

SuperSEL Language

Our PSEL/ASEL/SSEL/XSEL controllers control actuator operation and communications, etc. using programs that have been prepared using the SuperSEL language.

The SuperSEL language is the simplest of the numerous robotic languages.

SuperSEL adeptly solves the difficult question of “realizing a high level of control with a simple language.”

SuperSEL has a step-wise structure in which commands are entered in operation sequence, which are then executed in sequence from step 1, making it extremely easy to understand, even for a novice.

The SuperSEL language has two types of data: “program data,” which runs commands to move the various axes and commands to performed external communications, and “position data,” which records the positions to which the various axes are moved.

Program data can be entered as up to 9,999 command steps, which can be divided into 128 programs.

Position data can be registered for up to 20,000 positions, with 3 axes worth of position data for each position. (These maximum values are different depending on each controller, for details please refer to the catalog page for each controller.)

When each of the axes is moved, the motion command in the program data designates the number of position data, and it is moved to the position registered in the position data.

● Program Data

No.	B	E	N	Cnd	Cmd	Operand 1	Operand 2
1					HOME	100	
2					HOME	11	
3					VEL	200	
4					WTON	1	
5					MOVL	1	
6					BTON	301	
7					WTON	2	
8					BTOF	301	
9					MOVL	2	
10					BTON	302	

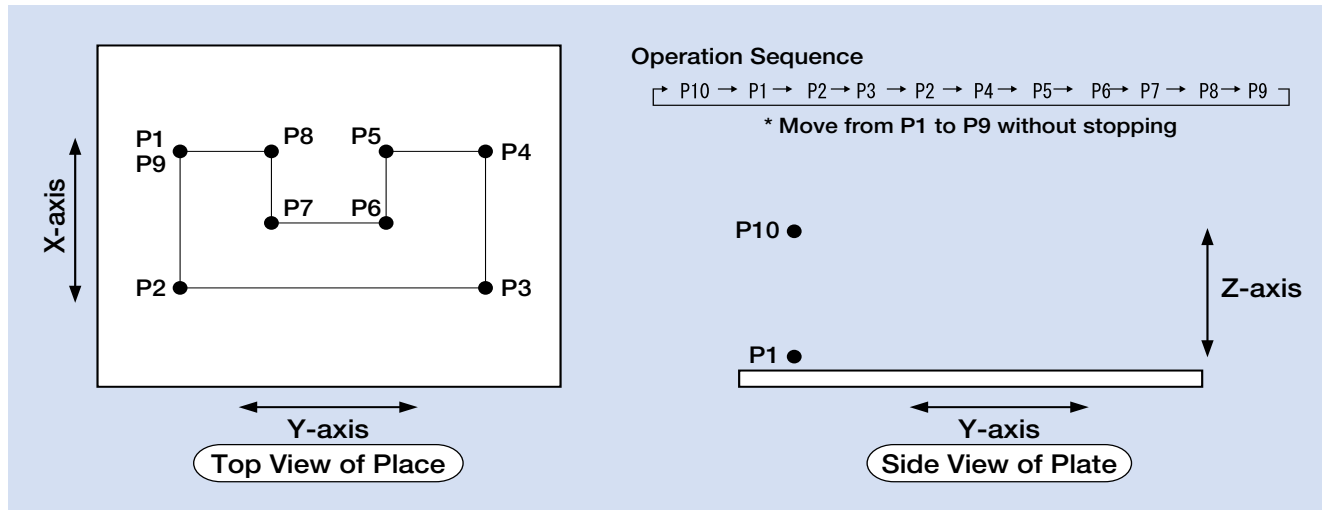
● Position Data

No.	Axis1	Axis2	Axis3	Vel
1	10.000	150.000	50.000	
2	20.000	140.000	50.000	
3	30.000	150.000	50.000	
4	40.000	140.000	50.000	
5	40.000	110.000	50.000	
6	30.000	100.000	50.000	



Operation Summary

Apply sealant to a plate along the path shown in the figure below.
 Continuous movement is performed along a path from position 1 to position 9, without stopping.



Position Data

	X-axis	Y-axis	Z-axis
P1	10	150	50
P2	40	150	50
P3	40	70	50
P4	10	70	50
P5	10	90	50
P6	20	90	50
P7	20	130	50
P8	10	130	50
P9	10	150	50
P10	10	150	0

Program

Step	Extension Condition	Input Condition	Command	Operation 1	Operation 2	Output Condition	Comment
1			HOME	100			Homing on Z-axis only
2			HOME	11			Homing on XY axes
3			VEL	100			Set speed to 100mm/sec
4			ACC	0.3			Set acceleration to 0.3G
5			TAG	1			Destination of GOTO1 in step 11
6			WTON	16			Stop until input 16 from the start button
7			MOVP	10			Move to space above Position 1 (i.e. Position 10)
8			MOVP	1			Move (down) to Position 1
9			PATH	2			With position 1 as base point, move continuously to position 9
10			MOVP	10	9		Move to space above Position 1 (i.e. Position 10)
11			GOTO	1			Jump to TAG1