

CJ1W-NC□□

Position control units

High-speed, High-precision positioning with 1, 2, or 4 axes

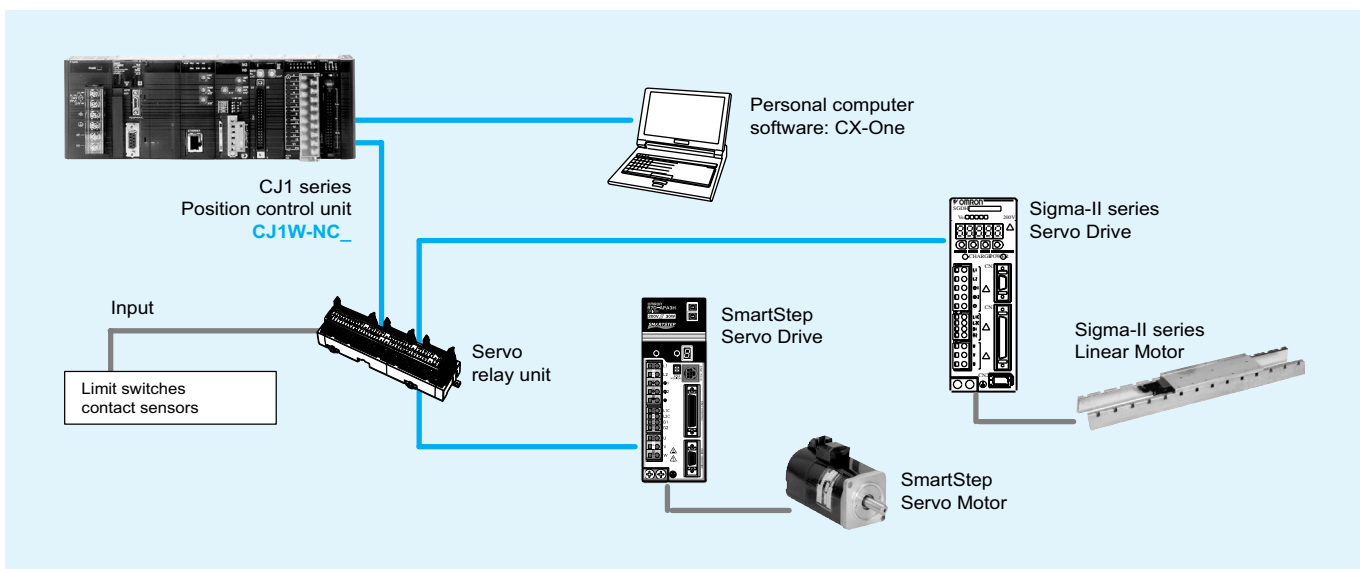
- Positioning can done by direct ladder commands
- Position and speed control
- Linear interpolation
- Interrupt feeding function
- Positioning of 100 points done from memory
- S-curve acceleration/deceleration, origin search, backlash compensation, and other features are also supported.
- Positioning data is saved in internal flash memory, eliminating the need to maintain a backup battery.
- Use Windows-based support software (CX-position) to easily create positioning data and store data and parameters in files.



Function

These position control units support positioning control via pulse-train outputs. Positioning is performed using trapezoidal or S-curve acceleration and deceleration. Models are available with 1, 2, or 4 axes control, and can be used in combination with servo drives or stepping motors that accept pulse-train control.

System configuration



Specifications

Model	CJ1W-NC113 CJ1W-NC133	CJ1W-NC213 CJ1W-NC233	CJ1W-NC413 CJ1W-NC433
Unit name	Position control unit		
Classification	Special I/O unit		
Unit numbers	0 to 95		0 to 94
Control method	Open-loop control by pulse train output		
Control output interface	CJ1W-NC□13: Open-collector output CJ1W-NC□33: Line-driver output		
Controlled axes	1	2	4
Operating modes	Direct operation or memory operation		
Data format	Binary (hexadecimal)		
Affect on scan time for end refresh	0.29 to 0.41 ms max./unit		
Affect on scan time for IOWR/IORD	0.6 to 0.7 ms max./instructions		
Startup time	2 ms max. (refer to operation manual for conditions)		
Position data	-1,073,741,823 to +1,073,741,823 pulses		
No. of positions	100 per axis		
Speed data	1 to 500 kpps (in 1 pps units)		
No. of speeds	100 per axis		
Acceleration/deceleration times	0 to 250 s (time to max. speed)		
Acceleration/deceleration curves	Trapezoidal or S-curve		
Saving data in CPU	Flash memory		
Windows-based support software	CX-position (WS02-NCTC1-E)		
Ambient operating temperature	0 to 55 °C		0 to 50 °C
External power supply	24 VDC ±10%, 5 VDC ±5% (line driver only)		24 VDC ±5%, 5 VDC ±5% (line driver only)

Ordering information

Position control unit

Name	Model
1 axis position control unit. Open-collector output.	CJ1W-NC113
2 axes position control unit. Open-collector output.	CJ1W-NC213
4 axes position control unit. Open-collector output.	CJ1W-NC413
1 axis position control unit. Line-driver output.	CJ1W-NC133
2 axes position control unit. Line-driver output.	CJ1W-NC233
4 axes position control unit. Line-driver output.	CJ1W-NC433

Servo drive cables

Note: Refer the selected servo systems section for cable and servo relay units information.

Computer software

Specifications	Model
CX-One	CX-One

ALL DIMENSIONS SHOWN ARE IN MILLIMETERS.
To convert millimeters into inches, multiply by 0.03937. To convert grams into ounces, multiply by 0.03527.