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SYSMAC WS02-NSFC1-E

Face Plate Auto-Builder for NS
(Ver. 1.1)

SETUP MANUAL

OMRON


WS02-NSFC1-E
Face Plate Auto-Builder for NS
(Ver.1.1)
Setup Manual


Produced February 2003


Notice:

OMRON products are manufactured for use according to proper procedures by a qualified operator and only for the purposes described in this manual.

The following conventions are used to indicate and classify precautions in this manual. Always heed the information provided with them. Failure to heed precautions can result in injury to people or damage to property.

 **DANGER** Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.

 **WARNING** Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

 **Caution** Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury, or property damage.

OMRON Product References

All OMRON products are capitalized in this manual. The word “Unit” is also capitalized when it refers to an OMRON product, regardless of whether or not it appears in the proper name of the product.

The abbreviation “Ch,” which appears in some displays and on some OMRON products, often means “word” and is abbreviated “Wd” in documentation in this sense.

The abbreviation “PLC” means Programmable Controller. “PC” is used, however, in some Programming Device displays to mean Programmable Controller.

Visual Aids

The following headings appear in the left column of the manual to help you locate different types of information.

Note Indicates information of particular interest for efficient and convenient operation of the product.

1,2,3... 1. Indicates lists of one sort or another, such as procedures, checklists, etc.

OMRON, 2003

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No patent liability is assumed with respect to the use of the information contained herein. Moreover, because OMRON is constantly striving to improve its high-quality products, the information contained in this manual is subject to change without notice. Every precaution has been taken in the preparation of this manual. Nevertheless, OMRON assumes no responsibility for errors or omissions. Neither is any liability assumed for damages resulting from the use of the information contained in this publication.

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About this Manual:

This manual describes the overview and installation of the WS02-NSFC1-E Face Plate Auto-Builder for NS. The Face Plate Auto-Builder for NS is a software package used to automatically build project files for the CS1W-LC001 Loop Control Unit and the CS1W-LCB01 and CS1W-LCB05 and CS1D-LCB05D Loop Control Boards used with NS-series Programmable Terminals. These files are based on the tag files created using CX-Process Tool.

The project files that are created are configured using the Face Plate Screens for the Loop Control Unit.


Please read this manual carefully and be sure you understand the information provided before attempting to install and operate the Face Plate Auto-Builder for NS. Please read the following manuals carefully and be sure you understand the information provided before setting up the Loop Control Unit/Board and NS-series PT System

Related Manuals to the Loop Control Unit/Board

Product	Manual name	Cat. No.	Contents
WS02-NSFC1-E Face Plate Auto-Builder for NS	Face Plate Auto-Builder for NS Operation Manual	W418	Installation and operation procedure for Face Plate Auto-Builder for NS.
WS02-LCTC1-EV3 CX-Process Tool	CX-Process Tool Operation Manual	W372	Installation and operation procedures for the CX-Process Tool.
WS02-LCTC1-E CX-Process Monitor	CX-Process Monitor Operation Manual	W373	Installation and operation procedures for the CX-Process Monitor.
CS1W-LC001 Loop Control Unit	Loop Control Unit Operation Manual	W374	Installation and operation procedures for the Loop Control Unit (except for function blocks).
CS1W-LCB01/05 CS1D-LCB05D Loop Control Boards	Loop Control Board Operation Manual	W406	Installation and operation procedures for the Loop Control Boards (except for function blocks).
CS1W-LC001 Loop Control Unit	Loop Control Unit Function Block Reference Manual	W375	Detailed information on function blocks for Loop Control Units.
CS1W-LCB01/05 CS1D-LCB05D Loop Control Boards	Loop Control Board Function Block Reference Manual	W407	Detailed information on function blocks for Loop Control Boards

Related Manuals to the NS-series PT

Product	Manual name	Cat. No.	Contents
NS-series PT	NS Series Setup Manual	V072	Describes connecting the PT to the host and peripheral devices, methods to setup communications and operation, and procedures for maintenance.
NS-series PT	NS Series Programming Manual	V073	Describes the screen configurations, object functions, and host communications for the PT.
NS-NSDC1-EV NS-Designer	NS-Designer Operation Manual	V074	Describes operating procedures for the NS-Designer, which is used to create the screens displayed on the PT and transfer them to the PT. It includes screen creation and transfer procedures.

 **WARNING** Failure to read and understand the information provided in this manual may result in personal injury or death, damage to the product, or product failure. Please read each section in its entirety and be sure you understand the information provided in the section and related sections before attempting any of the procedures or operations given.

PRECAUTIONS

The information contained in this section is important for the safe and reliable application of the Face Plate Auto-Builder for NS (Ver. 1.1). You must read this section and understand the information contained before attempting to set up or operate the Face Plate Auto-Builder for NS (Ver. 1.1) and PLC system.

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1 Intended Audience

This manual is intended for the following personnel, who must also have knowledge of electrical systems (an electrical engineer or the equivalent) and instrumentation systems.

- Personnel in charge of installing FA systems.
- Personnel in charge of designing FA systems.
- Personnel in charge of managing FA systems and facilities.


2 General Precautions

The user must operate the product according to the performance specifications described in the operation manuals.


Before using the product under conditions which are not described in the manual or applying the product to nuclear control systems, railroad systems, aviation systems, vehicles, combustion systems, medical equipment, amusement machines, safety equipment, petrochemical plants, and other systems, machines, and equipment that may have a serious influence on lives and property if used improperly, consult your OMRON representative.

Make sure that the ratings and performance characteristics of the product are sufficient for the systems, machines, and equipment, and be sure to provide the systems, machines, and equipment with double safety mechanisms.

This manual provides information for using the Face Plate Auto-Builder for NS. Be sure to read this manual before attempting to use the Face Plate Auto-Builder for NS and keep this manual close at hand for reference during operation.

 **WARNING** It is extremely important that a PLC and all PLC Units/Boards be used for the specified purpose and under the specified conditions, especially in applications that can directly or indirectly affect human life. You must consult with your OMRON representative before applying a PLC System to the above-mentioned applications.

3 Safety Precautions


 **Caution** Always confirm safety before transferring programs to a node or changing I/O memory at a node. Failure to do so may result in injury.

4 Application Precautions


Observe the following precautions when using the Face Plate Auto-Builder for NS.


 **Caution** Fail-safe measures must be taken by the customer to ensure safety in the


event of incorrect, missing, or abnormal signals caused by broken signal lines, momentary power interruptions, or other causes.


 **Caution** Confirm that no adverse effect will occur in the system before attempting any of the following:


- Changing the operating mode of the PLC
- Force-setting/force-resetting any bit in memory
- Changing the present value or any set value in memory

 **Caution** Be sure that all mounting screws, terminal screws, and cable connector screws are tightened to the torque specified in the user manuals. Incorrect tightening torque may result in malfunction.

 **Caution** Confirm operation of any user programs that you develop before running the programs.

 **Caution** Confirm the operation of screen data and host programs before using the programs for actual applications.

 **Caution** Always use the upper and lower limit settings when using numeral input to prevent malfunctions.

 **Caution** When transferring data in screen units, also transfer any other data for the PT memory that has changed.

SECTION 1

Overview

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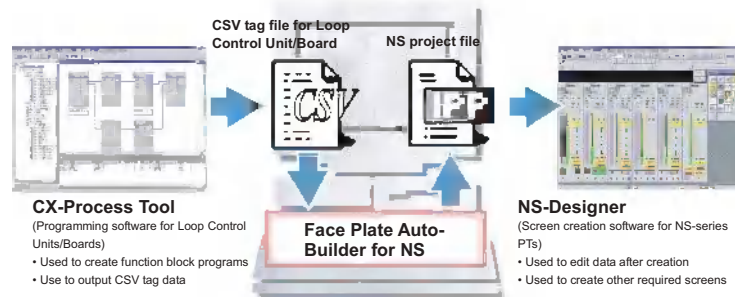
1-1 Features of the Face Plate Auto-Builder for NS

The Face Plate Auto-Builder for NS is a software package that automatically builds project files for NS-series Programmable Terminals that are used for monitoring and tuning the CS1W-LC001 Loop Control Unit or CS1W-LCB01, CS1W-LCB05, and CS1D-LCB05D Loop Control Boards.

Based on a CSV tag file created using the CX-Process Tool, the software automatically builds a NS-series project file configured with Face Plate Screens for the Loop Control Unit/Board.

1-1-1 Features

- By simply specifying the tag file created using the CX-Process Tool, the software automatically builds a project file for an OMRON NS-series Programmable Terminal. The project file is configured with Face Plate Screens of the Loop Control Unit/Board.
- The project file created with the Face Plate Auto-Builder for NS enable monitoring and tuning the function blocks for up to 32 loops (PID, etc.) in the Loop Control Unit or Loop Control Board from the NS-series Programmable Terminal.
- Face Plate Screens can be built for the following function blocks of Loop Control Unit or Board.
 - 2-position ON/OFF (Block Model 001)
 - 3-position ON/OFF (Block Model 002)
 - Basic PID (Block Model 011)
 - Advanced PID (Block Model 012)
 - Indication and Operation (Block Model 032)
 - Indicator (Block Model 034)
 - Segment Program 2 (Block Model 157)



1-2 System Requirements

The following hardware and software is required to install and operate the Face Plate Auto-Builder for NS.

1-2-1 Computer

An IBM PC/AT or compatible computer capable of running Windows 95 (OSR2 or later), 98, Me, NT4.0 (Service Pack 3 or later), or 2000.

(Intel Celeron 400 MHz or higher with least 32 MB of memory recommended. At least 200 MB of space on the hard disk.)

1-2-2 Software

OS: Windows 95 (OSR2 or later), 98, Me, NT4.0 (Service Pack 3 or later), or 2000.

Note The Windows 95 OS must be OSR2 or later only. Operation is not supported on versions earlier than Windows 95 OSR2.

1-3 Application Environment

The Face Plate Auto-Builder for NS uses tag files created with the following software.

CX-Process Tool

CX-Process Tool V2.0 or later

Projects built with the Face Plate Auto-Builder for NS are used with the following hardware and software.

Loop Control Unit or Loop Control Board

CS1W-LC001 Ver.2.0 or later

CS1W-LCB01/05 Ver.1.0 or later

CS1D-LCB05D

NS-Designer

NS-Designer Ver.2.0 or later

NS-series PT (Programmable Terminals)

The following models of NS-series PT, Ver.2.0 or later:

NS12-TS00□/TS01□

NS10-TV00□/TV01□

NS7-SV00□/SV01□

1-3-1 Connection Methods

The project files built with the Face Plate Auto-Builder for NS can be used with the following connection methods between the NS-series PT and PLC.

Communications port	Supported communications methods
Serial port A	1:1 NT Link 1:N NT Links
Serial port B	1:1 NT Link 1:N NT Links
Ethernet	FINS communications
Controller Link	FINS communications

- Note**
1. Other connection combinations not listed here may cause malfunctions.
 2. When Controller Link or Ethernet connections are used, project files are built for a single node.

SECTION 2

Setup

2-1	Installation Method.....	6
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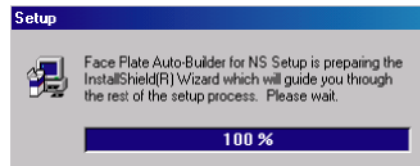
2-1 Installation Method

The release notes will be displayed automatically after inserting the installation CD in the CD-ROM drive. Install the software after reading the release notes thoroughly.

2-1-1 Installing the Face Plate Auto-Builder for NS

Step 1: Execute the following setup wizard program from the CD.

<CD-ROM drive> \Face Plate Auto-Builder for NS\DISK1\SETUP.EXE.



Step 2: Start installation of the Face Plate Auto-Builder for NS by clicking the **Next** Button.



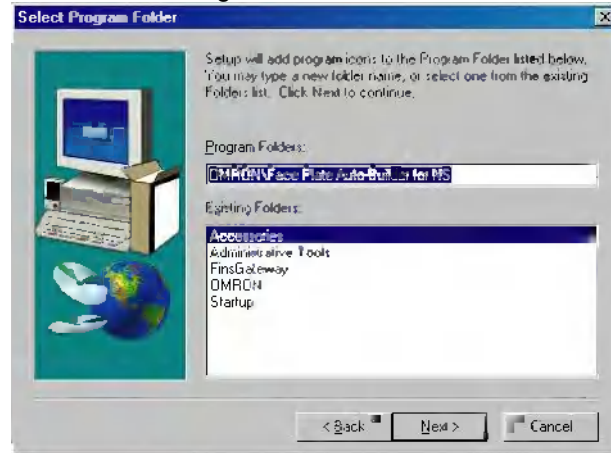
Step 3: Specify the drive and directory in which the program files will be installed.

The default setting is C: \Program Files\OMRON\FP Auto-Builder. To change the directory, click the **Browse** Button, and select the directory.



Step 4: Click the **Next** Button. The Select Program Folder Dialog Box will be displayed. Select the program folder.

The default setting is OMRONFace Plate Auto-Builder for NS.



Step 5: When installation has been completed, the Setup Complete Dialog Box will be displayed. Click the **Finish** Button.

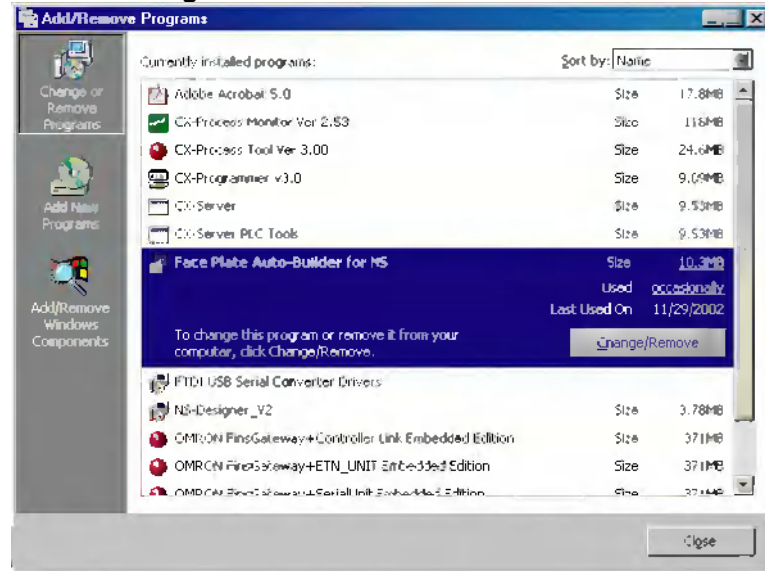


Step 6: Restart the computer.

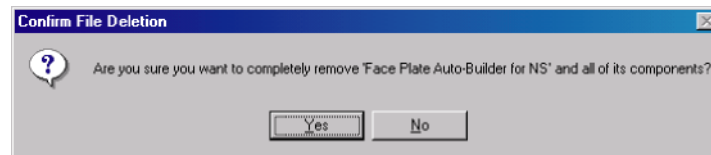
2-2 Uninstalling the Face Plate Auto-Builder for NS

Step 1: Select **Add/Remove Programs** from the Control Panel.

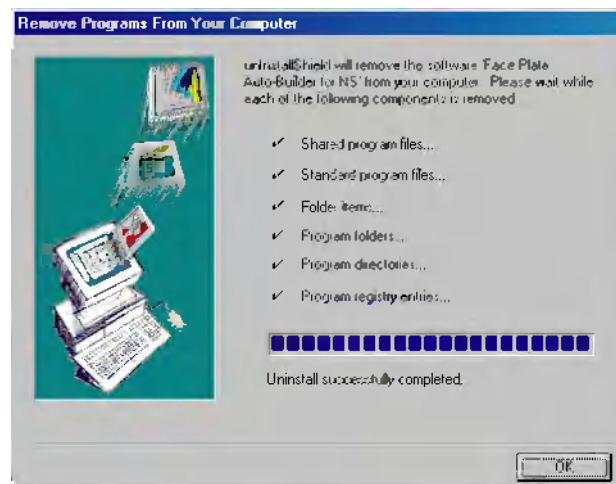
Select **Face Plate Auto-Builder for NS** from the list of applications, and click the **Change/Remove** Button.



Step 2: Click the **Yes** Button. The Face Plate Auto-Builder for NS will be uninstalled.



Step 3: When the uninstall process has been completed, the following screen will be displayed. Click the **OK** Button.



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Authorized Distributor:

SYSMAC WS02-NSFC1-E Face Plate Auto-Builder for NS (Ver. 1.1)

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