

How to update or recover the system program Ver.8.4

Introduction

CDROM includes system program installation program to update or to recover your Programmable Terminal (PT).

Please follow the instruction below **just in case when System Program Ver.8.4 is corrupted or the System Program in the PT is Ver.4.x, Ver.5.x, Ver.6.x, Ver.7.x or Ver.8.x.**

This program can be used for the all models listed below. Therefore, the following operations are also common to the all models.

- NS15-V2, NS12-V1/V2, NS10- V1/V2, NS8- V1/V2 and NS5- V1/V2
- NSJ12, NSJ10, NSJ8 and NSJ5
- NSH5

In this manual PT indicates the models of NS-series listed above unless otherwise noted.

NOTE

Do NOT use this program for NS12/10/7, which does not have –V1 or –V2 suffix at the end of the model number.

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1. Preparations Before Updating or Recovering

A Memory Card (50MB or over) is required to perform this program. Please prepare the Memory Card beforehand. Please note that operation will not be properly performed with a Memory Card that was formatted using Windows2000/XP/Vista/7. Refer to the Section 5 for details on using a Memory Card.

<Overview of the Procedure>

1. Copy the program to a Memory Card.
2. Place it in the PT and turn ON the power. The program for recovering the system program is started automatically.
3. Select Clean Installation or Overwrite Installation in the first screen. (see note). The program will automatically be started after selecting the option.

Note: If the touch screen has no input within 20 seconds, it proceeds the program regarding as the Overwrite Installation has been selected.

A Clean Install will automatically run without showing an Install Instruction Selection Screen. When the version of the project data in the NS Hardware are higher than the system version you are going to install with the Update/Recover program.

Example:

A Clean Install will automatically run under such a combination as below.

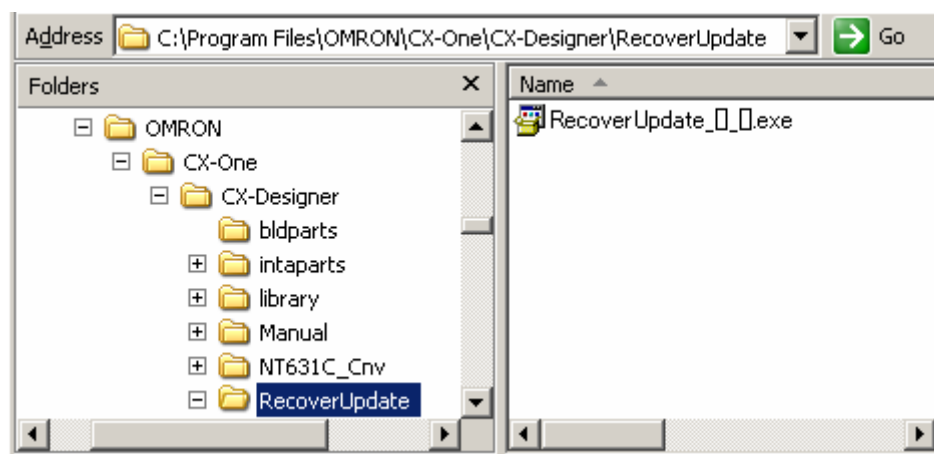
Update/ Recover program Ver.5.0

Project in the NS Hardware Ver.6.0

1.1 Step1: Copy the program to a Memory Card

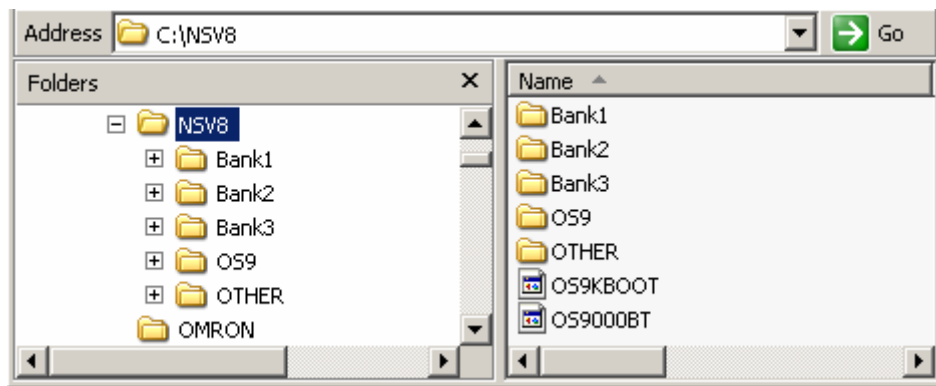
<Copying from CX-Designer Installation Folder >

The program will be installed under the C:\Program Files\OMRON\CX-One\CX-Designer\RecoverUpdate as the default location when installing the CX-Designer. The self-extracting Recover/Update Program will be installed.

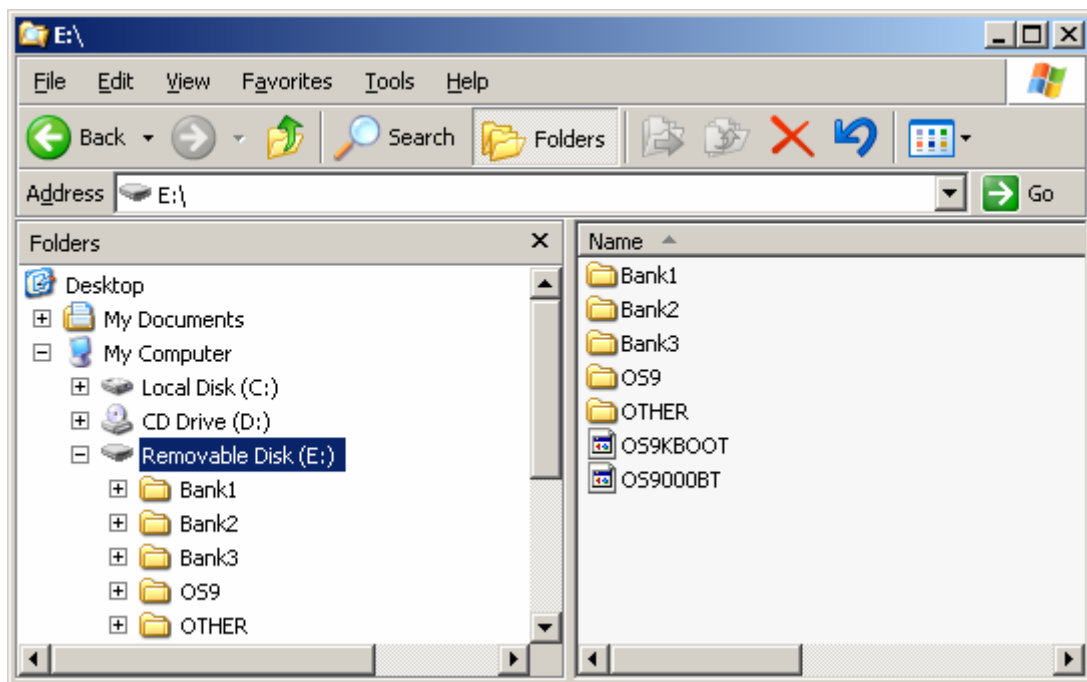


Execute RecoverUpdate_[]_.exe.

Double click the exe module and extract the compressed data. Folder will be newly created. The following figure shows in the case you decompressed on C:\NSV8.



Copy all those modules under the root of the Memory Card. The following figure shows in the case the Memory Card is assigned to E: drive.



Preparation completed. Safely remove your Memory Card from your personal computer.

1.2 Step2: How to place the Memory Card in the PT and execute the program.

1. Pull out all communications cable connected to the PT.
2. Place the Memory Card in the PT.
3. Turn ON the power to the PT. (If the power is already turned ON, turn OFF the power once, and turn On again.)
4. The program will be started approx. 10 seconds later.

- Installation program will not start in case the PT does not recognize the Memory Card. Check whether the Memory Card is placed in the connector. Refer to the Section 5 for more details.

1.3 Step 3: Select installation method.

Select Clean Installation or Overwrite Installation according to the followings.

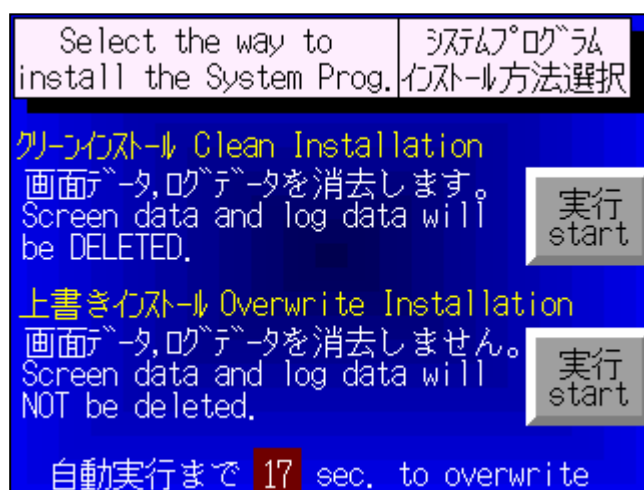
Clean Installation is recommended in case you encountered the followings.

- Case that an error message is displayed while starting up the PT.
- Case that the system program needs be updated with no screen data inside of the PT. (The PT has been purchased or the screen data area has been formatted.)

Overwrite Installation is recommended in case you encountered the followings.

- Case that only system program needs to be updated without deleting screen data and log data inside of the PT.

<Screen image of NS5, NSJ5, or NSH5>



<Screen image of NS15/12/10/8 or NSJ12/10/8>



Press Start button at the right of each explanation.

If the touch screen has no input within 20 seconds, it proceeds the program regarding as the Overwrite Installation has been selected.

2. Process for Updating or Recovering the System Program

This section describes procedures for updating or recovering the system program. The image samples of the PT are the same as NS10-V2/NS8-V2.

<Clean Installation process>

1. Formatting the screen data area
2. Formatting the system program area
3. Downloading the system program Ver.8.4.
4. Updating the operating system Ver.3.17
(See note).
5. Initializing the log

NOTE

Do NOT turn OFF the power while executing the program.

<Overwrite Installation process>

1. Temporarily evacuating setting files.
2. Formatting system program.
3. Downloading system program ver.8.4.
4. Updating operating system ver.3.17 (See note.).
5. Restoring the setting files.

Note: In the case of NS5-[Q1]-V2, updating to ver.3.15.
In the case of NS5-[Q0]-V2, updating to ver.3.14.

<Reference for executing the program>

It takes approximately three minutes. However, it depends on the model of PT.

2.1 Clean Installation

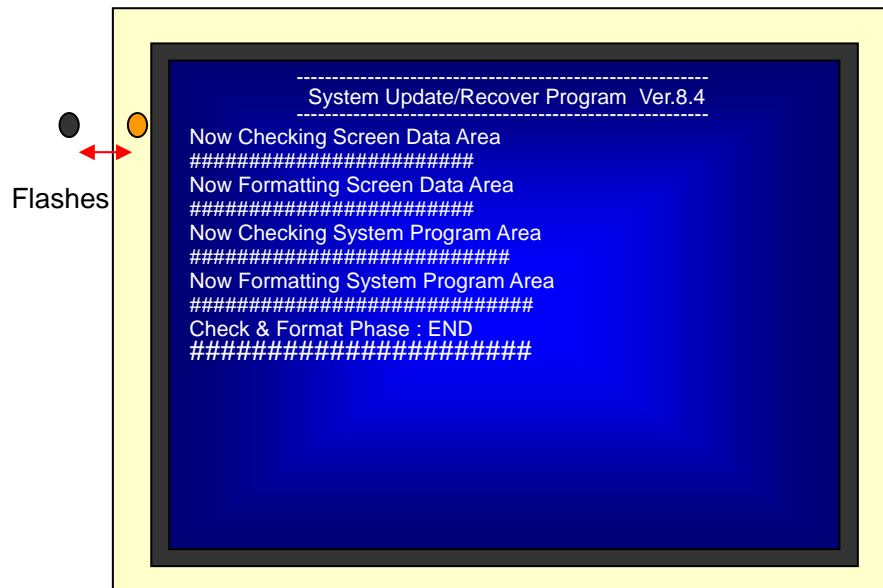
2.1.1 Process until system program area is formatted

The indicator flashes orange when the program starts processing.

The program title appears. Then, screen data area is checked and formatted and screen data area is checked and formatted.

When the process of this phase is completed, "Check & Format Phase: END" is displayed.

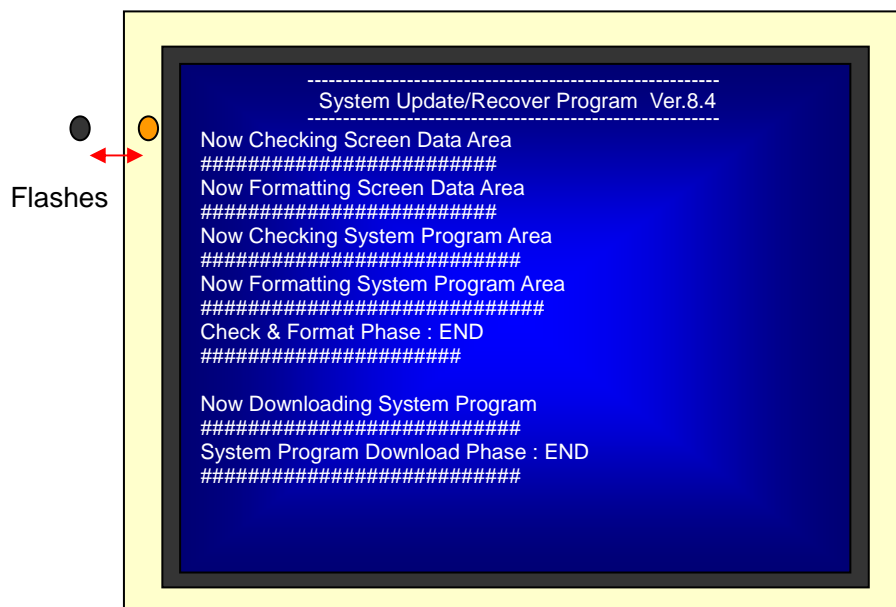
The following shows # which indicates Japanese fonts.



2.1.2 Downloading the System Program

Download the system program.

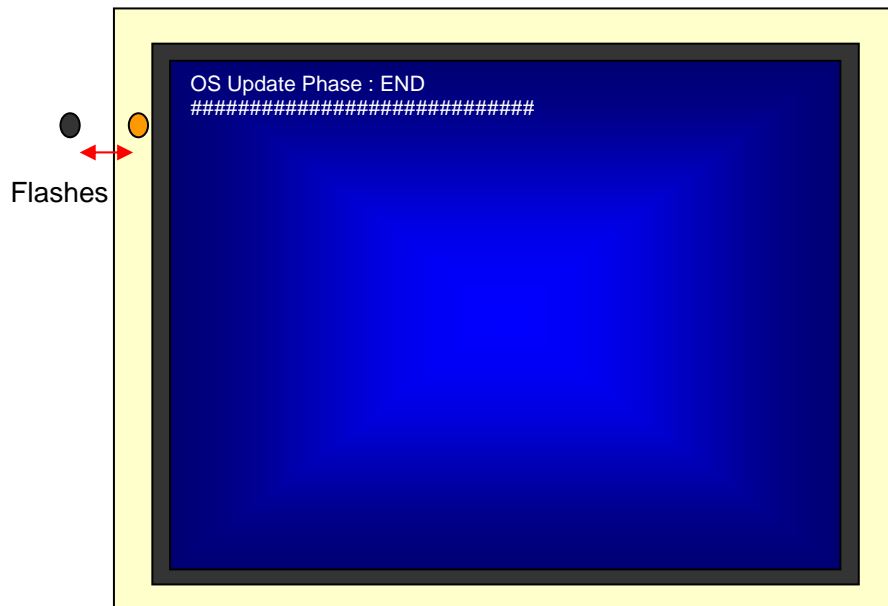
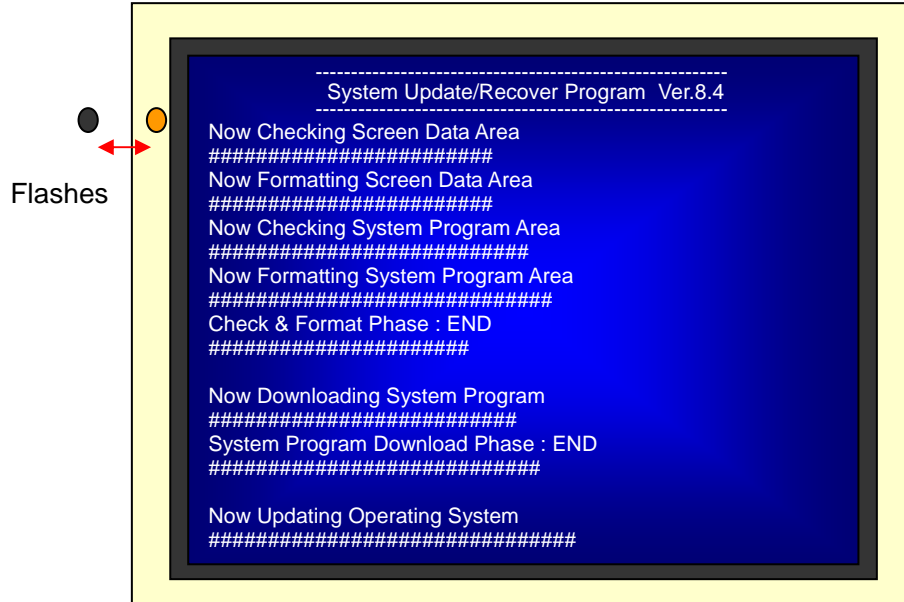
When downloading the system program is completed, "System Program Download Phase: END" is displayed as shown below.



2.1.3 Updating the Operating System

Update the operating system.

When updating the operating system is completed, "OS Update Phase: END" is displayed as shown below.

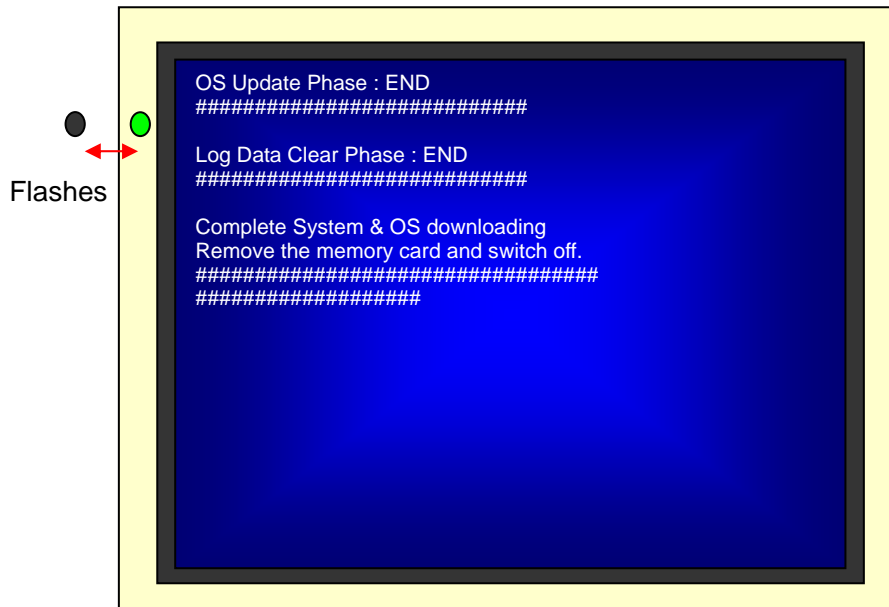


2.1.4 Initializing Log Data and Program Termination

Initializing log data is immediately completed and “Log Data Clear Phase: END” is displayed as shown below.

Message “Please switch OFF “ appears after all processes are completed normally. Then, the indicator flashes green.

Turn OFF the power of the PT and **safely remove the Memory Card.**



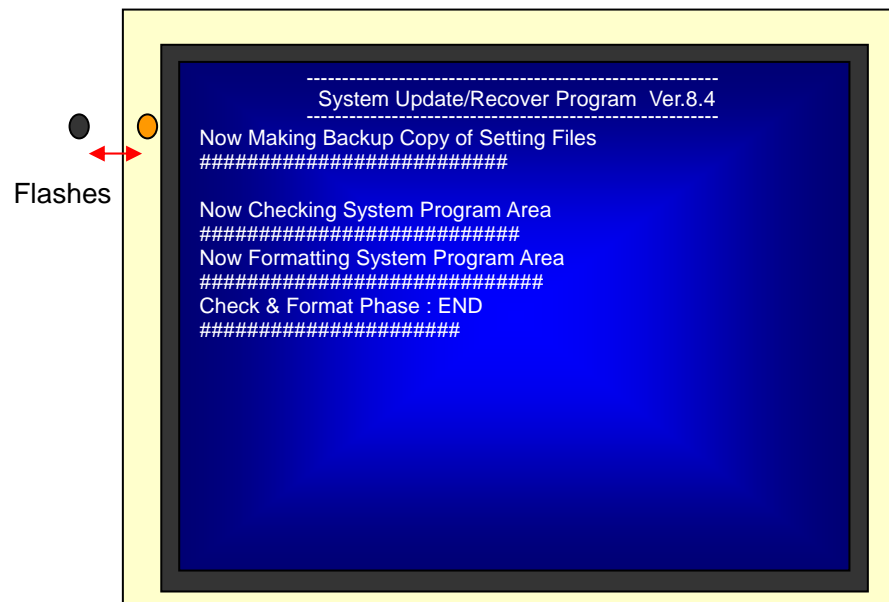
2.2 Overwrite Installation

2.2.1 Process until system program area is formatted

The indicator flashes orange when the program starts processing.

The program title appears. Then, setting files are evacuated temporarily and system program area is checked and formatted.

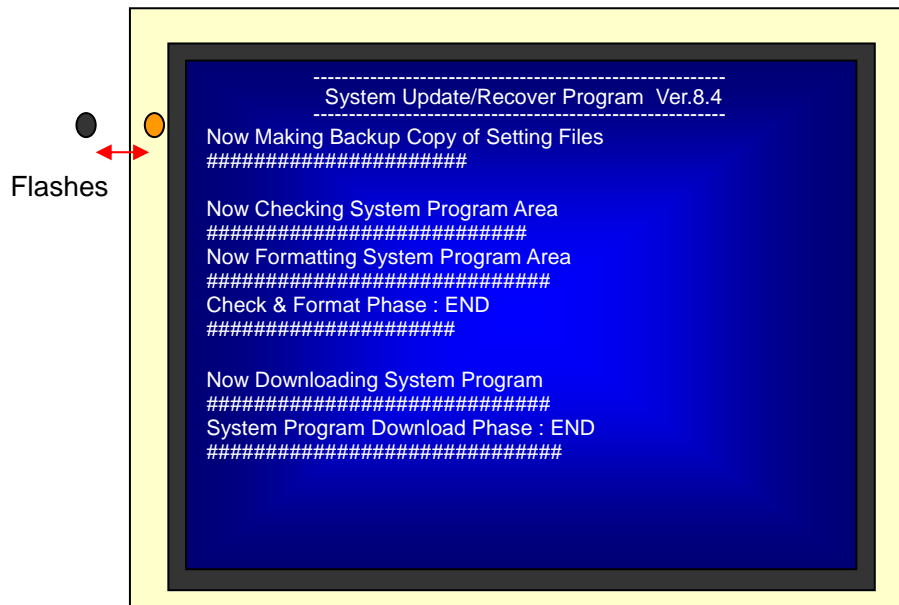
When the process of this phase is completed, “Check & Format Phase: END” is displayed.



2.2.2 Downloading the System Program

Download the system program.

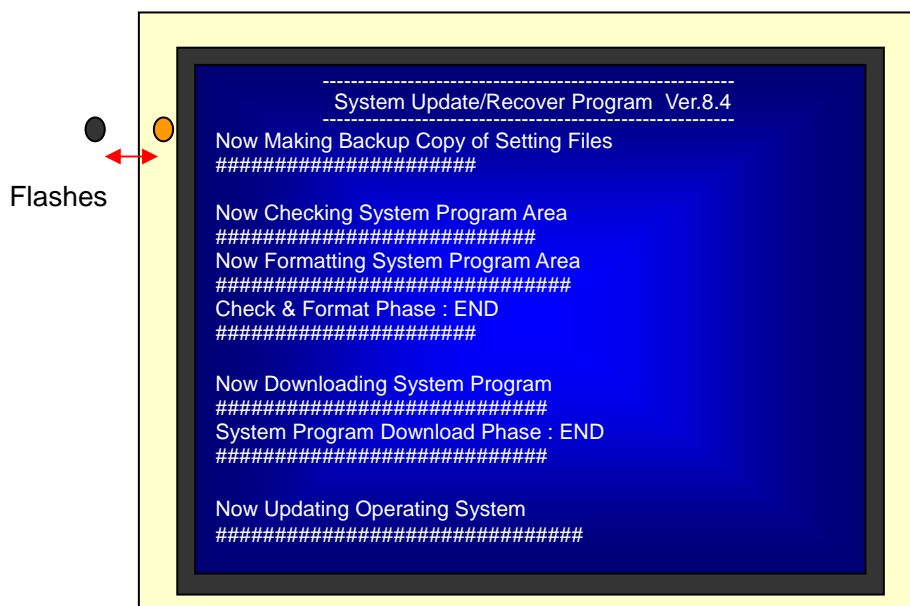
When downloading the system program is completed, "System Program Download Phase: END" is displayed as shown below.

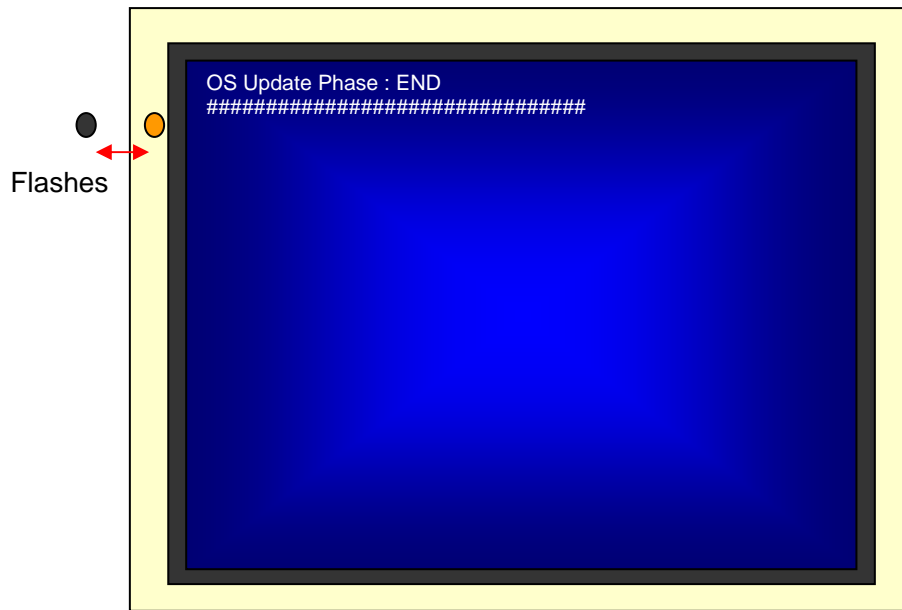


2.2.3 Updating the Operating System

Update the operating system.

When updating the operating system is completed, "OS Update Phase: END" is displayed as shown below.



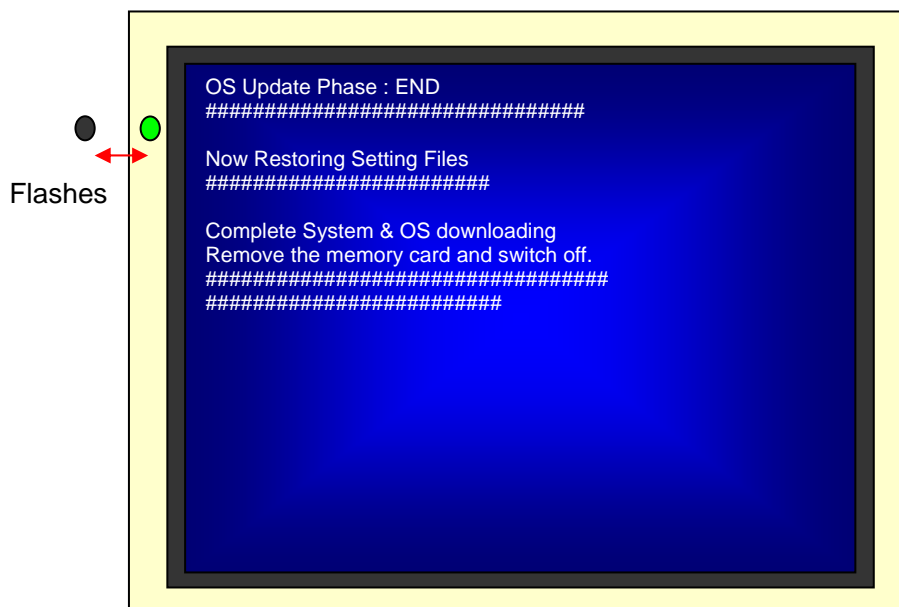


2.2.4 Restoring the setting files and Program Termination

Restore the setting files that are evacuated temporarily.

Message "Please switch OFF " appears after all processes are completed normally. Then, the indicator flashes green.

Turn OFF the power of the PT and **safely remove the Memory Card.**

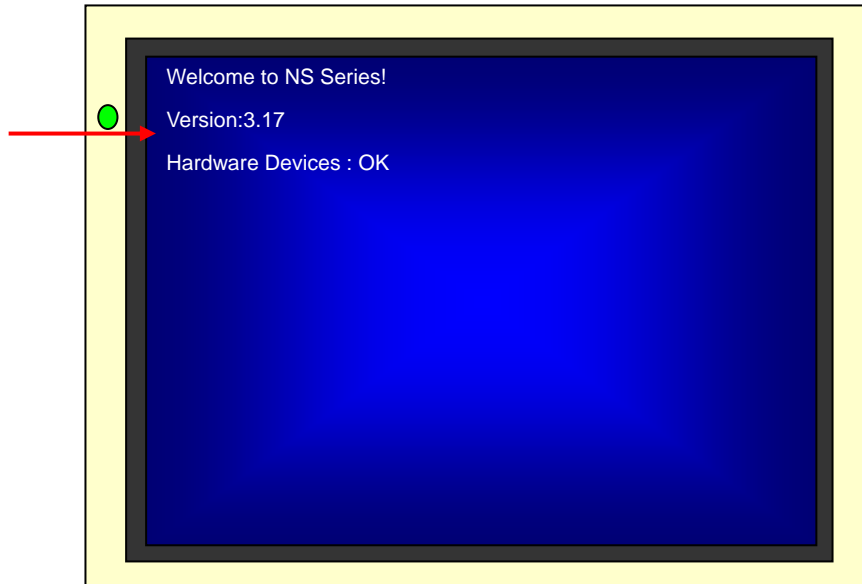


3. Confirmation after Updating or Recovering

REMOVE the memory card and turn ON the power to the PT after terminating the program.

Please check the points as shown below.

3.1 The Version of Operating System



As the image above shows, the version of system program is displayed in the second line after turning ON the power. Confirm that the version is changed to 3.17 (See note.).

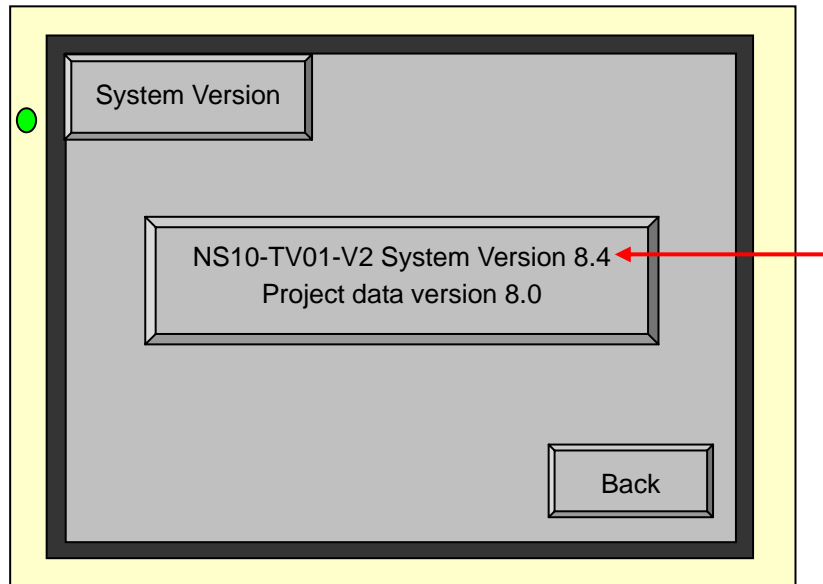
Note: In the case of NS5-[]Q1[]-V2, confirm that the version is changed to 3.15.

In the case of NS5-[]Q0[]-V2, confirm that the version is changed to 3.14.

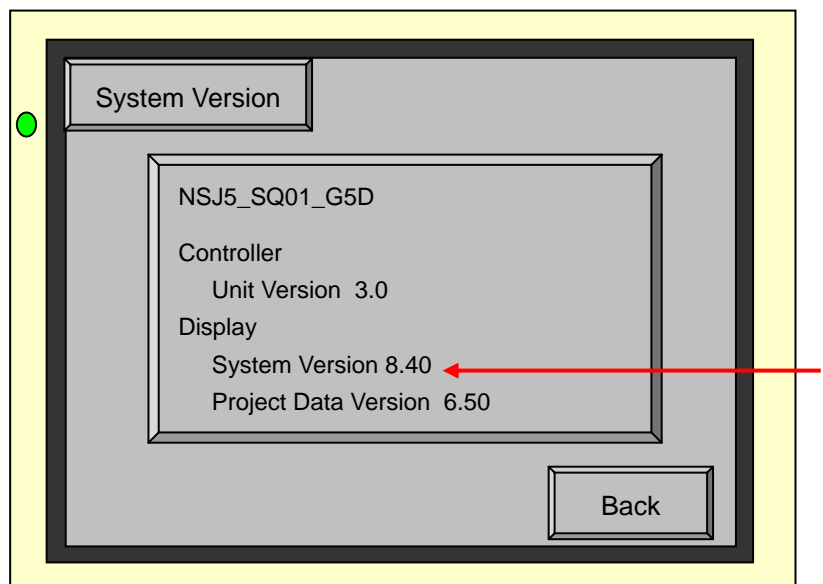
3.2 The Version of System Program

Go to the system menu and select System Version in the Special Screen tab. Check whether it shows Version 8.4

<NS15/12/10/8/5, NSH5>.



<NSJ12/10/8/5>.



4. Troubleshooting

The possible error symptoms while executing the program and countermeasures are described.

Symptom	Cause	Countermeasure
The indicator lights red and the program does not start.	Model type information registered in the PT cannot be read.	Contact your nearest OMRON representative.
The indicator flashes green and the buzzer sounds.	Backlight has malfunctioned.	Contact your nearest OMRON representative.
Message "Touch Panel Error" is displayed.	The touch panel is not detected.	
The indicator flashes red/"ERROR" is displayed	Failed to download the system program or upload the operating system.	Check whether the Memory Card is corrupted with a computer and perform update/recovery again.
The indicator flashes orange for long time and does not change.	The system becomes unstable.	Check whether the conditions such as power supply, noise, or temperature are appropriate. Execute all over again after checking whether the memory card is corrupted on a computer.
	Started up the upgrading program while communicating with PLC.	Pull out all the communications cable from the PT and execute all over again.
The indicator turns to orange but nothing is started.	The memory card is not recognized.	Copy the program to another memory card and execute the program. Refer to the Section 5 About Memory cards for details.
The indicator lights green and the WARNING No.24 is displayed.	An attempt was made to recover/update a system program earlier than version 8.0 in the following NS series. NS5-SQ1[]-V2, NS5-TQ1[]-V2, NS5-MQ1[]-V2, NSJ5-SQ1[], NSJ5-TQ1[], NSH5-SQ[]1[]-V2	A program in the Memory Card must be patched when you recover/update a system program earlier than version 8.0 in the NS-series PTs in the left column. For details on how to patch the program, refer to Chapter 6.

5. About Memory Cards

5.1 How to Format a Memory Card

To use this program to update or recover your NS, do not format a memory card on a computer that Windows2000/XP/Vista/7 is installed. Programs cannot be read and execution cannot be completed normally.

This symptom is caused by changing specification of operation system on the computer to support large capacity hard disk.

5.2 Highly recommended Memory Card Models

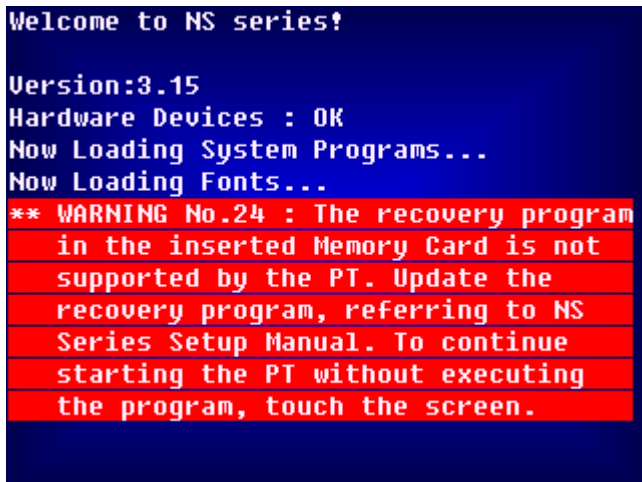
Use one of HMC-EF183 (recommended by OMRON).

6. Using Old Version of Recover/Update Program

6.1 When Recover/Update Program Is Not Executed Properly

The warning message shown in the figure may be displayed while you recover/update the system program in the PT according to the procedure described in this document.

If this warning message is displayed, the Recover/Update program in the Memory Card must be patched in order to recover/update the system program. Follow the procedure below to patch the Recover/Update Program.



6.2 Overview of the Procedure

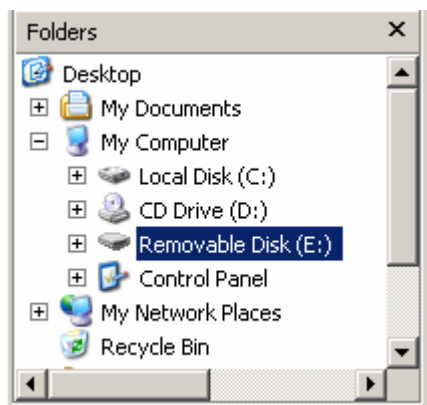
Follow this procedure to patch the Recover/Update Program.

- 1) If the warning message shown in the figure is displayed while recovering/updating, insert the Memory Card in a memory card slot or USB memory card adapter of your personal computer.
- 2) Execute the patch program (CFPATCH.EXE) to update the Recover/Update Program.
- 3) Follow the procedure described in the Chapter 1 to recover/update the system program again.

6.3 Details of the Procedure

- 1) Insert the Memory Card into a drive of your computer.

If the warning message is displayed while recovering/updating, insert the Memory Card in a memory card slot of your personal computer. Remember the drive number for the Memory Card.



In the left figure, "E" is the drive for the Memory Card.

If your computer does not have a memory card slot, you can use a USB memory card adapter.

2) Execute the Patch Program "CFPATCH"

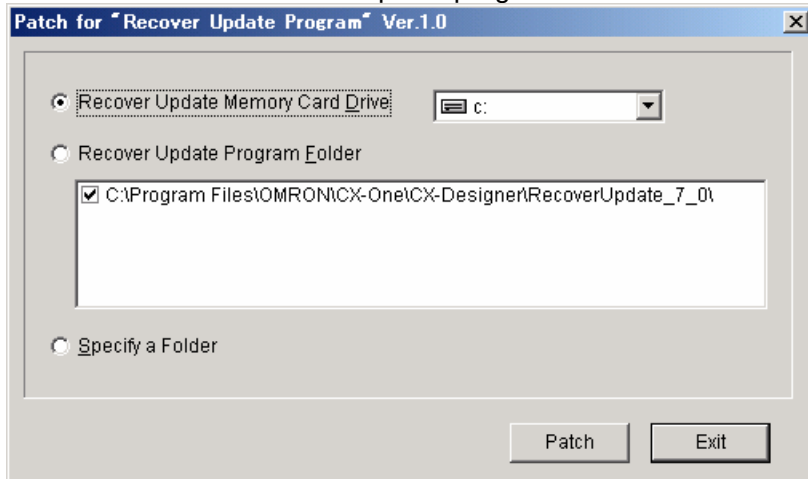
To patch, use the CFPATCH.EXE that is stored under /Utility/English/RecoverUpdate folder of CX-Designer or CX-One.



cfpatch

This is the icon of CFPATCH.EXE

Execute CFPATCH.EXE. The patch program will start and the following dialog will be displayed.



Select any of the following patch methods and click **Patch** Button.

1. Patching the program in the Memory Card (default).

A Recover/Update Program in the Memory Card will be directly patched.

Specify the drive for the Memory Card that you set in the step 1).

2. Patching the Recover/Update Program in the personal computer.

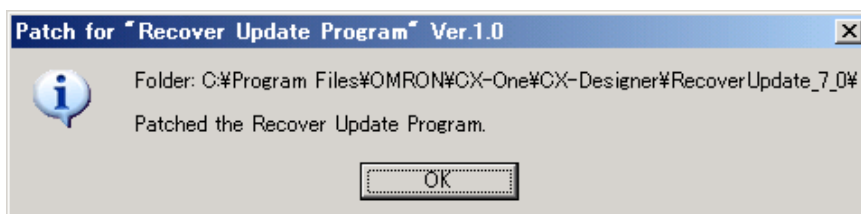
A folder list of the Recover/Update Program will be displayed in the center of the window. Select a Recover/Update Program you want to patch.

3. Directory specifying a folder in which the Recover/Update Program is stored.

A Recover/Update Program, not stored in the standard installation folder, will be patched. Click **Patch** Button. The **Browse for Folder** will be displayed. Select an appropriate folder.

3) Checking the Execution Result of the Patch Program

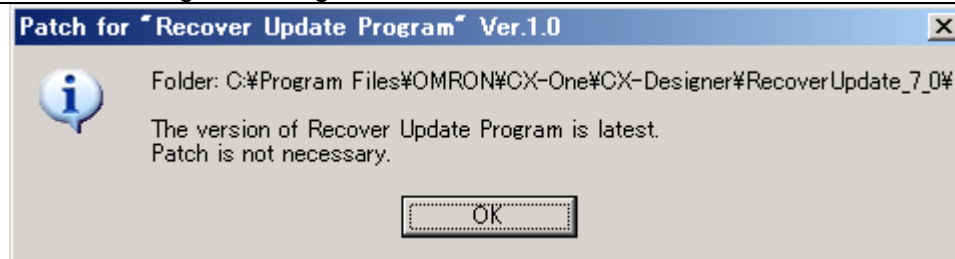
When the patch is complete successfully, the following dialog box will be displayed.



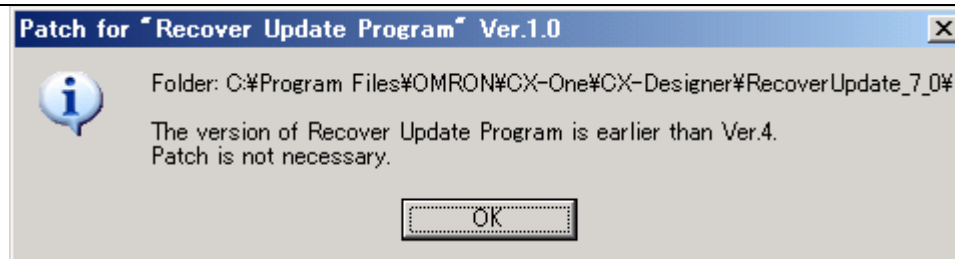
4) Executing the Patched Recover/Update Program with the PT Again

Follow the procedure in Chapter 1 to execute it again.

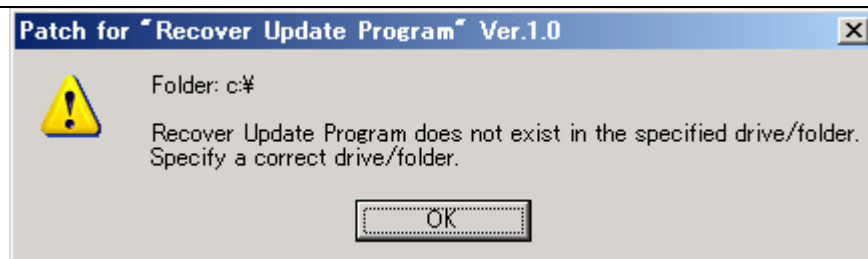
6.4 Patch Program Dialog Boxes and Countermeasures



The specified Recover/Update Program has already been patched.



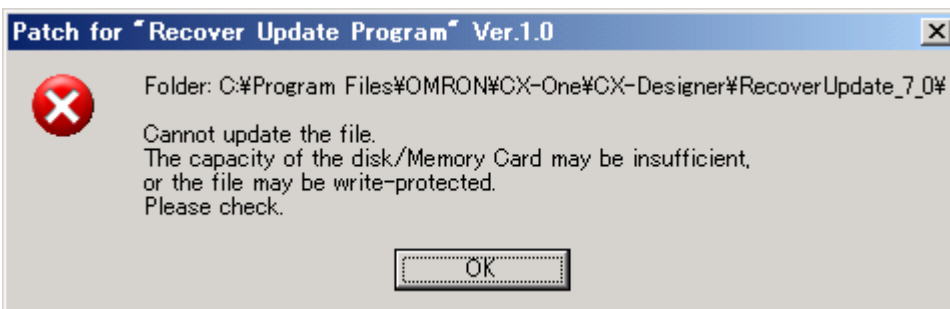
The system program version in the PT is earlier than 4.0 (PT model number without -V or -V suffix.).
Patch is not necessary.



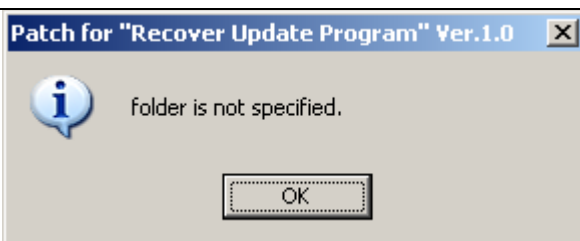
The Recover/Update Program is not stored in the specified drive or folder.
Specify the correct drive or folder. Then patch the program again.



Cannot patch because the specified drive or folder is write-protected. Check the property.



Cannot patch because the capacity of the specified drive or folder is insufficient, or the drive or folder is write-protected. Check the capacity of the file or folder, and the property.



When **Recover Update Program Folder** option is selected, the **Patch** Button is clicked without any folder being selected.

Select a folder for patch (Select a checkbox).