NX100 RCS-Module for IGRIP

Installation Manual

Upon receipt of the product and prior to initial operation, read this instruction thoroughly, and retain for future reference.

Part Number: 152001-1CD
Revision: 0

General Precautions

· Diagrams and photos in this manual are used as examples only and may differ from the actual delivered product.

· This manual may be modified when necessary because of improvement of the product, modification, or changes in specifications.
Such modification is made as a revision by renewing the manual No.

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Contents

1 Introduction

The RCS-Module (hereinafter called the NX100 RCS-Module) is a software which runs a simulation of a manipulator controlled by the NX100 using a function called the Realistic Robot Simulation (RRS) of IGRIP.

This manual describes how to install and start up the NX100 RCS-Module.

Note: For details of the RRS function of IGRIP, contact DELMIA Japan, Ltd., the developer and distributor of the IGRIP.

1.1 System Requirements

The NX100 RCS-Module requires the following hardware and software:

1.1.1 Hardware

- ・ PC/AT compatible personal computer and monitor to run IGRIP D5 or IGRIP V5 version for PC.
- ・ 10 MB or more of free hard disk space.
- ・ CD-ROM drive.
- ・ Hardware Lock Key . (Refer to "1.2 Hardware Lock Key".)

1.1.2 Software

- ・ For IGRIP D5:
    1) OS (Windows 2000) on which IGRIP D5 version for PC runs
    2) IGRIP version for PC: ver. D5R13 or a newer version, with RRS option of IGRIP D5.
- ・ For IGRIP V5:
    1) OS (Windows 2000/XP) on which IGRIP V5 version for PC runs
    2) IGRIP V5: ver. R15 or a newer version, with RRS option of IGRIP V5.

1.2 Hardware Lock Key

For proper operation, connect provided hardware lock key to personal computer before using this software. Two types of hardware lock keys are available;

- USB type

- D-sub type

Followings are the connecting methods of each key type.

1.2.1 Connecting USB type key

Check and execute the following items before connecting the key to USB port.

<Check the computing environment>

Multi-connection of USB type key is not available for one USB port because of hardware structure.   Therefore, only one key should be connected to one USB port. When installing multiple Yaskawa offline software into one personal computer and multi-connecting USB keys, use the personal computer which is provided same numbers of USB ports as the number of software to be installed.

<Installation of driver>

Be sure to install the driver **_with key detached_** from personal computer.

Execute "\SentinelDriver\SSD5411-32bit.EXE" of installation CD-ROM. Refer to "\SentinelDriver\Manual\us\Readme.pdf" for the installation procedure.

Note: 1. When installing the driver under Windows 2000/XP environment, be sure to login on administrator mode in order to add files to system folder and input information in registry.
2. If a key is connected to personal computer before installing the driver, Windows wizard ([Add New Hardware] Wizard) starts up. In this case, push [cancel], and detach the key from personal computer and then install the driver.

1.2.2 Connecting D-sub type key

Connecting the key to the printer port( ).

<Installation of driver>

Execute "\SentinelDriver\SSD5411-32bit.EXE" of installation CD-ROM. Refer to "\SentinelDriver\Manual\us\Readme.pdf" for the installation procedure.

Note: 1. Be sure to install the driver in case of operation under Windows 2000/XP environment.
2. When installing the driver under Windows 2000/XP environment, be sure to login on the administrator mode in order to add files to system folder and input information in registry.
3. Refer to "4.1 Frequently-asked questions" for other countermeasures concerning hardware lock key.

1.3 Software

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2 IGRIP D5

2.1 Installation of the NX100 RCS Module

2.1.1 Execution of Setup Program

Install the NX100 RCS-Module according the following procedure:

1. Turn ON the personal computer and the monitor power supply to start up Windows.
2. Exit all the Windows programs.
3. Insert the installation CD-ROM into the CD-ROM drive.
4. Click the [Start] button and point to [Settings]. Click [Control Panel], and select the [Add/Remove Programs].
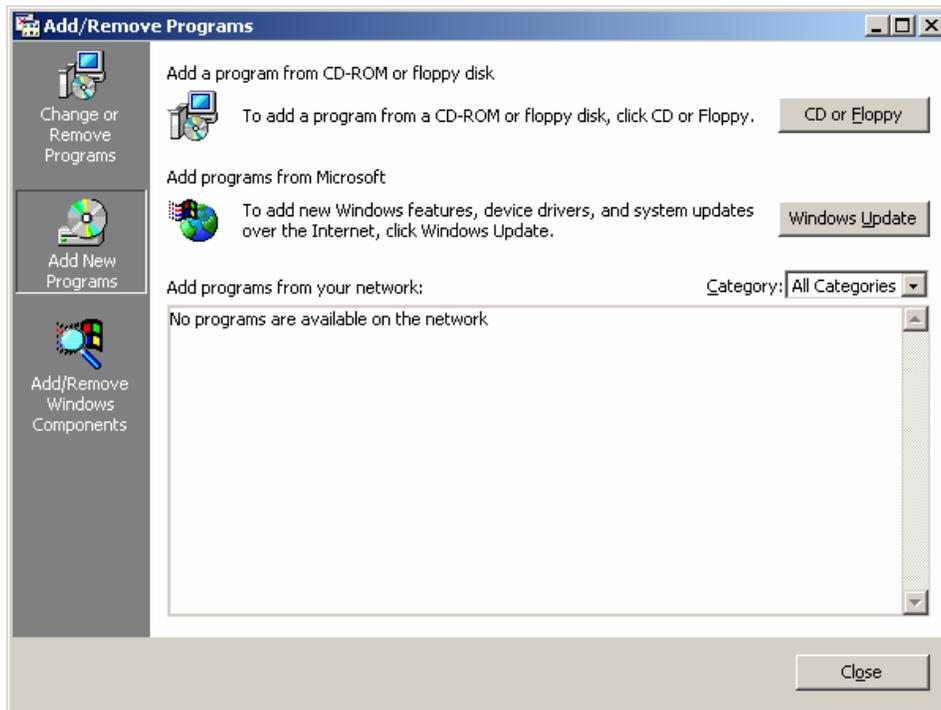

Fig. 2-1 [Add/Remove Programs] Dialog Box

5. Click the [Add New Programs] button, then click the [CD or Floppy] button.
6. Follow the on-screen instructions to run "Setup.exe" from the CD-ROM drive.
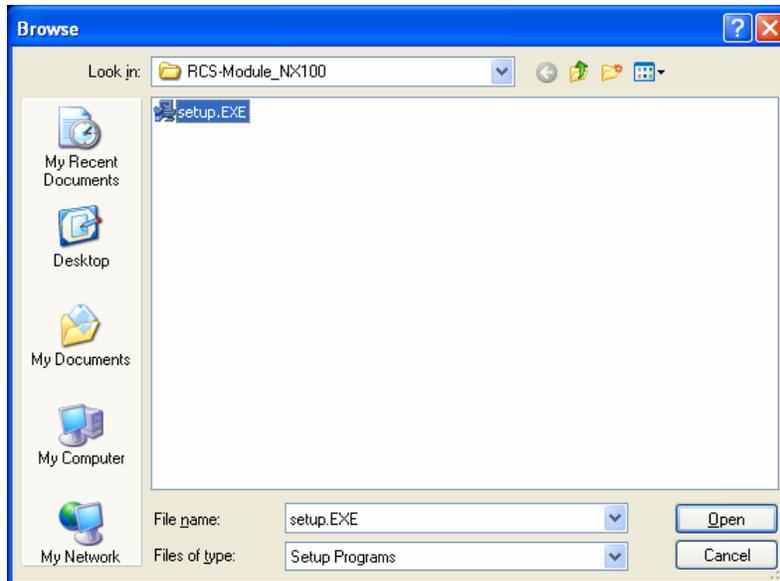
Fig. 2-2 Dialog Box for Setup Program Setting

7. Click the [Finish] button to execute the setup program. Follow the on-screen instructions.

8. During the installation, a selection dialog box appears to select the IGRIP module version
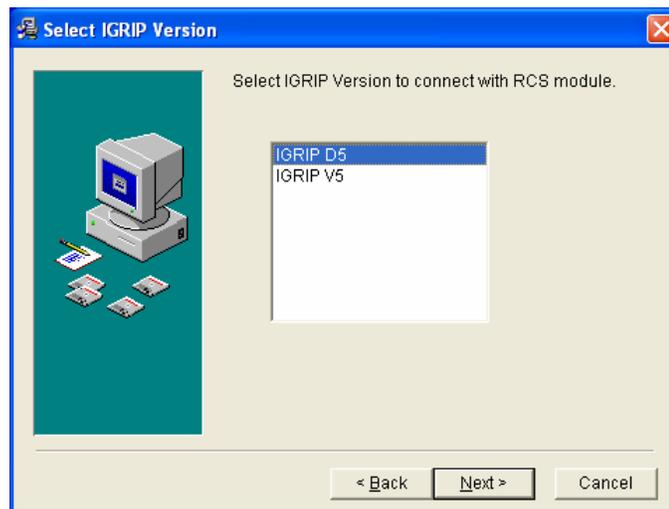   to install. Please select the IGRIP D5 module.

Fig. 2-3 [IGRIP Selection] Dialog Box

9. During the installation, a selection dialog box appears to specify the destination folder
    name: select the folder name where IGRIP has been installed.
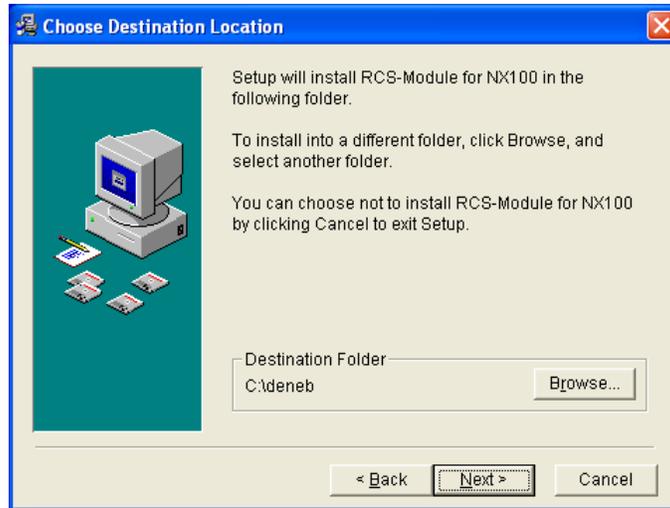
Fig. 2-4 [Choose Destination Location] Dialog Box

Note: If for some reason, the NX100 RCS-Module needs to be reinstalled, perform the reinstallation operation after deleting all the NX100 RCS-Module files by selecting [RCS-Module for NX100] in the [Add/Remove Programs] dialog box (Fig. 2-1) or by clicking the [Start] button in the task bar and selecting [Program]- [YASKAWA RRS]- [Uninstall].

2.1.2 Installation Directory

The programs and robot parameters of the NX100 RCS-Module are located under the directory where IGRIP has been installed as follows:
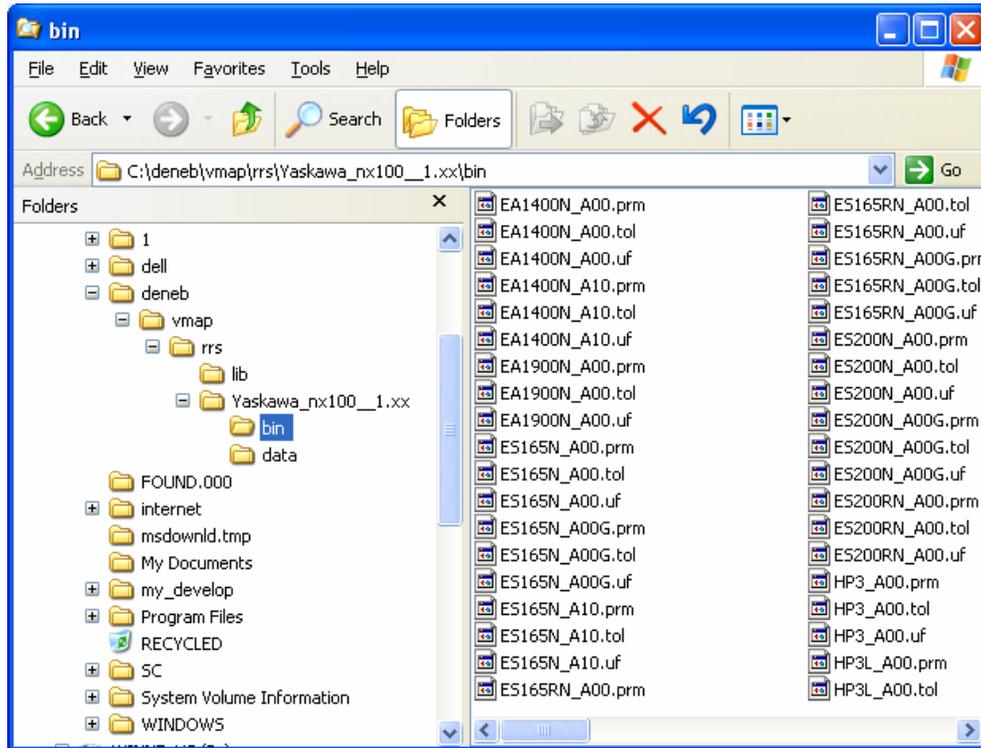
<INSTALLATION FOLDER>\VMAP\RRS\YASKAWA_NX100__1.XX\bin

Fig. 2-5 Folder Structure after Installation

Note 1) After the installation, the directory **\VMAP\RRS\YASKAWA_NX100__1.XX\data** is created. It is a directory to save the robot parameters from the actual manipulator, and is empty at installation.

Note 2) Do not change the names of **bin** or **data** folder. Since the names are case-sensitive, changing the name of the folder or using upper-case characters may cause the NX100 RCS-Module to malfunction.

2.2 IGRIP D5-RRS/RCS-Module Connection Operation

To connect the NX100 RCS-Module with the RRS function of IGRIP and run a simulation, it is required to perform the "Start-up of the RCS Server Program" and the "IGRIP-RRS Connection Operation".

2.2.1 Preparation

RRS server definition is in the file "rrs.servers" located under "\vmap\rrs" which is located under the folder where IGRIP was installed.   Add the host name of your server machine in this file. The format description is as follows:

Server definition: <RRS_Server><RRS_Cntr_Type>SOCKET<Host><Port>

If the host name is "IGRIP", the definition is written as follows:

```
# YASKAWA NX100 1.XX Servers
#
YASKAWA_NX100__1.XX_Server1 YASKAWA_NX100__1.XX SOCKET Lynxdeu  4500
YASKAWA_NX100__1.XX_Server2 YASKAWA_NX100__1.XX SOCKET rcssrvr    4500
YASKAWA_NX100__1.XX_Server3 YASKAWA_NX100__1.XX SOCKET IGRIP     4500
```

Fig. 2-6 Example of the rrs.server settings

Note) The modification on "rrs.servers" file after launching the IGRIP will not be reflected.

2.2.2 Start-up of the RCS Server Program

To start the RCS server program, follow the procedure below:

1) Start a MS-DOS Window.

Click the [Start] button and point to [Program], then select [Accessory] - [Command Prompt] to display a MS-DOS Window.


2) Change to the folder in which the RCS server program was installed.

Change the current folder to the folder where the RCS server program (rcssrv_Yaskawa_NX100__1.xx.exe) is located. The following example is for the DOS command input and assumes that IGRIP has been installed in C:\deneb:

>c:

>cd c:\deneb\vmap\rrs\yaskawa_nx100__1.xx\bin

3) Start the server program.

Start the RCS server program (rcssrv_Yaskawa_NX100__1.XX.exe).　The argument "-tcp" and the port no. "4500" are required for the program.　The following example is for the DOS command input and assumes that IGRIP was installed in C:\deneb: >rcssrv_Yaskawa_NX100__1.XX.exe -tcp 4500
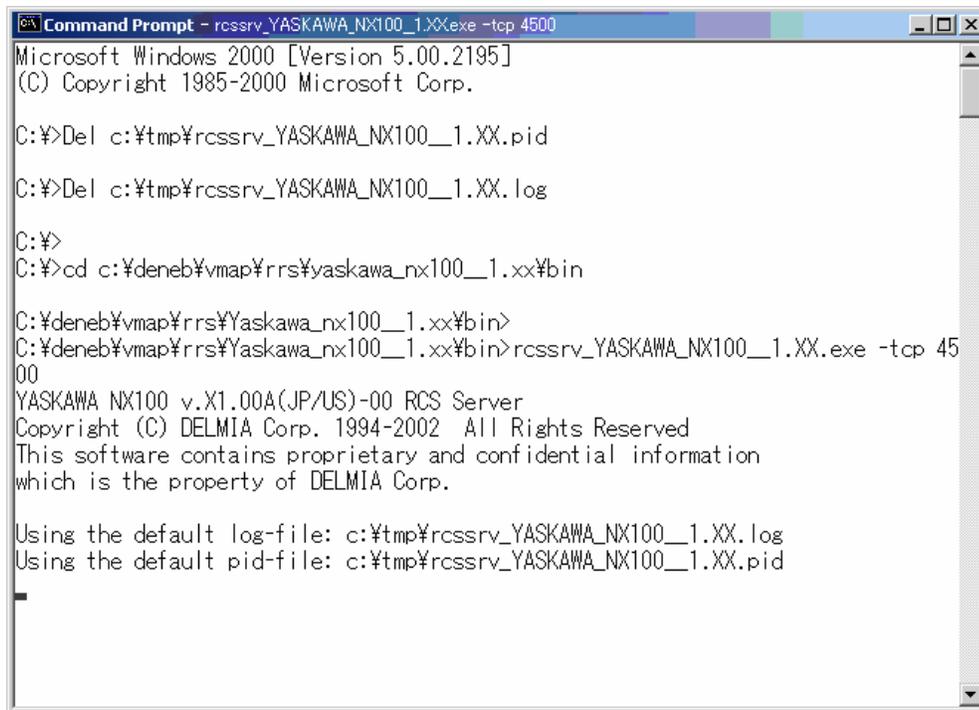
```
Command Prompt - rcssrv_YASKAWA_NX100_1.XX.exe -tcp 4500          _ □ ×
Microsoft Windows 2000 [Version 5.00.2195]
(C) Copyright 1985-2000 Microsoft Corp.

C:\>Del c:\tmp\rcssrv_YASKAWA_NX100__1.XX.pid

C:\>Del c:\tmp\rcssrv_YASKAWA_NX100__1.XX.log

C:\>
C:\>cd c:\deneb\vmap\rrs\yaskawa_nx100__1.xx\bin

C:\deneb\vmap\rrs\Yaskawa_nx100__1.xx\bin>
C:\deneb\vmap\rrs\Yaskawa_nx100__1.xx\bin>rcssrv_YASKAWA_NX100__1.XX.exe -tcp 45
00
YASKAWA NX100 v.X1.00A(JP/US)-00 RCS Server
Copyright (C) DELMIA Corp. 1994-2002   All Rights Reserved
This software contains proprietary and confidential information
which is the property of DELMIA Corp.

Using the default log-file: c:\tmp\rcssrv_YASKAWA_NX100__1.XX.log
Using the default pid-file: c:\tmp\rcssrv_YASKAWA_NX100__1.XX.pid
```

Fig. 2-7 DOS Prompt command example

Note)   If the RCS server has been started in the past, the files "Rcssrv_YASKAWA_ NX100__1.XX.log" and "Rcssrv_YASKAWA_NX100__1.XX.pid" are created under the "c:\tmp" folder.　Delete those files before starting the RCS server program (rcssrv_Yaskawa_NX100__1.XX.exe); if those files exist, the server program would not start properly.

2.2.3 IGRIP-RRS Connection Operation

To perform RRS connection operation with IGRIP, follow the procedure below:

1) Start the IGRIP, and register the MOTOMAN robot in a workcell.

2) The [RRS Status] dialog box appears by the following operation procedure:
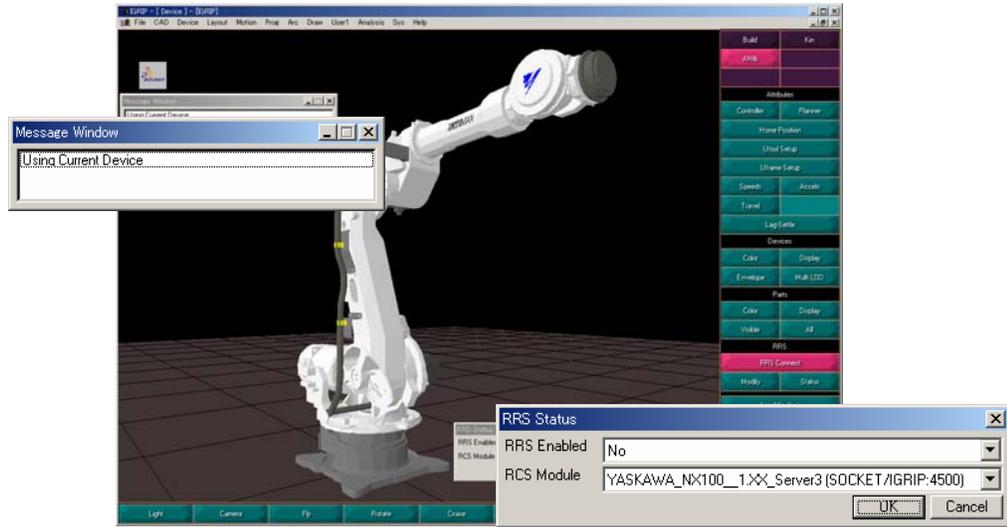
Operation procedure: [Device]-[Attrib]-[RRS Connect]

Fig. 2-8 IGRIP RRS Connection Operation

3) Select "YASKAWA_NX100__1/XX_Server1(SOCKET/IGRIP:4500)" from the pull-down menu for [RCS Module] in the [RRS Status] dialog box. Select "Yes" for [RRS Enabled], and press the [OK] button.
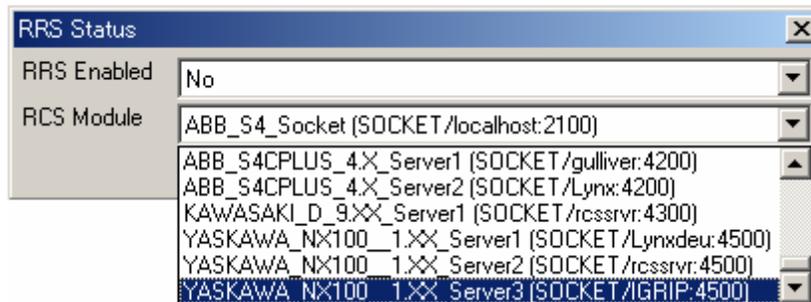

Fig. 2-9 IGRIP [RRS Status] Dialog Box

4) Select the MOTOMAN of the same type as the manipulator model from the pull-down menu for [Manipulator] in the [RRS Properties] dialog box. Press the [OK] button.
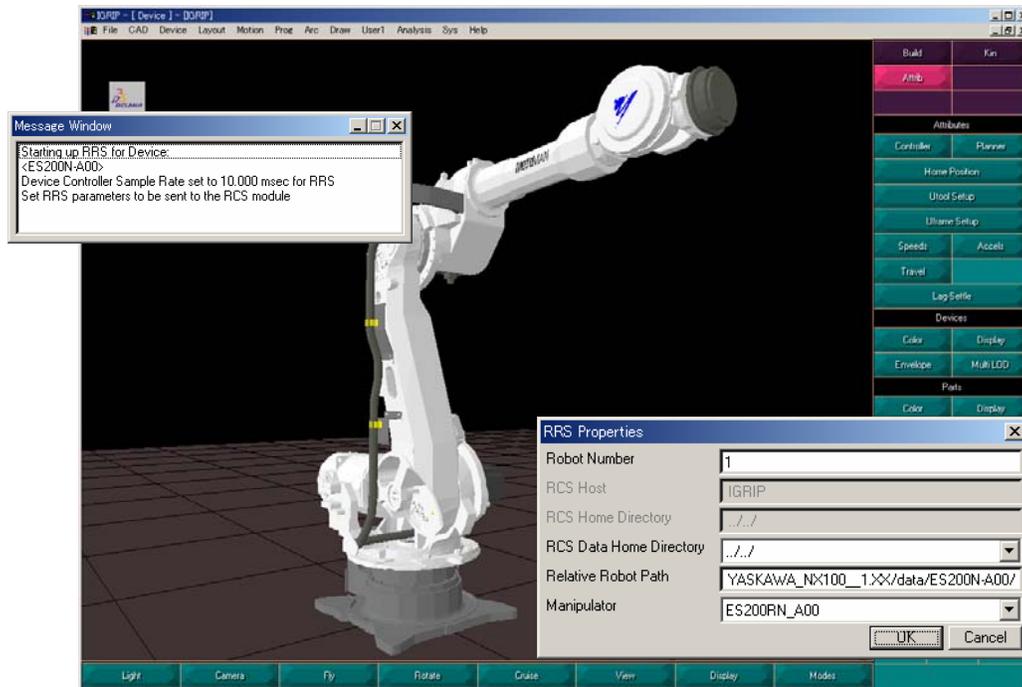
Fig. 2-10 IGRIP [RRS Properties] Dialog Box

5) The following message appears on [RRS Message Window] of the subject MOTOMAN.
   With this window, the user can confirm the connection of IGRIP-RRS/RCS-Module.
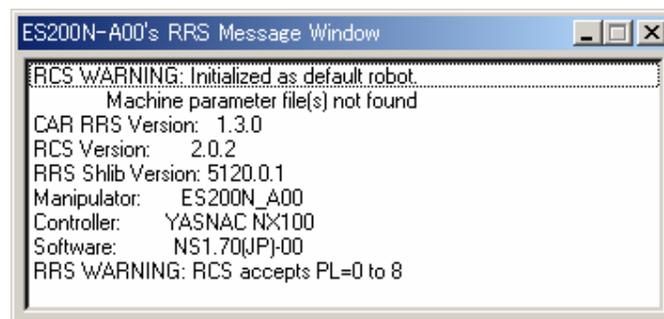

Fig. 2-11 IGRIP [RRS Message Window] Dialog Box

Note 1)   The above message window shows "Initialized as default robot. Machine
           parameter file(s) not found". It means that since there had been no parameters
           for the subject manipulator, the RCS-Module has been started by the default
           parameters.   To start the RCS-Module properly with the right parameters
           downloaded from the actual manipulators or provided by Yaskawa, it is
           necessary to prepare those files under "\VMAP\RRS\YASKAWA_NX100__1.
           XX\data" using proper names. (Refer to Chapter 2.2.5.)

Note 2)   When connecting the RRS, a WARNING dialog box appears, clearly indicating
           the upper limit of the positioning level (PL) for the subject RCS-Module. It is
           an indication to prompt the user's attention, and is not a failure indication.

2.2.4 IGRIP-RRS Disconnection Operation

To perform RRS disconnection operation with IGRIP, follow the procedure below:

1) The [RRS Status] dialog box appears by the following operation procedure:

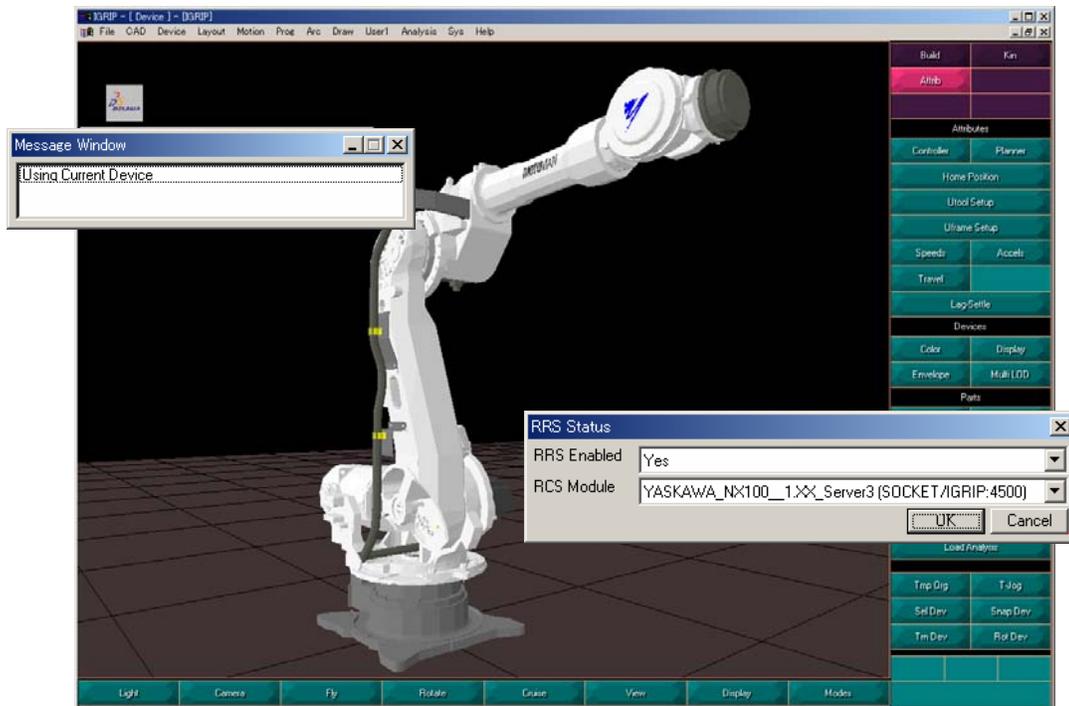   Operation procedure: [Device]-[Attrib]-[RRS Connect]

Fig. 2-12 IGRIP [RRS Status] Dialog Box

2) Select "No" for [RRS Enabled] in the [RRS Status] dialog box, and press the [OK] button.

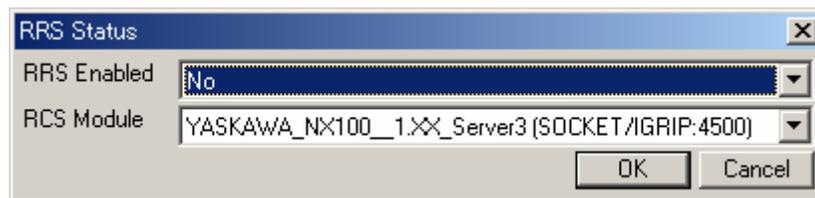   The connection with the RCS-Module can be disconnected with this operation.

Fig. 2-13 IGRIP [RRS Status] Dialog Box

Note) When closing the IGRIP, it is also required to terminate the RCS server program (rcssrv_Yaskawa_NX100__1.XX.exe). To terminate the RCS server program, close the MS-DOS window opened in Chapter 3.2.

2.2.5 IGRIP-RRS Connection Using Parameters of Actual Manipulator

To start the RCS-Module properly using the parameters downloaded from actual manipulator or right parameter provided by Yaskawa, prepare the parameters in the following procedure and perform IGRIP-RRS connection:

1) Change the name of the parameter file. The new file name should be conformed to the following rule: [Robot type]_[Two-digit Robot number].[Extension of each parameter]

	Parameter Name	File Name before Change	New File Name in case of ES200N-A00 (Robot number in cell: No.1)
1	All parameters	all.prm	ES200N_A00_01.prm
2	Tool data	tool.cnd	ES200N_A00_01.tol
3	User frame data	uframe.dat	ES200N_A00_01.uf

Replace all the symbols "-" used in the robot type with "_".

2) Copy the file with a new name in the following folder.
   Copy to: "\VMAP\RRS\Yaskawa_nx100__1.xx\data" located under the folder where the IGRIP was installed.

3) Perform the IGRIP-RRS connection operation.

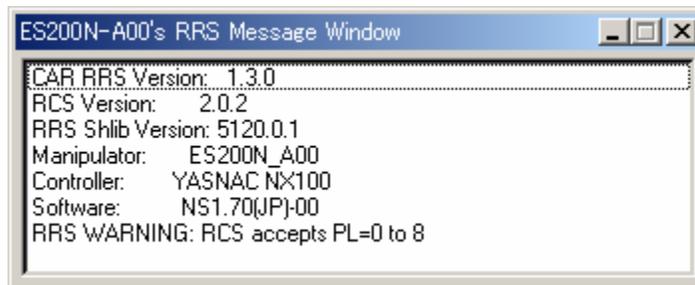4) Confirm that there is no warning indicated in the [RRS Message Window] of the subject robot as follows:

Fig. 2-14 IGRIP [RRS Message Window] Dialog Box

2.2.6 When the MOTOMAN Model Required for Manipulator Selection is not Displayed

The robot models produced after the release of the IGRIP version are not listed in the pull-down menu for [Manipulator] in the [RRS Properties] dialog box. The subject model of the MOTOMAN can be listed on the pull-down menu by adding the model to the "manipulator list". Follow the editing procedure of the "manipulator list" shown below:

1) Open the "manipulator list" in a text editor. The "manipulator list" is stored in the file "YASKAWA_NX100.manip" in the folder "\vmap\rrs\lib" under the IGRIP installation directory. (If there is no such file, create a new file in this name.)

2) Add the model name in the list. The "manipulator list" contains the text data as shown in the figure below. Add the model name of desired MOTOMAN to the list. When entering the manipulator name, be sure to enter one model per a line with no blank or symbol. Also, the list can be replaced as the standard by designating "*REPLACE*" on the first line
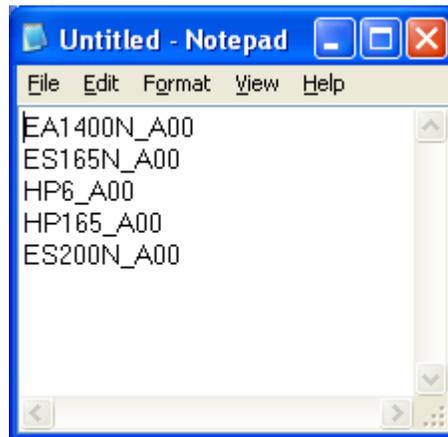

Fig. 2-15 Text Editor Example for Adding Manipulator

3) Save and close the "manipulator list".

3 IGRIP V5

3.1 Installation of the NX100 RCS Module

3.1.1 Execution of Setup Program

Install the NX100 RCS-Module according the following procedure:

1. Turn ON the personal computer and the monitor power supply to start up Windows.
2. Exit all the Windows programs.
3. Insert the installation CD-ROM into the CD-ROM drive.
4. Click the [Start] button and point to [Settings]. Click [Control Panel], and select the [Add/Remove Programs].
5. Click the [Add New Programs] button, then click the [CD or Floppy] button.
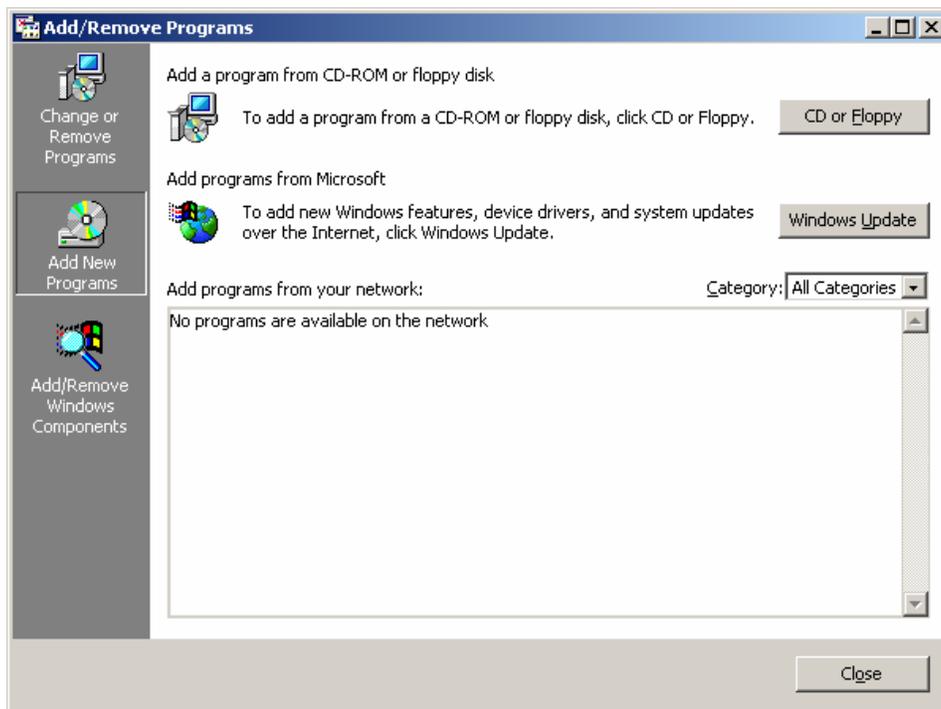

Fig. 3-1 [Add/Remove Programs] Dialog Box

6. Follow the on-screen instructions to run "Setup.exe" from the CD-ROM drive.
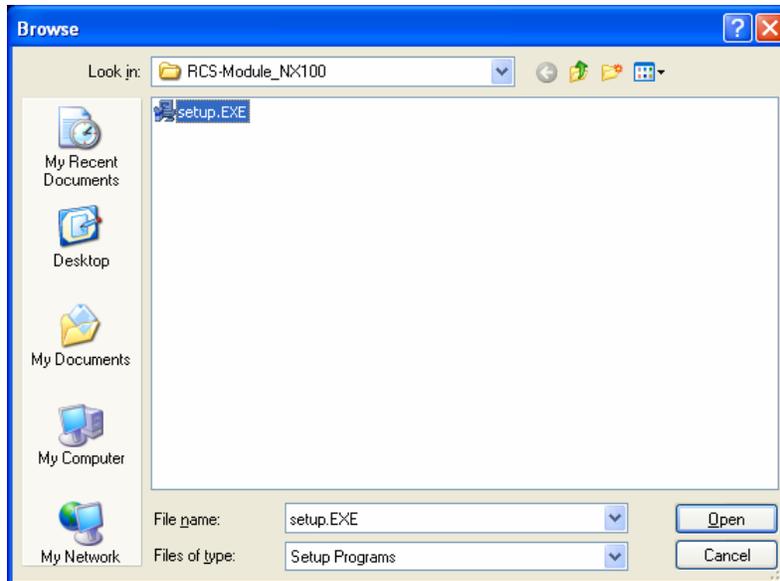
Fig. 3-2 Dialog Box for Setup Program Setting

7. Click the [Finish] button to execute the setup program. Follow the on-screen instructions.

8. During the installation, a selection dialog box appears to select the IGRIP module version to install. Please select the IGRIP V5 module.

Fig. 3-3 [IGRIP Selection] Dialog Box

9. During the installation, a selection dialog box appears to specify the destination folder name: select the folder name where IGRIP V5 has been installed.
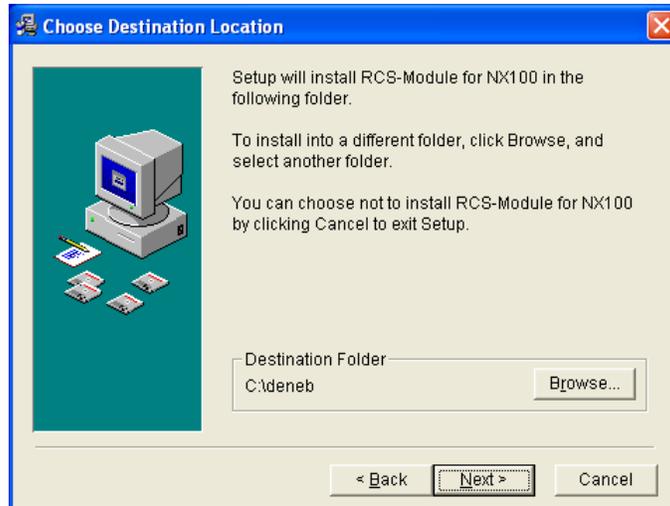
Fig. 3-4 [Choose Destination Location] Dialog Box

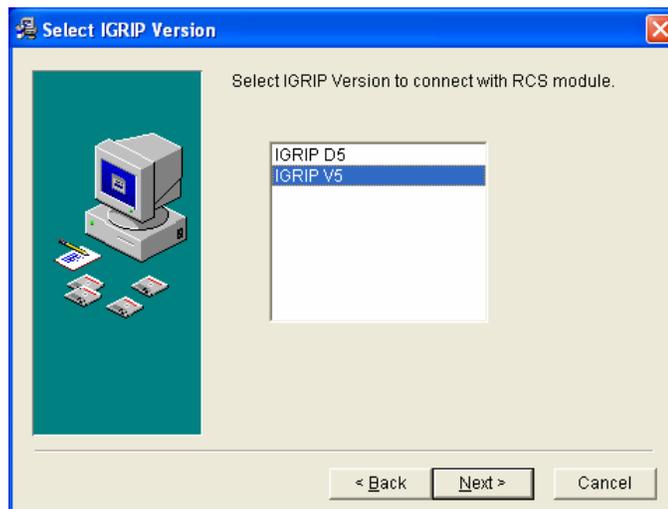Note: If for some reason, the NX100 RCS-Module needs to be reinstalled, perform the reinstallation operation after deleting all the NX100 RCS-Module files by selecting [RCS-Module for NX100] in the [Add/Remove Programs] dialog box (Fig. 3-1) or by clicking the [Start] button in the task bar and selecting [Program]- [YASKAWA RRS]- [Uninstall].

3.1.2 Installation Directory

The programs and robot parameters of the NX100 RCS-Module are located under the directory where IGRIP has been installed as follows:
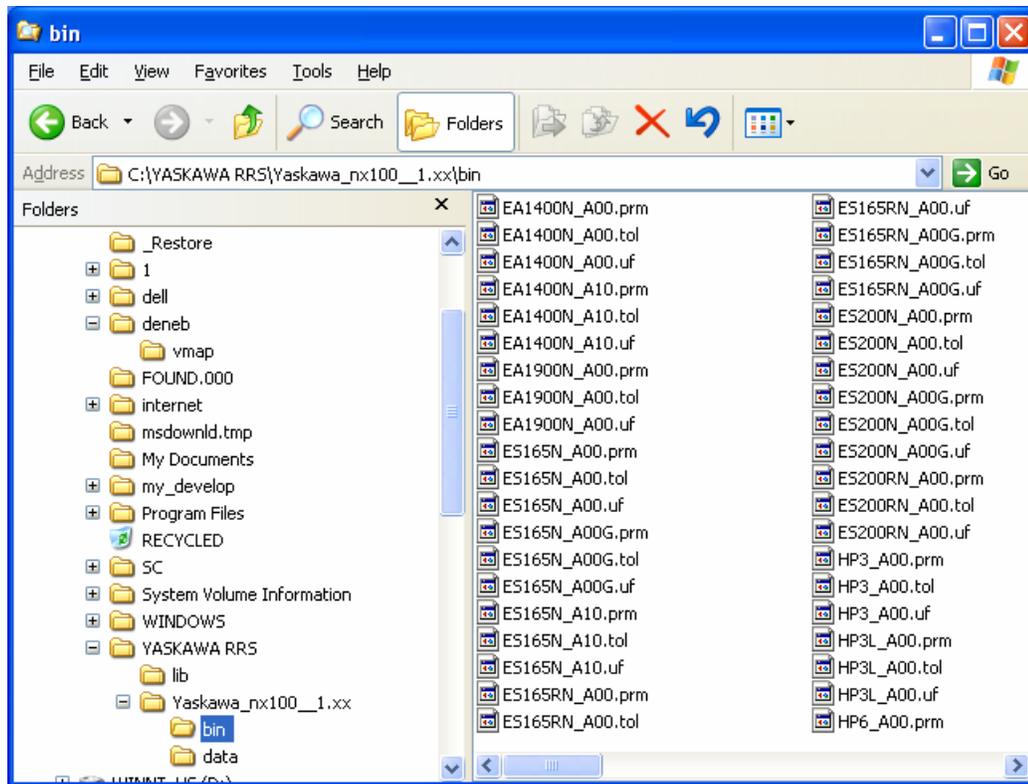
<INSTALLATION FOLDER> \YASKAWA_NX100__1.XX\bin

Fig. 3-5 Folder Structure after Installation

Note 1). After the installation, the directory **<Installation Folder>**
\YASKAWA_NX100__1.XX\data is created. It is a directory to save the robot
parameters from the actual manipulator, and is empty at installation.

Note 2) Do not change the names of **bin** or **data** folder. Since the names are case-sensitive,
changing the name of the folder or using upper-case characters may cause the NX100
RCS-Module to malfunction.

3.2 IGRIP V5-RRS/RCS-Module Connection Operation

To connect the NX100 RCS-Module with the RRS function of IGRIP and run a simulation, it is required to perform the "Start-up of the RCS Server Program" and the "IGRIP-RRS Connection Operation".

3.2.1 Preparation

RRS server definition is in the file "rrs.servers" located under "\intel_a\startup\rrs" which is located under the folder where IGRIP was installed.   Add the host name of your server machine in this file. The format description is as follows:

Server definition: <RRS_Server><RRS_Cntr_Type>SOCKET<Host><Port>

If the host name is "IGRIP", the definition is written as follows:


```
# YASKAWA NX100 1.XX Servers
#
YASKAWA_NX100__1.XX_Server1 YASKAWA_NX100__1.XX SOCKET Lynxdeu  4500
YASKAWA_NX100__1.XX_Server2 YASKAWA_NX100__1.XX SOCKET rcssrvr    4500
YASKAWA_NX100__1.XX_Server3 YASKAWA_NX100__1.XX SOCKET IGRIP     4500
```

Fig. 3-6 Example of the RRS server settings

Note) The modification on "rrs.servers" file after launching the IGRIP will not be reflected.

3.2.2 Setup of the IGRIP V5 RRS property

After the installation, it is necessary to set the installation location of the RCS module in IGRIP V5. To do so, please follow the procedure below:

1) In IGRIP V5, select [Tools]-[Options] to display the "Options" dialog box.
2) Click on [Ressource Detailing] in tree structure on the left side of the "Options" dialog box.
3) Click on the [RRS] tab on the right side of the "Options" dialog box

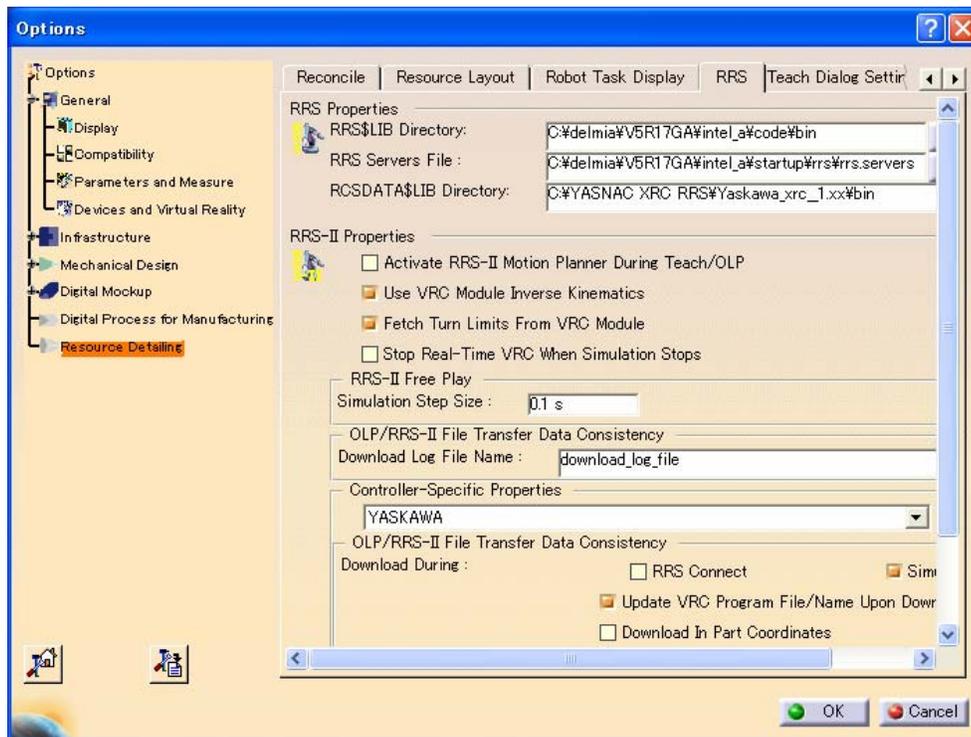Atfer completing the above steps, the "Options" dialog box should look like the figure below.

Fig. 3-7 IGRIP V5 [Options] Dialog Box

In the main section, set the directories for the [RRS$LIB directory], [RRS Servers File] and [RCSDATA$LIB directory].

Set the values as follows:

      RRS$LIB directory:

          <IGRIP installation folder>\intel_a\code\bin

      RRS Servers File

          < IGRIP installation folder >\intel_a\startup\rrs\rrs.servers

      RCSDATA$LIB directory:

          <RCS module installation folder>\Yaskawa_nx100__1.xx\bin

3.2.3 Start-up of the RCS Server Program

To start the RCS server program, follow the procedure below:

1) Start a MS-DOS window.

   Click the [Start] button and point to [Program], then select [Accessory] [Command Prompt] to display a MS-DOS window.

2) Change to the folder in which the RCS server program was installed.

Change the current folder to the folder where the RCS server program
(rcssrv_Yaskawa_NX100__1.xx.exe) is located. The following example is for the DOS
command input and assumes that RCS serve program has been installed in
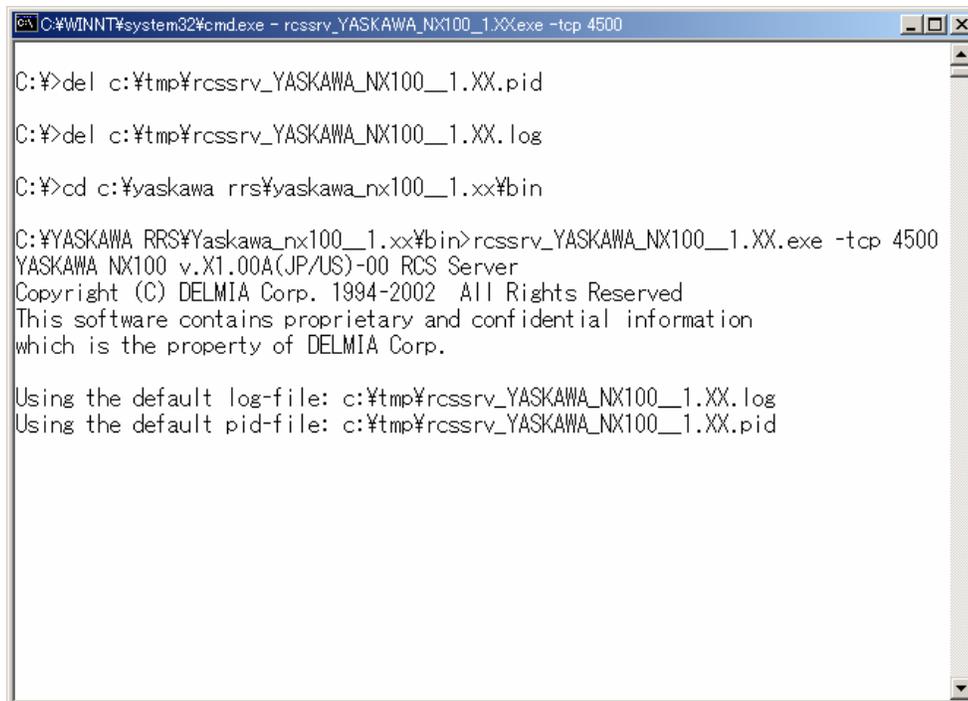C:\YASKAWA RRS:

>c:

>cd c:\YASKAWA RRS\yaskawa_nx100__1.xx\bin

3) Start the server program.

Start the RCS server program (rcssrv_Yaskawa_NX100__1.XX.exe).   The argument
"-tcp" and the port no. "4500" are required for the program. The following example is for
the DOS command input and assumes that RCS serve program has been installed in
C:\YASKAWA RRS:

>rcssrv_Yaskawa_NX100__1.XX.exe -tcp 4500


```
C:¥WINNT¥system32¥cmd.exe - rcssrv_YASKAWA_NX100_1.XX.exe -tcp 4500        _|□|×|

C:¥>del c:¥tmp¥rcssrv_YASKAWA_NX100__1.XX.pid

C:¥>del c:¥tmp¥rcssrv_YASKAWA_NX100__1.XX.log

C:¥>cd c:¥yaskawa rrs¥yaskawa_nx100__1.xx¥bin

C:¥YASKAWA RRS¥Yaskawa_nx100__1.xx¥bin>rcssrv_YASKAWA_NX100__1.XX.exe -tcp 4500
YASKAWA NX100 v.X1.00A(JP/US)-00 RCS Server
Copyright (C) DELMIA Corp. 1994-2002  All Rights Reserved
This software contains proprietary and confidential information
which is the property of DELMIA Corp.

Using the default log-file: c:¥tmp¥rcssrv_YASKAWA_NX100__1.XX.log
Using the default pid-file: c:¥tmp¥rcssrv_YASKAWA_NX100__1.XX.pid
```

Fig. 3-8 Example of the RRS server program start-up

Note)   If the RCS server has been started in the past, the files "Rcssrv_YASKAWA_
NX100__1.XX.log" and "Rcssrv_YASKAWA_NX100__1.XX.pid" are created
under the "c:\tmp" folder. Delete those files before starting the RCS server program
(rcssrv_Yaskawa_NX100__1.XX.exe); if those files exist, the server program
would not start properly.

3.2.4 IGRIP-RRS Connection Operation

To perform RRS connection operation with IGRIP V5, follow the procedure below:

1) Start the IGRIP V5, and register the MOTOMAN robot in a workcell.
2) Change the workbench to [Workcell Sequencing] by selecting [Start]-[Ressource Detailing]-[Workcell Sequencing]
3) Press the [RRS Connect] button of the [RRS Connect] Toolbar, then click in the workcell on the robot to be connected. The RRS Server Selection dialog box will display.
   If the [RRS Connect] toolbar is not currently displayed, use the following procedure:
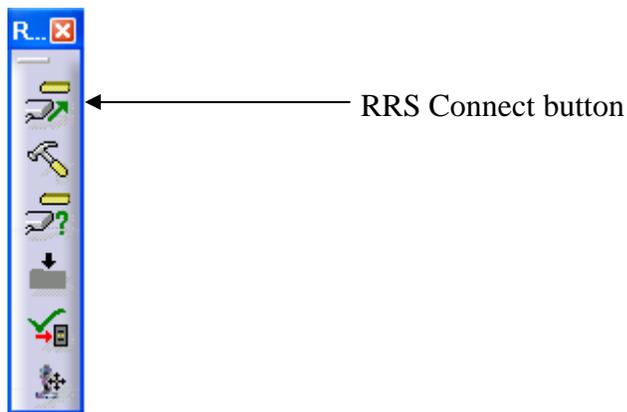   Select: [View]-[Toolbars]-[RRS Connect]

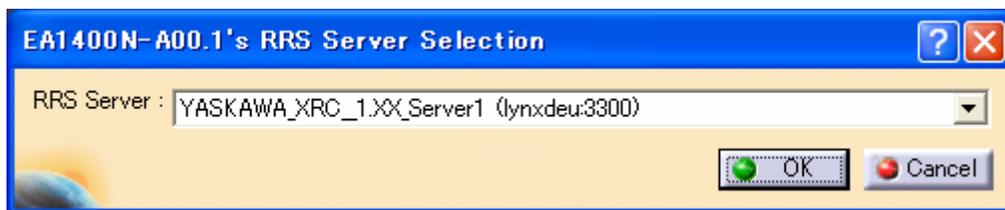   RRS Connect button

Fig. 3-9 RRS Connect toolbar

Fig. 3-10 RRS Server Selection dialog box (Dialog initial display)

4) In the RRS Server Selection dialog box, select the Yaskawa RRS server (YASKAWA NX100__1.XX_Server...) as the RRS Server and press [OK].
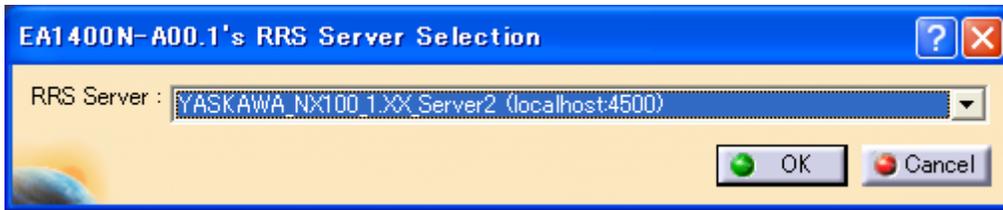
Fig. 3-11 RRS Server Selection dialog box (with Yaskawa NX100 server selection)

Note) Depending on the settings of the rrs.server, the value [2] and the [localhost] may differ from the ones in the figure above.

5) In the [Manipulator] field of the [RRS Properties] dialog box, select the same robot model as the Motoman robot registered in the workcell, then press the [OK] button.
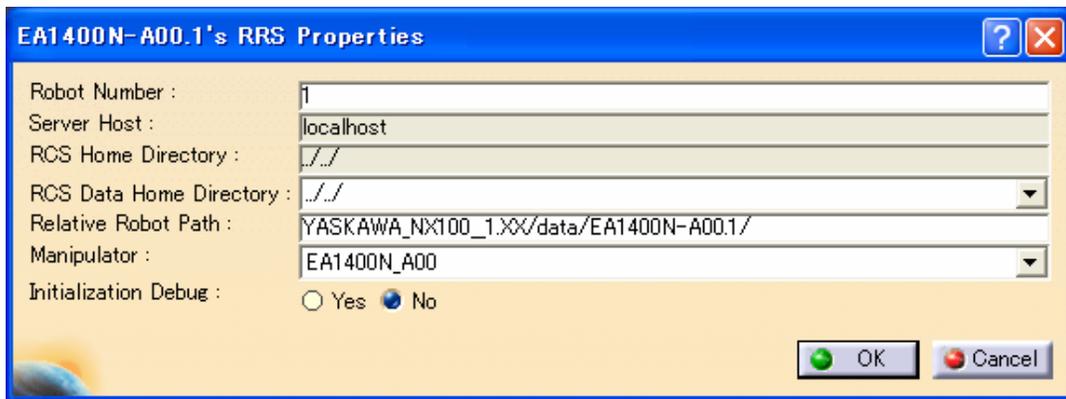

Fig. 3-12 RRS Connection Properties setup dialog box

6) The messages in following figure are displayed in the [RRS Message Window] on the robot with establish RRS connection. These messages confirm that the connection to the IGRIP-RRS/RCS Module is established.
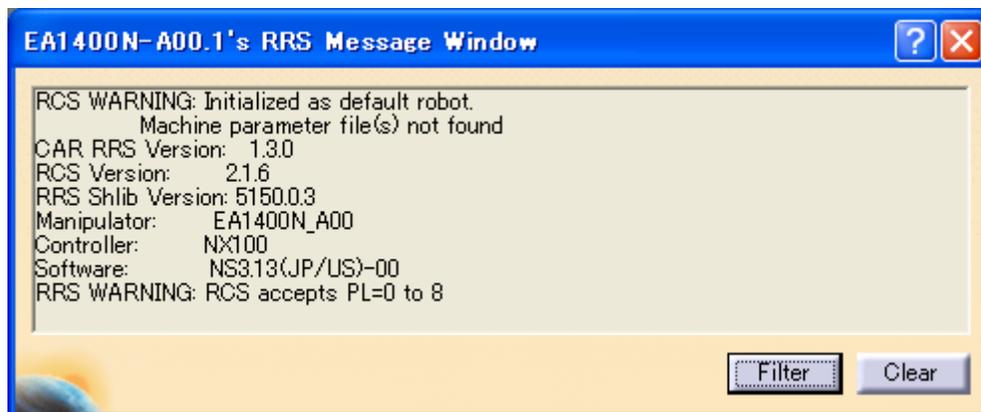

Fig. 3-13 RRS Message Window dialog box (when connected to RCS module)

Note 1) The above message window shows "Initialized as default robot. Machine parameter file(s) not found". It means that since there had been no parameters for the subject manipulator, the RCS-Module has been started by the default parameters. To start the RCS-Module properly with the right parameters downloaded from the actual manipulators or provided by Yaskawa, it is necessary to prepare those files under "<Installation Folder>\YASKAWA_NX100__1.XX\data" using proper names. (Refer to Section 3.2.6.)

Note 2) When connecting the RRS, a WARNING dialog box appears, clearly indicating the upper limit of the positioning level (PL) for the subject RCS-Module. It is an indication to prompt the user's attention, and is not a failure indication.

3.2.5 IGRIP V5-RRS Disconnection Operation

To perform RRS disconnection operation with IGRIP V5, follow the procedure below:

1) The [RRS Disconnect Confirmation] dialog box can be displayed with the following operation procedure:

Operation procedure: [View]-[Toolbars]-[RRS Connect]

2) Press the [OK] button on the [RRS Disconnect Confirmation] dialog box and the connection with the RCS-Module will disconnect.

RRS Disconnect Confirmation for EA1400N-A00.1

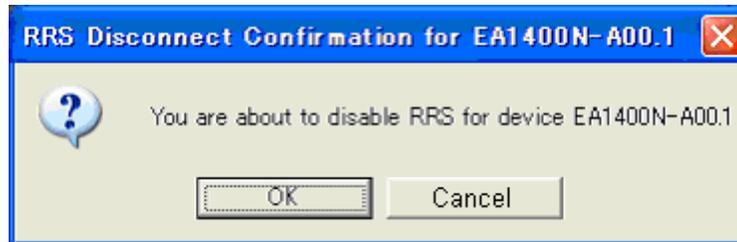You are about to disable RRS for device EA1400N-A00.1

OK   Cancel

Fig. 3-14 RRS Connect toolbar

Note) When closing the IGRIP V5, it is also required to terminate the RCS server program (rcssrv_Yaskawa_NX100__1.XX.exe). To terminate the RCS server program, close the MS-DOS window opened in Chapter 3.2.

3.2.6 IGRIP V5-RRS Connection Using Parameters of Actual Manipulator

To start the RCS-Module properly using the parameters downloaded from actual manipulator or right parameter provided by Yaskawa, prepare the parameters in the following procedure and perform IGRIP-RRS connection:

1) Change the name of the parameter file. The new file name should be conformed to the following rule: [Robot type]_[Two-digit Robot number].[Extension of each parameter]

	Parameter Name	File Name before Change	New File Name in case of EA1400-A00 (Robot number in cell: No.1)
1	All parameters	all.prm	EA1400N_A00_01.prm
2	Tool data	tool.cnd	EA1400N_A00_01.tol
3	User frame data	uframe.dat	EA1400N_A00_01.uf

Replace all the symbols "-" used in the robot type with "_".

2) Copy the file with a new name in the following folder.

Copy to: "\Yaskawa_nx100__1.xx\data" located under the folder where the IGRIP RCS module was installed.

3) Perform the IGRIP V5-RRS connection operation.

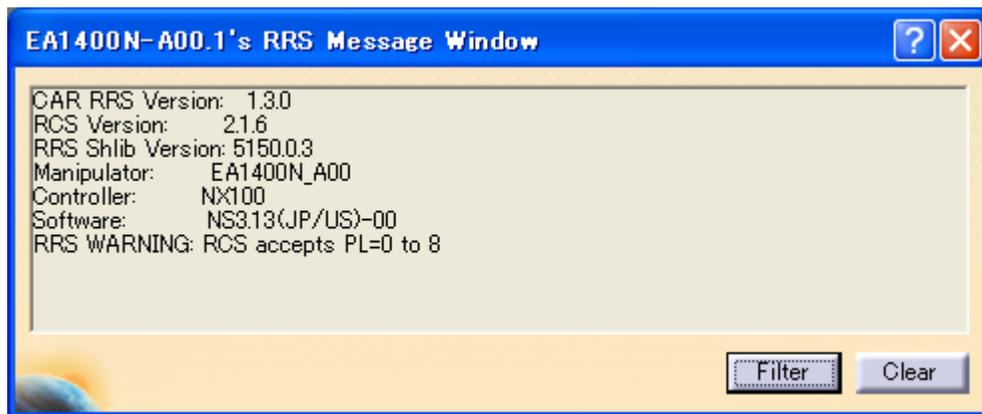4) Confirm that there is no warning in the [RRS Message Window] of the subject robot as follows:

EA1400N-A00.1's RRS Message Window

CAR RRS Version: 1.3.0
RCS Version: 2.1.6
RRS Shlib Version: 5150.0.3
Manipulator: EA1400N_A00
Controller: NX100
Software: NS3.13(JP/US)-00
RRS WARNING: RCS accepts PL=0 to 8

Fig. 3-15 RRS Message Window dialog box

3.2.7 When the MOTOMAN Model Required for Manipulator Selection is not Displayed

The robot models produced after the release of the IGRIP V5 version are not listed in the pull-down menu for [Manipulator] in the [RRS Properties] dialog box. The subject model of the MOTOMAN can be listed on the pull-down menu by adding the model to the "manipulator list". Follow the editing procedure of the "manipulator list" shown below:

1) Open the "manipulator list" in a text editor. The "manipulator list" is stored in the file "YASKAWA_NX100.manip" in the folder "\lib" under the RCS module installation directory. (If there is no such file, create a new file with this name.)

2) Add the model name in the list. The "manipulator list" contains the text data as shown in the figure below. Add the model name of desired MOTOMAN to the list. When entering the manipulator name, be sure to enter one model per a line with no blank or symbol. Also, the list can be replaced as the standard by designating "*REPLACE*" on the first line
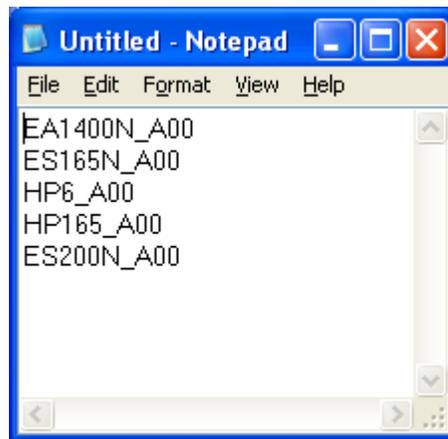

Fig. 3-16 Text Editor Example for Adding Manipulator

3) Save and close the "manipulator list".

4 APPENDIX

4.1 Frequently-asked Questions

4.1.1 When the driver has been installed with USB type key connected to a personal computer

3) Under the state that the USB type key is attached to the personal computer, delete the item registered as "USB Token" in Device Manager.

4) Uninstall the driver (Sentinel System Driver 5.41.1(32-bit)) with [Add/Remove Programs].

5) Install the driver with key detached from personal computer. With the procedure above, the driver can be performed normally.

4.1.2 When the previous version driver (Ver.PD-5.39.2) has been installed after installing the driver Ver.PD-5.41.1

In this case, problems may occur infrequently. To avoid problems, uninstall the driver Ver.PD-5.39.2（Sentinel System Driver）by [Add / Remove Programs].

4.1.3 When the software program does not start properly with D-SUB type

There is a possibility that the driver of the hardware lock key is old type or does not exist. Execute "\SentinelDriver\SSD5411-32bit.EXE" of installation CD-ROM. Refer to "\SentinelDriver\Manual\us\Readme.pdf" for the installation procedure.

Note 1)　Be sure to install the driver under Windows2000/XP environment.
Note 2)　When installing the driver under Windows2000/XP environment, be sure to login on administrator mode in order to add files to system folder and input information in registry.