2. Connect MP3 remote controller to its jack on front of a system.

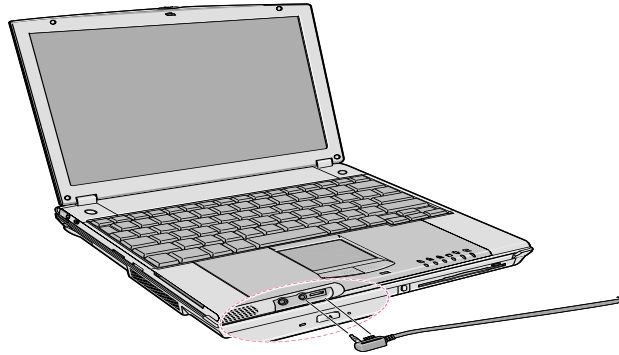

Figure 32. Connecting MP3 Player

3. Connect ear-phone to the MP3 remote controller.
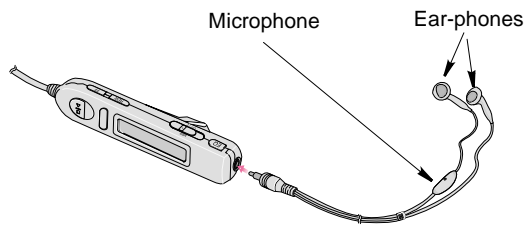

Figure 33. Headphone Hookup

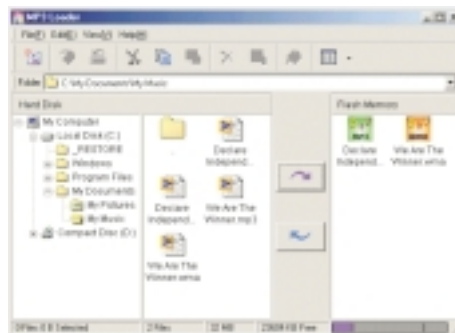**4.** Click Start > MP3 Loader > MP3 Loader.

Figure 34. MP3 Loader

5. Open the folder you saved the MP3 files on the hard disk. The files will be shown in the middle part of the window in a similar manner to Windows Explorer.

6. Select files you want to save to the flash memory of MP3 Player and click on the upload button or you may use the standard windows drag and drop method. Repeat this step until you have uploaded all of your selections or you have run out of memory.

7. Close the MP3 loader.

> **The MP3 player will not operate with the MP3 loader open. "PC" will be displayed in the led window of the player.**

8. Slide the Power Slide bar to Music mode ①. A musical note icon (♪) will appear on the LCD of MP3 remote controller.

9. Press the Play/Stop button to play MP3 files. The MP3 file number and the playing time will be displayed on the LCD of the remote controller.

10. Adjust volume with the volume bar(+ VOL -).

> **Refer to the on-line help of the program.**

Voice Recorder

You can use the microphone attached to the ear-phone to record your voice or other sounds into the MP3 Player.

Recording

1. Slide the Power Slide bar to Voice mode ②. A microphone icon (♪) will appear on the LCD of MP3 remote controller.

2. Press the REC/Erase button to record your voice. The track number and recording time will be shown on the LCD of the MP3 remote controller.

3. Press the REC/Erase button again to finish recording.

4. To listen to what you recorded, press the Play/Stop button.

Delete Recording

1. Select a file (recorded file) from your MP3 remote controller that you wish to delete.

2. Press the REC/Erase button for greater than 1 second. Next 'ERASE' message is displayed and blinks on the LCD, it means that the MP3 Player is ready to erase what you have chosen.

3. When 'ERASE' message is blinking, press REC/Erase button for greater than 1 second to erase the file.

If you are using MP3 Leader program, it is easier to erase the file by deleting a file from flash memory.

Using the Battery

Your computer uses a smart rechargeable Lithium-ion (Li-ion) battery pack for power when the AC adapter is not attached to an electrical outlet. The smart battery gives a accurate measurement of the current battery capacity which helps extend operating time by enabling effective power management in operating systems that take advantage of the accurate information supplied by the battery.

Charging the Battery

Your computer's battery starts charging automatically when you connect the power to the computer and to an electrical outlet. If the computer is off, the battery charges faster than if the computer's power is on.

Approximate charging times for the Li-Ion battery are:

- 2-3 hours with the computer off (Small battery) and 4-5 hours (Large battery).
- 5-6 hours with the computer on (Small battery) and 10-11 hours (Large battery).

While the battery is charging normally, the battery charge light on the computer is amber (See "System Status Lights" on page 25 for the location of the battery charge light). When the battery is fully charged, the light changes to green.

When you use a new battery pack for the first time or use a battery after a long period of storage, the initial battery life is shorter than normal. Normal battery life resumes after a few discharge-recharge cycles.

Follow these rules for charging your battery:

- A battery normally discharges power when not used for long periods of time. Be sure to recharge the battery every two months when it is not in use.
- Make it a practice to discharge your battery fully before recharging the battery. This can help extend the life of the battery.
- Do not attempt to charge the battery in temperatures of under 50° F (10° C) or over 90° F (32° C.)

All batteries eventually wear out and lose the ability to hold a charge. You may need to replace your battery pack after a year of average usage.

Safely Using the Battery

Follow these guidelines to safely use the battery:

- Turn off your computer and unplug it if you accidentally:

  – Expose the equipment to liquid.

  – Drop, jar, or damage the computer.

- Use only approved battery chargers.

- Do not disassemble the battery, heat it above 212° F (100° C), or burn it. The battery used in this computer may cause a fire or chemical burn if mistreated.

- Your computer's rechargeable battery may be considered hazardous waste. If you replace your battery with a new one:

  – Keep the old battery out of the reach of children.

  – Dispose of the old battery promptly.

  – Make sure that you follow all local requirements when you dispose of the old battery.

Removing the Battery

Your computer comes with the battery pack inserted in the computer. To remove the battery from the computer:

1. Turn the computer's power off and close the LCD panel.

2. Undock the computer if docked. See "Undocking your Computer" on page 7.

3. Turn the computer over so that the bottom of the unit faces up.

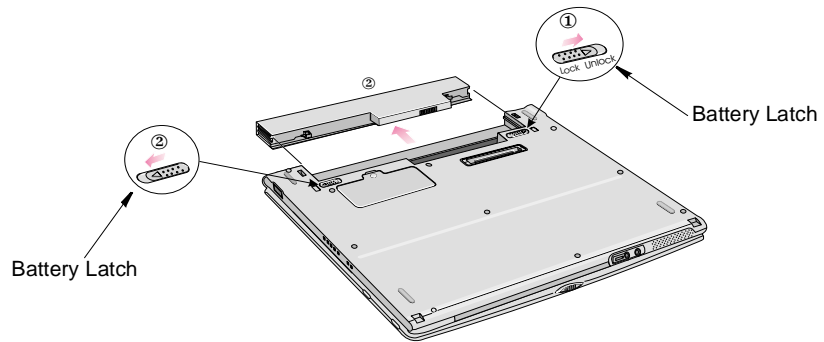4. Slide the battery locking taps outward ①.

.

Figure 35. Removing the Battery Pack

5. Slide the battery out of the compartment ②.

Installing the Battery

To install the battery pack:

1. With the computer's power off, close the LCD panel and turn the computer over so the bottom of the unit faces up.

2. Slide the battery into the battery pack into the compartment (Figure 37). Make sure the battery is fully inserted into the compartment.

Insure you have chosen the correct battery for your intended use of the computer.

Insert the battery into the battery compartment, ensuring the correct orientation so that the battery fits in its slot properly.

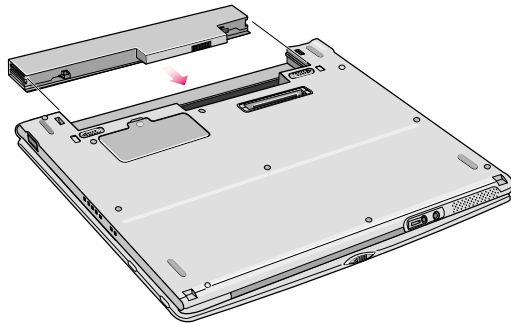**3.** Slide the battery pack latches toward the center of the computer.

Figure 36. Installing the Battery

Monitoring the Battery Charge

Battery life is affected by factors such as the power-management settings in System Setup, the applications you use, and the brightness settings of the LCD. Under normal usage, the battery charge lasts approximately 3 hours for small battery (undocked), 1 1/2 on small battery (docked) and approximately 5 hours for the large battery (undocked).

> **Battery life estimates are subject to variation. The actual life of your battery may be less than the estimates given in the manual.**

Power Meter

The Power Meter displays the charge of the batteries and the current source of computer power, AC or batteries. You may monitor the battery charge or usage by using the "Power Meter". To access the power meter click on the power meter icon on the task bar or click Start > Control Panel > Power Options > Power Meter tab.

Figure 37. Power Meter

You may also check battery charge by moving the mouse cursor to the power meter icon, a small dialog box will display the % of charge.

Battery Warnings

Your computer gives you the following low-battery warnings (Table 3).

Table 3. Battery Warnings

Warnings	Condition	Action to Take
The power LED blinks.	Battery low: The battery charge is about 10 percent. Approximately 5–10 minutes of battery charge is left.	Save your work. Use the power cord to power the computer or turn off the computer and install a fully charged battery.
The computer automatically goes into rest mode.	Battery very low: The battery charge is about 3 percent.	Use the power cord to power the computer and charge the battery.

The above features are valid with Windows 95 or any other APM compliant operating systems. In the case of a Windows 98/ Me or any other ACPI compliant operating system which is running on APM interface, you should adjust the battery alarm features by using the operating systems power management program (Control Panel > Power management in Windows 98/ Me).

In the ACPI mode you should select the Suspend mode of the low battery situations (Save to RAM/Save-to-File) in BIOS setup, See "Power Menu" on page 81. Also see "Using Power Management Options @" on page 89

If you cannot run your computer from the battery and the battery will not charge when you attach the power cord, the problem may be that:

● The battery temperature is below 50° F (10° C) or over 90° F (32° C). If you think the battery temperature is too hot or too cold, turn off the computer, remove the battery, and let the battery reach room temperature. Then try charging the battery again.

● The battery is defective. Replace the battery with a new battery.

Using the Modem

Your Notebook computer will have a Modem/LAN installed in your computer.

Precautions Before Use

> ✋ **If you connect the modem to the digital key-phone line, the modem will be damaged.**

DOS support

Windows 98: The 3Com Modem with a PCI/Mini PCI interface or AMR/MDC interface does not support DOS mode. You can use DOS box in Windows 98 instead of pure DOS mode.

Windows Me: Windows Me does not support pure DOS mode and the modem does not support a DOS box in Windows. So you can not use a communication application using in DOS.

If you use the modem on a PBX system (Key-phone system)

If you use a simple terminal program

you should type "ATX3&W" or "ATX3" command as an initialization command.

If you use a Windows Communication Program

Follow the instructions below.

1. Click the *Start* button and then point to *Settings*.

2. Click *Control Panel.*

3. Double-click *Modems* icon and the click *Properties* button at the *General* tab.

4. Check off "Wait for dial tone before dialing" check box at the *Connection* tab.

5. Click *OK* button to close the dialog box.

6. Click *OK* button to close "Modem Properties" dialog box.

Description of 56K

There are different standards regarding 56K technology.

- K56Flex.
  Technology developed by Rockwell Semiconductor Systems and Lucent Technologies

- X2.
  Technology developed by USR (US Robotics, now 3Com)

> **K56Flex and X2 are not interoperable.**

- V.90 Standard.
  In February 1998, The ITU-T (ITU Telecommunication Standardization Sector) agreed on the technical specifications for 56K modems (V.90) and has approved in mid-September, 1998.

  But, the modem driver can be updated to resolve fine points of operation between different vendor's modems and unusual telephone line conditions.

> **MODEM Notes:**
> 1. Due to FCC limitations, speeds of 53kbps are the maximum permissible transmit power levels during download transmissions. Actual data speeds will vary depending on line conditions.
> 2. In order to use the 56K feature, be sure to check if the standards supported by the on-line service provider and the modem are identical.
> 3. If you use a PBX phone system, you can not connect using the 56K mode due to line loss.

Specifications

- Data communications.
  V.90, K56Flex, V.34+, V.34, V.32bis, V.32, V22bis, V.22, V.23, V.21 BELL212A

- Data throughput speed
  56,000 bps ~ 28,000 bps (V.90, downstream only, step: about 1333 bps)

  56,000 bps ~ 32,000 bps (K56Flex, downstream only, step: 2000 bps)

  33,600 bps ~ 2,400 bps (step: 2400 bps)

1,200 bps

300 bps

- Fax mode support.
  V.17, V.29, V.27ter, V.21ch2
- Fax throughput speed.
  14400, 12000, 9600, 7200, 4800, 2400, 300
- Data compression feature.
  V.42bis, MNP CLASS 5
- Data correction feature.
  V.42 LAPM, MNP CLASS 2~4
- Fax capacity.
  CLASS 1
- PCI 2.1, PPMI 1.0 support

Windows Me Modem Driver Installation

Install the Modem Driver

Before you install the modem drivers, check if the PCI Card under Other devices of Device Manager tab of Control Panel on Windows exists. If it exists, remove it first.

After that, install the modem driver according to the instruction below.

1. When the Windows ME automatically detects PCI Card, Choose "Specify the location of the driver (Advanced)" and then click Next button.

2. Insert the CD or floppy diskette that has a modem driver in it.

3. Check "Specify a location" of Search for the best driver for your device.(Recommended)." and enter the directory location, then click Next button.

4. Click Next button when a dialog appears saying that windows is now ready to install the best driver for 3Com 56K V.90 Mini PCI Modem WDM Driver.

5. Click Finish button when a dialog appears saying that windows has finished installing 3Com 56K V.90 Mini PCI Modem WDM Driver.

6. Choose "Specify the location of the driver (Advanced) when the Windows ME automatically detects Modem Device and then click Next button.

7. Check "Specify a location" of Search for the best driver for your device (Recommended)." and enter the directory location, then click Next button.

8. Click Next button when a dialog appears saying that windows is now ready to install the best driver for 3Com 56K V.90 Mini PCI Modem.

9. Click Finish button when a dialog appears saying that windows has finished installing 3Com 56K V.90 Mini PCI Modem.

10. Restart the system.

Selecting a Country

You have to check if the country is selected correctly before you use the modem.

If the country is not selected correctly, the modem may not work properly. So, you must check if the country you're calling from is selected appropriately and then use the modem. If your modem only supports "Domestic", you must select the country where you bought your notebook computer. And, if you use the modem in other countries, your modem may not work properly. If your modem supports "Worldwide", please check with your local distributor which countries can be supported by the 3Com modem.

1. Click the Start button, point to Settings and click control panel.

2. Double-click "3Com 56K V.90 Mini PCI Modem WDM Driver" icon.

3. Select the country at the Country list box.

4. Click OK button.

Confirming Installation of the Modem Driver

After the modem driver is installed, check if the modem driver is installed properly.

1. Click the Start button, point to Settings and then click Control Panel.

2. Double-Click Modems icon.

3. Select 3Com 56K V.90 Mini PCI Modem in the Diagnostics tab and then click the More Info... button.

4. The modem is properly installed if the contents of Command and Response appear in the More Info... window.

Deleting the Modem Driver

1. Click the Start button, point to Settings and then click Control Panel.

2. Double-Click Add/Remove Programs icon.

3. Choose 3Com 56K V.90 Mini PCI Modem in the Install/Uninstall tab and then click Add/Remove... button.

4. Click Yes button in the Confirming File Deletion dialog.

Modem Driver Installation in Windows 98 (Modem Module Driver)

You can install the modem driver as shown in the following.

Install the Modem Driver

Before you install the modem drivers, check if the *PCI Card* under *Other devices* of *Device Manager* tab of Control Panel on Windows exists. If it exists, remove it first.

After that, install the modem driver according to the instructions below.

1. If the Windows 98 automatically detects the modem and shows the dialog saying *This wizard searches for new drivers for PCI Card*, click *Next* button.

2. Choose *Search for the best driver for your device (Recommended)* and then click *Next* button.

3. Check *Specify a location* check box in the dialog for specifying the search location. Insert the CD or floppy diskette that has the modem driver on it. Locate the directory that contains the modem driver, then click *Next* button. ('D' refers to the CD-ROM driver.)
"D:\Win98\Driver\Modemonly\Setup.exe"

> **In this manual, "D" refers to the CD-ROM drive. The directory path is subject to change depending on models.**

4. If Windows 98 found *3Com 56K V.90 Mini PCI Modem* driver, click *Next* button.

5. Click *Finish* button when a dialog appears saying that installation is completed.

6. In order to complete the driver installation, you must restart the system.

Selecting a Country

You have to check if the country is selected correctly before you use the modem.

MODEM Notes:

If the country is not selected correctly, the modem may not work properly. So, you must check if the country you're calling from is selected appropriately and then use the modem. If your modem only supports "Domestic", you must select the country where you bought your notebook computer. And, if you use the modem in other countries, your modem may not work properly. If your modem supports "Worldwide", please check with your local distributor which countries can be supported by the 3Com modem.

1. Click the *Start* button, point to *Settings*, and the click *Control Panel*.

2. Double-click the *3Com 56K V.90 Mini PCI Modem* icon.

3. Select the country at the *Country* list box.

Check if My location is set properly at telephony of Control panel before using modem.

Confirming Modem Driver Installation

After the modem driver is installed, you can check if the modem driver is installed properly.

1. Click the *Start* button, point to *Settings*, and then click *Control Panel*.

2. Double-click *Modem* icon.

3. Go to *Diagnostics* tab when the *Modem Properties* dialog appears.

4. Select the port that the modem is installed in and then click the *More Info* button.

5. The modem is properly installed if you can see the following dialog.
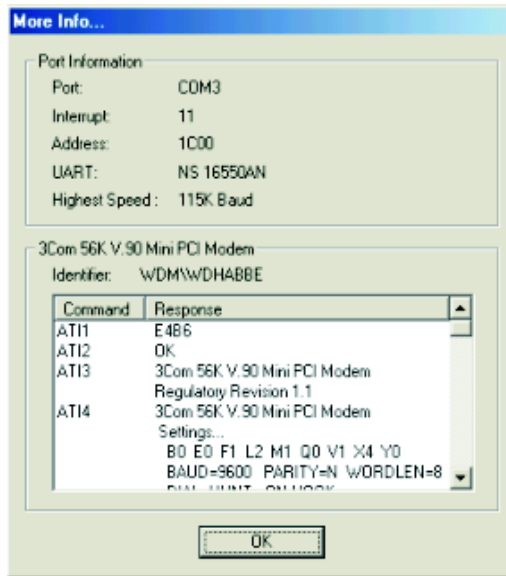
Figure 38. More Info Dialog Box

> **If the modem driver is not properly installed, install the driver again.**

Installing the Modem Driver in Windows Millennium (Modem/LAN Module Driver)

Install the Modem Driver

You don't need to install the modem driver because WinME already has this Modem driver. But, this driver shows the modem name as Lucent Win Modem at the device manager. You can see 3Com 56K V.90 Mini PCI Modem at the device manager if you wish to install the driver from System Recovery CD.

Install the modem driver according to the instruction below.

1. Insert the CD or floppy diskette that has a modem driver in it.

2. Click the Start button, and then click Run. Locate the directory that contains modem driver and run setup.exe.
(ex, D:\WinME\Drivers\Modem\Setup.exe)

3. Click OK button in the confirming dialog.

4. Setup copies the driver files onto the system.

5. Restart the system by clicking OK button.

Selecting a Country

You have to check if the country is selected correctly before you use the modem.

> **If the country is not selected correctly at the *I am in this country/region* of the *Dialing Properties* dialog, the modem may not work properly. So, you must check if the country you're calling from is selected appropriately and then use the modem. If your modem only supports "Domestic", you must select the country where you bought your notebook computer. And, if you use the modem in other countries, your modem may not work properly. If your modem supports "Worldwide", please check with your local distributor which countries can be supported by the 3Com modem.**

1. Click the *Start* button, point to *Settings*, and then click *Control Panel*.

2. Double-click the *Telephony* icon.

3. Go to the *My Locations* tab of *Dialing Properties* dialog. Select the country at the *I am in this country/region* list box.

Confirming Installation of the Modem Driver

After the modem driver is installed, check if the modem driver is installed properly.

1. Click the Start button, point to Settings and then click Control Panel.

2. Double-Click Modems icon.

3. Select 3Com 56K V.90 Mini PCI Modem in the Diagnostics tab and then click the More Info... button.

4. The modem is properly installed if the contents of Command and Response appear in the More Info... window.

Windows 98 Modem Driver Installation (Modem/LAN Module Driver)

You can install the modem driver as shown in the following.

> **The figures illustrated in this manual may not be identical to those on your system. The figures in this manual were developed using the** 3Com **56K V.90 Mini PCI Modem Installation as a reference.**

Install the Modem Driver

Before you install the modem drivers, check if the *Serial Controller* under *Other devices* of *Device Manager* tab of Control Panel on Windows exists. If it exists, remove it first.

After that, install the modem driver according to the instructions below.

> **You can also install the modem driver by specifying the location of the directory that the modem driver is in when Windows 98 automatically detects the modem and shows the *Add New Hardware Wizard dialog*. But, it is easier to press the *Cancel* button at this time and follow the instructions below.**

1. Insert the CD or floppy diskette that has the modem driver on it.

2. Click the *Start* button, and then click *Run*. Locate the directory that contains modem driver and run setup.exe. (In this manual, "D" refers to the CD-ROM drive.) "D:\Win98\Drivers\Modem\Setup.exe"

3. Click *Next* button when the *Welcome* dialog appears.

4. Setup copies the driver files onto the system.

5. The *Setup Complete* dialog appears when the file copying process is finished. In order to complete the driver installation, you must restart the system. Check *Yes, I want to restart my computer now* and click *Finish* button.

Selecting a Country

You have to check if the country is selected correctly before you use the modem.

> **Selecting a Country Note:**
> If the country is not selected correctly at the *I am in this country/region* of the *Dialing Properties* dialog, the modem may not work properly. Therefore, you must check if the country you're calling from is selected appropriately and then

use the modem. If your modem only supports "Domestic", you must select the country where you bought your notebook computer. And, if you use the modem in other countries, your modem may not work properly. If your modem supports "Worldwide", please check with your local distributor which countries can be supported by the 3Com modem.

1. Click the *Start* button, point to *Settings*, and the click *Control Panel*.

2. Double-click the *Telephony* icon.

3. Go to the *My Locations* tab of *Dialing Properties* dialog. Select the country at the *I am in this country/region* list box.

Confirming Installation of the Modem Driver

After the modem driver is installed, you can check if the modem driver is installed properly.

1. Click the *Start* button, point to *Settings*, and then click *Control Panel*.

2. Double-click *Modem* icon.

3. Go to D*iagnostics* tab when the *Modem Properties* dialog appears.

4. Select the port that the modem is installed in and then click the *More Info* button.

The port where your modem is installed may be different from that of the above picture.

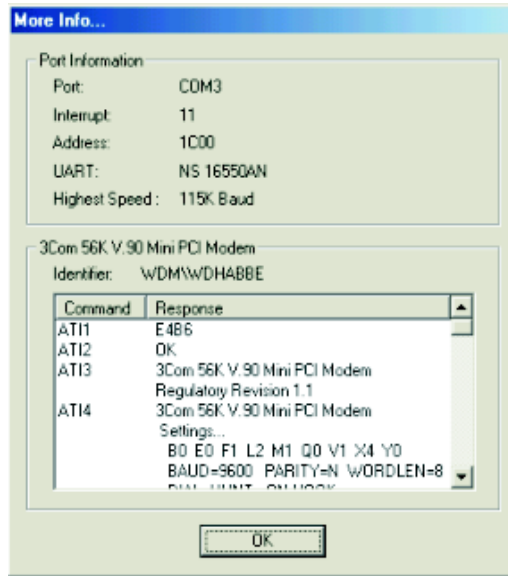5. The modem is properly installed if you can see the following dialog.

Figure 39. More Info Dialog Box

If the modem is not properly installed, install the driver again.

Modem Commands

The 3Com Modem includes the basic commands used by the Smart Modem of the Hayes Corporation. Some additional commands have been added to it to improve its capacity.

What are AT commands?

AT commands are the control commands of Fax modems developed by the Hayes Corporation. AT commands are the industry standard and necessary for any fax modem. It is used with the S-register to set the modem status.

Generally, AT commands are used by directly entering the command into any communications program, like Hyper terminal.

You can do the jobs below more easily by using AT commands.

● Calling up or hanging up the phone in order to communicate by Computer modem

● Choosing a modem in order to make the most efficient communication status.

But, as the communication programs are becoming more efficient and more intelligent nowadays, users do not have to know all the AT commands. Only a few basic commands are enough for computer communications.

Before Using AT Commands

AT commands can be used by entering them into terminal-based communication programs directly. (Hyper terminal, CrossTalk, Procomm, etc.)

CompuServe, America On-line applications are not terminal-based communication programs, but they are the communication programs based on a Graphic environment. This kind of program can initiate the modem setting by entering AT commands in a menu having a modem initialization command.

What you have to know before using AT commands is that there are two kinds of modes when you use it.

Command mode:

If you turn on your computer and start communication by a communication program, you can see a prompt on the terminal screen. Under such conditions, you can use AT commands like calling, etc.

DATA Mode

In command mode, you can call by using AT commands and communicate with others by connecting to other modems. You can call this status Data mode or On-line mode. In data mode, You can't use any AT commands except the +++ command, which has +++ at the head.

If you stop communication and disconnect the phone, the Fax modem will run in command mode again.

Using Command Mode during Communications

Sometimes, you have to use AT command while you're communicating with others via modem. In this case, you can use +++ command for AT command without hanging up your telephone. Pressing '+' three times makes fax modem change to command mode. Of course, the telephone is not disconnected. (Don't enter *Enter* key after input +++)

Connection may be lost depending on the server.

If you want return to Data mode from command mode, you only have to input ATO and press the *Enter* key to start the communications again.

The mode can not be transferred from the command mode to data mode depending on the server.

Using AT commands

AT commands can be used in the following way. There's no difference between capital letters and small letters, and all commands should include 'AT' as a prefix except ones, which include 'A/' instead.

Also, Carriage Return saved in the S3 register should be entered in order to sign the end of the command.

> AT commandPress *Enter* key

Example: ATDT 123-4567Press *Enter* and the modem dials to 123-4567

Display the result value

After entering AT commands, the result value is displayed on the screen.

The result value can be displayed during communication. Generally, the result will be *OK*. According to the ATV command, the result can be displayed as Words or numeral letters. (ATV0: Display as numeral letters, ATV1: Display as English words)

Basic AT Commands

A/	Repeats the previous command in the buffer
ATA	Responds manually to incoming RING signals
+++	Switches from on-line mode to command mode
ATO	Switches from command mode to on-line mode
ATEn	Echo control
E0	Disables echoing of the commands to the screen
E1	Enables echoing of the commands to the screen

ATDT phone numberTouch tone dial

ATDP phone numberPulse dial

ATHn	Hook control
H0	On-Hook (same as hang-up)
H1	Off-Hook (same as hold-on)
ATLn	Modem speaker loudness control
L0~1	Low volume
L2	Medium volume
L3	High volume
ATMn	Modem speaker control
M0	Disables modem speaker
M1	Enables only when in connection procedure
M2	Enables always
M3	Enables until carrier has been detected after connection
ATS0=n	Sets S0 register value (n range: 0~255). Sets the number of incoming ring signals before answering. Modem responds after ringing as many times as specified in n value. If the value of n is '0', ATA command should be entered for auto answer
ATS0?	Displays S0 register value on the terminal
ATX3	Dials after waiting for specified time
ATX4	Dials after dial tone is detected
ATZ	Initializes modem
AT&F	Loads the factory default configuration (profile)
AT&V	Shows current configuration
AT&W	Saves user profile
AT&Zn=x	Stores the dial string in modem memory (n=0~3, x=phone number) e.g.) AT&Z0=1235678
	Automatically calls the stored phone number by using the following command.