition

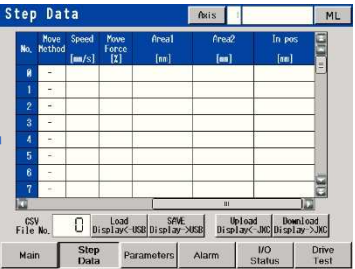
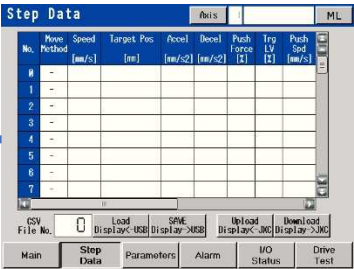
Status Monitor



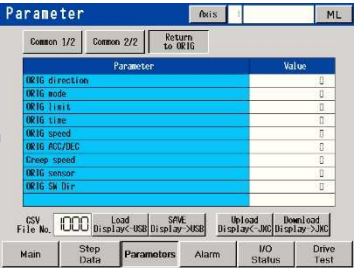
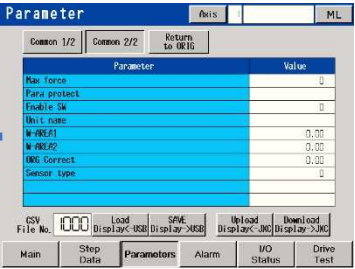
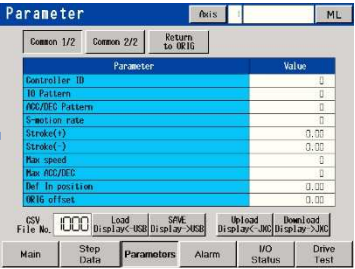
Main



Step data (2 screens)



Parameter (3 screens)



Alarm



I/O Status

**I/O Status**    ML    c LEHF100-10    Prev

**Status Monitor**

Position [mm]     Speed [mm/s]     New Force [N]     Target Posn [mm]     Step No.

**I/O Monitor (P10)**

INPUT		OUTPUT	
<input type="checkbox"/> STEP B110	<input type="checkbox"/> SETUP	<input type="checkbox"/> STEP B110	<input type="checkbox"/> BUSY
<input type="checkbox"/> STEP B111	<input type="checkbox"/> HOLD	<input type="checkbox"/> STEP B111	<input type="checkbox"/> AREA
<input type="checkbox"/> STEP B112	<input type="checkbox"/> DRIVE	<input type="checkbox"/> STEP B112	<input type="checkbox"/> CLT ON
<input type="checkbox"/> STEP B113	<input type="checkbox"/> RESET	<input type="checkbox"/> STEP B113	<input type="checkbox"/> IMP
<input type="checkbox"/> STEP B114	<input type="checkbox"/> SVON	<input type="checkbox"/> STEP B114	<input type="checkbox"/> CURE
<input type="checkbox"/> STEP B115	<input type="checkbox"/> STEP B115		

Connect axis

**Connect axis Cfg**    ML    c LEHF100-10    Back

No.	Connection	Unit Name	Version	Status	Position
1	OFF	LEHF100-10	0.00	4.96%	0.00
2	OFF	LEHF100-10	0.00	4.96%	0.00
3	OFF		0.00	4.96%	0.00
4	OFF		0.00	4.96%	0.00
5	OFF		0.00	4.96%	0.00
6	OFF		0.00	4.96%	0.00
7	OFF		0.00	4.96%	0.00
8	OFF		0.00	4.96%	0.00
9	OFF		0.00	4.96%	0.00
10	OFF		0.00	4.96%	0.00
11	OFF		0.00	4.96%	0.00
12	OFF		0.00	4.96%	0.00
13	OFF		0.00	4.96%	0.00
14	OFF		0.00	4.96%	0.00
15	OFF		0.00	4.96%	0.00
16	OFF		0.00	4.96%	0.00

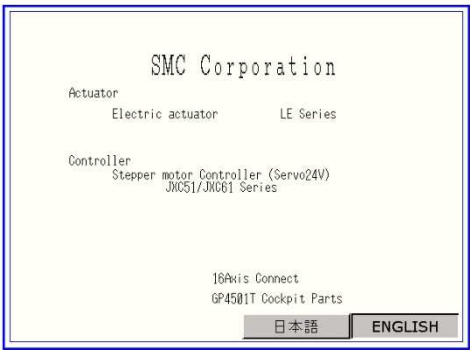
              

Figure 5-1 Screen Transition

# 6 Base Screen

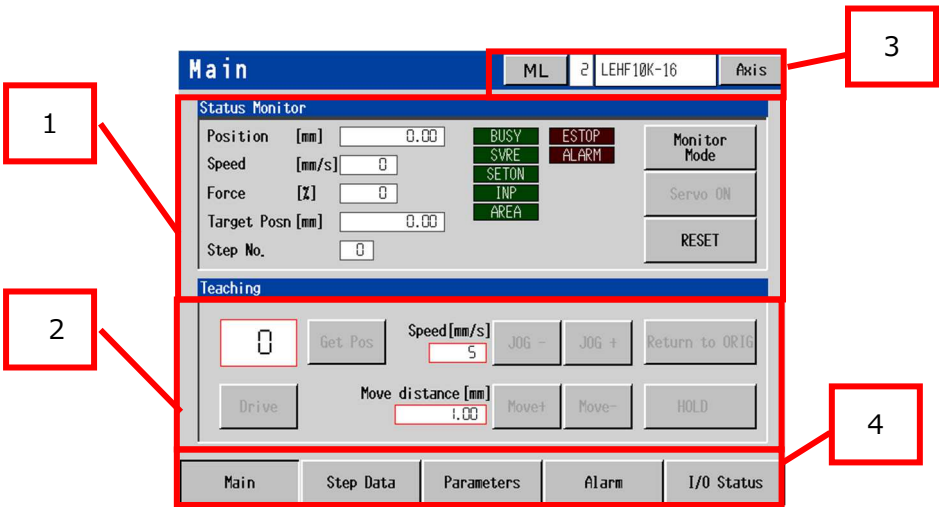
## 6.1 Status Monitor

Status monitor will display when starting up.  
Switch to “Main” 3 seconds later or if touching screen.  
Do not delete this screen because of background initialization process.



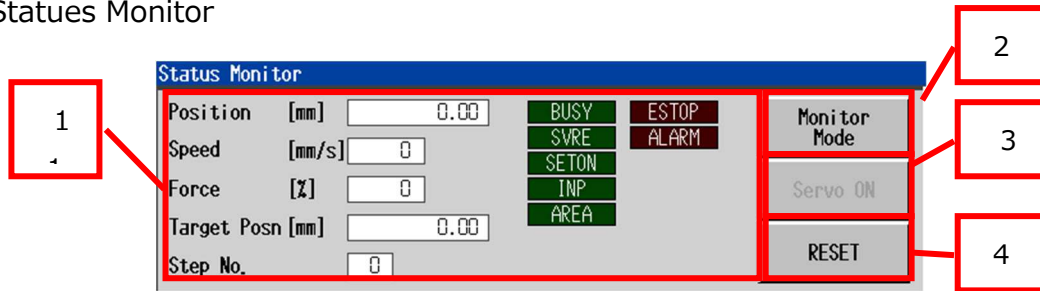
## 6.2 Main






The main actuator display status and various operations of the actuator are also performed on this screen.



No.	Item	説明
1	Status monitor	To display status information of the controller, various operations; such as MonitorMode / TestMode switchover, Servo ON operation and Alarm Reset operation can be performed.
2	Teaching	Various operations, such as Return to ORIG, JOG, move and teaching can be performed.
3	Axis	To display Window in order to switch connection axis
4	Menu	Menu switch to change screens

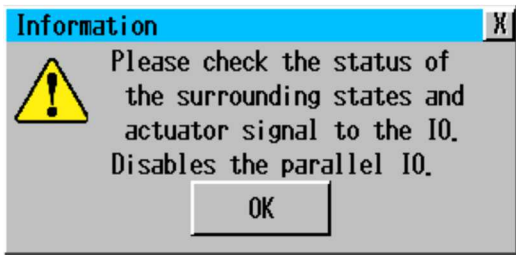
### 6.2.1 Statues Monitor



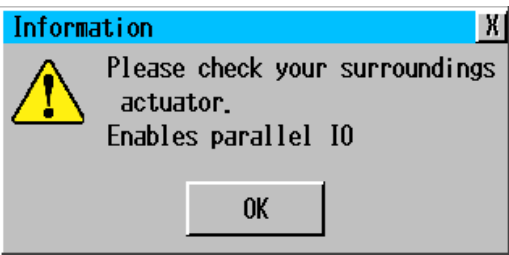
No.	Item	Description	
1	Information	Position	Display actuator position
		Speed	Display actuator speed
		Force	Display actuator force
		Target Position	Display specified target position
		Step No.	Display step NO.
		BUSY	Actuator will light up during operation
		SVRE	Lights up when servo is on
		SETON	Lights up when back in to "Return to ORIG"
		INP	Return to ORIG Lighting up within ORIG position and Def In position
			Drive Lighting up within Step Data position and In position
			Pushing Accel will be lighted up in more than threshold
		AREA	Lighting up within "Area1 to Area2" of Step Data
		ESTOP	Lights in the stop instruction by the emergency stop signal
		ALARM	Lighting up when an alarm occurs The "Alarm" switch also lights up in Menu screen
2	MonitorMode	Switch to MonitorMode and TestMode	
	TestMode		Operation from signal I / O is enabled, actuator can only be monitored from Display Unit in MonitorMode.
			Operation from signal I / O is disabled, actuator can be operated from Display Unit in TestMode.
3	Servo ON	Servo On command from Display Unit	
			Servo On switch is interlocked in MonitorMode & cannot be operated.
			Servo can be operated in TestMode when Servo is off.
			Servo can be operated in TestMode when Servo is on.
4	RESET	Reset the alarm Reset operation is possible in both MonitorMode and TestMode	

◆MonitorMode/TestMode

When switching between MonitorMode/TestMode, the following confirmation window will display.  
By selecting "OK", mode is automatically switched.

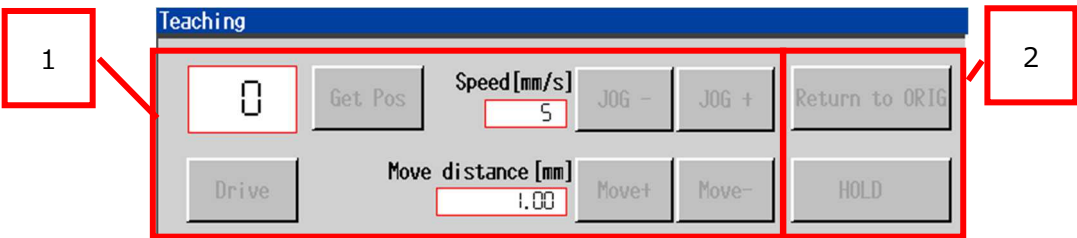


From monitor mode to test mode



From test mode to monitor mode

6.2.2 Teaching



No.	Item	Description	
1	Teaching	Step No.	Setting for Step No. of Get Pos (Teaching) and Drive. When touching a numerical number, a pop-up keyboard will be displayed.
		Get Pos	Rewriting Step Data position which is specified in Step No. when touching Get Pos switch position. Depending on specified step No., displayed confirmation window is different.
		Drive	Actuator will operate when position is specified in Step No. of step data.
		Speed	Setting JOG speed
		Move distance	Setting moving distance
		JOG-	Moving to minus direction JOG feed when holding
		JOG+	Moving to plus direction JOG feed when holding
		Move -	Moving to minus direction which has specified move distance
		Move +	Moving to plus direction which has specified move distance
2	Return to ORIG		To start Return to ORIG operation
	Hold		Suspending actuator operation when operating drive Resume by pressing again

Switches described above cannot be operated if they are not in TestMode.

(4-2-1 Status Monitor “MonitorMode/TestMode”)

#### ◆GetPos

Depending on specified step data status of Step No. confirmation window will display when pressing Get Pos switch.

- 1) If operation fails to set up "Move Method" in specified Step No.



#### [Notes]

"Target Position" in step data editing screen is not displayed because "Move Method" is not setup.

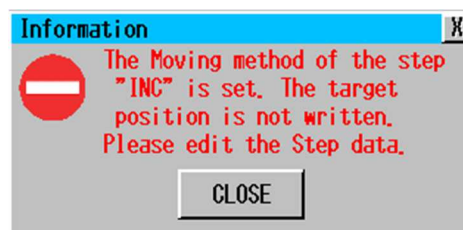
"Target position" will be displayed by setting "Move Method" in step data editing screen.

- 2) "Move Method" of specified Step No. is ABS.



"Target position" will display which has a specified Step No. and then rewrite into current "Position"

- 3) "Move Method" of specified Step No. is INC.



#### [Note]

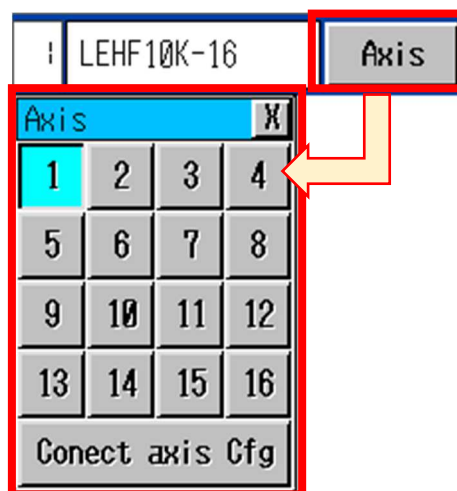
If current position is written as absolute figure with INC, it may not operate properly. You should change Step No. or "Move Method" in step data editing screen. After downloading to Controller, [Get Pos] needs to be performed in Main screen.



### 6.2.3 Axis Selection

If there is an "axis" switch at the top right corner of the screen, operation to display the axis can be switched at any time. Axis window will display, touch appropriate axis number.

Switch to setting screen by touching "Connect Axis Cfg". The axis numbers highlighted in gray are locked in order to set up interlock.



When switching to axis, Step data and Parameters will be automatically reloaded.

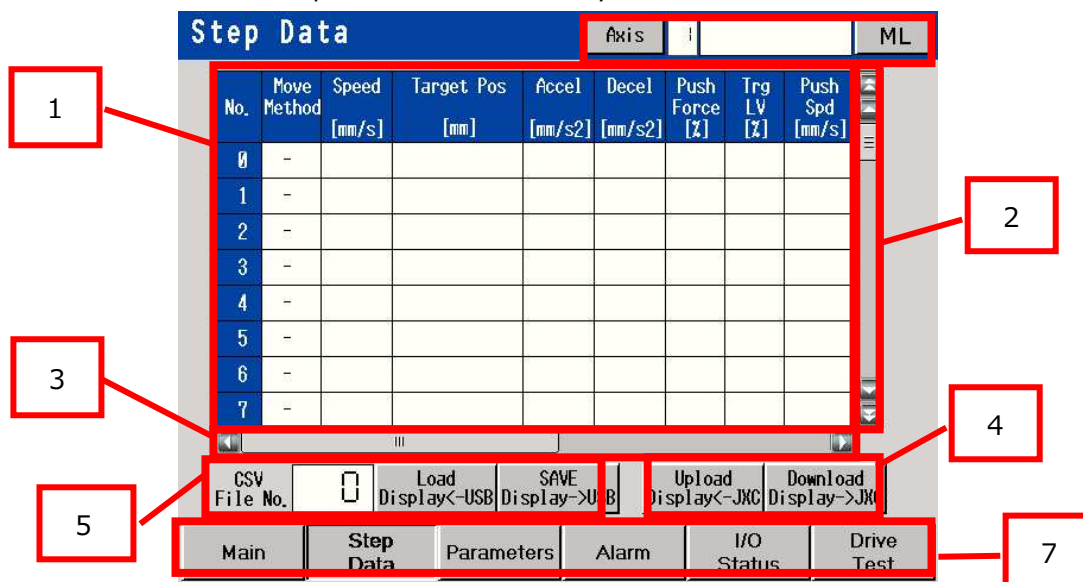
## 6.3 Step Data Screen

Editing Step data

Rather than editing data in controller directly, upload to Display Unit first and download data.

When switching to connect axis, Step data and Parameters will be automatically reloaded.

You can save and read Step data to USB memory.



No.	Item	Description	
1	Step Data	Touch the item that you want to edit, keyboard or window will display, the data can be edited.	
2	Up-down scroll	Change displayed Step No. (0 to 63) Display the step number you want to edit with the line spacing or page ejection switch.	
3	Right-left scroll	Change screens with right-left scroll. There are 12 items per Step data.	
4	Upload/ Download	Upload Display Unit ← JXC	Read Step data of controller to Display Unit's display area.
		Download Display Unit → JXC	Write edited Step data to controller on Display Unit.
5	Load/Save	CSV File No.	Specific file numbers and save/read to USB memory. Select Step data within range of 0 to 99
		Load Display Unit ← USB	Read Step data from USB memory to Display Unit's display area.
		Save Display Unit → USB	Save edited data to USB memory on Display Unit.
6	Axis	Display window to switch connect axis	
7	Menu	Menu switch to change various screens	

#### ◆Step data

Display Move Method Setting Window

If selecting “-” in “Move Method”, the rest of the categories will be hidden.

If selecting “ABS” or “INC”, the rest of the categories can be entered.

If selecting “0” in Push Force”, Trg LV” and “Push Spd” will be “0”.

No.	Move Method	Speed [mm/s]	Target Pos [mm]	Accel [mm/s <sup>2</sup> ]	Decel [mm/s <sup>2</sup> ]	Push Force [Z]	Trg LV [Z]	Push Spd [mm/s]
0	ABS	0	0.00	0	0	0	0	0
1	INC	0	0.00	0	0	0	0	0
2	ABS	0	0.00	0	0	0	0	0
3	-							
4	-							
5	-							
6	-							
7	-							

Mode Method Setting

No.	Move Method	Speed [mm/s]	Target Pos [mm]	Accel [mm/s <sup>2</sup> ]	Decel [mm/s <sup>2</sup> ]	Push Force [Z]	Trg LV [Z]	Push Spd [mm/s]
0	ABS	0	0.00	0	0	0	0	0
1	INC	0	0.00	0	0	0	0	0
2	ABS	0	0.00	0	0	0	0	0
3	-							
4	-							
5	-							
6	-							
7	-							

Value Input  
(Pop up Keyboard)

#### ◆Upload/Download

Select Upload/Download switch, the following confirmation window will be displayed.

Information

<<STEP DATA Upload(Display ← JXC)>>  
 The step data uploaded from a controller is displayed on a screen.

OK

Upload

Information

<<STEP DATA Download(Display → JXC)>>  
 The step data edited in the screens is downloaded to a controller.

OK

Download

Select “OK” to perform Upload/Download.

If "Para protect" is "2:Common" in Parameter setting, Step data cannot be written. Download switch and Load switch will not be able to operate as interlocked.



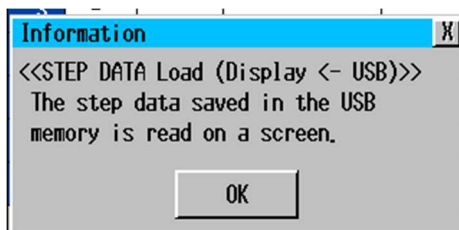
[[Note]

The limitation above operates parameter setting value in controller directly.

Even changing "2:Common" into "1:Common+StepData" in Parameter screen. Download and USB memory of Step data can be loaded because controller setting doesn't change if downloading in this screen.

#### ◆Load/Save

Select Load/Save switch, the following confirmation window will be displayed.



Load



Save

The following error message will display when specifying non-existent file numbers in USB memory when loading. When USB memory is not inserted, the following error message is also displayed.



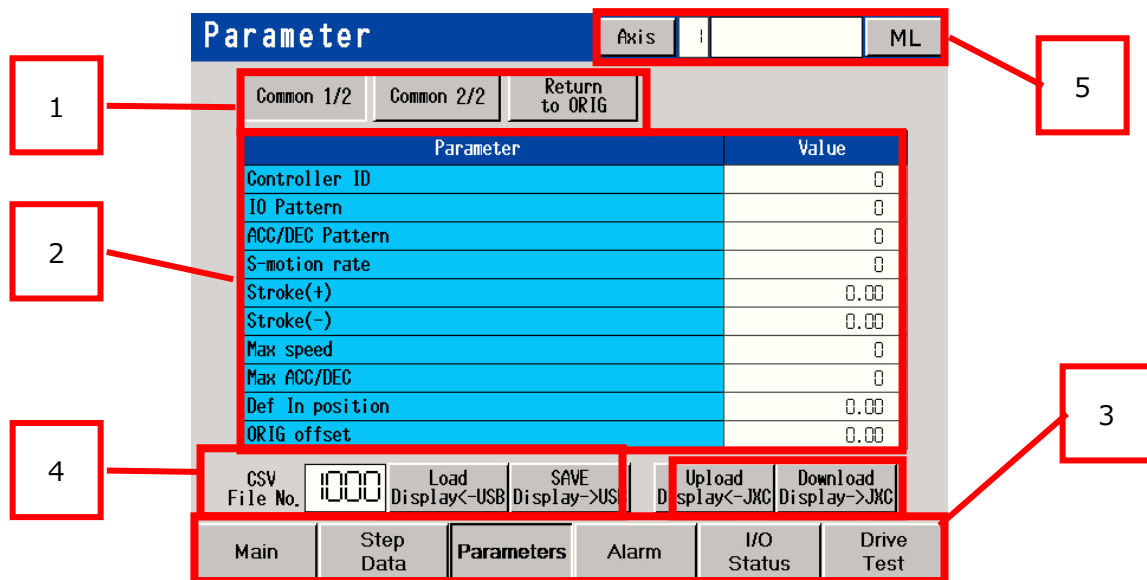
[Note]

Load/Save function can only be used with a single USB memory stick. To prevent malfunction, do

## 6.4 Parameter

Parameters edit screen

Download after editing and upload to Display Unit first, rather than editing the parameters in the controller directly. If switching connection axis, Step data and parameter will automatically start the upload. Parameter can be saved and read to USB memory.



No.	Item	Description	
1	Parameter Items	Select from "Basic 1", "Basic2", "Return to ORIG"	
2	Parameter Editing Area	Change displayed parameters Enter value with window or pop-up keyboard	
3	Upload/Download	Upload Display Unit←JXC	Read controller parameter to Display Unit's display area.
		Download Display Unit→JXC	Write displayed Parameter to controller on Display Unit.
4	Load/Save	CSV File No.	Specific file numbers and save/read to USB memory Select Parameter within 1000 to 1999
		Load Display Unit←USB	Read Parameter from USB memory to Display Unit's display area
		Save Display Unit→USB	Save edited Parameter to USB memory on Display Unit.
5	Axis	Display window to switch connect axis	
6	Menu	Menu switch to change various screens	

◆Parameters protect

Step data can be protected via "Para protect" setting in "Basic2".  
If selecting "Basic2" in Para protect set, interlock to "Download" switch in Step data screen, then Step data cannot be written to controller. Para protect can be displayed when setting except with "1:Common+StepData" or "2:Common" in value, where the setting cannot be changed.

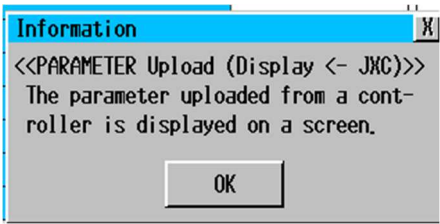
Parameter	Value
Max force	0
Para protect	1:Common+StepData
1:Common+StepData	X
2:Common	0.00
0.00	0.00
0	0

Para protect can be displayed if setting except "1:Common+StepData" or "2:Common" in value, but cannot change setting.

Protect step data

◆Upload/Download

When selecting Upload/Download switch, the following confirmation window will be displayed

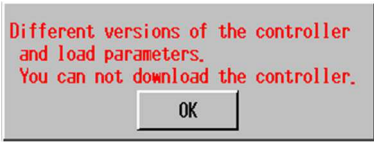


Upload



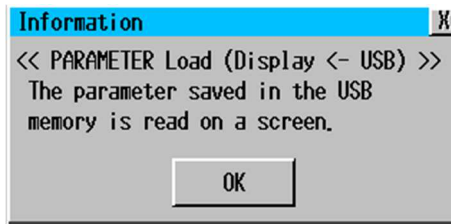
Download

Only parameter displayed on screen can be written to controller when downloading.  
If you want to change all parameters, [Download] switch of all parameter screens should be selected.  
Match the version information of the controller when loading the parameters from the USB memory. When version is different error message will be displayed, will not be able to download to controller.

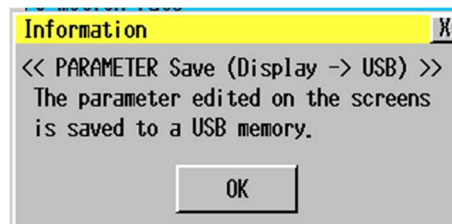


#### ◆Load/Save

When selecting Load/Save switch, the following confirmation window will be displayed.



Load



Save

The following error message will display when specifying non-existent file numbers in USB memory when loading.

When USB memory is not inserted, the following error message is also displayed.



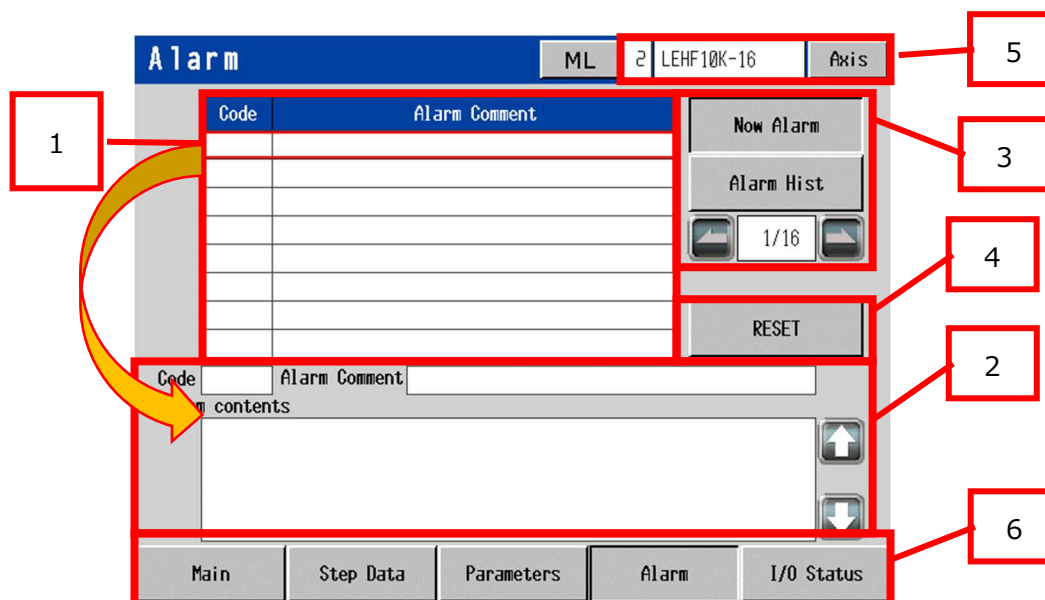
#### [Note]

Load/Save function can only be used with a single USB memory stick. To prevent malfunction, do not insert more than one USB memory device at a time.

## 6.5 Alarm

Alarm and Alarm history display when alarm Controller is triggered.

Touch the "Code" and "Alarm Comment", button to display more detailed information on the bottom screen. Alarm can be reset from Display Unit by pressing the "Reset" switch. This depends on the Alarm type as same cannot perform a reset. Refer to the "How to deactivate" which is displayed in Alarm contents.



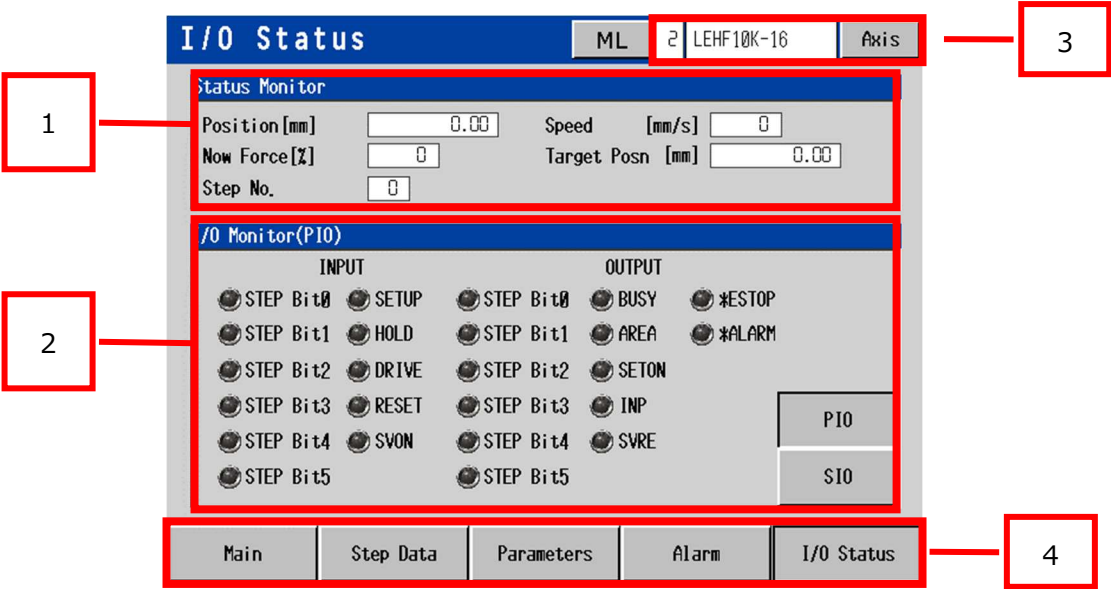
No.	Item	Description
1	Alarm list	Display "Code and "Alarm Comment"
2	Alarm contents	To display detailed information about alarm "Alarm Comment".  Go up and down by selecting "↑" "↓"  Objected alarm which displays detailed information within a red frame.
3	Alarm switchover	Switch Alarm /Alarm History Displays history of past 15 incidents by pressing "<-" , ">-" switch If 16 <sup>th</sup> alarm occurs, press "RESET" to clear.
4	RESET	Reset Alarm Reset operation is possible for both MonitorMode/TestMode
5	Axis	Display window to switch connect axis
6	Menu	Menu switch to change various screens



## 6.6 I/O Status

Display I/O status in Controller

Switch to internal status of serial input and PIO signal.

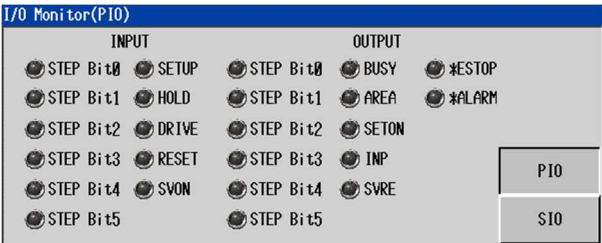


No.	Item	Description
1	Status Monitor	Display status of "Position" and "Speed"
2	I/O Monitor	Display status of I/O Monitor (PIO) Switch to internal status information when inputting serial number
3	Axis	Display window to switch connect axis
4	Menu	Menu switch to change various screens

### ◆ I/O Status Switchover

The following shows internal controller status information when inputting serial number.

(Background color will be lighter)



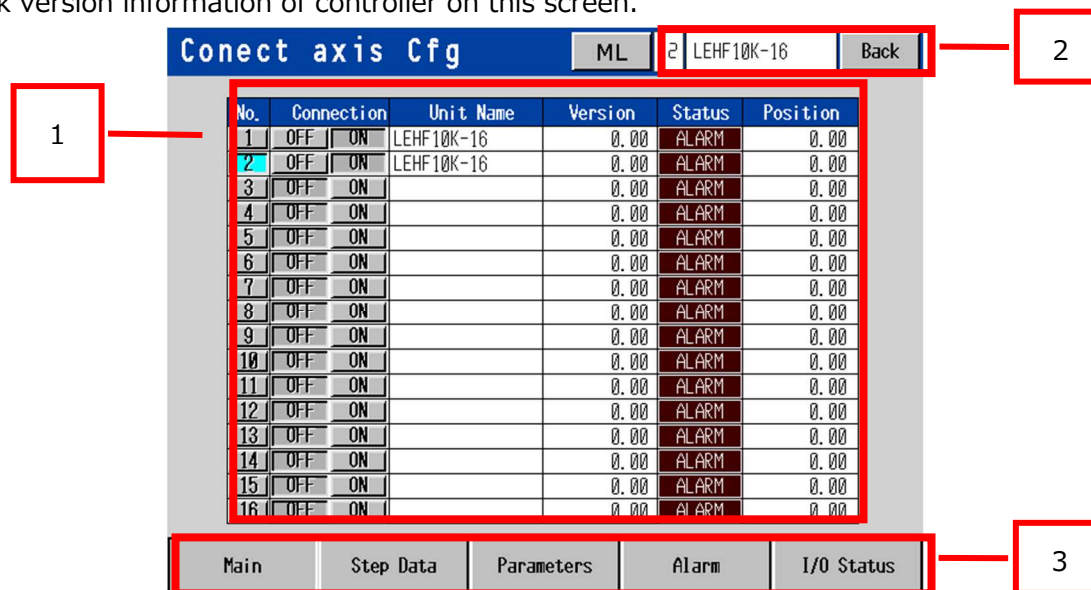
## 6.7 Connect axis configuration

Connection/Disconnection can be performed on up to 16 axis.

Switch to this screen by selecting "Connect axis Cfg" of "Axis"

Even if disconnecting Display Unit power, connection information and selected axis are saved to memory. After transferring screen data, only the first conversion will be automatically switched to this screen (because information for the selected axis is not backed up).

Check version information of controller on this screen.



No.	Item	Description
1	Connect Axis	Connection/disconnection/axis selection can be performed.
		No. selected axis current selected axis
		connect axis Axis that can be switched
		disconnection axis Axis that cannot be switched due to disconnection
		Connecting switchover Switch to ON/OFF
		Unit Name Display unit name ( connect axis only)
		Version Display version ( connect axis only)
		Status Alarm status of each axis is displayed.
		Position The current position of actuator for each axis is displayed.
2	Back	Back to previous screen
3	Menu	Menu switch to change various screens

### [Note]

If disconnected axis is turned "ON", a communication error will be displayed at the bottom of the screen. Response of touch operation will be significantly slower.

## 7 Common Setting

### 7.1 Alarm Setting

Does not use this screen.

### 7.2 Recipe Setting

Used for saving/reading "Step data" and "Parameter" to USB memory.

Using "Common Settings" - "CSV Data Transfer"- Address Operation".

Recipe Setting is handled by the D script of the step data common screen (B8701) and, parameter common screen (B8702). For more information, please refer to the Reference Manual 26.10.2.2 "For Address Action" of GP-Pro EX.

### 7.3 Text

Using "Alarm contents" of "Alarm"

Using "Common setting" – "Text"

For more information, please refer to the Reference Manual 17.6.2 "Message Display [Text Display] Settings Guide" and 17.3.1 "Changing the Displayed Text " of GP-Pro EX

## 8 Address map

### 8.1 Address

The following listed addresses are "USR" internal memory in Display Unit.

Address is read from the JXC (controller). Using work area for display, setting and operation. For the internal address of the JXC (controller), please contact SMC Corporation.

Table 8-1 Address list

Address	TYPE	Content	Notes
USR20000	Word	Software version	
USR20001	Word	Controller ID	Data (1 to 32)
USR20002	Word	IO pattern	Position point(1:64 point, 2: 128 point 3: 16 point)
USR20003	Word	ACC/DEC Pattern	1: trapezoidal ACC/DE, 2:S- ACC/DE
USR20004	Word	S-motion rate	S-motion rate (0 to 100)
USR20005	Word	Stroke(+)	position + Limit ( $\pm 21471836.47$ )
USR20006	Word		
USR20007	Word	Stroke(-)	position – Limit ( $\pm 21471836.47$ )
USR20008	Word		
USR20009	Word	Max speed	Max speed setting (1 to 65535)
USR20010	Word	Max ACC/DEC	Max ACC/DEC setting (1 to 65535)
USR20011	Word	Def In position	Position INP output range (0.01 to 1471836.47)
USR20012	Word		
USR20013	Word	ORIG offset	Limit (Z) Toward the center position after detecting ( $\pm 21471836.47$ )
USR20014	Word		
USR20015	Word	Max force	torque value while forcing (1 to 100)
USR20016	Word	Para protect	write enable level (1 to 2) 1: Common parameter + StepData 2: Common parameter only
USR20017	Word	Enable SW	1: Enable, 2: Disable
USR20018	Word	-	-
USR20019	Word	Unit name	Enter parameter unit name Max. 14 alphanumeric and numeric
USR20020	Word		
USR20021	Word		
USR20022	Word		
USR20023	Word		
USR20024	Word		
USR20025	Word		
USR20026	Word		

Address	TYPE	Content	Notes
USR20027	Word	WAREA1	Wide Area1( $\pm 21471836.47$ )
USR20028	Word		
USR20029	Word	W-AREA2	Wide Area 2( $\pm 21471836.47$ )
USR20030	Word		
USR20031	Word	ORG Correct	Gripper full stroke
USR20032	Word		
USR20033	Word	Sensor type	1: Incremental, 2: absolute (0 to 65535)
USR20034	Word	ORIG direction	1: CW, 2: CCW
USR20035	Word	ORIG mode	1: ORIG limit 2: Limit switch Return to ORIG
USR20036	Word	ORIG limit	Current detection level when returning to ORIG (1 to 100)
USR20037	Word	ORIG time	judge time when returning to ORIG (1 to 255)
USR20038	Word	ORIG speed	moving speed when returning to ORIG (1 to 65535)
USR20039	Word	ORIG ACC/DEC	ACC/DEC moving speed when returning to ORIG (1 to 65535) Including creeping
USR20040	Word	Creep speed	moving speed when returning to ORIG (1 to 65535)
USR20041	Word	ORIG sensor	0: original sensor disable, 1: a contact point, 2: b contact point
USR20042	Word	-	-
USR20043	Word	ORIG SW Dir	0: setting disable 1: F, 2: R
USR20054	Word	Unit system specified	1: Position unit system 2: Angle unit system
USR20059	Word	-	-
USR20060	Word	Setting window	Setting Window Control Word Address
USR20061	Word	Window No.	
USR20062	Word	Window display direction X	
USR20063	Word	Window display direction Y	
USR20064	Word	Axis select window	
USR20065	Word		
USR20066	Word	Axis number select	
USR2006700	Bit	temporary flag Read start window display	
USR2006701	Bit	Step data read completion	
USR2006702	Bit	Parameter read completion	

Address	TYPE	Content	Notes
USR20070	Word	Stroke(+) Min	ORIG offset
USR20071	Word		
USR20072	Word	Stroke(+) Max	Stroke(+) Max + ORIG offset
USR20073	Word		
USR20074	Word	Stroke(-) Min	Stroke(-) Min + ORIG offset
USR20075	Word		
USR20076	Word	Stroke(-) Max	ORIG offset
USR20077	Word		
USR20078	Word	ORIG offset Min	Stroke (+) - Stroke(+) Max
USR20079	Word		
USR20080	Word	ORIG offset Max	Stroke (-) - Stroke(-) Min
USR20081	Word		
USR20082	Word	Def In position Min	1
USR20083	Word		
USR20084	Word	Max. ACC/DEC Min	1
USR20085	Word		
USR20086	Word		
USR20087	Word		
USR20088	Word		
USR20089	Word		
USR20090	Word	Para protect	Display: 1 to 5 (1,2,3,100,200 supported)
USR2009100	Bit	Para protect	For Interlock
USR2020000	Bit	MonitorMode/ TestMode switchover	0=MonitorMode 1=TestMode
USR2020001	Bit	Mode switchover Warning Window1	Get Pos
USR2020002	Bit	Mode switchover Warning Window2	
USR2101000	Bit	JOG- set	JOG-
USR2101001	Bit	JOG- momentary	
USR2101002	Bit	JOG+ set	JOG+
USR2101003	Bit	JOG+ momentary	
USR2101004	Bit	Move- set	Move-
USR2101005	Bit	Move- momentary	
USR2101006	Bit	Move+ set	Move+
USR2101007	Bit	Move+ momentary	

Address	TYPE	Content	Notes
USR21020	Word	Step No.	
USR2102000	Bit	Step No. 00 bit	
USR2102001	Bit	Step No. 01 bit	
USR2102002	Bit	Step No. 02 bit	
USR2102003	Bit	Step No. 03 bit	
USR2102004	Bit	Step No. 04 bit	
USR2102005	Bit	Step No. 05 bit	
USR2102100	Bit	Step No. input completion	D-Script activation
USR2103000	Bit	Numeric operation	Window display
USR2103100	Bit	Get Pos Window control	D-Script activation
USR2103101	Bit	Get Pos Window1	Unconfigured window for import destination
USR2103102	Bit	Get Pos Window2	import destination : ABS window
USR2103103	Bit	Get Pos Window3	import destination :INC window
USR2103104	Bit	Get Pos execution	D-Script activation
USR21032	Word	Position import destination Move Method Check	0: unconfigured 1:ABS 2:INC
USR21033	Word	import destination of previous data For display	Position information of import destination
USR2103400	Bit	Step data Upload	
USR2103401	Bit	Step data Upload	D-Script activation
USR2103500	Bit	Step data Download	
USR2103501	Bit	Step data Download	D-Script activation
USR2103600	Bit	Step data move-up	
USR2103601	Bit	Step data move-up	Interlock
USR2103700	Bit	Step data move-down	
USR2103701	Bit	Step data move-down	Interlock
USR2103800	Bit	Parameter Upload	
USR2103801	Bit	Parameter Upload	D-Script activation
USR2103900	Bit	Parameter Download	
USR2103901	Bit	Parameter Download	D-Script activation

Address	TYPE	Content	Notes
USR21050	Word	STEP No. 1 line for display	
USR21051	Word	STEP No. 2 line for display	
USR21052	Word	STEP No. 3 line for display	
USR21053	Word	STEP No. 4 line for display	
USR21054	Word	STEP No. 5 line for display	
USR21055	Word	STEP No. 6 line for display	
USR21056	Word	STEP No. 7 line for display	
USR21057	Word	STEP No. 8 line for display	
USR21058	Word	STEP No. for display	for scroll Work area
USR21059	Word	STEP No. during display	for scroll detection Temporary area
USR21070	Word	Step data first line	
USR2107000	Bit	Step data first line	Interlock
USR2107100	Bit	Step data second line	Interlock
USR2107200	Bit	Step data third line	Interlock
USR2107300	Bit	Step data fourth line	Interlock
USR2107400	Bit	Step data fifth line	Interlock
USR2107500	Bit	Step data sixth line	Interlock
USR2107600	Bit	Step data seventh line	Interlock
USR2107700	Bit	Step data eighth line	Interlock
USR21100	Word	1 axis Move distance	
USR21101	Word		
USR21102	Word	2 axis Move distance	
USR21103	Word		
USR21104	Word	3 axis Move distance	
USR21105	Word		
USR21106	Word	4 axis Move distance	
USR21107	Word		
USR21108	Word	5 axis Move distance	
USR21109	Word		
USR21110	Word	6 axis Move distance	
USR21111	Word		
USR21112	Word	7 axis Move distance	
USR21113	Word		
USR21114	Word	8 axis Move distance	
USR21115	Word		



Address	TYPE	Content	Notes
USR21116	Word	9 axis Move distance	
USR21117	Word		
USR21118	Word	10 axis Move distance	
USR21119	Word		
USR21120	Word	11 axis Move distance	
USR21121	Word		
USR21122	Word	12 axis Move distance	
USR21123	Word		
USR21124	Word	13 axis Move distance	
USR21125	Word		
USR21126	Word	14 axis Move distance	
USR21127	Word		
USR21128	Word	15 axis Move distance	
USR21129	Word		
USR21130	Word	16 axis Move distance	
USR21131	Word		
USR21164	Word	Move distance offset	
USR21200	Word	Move distance	
USR21201	Word		
USR2120200	Bit	Move distance change completion	
USR22000	Word	Parameter switchover	
USR2200000	Bit	Parameter switchover	
USR2200001	Bit	Parameter switchover	
USR2200002	Bit	Parameter switchover	
USR22010	Word	Menu switch	
USR2201000	Bit	Menu switch	
USR2201001	Bit	Menu switch	
USR2201002	Bit	Menu switch	
USR2201003	Bit	Menu switch	
USR2201004	Bit	Menu switch	
USR22020	Word	Step data	Within window Step No. for display

Address	TYPE	Content	Notes
USR23000	Word	STEP00 Move Method	STEP DATA
USR23001	Word	STEP00 speed	
USR23002	Word	STEP00 position	
USR23003	Word		
USR23004	Word	STEP00 Acceleration	
USR23005	Word	STEP00 Deceleration	
USR23006	Word	STEP00 Accel	
USR23007	Word	STEP00 Decel	
USR23008	Word	STEP00 PushingSp	
USR23009	Word	STEP00 IN pos	
USR23010	Word	STEP00 Area1	
USR23011	Word		
USR23012	Word	STEP00 Area2	
USR23013	Word		
USR23014	Word	STEP00 In pos	
USR23015	Word		
USR23016 ~ USR23511	Word	STEP01 to STEP31	
USR23512 ~ USR24023	Word	STEP32 to STEP63	

Address	TYPE	Content	Notes
USR25000	Word	0 line Move Method	STEP DATA display/editing area 0 line
USR25001	Word	0 line Speed	
USR25002	Word	0 line Position (L)	
USR25003	Word	0 line Position (H)	
USR25004	Word	0 line Accel	
USR25005	Word	0 line Decel	
USR25006	Word	0 line Accel	
USR25007	Word	0 line Decel	
USR25008	Word	0 line PushingSp	
USR25009	Word	0 line Accel	
USR25010	Word	0 line Area1(L)	
USR25011	Word	0 line Area1(H)	
USR25012	Word	0 line Area2(L)	
USR25013	Word	0 line Area2(H)	
USR25014	Word	0 line In pos (L)	
USR25015	Word	0 line In pos (H)	
USR25016	Word	1st line Move Method	STEP DATA display/editing area 1st line
USR25017	Word	1st line speed	
USR25018	Word	1st line Position (L)	
USR25019	Word	1st line Position (H)	
USR25020	Word	1st line Accel	
USR25021	Word	1st line Decel	
USR25022	Word	1st line Accel	
USR25023	Word	1st line Decel	
USR25024	Word	1st line PushingSp	
USR25025	Word	1st line Accel	
USR25026	Word	1st line Area1(L)	

Address	TYPE	Content	Notes
USR25027	Word	1st line Area1(H)	STEP DATA display/editing area 1st line
USR25028	Word	1st line Area2(L)	
USR25029	Word	1st line Area2(H)	
USR25030	Word	1st line In pos (L)	
USR25031	Word	1st line In pos (H)	
USR25032	Word	2nd line Move Method	STEP DATA display/editing area 2nd line
USR25033	Word	2nd line speed	
USR25034	Word	2nd line Position (L)	
USR25035	Word	2nd line Position (H)	
USR25036	Word	2nd line Accel	
USR25037	Word	2nd line Decel	
USR25038	Word	2nd line Accel	
USR25039	Word	2nd line Decel	
USR25040	Word	2nd line PushingSp	
USR25041	Word	2nd line Accel	
USR25042	Word	2nd line Area1(L)	
USR25043	Word	2nd line Area1(H)	
USR25044	Word	2nd line Area2(L)	
USR25045	Word	2nd line Area2(H)	
USR25046	Word	2nd line In pos (L)	
USR25047	Word	2nd line In pos (H)	
USR25048	Word	3rd line Move Method	STEP DATA display/editing area 3rd line
USR25049	Word	3rd line speed	
USR25050	Word	3rd line Position (L)	
USR25051	Word	3rd line Position (H)	
USR25052	Word	3rd line Accel	
USR25053	Word	3rd line Decel	
USR25054	Word	3rd line Accel	
USR25055	Word	3rd line Decel	
USR25056	Word	3rd line PushingSp	
USR25057	Word	3rd line Accel	
USR25058	Word	3rd line Area1(L)	
USR25059	Word	3rd line Area1(H)	
USR25060	Word	3rd line Area2(L)	
USR25061	Word	3rd line Area2(H)	

Address	TYPE	Content	Notes
USR25062	Word	3rd line In pos (L)	
USR25063	Word	3rd line In pos (H)	
USR25064	Word	4th line Move Method	STEP DATA display/editing area 4th line
USR25065	Word	4th line speed	
USR25066	Word	4th line Position (L)	
USR25067	Word	4th line Position (H)	
USR25068	Word	4th line Accel	
USR25069	Word	4th line Decel	
USR25070	Word	4th line Accel	
USR25071	Word	4th line Decel	
USR25072	Word	4th line PushingSp	
USR25073	Word	4th line Accel	
USR25074	Word	4th Area1(L)	
USR25075	Word	4th Area1(H)	
USR25076	Word	4th Area2(L)	
USR25077	Word	4th Area2(H)	
USR25078	Word	4th In pos (L)	
USR25079	Word	4th line In pos(H)	
USR25080	Word	5th line Move Method	STEP DATA display/editing area 5th line
USR25081	Word	5th line speed	
USR25082	Word	5th line Position (L)	
USR25083	Word	5th line Position (H)	
USR25084	Word	5th line Accel	
USR25085	Word	5th line Decel	
USR25086	Word	5th line Accel	
USR25087	Word	5th line Decel	
USR25088	Word	5th line PushingSp	
USR25089	Word	5th Accel	
USR25090	Word	5th line Area1(L)	
USR25091	Word	5th line Area1(H)	
USR25092	Word	5th line Area2(L)	
USR25093	Word	5th line Area2(H)	
USR25094	Word	5th line In pos (L)	
USR25095	Word	5th line In pos (H)	

Address	TYPE	Content	Notes
USR25096	Word	6th line Move Method	STEP DATA display/editing area 6th line
USR25097	Word	6th line speed	
USR25098	Word	6th line Position (L)	
USR25099	Word	6th line Position (H)	
USR25100	Word	6th line Accel	
USR25101	Word	6th line Decel	
USR25102	Word	6th line Accel	
USR25103	Word	6th line Decel	
USR25104	Word	6th line PushingSp	
USR25105	Word	6th line Accel	
USR25106	Word	6th line Area1(L)	
USR25107	Word	6th line Area1(H)	
USR25108	Word	6th line Area2(L)	
USR25109	Word	6th line Area2(H)	
USR25110	Word	6th line In pos (L)	
USR25111	Word	6th line In pos (H)	
USR25112	Word	7th line Move Method	STEP DATA display/editing area 7th line
USR25113	Word	7th line speed	
USR25114	Word	7th line Position (L)	
USR25115	Word	7th line Position (H)	
USR25116	Word	7th line Accel	
USR25117	Word	7th line Decel	
USR25118	Word	7th line Accel	
USR25119	Word	7th line Decel	
USR25120	Word	7th line PushingSp	
USR25121	Word	7th line Accel	
USR25122	Word	7th line Area1(L)	
USR25123	Word	7th line Area1(H)	
USR25124	Word	7th line Area2(L)	
USR25125	Word	7th line Area2(H)	
USR25126	Word	7th line In pos (L)	
USR25127	Word	7th line In pos (H)	

Address	TYPE	Content	Notes
USR25200	Word	Speed	speed Min
USR25201	Word		speed Max
USR25202	Word	Work Area	operating condition =ABS: Position Min
USR25203	Word		
USR25204	Word		operating condition =ABS: Position Max
USR25205	Word		
USR25206	Word		operating condition =INC: Position Min
USR25207	Word		
USR25208	Word		operating condition =INC: Position Max
USR25209	Word		
USR25210	Word	Position	Position 0 Min
USR25211	Word		
USR25212	Word		Position 0 Max
USR25213	Word		
USR25214	Word		Position 1 Min
USR25215	Word		
USR25216	Word		Position 1 Max
USR25217	Word		
USR25218	Word		Position 2 Min
USR25219	Word		
USR25220	Word		Position 2 Max
USR25221	Word		
USR25222	Word		Position 3 Min
USR25223	Word		
USR25224	Word		Position 3 Max
USR25225	Word		
USR25226	Word		Position 4 Min
USR25227	Word		
USR25228	Word		Position 4 Max
USR25229	Word		
USR25230	Word		Position 5 Min
USR25231	Word		
USR25232	Word		Position 5 Max
USR25233	Word		

Address	TYPE	Content	Notes
USR25234	Word	Position	Position 6 Min
USR25235	Word		
USR25236	Word		Position 6 Max
USR25237	Word		
USR25238	Word		Position 7 Min
USR25239	Word		
USR25240	Word		Position 7 Max
USR25241	Word		
USR25242	Word	ACC/DEC	Acceleration Min
USR25243	Word		Acceleration Max
USR25244	Word	Accel	Accel Min
USR25245	Word		Accel Max
USR25246	Word	Decel	Decel Min
USR25247	Word		Decel Max0
USR25248	Word		Decel Max1
USR25249	Word		Decel Max2
USR25250	Word		Decel Max3
USR25251	Word		Decel Max4
USR25252	Word		Decel Max5
USR25253	Word		Decel Max6
USR25254	Word		Decel Max7
USR25255	Word	PushingSp	PushingSp Min
USR25256	Word		PushingSp Max
USR25257	Word	MovingF	MovingF Min
USR25258	Word		MovingF Max
USR25259	Word	-	-



Address	TYPE	Content	Notes
USR25260	Word	Area 1	Area Min
USR25261	Word		
USR25262	Word		Area Max0
USR25263	Word		
USR25264	Word		Area Max1
USR25265	Word		
USR25266	Word		Area Max2
USR25267	Word		
USR25268	Word		Area Max3
USR25269	Word		
USR25270	Word		Area Max4
USR25271	Word		
USR25272	Word		Area Max5
USR25273	Word		
USR25274	Word		Area Max6
USR25275	Word		
USR25276	Word		Area Max7
USR25277	Word		
USR25278	Word	Area 2	Area Min0
USR25279	Word		
USR25280	Word		Area Min1
USR25281	Word		
USR25282	Word		Area Min2
USR25283	Word		
USR25284	Word		Area Min3
USR25285	Word		
USR25286	Word		Area Min4
USR25287	Word		
USR25288	Word		Area Min5
USR25289	Word		
USR25290	Word		Area Min6
USR25291	Word		
USR25292	Word		Area Min7
USR25293	Word		
USR25294	Word		Area Max
USR25295	Word		

Address	TYPE	Content	Notes
USR25296	Word	In pos	In pos Min
USR25297	Word		
USR25298	Word		In pos Max
USR25299	Word		
USR2530000	Bit	Decel interlock	Decel interlock
USR2530001	Bit		
USR2530002	Bit		
USR2530003	Bit		
USR2530004	Bit		
USR2530005	Bit		
USR2530006	Bit		
USR2530007	Bit		
USR2540000	Bit	Input completion Bit	Will be ON if editing STEP Data
USR2540001	Bit	Move Method change Bit	Will be ON if changing Move Method
USR25500	Word	Move Method Setting Window	Move Method Setting Window Control Word Address
USR25501	Word	Window No.	
USR25502	Word	Window Display PositionX	
USR25503	Word	Window Display PositionY	
USR25504	Word	Move Method lines	
USR25505	Word	Move Method STEP No.	
USR25506	Word	Move Method selection	0:none, 1:ABS, 2:INC temporary
USR25507	Word	Move Method original data	
USR25600	Word	CSV Data Transfer	Control
USR25601	Word		Status
USR25602	Word		File No.
USR25603	Word		Mode
USR25604	Word		Address Mode
USR25605	Word		Device Code
USR25606	Word		Address Code
USR25607	Word		
USR25608	Word		Data

Address	TYPE	Content	Notes
USR25609	Word	CSV Data Transfer	Reserved Area
USR25610	Word		
USR25611	Word		
USR25612	Word		
USR25613	Word		
USR25614	Word		
USR25615	Word		
USR2561600	Bit	STEP DATA Load	Window
USR2561601	Bit		D-Script Activation
USR2561602	Bit	STEP DATA Save	Window
USR2561603	Bit		D-Script Activation
USR2561604	Bit	-	-
USR2561605	Bit	-	-
USR2561606	Bit	Parameter Load	Window
USR2561607	Bit	D-Script Activation	
USR2561608	Bit	Parameter Save	Window
USR2561609	Bit	D-Script Activation	
USR25617	Word	CSV Data Transfer ErrCode	Results of CSV data transfer Will be Error Code if an error occurs
USR2561800	Bit	Error Display Window	
USR2561900	Bit	STEP DATA Download Interlock	STEP DATA Download Interlock Bit
USR2561901	Bit	STEP DATA Protect Window	STEP DATA Download Protect Window
USR2562000	Bit	Parameter Download Interlock	Parameter Download Interlock Bit
USR2562001	Bit	Parameter Protect Window	Parameter Download Protect Window
USR2570000	Bit	Unit system (for display)	0: position unit system 1: angle unit system
USR25701	Word	Unit system (for display)	0: position unit system 1: angle unit system

Address	TYPE	Content	Notes
USR25800	Word	Alarm 1	Alarm List Display Area
USR25801	Word	Alarm 2	
USR25802	Word	Alarm 3	
USR25803	Word	Alarm 4	
USR25804	Word	Alarm 5	
USR25805	Word	Alarm 6	
USR25806	Word	Alarm 7	
USR25807	Word	Alarm 8	
USR2580800	Bit	During occurring Alarm/Alarm History changeover Bit	OFF: Alarm ON: Alarm History
USR2580801	Bit	Bit for details display	Will be "ON" when switching display or switching alarm history page
USR25809	Word	Alarm History Offset	
USR25810	Word	Alarm text No.	Alarm Comment text No.=1
USR25811	Word	Alarm Text Display Line Number Storage	Move a red frame
USR2580800	Bit	During occurring Alarm/Alarm History changeover Bit	OFF: Alarm ON: Alarm History
USR2580801	Bit	Bit for display details	Will be "ON" when switching display or switching alarm history page
USR25809	Word	Alarm History Offset	
USR25810	Word	Alarm text No.	Alarm Comment text No.=1
USR25811	Word	Alarm Text Display Line Number Storage	Move a red frame
USR25820	Word	Alarm Code	Alarm Code (detail) Alarm No.
USR25821	Word	Alarm Code	Alarm Code (detail) Alarm No.
USR25822	Word	Alarm Code	Alarm Code (detail) start line
USR28000	Word	For axis	1 to 16