

FaxMail Network for Windows n1.05 is shareware.
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FaxMail Network for Windows and FaxMail for Windows are very similar with the same look and feel. FaxMail Network for Windows is 32 bit and will run on a single computer or network system. If you need a 16 bit single computer version, try FaxMail for Windows.

If you are going to be using this 32bit product on a 16bit version of Windows such as Windows 3.1x or Windows for Workgroups, you will need to install Win32s, if you have not already done so. You can get Win32s.zip, FREE, from Microsoft or search the web, aol, or CompuServe. Win32s allows 16bit Windows to run 32bit programs.

Adds a <FaxBar> to all your Windows Programs

If you can print, you can fax

All the Fax Machines in the world are your printers with
FaxMail Network for Windows

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DESCRIPTION:

FaxMail includes a choice of four different installations which support Microsoft Windows 95, Windows 3.1 with Win32, Windows for Workgroups 3.11 and Windows NT. Supports most FaxModems, Group 3 CLASS 1, CLASS 2 and CLASS 2.0. FaxMail Network for Windows will add a <FaxBar> to your Windows Programs, giving you access to all the Fax /Modems and Fax/Machines in the world, making them become your printers. FaxMail attaching itself to and becomes a part of the actual Microsoft Windows environment, thereby adding its features to all Windows Applications. FaxMail has hundreds of useful features such as Dynamic View/Edit Cover Page, FaxBook Import/Export, Windows Dynamic All Class FaxModem Driver, and Technical Support. You can import up to 1000 name and phone numbers into each FaxBook (Phone Book) at a time from any xBase data base program, and you can have as many FaxBooks as you want. FaxMail gives you laser quality fax output, making it a great tool to send an occasional fax or large numbers of high quality faxes from the background while you work on other tasks. FaxMail bundles the most useful fax features, and it is fast! The simplicity of information transfer

via FaxMail Network for Windows is unequalled. It is a faxmail management system, integrating FaxModem technologies into computer document generation. You can create very short and/or long fax.

FEATURES:

- *select number rings until the FaxModem answers
- *number of re-dials
- *length of time between re-dials
- *set modem volume
- *"Scale to printer" or "Print actual FAX size"
- *view and move fax from Windows File Manager
- *Immediate or scheduled fax sends
- *broadcast queue holds 32,000 fax
- *option to auto-print incoming faxes in the background
- *send/receive fax in the background while you work in the foreground
- *easy fax management
- *GOOD help system
- *very fast fax viewer
- *log all sent and future fax events
- *quick notes with variable merge from FaxBook fields
- *fax any document you can print (send amazingly clean resumes)
- *event monitor
- *received fax notification
- *fax rescheduling
- *up to 1000 entries per FaxBook
- *easily create custom cover pages
- *background printing
- *supports "Silent-Answer"
- *FaxMail Convert to Fax driver
- *supports many paper sizes, in PORTRAIT and LANDSCAPE, including Letter 8.5x11, Legal 8.5x14, A4 210x297mm, A5 182x257mm, and is user definable down to a fraction of an inch
- *Enhanced Windows Dynamic All Class FaxModem Driver
- *FaxBook merge into Cover Page
- *Automatically switches from Fax to Printer Mode
- *Supports Microsoft Word for Windows, Windows Write, and all other programs with the abilities to print
- *Full-support for COM1-COM4.

EXTRAS WHEN YOU REGISTER:

- *OCR (Optical Character Recognition), *Fax to PCX BreakUp and
- *Zoom/Edit Fax. The OCR will convert fax into text that can be read by all editors and Word Processors, yet retains the original fax, unchanged. BreakUp will break a multiple page DCX fax file into individual one page PCX files that can be easily imported into most Windows programs. Edit Outgoing and Incoming Fax. Before printing to a fax machine or upon receiving a fax, you may want to use Zoom/Edit to add graphics, text (any font, any size), or use your mouse to sign the fax. *FaxBook Import/Export. *Build Fax form other faxes.

INCLUDES:

FaxModem Wizard COM-Port/FaxModem Tester. FaxModem Wizard not only tell you what kind of UART is present on each of your four COM-Ports but what IRQ it is using. Great tool for finding COM-IRQ conflicts.

REQUIREMENTS:

Microsoft Windows v3.1 with Win32, Windows for Workgroups v3.11, Windows NT, Windows 95, and a Modem. Almost all modems are CLASS 1, CLASS 2 or CLASS 2.0. FaxMail supports all three CLASSES.

UPGRADE HISTORY:

Improved Flow Control. Improved the page changing while sending / receiving faxes. Upgraded Fax Viewer for improved viewing with high resolution monitors. Set date format to MM/DD/YY - USA, DD.MM.YY - UK or YY-MM-DD - WORLD. Take selected page(s) form Faxes and build another Fax. Supports Microsoft Windows 95, Windows 3.1 with Win32, Windows for Workgroups 3.11, Windows NT. Windows Dynamic FaxModem Driver now supports almost all FaxModems including USRobotics. Convert to Fax now converts colored images to varying shads of gray patterns. Upgraded Events Log, Future Send Queue. Fax Viewer now supports SVGA. New updated help system. The Manual.txt is included. Convert to Fax driver, now, supports black, white, and all shades of gray. It supports many paper sizes, PORTRAIT and LANDSCAPE. You can create very short and/or long fax including Letter 8.5x11, Legal 8.5x14mm, A4 210x297mm, A5 182x257mm, and is user definable down to a fraction of an inch. View and move fax from Windows

File Manager. Enhanced Windows Dynamic All Class FaxModem Driver. View Cover Page. Edit Cover Page. Edit Cover Page Logo. Cover Page Help. Includes the "FaxModem Wizard" tools that not only tell you what kind of UART is present on each of your four COM-Ports but what IRQ it is using. Addition of the FaxMail Network for Windows Dynamic All Class FaxModem Driver. No TSR, DOS, or real-time Drivers required. Major upgrade of the FaxModem Drivers. Many improvements to the FaxBook (Phone-Books) program including Import/Export. Improved operation with Microsoft Word for Windows and Windows Write.

NOTE:

If you choose to use the "FaxMail Network for Windows Dynamic All Class FaxModem Driver", a lot of this README will not pertain to you, and nothing will be put in your AUTOEXEC.BAT.

BEFORE ALL ELSE:

Because of size constraints we are forced to leave some of the glitter out of this shareware versions, but it is still VERY MUCH a FULL working fax program with feature not seen anywhere else. We left off things like decorative bitmaps, several of the sample cover page logo files, FaxBook imports and a few other things that will not impede your use of FaxMail. All of the above mentioned and more will be in your registered version.

We are working full time on improving and upgrading FaxMail Network for Windows based upon the feedback from you and other users. So...before you install, look at the date on this file. If the date is more than a week old, you may want to get the latest version.

You can get FaxMail Network for Windows from many BBSs and FTP Internet Sites around the world. fax_n105.zip, where fax_n105 means version n1.05.

WWW: <http://www.blkbox.com/~jonk/>
Computer Technical Support BBS, 713-499-5939, home of FaxMail
FREQ from FidoNet:FaxMail 1:106/10000
FTP: <ftp.coast.net/SimTel/win3/fax/>
CompuServe (FAXWIN.ZIP) GO PCFF and search for:FaxMail
America On-line (AOL) Keyword: Software, do library search for: FaxMail

If you have a problem that is not covered here, contact ElectraSoft at 713-261-0307 because most likely there is either a solution to your problem, or a newer version of FaxMail Network for Windows does not have the problem.

LEGAL INFORMATION:

If you have a registered version of FaxMail Network for Windows you may *NOT* share the registered version with others.

FaxMail Network for Windows is shareware. This means you have a chance to test the performance of FaxMail Network for Windows before committing yourself to buying it. FaxMail Network for Windows is a Shareware product and we would like you to REGISTER after testing this "evaluation copy".

Only the unregistered version of FaxMail Network for Windows may be distributed freely, and no fee may be charged for it except a nominal copying fee. All trademarks contained herein are registered to their respective owners.

IMPORTANT INFORMATION:

While converting printer output to a fax, FaxMail will need to create and use a temporary file called "TOFAX" and then delete it when finished.

This file will be in the root of the drive FaxMail is installed on.

So that FaxMail Convert to Fax will be able to convert printable files to faxes, you may want to check the following three things on the drive that you installed FaxMail on:

1. If you have the maximum allowed files in that root directory, remove some.
2. If you have a directory called TOFAX on that drive, remove it.
3. If that drive is full, make some room. The fax converter needs about 200k per page. Keep in mind that Windows itself may need 5meg+- free on the hard drive.

If you are currently using another Modem-Program, remember that they can not run concurrently on the same COM-Port. Disabling a fax program may be as easy as not loading it or you may have to remove one or more lines from your AUTOEXEC.BAT, CONFIG.SYS, WIN.INI or SYSTEM.INI. Typing rem ahead of a line in your AUTOEXEC.BAT or CONFIG.SYS will disable it. Example:

```
change:
C:\OLD_FAX_DIR\OLFAXPRG.EXE
to:
rem C:\OLD_FAX_DIR\OLFAXPRG.EXE
```

To disable a line in an *.INI (WIN.INI and SYSTEM.INI) file, place a ; before the line to be commented-out. Example:

```
change:
C:\OLD_FAX_DIR\OLD_FAX_PRG.EXE
to:
;C:\OLD_FAX_DIR\OLD_FAX_PRG.EXE
```

If your old Fax-Program loads from the Windows-StartUp-Group as you enter Windows, you will have to move it's ICON out of your Windows-StartUp-Group by grabbing it and dropping it in another Group.

JonK@BlkBox.com

or FidoNet to:

Jon Kraemer on 1:106/10000

FAXMAIL INSTALLATION:

Make a directory called FMNW_SHR, like this:

```
C:
CD \
MD FMNW_SHR
CD FMNW_SHR
UnZIP(PKUNZIP.EXE Version 2.04g or higher) * into FMNW_SHR
directory, like this:
Copy FaxMail into FMNW_SHR
PKUNZIP * /O
Use the Windows run command to run the FaxMail Network for Windows
INSTALL.EXE.
```

Installation scenarios:

- Single computer with no network:
 - o You must be Work Station 1.

- o Give <Your Computer Drive> as the drive you want FaxMail to use.
- o Give <Server Drive> as the same.
- o You will need a working fax modem.
- o You can send faxes.
- o You can receive faxes.

Installing on Server as Work Station 1:

- o Give <Your Computer Drive> as the drive you want FaxMail to use.
- o Give <Server Drive> as the same.
- o All other Work Stations will need access to this network drive.
- o Server computer will do all other stations sends a receives in the background.
- o Server will need a working fax modem.
- o Server can send faxes.
- o Server can receive faxes.

Installing on Server as Work Station 2 or above:

- o Give <Your Computer Drive> as the drive you want FaxMail to use.
- o Give <Server Drive> as the same.
- o All other Work Station will need access to this network drive.
- o Work Station 1 will have the modem and do the work.
- o You do not need a modem.
- o You can send faxes.
- o You can not receive faxes.

Installing on a Work Station as Work Station 1:

- o Give <Your Computer Drive> as the drive you want FaxMail to use on your computer.
- o Give <Server Drive> as the drive on the Server for all stations to share.
- o All other Work Station will need access to this network drive.
- o This computer will do all other stations sends a receives in the background.
- o You will need a working fax modem.
- o You can send faxes.
- o You can receive faxes.

Installing on a Work Station as Work Station 2 or above:

- o Give <Your Computer Drive> as the drive you want FaxMail to use on your computer.
- o Give <Server Drive> as the drive on the Server for all stations to share.
- o You do not need a modem.
- o You can send faxes.
- o You can not receive faxes.

Notes:

Work Station 1:

- o Will always be the computer with the one and only fax modem.
- o Will be able to see and intervene in all Work Stations Events Log and Future Send Queue.

Work Station 2 and above:

- o Can only see and control there own business.
- o Does not need a modem.

AFTER FAXMAIL INSTALLATION:

After installation, you will have several icons in the FaxMail for Windows Group. Please note the following icons:

Manual (MANUAL.WRI)
 Read Me (README.WRI)
 Q and A (Q_A.WRI)

FaxMail Tutor (FMNWTUTR.WRI)

FaxMail Help (FMNW.HLP)

These should be read before using FaxMail Network for Windows. There is also "Contact-Sensitive Help" buttons, throughout FaxMail Network for Windows, for your convenience.

Everything is explained thoroughly in the FaxMail Network for Windows help system, which may be called upon from anywhere in FaxMail Network for Windows.

If you want to use FaxMail Network for Windows from within any Windows Application and/or take advantage of *ALL* the power FaxMail for Windows has, load FaxMail from it's Group before loading any other Windows Applications.

After the FaxMail program is loaded, click on the <Configure> button and SetUp and configure things *YOUR WAY*. I suggest that if you are not sure of something, leave the defaults set as it came to you. Make a printout of the defaults in case you change something you do not understand yet.

WINDOWS NT:

Adding "FaxMail NT Convert to Fax" to Windows NT:

- o Install FaxMail Network for Windows.
- o Re-Boot the computer.

WINDOWS NT version 4.XX

1. Locate the NTPRINT.INF file.
2. Open the file and locate the Manufacturer section. If FaxMail has not already done so, do the following: Under the existing heading of [Manufacturer], Copy and Paste these 2 lines: (they should go between "Epson" and "Fujitsu")

```
[Manufacturer]
"FaxMail_95"
"FaxMail_NT"
```

3. Copy and Paste these 4 lines: (Model sections)
- ```
[FaxMail_95]
"FaxMail_95 Convert to Fax" = FM_PN_95.DRV,FaxMail_95_Convert_to_Fax
[FaxMail_NT]
"FaxMail NT Convert to Fax" = FM_PN_NT.DLL,FaxMail_NT_Convert_to_Fax
```

4. Copy and Paste these 6 lines: (Installer Sections)
- ```
[FM_PN_95.DRV]
CopyFiles=@FM_PN_95.DRV,UNI
DataSection=UNI_DATA
[FM_PN_NT.DLL]
CopyFiles=@FM_PN_NT.DLL,RASDD
DataSection=RASDD_DATA
```

5. Use the Add Printer ICON and respond as follows:

Manufacturers:
FaxMail_NT

Printers:
FaxMail NT Convert to Fax

Available Ports:

C:\TOFAX Unknown local port

Replace the C in C:\TOFAX with the drive you installed FaxMail on.

When asked for the FM_PN_NT.DLL, type in the path to the temporary directory where you UnZipped FaxMail, or click on <Skip>.

6. Restart your computer as you would after any installation.

WINDOWS NT version 3.XX

1. After installing FaxMail Network for Windows, re-boot the computer, go to <Main> group and select <Print Manager>.
2. From the "Print Manager" select <Printer>, <Create Printer>.
3. Fill out the information in the dialog box EXACTLY as follows. Where the C: in C:\TOFAX is the drive letter of your HardDrive where you installed FaxMail. If you installed on D: you will select D:\TOFAX from the drop-down list box.

Note:

- o If you can not find "FaxMail NT Convert to Fax" in the Driver drop-down list box it is probably because PRINTER.INF is locked or Read-Only. If this is the case, you will have to unlock it and use the FaxMail Network for Windows [Change FaxModem Driver] ICON to reinstall.

```
+-----+
|                Create Printer                |
+-----+
|                                               |
|                                               |
|                                               |
|               +-----+ |
|               | OK      | |
| Printer Name: | FaxMail NT Convert to Fax | +-----+ |
|               +-----++ |
|               | Cancel  | |
| Driver:       | FaxMail NT Convert to Fax || +-----+ |
|               +-----++ |
|               | Setup   | |
| Description:  | Print to Fax                | +-----+ |
|               +-----++ |
|               | Details  | |
| Print to:     | C:\TOFAX                    || +-----+ |
|               +-----++ |
|               | Settings| |
|               +-----+ |
| +-[ ]Share this printer on the network--+ |
| || +-----+ | +-----+ | |
| || Share Name: | | |
| || +-----+ | |
| || Location:   | | |
| || +-----+ | |
| +-----+ |
+-----+
```

4. Select OK.

5. You will be asked for the Windows NT installation floppies or CD-ROM.

Note:

- o In most cases all the printer files are already in place. If this is the case, give C:\ (or the drive that you installed FaxMail to) as your NT installation disk.

NT expects to find FM_PN_NT.DLL on your floppies or CD-ROM, but it will not be there because this driver only comes with FaxMail for Windows. The FaxMail installation has already put FM_PN_NT.DLL in place, so it is not necessary for NT to do so. For this reason you will get a "non-critical error" when NT can not find FM_PN_NT.DLL on your floppies or CD-ROM. When you are presented with a non-critical error, select <Ignore>. NT will ignore coping FM_PN_NT.DLL, but will copy the printer driver support files that it does have.

During installation, FaxMail creates the following files:

```
\WINNT35\SYSTEM32\SPOOL\DRIVERS\W32X86\FM_PN_NT.DLL
```

```
\WINNT35\SYSTEM32\SPOOL\DRIVERS\W32X86\1\FM_PN_NT.DLL
```

```
\WINNT35\SYSTEM\FM_PN_NT.DLL
```

If for some reason they are not there, copy them there from the unzipped files that came with FaxMail.

Notes:

- o During the "FaxMail NT Convert to Fax" installation, in response to "non-critical errors", select <Ignore>.

- o The reason for this unorthodox installation is that NT expects to find the driver, FM_PN_NT.DLL, on your NT installation floppies or CD-ROM for the purpose of copying it. When NT can not find FM_PN_NT.DLL, it will display a "non-critical error". In response to this non-critical error you will respond <Ignore>. NT will continue and put the following printer driver support files on your HardDrive:

```
\WINNT35\SYSTEM32\SPOOL\DRIVERS\W32X86\RASDD.DLL
```

```
\WINNT35\SYSTEM32\SPOOL\DRIVERS\W32X86\RASDDUI.DLL
```

```
\WINNT35\SYSTEM32\SPOOL\DRIVERS\W32X86\1\RASDD.DLL
```

```
\WINNT35\SYSTEM32\SPOOL\DRIVERS\W32X86\1\RASDDUI.DLL
```

- o When you have successfully installed FaxMail NT Convert to Fax, there will be more than one copy of FM_PN_NT.DLL on your HardDrive. They will be in, at least, the following directories.

```
\WINNT35\SYSTEM32\SPOOL\DRIVERS\W32X86\FM_PN_NT.DLL
```

```
\WINNT35\SYSTEM32\SPOOL\DRIVERS\W32X86\1\FM_PN_NT.DLL
```

Do not delete any of them. NT needs them all. FaxMail will also put the following in your SYSTEM directory:

```
\WINNT35\SYSTEM\FM_PN_NT.DLL
```

- o When installing an upgraded version of FaxMail Network for Windows, check to be sure the following files are updated.

```
\WINNT35\SYSTEM32\SPOOL\DRIVERS\W32X86\FM_PN_NT.DLL
```

```
\WINNT35\SYSTEM32\SPOOL\DRIVERS\W32X86\1\FM_PN_NT.DLL
```

```
\WINNT35\SYSTEM\FM_PN_NT.DLL
```

You can find all instances of FM_PN_NT.DLL and FM_PN_NT.DRV by going to the DOS prompt and typing:

```
C: {Or the drive where NT is.
```

```
CD\ {Move to the root-directory.
```

```
DIR FM_PN_NT.* /S /P {List directories containing FM_PN_NT.DLL, DRV.
```

Converting a document to Fax from Windows NT:

1. Load FaxMail Network for Windows.
2. Load your text editor or word processor.
3. Select <File>, <Printer Setup> or equivalent.
4. Select "FaxMail NT Convert to Fax on C:\TOFAX" as the default

printer.

5. Select <File>, <Print> or equivalent.
6. Do your normal print routine to "FaxMail NT Convert to Fax on C:\TOFAX".
7. After the print job is done, the "Converting Printer output to Fax" dialog box will appear and Convert the printer output to Fax.
8. When the Send Fax dialog box appears, <Fax Viewer> and <Send Fax>.

Note:

- o Some Windows Applications like Word for Windows 6.00 will not recognize "FaxMail NT Convert to Fax" unless you, before loading them, toggle the <PRINTER OR FAX TOGGLE> to "PRINTER IS ACTIVE", load the Print-Manager and from there select "FaxMail NT Convert to Fax" as the default printer.

Adding a modem to Windows NT:

1. See FaxModem INSTALLATION in this README.
2. Open the <Main Group> and select <Control Panel>.
3. Select <Ports>, select <Add> or <Settings> to add your new modem or reconfigure to fit your need.

Note:

The following chart is the normal possibilities, and may help you while in the <Ports> setup procedure:

COM Port Number:	Interrupt ReQuest Line:	Base I/O Port Address:
COM1-IRQ4		03F8
COM2-IRQ3		02F8
COM3-IRQ5, IRQ7 or IRQ2		03E8
COM4-IRQ5, IRQ7 or IRQ2		02E8

If you have a sound card, it may be using IRQ5 or IRQ7. A CD-ROM usually uses one of the IRQs above IRQ7.

HELPFUL HINTS:

"Silent Answer"

Silent Answer requires the support and cooperation of the remote sending FaxModem/Machine with your receiving FaxModem. If the sending FaxModem/Machine does not support "Silent Answer" by sending the "CNG" tone, you will lose that Fax! Please read *all* of this area before using "Silent Answer". If you still want "Silent Answer", here is what it does and how to implement it.

Silent answer let one telephone line be used for two purposes; receiving Faxes with the FaxModem, and receiving voice calls with an answering machine or telephone. When set to this mode, the FaxModem lets your answering machine answer all incoming calls. If it detects Fax "CNG" tones, it routes the call to FaxMail Network for Windows.

Otherwise, it just sits silently on the phone line while you or your answering machine takes the call.

When the phone rings and after the second ring the FaxModem will start monitoring the telephone line. If it detects a Fax tone, it will receive the Fax. If it does not detect a fax tone, it will do nothing.

Silent Answer hardware installation

When installing the FaxModem, DO NOT plug the answering machine into the telephone jack on the back of the FaxModem. Instead, do one of the following:

- a. Plug the answering machine and FaxModem into different wall jack (i.e. jacks in different rooms).
- b. Plug the answering machine into a wall jack and the FaxModem into the answering machine.
- c. If your answering machine has some kind of phone-jack switching; use this method. You must locate the two devices on separate extensions to make silent answer work correctly. This means you can not plug the answering machine into the FaxModem or vice versa. You can split a single extension with a duplex jack adapter. Radio Shack commonly carries these, part number 279-357 for \$4.49.

Also, if you have an older answering machine that does NOT automatically turn itself off when it detects that a person or the FaxModem has answered the call, you need a \$7.95 adapter from Radio Shack, part#43-107. This adapter disconnects the answering machine from the phone line when the call is answered. It goes between the answering machine and the wall jack.

Note:

The device that is picking up the line initially, must answer after, and not before, the second ring. This means you should set it to 3 for best results. If no other device picks up the line by the time the number of rings that FaxMail Network for Windows is set to is reached, FaxMail Network for Windows will answer it and process a Fax.

To activate Silent Answer

Load the FaxMail Network for Windows "FaxMail" program and click on the <Configure> Button and on the Silent Answer <Check> Button. Set the number of rings until we answer to four and set your answering-machine to three rings. If the Silent Answer <Check> Button is inactive and gray, your FaxModem does not support Silent Answer.

KNOWN TO BE COMPATIBLE WITH:

The: "FaxMail Network for Windows Dynamic All Class FaxModem Driver" has been tested with many modems including the following, but should work on almost all Modems.

- GVC; Class 0,1,2; 14400
- IBM; Easy OPTIONS; Class 0,1,2
- ZOOM; Class 0,1,2; 9600, 14400, 28800
- Dallas; Internal and External; Class 0,2 and 0,1,2; 9600, 14400
- Intel; PCFM7600W; Class 0,1,2; 9600, 14400
- ZyXEL; Class 0,1,2,2.0; 9600, 14400
- USRobotics, Class 0,1,2.0

-TurboModem, Class 0,1,2
-Rockwell, Class 0,1,2
-Rockwell, Data 2400, Class 1 Send 9600, Receive 4800
-Dallas, Class 2
-Hayes, Class 1
-Supra FAX Modem/Plus; Class 0,1,2:

USING COMTEST.COM:

Definition:

FaxModem Wizard COM-Port/FaxModem Tester, COMTEST.COM. FaxModem Wizard not only tell you what kind of UART is present on each of your four COM-Ports but what IRQ it is using. It will generate a text file called COMTEST.COM that you can read later. This file can be e-mailed to ElectraSoft for analyses.

Usage:

Find COM-IRQ conflicts.

How to use COMTEST.COM.

Windows 3.1x

Exit (do not use the Windows "MS-DOS Command Prompt") Windows.

```
CD\FAXMAIL
COMTEST.COM
EDIT COMTEST.TXT
```

Windows 95

Windows 95 Method 1

Select <Start>, <Shut Down>, <(*)Restart the computer in MS-DOS mode?>.

```
CD\FAXMAIL
COMTEST.COM
EDIT COMTEST.TXT
```

Windows 95 Method 2

Turn on your computer and select <6. Command prompt only>.

```
CD\FAXMAIL
COMTEST.COM
EDIT COMTEST.TXT
```

Windows 95 Method 3

Put the following four lines in your Windows 95 AUTOEXEC.BAT.

```
CD\FAXMAIL
COMTEST.COM
EDIT COMTEST.TXT
CD\
```

Windows NT

1. Be sure that no software is using any of the four COM-Ports.
2. Select "MS-DOS Command Prompt" and type:

```
CD\FAXMAIL
COMTEST.COM
EDIT COMTEST.TXT
```

Note:

Windows NT will warn you that the COM-IRQs can not be opened, and ask if you want to <Terminate> or <Ignore>. Respond with <Ignore> to all warning message.

See "RESOLVING CONFLICTS" and "FaxModem INSTALLATION" in this file.

FaxModem INSTALLATION:

Notes:

1. To stay safe when removing/replacing hardware, always turn your computer off and unplug it.
2. To reduce the possibility of damaging electronic components in your computer with "static potentials" when removing/replacing hardware, place one hand on the metal chassis before removing/replacing hardware.

Read "USING COMTEST.COM" first...

(IMPORTANT: Read but don't do this unless you are installing or reinstalling a FaxModem)

Definitions:

COM, Communications-Port (1 - 4).

IRQ, Interrupt-ReQuest (0 - 15).

External FaxModem, is placed *ON* a COM-Port (UART).

Internal FaxModem, *REPLACES* a COM-Port (UART).

A majority of the people I give tech-support to have a hardware conflict due to improper Internal FaxModem installation!

Notes:

1. An External Modem is plugged into an existing COM-Port (UART)!
2. An Internal Modem is a UART and REPLACES an existing COM-Port (UART)!

If you are having problems with a Modem, read the above lines until you comprehend and understand them.

Installing an External FaxModem:

Plug one end of the COM cable into your FaxModem and the other end into a vacant COM-Port. You will have to know what COM-Port and what IRQ you plugged into so you can let the software know during software installation.

Installing an Internal FaxModem:

When installing an Internal FaxModem, be sure you disable the COM-Port (located on your IO-Board) you are going to replace. Then; before installing the Internal FaxModem, test, with the opening screen of COMTEST.COM (comes with FaxMail Network for Windows and *MUST* be run from DOS. It will *NOT* work while in Windows.), to be sure the COM-Port really is disabled, and then, AND ONLY THEN, are you ready to install the "Internal FaxModem". Not doing this properly is the overwhelming major reason for Modem and other computer problems that to the average person seem to have no relationship to their modem, but it does! If you are installing on COM2-IRQ3, the COMTEST.COM opening screen should look like this BEFORE you install the FaxModem.

COM1-IRQ4:

UART (16450 Chip) or Equivalent detected.

COM2-IRQ*:

No UART/COM/Modem/Serial Port detected.

COM3-IRQ*:

No UART/COM/Modem/Serial Port detected.

COM4-IRQ*:

No UART/COM/Modem/Serial Port detected.

Then you are ready to set the jumpers on your Internal FaxModem to COM2-IRQ3 and insert it into a vacant slot; thus replacing the COM2 UART.

You can use DEBUG.EXE to help install Modems, but it is not as accurate as COMTEST.COM (see Note 5).

If you are reinstalling a FaxModem on a different COM-IRQ, keep in mind that you may have to reinstall or run setup on all the software that is presently using the FaxModem.

If COM1-IRQ4 and COM2-IRQ3 are in use, I would suggest one of the following configurations:

COM3-IRQ5,
COM3-IRQ7,

or

COM3-IRQ2

If we would have found COM2 unused we would have configured like this:

COM2-IRQ3

Here is a list of suggested combinations:

COM1-IRQ4

COM2-IRQ3

COM3-IRQ5

COM3-IRQ7

COM3-IRQ2

COM4-IRQ5

COM4-IRQ7

COM4-IRQ2

FaxMail Network for Windows will supports COM1 through COM4 on IRQ0 through IRQ15. But...Before these addresses can be used, your "COM-Port/FaxModem" must first support the configuration and second you must properly configure said device.

Never skip a COM-Port as the system will go into "conflict-convulsion" from time to time. To find a vacant IRQ, run something like SYSONFO.EXE, etc. Here is some information on IRQs in the IBM-Compatible. They are: IRQ0 - IRQ15. N/A means not normally available for your FaxModem.

IRQ0 {INT 08h, Reserved for 8253 Channel 0 System-Timer-Tick, N/A
IRQ1 {INT 09h, Reserved for Key-Board Attention, N/A
IRQ2 {INT 0Ah, Reserved for Future use, (you can use if not in use)
IRQ3 {INT 0Bh, Reserved for COM2-IRQ3, or COM4-IRQ3 *If not used by COM2
IRQ4 {INT 0Ch, Reserved for COM1-IRQ4, or COM3-IRQ4 *If not used by COM1
IRQ5 {INT 0Dh, Reserved for XT-HardDrive, Can used unless you have an XT
IRQ6 {INT 0Eh, Reserved for Disk Attention, N/A
IRQ7 {INT 0Fh, LPT1, but usually doesn't need IRQ, usually can be used
IRQ8 - IRQ15 {Available in AT and up, but not in XT computers)

The following report was generated by Peter Norton's SYSINFO.EXE on a 486DX-50:

* Hardware Interrupts *

Number	Address	Name	Owner
IRQ 00	FCAC:0043	Timer Output 0	BIOS
IRQ 01	FCAC:0048	Keyboard	BIOS
IRQ 02	08AB:0057	[Cascade]	DOS System Area
IRQ 03	08AB:006F	COM2	DOS System Area
IRQ 04	0A4D:9F5A	COM1	FM_ROCK2.COM
IRQ 05	08AB:009F	LPT2	DOS System Area
IRQ 06	08AB:00B7	Floppy Disk	DOS System Area
IRQ 07	0070:06F4	LPT1	DOS System Area
IRQ 08	0000:0000	Real-time Clock	Unused

IRQ 09	0000:0000	Reserved	Unused
IRQ 10	0000:0000	Reserved	Unused
IRQ 11	0000:0000	Reserved	Unused
IRQ 12	0000:0000	Reserved	Unused
IRQ 13	0000:0000	Coprocessor	Unused
IRQ 14	0000:0000	Fixed Disk	Unused
IRQ 15	0000:0000	Reserved	Unused

Note 1:

As you can see, if IRQ4 is used by COM1, you have to find another IRQ for COM3. If you have a COM1-IRQ4 and you use COM3 you will need to use an alternative IRQ. The same goes if you are going to use COM4 and you have a COM2-IRQ3.

Note 2:

It is best to use COM1-IRQ4 or COM2-IRQ3 for FaxModems, as they were originally and specifically set aside for communications. Experience has shown me that some FaxModems do not perform as well on COM3 and COM4 using IRQ5, IRQ7 or IRQ2.

Note 3:

By the way, the problem with this and most system tests, such as MSD.EXE, is that they tell you what is suppose to be or what is normally on an IRQ. For instances, when I ran this test, as you can see, it says that "LPT1" is on IRQ7. The fact is I have a Rockwell class 1,2 FaxModem on COM3-IRQ7. When I ran COMTEST.COM I got the following results:

FaxModem Wizard COM-Port Test is part of "FaxMail Network for Windows"
(C) Copyright 1990-1996, Jon Krahmer, All Rights Reserved.

COM1-IRQ4:

UART (16450 Chip) or Equivalent detected.

COM2-IRQ3:

FIFO UART (16550AN Chip) or Equivalent detected.
This is a high performance UART with buffering.

COM3-IRQ7:

UART (16450 Chip) or Equivalent detected.

COM4-IRQ*:

No UART/COM/Modem/Serial Port detected.

Press <Esc> <Esc> to exit COMTEST or <Any-Key> to Continue...

If your computer has a built-in COM1-IRQ4 and COM2-IRQ3, you can disable either COM1-IRQ4 or COM2-IRQ3 and then set your FaxModem to that COM-Port and IRQ. This is done by getting out your manuals and moving the jumpers or contact the company you bought your computer and FaxModem from.

Note 5:

At Segment 0040, Offset 0000 DOS keeps a table of ports starting with your COM-Ports. The BIOS and DOS assume that you know that you can not skip a COM-port or reuse an IRQ. If you do, it will raise havoc with your system. If you skip a COM-Port, your system will compress the COM-Port table thus making it useless to any program that depend on it. For instance, if you have a UART on:

COM1, COM2, and COM4

your system will report that you have a UART on:

COM1, COM2, and COM3

Example of how to verify this:

Go to the DOS-Prompt and type:

```
CD\           {go to the root directory
DEBUG        {or \DOS\DEBUG
-D 0040:0000  {the - prompt will appear
              {something similar to the following will appear
0040:0000  F8 03 F8 02 E8 03 00 00-78 03 00 00 00 00 00 00 .....x....
Q <Enter>    {to Quit DEBUG
```

We are only concerned with the first 8 BYTES (4 WORDs).

```
0040:0000  F8 03 F8 02 E8 03 00 00  {as you found them
          F8 03,F8 02,E8 03,00 00  {separated
          03F8 02F8 03E8 0000  {formatted from BYTES to WORDs
          3F8  2F8  3E8  000  {formatted to human terms
          COM1 COM2 COM3      {No COM4; or was there?
```

It looks like you have a COM1, COM2 and COM3 :-)

RESOLVING CONFLICTS:

Read "USING COMTEST.COM" and "FaxModem INSTALLATION" first...

Example of a conflict and how to resolve it

Lets assume you have a mouse on COM1-IRQ4 and a modem on COM4-IRQ3.

You have a hardware conflict. You should never skip a COM-Port as the system will go into "conflict-convulsion".

Your computer has a COM-Port table at real-mode Segment 0040h, Offset 0000h, 0040:0000. It assumes that you did not skip a port, and if you did, it will compress it down to where, in this case, your COM4 is entered into the COM-port table at the location reserved for COM3. When you go into Windows, Windows looks at the COM-Port table and thinks you have a COM1, COM2 and COM3. When it goes to access COM3, bad things happen, because it is not there.

FaxModem Wizard, COMTEST.COM, is included with FaxMail Network for Windows. It will tell you what, if anything, is on each of your four COM-Ports and which IRQ each COM-Port is using, COM?-IRQ?. It will give you a written report about your Modem.

Exit Windows and Run COMTEST.COM. In this example the results will look like this:

```
COM1-IRQ4:
  UART (16450 Chip) or Equivalent detected.
```

```
COM2-IRQ3:
  UART (16450 Chip) or Equivalent detected.
```

```
COM3-IRQ*:
  No UART/COM/Modem/Serial Port detected.
```

```
COM4-IRQ3:
  UART (16450 Chip) or Equivalent detected.
```

To Correct this conflict:

Method 1

1. Turn off your computer and remove your modem.
2. Turn on your computer and run FaxModem Wizard (COMTEST.COM). The UART on COM4 should now be gone as shown in this example.

```
COM1-IRQ4:  
  UART (16450 Chip) or Equivalent detected.
```

```
COM2-IRQ3:  
  UART (16450 Chip) or Equivalent detected.
```

```
COM3-IRQ*:  
  No UART/COM/Modem/Serial Port detected.
```

```
COM4-IRQ*:  
  No UART/COM/Modem/Serial Port detected.
```

3. Turn off your computer and disable COM2. For most computers, this is done by removing the I/O board and moving or removing the jumpers so that COM2 is disabled. The "I/O board" is the input output board that controls the HardDrive, COM-Ports and etc. If this is the case with your computer, get out the jumper-sheet that came with your computer's I/O board, and move the jumpers so that COM2 is disabled.
4. Run FaxModem Wizard and look for the following results:

```
COM1-IRQ4:  
  UART (16450 Chip) or Equivalent detected.
```

```
COM2-IRQ*:  
  No UART/COM/Modem/Serial Port detected.
```

```
COM3-IRQ*:  
  No UART/COM/Modem/Serial Port detected.
```

```
COM4-IRQ*:  
  No UART/COM/Modem/Serial Port detected.
```

5. Get out the jumper-sheet that came with your modem and set your modem to COM2-IRQ3 and insert it into any vacant slot.
6. Run FaxModem Wizard to verify that it looks like this:

```
COM1-IRQ4:  
  UART (16450 Chip) or Equivalent detected.
```

```
COM2-IRQ3:  
  UART (16450 Chip) or Equivalent detected.
```

```
COM3-IRQ*:  
  No UART/COM/Modem/Serial Port detected.
```

```
COM4-IRQ*:  
  No UART/COM/Modem/Serial Port detected.
```


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