





# Hardware specification regarding PC Expanion L100, L120, and L200

	L100	L120	L200
Dimension	8.46inch(W) x 6.30inch(D) x 1.57inch(H)	9.57inch(W) x 5.31inch(D) x 1.57inch(H)	9.57inch(W) x 5.31inch(D) x 1.57inch(H)
Weight	0.83 lb	0.81 lb	0.82 lb
Protocol	WoIP (Windows® over IP) / LoIP (Linux over IP)	WoIP (Windows® over IP) / LoIP (Linux over IP)	WoIP (Windows® over IP) / LoIP (Linux over IP)
Serial Port*	X	Х	0
USB port	X	Х	0
Operating	Windows® XP Home Edition	Windows® XP Home Edition	Windows® XP Home Edition
System	Windows® XP Professional	Windows® XP Professional	Windows® XP Professional
	Windows® 2000 Professional	Windows® 2000 Professional	Windows® XP Media Center Edition
	Windows® XP Media Center Edition	Windows® XP Media Center Edition	Windows® Server 2003
	Windows® Server 2003	Windows® Server 2003	Windows® Small Business Server 2003
	Windows® 2000 Server	Windows® Small Business Server 2003	Linux**
	Windows® Small Business Server 2003	Linux**	
	Linux**		

The specifications of the product may be altered without any advance notice being given to individual users.

<sup>\*</sup> Some restrictions apply

<sup>\*\*</sup> Some restrictions apply. See website for details.

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### **Disclaimers**

- The manufacturer, importers and agencies are not responsible for any accidental damage to the product or damage to the product which is caused by improper use and operation of this product.
- The information in the User's Guide has been written based on the specifications of current products. The manufacturer of the product, NComputing Co., Ltd., continues to upgrade the product with additional new functions, and will continue to improve the product by applying new technologies.
- The specifications of this product may be altered without advance notice given to individual users.

# Symbols and descriptions for the correct and safe use of the product.

The following instructions are for the correct use of this product and must be observed in order to prevent any unexpected danger that may occur to users or damage the product.

A user must read and follow this User's Guide instructions carefully before use.



This sign indicates the possibility of damage to the product when instructions are not followed.



This sign indicates important information which a user must read carefully in order to use this device correctly.



This sign indicates helpful information which a user can refer to in order to use the system correctly.

#### Classifications and descriptions of signs

The following descriptions for the correct use of the product must be referred to by the user in order to prevent any physical injury occurring from unexpected danger, or any loss of assets which may be caused by damage to the product.

# A user must read this User's Guide carefully before use and follow the instructions.

- Be sure that the place of installation is not too hot (temperature above 35C degrees) or too cold (temperature below 0C degrees), or too wet.
- Be sure to keep the mainframe safe from any severe impact.
- Be sure that the product does not come into direct contact with benzene or paint thinner.
- Be sure that the product is not exposed to direct sunlight or any hot machinery.
- Be sure to keep the product away from any items which have strong magnetic properties.
- Do not disassemble, repair or rebuild the product.
- Do not leave a LAN (Local Area Network) cable in any passageway.
   An electric shock, fire, damage to the product or physical injury may occur as a result of tripping over the cable.
- Disconnect the LAN cable from the product when the cable is not in use for a long period of time.
- Be sure to install the product in such a way that it is safe from damage caused by dropping or falling.

#### **FCC Information to Use**

This equipment has been tested and found to comply with the limit for a class B digital device, pursuant 15 of the FCC Rules.

These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or the following measures:

- Reorient or relocate the receiving antenna
- Increase the separation between the equipment and receiver
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected
- Consult the dealer or an experienced radio TV technician for help

Change or modification not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

#### **Notice**

#### Thank you for purchasing our company's product.

This product has been made by using state of the art technology from NComputing and has undergone thorough testing. An understanding of reliability has been reached for this product due to extensive testing. This User's Guide is designed to help the user to achieve easy installation and use of the product. Our company makes every effort to provide our customers with information related to the product, and with answers for any questions that may be asked by our customers. The performance of the product can be continuously enhanced via the software update utility. (Please refer to the relevant section of the User's Guide for more detailed information). The customer's registration and the registration of the product serial number, which can be done via the Internet, enables customers to receive the software upgrade service and ongoing technical support via the Internet for their convenience.

- Please note that reproduction of the User's Guide in whole or in part, without permission from the manufacturer, is not permitted.
- Please read the notes, which are related to safety, before use.
- The information in the User's Guide may vary depending on any improvements in the product and the model type of the purchased product.
- The manufacturer is not responsible for any damage to the product that is caused by using any products which are not specified as standard products, or by not following instructions and procedures correctly.
- This product is compatible with Windows® 2000 Professional, Windows® 2000 Server, Windows® XP Home Edition, Windows® XP Professional, Windows® XP Media Center Edition, Windows® Server 2003(Standard Edition/Enterprise Edition), Windows® Small Business Server 2003, Linux\*

- Any other operating systems including new operating systems require special software, which can be purchased separately, or an upgrade of the software is available at extra cost.
- This product is an independent terminal device which provides for the emulation of Windows, not a computer. Unlike an existing computer there is no need for the addition of auxiliary peripheral devices, or for the connection of different types of communication devices, or for the modification of hardware. The product does not support video images with a high picture quality or 3D games which have to be supported by high performance computers.

When more than one user shares one computer by using this product, the settings for related functions, which are provided by the Windows operating system, must be carried out as an adequate safety measure. The file service by using the NTFS (New Technology File System) method and environment settings in User Accounts in Control Panel must be carried out in administrator mode in order to ensure the security, easy maintenance and repair of the system. Please refer to the Windows operating system for more detailed information.

\* Some restrictions apply. See website for details.

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# **Part 1** Product Features

### What is the PC Expanion®?

The PC Expanion is a unique networking device using WoIP(Windows over IP) or LoIP(Linux over IP) networking standards. Users can share the resources of the host PC system by connecting a PC Expanion terminal(s) to it, providing the benefit of having several networked PCs. Users can connect one or more PC Expanion terminals to one host PC directly using a LAN adapter and cable or via the network using a switch/router.

#### **Features**

#### **Cost Effective**

Save up to 80% of hardware cost versus buying a Pentum4 or equivalent PC; the PC Expanion gives any office or home the ability to expand any existing host PC easily and affordably.

#### Compatibility

The PC Expanion will run Windows or Linux based applications on a host PC; applications include Internet browsing, email, office suites, most games and much more.

### No Maintenance Required

Maintenance and upgrades only apply to the host PC. The PC Expanion requires no hardware maintenance, only occasional software updates.

#### Small sleek design

Space saving design allows more room for your office or desk area.

#### **Secure and Fast**

Our proprietary Terminal Protocol allows for a fast and secure environment using image caching and 128 bit encryption

\*No noise output and low power consumption, quiet operations while saving energy costs.



Depending on the performance of the host PC, an application's compatibility and operating speed can vary. Refer to NComputing's web site for more information.

### **System Minimum Requirement**

#### The minimum hardware requirements

# To connect one PC EXPANION terminal to a single host PC, the following system requirements apply:

Intel® Pentium® 4 1.3 GHz processor with at least 512 MB RAM or higher.

# To connect two to three PC EXPANION terminal(s) to a single host PC, the following system requirements apply:

Intel<sup>®</sup> Pentium<sup>®</sup> 4 2.4 GHz processor with Hyper - Threading technology with at least 512 MB RAM or higher.

# To connect four to seven PC EXPANION terminal(s) to a single host PC, the following system requirements apply:

Intel<sup>®</sup> Pentium<sup>®</sup> 4 3.0 GHz processor with Hyper - Threading technology with at least 1024 MB RAM or higher.

# To connect eight to ten PC EXPANION terminal(s) to a single host PC, the following system requirements apply:

Intel $^{\otimes}$  Pentium $^{\otimes}$  4 3.2 GHz processor with Hyper - Threading technology with at least 2048 MB RAM or higher.

# To connect 10-15 PC EXPANION terminal to a single host PC, the following system requirements apply:

Intel® Pentium® 4 or Xeon® 3.0 GHz processor with at least 3 GB RAM or higher.

# To connect 16-20 PC EXPANION terminal(s) to a single host PC, the following system requirements apply:

Intel® Pentium® 4 or Xeon® 3.2 GHz processor with Hyper - Threading technology with at least 4 GB RAM or higher.

# To connect 20-25 five PC EXPANION terminal(s) to a single host PC, the following system requirements apply:

Intel® Pentium® 4 or Xeon® 3.4 GHz processor with Hyper - Threading technology with at least 5 GB RAM or higher.

# To connect 26-30 PC EXPANION terminal(s) to a single host PC, the following system requirements apply:

Intel<sup>®</sup> Pentium<sup>®</sup> 4 or Xeon<sup>®</sup> 3.6 GHz processor with Hyper - Threading technology with at least 6 GB RAM or higher.

#### Note

- Do not use a notebook PC as a host PC. Using notebook PCs causes power management and memory problems. Notebooks use power-saving features and different technologies than a typical desktop PC.
- We recommend a 60GB and 7200rpm or higher hard disk drive.

### OS (Operating System) and Maximum Connection Limit

- Windows® 2000 Professional: 10 units (L200 model does not support this operating system.)
- Windows<sup>®</sup> 2000 Server: 30 units (L200 model does not support this operating system.)
- Windows® XP Home Edition: 10 units
- Windows<sup>®</sup> XP Professional: 10 units
- Windows® XP Media Center Edition: 10 units
- Windows® Server 2003 (Standard Edition / Enterprise Edition): 30 units
- Windows® Small Business Server 2003: 30 units
- Linux\*: 30 units (the USB memory port of L200 model does not support a USB device under Linux.)

### PC Expanion® Conceptual Diagram

Host PC

Windows® 2000 Professional/Server

 $\hbox{Windows}^{\otimes}\,\hbox{XP Home Edition/Professional/Media Center Edition}$ 

Windows® Server 2003(Standard/Enterprise Edition)

Windows® Small Business Server 2003

Linux



Maximum number of users can vary depending on host PC configuration, type of OS and administrative settings.

<sup>\*</sup> Some restrictions apply. See website for details.

# How to use the PC Expanion

- 1 Install the PC Expanion (Refer to the Quick Installation Guide )
- 2 Install the NCT-2000-XP application on the host PC
- 3 Setup the network configuration
- 4 Turn on the PC Expanion, set up the PC Expanion
- 5 Click the "Connect" button

MEM	10

# Part 2 NCT-2000-XP Installation

#### 1 Insert the software installation CD into the CD drive.

Turn on the host PC and insert the Software Installation CD into the CD drive after your computer boots up.

#### 2 Click < Install Program > button.

The installation program will start automatically. When the installation screen appears, click "Install Main Program".



#### 3 'Preparing to install' message appears.

This means that the program is checking the server to see if it has the latest version.



### Note

 Message similar to the one shown here will appear if your Internet is not connected.



O If you have Internet connectivity and Windows® XP Service pack 2 is installed, a message similar to the one shown below will appear.

Click the "Ask Me Later" button.



#### 4 The latest NCT-2000-XP program installation

If the server has the latest version, you will be asked if you want to install the latest version as shown on the left below. Click "Yes" if you want to install, or click "No" if you want to install the version on the CD. The new version will be downloaded as shown on the right below when installing. (It is recommended to select "Yes" to install the latest version. The download may take some time depending on the Internet speed)



#### 5 Click < Next> button.

The installation program will start automatically. When the installation wizard screen appears, click "Next".



#### 6 Click <Next> button.

If you click the <more> button, you will see a notice with the html type.



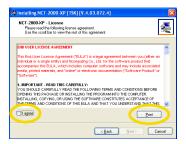




Please make sure to DISABLE or UNINSTALL any Anti-Virus or Firewall software that may be running in the background. Security software of this type has been tested and known to interfere with the installation and operation of this product.

#### 7 Select 'I agree' and then click the <Next> button.

Once the license agreement window appears, check "I agree" and click "Next". If you do not agree with the license agreement, click the "Cancel" button to finish the process. If you would like to print this out, please click "Print."



#### 8 Select 'I agree' and then click the <Next> button.

When the NCT-2000-XP-Terms of Use window appears, check "I agree" and click "Next". If you do not want to agree to the license, click "Cancel" to finish the process. If you would like to print this out, please click "Print".



#### 9 Click the <Next> button.

Read the contents of the readme file and click "Next". If you would like to print this out, please click "Print".



#### 10 Click the <Next> button.

Select the installation default folder and click "Next." The "Program Files" folder is the default installation folder.



### Note

If you want to install it in another path, type the path directly or click the <find> button and select the desired folder.





#### 11 Click < Next> button.

If the same screen as the one shown on the right appears, select the item that you want to install after confirming the following reference and click "Next."



#### Note

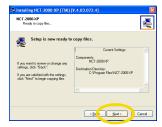
Administrator Password: If you set an administrator password, the Network Administrator Console will require this password to make changes within the console. You should remember the "Administrator Password" for future configuration changes. If you do not remember the password, you can't execute the program or alter management settings.

(If you want to cancel the previous password, refer to "26. How to manage when a user forgets the password of the NCT-2000-XP program" in Part 8.)

Network Control Console: A management application that manages local user groups and can also manage individual computers and the connected PC EXPANIONs

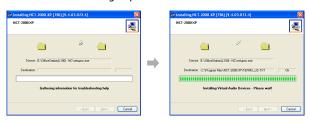
#### 12 Click the <Next> button.

If you would like to review or change any settings, click "Back". If you are satisfied with the settings, click "Next" to begin copying files.



#### 13 Installing the NCT-2000-XP program

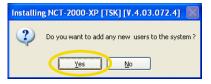
Refer to the following steps.



Gathering information for troubleshooting help ▶ Copying files ▶ Installation of service ▶ Remote management console installation ▶ the selected items installation ▶ Virtual audio device driver installation

#### 14 Add user accounts.

When the program installation is completed, the message screen for adding new users will appear. (Refer to the screen) For more details, please refer to "Create a new account" of operating system and "1. How to add new user accounts" in Part 8.



#### 15 Click the <Restart> button.

When this is completed you will be asked to restart the system (Refer to the following screen). After checking "Yes, I want to restart my computer now," click "Restart" to reboot your computer.



# Part 3 | Setting up Network configuration

# Connecting to the network by using a cable or DSL router

You need to configure the network to connect with any PC Expanion terminal(s). To configure your computer's network configurations, please refer to the following:

If you use a Cable/DSL router, you can use dynamic IP addresses. (To use dynamic IP addresses, the router must support DHCP or a dynamic IP address allocation function) If you want to use static IP addresses when using a Cable/DSL router, refer to "Connecting by using a switch."

- 1 Turn on the PC Expanion.
- 2 Click the <Setup> button on the startup screen of the PC Expanion.





Select the 'Network' tab. Then Select 'Get Dynamic IP address' and click the <Save> button. (The PC Expanion uses the "Get Dynamic IP address" option as the default. No additional settings are required.)



With the L120 and L200 models, the list of host computers is displayed in the startup screen of the PC Expanion. The other products require using the "Connection to" drop-down list. If the user clicks either <TS Options> within <Setup> or <Options> within <Setup> after selecting "Autodetection," the host computer name is displayed automatically. The name of the host computer will be displayed for up to 8 host computers. Click the <Connect> button. Start using the PC Expanion.





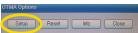
# Connecting by Using a switch (Supports 100Mbps switching)

To connect by using a switch, you need to set a static IP address on both the PC Expanion terminal and the host PC.

To configure an IP address as static, follow these steps:

- Turn on the PC Expanion.
- 2 Click the <Setup> button on the startup screen of the PC Expanion.





\_\_\_\_3 Select the 'Network' tab. Then select 'Use Static IP address' option. Type the IP address and the gateway. And then Click the <Save> button. (If you do not know them, please contact a network administrator.)



4 With the L120 and L200 models, the list of host computers is displayed in the startup screen of the PC Expanion. The other models list the host computers when a user clicks the "Connection to" drop-down list. If the user clicks on either <TS Options> within <Setup> or <Options> within <Setup> after selecting "Autodetection", the host computer name is displayed automatically. Click the <Connect> button. Start using the PC Expanion.



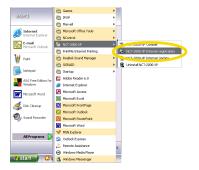


# **Part 4** Product Registration

The user must be registered in order to receive continuous support such as upgrades of the application software and after Sales service. The following method can be used for registering the user via the Internet.



- ▼ The serial number and the activation key of the product, which the user has purchased, must be registered via the Internet or by other means. When you are formatting or modifying the hard disk, or you are replacing the current computer with a new one after registering the serial number, please unregister the serial number and the activation key. Please take note that the serial number and the activation key can be registered up to only 10 times if you fail to unregister the serial number.
- \_1 After clicking on the <Start> button on the Windows login screen, please select the <All Programs ► NCT-2000-XP ► NCT-2000-XP Internet Registration> in order to register.



When the message window on the right appears, please input the 'Administrator Password', and then click on the <Next> button.

(If the 'Administrator Password' has been registered, please click on the <Next> button after inputting the 'Administrator Password')





- If the 'Disable password protection' was selected during the installation of the application, the message window for the 'Administrator Password' does not appear.
- Please click on the <Next> button after inputting the correct information in the relevant boxes. For excellent service in the future, please make sure that all the information you provide is accurate.





#### Personal information protection policy

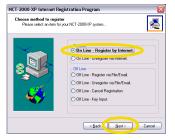
The NComputing Inc. highly values any personal information which is provided by customers. NComputing Inc. observes the personal information protection provision clause of the "laws related to the use and promotion of information and communication networks" and the "guidelines for personal information protection" which were enacted by the Ministry of Information and Communication of the Korean government. NComputing Inc. informs customers of how and for what purpose personal information provided is used, in accordance with the personal information protection policy of the company. NComputing also informs the customer of what measures have been taken by the company in order to protect the customers' privacy. The personal information that customers provide for registration, is only used for the purpose of updating the software and providing technical support.

- 4 Select the method of registration
  - Online: At present the host PC is connected to the Internet
  - Offline: The host PC is not connected to the internet

### **Selecting online Internet registration**

This option is only available when the computer, which has the NCT-2000-XP program, is connected to the Internet.

Please click on the <Next> button after selecting 'On Line - Register by Internet'.



2 Please click on the <Next> button after selecting the serial number.



A window for user's information registration appears. Please click on the <Back> button to correct the information, or click on the <Next> button to continue the registration.



4 The registration of the serial number starts when all the information has been inputted correctly. Please take note that if the computer is logged off or the Internet is disconnected before the registration is completed, the registration cannot be completed successfully.





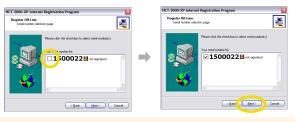
# Creating a product registration document in instances where the Internet cannot be used for registration

In instances where the computer with which the NCT-2000-XP software has been registered with is not connected to the Internet, please select the 'Off Line - Register via File/Email' and then create a data file for offline-registration. Please send this file in an email as an attached file to a supplier or an agent who can help you with the registration of the serial number.

Please select the 'Off Line - Register via File/Email, ' and then click on the <Next> button.



Please select the serial number with which you wish to register, and then click on the <Next> button.



A window with user's information registration appears. After checking the information with which the user has provided, please click on the <Back> button to correct the information, or click on the <Next> button to continue the registration.

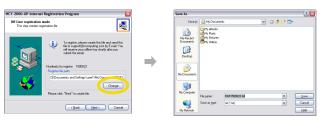


4 Please select a directory for creating the offline registration file and the name of the file, and then click on the <Next> button. The destination of the storage is <My Documents> and the name of the file is 'RGF serial number.txt.' To change the storage destination please click on the 'Change' button and select a new storage destination.



Note

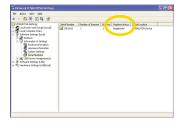
If you would like to change the path, click the <Change> button.



The following message window will appear to inform of the successful completion of the registration. Please send the stored file to the registration center or agent. Please click on the <Finish> button.
(Please do not modify the registration file. If the registration file is modified, we cannot register it.)



Please send the file to the registration center or agent. The registration center or agent will send out a text file which can be used for registration of the serial number. This option is used to register the serial number by using a text file.



Note

- If you would like to cancel the registration before receiving the activation key, you can select the "Offline Cancellation of registration" option and then select the serial number that you would like to cancel. After cancelling the serial number, you cannot use the previous registration file. You must repeat the registration process.
- There will be 2 six-digit numbers, a total of 12 digits, of the approval number in the 'Activate Key' contained in the file with which has been sent out by the registration center or agent. Please select the 'Off Line Key Input' and then click on the <Next> button.



8 After selecting the corresponding serial number, input the approval number into the 'Activation Key' as seen below, and then click on the <Accept> button. If the correct serial number and the activation key has been submitted, the following message window appears. Please click on the <OK> button, and then click on the <Finish> button.



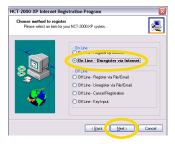
### Unregistration

After registering the serial number, if you wish to replace the computer which is currently being used with a new computer, or to modify the hard disk, the serial number must be unregistered before cancelling the installation of the NCX-2000-XP program.

#### Unregistration of the product via the Internet

This option is used to unregister the corresponding serial number in the instance where the serial number was registered by using the 'On Line - Register by Internet'. If the 'On Line - Register by Internet' option is used for the registration of the serial number, please use the option to unregister the serial number.

Please select the 'On Line – Unregister by Internet', and then click on the <Next> button.



Please select the serial number with which you wish to unregister, and then click on the <Next> button.



3 A window for the user's registration information appears. Please click on the <Back> button to correct the information, or click on the <Next> button to continue the registration.



4 The registration of the serial number starts when all of the information has been inputted correctly. Please take note that the unregistration cannot be completed successfully if the computer is signed off or if the Internet is disconnected before the registration is completed.





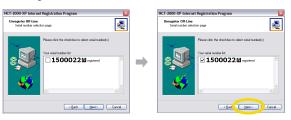
#### Cancellation of registration Offline (File/Email)

Serial numbers can be unregistered offline in the same manner that they are registered offline.

Please select the 'Off Line -unregister via File/Email' option for unregistration, and then click on the <Next> button.



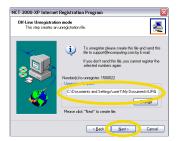
Please select the serial number with which you wish to unregister, and then click on the <Next> button.



A window for user's information registration appears. After checking the information with which the user has provided, please click on the <Back> button to correct the information, or click on the <Next> button to continue the registration.



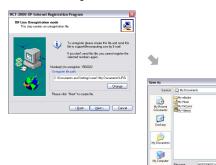
A file creating process is required for the unregistration of the serial number. Please confirm the destination of the storage and the name of the file, and then click on the <Next> button. The storage folder is 'My Documents' and the file name is 'URGF serial number.txt'. If you wish to change the storage location, please click on the 'Change' button to select a new destination.



· 0 / 12 m

Cancel

Note If you would like to change the path of where to save the file, click the <change> button.



5 Please send the created file to the registration center or agent. The serial number cannot be used again once the unregistration is completed. Please click on the <Finish> button.



# Part 5 Updating the NCT-2000-XP application via the Internet

A user who has successfully completed the registration process can update the NCT-2000-XP program by using the following methods.

#### Updating with the application installation CD which is included

In order to update the NCT-2000-XP program via the Internet, users must have completed the registration process. Without registration, updating the software will not be possible. User information must be saved temporarily before installing the new version in order to protect the private information of the user and to achieve safe and easy updates . This process is required in order to have a backup in case an unexpected problem occurs while trying to update the program with a new version, so that the system can always return to where it was before.

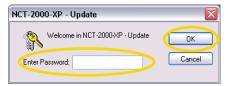
#### **Direct Updating via the Internet**

This method can be used only when the user registration with the previous version has been completed. (Please refer to "Part 2. NCT-2000-XP Installation")

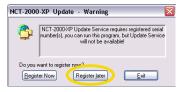
Please click on the <Start> button on the Windows logon screen, and then select the <All Programs ► NCT-2000-XP ► NCT-2000-XP Internet Update> in order.



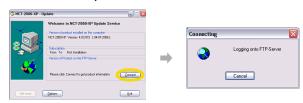
Please input the password in the space provided in the 'Enter Password" message window, and then click on the <OK> button. (This 'Enter Password" message window appears only if the administrator password is set during the installation.)



In order to continue updating, the <Internet Registration> process must have been completed. If you have already completed the registration process, please click on the <Register later> button to continue the updating process. If you have not yet completed the registration process, please click on the <Register Now> button to complete the <Internet Registration> process and then execute the updating process.

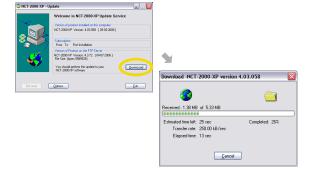


4 Please click on the <Connect> button so that the user can compare the program in the NCT-2000-XP server against the program which has been currently installed.



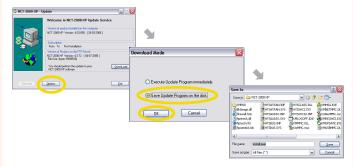
As shown in the picture below, the current version and the latest version on NComputing's Internet Server can be confirmed.

If there is a new version on the Internet server, please click on the <Connect> button to start the updating process. The speed of the download varies depending on the speed of the Internet connection.)



Note

If you do not want to install the latest NCT-2000-XP version right now, save the program the file type and click the <Product information> button. Then select the "Save the program in the disk" option. The default folder is the installed NCT-2000-XP folder in the hard disk drive. If you would like to save the file in another folder, please select another folder. When you save the file in another folder, you must move the file to the installed NCT-2000-XP folder in order to run the program.

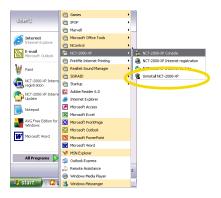


. When the download is completed, the installation of the program starts in the same way as the 'Installation of the NCX-2000-XP application.'

# Part 6 NCT-2000-XP Remote Management Console

Remote management of the NCT-2000-XP is automatically implemented with the installation. When the installation of the application is completed, the NCT-2000-XP group is automatically created in the program group.

To confirm the installation of the NCT-2000-XP application, please click on the <Start> button in the Windows operating system, and then select the <All Programs ▶ NCT-2000-XP> in order.You also can run the NCT-2000-XP application on the NCT-2000-XP program icon on the taskbar of Windows.



### Note

#### Functions of the NCT-2000-XP program icon in the taskbar of Windows.

There are some basic functions that can be accessed by rightclicking on the NCX-2000-XP icon which is in the 'Information area' of the taskbar. Here are the differences between options of the host PC and PC Expanion.





<Host computer>

<PC Expanion>

Please refer to each option for the function.

#### NCT-2000-XP Management Console

The option is that the NCT-2000-XP is running.



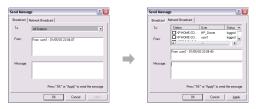
#### **Station Information**

The user can see the user ID, the station information, and the host computer name.



#### NCT-2000-XP - Send Message

The user can send a message to the connected PC Expanion or a specific PC Expanion. For more information, please see "9. How to send a message to the connected PC Expanion." in Part 8.



#### NCT-2000-XP Disable(Enable)

The user can stop running or start the NCT-2000-XP application. For more information, please see "10. How to start or stop running the PC Expanion." in Part 8.

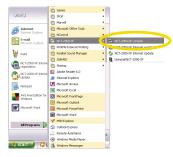
#### keyboard setting

When the user uses the PC Expanion, the user can set the status of 'Num Lock' key or 'Caps Lock' key or 'Scroll Lock' key.



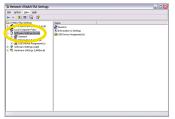
#### 1 Run the NCT-2000-XP application

To confirm the installation of the NCT-2000-XP application, please click on the <Start> button in the Windows operating system, and then select the <All Programs ► NCT-2000-XP ► in order. You also can run the NCT-2000-XP application on the NCT-2000-XP program icon on the taskbar of Windows.



#### 2 Software Settings (Local)

There are items such as 'Sessions', 'Information & Settings' and 'USB-Device Assignment(s) under the 'Software Settings (local)' These option can be used to check the status of the PC Expanion, change options, and assign the USB storage device.



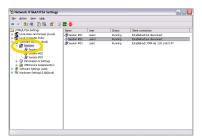


♦ The 'NCT-2000-XP Management Console' window appears when the <Local Settings> is selected from the menu. After inputting the password, please click on the <OK> button. (If the 'Disable password protection' was selected during the installation of the application, the 'NCT-2000-XP Management Console' does not appear.>



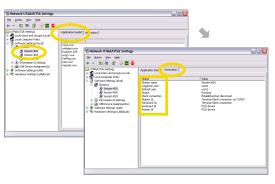
#### Sessions

The information on the station, which is currently connected, and the standby status of the station for the connection can be viewed when 'Stations' is selected.



#### Session #01, #02, #03 ...

The programs and all the information, which are being used by the station that is currently connected, can be checked when the session is selected.



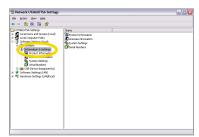
# The following information is the information tab for each session.

- Station names: Displays the number of the selected station.
   The numbers are provided in the order of the connection to the host computer, which starts from Station #02.
- Logged in use: Displays the name of the user who is logged in on the station.
- Default user: Displays the name of the user who has logged on recently.
- Status: Displays the current connection status of the station.
- Client connection: Displays the automatic launch status of the station which is connected.

- Display Id: Shows the display device of the station which is connected.
- Hardware Id: Displays the virtual hardware of the station which is connected.
- Keyboard Id: Displays the information on the keyboard of the station which is connected.
- Pointer Id: Displays the information on the mouse of the station which is connected.

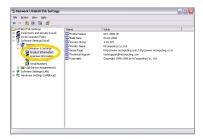
#### Information & Settings

There are four items including 'Product Information', 'License Information', 'System Settings', and 'Serial Numbers' on the Information & Settings menu.



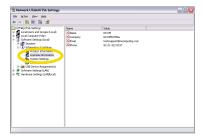
#### **Product Information**

Displays the information on the Version String, Build Date, Copyright, Technical Support and Home Page.



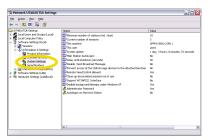
#### **License Information**

Displays information such as the name of the person who registered the product, company name, Email address and telephone number, which were all inputted during the installation of the product.



#### **System Settings**

Displays the general information on the system.



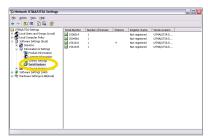
- Maximum number of stations (incl. Host): Displays the maximum number of stations that can be connected to the host computer.
- Current number of additional stations: Displays the number of users that are connected to the host computer and is currently being used.
- This machine: Displays the name of the host computer. The name of the computer can be changed by using the <Computer name> option at the Windows system registration information menu.
- This user: Displays the names of the users who have logged on the host computer.
- System uptime: Displays the logon period of the host computer's operating system.
- Main Station AutoLogon: Displays an option to automatically start the stations, which are connected to the host computer, at boot-up.

- Delay until shutdown (seconds): The shutdown time of each station when the host computer shuts down can be set.
   The range of the input value is from 1 second to 999 seconds.
- Disable Send Broadcast Message: Displays an option that can activate or deactivate the message sending mode for each station.
- Prevent access of the USB-storage devices to the attached terminal.: Displays an option which can activate or deactivate the USB-storage devices.
- Remote View/Control allowed: Displays an option that an administrator can view or control the PC Expanion remotely.
- Clean up disconnected sessions not in use: Display an option that the session can be terminated, if the user does not log on again after disconnecting.
- Support WTSAPI32 Interface: A program, which uses the Windows RDP function, can be selected by using this mode. If this feature is enabled, all NComputing protocols are automatically converted to RDP-compatible formats. Use this for Terminal Services Compatibility issues.
- Disable background-bitmaps under Windows XP:
   Displays an option which can display the background image under the Windows XP operating system.
- Administrator Password: Entering a password to use the NCX-2000-XP program can be activated or deactivated by using this mode. If the user does not wish to have a password, the 'Disable Password Protection' must be selected.

 Autologon on the Host Station: If the user name and password are set, the station can start without the Windows logon screen of the host computer when on.

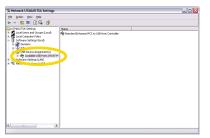
#### **Serial Numbers**

Displays the serial numbers and status of the registration. The serial numbers can be added or deleted by using the right button on the mouse. For more information, please see "27. How to add or remove the serial number of NCT-2000-XP program" in Part 8.



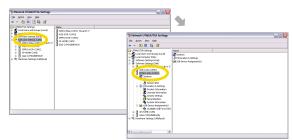
### USB-Storage device Assignment(s)

This menu enables the use of the USB device at each station by setting an option for the USB Device which is connected to the host computer. When the USB device is connected, the user can view the USB device which is connected to the corresponding port.



#### 3 Software Settings (LAN)

If the host PCs that the NCT-2000-XP program is installed on are located on the same network, the host PCs are listed in 'Software Settings (LAN).' The user can see the status of a host PC and how many PC Expanions are connected to the host PC. The host computer refers to the computer that the NCT-2000-XP program is installed.

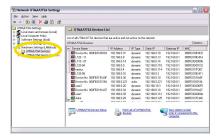


#### 4 Hardware Settings (LAN/Local)

The user can set the status of the connected PC Expanions and change the options.

#### UTMA/UTSA Devices

Settings for the connected PC Expanions can be changed from the administration console. ("UTMA/UTSA Device" shows information about the PC Expanions connected to the network.) Select the PC Expanion of which the settings are to be changed and click "UTMA/UTSA Device Setup" to change the setting.

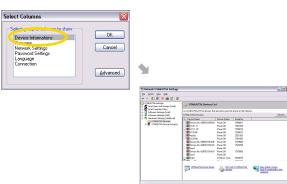


The <Column> option delete displays the various columns. If you click the <Column> button, you can select the column list.



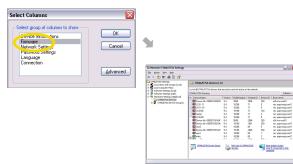
#### **Device Information**

The status of the connection and the serial number.



#### **Firmware**

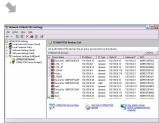
The version, the build number, the schema ID, the device ID, and the boot server of the PC Expanion.



#### **Network Settings**

The IP address of the PC Expanion, the status of setting the IP address, gateway, and a MAC address.

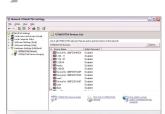




#### **Password Settings**

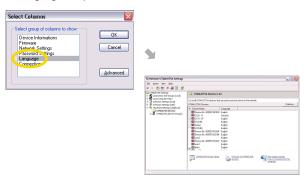
The status of the password in the setup of the PC Expanion.





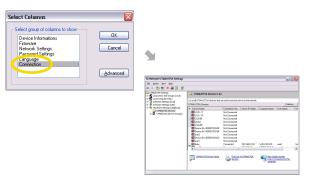
#### Language

Language setup



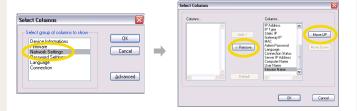
#### Connection

Status of the connection between the PC Expanion and the host PC, the IP address of the host PC, the name of host PC, the user name, and the name of the station.



#### Advanced

When the user clicks the <Advanced> button, the user sets the desired columns. When the user clicks the <Move UP>, the column moves up. When the user clicks the <Move Down> button, the column moves down. If the user selects the column and clicks the <Remove> button, the column will not be displayed in the list of UTMA/UTSA Devices.



### UTMA/UTSA Device Setup

If you would like to change the option of the PC Expanion, please select the PC Expanion and then double-click the process icon. Also double-click the name of the PC Expanion. If the PC Expanion is not connected to the host PC or is turned off, you cannot change this option.

Note

- Click the hardware setting (LAN/Local) in the NCT-2000-XP console menu.
  - Green color icon : Connected to the host PC in the local network.
  - Blue color icon: Disconnected to the host PC in the local network.
  - Red color icon: Turned off state, but has been connected to the host PC more than one time.

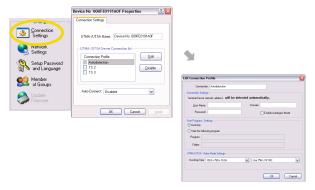
The color of the icon is not updated in real time. To check the status of each PC Expanion, click the "F5" key or click the "refresh" icon.



When the user clicks the "UTMA/UTSA Device Setup" icon, the user can see the settings of the PC Expanion. Please refer to the above picture. If you click the <Print> button, you can see the settings of the PC Expanion. If you would like to reset each option, please refer to the following information.

#### **Connection Settings**

The user can set the IP address of the host PC, the user ID, the password, the option of "Enable Autologon Mode," "Auto-connection" mode, "Automatic Application", and the resolution and the refresh rate. For more information, please see Part 8.



### **Network Settings.**

The user can change the IP address of Station.



#### **Setup Password and Language**

The user can enable or disable the "Do not use password" option or "Protect BIOS options with password."



#### **Member of Groups**

The user can mange a group of selected PC Expanions. For more information, please see the "25. How to manage when the PC Expanions are grouped under NCT-2000-XP program" in Part 8.



### Part 7 Using the "Setup"

The PC Expanion allows users to set various settings such as IP settings, host computer to connect to, resolution, etc. Users can set the settings in PC Expanion as well as in the NCT-2000-XP console of a host computer as described in Part 6. This section describes procedures to configure the settings of the PC Expanion. The 'Setup' screen of PC Expanion supports English only.

When the user turns on the PC Expanion, the startup screen appears. The function is the following information.

- Connect: Used to connect to the host PC.
- **Sleep**: Used in the power save mode.
- **Setup**: Used to reset the option of the PC Expanion.
- Info: Used to see the information on the PC Expanion.
- Connection to: Used to select the desired PC Expanion.
   (When the arrow icon is clicked, you can see the host PC.)
- **Refresh**: The name of connected host computer is updated
- **Options**: To use "Setup", "Info", "Reset", or "Close."
- Close: Close the window.

<Setup> consists of 'Network', 'TS Options' or 'Options', 'Password', 'Update', and 'Misc'

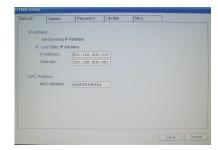
- **Network**: To set the IP address of the PC Expanion.
- TS Options: To set host computer information to be connected by the PC Expanion and the resolution and user name of the host computer in advance.

- **Password**: To set a password for 'Setup'.
- Update: To update the firmware.
- Misc: To calibrate the touch screen or touch pad device.

#### Each the item is described below.

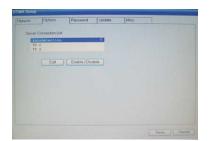


You can set the IP address of the PC Expanion. The default setting is 'Obtain an IP address automatically.' This option can be used if a DHCP server is available on your network and an IP address is automatically allocated to the PC Expanion. To set a static IP address manually, select 'Use Static IP address' option and enter an IP address for the PC Expanion and gateway in the 'IP address' and 'Gateway' fields respectively.



#### **Options or TS Options**

You can set the host computer to be connected to the PC Expanion and set the resolution and user name for the host computer. Select 'Autodetection', 'TS 2' or 'TS 3' in the 'TS Options' screen and click the <Enable-Disable> button. It will then be displayed in the <Connection to> list on the PC Expanion initial screen. Select 'Autodetection' to search for host computers in which the NCT-2000-XP program is installed. It will list up to 8 of the computers found and the '\*' symbol appears in front of the host computer names. Select 'TS 2' or 'TS 3' to specify and connect to a computer. If you select 'TS 2' or 'TS 3', 'TS 2' or 'TS 3' will appear without the '\*' symbol. To change the settings for a host computer to be connected, click the <Edit> button.

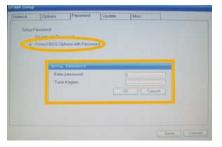




- Connection Name: You can enter a host computer name. This name should be different than the name set in the host computer you are using. If you have selected 'Autodetection', you cannot change this field. 'Autodetection' searches for host computers in the network and shows the names set in the computers as they are. However, if you have selected 'TS 2' or 'TS 3', you can rename a computer.
- User Name: You can set a user name that will be used to logon a host computer. If you enter a user name, the name appears in the user name field on the Logon screen.
- Program: If you select 'Desktop', you can use the operation system without changing it. If you select 'Start following program', only the specified program will be launched. If you exit the program, you are automatically logged off. For example, if you want to use the Notepad program only, type 'notepad.exe' in the 'Program' field and then the location of the application file in the 'Folder' field such as 'C:\>'.
- Desktop size: You can select the resolution and frequency of your PC Expanion screen. The available resolutions may differ depending on the model. To confirm if a resolution is supported by the monitor before applying it, select a resolution and click the <Mode Test> button. When you logon, a resolution configured here is applied regardless of the resolution you set on Windows after logon.

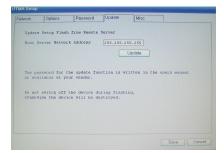
#### Password

This option allows a user to set a BIOS password for protection. If the user selects the "Protect BIOS options with password" option, the user can set the new password.



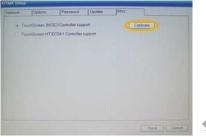
### Update

This is used to update the PC Expanion firmware. Once the NCT-2000-XP application is upgraded, the PC Expanion automatically updates the firmware during a booting sequence. Users do not need to use this option manually.





This option is the function for end-users that want to use a touch screen or touch pad device. The option is currently only supported by the L2XX model series. If you want to calibrate the cursor of a touch screen or touch pad, click the <Calibrate> button. And then click the cross in order.





### Part 8 Using the PC Expanion (Advanced)

#### 1. How to add a new user account

User accounts personalize Windows for each person who shares a computer. You can choose your own account name, picture, and password, and choose other settings that will apply only to you. A user account gives you a personalized view of your own files, a list of favorite Web sites, and a list of recently visited Web pages. With a user account, documents you create or save are stored in your own My Documents folder, separate from the documents of others who also use the host PC. To help keep your files more secure and to help make sure they remain private, use a password for your user account. You can still mark certain items as shared if you want other people to be able to access them. If you do not use a password for your user account, other people will have access to your account and will be able to see all of your folders and files. If you have a user account and you change the computer settings, such as the type, size, or the screen saver, those settings will apply only to your account. As a user with a computer administrator account, you can create, delete, and change all user accounts on the host PC. You can create as many accounts on the computer as you want, and have full access to all accounts on the computer.

- Administrator: Users with complete and unrestricted access to the computer/domain
- Backup Operators: Backup Operators can override security restrictions for the sole purpose of backing up or restoring files.
- Guests: Guests have the same access as members of the users group by default, except for the guest account which is further restricted.

- Network Configuration Operators: Members in this group can have some administrative privileges to manage configuration of networking features.
- Power Users : Power Users possess most administrative powers with some restrictions. Power Users can run legacy applications in addition to certified applications
- Remote Desktop Users: Members in this group are granted the right to logon remotely
- Replicator: Supports file replication in a domain
- Users: Users are prevented from making accidental or intentional system-wide changes. Users can run certified applications, excluding most legacy applications
- HelpServiceGroup: Help and Support Center

#### Add a user account under Windows 2000 Professional





2 Click the <Add> button.



Click the <Next> button after typing the user ID, the full name, and the explanation, You must type the same name when you log on. You do not need to type the full name and explanation.



4 Enter your password and click the <Next> button. If no password is set, anyone can logon and view and change your personal information and settings. Be sure to set a password.



Note

You can set a password for a user account or change the password of a password-protected account. Double-click <Control Panel> ► <User Accounts and Password>, select a user account and click the <Set Password> button to set or change a password.



\_\_\_\_\_\_ Click the <Finish> button after setting the user group. Please select the user group after reading each group's detailed explanation.





You can reconfigure groups for a user account. Double-click <Control Panel> ► <User Accounts and Password>, select a user account and click the <Properties> button to change the group in the user account.



### Add new user accounts under Windows XP operating system.

1 <Start ▶ Control Panel> Double-click <User Accounts> icon.





2 Click "Create a new account"



**3** Type a name for the new account. And then click the <Next> button.

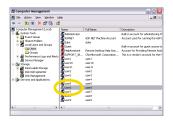


4 Select an account type and click the <Create a new account> button. If you select an account type, you will be able to know the priority of the account type. Windows XP provides 'Computer administrator' and 'Limited' account types.

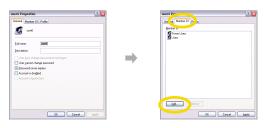




- ◆ The user can only create the administrator and the limited user account under Windows XP Home edition. However, the user can create new user account similar to the Windows 2000 operating system under Windows XP Professional. The following information is for the user to create a new user account under Windows XP Professional.



2 Select 'Member Of' and then click the <Add> button.



3 Click the <Advanced> button.



Click the <Find Now> button.



Click the <OK> button after selecting the desired group. When the screen of step 3 appears, click the <OK> button. The user group is set.



# 2. How to check the IP address setting on the PC Expanion

#### How to check the IP address on the PC Expanion.

1 Click the <Setup> button or <Setup> of <Options> button of startup screen of PC Expanion.





Select the 'Network' tab.

To use an automatically allocated IP address, select 'Obtain an IP address automatically.' This option is available only when your network provides DHCP functionality. If DHCP is not supported, you have to configure the IP address manually. To setup the IP address manually, select 'Use Static IP address,' enter an IP address in the IP address field, and enter the IP address of a gateway in the Gateway field. For the correct IP address and the IP address of the gateway, ask your computer administrator.





<u>3</u> Click the <Info> button or <Info> of <Options> to check the IP address and the gateway of the PC Expanion.



#### How to check the IP address and the gateway in the NCT-2000-XP program

■ <Start> ► <All Programs> ► <NCT-2000-XP> ► Select the <NCT-2000-XP Console> ► Select <Hardware Settings (Local/LAN)> ► Select <UTMA/UTSA device>. You can confirm the IP address of the corresponding station in the device list. The view item of the device list is set to 'Network' by default. If this item has been changed, click the <Item> button, select 'Network' and click the <OK> button to confirm the IP address.



**2** Select the corresponding PC Expanion and then double-click or click the 'Device Settings' icon.

You can confirm the current IP address and gateway address in the Network Settings field. To change the IP address, click the <Network Settings> button.



To use an automatically allocated IP address, select 'Obtain an IP address automatically.' To use a static IP address, select 'Use the following IP address,' enter an IP address and the gateway address. For the IP correct address and the IP address of the gateway necessary for manual setting, ask your computer administrator.





<Automatic>

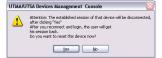
<Manual>

4 In order to apply the setting, click the <OK> or <Apply> button. You must restart the PC Expanion in order to apply the setting. Please click the <OK> button.



Note

If the PC Expanion is currently being connected and used, a warning message appears. To apply the changes, click the <Yes> button. The PC Expanion restarts. However, since the current environment settings are unchanged, you can use your environment settings when you logon with the same user account after restarting.



If the PC Expanion is turned off or does not exist in the same subnetwork, an error message appears and the settings will not be changed. In this case, click the <OK> button to cancel the changes.



### 3. How to check the IP address of the host PC.

#### How to check the IP address with Windows 2000 operating system.

1 <Start> ▶ <Settings> ▶ <Network and Dial-up connection> ▶ Select 'Local Area Connection' and then double-click it.





2 Click the <Properties> button.



**3** Select 'Internet Protocol(TCP/IP)' and then click the <Properties> button.



To use an automatically allocated IP address, select 'Obtain an IP address automatically.' To use a static IP address, select 'Use the following IP address.' In this case, you must manually enter the IP address, Subnet mask, Default gateway, and Preferred DNS server address. For the information necessary for manual setting, ask your computer administrator.



<Automatic Setting>



<Manual Setting>

#### How to check the IP address of the host PC under Windows XP operating system.

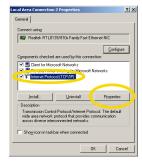
≤Start> ► <Control Panel> ► <Network Connection> ► Select 'Local Area Connection' and then double-click.



2 Click the <Properties> button.



Select 'Internet Protocol (TCP/IP)' and then click the <Properties> button.



To use an automatically allocated IP address, select 'Obtain an IP address automatically. To use a static IP address, select 'Use the following IP address.' In this case, you have to enter manually the IP address, Subnet mask, Default gateway, and Preferred DNS server address. For the information necessary for manual setting, ask your computer administrator.



< In case of automatic setting>



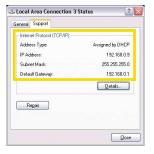
<In case of manual setting>

Note

The user can check the IP address of the host PC under DOS environment. <Start> ▶ <All Programs> ▶ <Accessory> ▶ <Command Prompt> or <Start> ▶ <Run> ▶ Type 'cmd' and then click the <OK> button. Then type 'ipconfig' command and click the <Enter> key. You can see the IP address of the host PC.



In Windows XP, you can easily confirm the IP address settings with or without opening a DOS command prompt window. In Step 2 of the Settings in Windows XP, if you select the <Support> tab, you can view the current IP address settings.



# 4. How to connect between the PC Expanion and the host PC using network equipment.

#### Connecting to the network using a cable or DSL router (DHCP function of more than 100Mbps with switching)

- 1 Refer to '2. How to check the IP address setting of PC Expanion' in Part 8., Then set the IP address of the PC Expanion.
- To set the IP address of a host computer refer to '3. Setting and Confirming the IP Address of a Host Computer.' The IP address of a host computer and the address of the PC Expanion must be in the same sub-network. This means that the first 3 among the 4 numbers of the IP addresses must be the same. For example, if the IP address of a host computer is 192.168.0.1, then the PC Expanion must have an IP address starting with 192.168.0. If one of the first 3 numbers of the IP addresses is different, they are not in the same sub-network. To connect to a computer outside of the same sub-network, specify a host computer to connect to and refer to '6. Connecting a Specific Host Computer.'
- Click the 'Connection to' arrow in the PC Expanion initial screen and select a host computer from the list. If 'Autodetection' is selected in the <Setup> ► <TS Options> of the PC Expanion, up to 8 host computers within the same sub-network of the NCT-2000-XP application will be automatically found and listed. Automatically found host computer names are marked by the '\*' symbol in front of them. If 'Autodetection' is not selected in <Setup> ► <TS Options> and only 'TS 2' or 'TS 3' is selected, 'TS 2' or 'TS 3' appears in the list without the '\*' symbol.

4 Click the <Connect> button.





When the Windows logon window appears, type the user name and the password.



### Connecting with a switch (Supports 100Mbps switching)

'Setup the IP address of the PC Expanion by referring to '2. Setting and Confirming the IP Address of PC Expanion'. If you are using a switch, you must set up the IP address manually because you cannot use an automatically allocated IP address. For the correct IP address and gateway address, ask your computer administrator.



2 Set the IP address of a host computer by referring to '3. Setting and Confirming the IP Address of a Host Computer.' If you are using a switch, you have to setup the IP address manually because you cannot use an automatically allocated IP address. For the IP address and gateway address, ask your computer administrator. The IP address of a host computer and PC Expanion must be in the same sub-network. This means the first 3 among the 4 numbers of the IP addresses must be the same. For example, if the IP address of a host computer is 192.168.0.1, then the PC Expanion must have an IP addresses is different, they are not in the same sub-network. To connect to a computer not in the same sub-network, specify a host computer and refer to '6. Connecting to a Specified Host Computer.'



- and select a host computer from the list. If 'Autodetection' is selected in the <Setup> ▶ <TS Options> of the PC Expanion, up to 8 host computers within the same sub-network of the NCT-2000-XP application are automatically found and listed. Automatically found host computer names are marked by the '\*' symbol in front of them. If 'Autodetection' is not selected in <Setup> ▶ <TS Options> and only 'TS 2' or 'TS 3' is selected, 'TS 2' or 'TS 3' appears on the list without the '\*' symbol.
- 4 Click the <Connect> button.





When the Windows logon window appears, type the user ID and the password.



# 5. How to connect the PC Expanion to the host PC directly

You can also use the PC Expanion by connecting it to the LAN port of a host computer directly. In this case, you cannot use the Cable supplied with the product. You will need a cross-over LAN cable. If a host computer has one LAN card and the PC Expanion is connected to the LAN card, the computer cannot be connected to the Internet or external networks. In this case, to connect the host computer to the Internet or external networks, install an additional LAN card in the computer and refer to 'When there is more than a LAN'. The LAN card must support 100Mbps or higher.

#### When only one LAN card is plugged in the host PC (more than 100Mbps support)

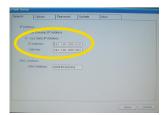
After referring to the '2. How to check the IP address setting of PC Expanion' in part 8, please set the IP address of PC Expanion manually.

#### <For example>

Select the 'Use Static IP address' option in the setup menu of the PC Expanion.

IP address column: Type "192.168.010.003"

Gateway: Type "192.168.010.001"



**2** After referring to "3. How to check the IP address setting of the host computer" in part 8, set the IP address of the host PC manually.

<For example>

Select the 'Use the following IP address' option.

IP address column:

Type "192.168.010.002"

**Subnet Mask:** 

Type "255.255.255.0"

Gateway: Type "192.168.010.001"



2 Click the 'Connection to' arrow in the PC Expanion initial screen and select a host computer from the list. If 'Autodetection' is selected in the <Setup> ▶ <TS Options> of PC Expanion, up to 8 host computers within the same sub-network of the NCT-2000-XP application are automatically found and listed. However, since there is one connected host computer, only the computer is displayed. An automatically found host computer name is marked by the '\*' symbol in front of it. To connect to a computer without a search operation, set the host computer IP address to the IP address used in Step 2 by referring to '6. How to connect to the Specific host PC.' Click the <Connect> button.





When the Windows logon window appears, type the user ID and the password.



#### Two LAN cards are installed in the host PC(more than 100Mbps support)

If two LAN cards are installed in the host computer, you can use one to connect to the PC Expanion and the other to connect to the Internet or external networks. In this case, connect the host computer and the PC Expanion by referring to 'When there is one LAN card' and setup the other LAN card to connect it to the Internet or external networks.

1 <Start> ▶ <Control Panel> ▶ <Network Connections> ▶ Select

'Local Area Connection' and then double-click it.



2 Click the <Properties> button.



3 Select 'Advanced' tab. Check "Allow other network users to connect through this computer's Internet connection" in the Internet Connecting Sharing window and click "OK" button.



4 Click the <Yes> button.

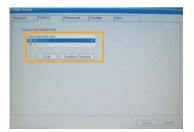


### 6. How to connect to the specific host PC

1 Click the <Setup> button in the startup screen of the PC Expanion.



**2** Select the 'TS Options' tab, select 'TS 2' or 'TS 3' and click the <Enable-Disable> button. Click the <Edit> button and setup host computer information. If 'Autodetection' is selected, up to 8 host computers within the same sub-network of the NCT-2000-XP application are automatically found and listed. Automatically found host computer names are marked by the'\*' symbol in front of them. If 'Autodetection' is not selected and 'TS 2' or 'TS 3' is selected, 'TS 2' or 'TS 3' appears in the list without the '\*' symbol.



3 Enter the IP address of the host computer to connect to the Terminal Server network address field. For the IP address of a host computer, refer to '3. Setting and Confirming the IP Address of a Host Computer.' If the IP address is incorrect, the host computer will not be connected. Click the <OK> button to save the settings and click the <Save> button to exit the settings.



4 Click the <Connection to> arrow in the PC Expanion's initial screen and select a host computer from the list. If 'Autodetection' is not selected and 'TS 2' or 'TS 3' is selected, 'TS 2' or 'TS 3' appears in the list without the '\*' symbol.





\_5 Click the <Connect> button. When the Windows logon screen appears, type the user ID and the password.



#### How to map the PC Expanion and connect to the host PC under the NCT-2000-XP console

\_\_\_\_\_ <Start> ▶ <All Programs> ▶ <NCT-2000-XP> ▶ Select <NCT-2000-XP Console> in order to run the program. Go to the <Hardware Settings (Local/LAN)> ▶ <UTMA/UTSA Device>. Select the specific PC Expanion and then double-click it.



2 Click the <Connection Settings> icon in the 'UTMA/UTSA Setup view.'



and then click the <Apply> button. Click the <Edit> button and view the setup host computer information. If 'Autodetection' is selected, up to 8 host computers within the same sub-network of the NCT-2000-XP application are automatically found and listed.



Input the IP address of the host PC in the "Terminal Server network address" column of the "Edit Connection Profile" window. Then click the <OK> button.



5 Click the <OK> button or the <Apply> button in order to save the changed option. The user must restart the PC Expanion. Please click the <OK> button in order to restart the PC Expanion.





Note

If the PC Expanion is currently being connected and used, a warning message appears. If you click the <Yes> button, the PC Expanion restarts. However, since the current environment settings are unchanged, you can use your environment settings when you logon with the same user account even after restarting.



If the PC Expanion is turned off or does not exist in the same subnetwork, the following screen appears and the settings will not be changed. In this case, click the <OK> button to cancel the changes.



Click the <Connect> arrow in the PC Expanion initial screen and select a host computer from the list. If 'Autodetection' is not selected and 'TS 2' or 'TS 3' is selected, 'TS 2' or 'TS 3' appears on the list.





Yhen the Windows logon window appears, type the user ID and password.



# 7. How to connect to the specific host PC automatically

#### How to configure the PC Expanion.

1 Click the <Setup> button in the startup screen on the PC Expanion.



Select the 'TS Options' tab, select 'TS 2' or 'TS 3', click the <Enable-Disable> button and click the <Edit> button. To connect to a specified host computer automatically, there must be one host computer on the <Connection to> list of the PC Expanion initial screen. If 'Autodetection' is selected in the 'TS Options' screen, select 'Autodetection', click the <Enable-Disable> button to unselect the option, and select either 'TS 2' or 'TS 3'.



Type the address that you want to connect to the host PC in the 'Terminal Server network address' column. Then select the 'Autoconnection Enable' option. Refer to '3. How to check the IP address setting of host Computer' in Part 8. regarding the IP address of specific host PC. Click the <OK> button. Then click the <Save> button. The setup procedure is finished.



When the PC Expanion is rebooted, the PC Expanion attempts to connect to the specific host PC after a few seconds. If the PC Expanion is connected to the host PC, please check the IP address of the specific host PC in the setup.

### How to set up under the NCT-2000-XP console

Start> ► <All Programs> ►



2 Click the <Connection Settings> icon in the 'UTMA/UTSA Setup view.'



3 Select either 'TS 2' or 'TS 3' from the 'Host Computer List to Connect to,' click the <Apply> button and then click the <Edit> button. To connect to a specified host computer automatically, there must be one host computer in the <Connection to> list on the PC Expanion's initial screen. If 'Autodetection' is selected in the 'Host Computer List to Connect to,' select 'Autodetection' and click the <Enable-Disable> button to unselect the option. Then select either 'TS 2' or 'TS 3'.



4 Input the IP address of the host PC in the "Terminal Server network address" column of "Edit Connection Profile" window. Then click the <OK> button. Refer to '3. How to check the IP address setting of host PC" in Part 8.



5 Select the host PC that the PC Expanion is connected to automatically in the "Auto-Connect" list. Click the <OK> button or the <Apply> button.



In order to save the changed option, the PC Expanion must be restarted. Click the <Yes> button in order to restart the PC Expanion.



Note

If the PC Expanion is currently being connected and used, a warning message appears. If you click the <Yes> button, the PC Expanion restarts. However, since the current environment settings are unchanged, you can use your environment settings when you logon with the same user account after restarting.



If the PC Expanion is turned off or does not exist in the same subnetwork, the following screen appears and the settings will not be changed. In this case, click the <OK> button to cancel the changes.



\_7 When the PC Expanion is rebooted, the PC Expanion attempts to connect to the specific host PC after a few seconds. If the PC Expanion is connected to the host PC, please check the IP address of the specific host PC in the setup.

# 8. How to log in automatically when the PC Expanion connects to the host PC.

PC Expanion users can log in from the host PC. <Start> ► <All Programs> ► <NCT-2000-XP> ► Select <NCT-2000-XP Console> in order to run the NCT-2000-XP program. Go to <Hardware Settings (Local/LAN)> ► Select <UTMA/UTSA Device> and then select the specific PC Expanion. Then double-click it.



Click the <Connection Settings> icon in the 'UTMA/UTSA Setup view'.



\_\_\_\_\_3 Select the host PC that is connected to the PC Expanion in the "UTMA/UTSA-Server Connection list" and then click the <Edit> button.



Select 'Use auto logon' in the 'Connection Information Settings' screen. Be sure to enter your 'User Name' and 'Password' and click the <OK> button. The Auto Logon function is only allowed on the NCT-2000-XP console because the password is saved in the user personal profile managed by the host computer and the PC Expanion cannot manage this information. Therefore, this function setting is allowed on a host computer.



In order to save the changed option, the PC Expanion must be restarted. Click the <Yes> button in order to restart the PC Expanion.





Note

◆ If the user uses the specific PC Expanion, the right figure appears like as the right window. If when the user clicks the <Yes> button, the PC Expanion will be restarted. However the present environment is saved. Therefore if the same user logs on again, the environment will be loaded.



If the specific PC Expanion is turned off or there is no the PC Expanion on the network, the follwing image will appear. Click the <OK> button.



- Select the specific host PC in the connection list on the startup screen of the PC Expanion. If the 'Autodetection' is disabled and TS 2' or TS 3' is enabled, TS 2' or TS 3' will be displayed in the connection list.
- **7** Click the <Connect> button.





# 9. How to send a message to the connected PC Expanion

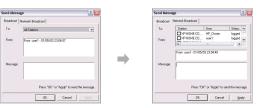
There are two methods available to send a message.

#### Send a message using "NCT-2000-XP-Send Message" option in the pop-up menu of NCT-2000-XP icon on the taskbar.

Move the mouse point to the NCT-2000-XP icon on the task bar of Windows. Then click the right mouse button. Select the 'NCT-2000-XP - Send Message'



A user can send a message from the PC Expanion to other PC Expanion or to other PC Expanion of different host PC. Select <Send Message> to send a message to the PC Expanion connected to the same host computer. To send a message to another host computer or the PC Expanion connected to another host computer or the PC Expanion connected to another host computer, select <Transmit Message> and select a destination PC Expanion. Type your message in the 'Message' field and click the <OK> or <Apply> button.



#### How to send a message in the NCT-2000-XP console

The user can send a message in the NCT-2000-XP console. Go to <Start> ▶ <All Programs> ▶ <NCT-2000-XP> ▶ <NCT-2000-XP Console. Go to <Software Settings (local)> ▶ <Sessions> Then select the station that you want to send a message to. If you select a Station and right-click, a pop-up menu appears. Select 'Transmit Message' from the pop-up menu or select the 'Transmit Message' button at the top of the screen to transmit a message to a selected PC Expanion. On the NCT-2000-XP console, you can transmit a message to one selected Station only. Transmitting a message on the NCT-2000-XP console requires Computer Administrator user privilege.



# 10. How to start or stop running the NCT-2000-XP application

After installing the NCT-2000-XP application, whenever the host PC is rebooted, the NCT-2000-XP program will run automatically. If the NCT-2000-XP application is disabled, the PC Expanion cannot connect to the host PC.

Move the mouse point to the NCT-2000-XP icon on the taskbar of Windows. Then click the right mouse button. Then select the 'NCT-2000-XP disable.'



The host PC rebooting message window will appear. If you want to apply this option, the host PC must be rebooted.



When the host PC is rebooted, a window appears with the disabled NCT-2000-XP application. The window asks whether you would like to use the NCT-2000-XP program again or not. If you would like to the NCT-2000-XP program to be enabled again, click the <Yes> button. If you would like the NCT-2000-XP to be disabled, click the <No> button. If the <Yes> button is clicked, the host PC reboot message appears. In order to enable the NCT-2000-XP program, the host PC has to be rebooted.



If the NCT-2000-XP is disabled after booting the host PC, please move the mouse cursor to the NCT-2000-XP icon on the Windows taskbar. Then click the right mouse button and select the 'Enable NCT-2000-XP now'. The host PC must be rebooted in order to apply the option.

### 11. How to terminate an active PC Expanion.

The user can terminate the PC Expanion that is presently connected to the host PC.

- Go to <Start> ▶ <All Programs> ▶ <NCT-2000-XP> ▶ <NCT-2000-XP Console>. Go to <Software Settings (local)> ▶ Select <Sessions> and then select the PC Expanion that you want to terminate.
- When the user clicks the right mouse button after selecting the correct station, the user will see the 'Stop Station' option of pop-up menu. Select 'Stop Station' menu or click the 'Stop Station' button in the menu bar. The PC Expanion will be terminated by force.



3 A confirmation message will appear before a Station is shut down. To exit a Station forcibly, click the <Yes> button. When this is done, the Station is immediately terminated without further warning messages. Note that a user cannot save data when a Station is forcibly terminated.



### 12. How to see the screen of a running PC Expanion

The user can see the screen of a PC Expanion that is connected to a host PC.

- \_1 Go to <Start> ▶ <All Programs> ▶ <NCT-2000-XP> ▶ <NCT-2000-XP Console>. Go to <Software Settings (local)> ▶ Select the <Session> and then select the PC Expanion that you would like to view.
- when the user clicks the right mouse button after selecting the station, the 'View station' option in the pop-up menu appear.

  Select the 'View station' or click the 'View Screen' button in order to see the screen of a PC Expanion.



The station screen appears where the user can set the resolution and color depth on the PC Expanion.



To view a station screen, go to in the "UTMA/UTSA Devices list" window. Go to <Start> ▶ <All Programs> ▶ <NCT-2000-XP> ▶ <NCT-2000-XP Console>. Select <Hardware Settings (Local/LAN)> ▶ <Device>, select the corresponding PC Expanion from the device list and then click <View User Screen view> at the bottom of the screen.



## 13. How to control a running PC Expanion by the administrator

The administrator can control a PC Expanion that is connected to the host PC remotely.

- <u>1</u> After referring to '12. How to see the screen of running PC Expanion' in Part 8, run the "View station" option.
- When the screen of the station displays, move the mouse point to the title bar of window.

Then click the right mouse button. Two options are displayed:

- Controlled By TS Admin: If this option is selected, an administrator can control the PC Expanion remotely.
- User Input Allowed: This option is selected by default. If this option is selected, you can use a keyboard and mouse on the PC Expanion. If this option is unselected, a user cannot use a keyboard and mouse but can only view the screen.



◀ If the user selects the option above, it is difficult to use the keyboard and the mouse because both the user's keyboard/mouse and the administrator's keyboard/ mouse are given equal access to operate simultaneously.

### 14. How to log in to the host PC automatically

The PC Expanion provides a mechanism for automatically logging on a host computer without entering a user name and password.

Go to <Start> ▶ <All Programs> ▶ <NCT-2000-XP> ▶ <NCT-2000-XP Console>. Go to <Software Settings (local)> ▶ <Information & Settings> ▶ Select <System Settings> and then double-click the 'Autologon on the host Station' on the right side of the window.



Check the "Enable Autologon Mode on Main Station' option. Then type the user ID and the password. Click the <OK> button or <Apply> button. The PC Expanion is logged on the host PC with the user ID and the password automatically.



# 15. How to set the timer for a 'system shutdown' message

If a user shuts down a host computer while a PC Expanion is connected to it, a message appears informing the PC Expanion user of the shutdown. This is to enable a PC Expanion user to save his data when an administrator shuts down or restarts a host computer. To save the current work, a PC Expanion user must click the <Cancel> button, save his data and then click <Logoff>. If there is no data to be saved, click the <Logoff> button to terminate the connection and allow the shutdown or restart of the host computer. Click the <Cancel> button to cancel the shutdown or restart of the host computer.

In this case, the message shown below appears on the host computer. To shutdown and restart the host computer regardless of the currently connected user, click the <Restart Now> button. To cancel the shutdown or restart, click the <Cancel> button.





2 Set the time. Then click <OK> button or <Apply> button. The range of timing is from 1 until 999 seconds.



Note

When a host computer is shutdown or restarted, and if a PC Expanion user selects the <Cancel> button, the host computer will not be shutdown. A the message will appear saying that a station user canceled the shutdown.



# 16. How to enable or disable the function of sending a message

Please refer to '9. How to send a message to the connected PC Expanion' in Part 8.



To use the Transmit Message function, select 'Users can transmit a notification message.' In order not to use the Transmit Message function, select 'Users cannot transmit a notification message'. Click the <OK> or <Apply> button to apply the settings. This setting does not control the NCT-2000-XP console function, but rather the Transmit Message function that is available when you click the NCT-2000-XP shortcut icon on the Desktop notification area.



### 17. How to view and control a PC Expanion

Please refer to '12. How to see the screen of a running PC Expanion' and '13. How to control the running of a PC Expanion by an administrator' in Part 8 regarding the function of viewing the PC Expanion and controlling the PC Expanion remotely.

\_ Go to <Start> ▶ <All Programs> ▶ <NCT-2000-XP> ▶ <NCT-2000-XP Console>. Go to <Software Settings (local)> ▶ <Information and Settings> ▶ Select <System Settings> and then double-click the 'Remote View/Control allowed' option on the right.



2 If you would like enable the function, select "Yes" Otherwise select "No." Then click <OK> button or <Apply> button in order to apply the function.



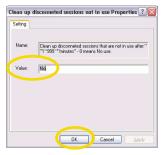
# 18. How to stop a station automatically when the PC Expanion is disconnected.

A PC Expanion session continues to run if a user turns the PC Expanion off without selecting 'Disconnect' or without logging off of the connection. An NCT-2000-XP console will represent this status as 'Disconnected'. If this status continues for a long period of time, it wastes the host computer's resources and it may cause some difficulties for other users. Select the 'Auto stop 'Disconnected' stations' option, to save system resources even if the connection is unexpectedly disconnected.

\_ Go to <Start> ▶ <All Programs> ▶ <NCT-2000-XP> ▶ <NCT-2000-XP Console>. Go to <Software Settings (local)> ▶ <Information & Settings> ▶ Select <System Settings> and then double-click the 'Clean up disconnection sessions not in use' option on the right.

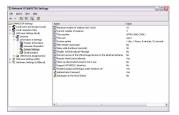


2 Type a numeric character. The range is from 0 to 999 minutes. In order to stop a 'connected' PC Expanion automatically, set this value to '0'. When the period of time passes since PC Expanion enters 'Disconnected' status, the 'Disconnected' PC Expanion will be forcibly terminated.



# 19. How to run both NCT-2000-XP program and an application using Windows RDP

Remote Desktop Protocol (RDP) is a multi-channel protocol that allows a user to connect to a computer running Microsoft Terminal Services. If an application using RDP does not run properly after installing the NCT-2000-XP application, choose the 'Support WTSAPI32 Interface' option. The application should begin to run properly. 'WTSAPI' stands for Windows Terminal Server Application Interface for NT compatible system.



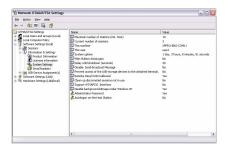
Select the 'Yes, WTSAPI32 interface is Enabled' option. Then click the <OK> button or <Apply> button.



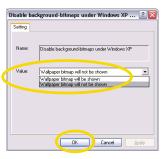
# 20. How to view the background-bitmaps image of a PC Expanion

When NCT-2000-XP program is installed on a host computer and you are using a PC Expanion to connect to the host computer, the background image appears only once when a connection has been established for the first time with the host computer. The background image appears only while you are creating a personal profile. If you connect to the host computer again after the personal profile is created, NCT-2000-XP does not send the background image to the PC Expanion according to the personal profile settings.

Go to <Start> ▶ <All Programs> ▶ <NCT-2000-XP> ▶ <NCT-2000-XP</li>
 Console>. Go to <Software Settings (local)> ▶ <Information & Settings>
 ▶ Select <System Settings> and then double-click the 'Disable background-bitmaps under Windows XP' option on the right.



**2** If you would like to display the background-bitmaps image, select "Wallpaper bitmap will be shown." If you do not want to display the background-bitmaps image, select "Wallpaper bitmap will not be shown." Then click the <OK> button or <Apply> button.



# 21. How to set the password of the NCT-2000-XP program

Be sure to set your password to prevent anyone other than an administrator from changing the NCT-2000-XP console settings. You can set a password when you install the NCT-2000-XP application. To set a password when you install the program, enter a password in the 'New Password' and 'Confirm Password' and click the <Next> button instead of selecting 'Do not set administrator password.'

Go to <Start> ▶ <All Programs> ▶ <NCT-2000-XP> ▶ <NCT-2000-XP Console>. Go to <Software Settings (local)> ▶ <Information & Settings> ▶ Select <System Settings> and then double-click the 'Administrator Password' option on the right.



If 'Disable password protection' is checked, uncheck the option. Type new password in the 'Password' and 'Retype Password' column.
Then click the <Change Password> button. Click the <OK> button or <Apply> button.



## 22. How to use the USB port in case of L2XX model series

A user can set a USB storage device connected to a host computer so that a specific PC Expanion can access it. The L200 model provides a USB port so that a USB device can be connected to it directly. A USB storage device directly connected to the L200 is not accessible by a user using another PC Expanion. Only a user using the L200 can access a USB storage device directly connected.



\*The USB port on the L200 model does not support the USB device or USB storage device or USB printer under Linux.

### 23. How to change the name of a PC Expanion

The name of a PC Expanion is displayed in the 'Alias' field of the "UTMA Info" window when the user clicks the <Info> button.

The name of a PC Expanion can only be changed in the NCT-2000-XP console.

\_1 Go to <Start> ▶ <All Programs> ▶ <NCT-2000-XP> ▶ <NCT-2000-XP Console>. Go to <Hardware Settings (LAN/Local)> ▶ Select <UTMA/UTSA Devices> and then double-click the PC Expanion that you would like to change the name of.



2 Click the <Connection Settings> in the "UTMA/UTSA Device Overview" window. 'UTMA-/UTSA Name' is the name of the PC Expanion. Type new name for the PC Expanion.





In order to save the changed option, the PC Expanion must be restarted. Click the <Yes> button in order to restart the PC Expanion.





Note

If the user uses the specific PC Expanion, the following message will appear. Click the <Yes> button and the PC Expanion will be restarted.



If the specific PC Expanion is turned off or if the PC Expanion is not on the network, the following image appears.
Then the user cannot change the option. Click the <OK> button.



The changed name of the PC Expanion is applied in the NCT-2000-XP console and in the "UTMA Info" window of the PC Expanion.



# 24. How to run the specific program when the PC Expanion connects to the host PC

You can set a PC Expanion so that it can run only one program. So, if a PC Expanion user exits the program, the user is automatically logged off and cannot use any other program than the one specified.

### How to set under the PC Expanion

1 Click the <Setup> button in the startup screen of the PC Expanion.



2 Select 'TS Options' tab on the terminal server of the connection list. Then click the <Enable-Disable> button. Click the <Edit> button in order to set the information of the host PC.



Select 'Start following program' Then type the file name in the 'Program' column. And type the folder name for the path to the executable file in the 'Folder' column. For example, if you want to run the notepad program automatically, type the following information; program: Notepad.exe, Folder: C:\Windows. Then click the <OK> button and <Save> button.



4 Click the <Connect> button.



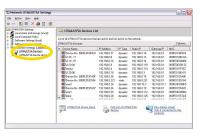


5 When the Windows logon window appears, type the user ID and the password. Then click <OK> button. The application should now run automatically. If the set application is terminated, the PC Expanion is logged off automatically.



#### How to set the NCT-2000-XP Console

\_ Go to <Start> ▶ <All Programs> ▶ <NCT-2000-XP> ▶ <NCT-2000-XP Console>. Go to <Hardware Settings (Local/LAN)> ▶ Select <UTMA/UTSA Devices> and then double-click the desired PC Expanion.



2 Click the <Connection Settings> in the "UTMA/UTSA Device Overview" window.



**3** Select the host PC that is connected to the PC Expanion in the "UTMA-/UTSA-Server Connection list". Then click <Edit>.



4 Select 'Start following program' Then type the execute file name in the 'Program' column. Type the folder for the execute file in the 'Folder' column. For example, if you would like to run 'memo' program automatically, type the following information; program: Notepad.exe, Folder: C:\Windows.

Then click the <OK> button and <Save> button.

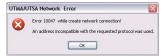


In order to save the changed option, the PC Expanion must be restarted. Click the <Yes> button in order to restart the PC Expanion.





If the user uses the specific PC Expanion, the following figure appears. Click the <Yes> button and the PC Expanion will be restarted.



If the specific PC Expanion is turned off or if the PC Expanion is not on the network, the image to the right appears. Click the <OK> button.



**6** Click the <Connect> button.





\_7 When the Windows logon window appears, type the user ID and the password. Then click the <OK> button. The set application runs automatically. If the set application is terminated, the PC Expanion is logged off automatically.

# 25. How to manage grouped PC Expanions under the NCT-2000-XP program

The NCT-2000-XP console's 'Hardware Settings (LAN/Local)' device list shows all PC Expanions that are currently connected to the network or were connected. A user can more efficiently manage PC Expanions by grouping them. Group PC Expanions according to the procedures below.

Go to <Start> ▶ <All Programs> ▶ <NCT-2000-XP> ▶ <NCT-2000-XP Console>. Then <Hardware Settings (Local/LAN)> ▶ Click to the <UTMA/UTSA Device Group(s)>. Move the mouse cursor to the right side screen and click the right mouse button. Go to <New> ▶ <New Logical Group>

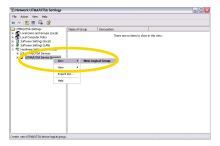


**2** Type the group name and the description. Then click the <OK> button. You can now view the new group.



There are two ways to assign PC Expanions in a group. One is how to assign the PC Expanion in the "UTMA/UTSA Device Group(s). The other is how to assign each PC Expanion.

The following is how to assign the PC Expanion in the "UTMA/UTSA Device Group(s)." Click on "UTMA/UTSA Device Groups" and click the right mouse button. Go to <New> ► <Add an UTMA/UTSA to Group>.

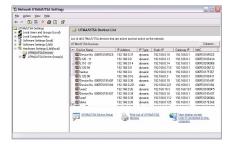


4 Select the PC Expanion that you want to group in the "Available UTMA/UTSA devices" and then click <OK> button. If you would like to select multiple PC Expanions, use the "Ctrl" key and the mouse.



## How to assign a PC Expanion

1 Go to <Start> ▶ <All Programs> ▶ <NCT-2000-XP> ▶ <NCT-2000-XP Console>. Go to <Hardware Settings (Local/LAN)> ▶ Select <UTMA/UTSA Devices> and then double-click the PC Expanion that you would like to change.



2 Click the <Member of Groups> in the "UTMA/UTSA Device Overview".



3 Click the <Add> button.



Select the group that you would like to group in "Available groups" and click the <OK> button.



**5** Click the <OK> button or the <Apply> button.



# 26. How to manage when user forgets the password of the NCT-2000-XP program

An administrator is responsible for setting the NCT-2000-XP console password. When you lose or forget an NCT-2000-XP console password, you can reset the password according to the procedures below.

1 Run the NCT-2000-XP program and input any password or character.



When the wrong password message appears, click the "OK" button.



When "Did you forget Your password?" message appears, click the <Yes> button.



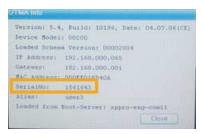
When "Please press "OK", end install program now" message appears, click the <OK> button. Then exit the program. The previous password is reset. If you would like to set new password, please refer to "21. How to set the password of NCT-2000-XP program" in Part 8.



# 27. How to add or remove the serial number of NCT-2000-XP program

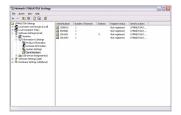
The serial number of the current version of a PC Expanion is embedded in the product. To view a serial number, click the <Info> button on the PC Expanion's initial screen. The serial number of a product manufactured before the year 2005 is not embedded. The serial number of a product manufactured before the year 2005 is printed on the label at the bottom of the product with an activation key. If your serial number is embedded by default, you do not need to add the serial number in the NCT-2000-XP console. Otherwise, you must add the serial number in the NCT-2000-XP console to use the product normally.

You can add or delete serial numbers according to the procedures below.



## How to add a serial number

\_ Go to <Start> ▶ <All Programs> ▶ <NCT-2000-XP> ▶ <NCT-2000-XP Console>. Go to <Information & Settings> ▶ Select <Serial Numbers>. If a PC Expanion with an added serial number connects to a host computer, the serial number is automatically displayed as shown on the right. The 'Serial Number Location' is represented as 'Device', when a serial number is saved in the PC Expanion by default. If a serial number is manually added, the 'Serial Number Location' is represented as 'Hard Disk.'



In order to add a serial number, select the <Serial Numbers> of <Information & Settings> and then click the right mouse button. Or move the mouse point to the right window of program and then click the right mouse button. Select <Add Serial Number>.



3 If there is no a serial number on the list, the insert window with user's information appears. If there is more than one serial number on the list, the serial number and the activation key input window appears. Type the serial number and the activation key. Then <OK> button.

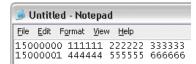


4 You can add all serial numbers after making a file. Go to <Software Settings (Local)> ▶ <Information & Settings> ▶ <Serial Numbers> and then click the right mouse button. Select < Import Serial Numbers>.



Note

Run the "Notepad" program. And then type the serial number and the activation key as shown in the picture on the right. Save the file.



Select the file where the serial number is saved.

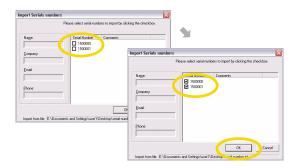


Note

If the serial number and the activation key are incorrect, when you click the <Open> button, this error message will appear.

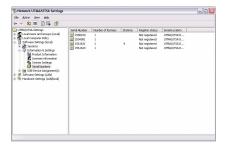


6 Select the serial number that you would like to input and then click "OK" button.

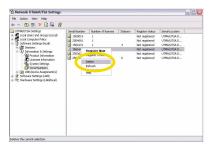


#### How to delete the serial number

1 Go to <Start> ▶ <All Programs> ▶ <NCT-2000-XP> ▶ <NCT-2000-XP console>. Go to <Information & Settings> ▶ Select the <Serial Number>.



To delete a serial number, select the serial number to be deleted, right-click and select <Delete> from the pop-up menu. If the serial number is in use, you cannot delete the number. You can figure out whether a serial number is in use or not by checking the number in the 'Number of Stations' field. If there is no number in the 'Number of Stations' field, you can delete the serial number.



# 28. How to delete the PC Expanion on the list of NCT-2000-XP console



- Select a PC Expanion, right-click and select <Delete Device> from the pop-up menu. You can delete a PC Expanion only when it is not in the same sub-network or turned off. You can only delete a PC Expanion whose icon is red. When the icon is blue or green, the < Delete Device > menu is disabled. NCT-2000-XP console does not refresh the list in real-time. Press the 'F5' key or the 'Refresh' button on the top of the screen to refresh the contents of the list.
- The message window appears. If you click the <Yes> button, the PC Expanion will be deleted. If you click the <No> button, the PC Expanion will be not deleted.



# 29. How to set the resolution and frequency on the PC Expanion

You can set the resolution and frequency of the PC Expanion to be used when it is connected to a host computer in advance.

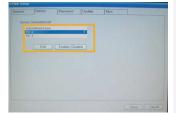
The specified resolution and frequency overrules the resolution and frequency settings made when you initially set up the host computer.

## How to configure in the PC Expanion.

<u>1</u> Click the <Setup> button or the <Setup> of <Options> button in the startup screen of PC Expanion.



'Select 'TS Options' tab and the terminal server of the connection list. Then click the <Enable-Disable> button. Click the <Edit> button in order to set the information of the host PC.

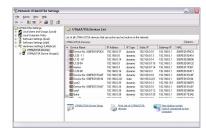


Close

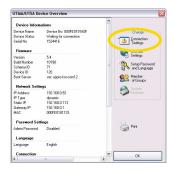
3 Select the resolution and frequency in the 'Desktop size' field. Available resolutions are displayed depending on your product model. 'Mode Test' is a function to test a selected resolution before applying it so that you can check if a selected resolution is supported by your monitor. Since some resolutions may not be supported by your monitor, use the 'Mode Test' function to check. Click the <OK> button and then the <Save> button.



#### How to set in the NCT-2000-XP console



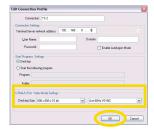
2 Click the <Connection Settings> in the "UTMA/UTSA Device Overview" window.



3 Select the host PC that is connected to the PC Expanion in the "UTMA-/UTSA-Server Connection list." Then click <Edit> button.



Select the Desktop size and the frequency. Then click the <OK> button.



5 In order to save the changes, the PC Expanion must be restarted. Click the <Yes> button in order to restart the PC Expanion





Note

If the user is currently using the specific PC Expanion, the following message appears. Click the <Yes> button and the PC Expanion will be restarted.



If the specific PC Expanion is turned off or if the PC Expanion is not on the network, the following image appears. Click the <OK> button.



6 Click the <Connect> button.





7 The screen with the resolution and the color depth set is displayed.

# 30. How to set the user ID and the password before the PC Expanion logs in to the host PC

If the PC Expanion is connected to a host computer, the Windows logon screen appears. You can preset your user name and password so that you can logon to Windows without entering them each time. To logon to Windows automatically, refer to '8. Auto Logon when PC Expanion is connected to a Host Computer.'

#### How to set in the PC Expanion

1 Click the <Setup> button in the startup screen of the PC Expanion.



2 'Select 'TS Options' tab and the terminal server of the connection list. Then click the <Enable-Disable> button. Click the <Edit> button in order to set the information on the host PC.



genter a user name in the 'User name' field. The user name allows alphabet letters only. You can enter a user name in a PC Expanion. You cannot enter a password in a PC Expanion. Since a password is private profile information, PC Expanion cannot save the information. Click the <OK> button to save the settings and click the <Save> button to finish the setting.



4 Click the "OK" button.

#### How to set in the NCT-2000-XP console



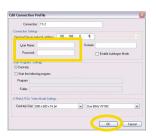
Click the <Connection Settings> in the "UTMA/UTSA Device Overview" window.



Select the host PC that is connected to the PC Expanion in the "UTMA-/UTSA-Server Connection list." Then click <Fdit> button.



4 Type the user name and the password in the "Edit Connection Profile" window.



\_\_\_\_\_\_ In order to save the changes, the PC Expanion must be restarted. Click the <Yes> button in order to restart the PC Expanion.



Note

If the user is currently using the specific PC Expanion, the following figure will appear. Click the <Yes> button and the PC Expanion will be restarted



If the specific PC Expanion is turned off or if the PC Expanion is not on the network, the following image appears. Click the <OK> button.



You can see the user ID when the logon window appears after connecting to the host PC.

# 31. How to uninstall the NCT-2000-XP program

If you uninstall the NCT-2000-XP application, you cannot use the PC Expanion.

Please click on the <Start> button on the Windows logon screen and select <All Programs ► NCT-2000-XP ► Uninstall NCT-2000-XP> in order.



when the 'Uninstall NCX-2000-XP' message window appears please click on the <Next> button. (If the 'Administrator password' has been set, please click on the <Next> button after inputting the 'Administrator password'.)



3 Click the <Next> button.



The NCX-2000-XP program is being uninstalled.



5 When the program is uninstalled completely the following message window appears. Please select the 'Yes, I want to restart my computer now', and then click on the <Restart> button.



# 32. How to assign a USB storage device

You can set a USB storage device connected to a host computer so that a specific PC Expanion can access it. The L200 model provides a USB port so that a USB device can be connected to it directly. A USB storage device directly connected to a L200 is not accessible by a user using another PC Expanion. Assign a USB storage device connected to a host computer to a PC Expanion according to the procedures below.

- \_1 Go to <Start> ▶ <All Programs> ▶ <NCT-2000-XP> ▶ <NCT-2000-XP Console>. Go to <Software Settings (local)> ▶ Select 'USB storage device assignment(s)'. If a USB storage device is plugged into the host PC, the USB device is displayed in the sub-folder as shown in the figure below.
- Default Setting is 'Allows all Stations to access USB port.' To allow only a specific PC Expanion to access a USB device, unselect 'Allows all Stations to access USB port' and select the PC Expanion from the list and click the <Apply> button. The 'Main Console' refers to the host computer. The list displays device names with serial numbers. A device name is the name that appears in the device list when you select 'Hardware Settings (LAN/Local)' ▶ 'Device'. For renaming procedures, refer to '23. Renaming a PC Expanion Name.'



# Part 9 Troubleshooting an error message

# Troubleshooting an error message that appears in the PC Expanion

#### Reading flash data...



While the PC Expanion is booting, the following message appears.

#### Getting dynamic IP address...



While the PC Expanion receives the IP address automatically, the following message appears.

#### DHCP server was not found...



If the PC Expanion does not receive the IP address from DHCP, an error message appears.

#### Check Point:

- 1 Check if there is a DHCP server on the current network.
- **2** Check if a LAN cable is connected to the PC Expanion.
- 3 Check if the LAN cable connected to the PC Expanion is a Direct Cable.
- Check if the LAN cable is properly connected and not down.

(3) If there is no DHCP server on the current network, click the <Setup> button, select 'Use Static IP address' in the 'Network' and manually set the IP address. For the IP address and gateway address required for manual setting, ask your computer administrator.

#### Static IP address was assigned.



When the IP address is set manually, the following message appears.

#### Try to boot latest client...



This message appears while the PC Expanion searches for the latest version of the NCT-2000-XP program. If there is a host computer installed within the same sub-network and the computer and PC Expanion can communicate, PC Expanion searches for the latest version from the host computer. If the latest version is downloaded, the screen blinks once and PC Expanion restarts. The symbol next to the message rotates while the latest version is being downloaded.

#### No Terminal Server found or not all services initialized yet, please click on the connection list and try again



When the PC Expanion is set to find the host PC automatically, "Autodetection" is set in <TS Options>. However the PC Expanion may not find the host PC where the NCT-2000-XP program is installed.

#### Check Point:

- Check if the NCT-2000-XP program is installed on the host computer.
- **2** Check if the LAN cable is properly connected to the host computer.
- Oheck if the host computer and PC Expanion are in the same subnetwork.
- ① Check if the firewall or anti-virus programs installed on the host computer or network equipment are compatible with NCT-2000-XP.

### Connection Terminal Server···



When the user clicks the <Connect> button, this message appears.

#### Host unreachable...



When the PC Expanion is connected to the host PC, and the PC Expanion does not find the host PC this message appears.

#### Check Point:

- If you are connected to a host computer that you selected from the found host computer list by selecting 'Autodetection' in the <Setup> ► <TS Options> of the PC Expanion, check if the firewall or anti-virus programs installed on the host computer are compatible with NCT-2000-XP.
- ② If you have selected 'TS 2' or 'TS 3' in the <Setup> ► <TS Options> of the PC Expanion, check if the IP address of the host computer is identical with the Terminal Server Network address set in the in 'TS 2' or 'TS 3'.
- If you have selected 'TS 2' or 'TS 3' in the <Setup> ► <TS Options> of the PC Expanion, check if the NCT-2000-XP program is installed on the host computer to be connected.
- ♠ If you have selected 'TS 2' or 'TS 3' in the <Setup> ► <TS Options> of the PC Expanion, check if the host computer is in the same subnetwork.

#### TS ERROR - INVALID OR NO SERIAL NUMBER!



This message appears when no serial number exists on the host computer. This message does not appear if the product includes a serial number. If a serial number is included, 'Serial No' appears when you click the <Info> button on the PC Expanion's initial screen.

#### Check Point:

Refer to "27. How to add or remove the serial number of the NCT-2000-XP program" in Part 8. Then add the serial number on the NCT-2000-XP console.

#### Connection was closed but data is not lost and application is still running at server side. Please connect terminal server later.

This message appears when the connection stops due to problems or abnormality occurs in the host PC or network equipment. Check the Host PC or the network equipment when this message appears and restart after turning off the power the host PC and PC Expanion.

#### Check Point:

- 1 Check if the host computer is overloaded.
- 2 Check if the network traffic is overloaded.
- Check if the communication is not normal due to unstable power supply to the network equipment.
- 4 Check if it occurs when you use a specific program.
- **5** Check if it occurs when you use a specific file.

#### **Authorization warning**

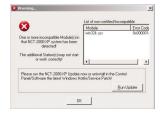
When two PC Expanions use the same serial number simultaneously, this error message appears. The serial number embedded in the product does not reproduce this message.

#### Check Point:

Check all serial numbers in the NCT-2000-XP program console.

# Troubleshooting about an error message that appears on the Host PC

#### **Multi user Error**



Microsoft is distributing Windows updates. Some security updates may conflict with NCT-2000-XP. A conflict may display an error message or disable a PC Expanion. If this happens, a new version will be distributed within a week. Therefore, please do not install Windows updates immediately after their release. If a problem with a Windows update is reported, detailed information will appear on our website for your reference.

# Appendix Glossary

# **Regarding PC Expanion**

#### **Host Computer**

The computer which is connected to a PC Expanion, or a computer in which the NCT-2000-XP program has been installed.

#### Station

A PC Expanion which is connected to a host computer, and is called a station of the host computer.

## WoIP (Windows over IP)

New network protocol that enables a PC to operate multi windows simultaneously in virtual memory and the registered multi user can access through TCP/IP by using a PC Expanion. This technology does not require a high priced server and supports the multi user access via a terminal.

#### UTMA(UltraThinMultiAccess) Multi-User Terminal

UTMA (Ultra Thin Multi Access) Multi User Terminal is a network computing terminal using NComputing patent technology. It doesn't use CPU, VGA, or main chipsets, simply a programmable SoC to connect to the host PC. A terminal using UTMA technology can be connected to a host PC by using a LAN cable. It can also be connected to a remote PC via the Internet using TCP/IP.

# Regarding computer network

#### **User account**

A user in a computing context is one who uses a computer system. Users may need to identify themselves for the purposes of accounting, security, logging and resource management. In order to identify oneself, a user has an account (a user account) and a username, and in most cases also a password (see below). Users employ the user interface to access systems, and the process of identification is often referred to as log in.

#### Administrator

A system administrator is a person who is responsible for managing a multi-user computing environment, such as a local area network (LAN). The responsibilities of the system administrator typically include: installing and configuring system hardware and software; establishing and managing user accounts; upgrading software; and backup and recovery tasks.

#### Alias

An alias is a fictitious name used by an individual as an alternative to his or her true name.

#### **Bandwidth**

Bandwidth is often used as a synonym for data transfer rate - the amount of data that can be carried from one point to another in a given time period (usually a second). This kind of bandwidth is usually expressed in bits (of data) per second (bps). Occasionally, it's expressed as bytes per second (Bps).

#### Client/Server

Client/server describes the relationship between two computer programs in which one program, the client, makes a service request from another program, the server, which fulfills the request.

### Console

The system console, root console or simply console is the text entry and display device for system administration messages, particularly those from the BIOS or boot loader, the kernel, from the system and from the system logger.

### **DHCP (Dynamic Host Configuration Protocol)**

DHCP (Dynamic Host Configuration Protocol) is a communications protocol that lets network administrators centrally manage and automate the assignment of Internet Protocol (IP) addresses in an organization's network. When using the Internet Protocol, each machine that can connect to the Internet needs a unique IP address, which is assigned when an Internet connection is created for a specific computer. Without DHCP, the IP address must be entered manually at each computer in an organization and a new IP address must be entered each time a computer moves to a new location on the network. DHCP lets a network administrator supervise and distribute IP addresses from a central point and automatically sends a new IP address when a computer is plugged into a different place in the network.

#### **DNS (Domain Name System)**

The domain name system (DNS) is the way that Internet domain names are located and translated into Internet Protocol addresses. A domain name is a meaningful and easy-to-remember "handle" for an Internet address.

#### **Download**

Downloading is the transmission of a file from one computer system to another.

#### **Dummy Hub**

Dummy hub may include a group of gateway cards for connection to a local area network (for example, an Ethernet or a Token Ring), and a connection to a line.

#### **Ethernet**

Ethernet is the most widely-installed local area network (LAN) technology. Specified as IEEE 802.3.

#### **Fast Ethernet**

Fast Ethernet or 100BASE-T provides transmission speeds up to 100 megabits per second and is typically used for LAN backbone systems.

#### **Firewall**

firewall is a set of related programs, located on a network gateway server, that protects the resources of a private network from users from other networks. (The term also implies the security policy that is used with the programs.) An enterprise with an Intranet that allows its workers access to the wider Internet installs a firewall to prevent outsiders from accessing its own private data resources and for controlling what outside resources its own users have access to.

#### FTP (File Transfer Protocol)

File Transfer Protocol (FTP), a standard Internet protocol, is the simplest way to exchange files between computers on the Internet.

## Gateway

A gateway is a network point that acts as an entrance to another network. On the Internet, a node or stopping point can be either a gateway node or a host (end-point) node.

#### Internet

Internet, sometimes called simply "the Net," is a worldwide system of computer networks - a network of networks in which users at any one computer can, if they have permission, get information from any other computer (and sometimes talk directly to users at other computers).

#### **IP Address**

The Internet is really the interconnection of many individual networks (it's sometimes referred to as an internetwork). So the Internet Protocol (IP) is basically the set of rules for one network communicating with any other (or occasionally, for broadcast messages to all other networks). Each network must know its own address on the Internet and that of any other networks with which it communicates. To be part of the Internet, an organization needs an Internet network number, which it can request from the Network Information Center (NIC). This unique network number is included in any packet sent out of the network onto the Internet.

#### LAN (Local Area Network)

Local area network (LAN) is a group of computers and associated devices that share a common communication line or wireless link and typically shares the resources of a single processor or server within a small geographic area (for example, within an office building). Usually, the server has applications and data storage that is shared in common by multiple computer users. A local area network may serve as few as two or three users (for example, in a home network) or as many as thousands of users (for example, in an FDDI network).

#### Log on

In general computer usage, logon is the procedure used to get access to an operating system or application, usually in a remote computer. Almost always a logon requires that the user has (1) a user ID and (2) a password. Often, the user ID must conform to a limited length such as eight characters and the password must contain at least one digit and not match a natural language word.

#### **MAC Address**

In a local area network (LAN) or other network, the MAC (Media Access Control) address is your computer's unique hardware number. (On an Ethernet LAN, it's the same as your Ethernet address.) When you're connected to the Internet from your computer (or host as the Internet protocol thinks of it), a correspondence table relates your IP address to your computer's physical (MAC) address on the LAN. The MAC address is used by the Media Access Control sublayer of the Data-Link Layer (DLC) of telecommunication protocols. There is a different MAC sublayer for each physical device type. The other sublayer level in the DLC layer is the Logical Link Control sublayer.

#### NIC (Network Interface Card)

A network interface card (NIC) is a computer circuit board or card that is installed on a computer so that it can be connected to a network.

#### Router

In packet-switched networks such as the Internet, a router is a device or, in some cases, software in a computer, that determines the next network point to which a packet should be forwarded toward its destination. The router is connected to at least two networks and decides which way to send each information packet based on its current understanding of the state of the networks it is connected to.

# **FAQ**

The following is a list of possible situations that may arise during the use of your product. Simple answers and solutions are provided for each:

Q A message (shown below) repeatedly appears while installing NCT-2000-XP. What is the problem?



- A When you try to install NCT-2000-XP using the Installation CD, it compares the contents of the CD with the latest version in the NComputing server. The message appears when the computer is not connected to the Internet or the port is blocked by a program such as a firewall. The reason why the message appears repeatedly is that there are multiple NComputing servers on the network. The redundant servers allow users to download the latest version of the software even if some are down or unreachable.
- Q Our company is using a firewall. Which ports should be opened to use a PC Expanion?
- A The port numbers are as follows. TCP Port: 27605, 3581, 3597, 3645, 3646, 3725, UDP Port: 1027, 1283.

  The port numbers are subject to change without notice.

# Q If NCT-2000-XP Installation CD is not available, can I download the latest version of the program?

A Yes, you can download the latest version of the program. However, unlike installing it with the CD, you have to select the option to search for NComputing servers as follows when you try to install the latest program. Click <Start> ▶ <All Programs> ▶ <Accessories> ▶ <Command Prompt> or click <Start> ▶ <Run>, type 'cmd' and click OK. If the DOS command prompt window appears, change directory to the NCT-2000-XP program folder and type 'Setup.exe/ftpon'. Then the NComputing servers are searched and the program is updated with the latest version.

# Q Why does the warning message below appear when I install NCT-2000-XP?

A Windows XP Service Pack 2 provides reinforced firewall that displays a security warning message when a new port is used. The message also appears when you install another program such as Messenger. If you select <Continue Cut Off> in the message box, you will not be able to find NComputing servers even if you run the setup program again because the port is blocked. If you select <Allow>, the port will open unless you block it manually. If you select <Check Later>, although the port is opened for now, the security warning message will appear again when the port is accessed next.



# Q Why does a message appear asking me to stop or delete a firewall or anti-virus program when I install NCT-2000-XP?

A PC Expanion communicates with a host computer using WoIP based on TCP/IP over an Ethernet connection. Therefore a firewall or antivirus program may block the operation of the program mistaking PC Expanion for a virus. Therefore, you have to open the ports in the corresponding program or stop the program to use PC Expanion. For the latest firewall and anti-virus program compatibility information, please visit our web site.

## Why does the Add users screen appear when I install CT-2000-XP?

A PC Expanion emulates the operating system. Therefore, you have to add users in order to allow them to use their own files. For the procedures to add users, refer to Part 8 in the manual.

## Q Can I set a user account type as 'Computer administrator' or 'Limited' only in Windows XP?

A No. Although Windows XP basically shows 'Computer administrator' and 'Limited', Windows XP provides the account types supported by Windows 2000. To set an account type different than the basic types, as can be done in Windows 2000, refer to 'Adding a User Account' in Part 8 in the manual.

# Q Do I have to register the serial number?

A Yes, you have to register the serial number. Otherwise, you cannot upgrade the program or use A/S.

# Q I have formatted the hard disk drive after registering the serial number. Can I register the serial number again?

A Yes, you can. You can register a serial number after formatting or replacing the hard disk drive. However, re-registration is limited to 10 times.

## Q Can I connect a PC Expanion directly to a host PC?

A Yes, please refer to "5. How to connect the PC Expanion to the host PC directly" in Part 8 in the manual.

# Q How many PC Expanions can be connected to one host PC via the network equipment?

A Please refer to "Part 1. The features of the product."

## Q Do I have to upgrade the NCT-2000-XP program?

A No, you don't need to upgrade the program if you do not have problems using it. However, since Microsoft is releasing security updates regularly, you may experience conflicts with new security updates. When a conflict with a security update is reported, a new version of the software will be distributed within a week. For more information refer to out website. In addition, a new version provides more functions. Therefore, using the latest version is recommended.

#### Q Will this with Windows® 98 or Windows ME?

A PC Expanion supports Windows® 2000 Professional, Windows® 2000 server, Windows® XP Home Edition, Windows® XP Professional, Windows® XP Media Center Edition, Windows® 2003 Standard Edition/Enterprise Edition, Windows® Small Business Server 2003 and Linux. For supporting other OS, please contact the technical support team.

### Q Must the version of the NCT-2000-XP programs in a sub-network be the same?

A Yes, they must be the same. Keep the program updated with the latest version. The latest version resolves problems of the previous version and provides more advanced functions. Since different versions in the same sub-network might cause data communication problems, please use the same version in a sub-network.

# Q Do I have to delete or stop the firewall, the security or anti-virus programs when I install NCT-2000-XP?

A No, you do not have to delete or stop them. However, some firewalls, security and/or anti-virus programs may cause problems when NCT-2000-XP is installed. In this case, you have to stop the real-time monitoring function of such a program to install NCT-2000-XP properly. In addition, the real-time monitoring function may cause problems when you use PC Expanion too. For detailed information, refer to our website.

# Q Do I have to setup a password for the NCT-2000-XP console password?

A Yes, we recommend setting a password for the NCT-2000-XP console. Otherwise, anyone can change the settings configuration in the console. Since the settings determine the PC Expanion operations, please keep the console password secure.

## Q What if I forget the password of the NCT-2000-XP console?

A Please refer to '26. How to mange when the user forgets the password of NCT-2000-XP program" in Part 8 in the manual.

## **Q** Do I have to add a user account to use the PC Expanion?

A Yes, you must add a user. PC Expanion enables multiple users to have access to one computer simultaneously. If many users logon with the same user account, the last logged off user's settings will be saved. In addition, all users could see the contents created by other users causing a security problem. You must add the necessary number of user accounts and protect them with passwords.

## Q Can the product support 10Mbps or 1Gbps?

A No, PC Expanion supports 100Mbps. The product cannot run under 10Mbps or 1Gbps properly.

# Q I can only move the mouse cursor but cannot do anything else while I am using the PC Expanion. The PC Expanion status in the NCT-2000-XP console appears to be running.

A This may happen when screen data is not received through the network because a LAN cable is disconnected or network equipment such as switching hub or IP sharer are temporarily unavailable. It may also happen when data communication is not stable due to an unstable power supply to network equipment or other reasons. In this case, turn the PC Expanion off, then turn it on and connect and logon to the host computer. Then you can resume your session without data loss. Check if network equipment such as a switching hub or IP sharer are operating normally and if sufficient power is supplied to the network equipment. You can avoid this problem by supplying stable power to the equipment using a UPS (Uninterruptible Power Supply).

## Q What games can I play?

- A You can only run 2D games the Internet and casual games such as a Java and flash type. Refer to the list below for what is not supported on a PC Expanion.
  - 3D games that require a GPU or hardware accelerator.
  - Single user game that requires the program CD.
  - Games that run on at only one registered PC and checks the IP address of the system.

## Q Can I view movie or mpeg file?

A Our product shares the resources of the host PC, so the memory and host PC resource is limited and the performance speed is dependant on the host PC's specification. Playing the video in full screen mode takes a lot of system resources. We recommend playing the video in and appreciate screen size that does not reduce the system speed. PC Expanion is designed to run office applications at the office such as surfing the Internet, word processing, or working with speadsheets.

## Q Suddenly I cannot connect to a host computer.

A Microsoft enables automatic upgrades with Windows updates that fix various bugs and correct security holes. Some of Windows updates are closely related to the PC Expanion driver. We do not recommend installing Windows updates immediately after their release. We will provide a new version of the software as soon as possible on our website. If you experience a problem, remove the latest Windows update installed on your computer and upgrade the NCT-2000-XP with the latest version from our website.



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You may also contact technical support at 1-888-365-1210 Monday  $\sim$  Friday between the hours of 9:00 AM  $\sim$  5:00 PM PST to speak with a technical support representative.