ANRITSU CORPORATION

MD1230/MP1590 Family Upgrade Manual

(Version 8.1 or later)

Anritsu Corporation

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1. Introduction

This document explains how to install and uninstall software for the MD1230/MP1590 family Version 8.1 or newer. Refer to the following table for the hardware and software supporting this procedure.

Model	Name
MD1230B	Data Quality Analyzer
MP1590B	Network Performance Tester
MP1591A	Network Performance Tester
MX123001A	Data Quality Analyzer Control Software
MX159001B	Network Performance Tester Control Software

1.1. Restriction

When installing or upgrading the software, confirm the following notes. For changes from the previous software version, refer to the release notes and manual explaining the functions.

Model	Note
MD1230A MD1231A/MD1231A1 MT7407A	This procedure cannot be used to install the MX123001A to control the MD1230A, MD1231A, MD1231A1, and MT7407A, because Version 7 and later do not support these models. In this case, install Version 6.
MP1590B	DO NOT install this upgrade when the MP1590B firmware version is 5.0 or earlier. In this case, contact your Anritsu Service or Sales Office to upgrade the software. (CM1130:0779) The restrictions on modules for the MP1590B have changed from version 7.0. For details, see the Operation Manual.(CM1262:0251)
MX123001A MX159001B	When the objective is to control the MD1230B, install the MX123001A; when the objective is to control the MP1590B/MP1591A, install the MX159001B. The MX123001A/MX159001B version must be the same as the version of the controlled main frame.
MX123001A	MX123001A does not support Windows98.(Ver.7.0 or later) (CM1262:0646) MX123001A support Windows7 (Ver.9.6 or later) but following options cannot be guaranteed in Windows7.(CM1130:1292) ・ MX123001A-06 TCL INTERFACE ・ MX123001A-07 RS-232C CONTROL ・ MX123001A-09 GPIB CONTROL ・ MX123001A-01 REMOTE CONTROL SOFTWARE FOR MD1230A-04 ・ MX123003A REMOTE CONTROL SOFTWARE FOR MX123002A
MX159001B	MX159001B support Windows7 (Ver.9.6 or later) but MX159001B does not support 64bit version and following options cannot be guaranteed in Windows7. (CM1130:1292)(CM1130:1292) ・ MX159001B-01 RS-232C CONTROL ・ MX159001B-02 GPIB CONTROL

MP1591A	Install the MX159001A in the external PC controlling the MP1591A. The MP1591A cannot use version 9.0 and later. Please use version 8.2.
Ethereal	Changed supported Ethereal version to 0.10.13 (Ver.8.2 or later) (CM1804:0001)
Decode module options (MD1230B-04, MX123001A-01)	Decode module options (MD1230B-04, MX123001A-01) earlier than Version 5.0 must be reinstalled after installing these options and in accordance with the usage notes. Refer to the notes on the Sniffer Technologies option in the previous version of the installation procedure (MD1230 Family Upgrade Manual, Ver.5.0 or later).
Option 01/02/03 Option 07/09/10 (MX123001A) RS-232C/GPIB/Ethernet Control	When the software is upgraded, some remote command device messages may change. Customers using remote commands should check the MD1230A Remote Control Operation Manual when performing the version upgrade.

2. Preparation

Prepare the following before installing.

For MD1230B/MP1590B

Prepared Item	Explanation
MD1230/MP1590 Family Software CD-ROM	This contains the installer, release notes, operation manual and this upgrade manual.
Product Key * Product Key is not necessary on version 9.06.10 or later	This is the 24-digit key on the CD-ROM label. It must be input to install the software.
MD1230B/MP1590B	This is the target of the software install.
USB Mouse and keyboard (PS/2 or USB)	These are connected to the MD1230B/MP1590B main frame for input of the product key, running the software installer, etc.
PC with CD-ROM drive	This is needed to copy the installer from the CD-ROM to the hard disk of the main unit.

For MX123001A/MX159001B

Prepared Item	Explanation
MD1230/MP1590 Family Software CD-ROM	This contains the installer, release notes, operation manual and this upgrade manual.
Product Key	This is the 24-digit key on the CD-ROM label. It must be input to install the software.
PC	This is is the target PC for the software install. It requires a CD-ROM drive for copying the installer.

For MP1591A

Prepared Item	Explanation
MD1230/MP1590 Family Software CD-ROM	This contains the installer, release notes, operation manual and this upgrade manual.
Product Key	This is the 24-digit key on the CD-ROM label. It must be input to install the software.
MP1591A	This is the target of the software install.
PC	This is the PC for controlling the MP1591A. Install the MX159001B in this PC. It requires a CD-ROM drive for copying the installer.
Ethernet cable RS-232C Cross cable	These are for connecting the MP1591A and PC to transfer files when controlling the main frame.

Proceed to the next step after completing these preparations.

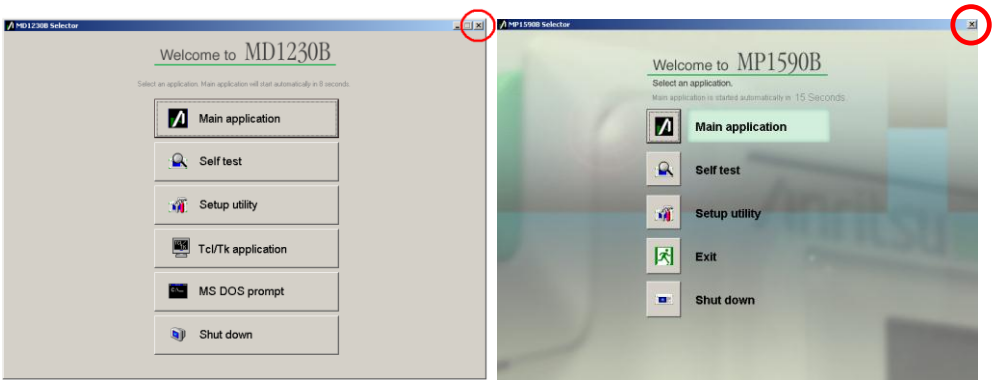
3. Starting Main Unit (MD1230B/MP1590B)

Ignore this section for models other than the MD1230B/MP1590B.

Connect the mouse and keyboard after checking that the main power switch of the main frame is “OFF”. Then set the main power switch to “ON”. The main power switch of the MD1230B is on the front panel. It is on the back panel of the MP1590B.

Note When purchasing a new unit/module and performing a version upgrade, do not install in the main frame at this step because there is a risk that the firmware upgrade may not be performed correctly. Add the new unit/module after performing the firmware upgrade as described below.

Wait until Windows starts after the power lamp is lit and the Selector screen shown below starts. Click the [x] button at the top right of the Selector screen to close it.



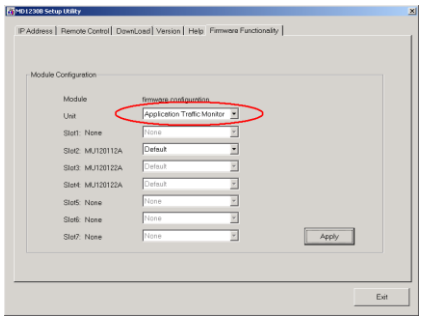
Memo: The MP1590B default setting is to not display icons on the desktop. To display the icons, right-click on the desktop and select [Arrange Icon By] - [Show Desktop Icons].

4. Checking and Changing Main Frame Operation Mode (MD1230B)

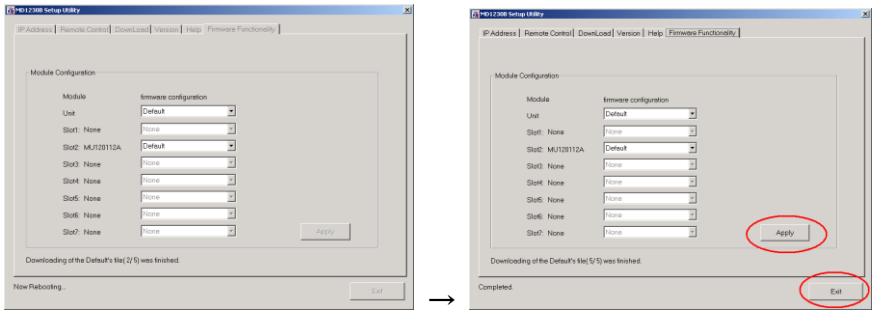
Ignore this section for models other than the MD1230B.

The MD1230B main frame must have been set to the Default mode before performing a version upgrade. The procedure is described below.

Select “Setup Utility” at the Selector screen, and click the Firmware Functionality tab. If the “Unit’ part is not set to “Default”, change it to “Default” and click the [Apply] button to start the change to the Default mode. The mode change takes 10 to 20 minutes and varies with the equipment status. If the setting is already “Default”, no action is required.



When the change processing is completed, the [Exit] button becomes enabled when the [Apply] button is clicked.



The above procedure completes the operation mode check.

5. Uninstalling (Version Downgrade)

This operation is unnecessary at the first install and version upgrade. This section explains the procedure when performing a version downgrade.

When installing an older version than the version currently installed in the MD1230/MP1590 family (version downgrade), it is necessary to uninstall the installed software first. Next, the old version is installed. For the old software installation procedure, refer to the install procedure supplied with the respective software.

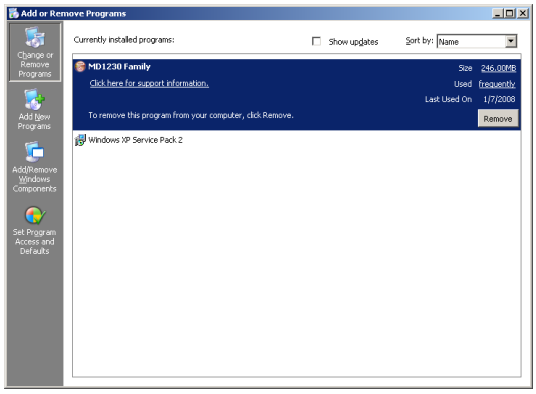
Note: If an install is attempted without uninstalling first, operation may not be normal., especially if downgrading to a version earlier than Version 5.0. If this problem occurs, recover by uninstalling and installing as described in this document.

The uninstall procedure is described below.

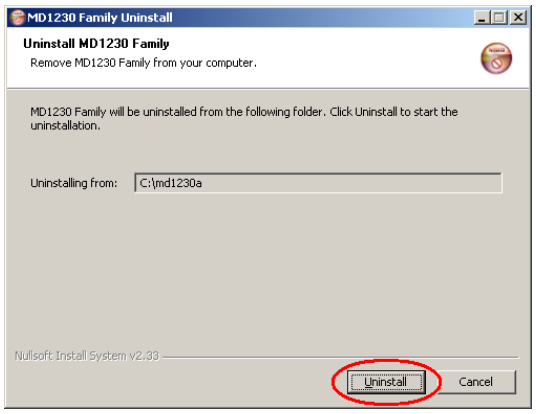
Note: This procedure shows screen for the MD1230B. For the MP1590B/MX159001B, parts showing ”MD1230 Family” show ”MP1590 Family”.

Note: The MD1230B firmware cannot be downgraded to versions earlier than Version 4.1. Installing Version 4.0 or earlier in the MD1230B may prevent normal start-up.

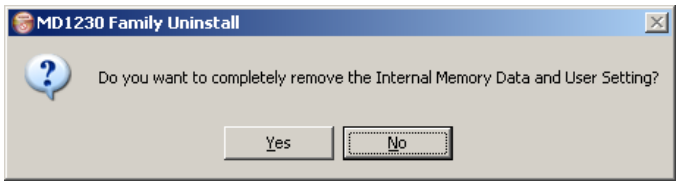
After quitting all running Windows applications, click [Start] – [Settings] – [Control Panel] – [Add or Remove Programs] and select ”MD1230 Family” or ”MP1590 Family” and click the [Remove] button.



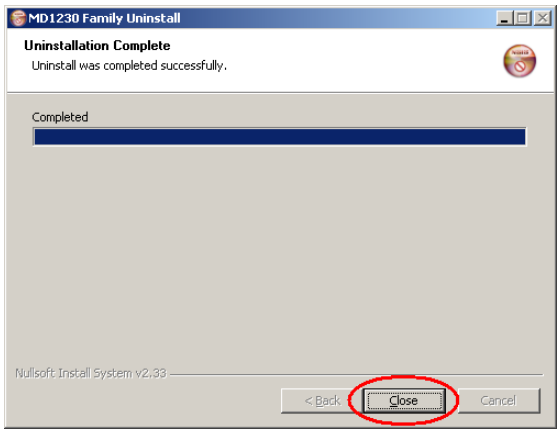
Click the [Uninstall] button to start the uninstall.



A dialog is displayed to confirm removal of all settings and measurements saved in internal memory. Click [No] to save the data and [Yes] to delete it. For details about the internal memory, see the MX123001A/MX159001B operation manual.



The uninstall procedure is executed next; wait until it is completed and the following screen is displayed. Click the [Close] button to complete the uninstall.



The above procedure completes the software uninstall.

6. Installing

Copy the installer to the hard disk as described in the following procedure.

Note: This procedure shows screen for the MD1230B. For the MP1590B/MX159001B, parts showing ”MD1230 Family” show ”MP1590 Family”.

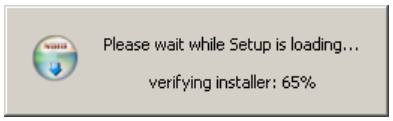
Copy the installer on the CD-ROM to an appropriate location on the hard disk (e.g. desktop). The installer file name differs with the install target. See the following table.

Install Target	Installer File Name
MD1230B, MX123001A	MD1230B_MX123001A-*.**.**.exe
MP1590B, MX159001B	MP1590B_91A_MX159001B-*.**.**.exe

* indicates software version

Memo: The MD1230B/MP1590B runs Windows XP and has a built-in USB I/F. As a result, the installer can be copied to the hard disk in the main frame using USB memory in the same way as a regular PC.

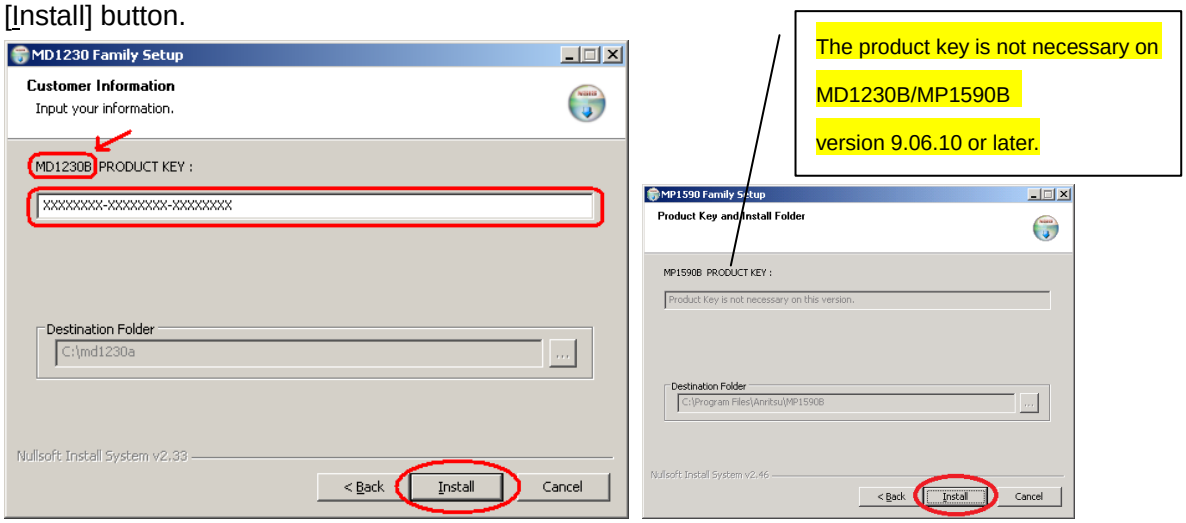
After quitting all running Windows applications, double-click the icon of the installer copied to the hard disk. The installer starts and the following screen is displayed. Wait until the next screen is displayed.



Click the [Next] button at following screen.



After checking that the name of the installed software (MD1230B/MP1590B/MX123001A/ MX159001A) is installed at the following screen, input the product 24-digit key and click the [Install] button.



The product key is the 24-digit number on the CD-ROM label. (Input the hyphens (-) too.) For details, see the following table.

Name	Explanation
MP1590B MD1230B	The product key is not necessary on version 9.06.10 or later. The product key differs according to the serial number of the main frame and software version. Consequently, the serial number and version recorded on the sheet must match the serial number and software version of the install destination.
MX123001A MX159001B	Use the product key supplied at purchase. Unlike installing in the main unit, the product key does not change with each version. When installing in multiple PCs, a different product key is required for each install. Using the same product key violates the terms of the license agreement and an error message is displayed when the PCs are connected at the same time.

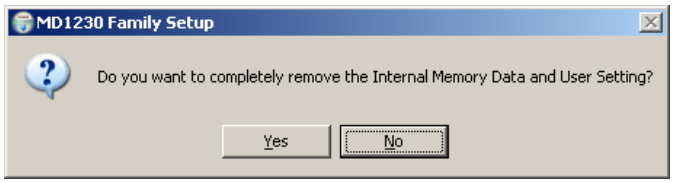
Note: The software install destination is as follows and cannot be changed.

MD1230B	C:¥md1230a
MP1590B	C:¥Program Files¥Anritsu¥MP1590B
MX123001A	C:¥Program Files¥Anritsu¥MX123001A
MX159001B	C:¥Program Files¥Anritsu¥MX159001B

When software Version 5.0 or later is already installed, the uninstaller starts. Run the uninstall according to the screen messages.

Note: The contents of the dialog displayed at uninstall vary according to the version of the installed software. For software Version 8.1 and later, the dialog is the same as in the Uninstall section.

The dialogs are displayed as follows. (The message contents are slightly different according to the installed software version.) This dialog requests confirmation that settings and measurement results saved in internal memory may be erased. When [No] is selected, the settings are erased. When [Yes] is selected, settings and measurement results saved in internal memory are cleared. For details about internal memory, refer to the MX123001A/MX159001B operation manual.



Note: When the software is installed in a different location than the default path, or when the version of the MX123001A software before the version upgrade is earlier than Version 3.1, use the following procedure to use the settings and measurement results saved in internal memory.

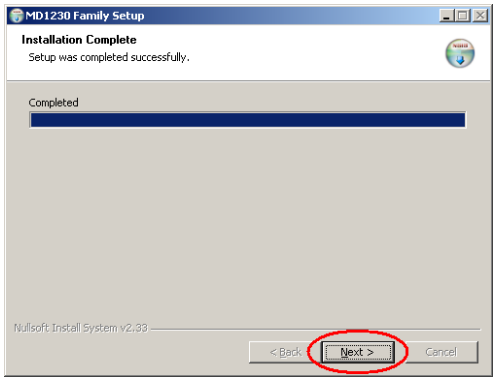
- Copy the Internal Memory folder of the previously installed folder.
- Paste the copied Internal Memory folder to the Main folder at the new install destination.

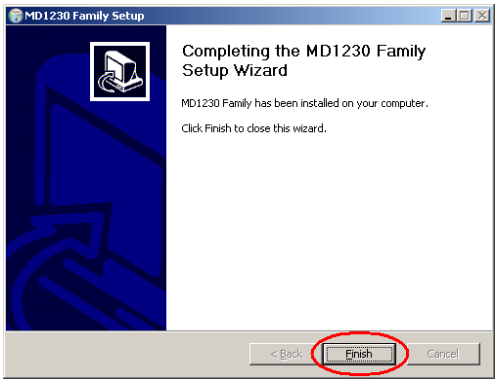
However, even if data in internal memory is saved as described above, it is not reflected in the settings after a software version upgrade.

In addition, when the dialog enquiring about erasing Read Only files is displayed, click the [No] button.

When the uninstall is completed, click the [Install] button again to perform installation.
However, it is not necessary click the [Install] button again when installing MD1230B/MX123001A software Version 5.0 or earlier, because installation proceeds automatically.

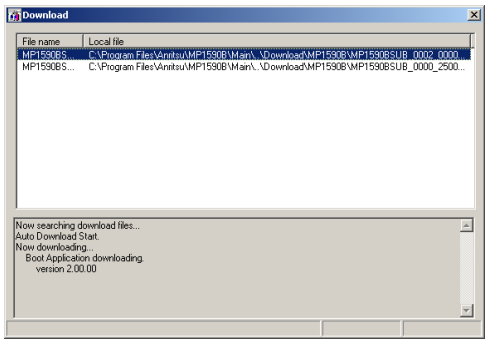
When the install in completed, click the [Next] button and then the [Finish] button to complete the install.



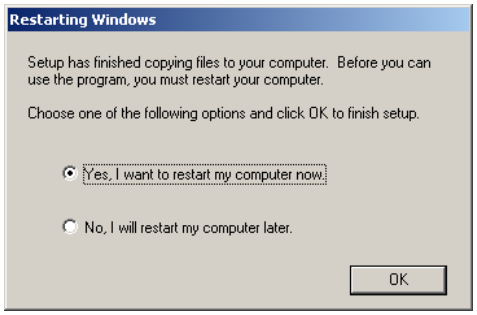


For the MX123001A/MX159001B, proceed to “Checking Install”.
For the MD1230B, proceed to “Updating Firmware”.
For the MP1591A, proceed to “Connecting PC and MP1591A”.

For the MP1590B, when the [Finish] button is clicked, the following type of screen is displayed and updating of the firmware of the module installed in the main frame is performed automatically. The time required for updating firmware is 2 to 15 minutes per file. If there is no firmware requiring updating (already updated), updating is not performed (nothing displayed in list).



When the firmware update is completed, the following dialog is displayed. Select “Yes, I want to restart my computer now.” and click the [OK] button.



This completes the install. Go to “Checking Installation”.

7. Connecting PC and MP1591A

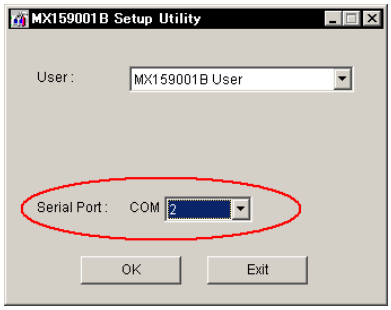
Ignore this section for models other than the MP1591A. This section explains the procedure for connecting a PC and the MP1591A to upgrade firmware.

Connect the PC and MP1591A main frame using an Ethernet cable.

Connect the PC and MU159101A (MP1591A control module) using an RS-232C cross cable.

Set the MP1591A power to “ON” and wait until start up has been completed. Use the ready LED to confirm that start up has completed.

Select [Start] – [Programs] – [MX159001B Setup Utility] at the PC controller. The following screen is displayed. Specify the number of the COM port where the RS-232C cross cable is connected.

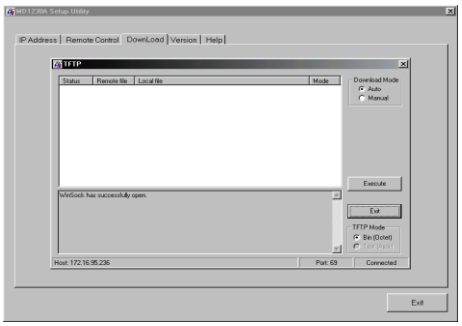


After completing this setting, proceed to “Upgrading Firmware”.

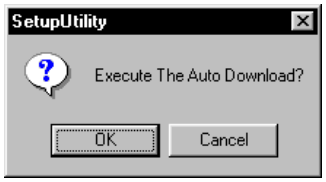
8. Upgrading Firmware

Ignore this section for models other than the MD1230B/MP1591A. This section explains the procedure for updating the installed firmware in the main frame and interface module.

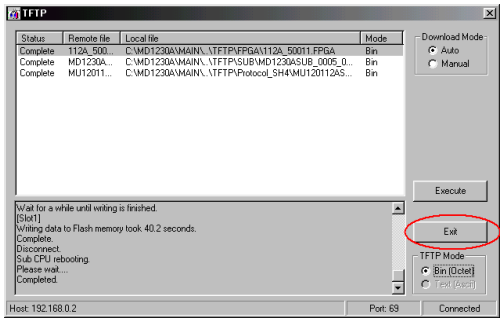
Start the Setup Utility and click the [Download] button at the Download tab to display the Firmware Update screen.



Click the [Execute] button. A dialog is displayed requesting confirmation that it is OK to perform automatic downloading. Click the [OK] button. A list of update files is displayed and firmware updating is performed. If there is no firmware that requires updating (already all updated), updating is not performed (nothing is displayed in the list).



The time required for updating firmware is 2 to 15 minutes per file. The following screen is displayed when updating is completed and the [Exit] button becomes enabled.



This completes firmware updating. Proceed to “Checking Installation”.

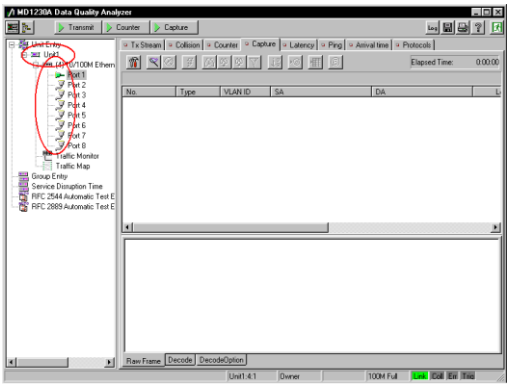
When installing a new unit/module, set the power to OFF, install the new unit/module and then update the firmware once again.

9. Checking Installation

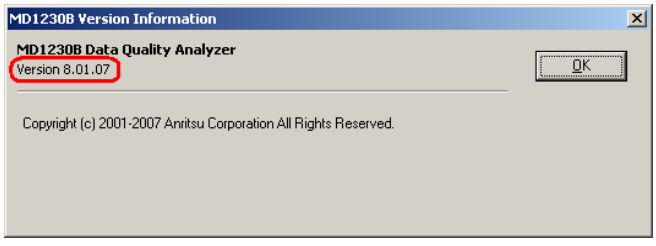
This section explains the procedure check whether the software install and firmware update were performed correctly.

Start Main Application by selecting Main Application at the MD1230B/MP1590B Selector screen. (If the Selector screen is not displayed, double-click the Selector icon on the desktop.) For the MX123001A/MX159001B, select MX123001A/MX15900B from the Start menu.

When Main Application starts, Unit connection processing is performed. (An icon for the inserted interface module is displayed under the Unit icon.) If connection processing is not executed, connect as described in “Procedure for Connecting to Unit” described later. In addition, refer to “Problems when Installing” described later if the connection dialog is not displayed.



Click [?] – [Version …] displayed at the top right of the Main Application screen. If the value displayed at the bottom left of the Version Information screen is the same as the installed software version, the install has been performed correctly.

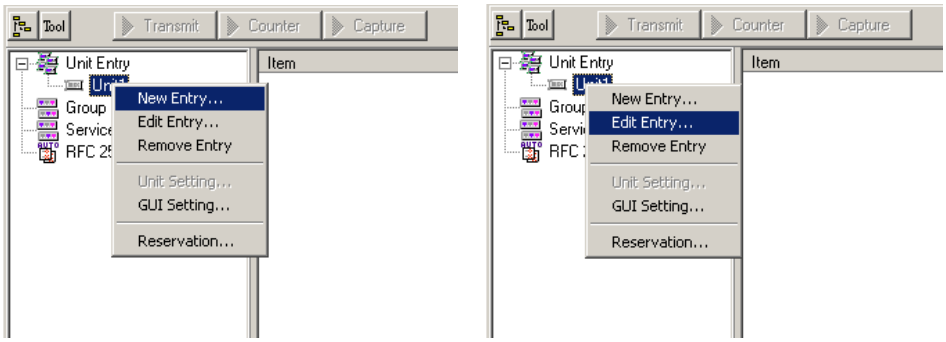


This completes the installation work.

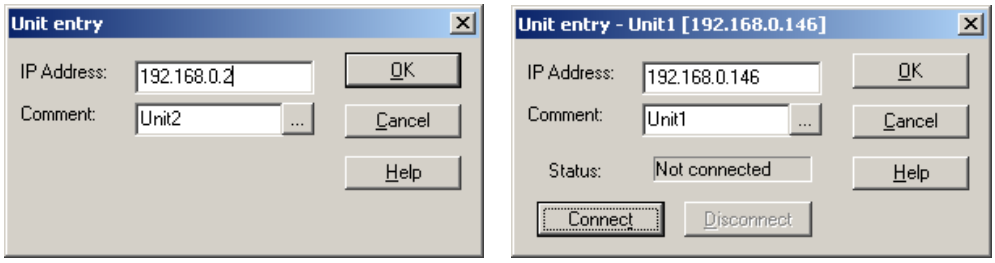
10. Procedure for Connecting to Unit

This section explains the procedure for connecting to the Unit when connection is not performed automatically.

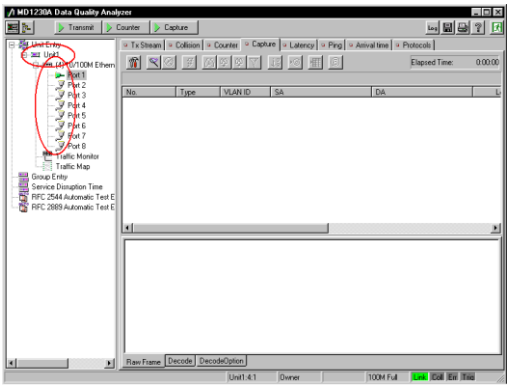
When the Unit icon is not displayed under Unit Entry, right-click [Unit Entry] and select [New Entry…]. If the Unit icon is displayed, right-click the icon and select [Edit Entry …].



When [New Entry] is selected, input the Unit IP address and click the [OK] button. When [Edit Entry...] is selected, click the [Connect] button. The Unit IP address can be confirmed at the IP Address tab of Setup Utility.

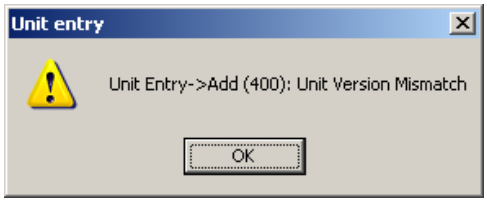


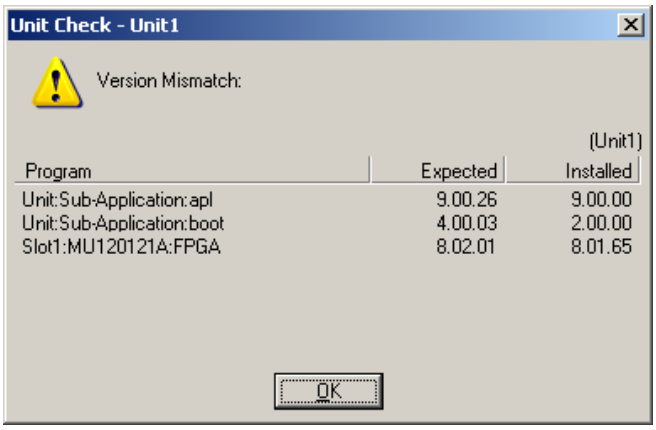
Unit connection processing is performed and the icon for the inserted interface module is displayed under the Unit icon. If the connection dialog is displayed, refer to “Problems when Installing” below.



11. Problems when Installing

When there are install problems, the following type of dialog is displayed at Unit connection. When [OK] is clicked at this dialog, x marks are displayed at the tree icon display. (When there is no problem, the icon is displayed as ; when there are problems, the icon looks like .)





This indicates that there is a mismatch in the versions when the Version Check is performed at Unit connection.

- The Version Check confirms whether the installed Windows application versions and main-frame firmware versions match.
- “Program” in the dialog is the name of the program with the mismatched version. “Installed” is the version of the actually installed program. “Expected” is the expected program version.

If these messages are displayed, refer to the section “Upgrading Firmware” and upgrade the firmware.

12. Troubleshooting

Q. The post-install operation seems unusual. What should we do?

A. When downgrading to earlier than Version 8.0, always perform an uninstall before installing. See the “Uninstalling” section.

Q. The firmware upgrade did not complete and Unit cannot be registered at Main Application. What should we do?

A. There may be a problem with the IP address setting (Windows/Unit). Start Setup Utility and click the IP Address tab. If the settings are not as listed below, change them.

Windows	Unit
IP Address: 192.168.0.1 Netmask: 255.255.255.0 Gateway: 0.0.0.0	IP Address: 192.168.0.2 Netmask: 255.255.255.0 Gateway: 0.0.0.0

Q. Why is X displayed at the Unit icon at Unit connection?

A. See the section “Problems when Installing”.

Q. Why can’t we uninstall?

A. Sometimes this problem occurs when a folder {B900EDE1-7F98-11D5-9604-00004CA31724} is left in the Windows registry. Start the regedit application from ”Run ...” at the Windows Start menu and delete the following registry key: ¥¥HKEY_LOCAL_MACHINE¥Software¥Microsoft¥Windows¥CurrentVersion¥Uninstall¥{B900EDE1-7F98-11D5-9604-00004CA31724}

Q. If the installed module composition is subsequently changed, is it necessary to re-install again?

A No. However, if the module firmware version is old, firmware upgrading is required. See “Upgrading Firmware” and ”Problems when Installing” sections.

Q. Can we read the setting and results data saved with a previously installed version?

A. Yes, by using the Setup File Converter utility. See the MX123001A operation manual for how to use Setup File Converter.

Q. Is installation impossible when the error message "The main-frame information (serial number) cannot be read." is displayed when the product key is input? (CM1130:0690)

A. This error message is displayed when running the installer for version 8.1 or later immediately after installing a version earlier than 8.1 without restarting. In this case, restart the main frame and reinstall again.