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## RELEASE NOTES

January 25, 1985

This document has three purposes: It highlights some key information, provides information not currently contained in your documentation, and lists some known problems that you may encounter when you use your 3Com products.

For easy scanning, these Release Notes are organized by subject, with the topic of each Note in capital letters at the beginning. Use them if you have a problem with your software or hardware, or scan them to find information that will supplement your User or Administrator's Guides. Where problems exist, solutions or work-arounds for them are given.

If you have any questions regarding information in these Release Notes, call the 3Com Customer Support Hotline at (415) 964-5561, or the 3Com main number (415) 961-9602.

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**MINIMUM MEMORY REQUIREMENTS**

To determine the amount of memory you need for your PC servers and user workstations, you need to add up the memory used by each application you plan to run, using the amounts given below, and then round up to the nearest 64K bytes increment. All figures are given in K bytes (KB).

**Server PCs:****Required:****One of:**

DOS 2.1

24KB

or

DOS 3.0

38KB

EtherShare

160KB

**Optional:**

EtherPrint (server)

60KB

EtherMail (server)

32KB

Installable device driver for non-IBM disk

Variable

Local user applications (Standard mode only)

Variable

**User (workstation) PCs:****Required:****One of:**

DOS 2.1

24KB

or

DOS 3.0

38KB

Ethernet driver (ENET)

8KB

Local user applications

Variable

**Optional:**

EtherMenu resident (if EtherMenu is installed)

17KB

Space for user applications, used only at the time the application is run, should be added for standard mode servers and user workstations. Space requirements for EtherSeries applications are as follows:

EtherShare (ES)

41KB

EtherPrint (EP)

26KB

EtherMail

123KB

EtherMenu

104KB

Since these applications are run one at a time, you need to include only enough space for the largest one you wish to use.

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**Additional memory may also be required if you are using non-IBM fixed disks with installable device drivers. Refer to the reference materials supplied with the disk.**

**If you have increased DOS or EtherShare I/O system buffers above the default number provided, be sure to include memory for the additional buffers. See the EtherShare/PC Administrator's Guide, Appendix E, for more information.**

**If you don't have enough memory in your PC running as a user station or server, the ES and MAIL programs may freeze the machine. Check available memory and memory requirements if this happens.**

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### ETHERSHARE/PC VERSION 2.4

#### USING DIFFERENT VERSIONS OF ETHERSHARE USER AND SERVER SOFTWARE:

**It is recommended that you use the same versions of EtherShare server software on all PC servers and EtherSeries user software on all Standard mode servers, system volumes and boot disks or diskettes. If this is not possible, then the local user of a Standard mode server must be careful to use the same revision level of EtherShare user software (ES.COM) and the Ethernet driver (ENET.CNC); that is, 2.4 versions should not be mixed with versions prior to 2.4. The best way to be sure this happens is for the local user to use the system volume on the Standard mode server s/he is using and to link only to data volumes on any servers running different revision levels of the EtherShare server software.**

#### USING DOS 2.1 OR 3.0:

**It is recommended that the same version of DOS (2.0, 2.1 or 3.0) be placed on workstation PC disks, diskettes and system volumes on the server. If different versions are used, some programs such as CHKDSK will not work when run off the server volumes. If you wish to have some workstations running one version and some another, it is best to establish two system volumes, one with each version, and to link to the volume with the same version as the linking workstation is using. For a DOS 3.0 system volume, the name SYS3 is recommended.**

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### CREATING VOLUMES WITH DOS 3.0:

If a volume is formatted with DOS 3.0 and subsequently used with DOS 2.1, unpredictable results will occur.

### APPLICATIONS THAT INTERFERE WITH THE STANDARD MODE SERVER:

XES (the security version of ES), EtherTerm and the Xerox Network Services/IBM PC products cannot be used by the local user on a standard mode server. In addition, Sidekick and Networked VisiWord have been found to conflict with the standard mode server and should be used only on workstations not being used simultaneously as network servers. Compaq BASIC and BASICA are now safe to use on the standard mode server; they no longer interfere with its operation.

### USING THE "ES UMOD" COMMAND:

When the PC server is running in Standard mode, a user who is logged in at the server can modify another user's password. This allows user passwords that have been forgotten or belong to a user no longer on the network to be deleted.

A user who is logged in at the server must supply a user's name to change the associated password. The command syntax is "ES UMOD username (newpassword)", instead of "ES UMOD (newpassword)" as described in the EtherShare User's Guide.

### USING THE TALLGRASS DISK BACKUP WITH THE STANDARD MODE SERVER

Running the Tallgrass backup program while the standard mode server is in operation can damage the contents of the disk. To perform backups, first shut down the server, reboot, and select the "EXIT TO DOS" selection from the menu. Then run the TGBACKUP program to make backup copies of the volumes.

### PROBLEM LOCAL PRINTING WITHOUT ETHERPRINT:

If the local user of a standard mode server attempts to use the DOS PRINT command, the server will notify the user that the PRINT command conflicts with the server and the local user will be unable to proceed. The server is still running, but all users should log out and the server should be restarted.

### USING THE CONFIG UTILITY:

The EtherShare/PC Administrator's Guide contains irrelevant information on page B-16. Ignore this page.

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### USING ETHERSHARE/PC WITH NON-IBM FIXED DISKS:

Your IBM PC Network Server can be built around an IBM PC XT, PC AT, or any IBM PC using non-IBM disk drives. However, some adjustments may be required due to memory requirements and hardware configuration.

Any disk drive that uses an installable DOS 2.0, 2.1, or 3.0 device driver can be used with the EtherShare/PC server software, provided there are no DMA channel, interrupt, or I/O address conflicts. (Refer to the EtherShare/PC Administrator's Guide, Appendix B, for information on reconfiguring the hardware and software to resolve difficulties.)

There are two general requirements for compatibility with non-IBM disk drives:

- The drive must use an installable DOS 2.0, 2.1 or 3.0 compatible device driver.
- Your server may need additional memory - usually 64K over the amount you need for the server and local user functions.

To install a non-IBM fixed disk:

1. Install your disk drive according to the manufacturer's specifications. This will include creating a diskette for booting the PC and loading the driver for the fixed disk. You only have to create a boot diskette for disks that cannot be booted directly. Some non-IBM disks work just like an IBM-XT; however, this depends on the age of your PC and which disk you are using.
2. Load all DOS programs and utilities into the root directory of the fixed disk.
3. Install the EtherShare/PC Server Software using the /FLOPPY option described in the EtherShare/PC Administrator's Guide, Section 2. Refer to the section "In a Non-Standard Configuration" for information on creating a server EtherShare/PC boot diskette.
4. After you have installed the EtherShare/PC Server Software, you must reboot the PC using the boot diskette that contains the drivers for the disk. You must then merge your regular boot diskette (created when you installed your disk drive) and your server EtherShare/PC boot diskette (created when you installed the EtherShare/PC Server Software). To do this:

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a. Add the contents of the CONFIG.SYS file from your fixed disk's boot diskette to the beginning of the file CONFIG.DED, to the beginning of the file CONFIG.STD, and to the beginning of the file CONFIG.SYS on your server EtherShare/PC boot diskette.

b. The CONFIG.SYS file on the fixed disk boot diskette will have a line in it with the format:

`device = file.ext`

Copy the file specified in "file.ext" from the fixed disk boot diskette to the server EtherShare/PC boot diskette.

c. If your fixed disk boot diskette contains an AUTOEXEC.BAT file, add the contents of it to the beginning of the AUTOEXEC.BAT file on the server EtherShare/PC boot diskette.

5. Reboot again, using the newly modified server EtherShare/PC boot diskette. Use this diskette whenever you boot your PC.

6. Continue with the installation instructions under "Preparing EtherShare for Use" in the EtherShare/PC Administrator's Guide, Section 2.

For additional information on installing some specific non-IBM disks, see the information below and the Joy of Networking Cookbook, available from your 3Com dealer.

### USING A TALLGRASS DISK ON A SERVER:

The Tallgrass fixed disk drive requires the following changes or modifications:

1. You will need an additional 64K of memory over the amount needed for the server and local user.

2. The fixed disk drive must boot from a diskette, then bring the server software up from the fixed disk drive, as follows:

a. Install the Tallgrass drive using DOS software from Tallgrass. When this installation is complete, you will have a file called "TGTBIO.COM", which is the DOS driver for the Tallgrass disk drive.

b. Format the Tallgrass disk drive leaving the CACHE and LANDING ZONE options OFF. Use the default sector size of 512 bytes. Install the EtherShare software using the "/FLOPPY" option in order to create a server EtherShare/PC boot diskette. (Refer to the EtherShare/PC Administrator's Guide, Section 2, for more details.)

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c. Copy the file "TGTBIO.COM" to the server EtherShare/PC boot diskette. (Remember to use the file that was modified when installing the drive and not the file on the Tallgrass software diskette.)

d. You must now edit the files "CONFIG.DED", "CONFIG.STD", and "CONFIG.SYS" on the server EtherShare/PC boot diskette to include the Tallgrass driver. Add a line to the beginning of each of these files, as follows:

```
device = tgtbio.com
```

This causes DOS to load the Tallgrass driver during the boot process.

NOTE: If you need to rerun the Tallgrass utilities, you must edit the CONFIG.SYS file and temporarily remove the line:

```
device = ansi.sys
```

Reboot the system and run the utilities. Removing this line allows the utilities to display information on the screen in the correct format. This is necessary since the EtherShare software uses the standard ANSI terminal cursor controls when displaying information on the screen, and the Tallgrass utilities do not.

When you want to restart the server software, remember that you must reinsert the line "device = ansi.sys" into the CONFIG.SYS file and reboot the system.

3. The Tallgrass disk drive uses interrupt line 3, which is the default for the EtherLink card and EtherShare software. Therefore, you must:

- a. Change the EtherLink card to use interrupt line 5, and
- b. Modify the EtherShare software to use interrupt line 5 (refer to the EtherShare/PC Administrator's Guide, Appendix B for instructions).

OR

- a. Modify the Tallgrass disk to use interrupt line 5. If you want to modify the Tallgrass disk instead of modifying the EtherLink card, refer to the documentation supplied with the disk.



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4. The Tallgrass disk drive uses DMA channel 3, which cannot be changed. The factory default for the EtherLink card and the EtherShare software is DMA channel 1. Unless the EtherLink card or software have been previously modified, no action is necessary.

### USING AN ALLOY PC-STOR DISK ON A SERVER:

The Alloy PC-STOR fixed disk drive requires the following changes or modifications:

1. The I/O address in the PC-STOR interface card must be set to address hex 344 (switches 1, 2, 4, and 8 open, the rest closed) on the dip switch.

2. The fixed disk drive will normally boot without a diskette. However, to install the EtherShare software after formatting the disk according to the instructions contained with the disk, you need to do the following:

a. Turn the power off and remove the disk interface card from the PC.

b. Remove the boot chip from the ALLOY interface card. (This chip is located above the IDXS-PC label.) Reinstall the card into the PC.

c. Reboot the PC with the boot disk you created for the PC-STOR according to the manufacturer's instructions.

d. Install the EtherShare Software with the /FLOPPY option as described in the EtherShare/PC Administrator's Guide, Section 2. When you are prompted for the boot floppy, insert the ALLOY boot disk in drive A:.

e. When the installation process is complete and you are told to reboot, instead, turn the power off and replace the boot chip on the ALLOY interface card. Reinstall the card and reboot without a diskette.

3. In order to boot EtherShare from the ALLOY hard disk, you must reconfigure some of the files contained in the Virtual Floppy (Boot Volume) of the ALLOY hard disk. Insert the ALLOY boot diskette into drive A: and type:

AVF RW

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Remove the diskette from drive A: and insert it into drive B:. Then copy the entire boot diskette to the Virtual Floppy by typing:

```
COPY B:*.* A:/V
```

Remove the diskette from drive B and store it in a safe place. Use this disk later if you wish to boot the server PC without running the EtherShare software.

4. You must now edit the files "AUTOEXEC.BAT", "CONFIG.DED", "CONFIG.STD", and "CONFIG.SYS" on drive A:. Add a line to the beginning of AUTOEXEC.BAT as follows:

```
AVF RW
```

Add a line to the beginning of each of the other three files, as follows:

```
DEVICE = ADRVR.SYS
```

This causes DOS to load the Alloy driver during the boot process.

5. Since you have two volumes on the Alloy hard disk (drives C: and D:), you must install a network expansion peripheral in order for EtherShare to use both volumes. This is done the same way as installing EtherShare to use a second IBM hard disk on an IBM PC XT server. See the EtherShare/PC Administrator's Guide, Section 5.

### USING A MOUNTAIN HARD DISK ON A SERVER:

To use a Mountain hard disk on a server, follow the manufacturer's instructions, included with the disk, installing the disk as drive C:.

### ERRORS READING FROM OR WRITING TO FILES ON ETHERSHARE VOLUMES:

On an IBM PC AT server, you may see one of the following error messages:

```
Fatal Error... lookupb: ERROR[y] mH reading sector xxxx, drive n:
```

or

```
Fatal Error... flushit: ERROR[y] mH on writing sector xxxx, drive n:
```

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This means that you may have bad blocks on the volume that were not detected by the AT format program. To verify this:

(1) Load DEBUG

(2) Type:

```
- L 2000:0 n xxxx l
```

where n is the drive the error occurred on (0 = A:, 1 = B:, 2 = C:, etc.) and xxxx is the sector that was read or written. (In the message, the value m is the driver error code that occurred.)

You should get a critical error from DOS that matches the driver error code m in the failure message. If this happens, you have bad blocks on your disk that you need to keep from allocating to your files. To keep the bad block from surfacing, you can either re-format the hard disk on the AT, which will usually catch any new bad blocks, or you can try to allocate the bad space to a file you will never use. To do the latter, localize the file being read or written when the error occurs, rename the file to a name that is unlikely to conflict with any other file name, and hide the file to keep it from being accessed. This approach will probably result in your losing some good disk space along with the bad, but the bad block will be unaccessible. Do not delete the file if you use this method, or the EtherShare volume in which the file resides, or the bad blocks will surface later in another file.

### SYSTEM SECURITY OPTIONS:

There is only one version of Netlink, which gives access to network resources from the Network Volumes and Printers Menu. This version, called NETLINK, does NOT support user or volume creation, modification, or deletion.

When replacing ES.COM with XES.COM, be sure to change the name of XES to ES. In addition, in EtherMenu you need to replace the file TOUR.BAT with the file XTOUR.BAT and to change the name of XTOUR to TOUR.

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### ETHERSHARE/AP VERSION 2.2

#### BACKUP ON THE AP SERVER:

(1) You cannot restore a volume for a user that has a password. Have the user remove the password and then restore the volume. (2) You cannot print a copy of the backup listing. (3) Since the AP Server does not provide volume lockout when a backup process is taking place, backups should be performed when users are not logged in. If users are changing the data on the disk while it is being backed up, data may be lost. Use the automatic backup feature to run backups late at night or during slack periods.

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### ETHERPRINT/PC VERSION 2.4 ETHERPRINT/AP VERSION 2.2

#### INSTALLING NEW VERSIONS OF THE ETHERPRINT SERVER SOFTWARE:

In addition to terminating all links with user PCs, the installation process removes the current printer configuration information and reset sequences. After installing a new version of the EtherPrint/PC or EtherPrint/AP Server Software (or re-installing an existing version), you must reconfigure your printer(s). Note the reset sequence currently set for the printers before installing the EtherPrint server software. The current reset sequence may be viewed by displaying the "Reconfigure EtherPrint" menu.

#### EXPANSION CARD FOR SERIAL PRINTING:

The following serial cards have been found to work with the HP LaserJet attached to an IBM PC XT:

IBM Serial Card  
AST Six Pack

The following serial card has been found to work with the HP LaserJet attached to an IBM PC AT:

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### IBM Serial/Parallel Adapter Card

The LaserJet works only with the primary (H'3F8') serial port, not the secondary (H'2F8') port. Refer to the documentation supplied with the serial card.

#### USING THE EP /PLOT PARAMETER:

The EP /PLOT parameter does suppress the banner between print requests, but it does NOT delay printing until another EP LINK or EP UNLINK occurs. If you wish to delay printing also, use EP /PLOT /HOLD.

#### USING THE EP /DIRECT AND /HOLD PARAMETERS:

The EP /DIRECT and /HOLD parameters cannot be used at the same time. If an attempt is made to use them together, a message is displayed and the link is not established.

#### SPECIFYING A TIME INTERVAL TO MAINTAIN A DIRECT LINK WITHOUT PRINTING:

If you specify a time interval to maintain a direct link without printing that is less than 10 minutes or greater than 200 minutes, EtherPrint will display a message indicating that the value is out of the valid range and will use the default value of 10 minutes in establishing the link.

#### DIRECT PRINTING WITH THE HP LASERJET:

If you use escape sequences in documents for special print formatting and are direct printing on the HP LaserJet, the printer may not recognize the sequence. The output will be terminated at the location of the escape sequence.

#### FORM FEED SUPPRESSION WITH /PLOT:

Using the /PLOT option suppresses the form feed at the end of the print job.

#### USING DIRECT LINK WITH INCOMPATIBLE VERSIONS OF ETHERPRINT USER AND SERVER SOFTWARE:

You can direct link only if you are using version 2.4 software on both the user workstation and the server. If you try to direct link to a server with version 2.2 or earlier software, EtherPrint will display the following message:

\*\*\* <SERVER> not responding.

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The link will not be established. If you try to direct link using version 2.2 or earlier user software, the /DIRECT parameter will not be recognized.

### ADDITIONAL ERROR MESSAGES:

The following messages may be encountered during printing:

Device not ready writing to device PFN

The server is not responding so EtherPrint cannot send data to the spool file. Check the server to make sure it is operational.

Write fault writing to device PRN

The server is responding but cannot device PRN send data to the spool file. Make sure there is space on the server disk for the spool file, and, if so, use CHKDSK to check for bad sectors on the disk.

The following message may be encountered after an attempt to direct link to a printer:

26 - Printer busy, can't direct link now

Direct link can be done only when the printer is not in use. Try again when the printer is not busy.

### PARTS OF PRINT FILES LOST:

If you are using a word processor that sends a printer initialization sequence before or after printing a document, it is possible for this initialization or deinitialization sequence to lose the beginning or end of the document. This most notably occurs using WordStar with a Diablo 630 printer. The problem may be corrected by removing the printer initialization and deinitialization sequence that is sent by the word processing software. (WordStar allows you to do this in the WINSTALL program.)

### BEGINNINGS OR ENDS OF PRINT FILES LOST:

If you have a printer that has internal buffering you may lose printed output at the beginning or end of the files. This occurs when you include your printer's reset codes in the EtherPrint reset sequence for that printer. Correct this problem by using a carriage return (octal 015) instead of the reset sequence. To use a carriage return, you will need to replace the reset sequence provided by 3Com. Follow the

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instructions in the EtherPrint Administrator's Guide under "Reconfiguring EtherPrint." When the the reset sequence is requested, Type ESC and enter "\015" as the reset sequence.

### BLANK PAGES OR MISSING LAST LINE OF OUTPUT:

Some word processors, including WordStar, send termination sequences that do not end with linefeed and thus do not properly signal to EtherPrint to print the last line of the file. If these sequences are not terminated with a linefeed character (decimal 10 or hex 0A), they are kept in your PC's memory and sent to the printer when you EP UNLINK or ES LOGOUT. This results in EtherPrint printing a blank page or in the last line of output being printed at the start of the next file. To avoid this problem, use the /HOLD option with the EP LINK command and then use EP UNLINK after printing the file with the word processing software. Alternatively, make sure your lines and reset sequences are terminated with linefeeds. The latter can be accomplished with WordStar using the Set Deinitialization Menu in the WINSTALL program.

### ETHERPRINT NOT READY ERROR WRITING DEVICE PRN:

If you get a "Not ready error writing device PRN--Abort, Retry, Ignore?" error during printing, select Abort before unlinking and relinking, not Retry as specified in the EtherPrint User's Guide, Appendix B.

The following applies only to the AP server....

### PRINTERS AND WORD PROCESSORS THAT REQUIRE AN 8-BIT CHARACTER REPRESENTATION:

These require an additional step during installation. Some of the advanced features of word processing software (proportional spacing and sub- and super-scripting) require 8-bit character codes. EtherPrint on the AP server outputs data as 7 bits, with even parity, rather than 8 bits, with no parity, as those printers require. If your word processor does not operate correctly, change the output by running a configuration utility on the server. To run the utility, log in at the console terminal as uadmin:

```
login: uadmin (must be lower case)
```

When the "\*" appears, type "print8":

```
* print8
```

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When the "#" appears again, press "cntl" and "d" at the same time:

# [cntl-d]

Some printers will not operate correctly with the 8-bit representation. To set it back to the default, 7-bit representation, follow the same sequence, but type "print7" instead of "print8".

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## ETHERMAIL VERSION 2.4

### LOST ETHERMAIL MESSAGES:

If your PC server runs out of disk space on drive C:, it may lose messages sent to users who log into this server for their mail. Messages sent to the server will be successfully delivered to at least one recipient; however they may not be delivered to all users. Check on the amount of available disk space by shutting down the server and running CHKDSK on the server's hard disk C:.

### INSTALLING ETHERMAIL ON THE PC SERVER:

You cannot install an earlier version of the EtherMail/PC Server Software on an EtherShare/PC Version 2.2 or 2.4 server.

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## ETHERMENU VERSION 2.4

### USING ETHERMENU DEFINITION FILES FROM A PUBLIC VOLUME:

To use menu definition files on a public volume such as the system volume, the user must have a private data volume linked; a file called RUNIT.BAT is created on that volume. All other menu definition (.BAT and .DAT), help (.HLP) and executable (.EXE) files can reside on the public volume.



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When you run EtherMenu (via ESMENU), it will assume the private volume is linked to c:. If you wish to link the volume to a different drive, replace the c: with the appropriate drive id in the following two lines of ESMENU.BAT:

```
menusys c:  
e:runit
```

The volume linked to the specified drive id can be any private volume linked when EtherMenu is run, or a diskette.

### USING THE TOUR MENU ITEM:

Running the "Tour" (option 3 on sub-menu 1, EtherSeries utilities) will change the PATH specification for the user. To change it back to its previous setting, add the appropriate PATH = entry to the Mmc.BAT (default M13.BAT) file that starts the "Tour" option.

The following applies only to the Network Volumes and Printers Menu...

### USING THE NETWORK VOLUMES AND PRINTERS MENU:

The following instructions must be executed before running EtherMenu if you wish to use the Network Volumes and Printer menu (NETLINK):

```
TARBUF  
MENUINIT
```

These instructions must be executed in the order presented, and should be inserted into the AUTOEXEC.BAT file. Execution can take several seconds, depending on how large the network is and how many servers are not responding.

When using the Network Volumes and Printers menu, EtherMenu expects NETLINK to be on the current default drive. If you wish to use it from the system volume with menu definition files resident elsewhere, be sure to put the appropriate drive id in the call to Netlink in the Mmc.BAT file that invokes it, as shown in Appendix B of the EtherMenu Administrator's Guide, or include the appropriate drive id in the PATH = entry of the AUTOEXEC.BAT file.

To use the Network Volumes and Printer menu the user must first log in.

### LIMITATIONS:

The Network Volumes and Printers menu lists up to 500 users registered on the network, and up to 25 printers. It shows up to 15 volumes per user.

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### MENU SELECTION:

Menu items may be selected either with the cursor keys, highlighting and the RETURN key, OR by typing the first letter of the menu item. If the first letter is used, do NOT use the RETURN key.

### CHARACTERS SHOWING CURRENT STATUS:

The volume directory shows currently linked volumes by marking them with a pound sign (#).

The user directory shows currently logged-in users with a pound sign (#). It shows the current selected user whose volumes are shown with an asterisk (\*).

The server directory shows active servers with a pound sign (#) and shows with a hyphen (-) servers that are not responding to requests sent to the network. An asterisk (\*) indicates that the server is being queried for its current list of users and printers.

### GETTING THE LATEST INFORMATION ON USERS AND PRINTERS:

In the Network Volumes and Printers menu, the users and printers registered on a server are usually obtained at boot time. To get an updated copy of a server's users and printers, after selecting SERVER from the Object Selections menu, position the cursor to the desired server in the vertical window. Press the \* key (unshifted PrtSc). That server will be queried for its list of printers and users. Any users or printers that have been added will be shown; however, any users that have been removed will still also be shown.

### CURRENTLY LINKED PRINTERS DISPLAYED:

If you link a printer through EP rather than through the Network Volumes and Printers menu then EtherMenu will show in the Linked Printers window the logical printer id and server name, but the printer number shown will be 0 and the description will be blank.

### AUTOMATIC UNLINKING OF VOLUMES AND PRINTERS:

Any attempt to link a volume, where the user confirms that the link should override an earlier link, will unlink the previously linked volume whether or not the new link succeeds. Any attempt to link a printer will unlink a previously linked printer whether or not the new link succeeds.

**CLEARING ERROR MESSAGES:**

Error messages are cleared by pressing any regular typing key on the keyboard (that is, NOT shift keys, control keys, alt, or lock keys). This keystroke will not be used in any field.

**ADDITIONAL ERROR MESSAGES:**

In addition to the EtherShare and EtherPrint error messages listed in the EtherSeries User's Guide, the following messages may be encountered while running EtherMenu. For more information on how to remedy the problem see the EtherShare User's Guide.

**1 - Password required**

The requested volume has a password defined that must be supplied to link it. Retry the operation and supply the password.

**7 - Illegal unit**

Only unit numbers 0 - 8 are valid. Retry the request with a number in this range.

**20 - Too many linked**

No more printers can be linked. Unlink a printer not needed and retry the request.

**25 - Server busy, too many PCs linked**

Too many PCs are requesting service from the server. Have some users log out.

**39 - Maximum volumes already linked**

The maximum of four volumes linked has already been reached. Unlink an unneeded volume and retry the request.

**42 - Invalid command parameter**

A parameter entered as part of the request cannot be interpreted by the software. Check the parameters for the operation you requested and retry the operation.

**43 - Illegal user name**

The user name given is not the same as the currently logged in user. Retry the request with the currently logged in user name.

## RELEASE NOTES

### 100 or greater

All errors numbered 100 or greater are system errors. An error of this sort has prevented the request from being done. Retry the request.

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## REMOTE ETHERMAIL VERSION 2.0 USER SOFTWARE

### NO RESPONSE WHEN USING HAYES 1200B MODEM CARD:

The Hayes modem card sometimes does not respond when you issue the telephone dialing commands. To recover, exit from Remote EtherMail and run SCOM (a program provided by Hayes) which resets the modem. Run Remote EtherMail again and try the dialing procedure again.

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## ETHERSTART VERSION 1.0

### STARTING FROM OTHER USER'S PUBLIC VOLUMES:

EtherStart will allow starting only from your own START volume or a public START volume owned by the server (e.g. SYS.START). Public volumes owned by other users cannot be used for starting except by their owners.

## **ETHERLINK ASSY 1221-00 RELEASE NOTES**

**May 2, 1985**

You have received a new half-card version of the EtherLink printed circuit board. This version is identified by the assembly number ASSY 1221-00 printed vertically along the left edge of the PC Board. Your new EtherLink is functionally identical to the previous version (ASSY 34-780-00) but has been reduced to half the size of the standard IBM PC expansion board. This was possible through the integration of circuitry into VLSI devices. The physical difference of your new EtherLink will not affect its compatibility with any IBM PC or IBM Compatible PC.

Installation of the new EtherLink has been made simpler due to the reduced size of the PC board. The location (but not the function) of the jumpers, used to select between the onboard transceiver or a standard external Ethernet transceiver, configure the base addresses, interrupt, and DMA channels, have changed. Instructions for installation and jumper locations for the new EtherLink are contained in the following sections.

### **INSTALLATION INSTRUCTIONS**

All switches and jumpers have been correctly set, in the factory, for use with EtherSeries software. You will need to change these settings only if they conflict with other peripheral equipment. See Appendix E for details. The installation instructions in your EtherSeries Users Guide apply for your new EtherLink with the following exceptions.

#### **Set The Transceiver Select Switch (see Figure 1)**

The transceiver select switch on your new EtherLink consists of three rows of 7 pin sockets and one 14 pin plug. The transceiver select plug is installed by the factory in the two sockets closest to the bottom of the board, over the BNC label. This selects the on-board transceiver which is used when Thin Ethernet cable is connected to the round BNC coaxial cable connector on the rear panel.

To select the external transceiver, move the transceiver select plug to bridge the pair of sockets labeled DIX (these are the sockets closest to the top edge of the board). This bypasses the on-board transceiver and routes the signals to the Digital-Intel-Xerox (DIX) Ethernet transceiver cable connector on the rear panel. The method for moving the transceiver select plug is described in your EtherSeries

user manual Installation section, Moving the Transceiver Select Plug.

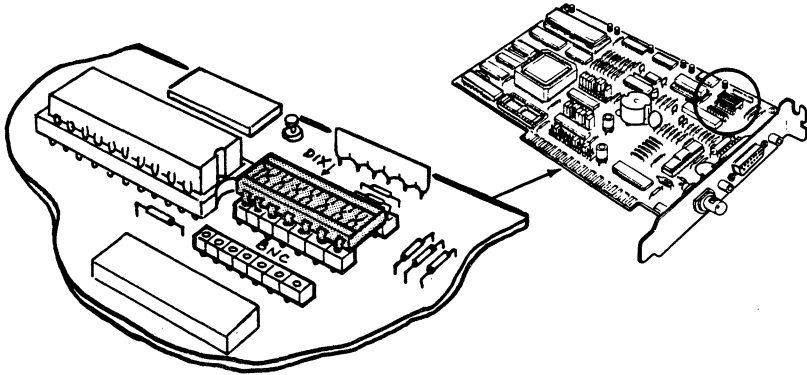


Figure 1: Transceiver Select Switch

#### **Install the EtherLink Card Guide**

Ignore this step because your new EtherLink does not require, and is not shipped with a card guide.

#### **Install the EtherLink Card**

Follow the instructions for installing the EtherLink card provided in your EtherSeries Users Guide. It is not necessary to tilt your new EtherLink Card, described in step two of this section of your EtherSeries Users Guide, due the shorter length of the new card. All the rest of the installation instructions in your EtherSeries Users Guide are accurate with no further exceptions.

## APPENDIX E (JUMPER LOCATIONS)

Your new EtherLink card is configurable using jumpers, and is identical in configurability to the previous version (ASSY 34-780). However the location and orientation of the jumpers is slightly different.

### Location of Jumpers on Your New EtherLink (figure 2)

The location of each set of jumpers on your EtherLink board are shown in figure 2.

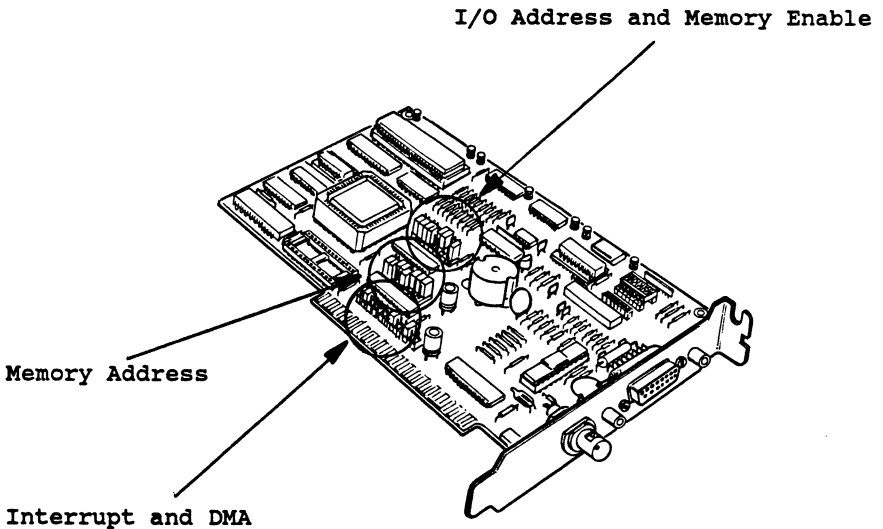


Figure 2: Location of jumpers

The Jumpers to configure the DMA channel, interrupt channel, and memory address of your new Etherlink card are located near the connector at the bottom of the card, the jumpers to configure the base I/O address are located at the center of the card.

### Changing Jumpers on The EtherLink Card

The I/O base address and memory address jumpers consist of a plastic block holding three pins. A plastic cover fits over the middle and one of the end pins, shorting them together.

Changing the position of the jumper to fit over the middle and the other end pin will change its state.

The DMA channel and interrupt jumpers consist of several rows, each containing two pins. A plastic block fits over one row of two pins. Changing the position of the jumper to fit over another row of pins will change its state.

#### DMA Channel Jumpers (figure 3)

There are two jumpers required to select the DMA channel (see figure 3):

1. To select the DMA request channel, move the jumper cover to fit over two of the pins in the rightmost group (over the label REQ). You can select channel 1, 2, or 3.
2. To select the DMA acknowledge channel, move the jumper cover to fit over two of the pins in the leftmost group (over the label ACK). You can select channel 1, 2, or 3.

NOTE: Both jumpers must select the same channel.

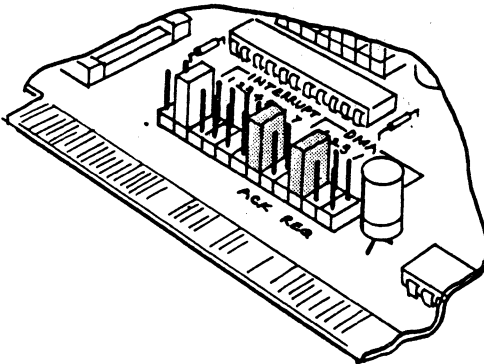


Figure 3: DMA Jumpers



### Interrupt Channel Jumpers (figure 4)

There is only one jumper block required to select the interrupt channel (see figure 4). Interrupt channels 2 through 7 may be selected. Place the jumper over the row of two pins that corresponds to the channel desired.

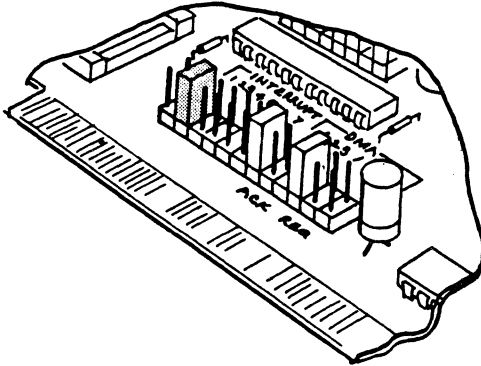


Figure 4: Interrupt jumper

### I/O Base Address and Memory Address Jumpers (figure 5 and 6)

Your new EtherLink card uses 16 I/O addresses, starting at the I/O base address selected. The I/O address bit and factory setting for each jumper is shown in the table in the I/O Base Address Jumpers section of Appendix E of your Etherseries Users Manual. The Memory address is used by an optional EtherStart PROM. A description of the EtherStart option and the use of these jumpers may be found in the EtherStart Users Guide.

To change the base address, or memory address, locate the jumper corresponding to the desired address bit (see figure 5 or 6).

1. To set the address decoding logic to recognize a "1", place the jumper cover so that it fits over the center and upper pins on the jumper block.
2. To set the logic to recognise a "0", place the jumper cover to fit over the center and lower pins.

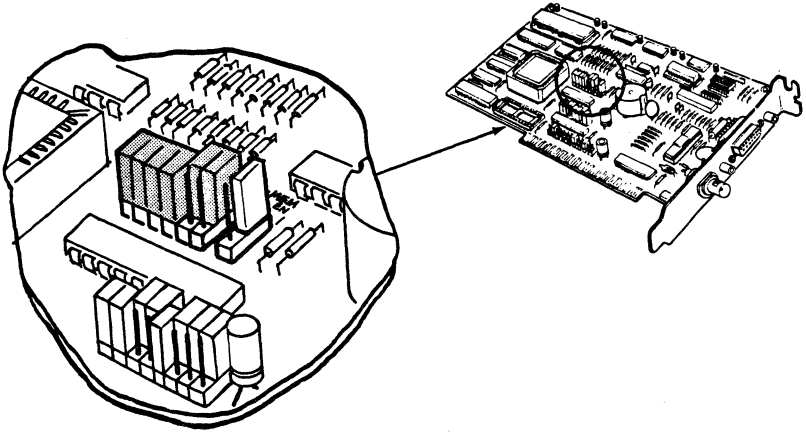


Figure 5: I/O Base Address jumpers

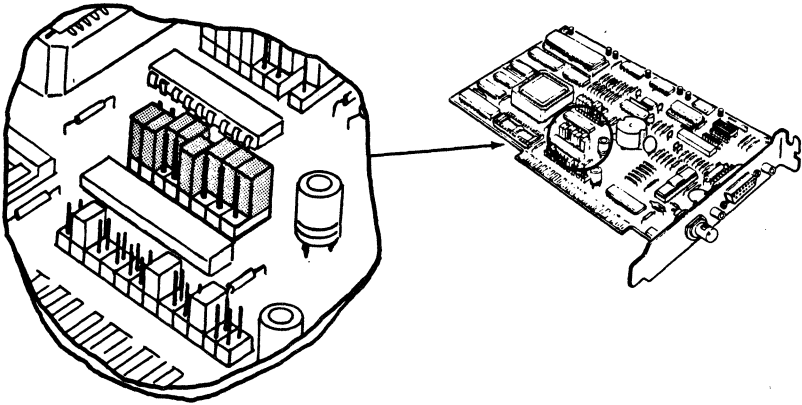


Figure 6: Memory Address Jumper

**Memory Enable Jumper (figure 7)**

The memory enable jumper enables the system to read an optional PROM, known as the EtherStart Rom. This jumper is set in the disable position by the factory and should be changed only if the EtherStart option is installed. This jumper consists of three pins with a jumper cover. The memory is enabled when the jumper cover connects the upper and middle pins, and is disabled when the cover connects the

middle and lower pins. This jumper should only be used when an EtherStart PROM is installed in your EtherLink. The EtherStart PROM comes with its own manual which describes in more detail the function of this jumper.

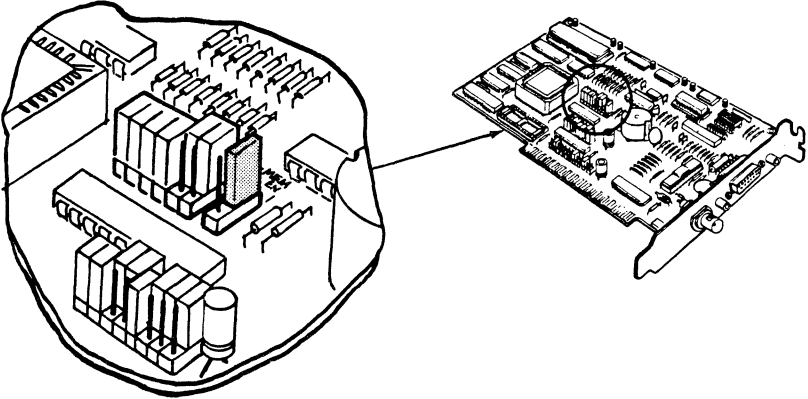


Figure 7: Memory Enable Jumper