



**Reduce servo drive setting and replacement work at changeover, maintenance, and operation times.**

## Issue 1

Operation rates are low due to the time-consuming changes of servo drive settings.

## Issue 2

Operation became unstable due to changing settings. It takes time to restore to default or previous settings by using old version files to stabilize operation.

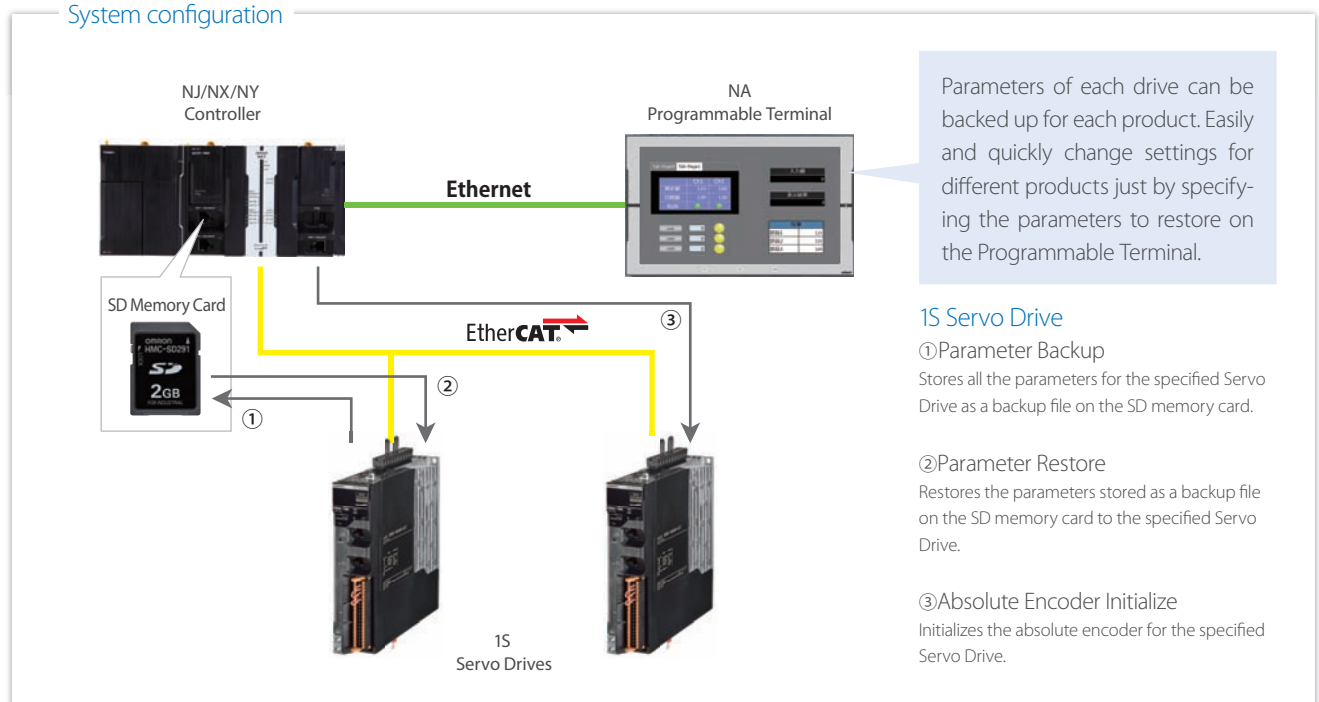
## Issue 3

When a broken device is replaced, a PC is required to change parameters.

## EtherCAT 1S Series Library offers solution!

The Parameter Backup Function Block backs up the parameters for each servo drive individually\* (upload settings from the servo drive), and the Parameter Restore Function Block restores them individually (download settings to the servo drive), without connecting to a PC. You can easily change and recover servo drive settings. The Absolute Encoder Initialize Function Block initializes each absolute encoder individually.

### System configuration

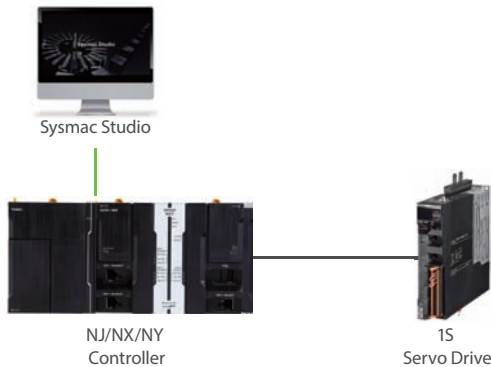


\* The Backup and Restore functions of the NJ/NX CPU Unit and the NY IPC Machine Controller can back up and restore the parameters for all the nodes at once. The addition of this library allows you to back up and restore the parameters for each node individually.

## Changing servo drive settings

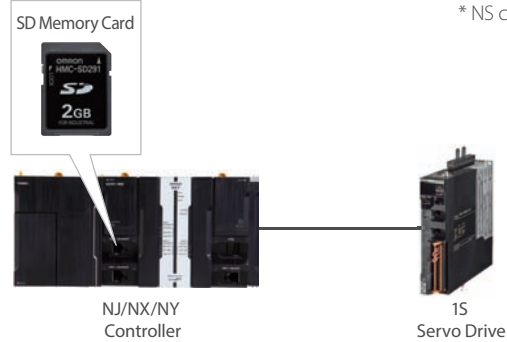
### From

Setting software (Sysmac Studio) is used to change settings.



### To

The NA/NS Programmable Terminal and push buttons are used as triggers to back up parameters on the SD memory card, restore them from the SD memory card, and initialize the absolute encoder. \*




\* NS cannot be connected to NY.

## Compatible Models

Name	Model	Version
Machine Automation Controller NJ/NX CPU Unit	NX701-□□□□/NJ101-□□□□	Version 1.10 or later
	NJ501-□□□□/NJ301-□□□□	Version 1.01 or later
	NX1P2-□□□□□□(1)	Version 1.13 or later
Industrial PC Platform NY IPC Machine Controller	NY5□□-1	Version 1.12 or later
Automation Software Sysmac Studio	SYSMAC-SE2□□□	Version 1.16 or higher
1S Servo Drive with Built-in EtherCAT Communications	R88D-1SN□-ECT	Version 1.00 or later
SD Memory Card	HMC-SD□□□	—

## Function Block (FB) Specifications

Name	FB name	Description
1S-series Servo Drive Parameter Backup	Backup_1S	Backs up the parameters for a 1S Servo Drive and stores them as a backup file on the SD memory card inserted in the controller.
1S-series Servo Drive Parameter Restore	Restore_1S	Restores the backup file created by the Backup_1S Function Block on the SD memory card inserted in the controller to a 1S Servo Drive.
1S-series Servo Drive Absolute Encoder Initialize	InitEncoder_1S	Initializes the absolute encoder (clears the multi-rotation counter for the absolute encoder) for a 1S Servo Drive.

Sysmac is a trademark or registered trademark of OMRON Corporation in Japan and other countries for OMRON factory automation products. EtherCAT® is registered trademark and patented technology, licensed by Beckhoff Automation GmbH, Germany. The SD logo is a trademark of SD-3C, LLC.  Other company names and product names in this document are the trademarks or registered trademarks of their respective companies.

Note: Do not use this document to operate the Unit.

**OMRON Corporation** Industrial Automation Company  
Kyoto, JAPAN

Contact: [www.ia.omron.com](http://www.ia.omron.com)

#### Regional Headquarters

**OMRON EUROPE B.V.**  
Wegalaan 67-69, 2132 JD Hoofddorp  
The Netherlands  
Tel: (31)2356-81-300/Fax: (31)2356-81-388

**OMRON ELECTRONICS LLC**  
2895 Greenspoint Parkway, Suite 200  
Hoffman Estates, IL 60169 U.S.A.  
Tel: (1) 847-843-7900/Fax: (1) 847-843-7787

**OMRON ASIA PACIFIC PTE. LTD.**  
No. 438A Alexandra Road # 05-05/08 (Lobby 2),  
Alexandra Technopark,  
Singapore 119967  
Tel: (65) 6835-3011/Fax: (65) 6835-2711

**OMRON (CHINA) CO., LTD.**  
Room 2211, Bank of China Tower,  
200 Yin Cheng Zhong Road,  
PuDong New Area, Shanghai, 200120, China  
Tel: (86) 21-5037-2222/Fax: (86) 21-5037-2200

#### Authorized Distributor:

© OMRON Corporation 2016 All Rights Reserved.  
In the interest of product improvement,  
specifications are subject to change without notice.  
CSM\_2\_1\_1116

Cat. No. P110-E1-01

0516(0516)