

***EXHIBIT C***

***User Manual***



# RT-400 User Manual

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## Features

NWG integrating HUB, Router, and high-speed serial interface, and it is a user-friendly SOHO (Small Office, Home Office) equipment.

### NWG has various connection functions

- ISP Dial-Up IP Connection
- RAS Client Dial-Up IP Connection
- RAS Server IP Connection
- Leased Line IP Connection
- ISP Dial-Up IP Connection + RAS Server IP Connection
- RAS Client Dial-Up IP Connection + RAS Server IP Connection
- ISP Networking Dial-Up IP Connection
- Networking Dial-Up IP Connection
- ISP Leased Line IP Connection

### IP Masquerade

This function can make access, at the same time, from more than one personal computer (PCs) to the Internet.

### Call Back

This function connects from home (Client) and after that, once again, it connects from office (RAS Server) to home (Client). Therefore, the telephone charges of the individual can be reduced.

### Automatic Connection and Disconnection

Automatic connection: By starting an E-Mail and so on, NWG begins a Dial-up automatically.

Automatic disconnection: NWG will work out automatic disconnection when there is no communication for a certain period.

### Firewall Protection

By the filter information which have set to NWG beforehand will monitor all incoming packet data and it protects your network.

### DHCP Server

Dynamic Host Configuration Protocol provides a dynamic IP address to PCs.

### High Speed Serial Interface

Two RS-232C high-speed serial interfaces with 460.8kbps (Max.) data transmit rate.

### Setup Utility

User friendly Setup utility for easy installation, even for a beginner.

### Flash ROM

The control program is in Flash ROM. You can easily upgrade firmware if necessary.



## .1 Components of Systems

- **System Requirements** (Other than NWG, please prepare below accessories for the system you want to build up).

### 1) Connecting four PCs or less

MODEM, Terminal Adapter, and DSU

Please prepare the MODEM or TA correspond to your telephone network.

For Terminal Adapter, please make sure the DSU is included.

10BASE-T Ethernet Card (Network Adapter Card)

Prepare one for each PC you want to connect.

10BASE-T Ethernet straight cable (1 is included in the package)

Prepare one for each PC you want to connect.

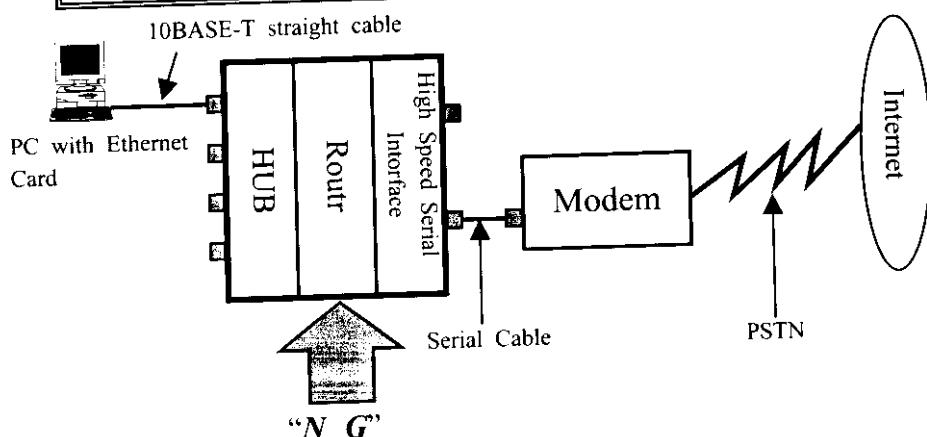
### 2) Connecting five PCs or more

Except the accessories on 1) above, one Ethernet HUB is required for more than five-computer connection. If there is the HUB without cascade switch, please prepare a 10BASE-T crossover cable.

### ● ISP (Internet Service Provider) Contract

Please sign an appropriate Internet connection contract with a reliable ISP and get necessary connection information. (For ISP information, please refer to Internet or PC magazines). When sign up with a certain ISP, it becomes necessary to have a new connection line (PSTN, ISDN or leased line). Please make sure your network type and apply for a new one if necessary.

Ex.: The minimum system requirement when using a MODEM connection





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Connect / Disconnect  
Telephone Network

## Application

This section instructs you how to sets Web browser and E-Mail software.

### IMPORTANT

When using ISP Dial-Up IP Connection function and so on, don't use the automatic message receiver ability of E-Mail software. When using this function, the attention is necessary because it does dial-up regularly and it adds telephone charges every time.

When using analog Modem and try auto Dial-up connect, it takes time to connect ISP. Especially time-out may happen when you start application such as Web browser, E-Mail software and FTP client software. In this case, please restart that application software again.

### Web browser

About web browser, please setup as:

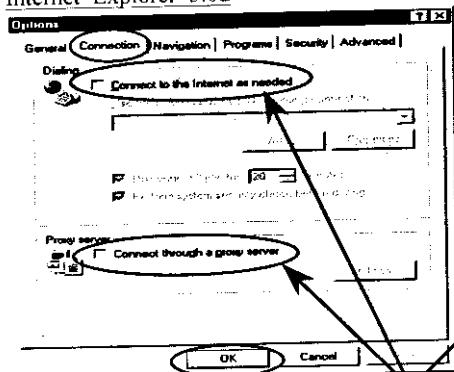
LAN Connection. (Do not setup as dial up connection)

Do not use Proxy Server

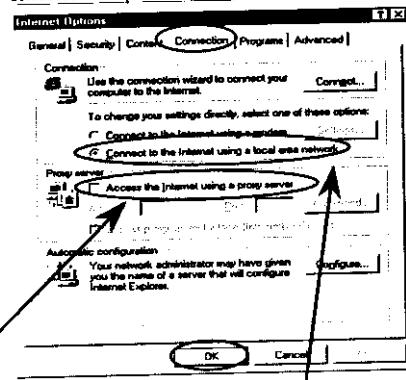
Take **Internet Explorer 3.0** for example.

- 1) Double-click "My Computer" -> "Control Panel" -> "Internet"
- 2) Click "Connection" Tab.

Internet Explorer 3.02



Internet Explorer 4.01



- 3) Click "OK" button.

NWG <123>

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**E-mail program**

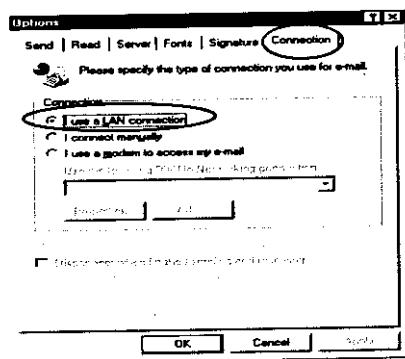
About e-mail application, please setup as:

LAN Connection. (Do not setup as dial up connection)

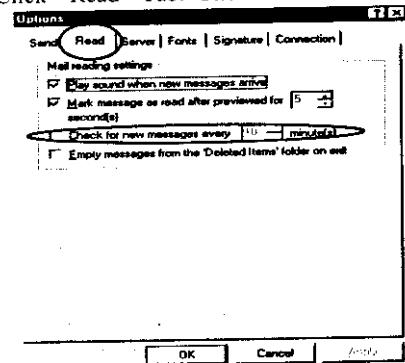
Do not check the mail frequently

Take Internet Mail 3.0 for example.

- 1) Choose "View" from menu, select "option" and click "Connection" Tab to have below window. Choose "I use a LAN connection".



- 2) Click "Read" Tab. Uncheck "Check for new messages every".



**If you want to setup to "Check for new messages every"**

When you choose and set the "Check for new messages every" function of E-mail to 30 minutes, NWG connects with ISP every 30 minutes. After, NWG disconnects by the "Non Activity Timers" function. But, the setting of NWG is "Enable Automatic Connection".

If you need to "Check for new messages every" frequently, please note:

Please setting a long interval to "check for new messages".

(To lower a call fee)

## Connection Types

This section instructs different kinds of public network connection. Please make sure you have complete setting.

### ● Auto connection

When beginning the application (web browser, E-mail) which uses an Internet, NWG connects automatically to ISP.

In this case, it doesn't display on the screen of the Windows 95 and Windows NT4.0 Dial-up network in PC. When the screen of the Dial-up network displays, the setting of application (web browser, E-mail) is different. Please, reconfirm setting.

Please be careful that it is impossible to connect automatically when "Enable Automatic Connection" function is not checked.

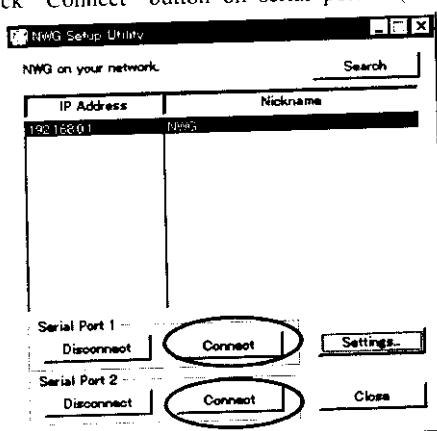
Please refer to **4.4.1 Automatic Connection** (Page 72).

*Remark: PING and NetBIOS cannot initiate connection*

### ● Manual connection

Choose NWG that you want to connect from the list. It will be highlights when chosen.

Click "Connect" button on serial port 1 (or 2).



### ● Leased line connection

Power on TA, and power on NWG.

When power on NWG, it will connect automatically.

Please refer to **PSTN and ISDN for Disconnecting** (Next page).

## Disconnect the network

This section instructs various networks of disconnect way.

### PSTN and ISDN

#### ● Automatic Disconnection

Through the setting contents of **Automatic disconnection**, you can disconnect the line.

There are two kinds of disconnecting.

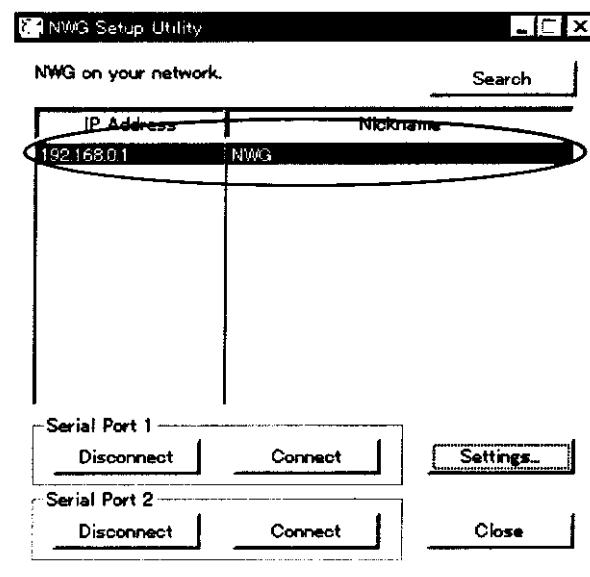
It disconnected by the “Non Activity Timers” function of NWG.

It disconnected by the “Set Non Disconnect Timer Period” function of NWG.

#### ● Manual Disconnection

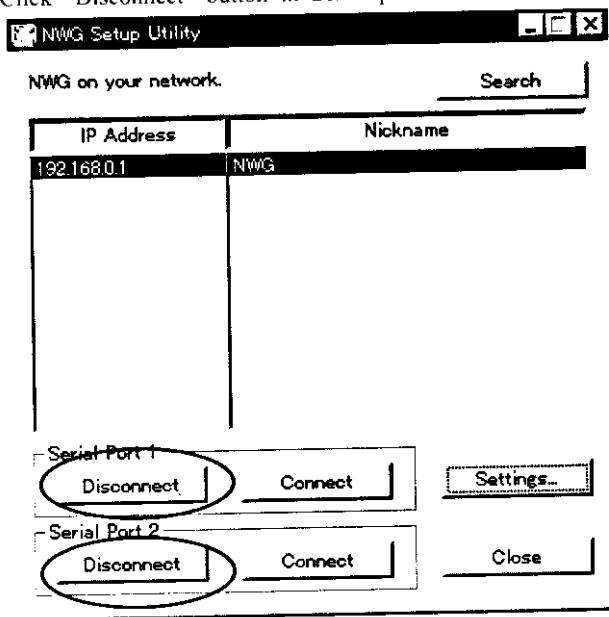
Through the Setup Utility, you can disconnect the line directly.

- 1) Choose NWG that you want to disconnect from the list. It will be highlights when chosen.

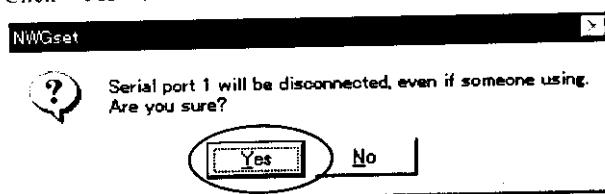


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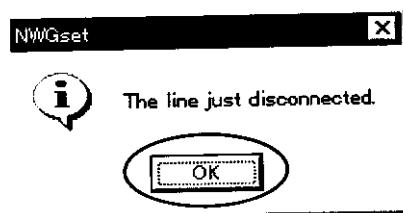
- 2) Click "Disconnect" button in Serial port 1 to disconnect serial port 1.  
Click "Disconnect" button in Serial port 2 to disconnect serial port 2.



- 3) Click "Yes" button to disconnect. Click "No" button to resume.



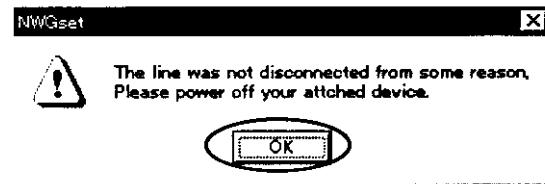
- 4) Click "OK" button to complete the task.



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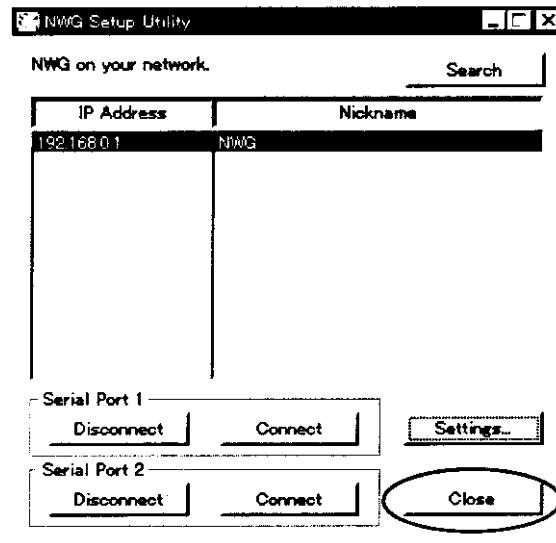
5) When the following screen is displayed, switch off the power supply because the malfunction of the equipment is caused.

Click "OK" button to complete the task.



MODEM/TA's malfunction  
NWG's malfunction  
Abnormal Cable (LAN and Serial) plug or unplug

6) Click "Close" button to end up Setup Utility



*If you want to go on to setup by Setup Utility, do not click "Close".*

Remarks: Depending on connecting ISP, it disconnects line by the Disconnect Timer function of the ISP side.

### Leased Line

Basically, you can not disconnect the leased line. However, please switch off the power supply of TA when you want to disconnect the Leased line for the maintenance of TA.

To connect leased line again, please refer to **Connection Types** to build up connection.

<130> NWG

## Examples

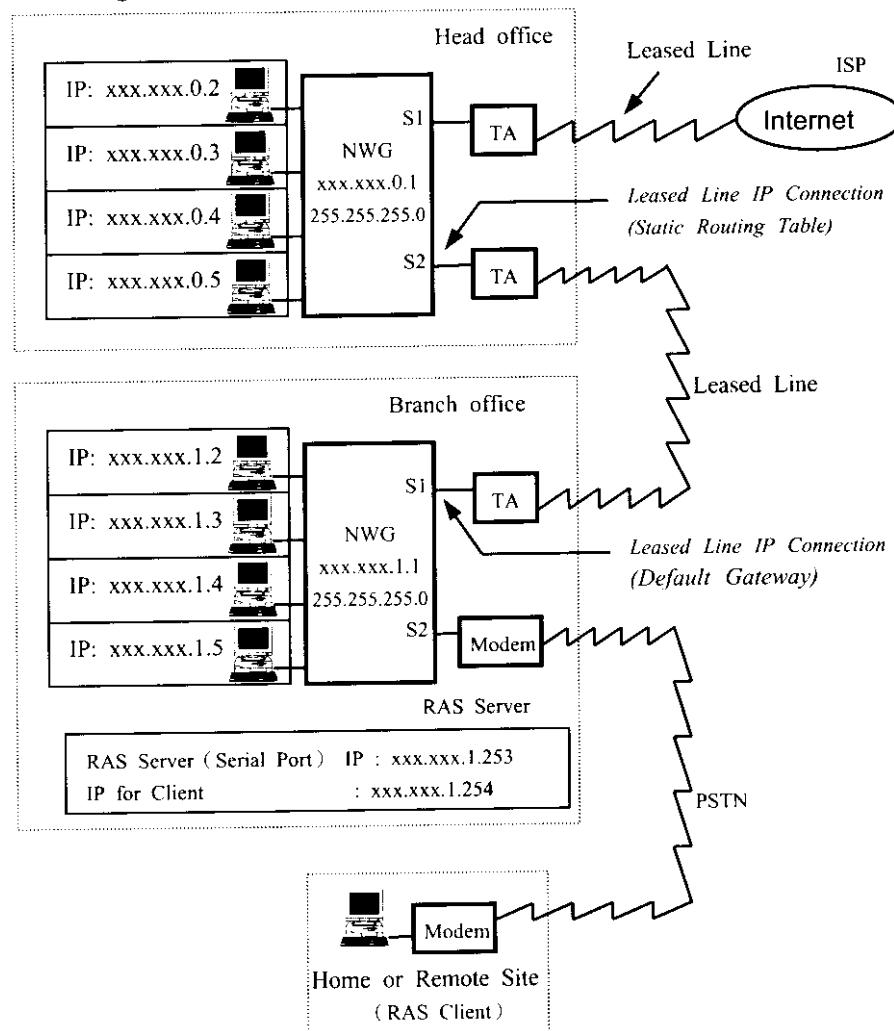
**An example of ISP <-> Head office <-> Branch office leased line connection**

The composition like the following figure can access an Internet via the head office from the branch office and home. Of course, it can access Internet from the head office.

The IP address and static routing instructs as below:

● Figure

IP: IP Address



*Go to next page*

● IP and Router settings in Head office

Setting of IP of NWG itself

IP address: xxx.xxx.0.1

Subnet Mask: 255.255.255.0

S1(Serial port 1)

Connection Type: ISP Leased Line IP Connection

S2(Serial port 2)

Connection Type: Leased Line IP Connection

Static Routing Table:

IP address: xxx.xxx.1.0

Subnet Mask: 255.255.255.0

PCs

IP address: xxx.xxx.0.2 to xxx.xxx.0.254 (avoid duplication)

Subnet Mask: 255.255.255.0

Default gateway:xxx.xxx.0.1

● IP and Router settings in Branch office

NWG

IP address: xxx.xxx.1.1

Subnet Mask: 255.255.255.0

S1(Serial port 1)

Connection Type: Leased Line IP Connection

This serial port is on default gateway setting

S2(Serial port 2)

Connection Type: RAS Server

Serial port IP address: xxx.xxx.1.253

Client IP address: xxx.xxx.1.254

PCs

IP address: xxx.xxx.1.2 to xxx.xxx.1.252 (avoid duplication)

Subnet Masking: 255.255.255.0

Default gateway: xxx.xxx.1.1

● IP address for RAS Client (Windows 95 setting) at home or remote site.

In Dial-up networking -> Property -> Server Type -> TCP/IP, select Server

assign IP address

In Control Panel -> Network -> TCP/IP -> Dial up adapter ->Property,

choose get IP automatically.

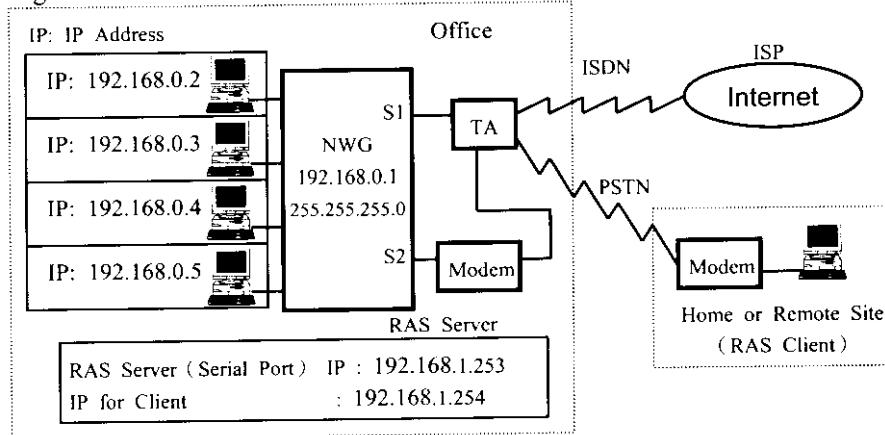
*End An example of ISP <-> Head office <-> Branch office leased line connection*

## An example with ISDN

The composition like the following figure shows RAS Server connection in MODEM via the TA analog port.

The IP address and RAS Server instructs as below:

### ● Figure



### ● IP and Routing settings in Company

Setting of IP of NWG itself

IP address: 192.168.0.1

Subnet Mask: 255.255.255.0

S1(Serial port 1)

Connection Type: ISP Dial-Up IP Connection

S2(Serial port 2)

Connection Type: RAS Server

Serial port IP address: 192.168.0.253

Client IP address: 192.168.0.254

PCs

IP address: 192.168.0.2 to 192.168.0.252 (unique for each user)

Subnet Masking: 255.255.255.0

Default gateway: 192.168.0.1

### ● IP address for RAS Client (Windows 95 setting) at home or remote site.

In Dial-up networking -> Property -> Server Type -> TCP/IP, select Server  
assign IP address

In Control Panel -> Network -> TCP/IP -> Dial up adapter ->Property,  
choose get IP automatically.



USER INFORMATION

INFORMATION TO THE USER

\*\*\*\*\*

This device complies with part 15 of the FCC Rules.

Operation is subject to the following two conditions:

- (1) This device may not cause harmful interference, and
- (2) This device must accept any interference received, including interference that may cause undesired operation.

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device. Pursuant to Part 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 to correct the interference by one or more of 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.

This booklet is available from the US government Printing Office  
\*Washington, DC 20402, Stock NO. 004-000-00345-4.

CAUTION: Any changes or modifications not expressly approved by the grantee of this device could void the user's authority to operate the equipment.

