



IBM 3270
Personal Computer

3

Using the Control Program

3

Using the Control Program

Second Edition (July 1985)

This edition describes how to use the IBM 3270 Personal Computer Control Program.

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About This Book

This book will be your guide to using the 3270 Personal Computer. It is for you to use after your 3270 PC has been set up and you have the version of the control program that you will be using. We hope that you are sitting at your work station as you read. We wrote this book to encourage you to start using the system. As with any new tool, you are probably anxious to try out your 3270 PC, but you are not sure how to begin. We will try to help.

This is Book 3. We designed it for you to keep as a handy reference along side your work station. It will help you in your day-to-day use of the 3270 PC and its Control Program.

Using the Online Tutorial

We began this book where the Online Tutorial in Book 2 ends. If you have not used the Tutorial yet, we recommend that you take some time and try it now. It will show you how your system works and how you can control it. It will also let you use parts of the system as you learn about them. The Online Tutorial diskette came packaged with this book. The instructions for it begin in Chapter 2 in Book 2.

Are You Ready to Do “Real” Work?

After you have finished the tutorial, you can begin to do “real” work. If you need a quick “road map”, try this:

- **Chapter 1. Turning on the 3270 PC and Loading Your Control Program**

Start by reading Chapter 1 and work along with the instructions.

- **Chapter 2. Selecting and Using Your Windows**

Then, read Chapter 2 and try locating the window you want.

- **Chapter 3. Using Your Keyboard with the Control Program**

Skim Chapter 3 to become a little more familiar with the keyboard.

- **Chapter 4. Using a Personal Computer Session**

- **Chapter 5. Using a Host Computer Session**

- **Chapter 6. Using a Notepad Session**

Pick and read the chapter that describes the type of session you want use (Personal Computer, Host, or Notepad).

- **Chapter 7. Sending Files Between a Personal Computer and a Host**

Read this chapter when you want to send files from your personal computer to a host computer and to receive files from your host.

- **Chapter 8. Printing What's on Your Screen**

Read this chapter when you want to print what's on your screen on the printer attached to your work station or on a printer attached to a 3274 Control Unit.

- **Chapter 9. Rearranging the Windows on Your Screen**

Read this chapter when you want to change the size, position, or color of your windows, hide or browse windows, or set up other sets of windows.

- **Chapter 10. Copying Text from Window to Window**

Read this chapter when you want to copy text from one place in a window to another place or into another window.

- **Chapter 11. Recording, Playing and Erasing Automatic Keystrokes**

Read this chapter when you want to learn how to record, play and series of keystrokes the you use frequently.

- **Chapter 12. Running DOS Commands Automatically**

Read this chapter when you want to learn how to use the AUTOEXEC.BAT file to run commands for you when you turn on your 3270 PC.

- **Chapter 13. Locating Problems with Your Control Program**

If you have any problems while you are using your work station, go to this chapter for help in locating the problem and either fixing or reporting it.

- **Appendix A. Messages**

Look up error messages in this appendix when you are told to in Chapter 13. Appendix A describes all the errors messages that the system can produce. You will probably see only a very small number of them.

- **Appendix B. Keyboard Summary**

If you are not sure what a key on your keyboard does you can look it up in Appendix B.

If You Need Some Help

If you have any questions about how to use 3270 PC, you can always refer to the:

1. Summary Card included with this book
2. Chapters in this book
3. Online Tutorial.

If you have a problem with your work station, and you are told in Chapter 13 to report the problem, follow your company's procedures.

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Chapter 1. Turning on the 3270 PC and Loading Your Control Program

Before you can start using your 3270 PC, your version of the 3270 PC Control Program must be in its memory. Every time you turn on your system, it loads a control program. What you need to know is how to make the system load your control program.

Before You Begin

Note: If you do not know how to operate your 3270 PC, look up the operating information in the front of the 3270 PC Guide to Operations binder, and read about:

- *Turning the units on and off*
- *Inserting and removing diskettes*
- *Handling diskettes*
- *Using a fixed disk if you have one.*

Don't turn anything on before you come back here and continue with these instructions.

What You Will Need

First, you will need your version of the control program. If you set it up yourself, you already know where it is.

You put it in one of these places:

- On a system diskette, or
- On your fixed disk.

If someone else set it up for you, the person who set it up should have given you a system diskette or told you that the control program is on your fixed disk.

When you know where your control program is, you are ready to continue with next section “Watching the Power-On Self Test (POST).”

Watching the Power-On Self Test (POST)

Don't Turn on Your System Unit Yet

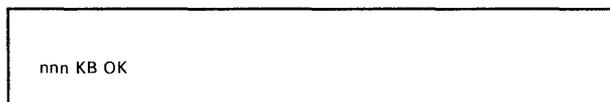
Wait until you have read the next section that describes the Power-On Self Test or POST, for short.

What to Expect

Every time you turn on your 3270 PC, it tests itself. This test is called the Power-On Self Test or POST. You should know what to expect the first time.

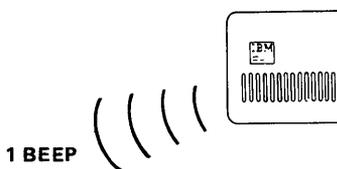
Three things will happen:

1. The memory in your system is checked and the amount that is working appears in the upper left corner of your screen.



Note: This number increases until it equals the amount of available storage in your system unit.

2. You will hear 1 short “beep”.



You may also hear the diskette reader hum and see the red “in use” lights flicker on and off.

-
3. Your version of the 3270 PC Control Program is loaded into memory.

When the POST is finished, your screen should look like this:



You may hear more beeps after this panel appears on your screen, you can ignore them.

Note: If you are using a copy of the control program that someone else set up for you, your screen could look different, and you may not need to press the Space Bar. Ask the person who set it up to describe what you will see and what to do.

Turning on the 3270 PC

If your control program is on a system diskette, skip the next section and continue with the section "Loading the Control Program from Your System Diskette" on page 1-6.

If your control program is on your fixed disk, continue with the next section, "Loading the Control Program from Your Fixed Disk."

Loading the Control Program from Your Fixed Disk

1. Turn off your system unit.

The On/Off switch is on the right side of the unit.

2. If you have a color display, turn it on.

The On/Off switch for the color display is located near the lower, right corner of the display. The monochrome display does not have an On/Off switch.

3. If you have a monochrome or color display, turn the brightness control clockwise as far as it will go.

4. If you have an expansion unit, turn it on.

The expansion unit looks like the system unit but it doesn't have any diskette drives in it. The On/Off switch is on the right side of the unit.

5. Turn on your system unit.

That's all there is to it. The next thing you will see is the Power-On Self Test. Continue with the section "Did the POST Run Correctly?" on page 1-7.

Loading the Control Program from Your System Diskette

1. Turn off your system unit.

The On/Off switch is on the right side of the unit.

2. Raise the lever on diskette drive A.
3. If there is a diskette in drive A remove it.
4. Insert your system diskette into diskette drive A.
5. Push down the lever on drive A.
6. If you have a color display, turn it on.

The On/Off switch for the color display is located near the lower, right corner of the display. The monochrome display does not have an On/Off switch.

7. If you have a monochrome or color display, turn the brightness control clockwise as far as it will go.
8. If you have an expansion unit, turn it on.

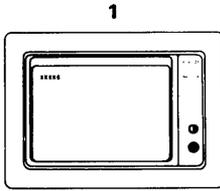
The expansion unit looks like the system unit but it doesn't have any diskette drives in it. The On/Off switch is on the right side of the unit.

9. Turn on your system unit.

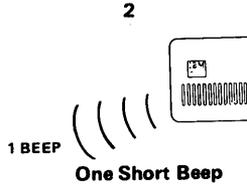
That's all there is to it. The next thing you will see is the Power-On Self Test. Continue with the next section "Did the POST Run Correctly?" on page 1-7.

Did the POST Run Correctly?

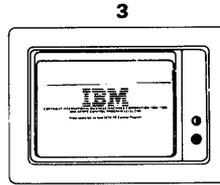
Did you see and hear:



Memory Test



One Short Beep



**3270 PC Control
Program Screen**

Did the POST run correctly?

Yes

No

|
|
**Did the IBM BASIC panel appear instead
of the one shown above?**

Yes

No

|
|
Go to the chapter that deals
problems in your *Guide to
Operations*.

You did not insert a system diskette
in drive A, or you do not have a copy
of the control program on your fixed
disk.

Insert a system disk in drive A or
place a copy of the control program
on your fixed disk.

Turn off your system unit, and rerun
the POST beginning on page 1-2.

Press the Space Bar, and wait about one minute.
Your windows should appear on your screen.

Your system is now ready to use. Go to “Chapter
2. Selecting and Using Your Windows” to choose
the window you want to start your work.

Chapter 2. Selecting and Using Your Windows

In this chapter, we will explain how you can:

- Select the window you want to use
- Enlarge a small window to its fill the screen
- Reduce a it back to its small size.

Some Things You Need to Know about Windows

Windows are areas of your screen that are reserved for working sessions. You can have one window for each of these sessions:

- 1 or more personal computer sessions
- 1 to 4 host computer sessions
- 1 or 2 notepad sessions.

You probably will not have all of these windows.

Your windows can appear on your screen in two ways:

- Several windows can appear on the screen at the same time.
- One of your windows can fill the whole screen.

What is on Your Screen?

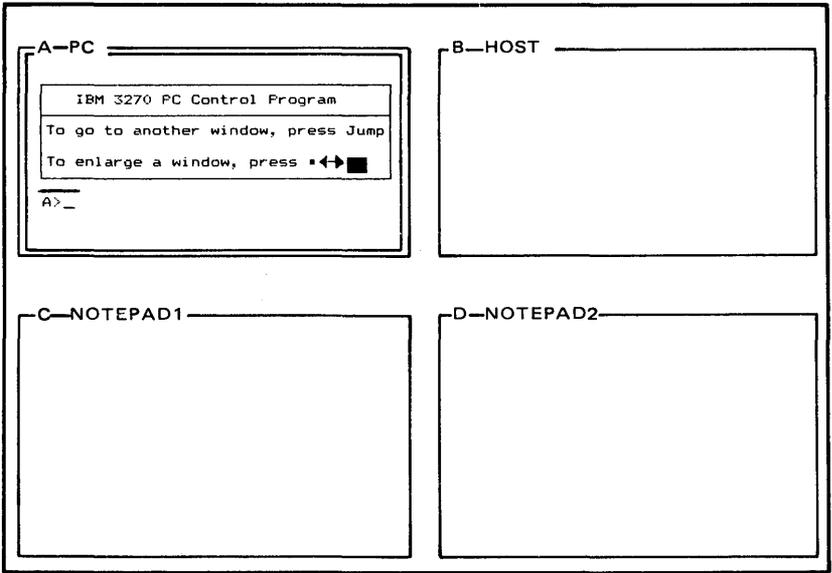
One window may fill the entire screen. When one of your windows fills screen, it doesn't look like a window. You can't see the other windows, and you can use only one at a time. You can imagine that they are stacked behind one another like sheets of paper.

You may have several small windows on your screen at the same time. You may see their borders and their names or you may not. Some of the windows may overlap others.

You can use a window only when it is the "active" window. If your window fills the entire screen it is active. If there is more than one window on your screen, the active window has the double border. It also has the cursor inside it. Whatever you do affects only the active window. If you want to use another window, you must make it active.

Choosing Windows When There Is More Than One on the Screen

If you are using the default control program, your screen should look like this:



The A window is active, it has the double border. If you set up your own control program, or if someone else set it up for you, the sizes and locations of the windows on your screen may be different.

To make another window active:

1. Press the Jump key.

The double border will move to the next window in alphabetical order. The windows are kept in alphabetical order by their single-letter short names. The short name is shown first in the upper left corner of the border.

2. To make the next window in order active, press the Jump key again.
3. To get back to the first window again, keep pressing the Jump key.

There is another way to make windows active.

1. Press the WSCtrl key.
2. Type the short name of the window you want.

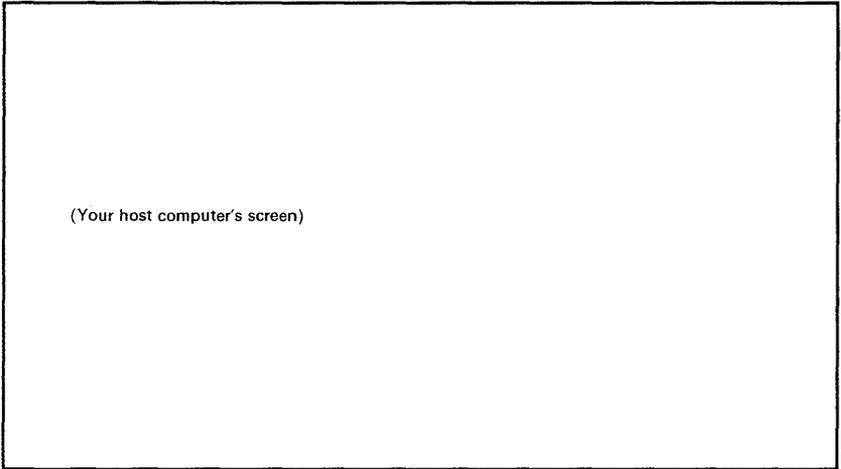
The window with the name you type will become the active window.

3. Press the WSCtrl key again to go back to your work.

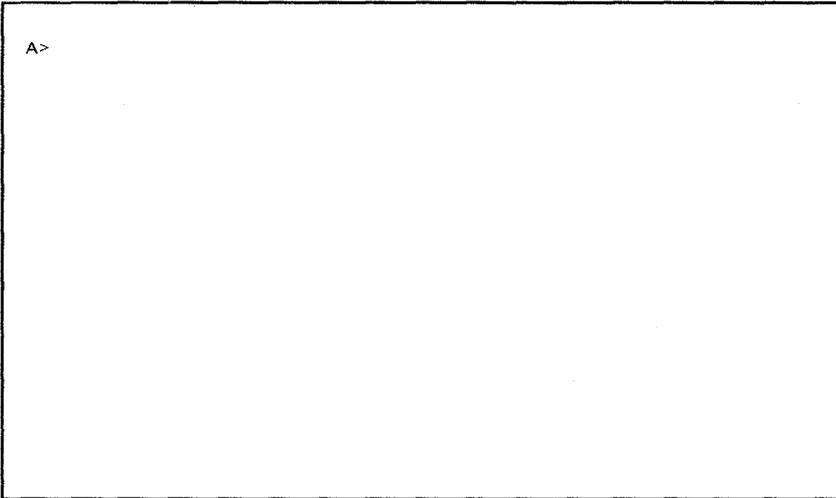
If you have windows that overlap on your screen, you will see some interesting effects when you choose a new window. The active window will always be on top. The other windows may be completely or partly covered.

Choosing Windows When They Fill the Entire Screen

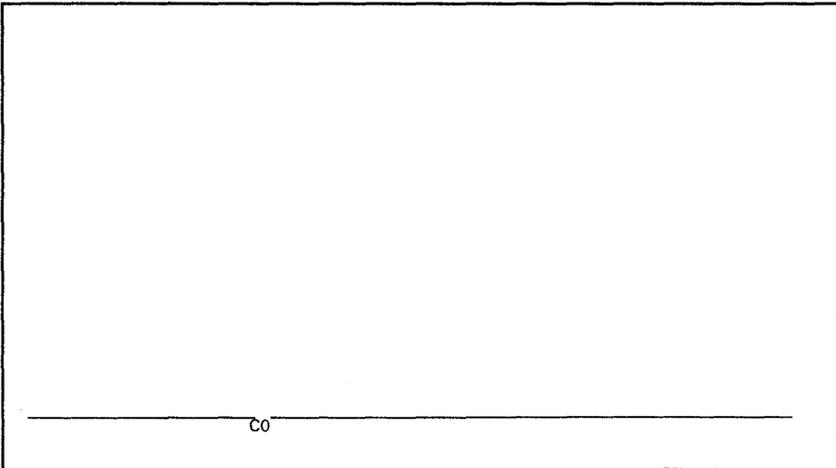
If you are not using the default control program, or if you set up your own control program, your screen may look like this:



Or this:



Or this:



One of these may be the first of your windows. It is the “active” window. It covers the entire screen, and doesn’t look like a window. You can’t see its border, and you can’t see the other windows.

To look at another window:

1. Press the Jump key.

The next window in alphabetical order will appear. It becomes the “active” window. The windows are kept in alphabetical order by their short names. When the windows fill the screen you can see the names of the windows. The names appear in the border.

2. To go to the next window in order, press the Jump key again.
3. To get back to the first window again, keep pressing the Jump key.

Now, you know how to find and select your windows.

Enlarging and Reducing Windows That Do Not Fill the Screen

If you have changed the size of your windows so that they do not fill the entire screen, they may be too small to see very much in them. You can use them that way. Just move the cursor to the edge of the active window. When the cursor reaches the edge, any text that is outside the border where you can't see it will move so you can see it. Try it; it really works. You may decide that you want to make the window larger so you can see as much as possible and work more easily.

To enlarge a small window to fill the screen:

1. Use the Jump key to choose the small window you want to enlarge.
2. Press the Enlarge key once.

The active window will enlarge to fill the screen completely.

To reduce an enlarged window to its smaller size again:

1. Press the Enlarge key once. 

The enlarged window shrinks back to its smaller size. If the window does not become small, it is a full-size window. You must change its size before you can enlarge and reduce it with the Enlarge key. You can read about changing the size of your windows in Chapter 9.

Finding the Name of a Full-Size Window on Your Screen

When the active window is full size and you jump to another window, it, too, will be full size. If you are not sure which window you are looking at, you can:

- Reduce the size of your active window.

Or, if all of your windows are still full size:

1. Press the WSCtrl key.
2. Press the PF1 key, and this list should appear on your screen.

```
SCRN:WINDOWS WINDOWS
0:ABCD      A:PC1
           B:HOST1
1:DCBA      C:NOTEPAD1
           D:NOTEPAD2
2:BA
3:DCA
4:
5:
6:
7:
8:
9:
```

It lists your windows and shows which window is active. The window shown in the box is the active window. For example, in this list, window A is active.

3. If you want to remove the list to see the right side of the screen, press the PF1 key again.
4. Press the WSCtrl key to go back to using the active window.

Chapter 3. Using Your Keyboard with the Control Program

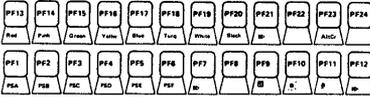
Using Your Keyboard with the Control Program

You should get to know your keyboard. It is the way that you “talk” to your sessions and the system. In this chapter we will examine the keyboard in more detail.

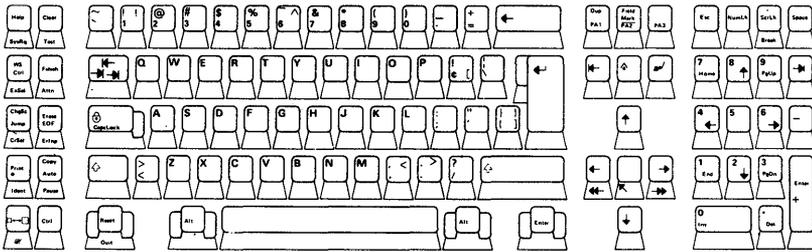
How Is the Keyboard Organized?

Your keyboard is divided into 5 areas:

Program Function Keys



Numeric Keypad



**Left
Control
Keys**

Typewriter Keyboard

**Right
Control
Keys**

1. Left control keys
2. Program function keys
3. Typewriter keys
4. Right control keys
5. Numeric keypad.

Most of the typewriter keys you will use work like the keys on a typewriter. Some of the keys that have more than one use are shown with:

- Markings on the front side (alternate case)
- Markings in different colors (the black and the blue)

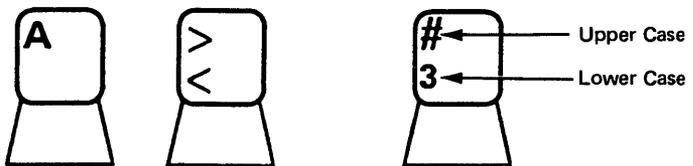
Others act as toggle switches (press once to turn on the function, press again to turn it off)

How to use these keys is explained in the next sections.

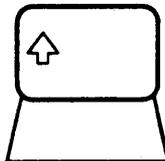
Using Upper and Lower Case

Most keys have an upper and lower case. The letters A through Z, the numbers 1 through 0, and the special symbols have upper and lower case. These work like the keys on a typewriter.

For lower case, press the key by itself.

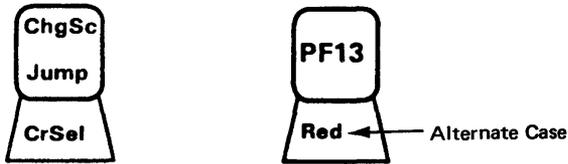


For upper case, press and hold the Shift key and then press the key you want.



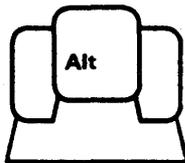
Using Alternate Case - the Marks on the Front

You will notice that some of the keys are labeled on the front. For example:



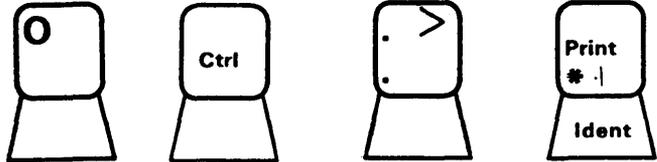
The markings on the front are for the alternate function.

For alternate case, press and hold the Alt key and then press the key you want.



Using Keys with Black and Blue Markings

Most of the keys on your keyboard have black markings. Some keys have blue markings, and others have both. For example:



The keys with the black markings work as labeled when you are using a personal computer, a host computer, or a note pad session, or when controlling your work station in control mode.

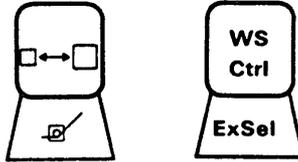
In general, the keys with the blue markings work as labeled when you are working with a PC session.

The keys with both black and blue markings work in two ways:

1. The blue markings work only in a PC session.
2. The black markings work everywhere else.

Using Toggle Keys

The toggle keys work like switches. Press them once to turn them on, and press them again to turn them off. For example:



Try pressing these keys to see how they work.

What Do the Keys Do?

If you want to know what a key does, you can look it up in Appendix B in this book. Appendix B contains a table that is divided into sections by keyboard area.

Using the Keyboard Templates

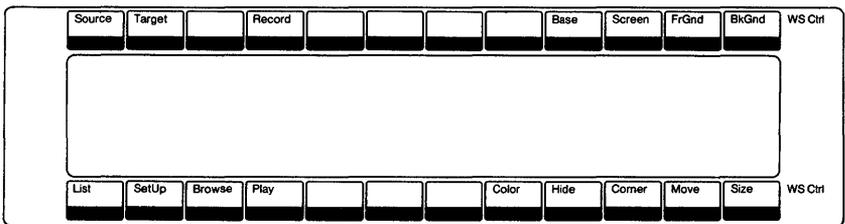
The two templates that came with your system fit around the PF keys on your keyboard. They help you remember what the PF keys do. Each template has two sides. One of the templates has these sides:

- Work Station Control
- Work Station Control and Entry Assist.

The other template has these sides:

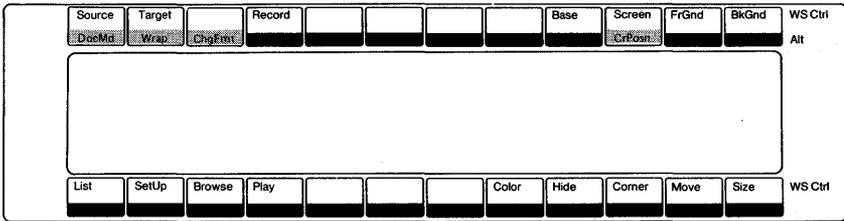
- Work Station Control, Entry Assist, and X.25 Network Communications
- Blank.

The Work Station Control side looks like this:



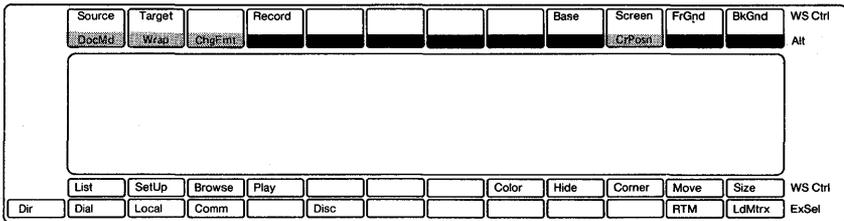
It is the side you should begin with.

The Work Station Control and Entry Assist side looks like this:



Use this side if your host computer has Entry Assist. The *IBM 3270 Information Display System: Entry Assist RPQ (8K1147) User's Guide*, GA23-0049, explains how to use the Entry Assist keys.

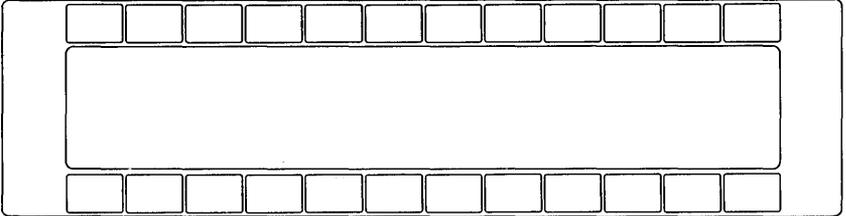
The Work Station Control, Entry Assist, and X.25 Network Communications side looks like this:



Use this side if your host computer has Entry Assist and is connected to an X.25 network. The *IBM 3270 Information Display System: X.25 Operation*, GA23-0204, describes how to use the X.25 keys.

Blank

The blank side looks like this:



You can use this side to create your own template. Fill it in as a reminder of the PF keys that you use with one of your programs.

Note: Both templates have the same Order Number, 5126-4080.

Chapter 4. Using a Personal Computer Session

In this chapter we will show you how to use a personal computer session. You will learn how to:

- Choose a personal computer session.
- Use DOS commands and run programs in your personal computer session.

Choosing a Personal Computer Session

After you have turned on your system and your windows are on the screen, you can choose a PC session.

1. Press the Jump key until you find the personal computer window you want.
2. If your windows are not enlarged, press the Enlarge key to make the personal computer window fill the screen.

-
3. If DOS is running in that session, look for the DOS ready message:

```
A>
```

Or:

```
C>
```

4. Or, if a PC program is running in that session, look for the information or messages that the program normally puts on the screen.

You are now ready to begin using your PC session. Each PC session looks and works as if it were an IBM Personal Computer. You may have DOS running or you may have a Personal Computer program running.

At any time, you can use the Jump key to go to another session.

Using DOS Commands and Running Programs in Your PC Session

After you have chosen the PC session you want to use, you can:

- Enter any DOS command, if you have DOS running in that session.
- Start any PC application program that is assigned to that session.
- Use a PC application program if it is already running.
- Enter the BASIC or BASICA commands to write a BASIC program.

What to Expect If You Have More than One Personal Computer Session

If you have more than one PC session, some programs running in one session may temporarily keep programs in other sessions from running or using the display screen. When this happens, you may see some of your programs stop running or your windows become blank. You can get a program that has stopped temporarily going again or you can get a blank window to return by pressing the Jump key until its window is active.

Note: If you are using more than one PC session, you must use the same level of DOS in all of them.

If you have difficulty running Personal Computer programs in your PC sessions, you may need Program Information Files (PIFs) on the diskette or fixed disk with the program. Contact your supervisor or the person you call for help with using your work station for more information about PIFs. You can also read the *IBM 3270 PC Control Program Reference* manual for information about:

- Describing your application programs to the system (Chapter 6).

What You Can Do If You Run Out of Space in a PC Session

Once you start using a PC session, you may find that it is not large enough.

Why You May Need More Space

Some programs may need more space than a session has available.

Other programs run faster with extra space.

What You Can Do

If you only have only one PC session and it is too small, you can't run your program, or make the program run faster.

If you have more than one PC session, the simplest solution is to start the program in another PC session that is large enough. Of course, you may not have a larger session to use. You may also have to stop a program that is already running in the other session.

If this doesn't solve your problem, you can contact your supervisor or the person you call for help with using your work station for assistance. You can also read the *IBM 3270 PC Control Program Reference* for information about:

- Temporarily combining and splitting your windows (Chapter 6).
- Permanently changing the way your system is set up (Appendix A).

For More Information about Personal Computing

If you are new to personal computing, you should refer to these books:

- For information about using DOS:

Disk Operating System User's Guide

Disk Operating System by Microsoft

Disk Operating System Quick Reference Card.

- For information about using Personal Computer programs:

The user's manuals that come with the programs.

- For information about programming with BASIC or BASICA:

BASIC by Microsoft.

Chapter 5. Using a Host Computer Session

This chapter explains how to use a window assigned to a host computer session.

Choosing a Host Session

1. Press the Jump key to choose the host computer window you want.
2. If your windows are not enlarged, press the Enlarge key to make the host window the screen.
3. Look for the information or prompts that your host normally puts on the screen.
4. Log on as usual.

What You Can Do with Your Host Sessions

After you have chosen the host session you want to use, you can:

- Enter any host command that your host accepts.
- Run any host application program that is available.

Refer to your instructions or user's manual for your host system.

At any time, you can use the Jump key to go to another window.

When you are done with your host session, log off as you normally would.

If your host is “down” (not working), follow your normal instructions for reporting a computer problem.

For More Information

If you are new to host computing, you may want to read these books:

- For information about using VM/370 CMS:

VM/SP: CMS Primer, SC24-5236

VM/SP: CMS User's Guide, SC19-6210

VM/SP: CMS Command and Macro Reference, SC19-6209

VM/SP: System Product Editor User's Guide, SC24-5220

VM/SP: System Product Editor Command and Macro Reference, SC24-5221

VM/SP: Quick Guide for Users, SX20-4400

VM/SP: CP Command Reference for General Users, SC19-6211

- For information about using OS/VS2 TSO:

OS/VS2 TSO Terminal User's Guide, GC28-0645

OS/VS2 TSO Command Language Reference, GC28-0646

Chapter 6. Using a Notepad Session

In this chapter we explain how you can:

- Use a window assigned to a notepad session
- Type in multi-colors in a note pad window
- Save the contents of the note pad window.

Choosing a Notepad

1. Press the Jump key to choose the notepad window you want.
2. If the window is not enlarged, press the Enlarge key to make the notepad window fill the screen.
3. Type anything you want in this window.

At any time, you can use the Jump key to go to another window.

Typing in Multi-Colors or Highlighting in a Notepad Window

You can type in highlighted text in notepad windows. If you have a color display, you can also type in multi-colors in your notepad windows.

1. Press the Jump key the notepad window you want.
2. If the window is not enlarged, press the Enlarge key to make the notepad window fill the screen.
3. Move the cursor to the place in the window you want to begin typing in a color.
4. Press and hold the Alt key and then press the one of the Highlighting keys (PF9 through 11) or one of the Color keys (PF13 through PF20). You can press one of the Highlighting and then press one of the Color key for highlighting in color.

You will see a little stick figure appear at the bottom of the screen and a small football shape in the color you chose.

5. Type what you want to appear in color.
6. If you want to change colors, repeat Steps 3 through 5, but press a different color key.
7. When you want to turn off the highlighting or color, press and hold the Alt key and then press either the No Highlighting key (PF12) or the Base key (PF21).

Saving the Notes in Your Notepads

Whenever you type notes in your notepad windows, they are temporary. If you turn your system off, your notes go away. If you want to keep your notes, you can save them before you turn off your system.

To save your notepads:

1. Make sure that you are not in workstation control mode.
2. Press the Jump key to choose a personal computer window.
3. Make sure that your default drive contains your control program.

If it doesn't, insert your system diskette into the default drive or change your default drive to your fixed disk. For example:

```
A>c:
```

4. Type: `indsave notepad`

```
A>indsave notepad
```

Or:

```
C>indsave
```

That's all there is to it. The notes in any of your notepad windows will be saved and you can use them the next time you turn on your system. **INDSAVE NOTEPAD** saves only your notepads. **INDSAVE** saves your notepads, screens, and keystroke recordings.

Getting Back the Your Notes

If you have made notes in your notepads and saved them, you can get the notes back. When you turn on the system, it doesn't get your notes automatically. You have to get them.

Here's how you do it:

1. Make sure that your workstation is not in control mode.
2. Press the Jump key to make a personal computer session active.
3. Type:

```
A>indrstr notepad
```

Or:

```
A>indrstr
```

INDRSTR NOTEPAD will get only your notepads. INDRSTR will get your windows, notepads, and keystroke recordings.

Note: You can get your notepads back automatically by adding the INDRSTR or INDRSTR NOTEPAD command to a system file called AUTOEXEC.BAT. See Chapter 12 if you want to use this file.

Chapter 7. Sending Files Between a Personal Computer and a Host

One of the advantages the 3270 PC offers is its ability to copy files from a diskette or from your fixed disk and send them to one of your hosts and send them back again. In this chapter we explain how you can move:

- Personal computer files to a VM or TSO host
- VM or TSO files to a personal computer.

What You Will Need

To send and receive files, you will need the 3270 PC Utilities. You can get utilities from one of these places:

- Your fixed disk or your system diskette, if you copied them there.

If you are using the default control program, they are already there.

- A separate diskette, if you copied them there.
- The second 3270 PC Control Program Diskette (2 of 2).

If you are sending files from a diskette or receiving files to a diskette, you will need that diskette.

Sending Personal Computer Files to a VM/CMS Host

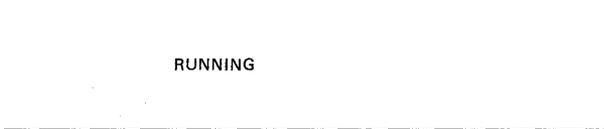
To send a file to a disk controlled by your VM/CMS host:

1. Jump to a VM/CMS host window.
2. If it is not already enlarged, you can enlarge it.
3. If you are not already logged on, log on to your VM host.
4. Make sure that the CMS ready message is the last thing on your screen:



R:

Or, if your screen is clear, make sure that no applications are running and that nothing is holding your CMS session. The word **RUNNING** should appear in the lower right corner of your screen.



RUNNING

If the word is **HOLDING** press the Reset key before you try to send any files to the host.

Note:

If you receive any messages in your host window while you are sending files, the files may not be received. To

keep messages from interfering, you can type this VM/CMS command and press the Enter key to temporarily stop messages:

```
set msg off
```

When you want to receive messages again, type this command and press the Enter key:

```
set msg on
```

5. Jump to one of your PC windows.
6. Make sure that your default drive contains the 3270 PC Utilities.

If the utilities are on a diskette, either your system diskette or a separate diskette, insert it into drive A, and make sure that drive A is the default.

If the utilities are on your fixed disk, make sure that drive C is the default.

For example, if your default drive is A and the utilities are on your fixed disk, type:

```
A>c:
```

Your default drive will change to the fixed disk:

```
C>
```

7. Type the SEND command next to the DOS ready message.

For example:

```
C>send a:pcfile.txt e:cmsfile script a1 (ascii crlf)
```

This command sends a file named PCFILE.TXT from a diskette in your A drive to the A-disk on your VM host in a host window named E.

- If you do not have a file named CMSFILE SCRIPT on your A-disk, PCFILE.TXT will be added to your A-disk with the name CMSFILE and a type SCRIPT. The length of all the records in CMSFILE will be fixed at 80 characters.
- If you have a file named CMSFILE SCRIPT on your A-disk, PCFILE.TXT will replace the CMSFILE on your A-disk. Everything that was in it will go away.

Note: This example illustrates only one form of the SEND command. It may work for you, or it may not. The next section and the examples explain how you can write other versions of the SEND command that you may need.

-
8. Press the Enter key, and this message will appear:

```
INDFT001 File transfer command being processed

INDFT002 Number of bytes of file transferred so far: ==>  xxxxxx
```

9. Wait until you see this message:

```
INDFT003 File transfer complete
```

That's all there is to it. You can now go to your VM/CMS host session and find the file you sent.

How to Write the SEND Command

There are several parts to the SEND command.

A **B** **C** **D** **E** **F**

SEND d: path filename.ext h:fn ft fm

G **H** **I** **J**

(ASCII CRLF APPEND LRECL n RECFM x)

If you need the parts shown in upper case, type them exactly as shown. If you need the parts shown in lower case, you must supply your own names or values. The parts between the parentheses are optional.

The parts of the Send command are:

- A SEND** The name of the command. (You always need this name.)
- B d:** The diskette or fixed disk drive on which the file you want to send is located: a, b, c, or d. (If the file to be sent and the utilities are on separate diskettes, this part must name drive B. If, in addition, you have only one diskette drive and you are told to insert a diskette into drive B, insert it into drive A instead. If the file to be sent and the utilities are on your fixed disk or on the same diskette, this part is optional.)
- C path** The subdirectories that the file is in. (Include this part only if the file is in a subdirectory.)
- D filename.ext** The name of the file you want to send. (Include the extension if the file has one.)
- E h:** The short name of the window that contains the VM/CMS host to which you want to send the file. (This part is optional, if you have only one host.)
- F fn ft fm** The name that the file is to have on your CMS disk. (You need the filename, filetype, and filemode. You can make up a new name or name a file that is already on your CMS disk. If you use a new name, the file that you send will be added to your CMS disk. If you use the

name of a file that is already there, the file that you send will replace or be added to the old file.)

- G ASCII CRLF** The control words for ASCII to EBCDIC translation and carriage return and line feed codes. (You need them for text or source files that you want to look at or edit - SCRIPT files, for example. You do not need them for binary files.)
- H APPEND** The control word to add the file that you send to the end of a CMS file. (You can omit this part if you want the file that is sent to replace an old CMS file.)
- I LRECL n** The record length that the file you send should have on your CMS disk. (This part is optional. Include a record length only if you want the file you send to have a record length other than 80. Replace the n with length you want. If you omit this option, the file will have a record length of 80.)
- J RECFM x** The record format that the file you send should have on your CMS disk: v or f. (This part is optional. If you want variable or fixed length records in the file that you send, replace the x with v for variable or f for fixed. If you omit this option, the file will have variable length records)

Examples

- **Sending a PC file from your default drive and adding it as a new file on your CMS A-disk.**

```
send pcfiler.txt e:cmsfile script a1  
      (ascii crlf lrecl 132 recfm v)
```

This command sends a file named PCFILE.TXT from your default drive to your VM host in your host window named E. It creates a new SCRIPT file named CMSFILE on your A-disk. The records in the file may vary in length up to a maximum of 132 characters.

- **Sending a PC file from your default drive to replace a file on your CMS A-disk.**

```
send a:pcfiler.txt e:cmsfile script a1  
      (ascii crlf)
```

This command sends a PC file named PCFILE.TXT from your A drive to your CMS A-disk in your host window named E. The file replaces a SCRIPT file named CMSFILE. The new CMSFILE will have the same record length and format as the old CMSFILE.

If you do not have a file called CMSFILE SCRIPT on your A-disk, PCFILE will be added to your A-disk as a new file called CMSFILE SCRIPT. The records in the file may vary in length up to a maximum of 80 characters.

-
- **Sending a PC file from a drive other than your default to replace a file on your CMS B-disk.**

```
send a:pcfile.txt e:cmsfile script bl  
      (ascii crlf)
```

This command sends a PC file named PCFILE.TXT from a diskette in drive A to your CMS B-disk in your host window named E. It replaces a SCRIPT file named CMSFILE.

If you do not have a file called CMSFILE SCRIPT on your B-disk, PCFILE will be added to your B-disk as a new file called CMSFILE SCRIPT. The records in the file may vary in length up to a maximum of 80 characters.

- **Sending a file from your default drive and adding it to the end of a file on your CMS A-disk.**

```
send c:pcfile.txt cmsfile script al  
      (ascii crlf append)
```

This command sends a PC file named PCFILE.TXT from your fixed disk to your only VM host. You do not need to name the host window if you have only one. It adds the file to the end of a SCRIPT file named CMSFILE on your CMS A-disk.

- **Sending a file from a subdirectory on your default drive to your CMS A-disk.**

```
send c:subdir1 pcfile.txt cmsfile script al  
      (ascii crlf)
```

This command sends a file named PCFILE.TXT from a subdirectory named SUBDIR1 on your fixed disk (default drive) to your VM host. It replaces a SCRIPT file, named CMSFILE, on your CMS A-disk.

Receiving Files at Your Personal Computer from a VM/CMS Host

You can place CMS files on a diskette or on your fixed disk in one of your Personal Computer sessions.

To receive a CMS file at your Personal Computer session:

1. Jump to the VM/CMS host window with the file you want.
2. If it is not already enlarged, you can enlarge it.
3. If you are not already logged on, log on to your VM host.
4. Make sure that the CMS ready message is the last thing on your screen:

```
R:
```

Or, if your screen is blank, make sure that no applications are running and that nothing is holding your CMS session. The word **RUNNING** should appear in the lower right corner of your screen.

```
RUNNING
```

If the word is **HOLDING** press the Reset key before your try to receive any files at your personal computer.

-
5. Jump to one of your PC windows.
 6. Make sure that your default drive contains the 3270 PC Utilities.

If the utilities are on a diskette, either your system diskette or a separate diskette, insert it into drive A, and make sure that drive A is the default.

If the utilities are on your fixed disk, make sure that drive C is the default.

For example, if your default drive is A and the utilities are on your fixed disk, type: c:

```
A>c:
```

Your default drive will change to C.

```
C>
```

7. Type the RECEIVE command next to the DOS ready message

For example:

```
C>receive a:pcfile.txt e:cmsfile script a1 (ascii crlf)
```

This command moves a copy of a file named CMSFILE SCRIPT from your CMS A-disk on a VM host in a host window named E to a diskette in your A drive.

-
- If you do not have a file named PCFILE.TXT on your A drive, CMSFILE will be added to the diskette with the name PCFILE.TXT.
 - If you have a file named PCFILE.TXT on the diskette in A drive, CMSFILE will replace the PCFILE.TXT on the diskette. Everything that was in it will go away.

This example illustrates one form of the RECEIVE command. It may work for you, or it may not. The next section and the examples explain how you can write other versions of the RECEIVE command that you may need.

8. Press the Enter key and this message will appear:

```
INDFT001 File transfer command being processed  
  
INDFT002 Number of bytes of file transferred so far: ==> xxxxxx
```

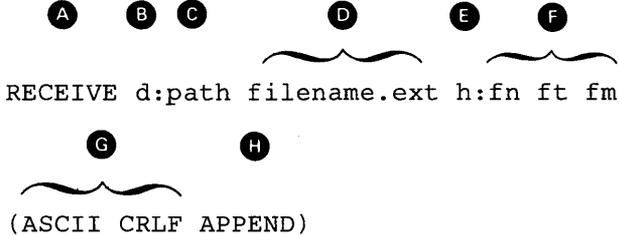
9. Wait until you see this message

```
INDFT003 File transfer complete  
C>
```

That's all there is to it. You should now be able to use the DIR command for the drive you named and find the file you received.

How to Write the RECEIVE Command

There are several parts to the RECEIVE command.



If you need the parts shown in upper case, type them exactly as shown. If you need the parts shown in lower case, you must supply the names or values that you want. The parts between the parentheses are optional.

- [A] RECEIVE** The name of the command. (You always need this name.)
- [B] d:** The diskette reader or fixed disk on which you want to put the file: a, b, c, or d. (If the 3270 PC Utilities are on a diskette and the file is to be placed on a separate diskette, this part must name drive B. If, in addition, you have only one diskette drive and you are told to insert a diskette into drive B, insert it into drive A instead. If you want to put the file onto your default drive, this part is optional.)
- [C] path** The subdirectories into which you want to put the file. (Include only if you want to put the file into a subdirectory.)

-
- Ⓓ **filename.ext** The name you want the file to have on your on your diskette or fixed disk. (You can make up a new name or name a file you already have. You can include an extension to the filename. If you use a new name, the file that you receive will be added to your diskette or fixed disk. If you use the name of an old file, the file that you receive will replace or be added to the old file.)
 - Ⓔ **h:** The short name of the window contains the VM/CMS host session from which you want to get the file. (You do not need this part if you have only one host.)
 - Ⓕ **fn ft fm** The name of the file you want to receive from your CMS disk. (You need the filename, filetype, and filemode.)
 - Ⓖ **ASCII CRLF** The control words for EBCDIC to ASCII translation and carriage return and line feed codes. (You need these for text or source files that you want to look at or edit. You do not need these control words for binary files.)
 - Ⓗ **APPEND** The control word that adds the file that you want to receive to the end of an old file. (You can omit this part, if you want the CMS file received to replace an old file.)

Examples

- **Receiving a file from your CMS A-disk at your default drive for a PC session.**

```
receive pcfile.txt e:cmsfile script a1  
      (ascii crlf)
```

This command sends a SCRIPT file named CMSFILE from your CMS A-disk in a host window named E to your PC session. It adds the file to your default drive (diskette or fixed disk) with the name, PCFILE.TXT.

- **Receiving a file from your CMS B-disk and replacing a file on a drive other than your default.**

```
receive a:pcfile.txt e:cmsfile script b1  
      (ascii crlf)
```

This command sends a SCRIPT file named CMSFILE from your CMS B-disk in a host window named E to a drive other than the default for your PC session. It replaces a file named PCFILE.TXT on a diskette in drive A.

- **Receiving a file from your CMS A-disk and adding it to a file on your default drive.**

```
receive c:pcfile.txt e:newfile script a1  
      (ascii crlf append)
```

This command sends a SCRIPT file named CMSFILE from your CMS A-disk in a host window named E to your PC session. It adds it to the end of a file named PCFILE.TXT on your fixed disk.

-
- **Receiving a file from your CMS A-disk and placing it in a subdirectory on your default drive.**

```
receive c: subdir1 pcfiler.txt e:cmsfile
      script al (ascii crlf)
```

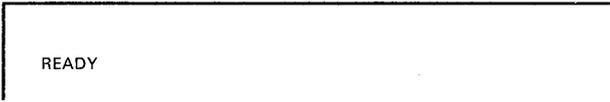
This command sends a **SCRIPT** file named **CMSFILE** from your CMS A-disk to your fixed disk. It replaces a file named **PCFILE.TXT** in a subdirectory named **SUBDIR1**.

Sending Personal Computer Files to a OS/VS2 TSO Host

You can send files to your TSO system volume as data sets or as members of partitioned data sets.

To send a file to your TSO host:

1. Jump to your TSO host window.
2. If it is not already enlarged, you can enlarge it.
3. If you are not already logged on, log on to your TSO host.
4. Make sure that the TSO ready message is the last thing on your screen.



READY

Note:

If someone else is using the partitioned data set, you will not be able to send a file to your TSO host.

5. Jump to one of your PC windows
6. Make sure that your default drive contains the 3270 PC Utilities.

If the utilities are on a diskette, either your system diskette or a separate diskette, insert it into drive A, and make sure that drive A is the default.

If the utilities are on your fixed disk, make sure that drive C is the default.

For example, if your default drive is A and the utilities are on your fixed disk, type: c:

```
A>c:
```

Your default drive will change to C.

```
C>
```

7. Type the SEND command next to the DOS ready message.

For example:

```
C>send a:pcfile.txt g:tsodset.script ascii crlf
```

This command sends a file named PCFILE.TXT from a diskette in your A drive to your TSO volume on your TSO host in a host window named E.

- If you do not have a data set named TSOFIELD.SCRIPT on your TSO volume, PCFILE.TXT will be added with the name TSOFIELD.SCRIPT. The length of all the records in TSOFIELD.SCRIPT will be fixed at 80 characters.

-
- If you have a data set named TSOFILE.SCRIPT on your TSO volume, PCFILE.TXT will replace the TSOFILE.SCRIPT on your volume. Everything that was in it will go away.

This example illustrates one form of the SEND command. It may work for you, or it may not. The next section and the examples explain how you can write other versions of the SEND command that you may need.

8. Press the Enter key or the <-' key and this message will appear

```
INDFT001 File transfer command being processed  
  
INDFT002 Number of bytes of file transferred so far: ==> xxxxxx
```

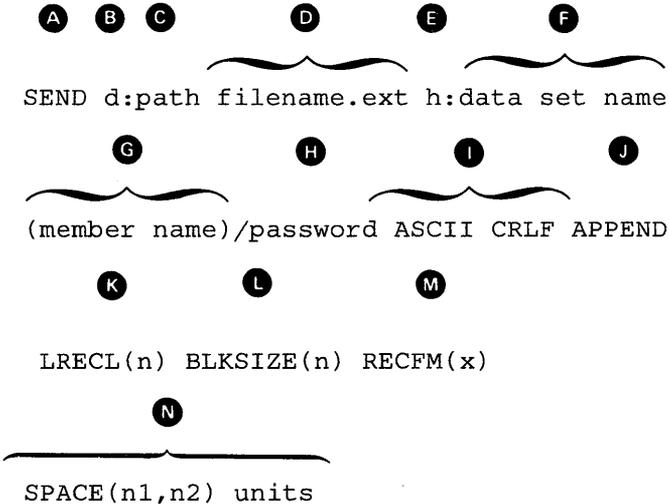
9. Wait until you see this message

```
INDFT003 File transfer complete  
C>
```

That's all there is to it. You can now go to your TSO host session and find the file you sent.

How to Write the SEND Command

There are several parts to the SEND command.



If you need the parts shown in upper case, type them exactly as shown. If you need the parts shown in lower case, you must supply the names or values that you want.

- A SEND** The name of the command.
(You always need this name.)
- B d:** The diskette or fixed disk drive on which the file to be sent is located: a, b, c, or d. (If the file to be sent and the utilities are on separate diskettes, this part must name drive B. If, in addition, you have only one diskette drive and you are told to insert a diskette into drive B, insert it into drive A instead. If the file to be sent and the utilities are on your

fixed disk or in the same diskette, this part is optional.)

- C path** The subdirectories that the file to be sent is in. (Omit this part, if the file is not in a subdirectory.)
- D filename.ext** The name of the file to be sent. (Include the extent if it has one.)
- E h:** The name of the TSO host session you want to send the file to. (You can omit this name, if you have only one host. If you have more than one host this is the short name, of the TSO host window you want)
- F data set name** The data set name the file you send is to have on your TSO volume. (You need the data set name. You can qualify the name. You can make up a new name or name a data set that is already on your TSO volume. If you use a new name, the file that you send will be added to your TSO volume. If you use the name of a data set that is already there, the file that you send will replace or be added to the old data set.)

-
- G (member name)** The member name if the file is to be put into a partitioned data set.
- Note: If someone else is using the partitioned data set, you will not be able to send a file to your TSO host.*
- H /password** The password of the data set if it has one.
- I ASCII CRLF** The control words for ASCII to EBCDIC translation and carriage return and line feed codes. (You need these control words for text or source data sets that you want to look at or edit - SCRIPT data sets, for example. You do not need them for binary data sets.)
- J APPEND** The option that adds the file tha you send to the end of an old TSO data set. (You can omit this part, if you want the file you send to replace an old TSO data set.)
- K LRECL(n)** The record length for a new data set on your TSO volume: n = 1 through 132. (This part is optional. If you want to set the record length for a new data set, replace the n with length you want. If you omit this part, you will get a record length of 80. If you included member name, do not include this part.)

-
- **BLKSIZE(n)** The size of the blocks of data in a new data set on your TSO volume. (This part is optional. If you want to set the block size for a new data set, replace the n with the size you want. If you omit this part, the block size will be the same as the record length. If you included member name, do not include this part.)

 - **RECFM(x)** The record format for a new data set on your TSO volume: x = v, f, or u. (This part is optional. If you want variable, fixed, or undefined length records in the data set, replace the x with v, f, or u. If you omit this option, you will get variable length records. If you included member name, do not include this part.)

 - **SPACE(n1,n2) units** The amount of space to be set aside for a new data set on your TSO volume: n1, n2, units TRACKS, or CYLINDERS. (This part is optional. If you want to set aside a certain number of blocks, tracks, or cylinders for the new data set, replace the units with the type of space you want - AVBLOCKS(units), TRACKS, or CYLINDERS; if you want AVBLOCKS, include the value. Then replace n1 with the amount of that space you want the data set to occupy. You can also replace n2 with an amount to be added if the data set needs more

space of the space than you asked for with n1. These values are similar to the values on the TSO ALLOCATE command. If you omit this part, you will get space for one block, and the length of the block will be set by the BLKSIZE or LRECL options. If you included member name, do not include this part.)

Examples

- **Sending a file from your default drive to replace a file on your TSO host.**

```
send pcfiler.txt g:tsodset.script ascii crlf
```

This command sends a file named PCFILE.TXT from your default drive (fixed disk) to your TSO host in a host window named G. It replaces a data set named TSODSET.SCRIPT on your TSO volume.

- **Sending a file from a drive other than the default to your TSO host.**

```
send a:pcfiler.txt g:tsodset.script  
ascii crlf
```

This command sends a file named PCFILE.TXT from a diskette in drive A to your TSO host in a host window named G. It replaces a data set named TSODSET.SCRIPT on your TSO volume.

-
- **Sending a file from your default drive to your TSO host and adding it to the end of a TSO data set.**

```
send a:pcfile.txt g:tsodset.script ascii  
      crlf append
```

This command sends a file named PCFILE.TXT from a diskette in drive A to your TSO host in a host window named G. It adds it to the end of a data set named TSODSET.SCRIPT on your TSO volume.

- **Sending a file to your TSO host and adding it to the end of a set that has a password.**

```
send a:pcfile.txt g:tsodset.script/brillig3  
      ascii crlf append
```

This command sends a file named PCFILE.TXT from a diskette in drive A to your TSO host in a host window named G. It adds it to the end of a data set named TSODSET.SCRIPT on your TSO volume. This data set has a password of BRILLIG3.

- **Sending a file from a subdirectory on your fixed disk to a partitioned data set on your TSO host.**

```
send c: subdir1 pcfile.txt  
      g:tsodset.script(member1) ascii crlf
```

This command sends a file named PCFILE.TXT from a subdirectory named SUBDIR1 on your fixed disk to your TSO host in a host window named G. It replaces a member named MEMBER1 in a partitioned data set named PCFILE.SCRIPT on your TSO volume.

-
- **Sending a file to a partitioned data set that has a password.**

```
send a:pcfile.txt g:tsodset.script  
      (member2)/slithy11 ascii crlf append
```

This command sends a file named PCFILE.TXT from a diskette in drive A to your TSO host in a host window named G. It adds it as a member named MEMBER2 to a partitioned data set named TSODSET.SCRIPT on your TSO volume. This data set has a password of SLITHY11.

- **Sending a file from your default drive and adding it as a new data set on your TSO volume.**

```
send pcfile.txt g:tsodset.script/vorp34  
      ascii crlf lrecl(132) blksize(132)  
      recfm(v) space(20,10) tracks
```

This command sends a file named PCFILE.TXT from your default drive to your TSO host. It adds it as a new data set named TSODSET.SCRIPT on your TSO volume. A password of VORPAL34 is assigned to it. The records in the data set may vary in length up to a maximum of 132 characters. The data blocks are the same length as the records. 20 tracks are set aside for this data set. If more tracks are needed, they will be added in groups of 10.

Receiving OS/VS2 TSO Data Sets at Your Personal Computer

You can receive a data set or a member of a partitioned data set from a TSO host at one of your Personal Computer sessions.

To send a data set to a Personal Computer session.

1. Jump to the TSO host window you want to receive the data set from.
2. If the window is not already enlarged, you can enlarge it.
3. If you are not logged on, log on to your TSO host.
4. Make sure that the TSO ready message is the last thing on your screen:



READY

5. Jump to one of your PC windows.
6. Make sure that your default drive contains the 3270 PC Utilities.

If the utilities are on a diskette, either your system diskette or a separate diskette, insert it into drive A, and make sure that drive A is the default.

If the utilities are on your fixed disk, make sure that drive C is the default.

For example, if your default drive is A and the utilities are on your fixed disk, type: c:

```
A>c:
```

Your default drive will change to C.

```
C>
```

7. Type the RECEIVE command next to the DOS ready message.

For example:

```
C>receive a:pcfile g:tsodset.script ascii crlf
```

This command moves a copy of a data set named TSOFILE.SCRIPT from your TSO volume on a TSO host in a host window named G to a diskette in your A drive.

- If you do not have a file named PCFILE.TXT on your A drive, TSOFILE.SCRIPT will be added to the diskette with the name PCFILE.TXT.
- If you have a file named PCFILE.TXT on the diskette in A drive, TSOFILE.SCRIPT will replace the PCFILE.TXT on the diskette. Everything that was in it will go away.

This example illustrates one form of the **RECEIVE** command. It may work for you, or it may not. The next section and the examples explain how you can write other versions of the **RECEIVE** command that you may need.

8. Press the Enter key or the <-' key and this message will appear:

```
INDFT001 File transfer command being processed

INDFT002 Number of bytes of file transferred so far: ==> xxxxxx
```

9. Wait until you see this message

```
INDFT003 File transfer complete

C>
```

That's all there is to it. You can now use the **DIR** command and find the file you received.

How to Write the RECEIVE Command

There are several parts to the RECEIVE command.


RECEIVE d:path filename.ext h:data set name


(member name)/password ASCII CRLF APPEND

If you need the parts shown in upper case, type them exactly as shown. If you need the parts shown in lower case, you must supply the names or values that you want.

- A RECEIVE** The name of the command. (You always need this name.)
- B d:** The diskette reader or fixed disk on which the data set is to be placed: a, b, c, or d. (If the 3270 PC Utilities are on a diskette and the data set is to be placed onto a separate diskette, this part must name drive B. If, in addition, you have only one diskette drive and you are told to insert a diskette into drive B, insert it into drive A instead. If you want to put the data set onto your default drive, this part is optional.)

-
- C path** The subdirectories you want to put the data set in. (This part is optional. Include it only if the data set is to be put into a subdirectory on your fixed disk.)
 - D filename.ext** The name it is to be filed with. (You can make up a new name or name a file that is already on your on your diskette or fixed disk. If you use a new name, the data set that you receive will be added to your diskette or fixed disk. If you use the name of a file that is already there, the data set that you receive will replace or be added to the old file.)
 - E h:** The short name of the TSO window from which you want to get the data set. (This part is optional, if you have only one host. Include it if you have more than one host)
 - F data set name** The name of the data set you want or the name of the partitioned data set that contains the member you want to send to your PC session. (You must use the qualified name.)
 - G (member name)** The name of the member of a partitioned data set that you want to send to your PC session. (This part is optional. Include it only if the data set is a member of a partitioned data set)

-
- **/password** The password of the data set. (Include this part only if the data set has a password.)
 - **ASCII CRLF]** The control words for EBCDIC to ASCII translation and carriage return and line feed codes. (You need these control words if your want to be able to look at or edit the file. You do not need them for binary files.)
 - **APPEND** The control word that adds the data set to the end of an old file. (You can omit this part, if you want the TSO data set to replace an old PC file.)

Examples

- **Receiving a data set from a TSO host to the default drive for your PC session.**

```
receive pcfiler.txt g:tsodset.script  
ascii crlf
```

This command sends a data set named **TSODSET.SCRIPT** from your TSO volume in a host window named **G** to your PC session. It adds it to the default drive with the name, **PCFILE.TXT**.

- **Receiving a data set from a TSO host to a drive other than your default drive.**

```
receive a:pcfiler.txt g:tsodset.script  
ascii crlf
```

This command sends a data set named **TSODSET.SCRIPT** from your TSO volume in a host window named **G**. It replaces a file named **PCFILE.TXT** on a diskette in drive **A**.

-
- **Receiving a data set from a TSO host and adding it to a PC file.**

```
receive a:pcfile.txt g:tsodset.script
      ascii crlf append
```

This command sends a data set named TSODSET.SCRIPT from your TSO volume in a host window named G. It adds it to the end of a file named PCFILE.TXT on the diskette in drive A.

- **Receiving a data set from a TSO host and placing it in a subdirectory on your fixed disk.**

```
receive c: subdirl pcfile.txt tsodset.
      script ascii crlf
```

This command sends a data set TSODSET.SCRIPT from your TSO volume in a host window named G. It replaces a file named PCFILE.TXT in a subdirectory named SUBDIR1 on your fixed disk.

- **Sending a data set that has a password from a TSO host to your default drive.**

```
receive a:pcfile.txt g:tsodset.
      script/brillig3 ascii crlf append
```

This command sends a data set named TSODSET.SCRIPT from your TSO volume in a host window named G. The data set has the password BRILLIG3. The data set is added to the end of a file named PCFILE.TXT on your A-disk.

-
- **Receiving a member of a partitioned data set from a TSO host at your PC session.**

```
receive c: subdir1 pcfiler.txt g:tsodset.  
script(member1) ascii crlf
```

This command sends a member named MEMNER1 from a partitioned data set named TSODSET.SCRIPT in a host window named G. The member is placed on your fixed disk in a subdirectory named SUBDIR1. It replaces a file named PCFILE.TXT.

- **Receiving a member of a partitioned data set that has a password to your PC session.**

```
receive a:pcfiler.txt g:tsodset.  
script(member2)/slithy11 ascii crlf  
append
```

This command sends a member named MEMBER2 from a partitioned data set named TSODSET.SCRIPT in a host window named G. The data set has a password of SLITHY11. The member is added to a file named PCFILE.TXT on the diskette in diskette drive A.

Chapter 8. Printing What's on Your Screen

This chapter explains:

- How to print what is in your windows when you are using any one of these sessions:
 - Personal Computer
 - Host
 - Notepad.
- How to print in workstation control mode.
- How to stop the printer before it is finished.
- What you should know if your printed copy does not exactly match what is on your screen.

Printing What Appears in a Personal Computer Window

While you are working in a PC session, you can print a copy of what is in the window. Even if the window is not full size on your screen, you will get a printed copy of the full size window. You can only use the printer attached to your 3270 PC.

1. Make sure the PC window you want to print is active.

If it is not, press the Jump key until it is.

2. Press the Shift key and the Print key.

If you want to stop the printer before the entire screen is printed:

- Press the Alt key and the Reset key.

Printing What Appears in a Host Computer Window

If you are working in one of your host windows, you can print a copy of the screen, in two ways:

- On the printer attached to your 3270 PC.
- On a printer attached to your 3274 Control Unit.

Using the Printer Attached to Your 3270 PC

1. Press the WSCtrl key.

This line appears at the bottom of your screen.

```
WSCTRL _
```

2. Make sure the host window you want to print is active and enlarged to fill the screen.

If it is not, press the Jump key and then press the Enlarge key. If you do not enlarge the window, you will print only what appears in the window.

3. Press the Print key.

The line at the bottom of your screen changes to look like this:

```
WSCTRL PRINT SCR
```

4. Wait for the words PRINT SCR to disappear.
5. Press the WSCtrl key again to return to using your host session.

If you want to stop the printer before the entire screen is printed:

- Press the Alt key and the Reset key.

Using the Printer Attached to Your 3274 Control Unit

You can print what appears in your host window on a printer attached to your 3274 Control Unit. Even if the window is not full size on your screen, you will get a printed copy of the full size window.

You may not have this type of printer available to you. If you are not sure, ask your supervisor or the person you call for help with using your computer.

If you are not familiar with this type of printer, you can about it in the *IBM 3270 Information Display System: 3278 Display Station Operator's Guide*, GA27-2890, before you try to use it.

To print on your control unit's printer:

1. Make sure that the host window you want to print is active.

If the window is not full size on your screen, you will get a printed copy of the full size window.

2. Press the Print key.

The line at the bottom of your screen should look like this:



If it doesn't, press and hold the Ctrl key and then press the WSCtrl key. If you still don't see this, there is a problem with the printer.

If anything else appears, press the Alt key and the Reset key, and then refer to the *3278 Display Station Operator's Guide*, for instructions on what to do next.

To stop the printer:

- Press the Alt key and the Reset Key while you still see this □-■nn at the bottom of your screen.

Once you see this ■-■nn, the printer has already started printing. You cannot stop it.

Printing What Appears in a Notepad Window

If you are working with a notepad session in one of your notepad windows, you can print what is on the screen on the printer attached to your 3270 PC.

1. Press the WScTRL key.

This line appears at the bottom of your screen.



2. Make sure the notepad window you want to print is active and enlarged to fill the screen.

If it is not, press the Enlarge key. If you do not enlarge the window, you will only print what appears on the screen.

-
3. Press the Print key.

Did the line at the bottom of your screen change to look like this:



4. Wait for the words PRINT SCR to disappear.
5. Press the WSCTRL key again to return to using your notepad session.

If you want to stop the printer before the entire screen is printed:

- Press the Alt key and the Reset key.

Printing What Appears on Your Screen

You can print a copy of your screen, as it appears with all the windows showing on the printer attached to your 3270PC.

1. Make sure that you are in workstation control mode.
2. Press the Print key.

Stopping the Printer Before It Finishes Printing

To you want to stop your printer before it finishes printing:

- Press the Alt key and the Reset Key.

What If Your Printed Copy Does Not Match What You See on Your Screen?

What to Expect

Some printers can't print everything that you can display on your screen. The things that can cause difficulties are:

- Illustrations, charts, and drawings
- Graphic characters
- Programmed symbols
- Special symbols
- Underscores
- Color
- Highlighting.

What Some Printers Can and Can't Do

Here are some examples:

- IBM 5201 Quietwriter Printer

It cannot print in color and cannot print any symbols or characters that are not in its character sets.

- IBM 5216 Wheelprinter and IBM 5218 Printer

They cannot print in color and cannot print any symbols or characters that are not on their print wheels.

- IBM 5152 Personal Computer Graphics Printer

It cannot print in color. It can print personal computer graphics, underscored text, and some highlighted text.

- IBM 5182 Personal Computer Color Printer

It cannot print the background colors of your windows. It may print text in different colors than it appears on your screen, and the shades of the colors may vary slightly. It prints white text on your screen in black. This printer cannot print programmed symbols, underscored text, and highlighting.

Printers that can't print everything will still try to print as much as they can. They may:

- Substitute characters they can print for characters they can't print
- Not print some things at all
- Substitute colors they can print for the ones they can't.

Since there is such a variety in what you can do on your screen, you will have to try printing some of these things on your printer to see what will happen.

When to Suspect Something Is Wrong with Your Printer

Since your printed copies may not match what is on your screen, you may be wondering how to tell if something is wrong with the printer. In most cases, your printer should handle text correctly. If the letters and numbers on your screen are printed correctly, your printer is probably working. If they are incorrect, you should consult the booklet that came with your printer to check it out.

Chapter 9. Rearranging the Windows on Your Screen

In this chapter we will explain how to:

- Get help information (page 9-2).
- Change the size and location of the windows on your screen (page 9-3).
- Change the color of your windows and screen (page 9-18).
- Save the changes you made to your windows (page 9-26).
- Get back the changes you made to your windows (page 9-27).
- Hide windows temporarily (page 9-29).
- Get hidden windows back again (page 9-30).
- Corner windows (page 9-32).
- Browse in your windows (page 9-33).
- Set up other sets of windows (page 9-34).

Getting Help Information

While your work station is in Control Mode, you can get help information on your screen.

To get help:

1. Press the WSCtrl key to put your work station into control mode.
2. Press the Help key.

This Help panel will appear on your screen:

```
GENERAL KEYS    1 of 4

Browse window:
  BROWSE (PF3),
Cancel current
  function: QUIT
End Help:    HELP
End WSCtrl:  WSCTRL
Enlarge window: -
List windows and
  screens: LIST (PF1)
Print screen: PRINT
Screen Background color:
  SCREEN (PF22),
  Alt+PF13-20
Select Screen: CHGSC or
  0-9
Select window: JUMP or
  A-Z

Next panel: Alt+Down->
Last Panel: Alt+Up->
```

This is the first of a set of help panels that you can see. It tells you which keys to press to do the things listed. To go to the next help panel, press the Alt key and the Down Cursor key. To go back to a previous help panel, press the Alt key and the Up Cursor key.

3. Take a few minutes and read through the other help panels, and practice using the Up and Down Cursor keys to go from panel to panel.
4. When you are finished with the help panels, press the Help key again.

The help panel disappears, and you can go back to doing your work.

Changing the Size and Location of the Windows on Your Screen

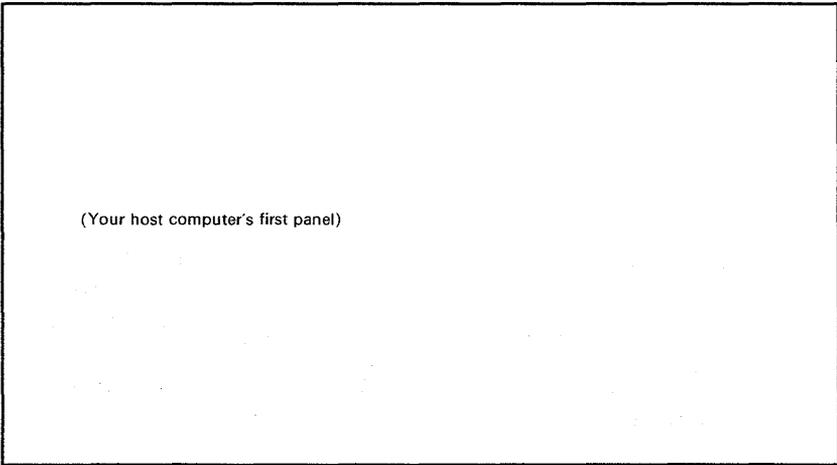
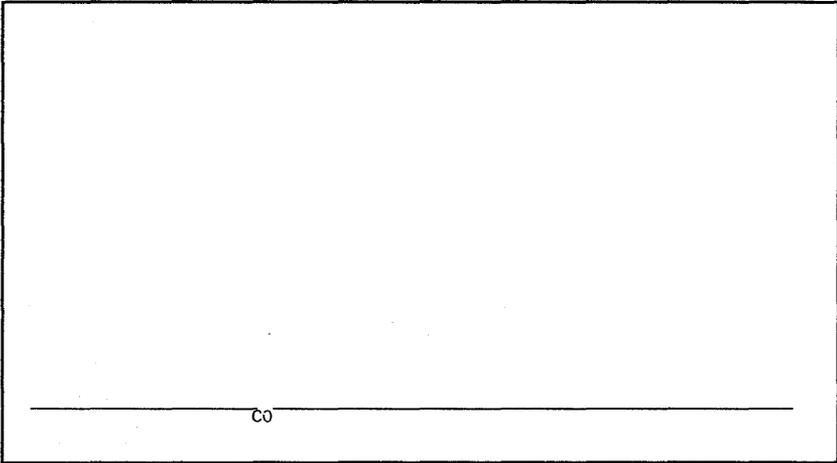
If all of your windows are full size, you may want to make them smaller and position them so that you can see them on your screen.

If your windows are already small, you may want to change the way they appear on your screen.

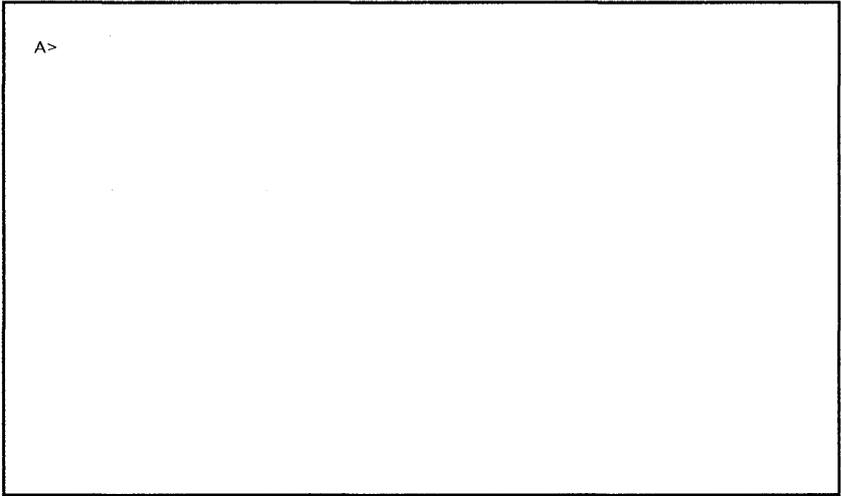
☞ The instructions that follow tell you how to reorganize a full-size set of windows. We will show you how to make your full-size windows small enough to fit on one screen. Our goal is to show you how to change the size of your windows and move them around on the screen. After you have learned that, you can experiment with arrangements that you like. Just make the changes you want instead of the changes the instructions suggest.

Reducing the Size of Your Full-Size Windows and Moving Them Around

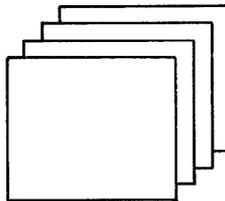
After you load your own version of the control program, your screen may look like one of these:



Or,

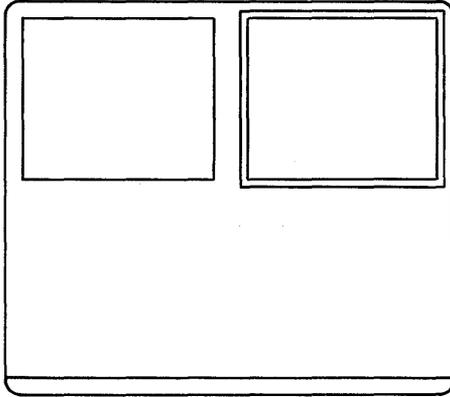


You are looking at your first, full-size window. It doesn't look like a window because it fills the entire screen. You can't even see its border. All your windows start out full size. You can imagine that they are stacked one behind the other like sheets of paper.



If you have more than window, we will show you how to arrange them so you can see them on your screen at the same time. Even though they will not fill the screen, you will be able to enlarge them when you want. Let's assume that you have at least two windows.

We will show you how to arrange them to look like this:



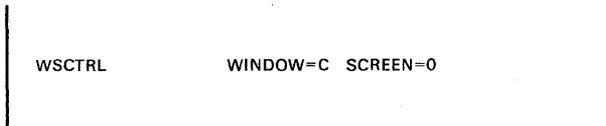
Follow these instructions even if you don't have the same number of windows. After you do the first two you will know enough to do the rest on your own.

Changing the Size of the First Window

Let's place the first window in the upper left corner of your screen:

1. If your work station is not in Control Mode, press the WSCtrl key.

This line should appear at the bottom of your screen:

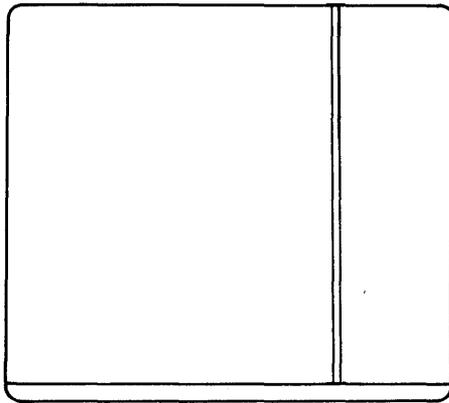


-
2. Press the Size key (PF12).

The line at the bottom of your screen changes to:

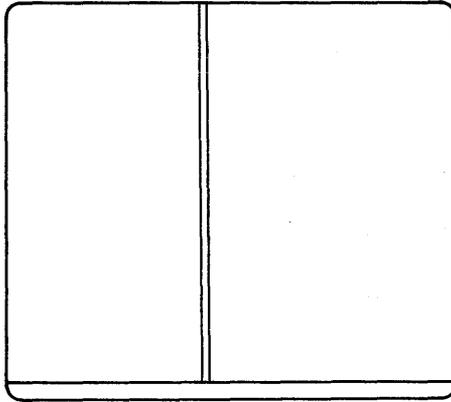
```
WSCTRL  SETUP SIZE  WINDOW=C  SCREEN=0
```

3. Press the black Left Cursor key.



You will see the right border of the first window appear along the right side of your screen.

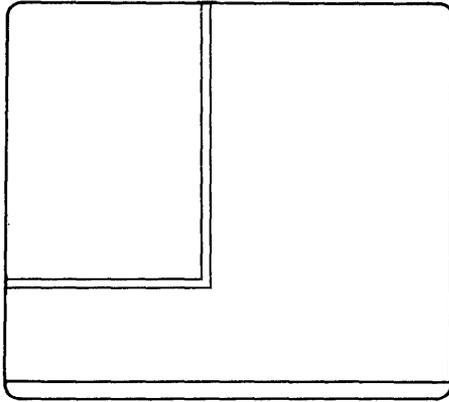
-
4. Press the Left Cursor key until the right border is near the center of the screen.



You may begin to see part of the second window, which is behind the first, appear as the border moves to the left.

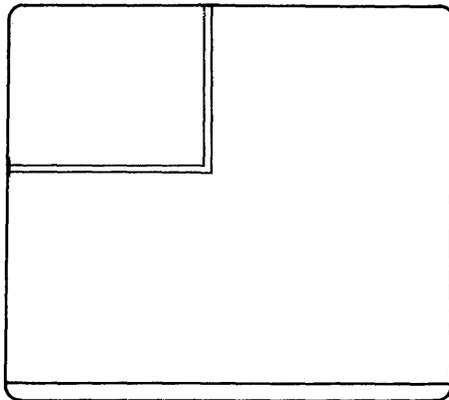
If you move the border too far to the left, use the Right Cursor key to move it back.

-
5. Press the Up Cursor key.



You will see the bottom border of the window appear at the along the bottom of your screen.

6. Press the Up Cursor key until the bottom border is near the center of the screen.



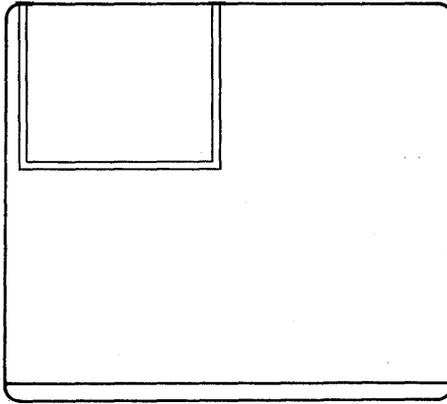
If you move it up too far, use the Down Cursor key to move it back.

-
7. Press the Move key (PF11).

The line at the bottom of your screen changes to:

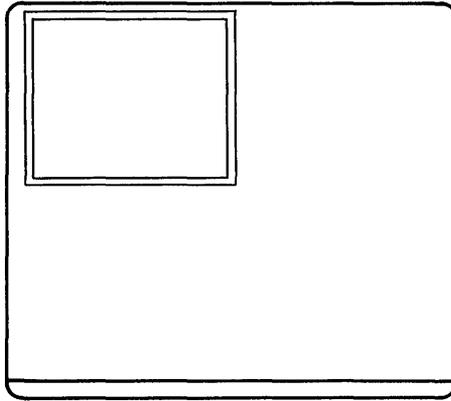
```
WSCTRL  SETUP MOVE  WINDOW=A  SCREEN=0
```

8. Press the Right Cursor key once.



You will see the left border of the window appear along the left side of the screen.

9. Press the Down Cursor key once.



You will see the top border with the name of the window appear.

You now have your first window in the upper left corner of your screen. We will leave it there and go work on your second window.

Changing the Size of the Second Window

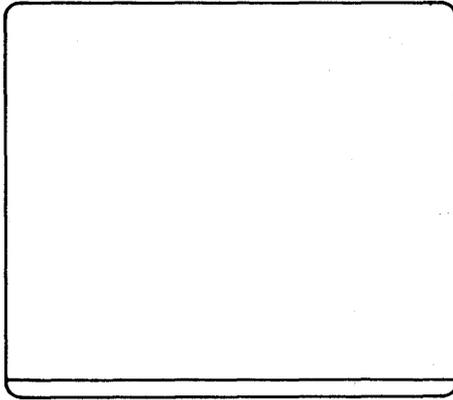
Let's place your second window in the upper right corner of the screen. First we will change its size:

1. Press the Jump key.

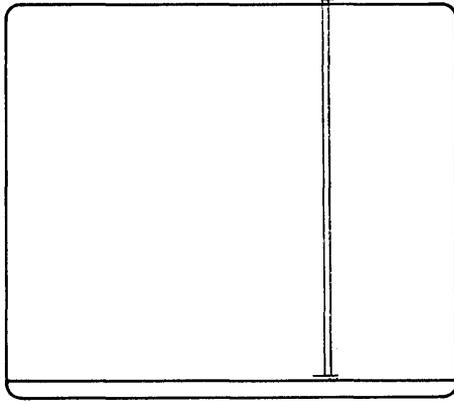
Your second window will appear and cover the entire screen. The line at the bottom of your screen changes to:

```
WSCTRL  SETUP MOVE  WINDOW=D  SCREEN=0
```

Window D is shown.

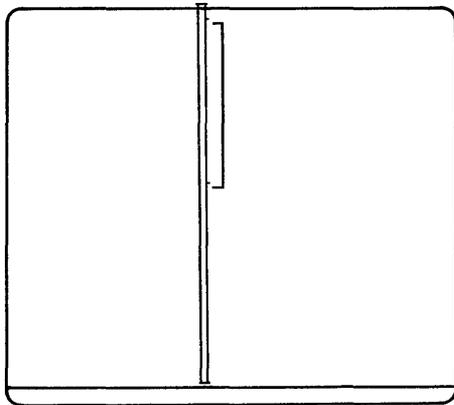


-
2. Press the Size key (PF12).
 3. Press the Left Cursor key.



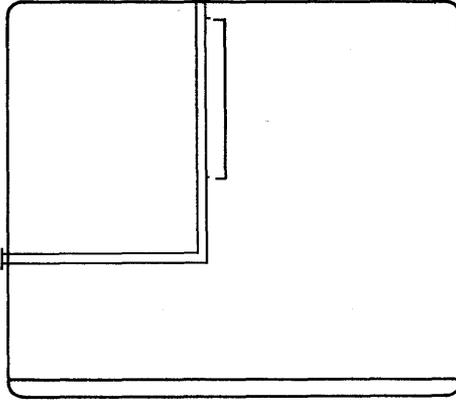
You will see the right border of the second window appear.

4. Keep pressing the Left Cursor key to move the border to the left until the edge of the first window begins to show.

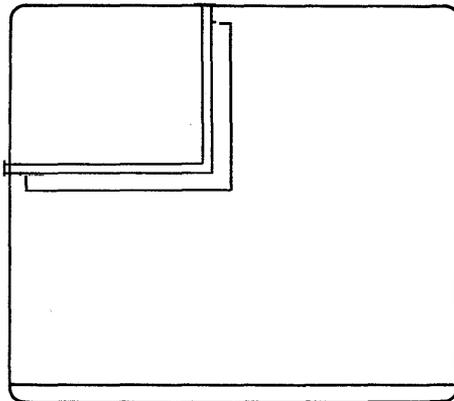


-
5. Press the Up Cursor key.

You will see the bottom border of the second window appear.

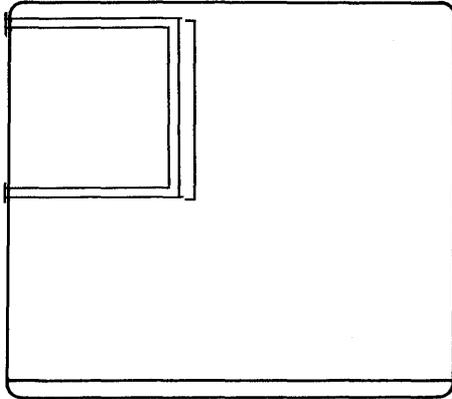


6. Keep pressing the Up Cursor key until the the bottom of the first window also begins to show.



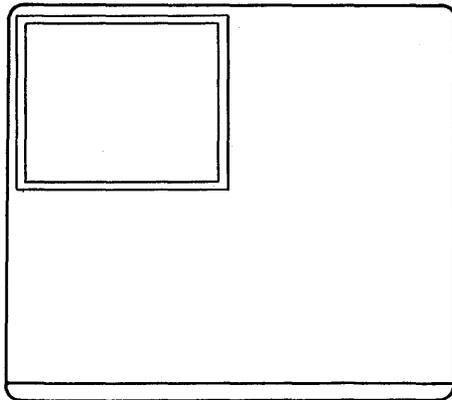
Your second window is now almost completely covering your first window.

-
7. Press the Move key (PF11).
 8. Press the Down Cursor key once.



The top border of the second window appears.

9. Press the Right Cursor key once.



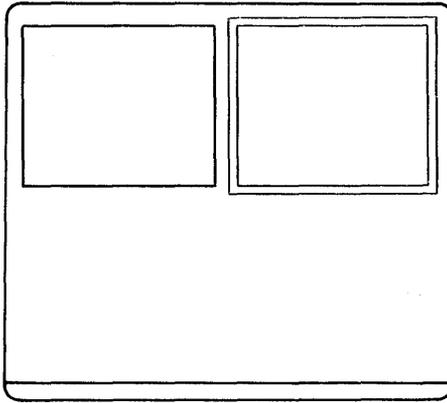
The left border appears. Now the second window is covering the first. It doesn't matter if the two windows are not exactly the same size.

Now, let's move the second window to the upper right corner of the screen:

1. Press the Right Cursor key.

The window moves to the right.

2. Keep pressing the Right Cursor key until the window has moved to the right side of the screen.



You could also press the Corner key (PF10) to move the second window. If you do you will have to move it down and to the left to see the whole border.

If the two windows do not fit exactly, you can use the PF11 or PF12 keys and the cursor keys to adjust their size or move them so they fit. If you are satisfied with them, leave them as they are. It is only important to be able to see both of them at the same time.

You have now changed the size and moved your first two windows. If you have other windows you can arrange them in the same way as the first two. Remember to use:

- The Jump key to choose the next window.
 - The PF12 key and the Cursor keys to change the size.
 - The PF11 key and the Cursor keys to move the window.
3. Now that you know how to rearrange your windows, take a few minutes and put them where you like them.
 4. When you are done, press the WSCtrl key again.

You can now go back to using your windows.

Whenever you make changes to your windows, you must save these changes before you turn off your system. If you don't, they will be lost. You will have to make them over again the next time you turn your system on.

To save your changes, follow the instructions in section "Saving the Changes to Your Windows and Screens" on page 9-26.

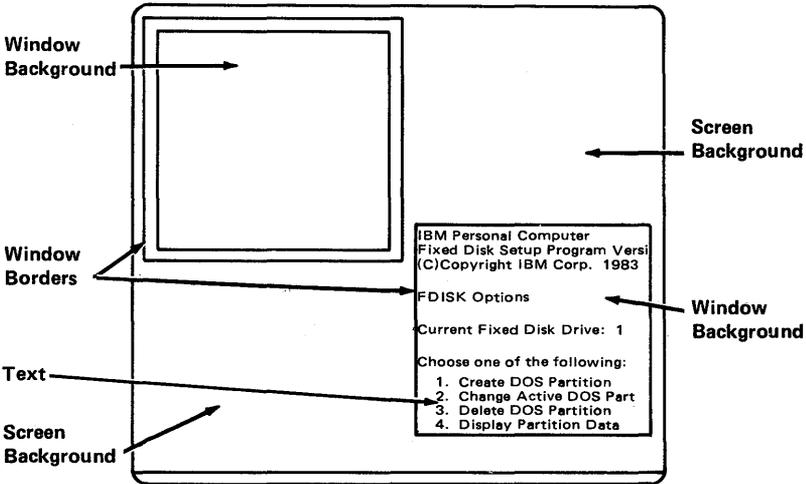
Changing the Color of Your Screen and Windows

If you have a color display, you can:

- Change the color of the background in your windows
- Change the color of the text in your windows
- Use the 3270 base colors in your host or notepad windows
- Change the color of the screen behind your windows.

What to Look For

You can color these areas of the windows and the screen:



Limitations

You can:

- Change the colors of the background and text of host and notepad windows only.

If you have used multi-color and highlighted text in your notepad windows, you must clear the notepad windows before you will see the new background and the text colors.

- Once you have colored the background and text of a window, you cannot use multi-color text without losing the background and text colors that you set. You can get them back by clearing the screen.

You cannot:

- Change the color of the background and text colors of your PC windows.

Saving Your Changes

Whenever you make changes to your windows, you must save the changes you made before you turn off your system. If you don't save them, they will be lost. You will have to make them over again the next time you turn on your system.

To save your changes, go to the section "Saving the Changes to Your Windows and Screens" on page 9-26, and follow those instructions.

Changing the Background Color of a Window

To begin:

1. Use the Jump key to choose the window you want to color.
2. If your work station is not in Control Mode, press the WSCTRL key.

This line should appear at the bottom of your screen:

```
WSCTRL
```

3. Press the Background key (PF24).

The line at the bottom of your screen changes to:

```
Select the color setting desired by using the color coded keys.  
WSCTRL  SETUP COLOR BKGND _
```

4. Press the Alt key and one of the Color keys (PF13 through PF20) to choose the color you want.
5. If you don't like the color you chose, press the Alt key and a different PF key.

-
6. When you have the color you want, press the Finish key.

You can now change other parts of the window or the screen. Press the PF key for the part you want to change.

7. If you are finished changing colors, press the WSCtrl key to go back to using your windows.

You are done.

Changing the Color of the Border and the Text in a Window

To begin:

1. Use the Jump key to choose the window you want to color.
2. If your work station is not in Control Mode, press the WSCtrl key.

This line should appear at the bottom of your screen:



WSCTRL

-
3. Press the Foreground key (PF23).

This line at the bottom of your screen changes to:

```
Select the color setting desired by using the color coded keys.  
WSCTRL  SETUP COLOR FRGND _
```

4. Press the Alt key and one of the Color keys (PF13 through PF20) to choose the color you want.
5. If you don't like the color you chose, press the Alt key and a different PF key.
6. When you have the color you want, press the Finish key.

You can now choose to color other windows or the screen. Press the PF key for what you want to change.

7. If you are finished changing colors, press the WSCTRL key to go back to using your windows.

You are done.

Changing the Color of the Screen Behind the Windows

To begin:

1. Press the WScrl key.

This line should appear at the bottom of your screen:

```
WSCTRL
```

2. Press the Screen key (PF22).

The line at the bottom of your screen changes to:

```
Select the color setting desired by using the color coded keys.  
WSCTRL  SETUP COLOR SCBK _
```

3. Press the Alt key and one of the Color keys (PF13 through PF20) to choose the color you want.
4. If you don't like the color you chose, press the Alt key and a different PF key.
5. When you have the color you want, press the Finish key.

You can now change parts of windows. Press the PF key for the part you want to change.

6. If you are finished changing colors, press the WScrl key to go back to using your windows.

You are done.

Using the Base Colors in Your Host and Notepad Windows

You can set the color of the text in your host and notepad windows to the four base colors: red, green, blue, and white. These colors will appear on a black background. Some application programs that run on your host computers require base colors in your host windows. If you use the base colors in a notepad window, you can also use multi-color and highlighted text.

To set the base colors in a host or notepad window:

1. Use the **Jump** key to choose the host or notepad window you want.
2. If your work station is not in **Control Mode**, press the **WSCTRL** key. This line should appear at the bottom of your screen:



3. Press the **Base** key (**PF21**), and the window changes to the four base colors.
4. When you are finished, press the **WSCTRL** key to go back to using your windows.

You are done.

Whenever you make changes to your windows or screens, you must save these changes before you turn off your system. If you don't, they will be lost. You will have to make them over again the next you turn on your system.

To save the changes, follow the instructions in section “Saving the Changes to Your Windows and Screens” on page 9-26.

Saving the Changes to Your Windows and Screens

Whenever you make changes to your windows or screens, you must save these changes before you turn off your system. If you don't, they will be lost. You will have to make them over again the next you turn on your system.

To save the changes to your windows and screens:

1. Make sure that your work station is not in control mode.
2. Press the Jump key to choose your Personal Computer window.
3. Type: `indsave screen`.

```
A>indsave screen
```

Or:

```
A>indsave
```

That's all there is to it. Any changes that you made will be saved. `INDSAVE SCREEN` saves only the changes to your screen. `INDSAVE` saves your screens, notepads, and keystroke recordings.

Getting Back the Changes to Your Windows

If you have made changes to your windows and saved them, you do not get the changes back automatically when you turn on your system. You have to get them.

Here's how to do it:

1. Make sure that your work station is not in control mode.
2. Press the Jump key to make a personal computer session active.
3. Type:

```
A>indrstr screen
```

Or:

```
A>indrstr
```

INDRSTR SCREEN will get only your windows. **INDRSTR** will get your windows, notepads, and keystroke recordings.

-
4. Press Enter. Your windows as you changed them will appear on the screen.

Note: You can get your changes back automatically by adding the INDRSTR or the INDRSTR SCREEN command to a system file called AUTOEXEC.BAT. See Chapter 12 if you want to use this file.

Hiding Windows Temporarily

You can temporarily hide a window that is usually on your screen. You may want to make your screen less “busy” or you may not want someone else to see what is in one of your windows. Of course, you must have another window to hide it behind.

To hide a window:

1. Use the Jump key to choose the window you want to hide.
2. Press the WSCtrl key.
3. Press the Hide key (PF9).

The active window will disappear behind one of the other windows on your screen. If your windows are full size, the active window on your screen will be replaced by another window that will fill the screen.

You cannot jump to the hidden window as long as it is hidden.

4. If you want to hide another window, repeat steps 1 through 3
5. If you are want to leave the window hidden and go on with other work, press the WSCtrl key again.

You are done.

Getting Hidden Windows Back Again

Once you have hidden one or more windows, you can get them back easily.

1. Press the WSCtrl key.
2. Type the single-letter, short name of a hidden window.

The hidden window will appear again as the active window.

If you don't remember the short name of the window, press the PF1 key and a list of your windows will appear on your screen.

```
SCRN:WINDOWS WINDOWS
0:ABCD      A:PC1
            B:HOST1
1:          C:NOTEPAD1
            D:NOTEPAD2
2:BA
3:DCA
4:
5:
6:
7:
8:
9:
```

-
3. To go on with other work, press the **WS**Ctrl key.

If you have changed the position of the text in a window while you browsing, when you press the **WS**Ctrl key to leave Control Mode, the position of the text will change so the cursor appears in the window.

Cornering Windows

To help speed up moving windows around on your screen, you can move windows from corner to corner. If your windows are full size, you cannot corner them.

To move a window from corner to corner:

1. Use the Jump key to choose the window you want to corner.
2. If the window fills the screen, press the Enlarge key to make it smaller.

If the window does not get smaller, you cannot corner it.

3. Press the WSCtrl key.
4. Press the Corner key (PF10).

The active window will move first to the upper left corner of the screen. Its top and left border will disappear.

5. If you want to move it to a another corner, press the PF10 key again. Keep pressing this key until the window is in the corner you want.
6. If you want to get the borders back, press the PF11 key, and use the Cursor keys to move the window until all the borders show.
7. If you want to corner another window, repeat steps 1 and 4.
8. When you want to go on with other work, press the WSCtrl key again.

You are done.

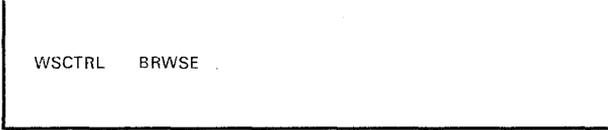
Browsing in Your Windows

You can browse in any of your windows. Browse lets you look at, but not use or change, the contents.

To browse in a window:

1. Use the Jump key to choose the window you want to browse.
2. Press the WSCtrl key.
3. Press the Browse key (PF3).

This line appears at the bottom of your screen:



WSCCTRL BRWSE

If text extends outside the window where you can't see it, use the cursor keys to move it into view, or enlarge the window if it is not full size.

4. When you are finished browsing, press the Browse key again.
5. When you want to leave work station control mode, press the WSCtrl key again.

After you press the the WSCtrl key, the contents of the window you browsed may change position to show the position of the cursor.

You are done.

Setting Up Specialized Sets of Windows from Your Basic Set

You have a basic set of windows. This basic set is called Screen Profile 0. We call it screen 0 for short. You probably have been using this set for some time. If you want to check:

1. If your work station is not in Control Mode, press the WScrl key.

This line should appear at the bottom of your screen:

```
WSCTRL                WINDOW=A SCREEN=0
```

The name for WINDOW will be the name of the active window. The number for SCREEN should be 0.

2. Press the ChgSc key, this message should appear:

```
INDWS040 Cannot use ChgSc: All other screens are empty  
WSCTRL                WINDOW=A SCREEN=0
```

If you see that message, you only have screen 0.

You can rearrange the windows in screen 0, but you still have to work with all of them. You cannot add or remove windows from screen 0 without changing the way your control program is set up. The arrangements that you can devise for screen 0 may not always fit your needs. You

may want to have your own screen with only the windows you choose.

You can set up your own screens if you:

- Need a special arrangement of windows for certain types of work.
- Find it more convenient to limit the number of windows on your screen.

You can set up nine different screens if you want. They are called screen 1 through screen 9. Only the windows you put in each screen appear together. You can rearrange the windows in the new screens any way you want. They don't have to be the same size or color or be in the same place as they are in screen 0.

When you need to use one of your screens, you can simply switch to it by pressing the Alt and ChgSc keys.

Setting Up a New Screen of Your Own

To set up a new screen:

1. If your work station is not in Control Mode, press the WSCtrl key.

The following line should appear at the bottom of your screen:

```
WSCTRL          WINDOW=A SCREEN=0
```

This line shows that window A on screen 0 is active.

2. If your windows are enlarged, press the Enlarge key to make them smaller.
3. Type a number from 1 through 9.

This will be the number of the new screen. You can choose any number that is not already being used for another screen.

4. If you are not sure which screens are available, press the PF1 key.

A list of the screens that are in use will appear at the right side of the screen. The screens with no windows are not being used.

For example,

```
SCRN:WINDOWS WINDOWS
0:ABCD      A:PC1
           B:HOST1
1:          C:NOTEPAD1
           D:NOTEPAD2

2:BA

3:DCA

4:

5:

6:

7:

8:

9:
```

Screens 1 and 4 through 9 are not being used.

5. You can press the PF1 key again to remove the list.
6. Type the number of the profile that you want to use.

Your screen will go blank. If you choose 1, the line will change to:

```
WSCTRL          WINDOW= SCREEN=1
```

-
7. Type the short name of the window you want to add to this screen profile.

The windows appear on your new screen as you type their names. The line at the bottom shows the short name of the window that you just added. For example, if you typed A, the line would look like this:

```
WSCTRL      -      WINDOW=A SCREEN=1
```

- You can add one or more of the windows from Profile 0. If you don't remember the short names of the windows, you can press the PF1 key again to look at the list. It also lists all your windows.
8. When you have the windows you want on your screen, you can move them around and change their size. See the section "Changing the Size and Location of the Windows on Your Screen" on page 9-3, and follow those instructions.
 9. When you are ready, press the WSCtrl key to go back to your work.

You are done.

Adding a New Window to One of Your Screens

At any time, you can add any window from screen 0 to screens 1 through 9. The window that you add cannot already be on those screens.

To add a new window:

1. If your work station is not in Control Mode, press the WSCtrl key.

This line should appear at the bottom of your screen:

```
WSCTRL      _      WINDOW=A SCREEN=0
```

This line shows, for example, that window A on screen 0 is active.

2. If this is not the screen profile you want, type the number of the screen to which you want to add a window.

That screen profile will appear on your screen. For example, if you typed 2, the line at the bottom will change to:

```
WSCTRL      _      WINDOW=B SCREEN=2
```

-
3. If you are not sure of the number of the screen profile, press the PF1 key.

A list of the screens that are in use will appear at the right side of the screen. The screens with no windows listed are not being used.

For example,

```
SCRN:WINDOWS WINDOWS
0:ABCD      A:PC1
           B:HOST1
1:A         C:NOTEPAD1
           D:NOTEPAD2
2:BC
3:DCA
4:
5:
6:
7:
8:
9:
```

-
4. Type the short name of the window you want to add to this screen profile.

You can add any of the other windows from screen 0. The window appears on your screen as you type its name. If your windows are full size, the new window will also fill the screen. The line at the bottom shows the short name of the window that you just added. For example, if you added window D:

```
WSCTRL          _      WINDOW=D SCREEN=2
```

5. When you have added the window you want, you can move it around and change its size. See the section “Changing the Size and Location of the Windows on Your Screen” on page 9-3, in this chapter and follow those instructions.
6. When you are ready, press the WSCTRL key to go back to your work.

You are done.

Removing a Window from a Screen Profile

You may have been using a screen awhile, and you decide that you want to remove a window.

At any time, you can remove any window that is on one of your screens.

To remove a window:

1. If your work station is not in Control Mode, press the WSCTRL key.

This line should appear at the bottom of your screen:

```
WSCTRL          _      WINDOW=A SCREEN=0
```

This line shows, for example, that window A on screen 0 is active.

2. If this is not the screen you want, type the number of the one you want to change.

That screen profile will appear on your screen. For example, if you typed 3, the line will change to:

```
WSCTRL          _      WINDOW=D SCREEN=3
```

-
3. If you are not sure of the number, press the PF1 key.

A list of the screen profiles that are in use will appear at the right side of the screen.

For example,

```
SCRN:WINDOWS WINDOWS
0:ABCD      A:PC1
            B:HOST1
1:A         C:NOTEPAD1
            D:NOTEPAD2
2:BCA
3:DCA
4:
5:
6:
7:
8:
9:
```

4. Type the short name of the window you want to remove from this screen, or press the Jump key to make active the window you want to remove.
5. Press the Alt and Window Delete keys. 

The window will disappear from your screen, and the line at the bottom will change to show the window that is now active.

If you remove all the windows from a screen profile, that profile will not appear until you add windows to it again. The line at the bottom of the screen will look like this:

```
WSCTRL          WINDOW= SCREEN=3
```

6. When you are ready, press the WSCtrl key to go back to your work.

You are done.

Choosing the Screen You Want to Use

If you have set up your own screens in addition to screen 0, you will need to know how to choose the one you want to use. To choose a screen profile:

1. Press the Shift and ChgSc keys.

The next screen in numerical order will appear. The screens are kept in numerical order.

2. To go to the next screen in order, press the Shift and ChgSc keys again.

You can also choose a screen in work station control mode:

1. Press the WSCtrl key.
2. Type the number of the screen you want.

The screen you requested will appear.

3. Press the WSCtrl key again to go back to your work.

Chapter 10. Copying Text from Window to Window

With some limitations, you can copy a block of text from one place in a window to another place in the same window. You can also copy text from one window into another window.

Limitations

You should know about these limitations:

- Some PC application programs will not let you copy within or into a personal computer window. The text may appear in the window but the program will not accept it.

You can always copy from a PC window into a host or notepad window.

Some PC programs that allow you to copy, need a Program Information File (PIF). If you have difficulty copying in your PC windows, contact your supervisor or the person you call for hrlp with using your computer. You can also read *IBM 3270 PC Control Program Reference* for information on defining your application programs to the system (Chapter 6).

- When you copy from a PC window into a host window, some of the characters in the PC window may appear as blanks when they are copied into the host window. These are ASCII characters that your host can't display.

-
- If you copy from a host that has a set of programmed symbols to a host that doesn't have any, the programmed symbols will be blanks.
 - You cannot copy from a PC window that is using graphics.
 - You cannot copy into protected areas of a window.
 - You must make room for the copy unless you want it placed over what is already there.

The copy procedure described in the following sections involves:

- Marking what you want to copy
- Marking where you want to place the copy
- Making the copy.

Marking What You Want to Copy

Let's mark a piece of text to copy:

1. Use the Jump key to jump to a window that has the text you want to copy.

For example, let's make a copy of this text in one of your windows:

Twinkle, twinkle, little star.
How I wonder what you are.
High above the sky so bright,
I wish I could remember the last line.

If you want to try doing this, jump to a notepad window and type these lines. Then, work along with the rest of the instructions.

2. Press the **WScrl** key to put your work station into Control Mode.

This line appears at the bottom of your screen:

```
WScrl
```

3. Press the **Source** key (PF13).

The line changes to this:

```
Position cursor and use CrSel to define the first corner.  
WScrl COPY SOURC
```

4. Use the **Cursor** keys to move the cursor to the upper left corner of the text.

```
Twinkle, twinkle, little star.  
How I wonder what you are.  
High above the sky so bright,  
I wish I could remember the last line.
```

If your window is not full-size, some of the text may be hidden by the border of the window. To see it all, move the cursor toward the border and the hidden text will move into view, or press the **Enlarge** key.

-
5. Press the Alt and CrSel keys to mark the first corner.

The first corner is marked with a corner symbol, and this message appears:

```
Position cursor and use CrSel to define the second corner.  
WSCTRL COPY SOURC
```

6. Move the cursor to the lower right corner of the text.

```
Twinkle, twinkle, little star.  
How I wonder what you are.  
High above the sky so bright,  
I wish I could remember the last line._
```

Since you are moving a block of text, make sure you place the cursor so that it includes the longest line.

7. Press the Alt and CrSel keys to mark the second corner.

In a host or notepad window, all the text to be copied is underlined and the four corners are marked with a corner symbol. In a PC window, only the corners are marked. The text is not underlined.

- Twinkle, twinkle, little star -

How I wonder what you are.

High above the sky so bright,

- wish I could remember the last line. -

If you missed some text, go back to step 4, and mark new corners.

8. When you are ready, go to the next section and choose where you want to place the copy.

If you decide that you don't want to make the copy, press the Finish key, and you are back to where you started.

Marking Where You Want to Place the Copy

You can place a copy of the text that you marked in the same window or in another window.

1. If you want to copy into another window, press the Jump key to select the window in which you want to put the copy.

For this example, we will make the copy in the same window as the text we just marked.

- Twinkle, twinkle, little star -

How I wonder what you are.

High above the sky so bright,

- wish I could remember the last line. -

This line should still be at the bottom of your screen:

```
WSCTRL COPY
```

2. Press the Target key (PF14).

This message appears:

```
Position cursor and use CrSel to define the first corner.  
WSCTRL COPY TARGT
```

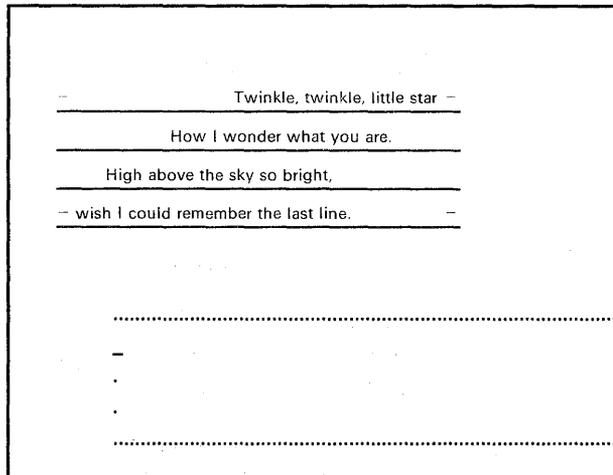
3. Use the Cursor keys to move the cursor to the spot where you want the upper left corner of the copy to be placed.

For example, let's place the copy 2 lines down and 4 spaces to the right of the original. The cursor would be here:

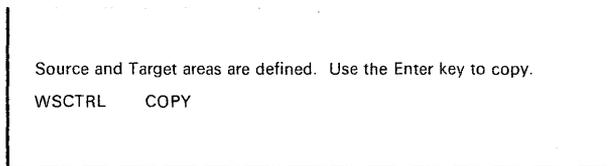
```
----- Twinkle, twinkle, little star -----  
-----  
----- How I wonder what you are. -----  
-----  
----- High above the sky so bright. -----  
-----  
----- wish I could remember the last line. -----
```

-
4. Press the Alt and CrSel keys to mark the upper left corner of the copy.

In a host or notepad window, the copy will occupy the space shown in reverse video with the corners marked. In a PC window, only corner marks show the space for the copy.



This message appears:

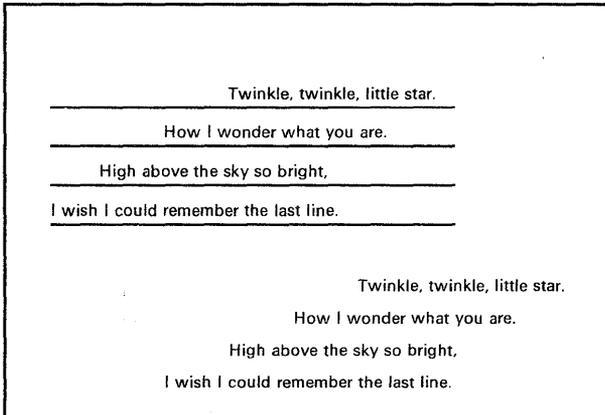


5. If you are not happy with the position of the copy, go back to step 2, and choose a new place for the copy.

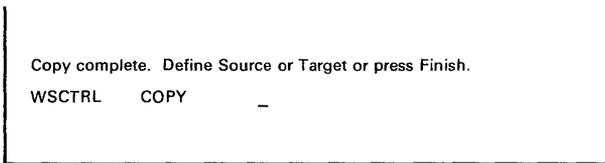
Making the Copy

1. When you are satisfied with the position of the copy, press the Enter key.

A copy of the marked text is placed at the cursor.



And this message appears at the bottom of your screen:



You can make another copy using the same source if you want. Just press the Target key (PF14) again to mark a new target for the next copy. If you want to mark a new source, press the Source key (PF13) again.

2. If you are done, press the Finish key. The underlines go away.
3. When you are ready, press the WScrl key to take your work station out of Control Mode.

Chapter 11. Recording, Playing, and Erasing Automatic Keystrokes

You can record a series of keystrokes and play them back into your windows whenever you want. You can also record a series of commands that you use often.

Making a Keystroke Recording

To record a series of keystrokes:

1. Press the Jump key to choose a window in which to record.

If you want to work along with the description that follows, jump to a notepad window, and follow the rest of these instructions.

2. Move the cursor to the place you want the recording to begin.

-
3. If your work station is not in Control Mode, press the WSCTRL key.

This line should appear at the bottom of your screen:

```
WSCTRL
```

4. Press the Record key (PF16).

This message appears:

```
Enter a unique name for the recording about to be made.
```

```
WSCTRL  AUTO REC  NAME  _
```

5. Choose a name for this recording.

Each keystroke recording needs a name, so that you can tell the system which recording you want to play. You can use any name that is not being used by another recording. If you do not remember the names of your keystroke recordings, press the PF1 key. You will see a list at the right side of your screen. You can press the PF1 key again to remove the list.

The name can be from 1 to 8 characters long. It can contain letters and numbers, but no blanks.

-
6. Type the name in the information area.

For this example, type the name JMEMO.
The information area will look like this:

```
Press the Enter key when the name is completed.
```

```
WScTRL  AUTO REC  NAME JMEMO_
```

7. If you are not happy with the name, backspace over it, and type a new name.

If you decide you do not want to make a recording right now, press the WScrl key, and you are back to where you started.

8. When you are ready, press the Enter key.

If you accidentally used a duplicate name, simply backspace and type a new name.

If the system accepts the name you chose, the line at the bottom of the screen disappears. The record symbol appears. It looks like this:

```
R
```

Warning:

From this point on, every key you press will be recorded except for these:

- WScrl
- Enlarge
- CrSel
- ChgScr
- Jump
- Finish

-
- Enter (in notepad windows)
 - PF keys (in notepad windows)

If you decide at this point that you don't want to make this recording, don't press any keys. Press the Finish key.

9. Type what you want to record.

For example, let's record this short note:

```
Dear Geoff,  
Thank you for your generous contribution.  
Sincerely,  
Jim
```

When you type something that has more than one line:

- Use the **↵** key to begin the second line if all the lines are to begin at the left side of the screen.
 - Use the Cursor keys to position the cursor at the beginning of the second line if it is not going to begin at the left side of the screen. Don't use the **↵** key.
 - Use the **↵** key to move the cursor to the next input area (field) on the screen if it has them.
10. When you are done typing, press the Finish key.

The record symbol disappears from the bottom of the screen.

That's all there is to it. You now have a recording called JMEMO. If you want to play this recording, follow the instructions in the section, "Playing a Keystroke Recording" on page 11-11.

Making a Keystroke Recording with a Pause to Enter Text

You can make a keystroke recording, and put a pause in the middle. When you play the recording, the pause:

- Stops the recording while it is playing and lets you type something in the middle. It's like typing a form letter and inserting a new name on each one.
- Stops the recording after it plays a recorded command or PF key and lets you type something or wait for the system to respond before it plays the next recorded command.

Note: If you are recoding in a host window, any key that signals the host automatically pauses. You do not have to include a pause. These keys include:

- *PF keys*
- *PA Keys*
- *Enter*
- *Clear*

To record a series of keystrokes with a pause:

1. Press the Jump key to choose a window in which you want to make a record.

If you want to work along with the description that follows, jump to a personal computer window, and follow the rest of these instructions.

2. Move the cursor to the place you want the recording to begin.

-
3. If your work station is not in Control Mode, press the WSCTRL key.

This line should appear at the bottom of your screen:

```
WSCTRL
```

4. Press the Record key (PF16).

This message appears:

```
Enter a unique name for the recording about to be made.  
WSCTRL AUTO REC NAME _
```

5. Choose a name for this recording.

Each keystroke recording needs a name, so you can tell the system which recording you want to play. You can use any name that is not being used by another recording. If you do not remember the names of your keystroke recordings, press the PF1 key. You will see a list at the right side of your screen. You can press the PF1 key again to remove the list.

The name can be from 1 to 8 characters long. It can contain letters and numbers but no blanks.

-
6. Type the name in the information area.

For this example, type the name PCCMDS.
The information area will look like this:

```
Press the Enter key when the name is completed.
```

```
WSCtrl  AUTO REC  NAME PCCMDS_
```

7. If you are not happy with the name, backspace over it, and type a new name.

If you decide you do not want to make a recording, press the WSCtrl key, and you are back where you started.

8. When you are ready, press the Enter key.

If you accidentally used a duplicate name, simply backspace and type a new name.

Warning:

From this point on, every key you press will be recorded except for these:

- WSCtrl
 - Enlarge
 - CrSel
 - ChgScr
 - Jump
 - Finish
 - Enter (in notepad windows)
 - PF keys (in notepad windows)
9. Type what you want to record.

For example, let's record a series of DOS commands.

10. Type the DOS CLS command: CLS

```
A>cls
```

11. Press the Enter key.

12. Wait for the DOS prompt to appear.

```
A>
```

The screen will be blank except for the DOS prompt at the top of screen.

13. Type the DOS VOL command: VOL

```
A>vol
```

14. Press the Enter key.

15. Wait for this message and the DOS prompt to appear:

```
Volume in drive A has no label
```

```
A>
```

-
16. Type the DOS TIME command:

```
A>time
```

17. Press the Enter key.
18. Wait for this message:

```
Current time is 8:17:35.50  
Enter new time: _
```

The time shown will be different on your system.

Before you type anything else, we will put a pause here.

19. Press the Alt and Pause keys.

You may type anything you want, but it will not be recorded.

20. Press the Alt and Pause keys again.
21. Press the Enter key and wait for the DOS prompt.

```
A>
```

22. Type the DOS VER command: VER

```
A>ver
```

23. Press the Enter key.

24. Wait for this message and the DOS prompt:

```
IBM Personal Computer DOS Version n.nn
```

```
A>
```

25. Press the Finish key.

That's all there is to it. You now have a recording called PCCMDS. If you want to play this recording, follow the instructions in the section, "Playing a Keystroke Recording with a Pause to Enter Text" on page 11-13.

Playing a Keystroke Recording

To play a keystroke recording:

1. Use the **Jump** key to go to the window in which you want to play the recording.

If you want to work along, jump to a notepad window, and follow the rest of these instructions. You will need a recording called **JMEMO**. The section, “Making a Keystroke Recording” on page 11-1, describes how to make this recording.

You must make room on your screen for the recording, or it will type over whatever is already there.

2. Use the **Cursor** keys to move the cursor to the place you want the recording to begin playing.
3. If your work station is not in **Control Mode**, press the **WSCTRL** key.

This line should appear at the bottom of your screen:



WSCTRL

-
4. Press the Play key (PF4).

This message appears:

```
Enter the unique name of the recording to play.  
WSCTRL  AUTO PLAY NAME _
```

5. Type the name of the recording you want to play.

For this example, type the name JMEMO:

```
Press the Enter key when the name is completed.  
WSCTRL  AUTO PLAY NAME JMEMO_
```

6. If you type the wrong name, backspace over it, and type a new name.

If you decide you do not want to play this recording, press the WSCTRL key, and you are back where you started.

7. When you are ready, press the Enter key.

The recording will play on the screen.

```
Dear Geoff,  
Thank you for your generous contribution.  
Sincerely,  
Jim_
```

That's all there is to it.

Playing a Keystroke Recording with a Pause to Enter Text

To play a keystroke recording with a pause in it:

1. Use the Jump key to go to the window you want to place the recording.

If you want to work along, jump to a PC window, and follow the rest of these instructions. You will need a recording called PCCMDS. The section, "Making a Keystroke Recording with a Pause to Enter Text" on page 11-5, describes how to make this recording.

2. Make sure that the DOS prompt is the last thing on your screen.
3. If your work station is not in Control Mode, press the WSCTRL key.

This line should appear at the bottom of your screen:

```
WSCTRL
```

4. Press the Play key (PF4)

This message appears:

```
Enter the unique name of the recording to play.  
WSCTRL  AUTO PLAY NAME _
```

-
5. Type the name of the recording you want to play.

For this example, type the name PCCMDS or whatever name you chose when you were making this recording.

```
Press the Enter key when the name is completed.
```

```
WSCTRL  AUTO PLAY NAME PCCMDS_
```

6. If you type the wrong name, backspace over it, and type a new name.

If you decide you do not want to play this recording, press the WSctrl key, and you are back where you started.

7. When you are ready, press the Enter key.

The recording will play on the screen up to the pause. Your screen should look like this:

```
A>vol
```

```
Volume in drive A has no label
```

```
A>time
```

```
Current time is 10:11:05.12
```

```
Enter new time: _
```

-
8. Type a new time, but do not press Enter.

For example, let's type 11:53 am:

```
Current time is 10:11:05.12
Enter new time: 11:53_
```

The pause symbol will appear at the bottom of your screen:

```
P P
```

9. Press the Alt and Pause keys.

The recording finishes playing on the screen. When the recording is done, your screen should look like this:

```
A>vol

Volume in drive A has no label

A>time
Current time is 10:11:05.12
Enter new time: 11:53

A>ver

IBM Personal Computer DOS Version n.nn

A>_
```

That's all there is to it.

Erasing a Keystroke Recording

To erase a keystroke recording:

1. If your work station is not in Control Mode, press the WSCTRL key.

This line should appear at the bottom of your screen:

```
WSCTRL
```

2. Press the Alt and ErInp keys.

This message appears:

```
Enter the unique name of the recording to be deleted.  
WSCTRL  AUTO ERASE NAME _
```

3. Type the name of the recording you want to erase.

For example, if you made the recording named JMEMO and want to erase it, type:

```
Press the Enter key when the name is completed.  
WSCTRL  AUTO ERASE NAME JMEMO_
```

4. If you type the wrong name, backspace over it, and type a new name.

-
5. If you decide you do not want to erase a recording, press the **WSCtrl** key, and you are back where you started.
 6. When you are ready, press the **Enter** key.

The message will appear at the bottom of the screen:

```
Erase complete: Press PF4 (Play), PF16 (Record), or ErInp.  
WSCTRL  AUTO      JMEMO
```

The recording named **JMEMO** is erased. You can make, play, or erase another recording.

7. When you are done, press the **WSCtrl** key to return to where you started.

Saving Your Keystroke Recordings

Whenever you make keystroke recordings, you should save them before you turn off your system. If you don't, they will be lost. You will have to make them over again the next time you turn your system on.

To save your keystroke recordings:

1. Make sure that you are not in work station Control Mode.
2. Press the Jump key to choose a Personal Computer window.
3. Make sure that your default drive contains your control program.

If it doesn't, insert your system diskette into the default drive or change your default drive to your fixed disk. For example:

```
A>c:
```

4. Type: `indsave autokey`.

```
A>indsave autokey
```

Or:

```
A>indsave
```

That's all there is to it. Any recordings you have made will be saved and you can use them the next time you turn on your system. **INDSAVE AUTOKEY** saves only your keystroke recordings. **INDSAVE** saves your keystroke recordings, screens, and notepads.

Getting Back Your Automatic Keystroke Recordings

If you have made keystroke recordings and saved them, you can get them. When you turn on the system, it doesn't get them automatically. You have to get them.

Here's how you do it:

1. Make sure that your work station is not in Control Mode.
2. Press the Jump key to make a personal computer session active.
3. Type: `indrstr autokey`.

```
A>indrstr autokey
```

Or:

```
A>indrstr
```

INDRSTR AUTOKEY will get only your recording. **INDRSTR** will get your windows, notepads, and keystroke recordings.

*Note: You can get your recordings back automatically by adding the **INDRSTR** or the **INDRSTR AUTOKEY** command to a system file called **AUTOEXEC.BAT**. See Chapter 12 if you want to use this file.*

Chapter 12. Running DOS Commands Automatically

As you learn more about using your PC sessions, you will discover “batch” files. These are special DOS files that let you write your own DOS commands. DOS has a batch file of its own that runs every time you turn on your system unit. You can use this file to do some things automatically. It is called the AUTOEXEC.BAT file. We will show you how to add commands to this file to automatically:

- Restore changes to your windows or screens
- Restore notes in your notepad sessions
- Restore keystroke recordings.

We show you how to add the INDRSTR command to the DOS batch file so you will not have to use them after you turn on your system unit. The AUTOEXEC.BAT file will run these commands for you.

Adding the INDRSTR Command to the AUTOEXEC.BAT File

1. Jump to a PC window that has DOS.
2. Make sure that your default drive contains your control program.

If your control program is on a system diskette, insert it into the default drive, or change the default drive.

If your control program is on your fixed disk, make sure that the fixed disk is the default.

For example, if your default drive is A and your control program is on your fixed disk, type:

```
A>c:
```

Your default drive will change to C:

```
C>
```

3. Type: type autoexec.bat.

```
A>type autoexec.bat
```

4. Press the Enter key.

The contents of your AUTOEXEX.BAT file will appear on your screen.

5. Make sure that there are no INDRSTR commands in the file.
6. If they are there, you do not need to add them again. If they are not, continue.

7. Now, type:

```
A>copy autoexec.bat + con: autoexec.bat
```

8. Press the Enter key.

This response will appear on your screen:

```
A>copy autoexec.bat + con: autoexec.bat
AUTOEXEC.BAT
CON
-
```

9. Type: `indrstr`.

```
Your screen should look like this:
A>copy autoexec.bat + con: autoexec.bat
AUTOEXEC.BAT
CON
indrstr
```

10. Press the Enter key.

11. Press the PF6 key.

You will see this response:

```
^Z
```

12. Press the Enter key.

13. Wait for this message:

```
^Z
  1 File(s) copied
```

You have now added the INDRSTR command to the AUTOEXEC.BAT file. The next time you turn on your system, anything that you saved with the INDSAVE command will reappear automatically.

Warning:

Do not make any changes or add anything in the AUTOEXEC.BAT file before the command that begins INDCIPL.

For More Information

If you want to learn more about the AUTOEXEC.BAT file and about creating batch files, read about Batch Commands in the manual: *Disk Operating System*.

Chapter 13. Locating Problems with Your Control Program

This chapter explains what to do if you have a problem while using the 3270 PC.

What to Do If You Have a Problem Using Your 3270 Personal Computer

1. **Did you receive a DOS message or a message from your application program?**

No	Yes
----	-----

- | | |
|--|---|
| | |
| | 1. Go to the DOS manual or the manual for your application program. |
| | 2. Look up the message. |
| | 3. Follow the instructions for the message. |

2. **Did you receive a message with one of these message numbers?**

INDCUnnn
INDDEnnn
INDDDnnn
INDDPnnn
INDINnnn
INDF0nnn
INDFTnnn
INDMOnnn
INDPAnnn
INDPDnnn
INDSMnnn
INDSRnnn
INDSTnnn
INDSYnnn
INDTRnnn
INDWSnnn
INDXFnnn

No

Yes

- |
|
1. Go to Appendix A in this manual.
2. Look up the message.

Did the explanation of the message solve the problem?

No Yes

|
|
<----- Continue with your work.

3. Is the problem with a session in a host window?

Yes No

|
You have a 3270 PC problem.

1. Do not turn off your system unit.

2. Make a note of the problem, for example:

Messages received

Return code received

Unexpected result.

3. Make a note of what you were trying to do when the problem occurred, for example:

Which PC application
was running

Which keys you pressed.

4. Follow your procedures for reporting problems to your supervisor or the person solving computer problems.

(If you are responsible for solving software problems, you can refer to Appendix B in the *3270 PC Control Program Reference* for more detailed instructions).

You have a problem communicating with a host.

1. Do not turn off your system unit.

2. Look at the Operator Information Area (OIA) at the bottom of the screen for an indicator.

3. Go to the Host Communication indicator chart on page 13-6.

3. Look up the explanation for the indicator shown.

4. Then return here and continue.

4. **Did the chart indicate a 3270 PC hardware problem?**

No Yes

- | | |
|--|---|
| | <ol style="list-style-type: none">1. Make a note of what went wrong.2. Go to the chapter that deals with problems in your <i>Guide to Operations</i>.3. If that does not solve the problem, follow your procedures for reporting a hardware problem to your supervisor or the person responsible for solving hardware problems. (If you are responsible for solving 3270 PC hardware problems, you can refer to the <i>3270 PC Hardware Problem Determination</i> manual for more detailed instructions.) |
|--|---|

5. **Did the chart indicate a 3274 Control Unit or host computer problem?**

No Yes

|
|
|

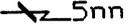
1. Follow your procedures for reporting control unit or host problems.

You have a 3270 PC Control Program problem.

1. Do not turn off your system unit.
2. Make a note of the problem, for example:
 - Messages received
 - Return code received
 - Unexpected result.
3. Make a note of what you were trying to do when the problem occurred, for example:
 - Which PC application was running
 - Which keys you pressed.
4. Follow your procedures for reporting software problems to your supervisor or the person responsible for solving software problems. (If you are responsible for solving software problems, you can refer to *3270 PC Control Program Reference* for more detailed instructions.)

Host Communications Indicators

If You Have This Symptom:	It Can Be Caused By:	Do This:
✕ 	A host computer	WAIT. Your host computer needs time to complete your request.
✕  C	A 3274 Control Unit problem	Your 3270 PC is not customized on the 3274. Contact your procedures for reporting a problem with your 3274 Control Unit.
✕  I	Your 3270 Personal Computer	WAIT. The 3270 PC needs time to do an internal function.
 590	1. A bad connection between your 3274 Control Unit and your 3270 PC Or: 2. Your 3274 Control Unit is not working or is turned off Or: 3. A 3270 PC hardware problem Or: 4. A 3274 Control Unit hardware problem	1. Make sure the coaxial cable is securely connected. If you still have the problem: 2. Follow your procedures for reporting a 3274 Control Unit problem. If you still have the problem: 3. Go back to Step 4 on page 13-4, and follow the instructions under the Yes answer for reporting a hardware problem. If you still have the problem: 4. Follow your procedures for reporting a 3274 Control Unit problem.
 591	There is a customization mismatch (SNA or non-SNA) between your 3270 PC and your 3274 Control Unit.	Contact your supervisor or the person who helps you with computer problems for information on recustomizing your 3270 PC work station. Or: Follow your procedures for reporting a 3274 Control Unit problem.

If You Have This Symptom:	It Can Be Caused By:	Do This:
<p>✗  5mm</p>	<p>A bad connection between your 3274 Control Unit and your 3270 PC</p>	<p>Press the Reset key, and repeat what you did when the problem occurred. If you still have the problem, go back to Step 5 on page 13-5, and follow the instructions under the Yes answer for reporting a control unit problem.</p>
<p>✗  204 ✗  207 ✗  208 ✗  211</p>	<p>1. A 3270 PC hardware problem Or: 2. A 3270 PC Control Program problem</p>	<p>1. Go back to Step 4 on page 13-4, and follow the instructions under the Yes answer for reporting a hardware problem. If there is no hardware problem: 2. Repeat what you were doing that caused the problem. If you still have the problem, go back to Step 5 on page 13-5 and follow the instructions under the No answer for reporting a control program problem.</p>
<p>✗  209</p>	<p>1. A bad connection between your 3274 Control Unit and your 3270 PC Or: 2. A 3270 PC hardware problem Or: 3. A 3270 PC Control Program problem</p>	<p>1. Make sure that the coaxial cable is securely connected. Turn the system unit off, and turn it on again. If you still have the problem: 2. Go back to Step 4 on page 13-4, and follow the instructions under the Yes answer for reporting a hardware problem. If there is no hardware problem: 3. Repeat what you did when the problem occurred. If you still have the problem, go back to Step 5 on page 13-5 and follow the instructions under the No answer for reporting a control program problem.</p>

If You Have This Symptom:	It Can Be Caused By:	Do This:
<p>X N 240</p> <p>X N 242</p> <p>X N 243</p>	<p>A 3270 PC problem</p>	<p>Turn the system unit off, and turn it on again. Repeat what you did when the problem occurred. If you still have the problem, go back to Step 5 on page 13-5 and follow the instructions under the No answer for reporting a control program problem.</p>
<p>X N 2 nn (not listed above)</p>	<p>1. A 3270 PC hardware problem Or: 2. A 3270 PC Control Program</p>	<p>1. Turn the system unit off, and turn it on again. Repeat what you did when the problem occurred. If you still have the problem, go back to Step 4 on page 13-4 and follow the instructions under the Yes answer for reporting a hardware problem. If you still have the problem: 2. Go back to Step 5 on page 13-5 and follow the instructions under the No answer for reporting a control program problem.</p>
<p>X N 3 nn</p>	<p>A host computer or a 3274 Control Unit problem</p>	<p>1. Go back to Step 5 on page 13-5, and follow the instructions under the Yes answer for reporting a host or control unit problem.</p>
<p>X N 620</p> <p>X N 641</p>	<p>A 3270 PC Control Program problem</p>	<p>Press the Reset key, and repeat what you did when the problem occurred. If you still have the problem, go back to Step 5 on page 13-5, and follow the instructions under the No answer for reporting a control program problem.</p>

If You Have This Symptom:	It Can Be Caused By:	Do This:
X N 654	A 3274 Control Unit problem	Go back to Step 5 on page 13-5, and follow the instructions under the Yes answer for reporting a control unit problem.
X N 697 X N 698	1. A 3270 PC hardware problem Or: 2. A 3270 PC Control Program problem	1. Go back to Step 4 on page 13-4, and follow the instructions under the Yes answer for reporting a hardware problem. If there is no hardware problem: 2. Go back to Step 5 on page 13-5, and follow the instructions under the No answer for reporting a control program problem.
X PROG4nn	A 3274 Control Unit problem	Press the Reset key, and repeat what you did when the problem occurred. If you still have the problem, go back to Step 5 on page 13-5, and follow the instructions under the Yes answer for reporting a control unit problem.
X PROG7nn	1. A 3270 PC hardware problem Or: 2. A 3270 PC Control Program problem	1. Go back to Step 4 on page 13-4, and follow the instructions under the Yes answer for reporting a hardware problem. If there is no hardware problem: 2. Go back to Step 5 on page 13-5, and follow the instructions under the No answer for reporting a control program problem.

If You Have This Symptom:	It Can Be Caused By:	Do This:
<p>A blank screen with no 4 in the operator information area.</p> <p>Note: The operator information area may contain other errors.</p>	<p>1. A bad connection between your 3274 Control Unit and your 3270 PC Or: 2. A 3274 Control Unit software problem Or: 3. A 3270 PC hardware problem Or: 4. A 3274 Control Unit hardware problem</p>	<p>1. Make sure the coaxial cable is securely connected. If you still have the problem: 2. Follow your procedures for reporting a 3274 Control Unit problem. If you still have the problem: 3. Go back to Step 4 on page 13-4, and follow the instructions under the Yes answer for reporting a hardware problem. If you still have the problem: 4. Follow your procedures for reporting a 3274 Control Unit problem.</p>
<p>A blank screen with a 4 and no other errors in the operator information area.</p>	<p>A host computer problem</p>	<p>There is no host application active for this host session. Follow your procedures for reporting a host problem.</p>
<p>Any other problem</p>	<p>1. A 3270 PC hardware problem Or: 2. A 3270 PC Control Program problem</p>	<p>1. Go back to Step 4 on page 13-4, and follow the instructions under the Yes answer for reporting a hardware problem. If there is no hardware problem: 2. Go back to Step 5 on page 13-5, and follow the instructions under the No answer for reporting a control program problem.</p>

Appendix A. Messages

Use this appendix whenever you see a message on your screen that begins with:

INDCU nnn
INDDEN nnn
INDDD nnn
INDDP nnn
INDF0 nnn
INDF $Tnnn$
INDIN nnn
INDPA nnn
INDPD nnn
INDSM nnn
INDSR nnn
INDST nnn
INDSY nnn
INDTR nnn
INDWS nnn
INDXF nnn

If you have any other messages on your screen, see Chapter 13, *Locating Problems with the Control Program*, first.

The messages described in this appendix are grouped alphabetically. Within each group, the messages are in numerical order.

If a message contains any kind of variable information such as names or numbers it is shown in italics with the letter *x*.

INDCU Customization Messages

INDCU001 Changed item restored to previous value

Explanation: You have made an invalid change to a field on a customization panel. The incorrect value has been replaced by its previous value.

User Response: Correct the value of the field or accept the default value.

INDCU002 No more space to insert into this field

Explanation: This message only appears when you are in insert mode. There is a maximum number of characters allowed in this field. You have tried to enter more characters than the field allows.

User Response: Correct the entry and try again.

INDCU003 Only A – F and 0 – 9 are allowed in this field

Explanation: Only hexadecimal values are allowed in this field. The only valid characters are 0 through 9 and A through F.

User Response: Correct the value in the field. If you need to restore the previous value, move the cursor off the field. The previous value and message INDCU001 appears.

INDCU004 You can type only in input fields

Explanation: You have tried to type on a customization panel in a place where it is not valid to do so, for example, a selectable field.

User Response: To type on a customization panel, position the cursor on an input field. If the cursor is on a selectable field, press PF2 to select the option.

INDCU005 Only numbers are allowed in this field

Explanation: You can enter only numbers 0 through 9 for the value of this field.

User Response: Correct the value in the field. If you need to restore the previous value, move the cursor off the field. The previous value and message INDCU001 appears.

INDCU006 Short name has already been used

Explanation: Each session must have a unique short name. The short name you have just typed has already been used for another session.

User Response: Correct the value in the field. If you need to restore the previous value, move the cursor off the field. The previous value and message INDCU001 appears.

INDCU007 Name does not start with a letter (A-Z)

Explanation: You must use a letter A through Z for the short name. The long name must begin with a letter A through Z.

User Response: Correct the value in the field. If you need to restore the previous value, move the cursor off the field. The previous value and message INDCU001 appears.

INDCU008 DOS must be version 2.00 or higher

Explanation: You are using a version of DOS that is too low. The customization program requires DOS to be version 2.10 or higher.

User Response: Try again with the correct version of DOS.

INDCU009 Number entered is too large

Explanation: The number you have typed is greater than the maximum value allowed for that field.

User Response: Correct the value in the field. If you need to restore the previous value, move the cursor off the field. The previous value and message INDCU001 appears.

INDCU010 Number entered is too small

Explanation: The number you have typed is less than the minimum value allowed for that field.

User Response: Correct the value in the field. If you need to restore the previous value, move the cursor off the field. The previous value and message INDCU001 appears.

INDCU011 Failed to write *xxxxxxxxxxx*

Explanation: An error has been detected during an attempt to write the file with the variable name *xxxxxxxxxxx*. Your diskette may be full.

User Response: Check to see if you have a full diskette. If it is not full, try the operation with a backup diskette. If the problem persists, go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDCU012 Failed to read *xxxxxxxxxxx*

Explanation: An error has been detected during an attempt to read the file with the variable name *xxxxxxxxxxx*.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDCU013 Failed to find *xxxxxxxxxxx*

Explanation: The file with the variable name *xxxxxxxxxxx* could not be found.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDCU014 Contents of file *xxxxxxxxxxx* are unusable

Explanation: The contents of the file with the variable name *xxxxxxxxxxx* are in an unexpected and unusable format.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDCU015 Customization incomplete - system not created

Explanation: You have pressed Esc to quit the customization program while it was creating a customized system diskette.

User Response: The system on the diskette is incomplete and cannot be used. The customization program re-displays the customization summary panel with the values that you selected for your customized system. If you want to create the same customized system on the same diskette, press PF3.

INDCU016 Not enough free storage to run this program

Explanation: You are trying to run the customization program on a work station with insufficient storage. A minimum of 100K bytes of free storage is required.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDCU017 Insert DOS diskette in drive *x*

Explanation: You are trying to create a system on a diskette that has not been formatted. This message appears along with messages CU031 and CU032 after you have pressed PF3 from the customization summary panel to create a customized system.

User Response: Insert the DOS diskette into the diskette drive indicated by the message, and close the drive door. The customization program formats the system diskette, copies the DOS files to it, and then creates the customized system.

**INDCU018 Insert customized system
diskette in drive *x***

Explanation: This message is displayed by the customization program when you select a drive from which default values will be read.

User Response: Insert the previously customized system diskette in the drive indicated by the message, and close the drive door. You can only use a version 2.0 customized control program for the default values.

**INDCU019 Insert target system diskette in
drive *x***

Explanation: This message is displayed by the customization program while it is creating your customized system.

User Response: Insert the system diskette in the diskette drive indicated by the message, and close the drive door.

**INDCU020 Insert formatted diskette in
drive *x***

Explanation: You answered **Yes** to the message INDCU038.

User Response: Insert a diskette that has been formatted with the */s* parameter in drive *x*.

**INDCU021 Insert Control Program diskette
1 in drive *x***

Explanation: This message is displayed by the customization program while it is creating your customized system.

User Response: Insert Control Program diskette 1 in the diskette drive indicated by the message, and close the drive door.

INDCU022 Insert Control Program diskette 2 in drive *x*

Explanation: This message is displayed by the customization program while it is creating your customized system.

User Response: Insert Control Program diskette 2 into the diskette drive indicated by the message, and close the drive door.

INDCU023 Strike any key when ready...

Explanation: The program displays this message.

User Response: When you are ready to proceed, press any key.

INDCU024 Drive *x* does not exist

Explanation: This message appears:

- If you are on the Home panel and you did not type the letter of a drive that exists on your current system, or
- You did not type a valid drive letter A through F.

User Response: On the Home panel, type the correct letter of the drive that exists on your current system. For any other panel, type the desired letter A through F. If you need to restore the previous value, move the cursor off the field. The previous value and message INDCU001 will appear.

INDCU025 Embedded blanks are not allowed in long names

Explanation: You are not allowed to use blank characters in long names. Only letters (A-Z) and numbers (0-9) can be used.

User Response: Correct the long name. If you need to restore the previous value, move the cursor off the field. The previous value and message INDCU001 will appear.

INDCU026 Only letters (A-Z) and numbers (0-9) are allowed

Explanation: You can enter only letters (A-Z) and numbers (0-9) in the value for this field.

User Response: Correct the name. If you need to restore the previous value, move the cursor off the field. The previous value and message INDCU001 will appear.

INDCU027 Cannot customize system with current values

Explanation: You have pressed PF3 to create your system diskette and a problem exists with your current responses. The message appears with message INDCU028.

User Response: Wait for message INDCU028 to appear and follow the user response for that message.

INDCU028 Customized system is too large

Explanation: The current values you specified would generate a customized system which could not fit in the storage size you chose on the Home panel.

User Response: Review your hardware and software options and make changes where possible to reduce the size of the customized system so it fits in the existing storage size.

If you get this message and choose to continue with the customization routine:

- This message appears as long as the customization routine cannot fit the customized system in the existing storage size
- This message no longer appears when you change the options so that the customization routine can fit the customized system in the existing storage size. For example, a common cause is the session sizes. Either the defaults are too large, or you have not changed them yet, or you have specified your personal computer sessions and you have gone back to change other options.

INDCU029 An AUTOEXEC.BAT file exists on target disk**INDCU030 Do you want it replaced? (Y/N)**

Explanation: The customization routine found an AUTOEXEC.BAT file on the target disk or diskette.

User Response: If you want it replaced by the AUTOEXEC.BAT file created by the customization routine, type **Y**. Otherwise, type **N** to continue using the existing AUTOEXEC.BAT FILE. Make sure INDCIPL is the first line of the file.

INDCU031 Incorrect printer entered

Explanation: You did not enter a valid printer number.

User Response: See the Hardware Options customization panel and then enter the correct printer number.

INDCU032 Target system diskette requires formatting**INDCU033 Type drive letter for DOS diskette and press PF3**

Explanation: You are trying to create a system on a target diskette that has not been formatted. This message appears along with message INDCU032 after you have pressed PF3 from the customization summary panel when you create a customized system.

User Response: Insert the DOS diskette, type the letter of the drive, and then press PF3.

INDCU034 System files already exist on target disk**INDCU035 Do you want them replaced? (Y/N)**

Explanation: You are recustomizing a system onto a previously customized system diskette or fixed disk. These messages appear after you have pressed PF3 from the customization summary panel when you create a customized system.

User Response:

Type **Y** if:

- You have patched any files on your system diskette, or received a refresh of the code.
- You are changing from CUT to DFT Control Unit attachment or visa versa.
- You are changing from SNA to non-SNA host attachment or visa versa.

Otherwise, type **N**.

INDCU036 Customization complete

Explanation: The customization program has transferred all the files needed for your customized system onto the target diskette. The customization summary panel is now re-displayed with the values you selected for your customized system.

User Response:

- You can end the customization program by pressing Esc.
- You can create another copy of this same system with the same values by pressing PF3.
- You can create a different customized system by changing any of the values on the customization summary panel and then pressing PF3.

INDCU037 Incorrect diskette inserted

Explanation: You have inserted an incorrect diskette in response to one of the customization prompts.

User Response: Remove the incorrect diskette from the drive indicated either by message INDCU019 or INDCU020. Insert the correct diskette in the drive and press any key to continue.

INDCU038 Do you want 3270 PC utilities copied? (Y/N)

Explanation: The customization routine copies utilities if you reply Y.

User Response: Answer Y if you want these utilities copied.

INDCU039 Target diskette filled. Fixed disk may be required.

Explanation: Your target diskette is full. The system you customized for will not fit on the diskette.

User Response: Your target diskette may not have been blank when you started customization. Insert a blank diskette into the target drive, and press PF3 to customize to that diskette. If you receive this message again, the system that you want to create will not fit on a diskette. Start customization over, and either select fewer options or customize onto a fixed disk.

INDDD Display Dump Messages

INDDD001 Only COUNTER, DUMP, or TRACE are valid parameters

Explanation: You entered an incorrect parameter. COUNTER, DUMP, or TRACE are the only valid parameters for the INDDISP command.

User Response: Choose the appropriate parameter.

INDDD002 Parameter required. Use COUNTER, DUMP, or TRACE

Explanation: You did not enter a required parameter after you typed the INDDISP command.

User Response: Choose the appropriate parameter for the INDDISP command.

INDDD003 Diskette or file not found

Explanation: This message appears when you inserted the incorrect diskette in response to either messages INDDD004, INDDD005, or INDDD006.

User Response: None. INDDD004, INDDD005, or INDDD006 appears.

INDDD004 Insert DUMPDATA.00x. Press Enter, or End to quit

Explanation: This message prompts you to insert the appropriate diskette.

User Response: Insert the requested diskette and press Enter. If you press the End key, the display dump utility is ended.

INDDD005 Insert diskette with
**TRACE.DMP. Press Enter, or
End to quit**

Explanation: This message prompts you to insert the diskette containing the file TRACE.DMP previously created using the command INDSAVE TRACE.

User Response: Insert the diskette and press Enter. If you press the End key, the display dump utility is ended.

INDDD006 Insert diskette with
**COUNTER.DMP. Press Enter, or
End to quit**

Explanation: This message prompts you to insert the diskette containing the file COUNTER.DMP previously created using the command INDSAVE COUNTER.

User Response: Insert the diskette and press Enter. If you press the End key, the display dump utility is ended.

INDDE Display Environment Messages

INDDE001 *xx* - Format incorrect. Space between short names

Explanation: The window short name specified contains more than one character.

User Response: Retry the command INDDENV, using short names of existing personal computer session windows separated by spaces. For example, INDDENV A B.

INDDE002 No window with this short name - *x*

Explanation: There is no window with that short name.

User Response: Retry the command INDDENV, using a short name of an existing personal computer session window.

INDDE003 Window short name must be a letter A - Z

Explanation: The window short name specified is not alphabetic.

User Response: Retry the command INDDENV, using a short name of an existing personal computer session window.

INDDE004 *x* must be a PC window short name

Explanation: The window name specified is either a host or notepad window, or a non-stoppable environment. The environment information will not be displayed.

User Response: Retry the command INDDENV, specifying a valid one character alphabetic window name that is in a personal computer environment.

INDDE005 System not customized for multiple PC environments

Explanation: On the Control Program Options panel of the customization procedure, you specified **No** for multi-PC environment capability. No environment information will be displayed.

User Response: None.

INDDE006 System error - *xxxx*

Explanation: There is a system error. The variable information *xxxx* is a return code.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDDE007 Not enough storage for display environment program

Explanation: There is not enough storage in the environment to run the display environment program.

User Response: If there are multiple PC environments in the system, try the display environment command INDDENV in a different personal computer window that displays the DOS prompt. If this problem persists in all personal computer windows, use the DOS command CHKDSK to display storage information.

INDDE008 *xx* additional PC environments can be created

Explanation: This informational message tells you the number of additional personal computer environments that can be created, providing there is sufficient storage.

User Response: None.

INDDP Dump Diskette Preparation Messages

INDDP001 Insert diskette DUMPDATA.00x
Press any key to continue or Q
to quit

Explanation: This message prompts you to insert a blank, formatted diskette DUMPDATA.001, DUMPDATA.002, or DUMPDATA.003.

User Response: Insert the appropriate diskette. Press any key to continue the dump diskette preparation process, or press the Q key to quit the process.

INDDP002 Diskette not blank. Insert
DUMPDATA.00x
Press any key to continue or Q
to quit

Explanation: You inserted a non-blank diskette.

User Response: Insert the appropriate blank, formatted diskette. Press any key to continue the dump diskette preparation process or press Q to quit the process. If the problem persists, go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDDP003 Dump diskette(s) ready for use

Explanation: The dump diskette preparation utility has completed preparing the diskette(s).

User Response: None.

INDDP004 Dump diskette preparation canceled

Explanation: You have canceled the dump diskette preparation utility.

User Response: None.

INDDP005 DOS error creating DUMPDATA.00x

Explanation: The dump diskette preparation utility has encountered a DOS error.

User Response: Reformat the diskette specified in the message and any other previously prepared dump diskettes. **Make sure you do not use the /s option** on the FORMAT command. Retry the procedure. If the problem persists, go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDDP006 Insufficient space on diskette to create DUMPDATA.00x

Explanation: The dump diskette contained hidden files which do not leave enough space on the diskette for this utility.

User Response: Format 3 diskettes. While formatting, make sure that 362,496 bytes are available on the diskette. **Make sure you do not use the /s option** on the FORMAT command. Retry the procedure. If the problem persists, go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDF0 System Extension Messages

INDF0nnn

Explanation: Messages that begin with INDF0 are produced by user-supplied, system extensions. The value *nnn* may be any number. The text of the message will vary with the number.

User Response: Refer to the information that accompanies the system extension or call your Technical Coordinator for an explanation of these messages.

INDFT File Transfer Messages

INDFT001 File transfer command being processed

Explanation: This message appears when the file transfer command is entered, and processing by the system has begun.

User Response: None. Wait for message INDFT002 to appear.

INDFT002 Number of bytes of file transferred so far: == > xxxxxxxx

Explanation: This is a progress message that tells you how many bytes of the personal computer file have been transferred to or from the host. The number is updated as the file is transferred. After the entire file has been transferred, **INDFT003 File transfer complete** appears. If it does not complete successfully, a file transfer error message such as INDFT006 appears.

User Response: Wait for file transfer to complete.

INDFT003 File transfer complete

Explanation: The file transfer operation has been completed successfully. There is now a file either at the host or at the personal computer whose name and characteristics are those you specified in the SEND or RECEIVE command.

User Response: None.

INDFT004 File transfer complete with records segmented

Explanation: The file transfer operation has been completed. Any record greater than the set logical record length (LRECL) of the file being appended will divide and become multiple records.

User Response: None.

INDFT005 Personal computer filespec incorrect: File transfer canceled

Explanation: You have entered some part of the personal computer DOS filespec incorrectly, for example, the diskette drive, path, filename, or extension.

User Response: Compare the personal computer DOS filespec in the file transfer command, which will still be visible in the personal computer session, with the user manual to make sure it conforms to the personal computer DOS requirements for a filespec. If the filespec is correct, it is possible that the specified personal computer file does not exist on the personal computer disk. Enter the DOS directory command, DIR, to check the personal computer filename and extension.

INDFT006 Command incomplete: File transfer canceled

Explanation: The user did not enter any parameters after Send or Receive.

User Response: Read the user manual on requirements for the Send and Receive commands and retry.

INDFT007 Cannot link to host: File transfer canceled

Explanation: This message indicates some kind of host connection problem.

User Response: If you see this message, file transfer may not be working properly. Verify that the host is operating. If it is, go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDFT008 Command transmit error: File transfer canceled

Explanation: This message occurs if there is a program error or if a key was pressed that produced an invalid code, for example, one that cannot be transmitted to the host.

User Response: Retry the file transfer after carefully reading the instructions in Chapter 7. Check the status of the host; there may be some information on the host session indicating the problem. If the host is operating, go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDFT009 Error reading file from damaged personal computer disk: File transfer canceled

Explanation: This message indicates that the personal computer disk or diskette is probably damaged.

User Response: Retry the operation with a backup copy of the file being transferred. If the failure still occurs, refer to the chapter that deals with problems in your *Guide to Operations*.

INDFT010 Host has not responded within timeout period: Refer to reference manual for more information

Explanation: The host has not responded to the file transfer within several seconds.

User Response: If the host session screen shows HOLDING, you can switch to the host session and press Clear (in VM/CMS) or PA2 (in TSO). This should start file transfer. If X SYSTEM or X

appears in the host session screen operator information area, wait for it to clear. These indicate the system is working slowly. If you want to halt file transfer after several time-out messages appear, switch to the host session, press Reset to clear the operator information area, and press PF2 to halt the file transfer, or Clear to continue. This situation can be caused by line problems.

INDFT011 Lost contact with host: File transfer canceled

Explanation: The host is inactive.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

**INDFT012 Error writing to damaged or full personal computer disk:
File transfer canceled**

Explanation: This message indicates that the personal computer disk or diskette has become full during a Receive operation, or that the disk or diskette may be damaged.

User Response: Verify that the diskette you are using is not full. Retry the operation with a backup copy of the file being transferred. If the failure still occurs, refer to the chapter that deals with problems in your *Guide to Operations*.

INDFT013 Error writing file to host: File transfer canceled

Explanation: The host program has detected an error in the file data being sent to it by the Send program.

User Response: Retry file transfer again. If the message occurs again, go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDFT014 Error reading file from host: File transfer canceled

Explanation: The host program has detected an error in the file data during a Receive operation.

User Response: Retry file transfer. If the message occurs again, go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDFT015 Required host storage unavailable: File transfer canceled

Explanation: You need 30K of main storage for file transfer, in addition to that required by your host. This should not be confused with disk space.

User Response: Contact your local host system support representative.

INDFT016 Incorrect request code: File transfer canceled

Explanation: An invalid parameter has been sent by the Send or Receive application.

User Response: Verify that the current versions of Send, Receive, and IND\$FILE MODULE are correctly installed. If they are, follow local procedures and have available:

1. The sequence of events, including keys pressed and in what order
2. A system level
3. Message number.

INDFT017 Missing or incorrect TSO data set name: File transfer canceled

Explanation: The TSO data set name is missing or not a sequential or partitioned data set.

User Response: Correct the TSO data set name in the command and retry.

INDFT017 Missing or incorrect CMS file name: File transfer canceled

Explanation: The CMS file name is missing or incorrectly specified.

User Response: Correct the CMS file name in the command and retry.

INDFT018 Incorrect option specified: File transfer canceled

Explanation: User specified an option that is not acceptable.

User Response: Correct the command to specify an acceptable option and retry.

INDFT019 Error reading or writing to host disk: File transfer canceled

Explanation: There is not enough space available for data on the host.

User Response: Look at the host session message for indications and correct the problem.

INDFT022 Host session identifier incorrect: File transfer canceled

Explanation: The host session specified by the **id** parameter in the file transfer command does not exist.

User Response: Determine which identifier you should be using by checking the host session identification using List (PF1).

INDFT023 Activity specified not a host session: File transfer canceled

Explanation: The identifier (**id**) specified in the file transfer command is not for a host session.

User Response: Press List (PF1) to identify the host windows. Reissue the file transfer command.

INDFT024 Autokey operation in progress: File transfer canceled:

Explanation: Autokey is active.

User Response: Wait until the autokey operation is complete and retry.

INDFT025 Keyboard inhibited: File transfer canceled

Explanation: The host session is not able to accept file transfer because the keyboard is locked.

User Response: Wait until the keyboard is free to receive, and then retry. If the problem persists, follow local procedures for reporting problems with the host.

INDFT026 Unrecoverable system error: File transfer canceled

Explanation: This message indicates a program error.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDF T027 **Communication sequence with host disrupted: File transfer canceled**

Explanation: This indicates a program error or that Ctrl + Break has been pressed.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDF T028 **Invalid option xxxxxxxx: File transfer canceled**

Explanation: *xxxxxxx* is not recognized, is specified as a positional keyword, or has an associated value that is incorrect.

User Response: Correct the option in the command and retry.

INDF T029 **Invalid option xxxxxxxx with RECEIVE: File transfer canceled**

Explanation: *xxxxxxx* is not valid with RECEIVE, but can be used with SEND.

User Response: Remove the option from the command and retry.

INDF T030 **Invalid option xxxxxxxx with APPEND: File transfer canceled**

Explanation: *xxxxxxx* is not valid with APPEND, but otherwise can be used.

User Response: Remove the option from the command and retry.

INDFT031 Invalid option xxxxxxxx without SPACE: File transfer canceled

Explanation: *xxxxxxx* can only be used if SPACE is also specified.

User Response: Remove the option from the command and retry.

INDFT032 Invalid option xxxxxxxx with PDS: File transfer canceled

Explanation: *xxxxxxx* is invalid with a host partitioned data set.

User Response: Remove the option from the command and retry.

INDFT033 Only one of TRACKS, CYLINDERS, AVBLOCK allowed: File transfer canceled

Explanation: SPACE can be specified in units of TRACKS, CYLINDERS, or AVBLOCK. Only one can be used.

User Response: Remove the unwanted option from the command and retry.

INDFT034 CMS file not found: File transfer canceled

Explanation: An existing CMS file must be specified for RECEIVE.

User Response: Correct the CMS file specification in the command and retry.

INDFT035 CMS disk is Read-Only: File transfer canceled

Explanation: The CMS file mode specified for SEND must allow write access.

User Response: Correct the CMS file specification in the command and retry.

INDFT036 CMS disk is not accessed: File transfer canceled

Explanation: The CMS file mode is not in the CMS disk search order.

User Response: Access the required disk in CMS or correct the CMS file specification in the command. Retry the command.

INDFT037 CMS disk is full: File transfer canceled

Explanation: Either the CMS disk is full, the maximum number of files (3400) on the minidisk has been reached, or the maximum number of data blocks (16060) per file has been reached.

User Response: Use another disk with enough space or remove unwanted files from the specified disk. If the personal computer file is very large (over 1 M bytes), consider dividing it into several pieces. When one of these actions has been taken, retry the command.

INDFT038 System error - *xxxx*: File transfer canceled

Explanation: There is a system error. The variable information *xxxx* is a return code.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDFT099 Host program error code *xx xxxxxxxx*: File transfer canceled

Explanation: This message indicates a program error.

User Response: Follow your local procedures and have available:

1. Sequence of events
2. The variable data, *xx xxxxxxxx* from this message
3. The system level.

INDPA Patch Installation Messages

There may be times when DOS messages appear, in addition to Patch messages, while you are using the Patch facility. If this happens, refer to your IBM Personal Computer *Disk Operating System* manual for explanations.

INDPA001 Empty patch file

Explanation: Data was not found in the patch file specified.

User Response: Add the Patch information to the failing patch file.

INDPA002 Zap data not specified

Explanation: Zap data was not found in the patch file specified.

User Response: Add the zap information to the failing patch file. Make sure you press the Enter key after every entry in the patch file.

INDPA003 Prerequisite system level not specified

Explanation: The first entry in the patch file is a required system level, and none was found.

User Response: Add the system level as the first entry in the failing patch file.

INDPA004 Current - system level = (xxxx)
But patch prerequisite is -
system level = (xxxx)

Explanation: The first entry in the patch file specified a prerequisite APAR level of xxxx, but the system is currently at a system level of xxxx.

User Response: Either upgrade the system level or correct the patch file, whichever caused the failure.

INDPA005 Requested APAR (xxxxxxx)
already installed

Explanation: The APAR number specified is already installed on the system.

User Response: Verify that you typed in the correct APAR number. If you did, then the patch is already installed and no further action is needed. If you typed an incorrect APAR number, correct and retry.

INDPA006 Requested APAR (xxxxxxx) not
installed

Explanation: You have tried to remove an APAR that is not on the system, or you entered the wrong APAR number.

User Response: If you typed the number correctly, the APAR has been removed, and no further action is needed.

INDPA007 Prerequisite APAR (xxxxxxx) not installed

Explanation: The APAR number specified a prerequisite APAR of xxxxxxx, but that APAR is not currently installed on the system.

User Response: Verify that the prerequisite APAR entry in the patch file is correct. If it is, install the required prerequisite APAR and retry the operation.

INDPA008 INDQPCH.DAT history file not found on this diskette

Explanation: Either one of these conditions is true:

- The diskette you are attempting to patch is not a customized control program diskette
- The INDQPCH.DAT history file has been deleted or is not on the diskette, the disk, or the subdirectory the patch is in.

User Response: According to the condition, take one of these actions:

- Place the control program diskette in the default drive
- If the history file INDQPCH has been deleted from the diskette, use the most current backup of your system diskette and install any fixes required to bring the system up to the current level.

INDPA009 Maximum APARs installed

Explanation: The system allows a maximum of 100 APARs to be installed for a given refresh level.

User Response: Upgrade your system to the most current refresh level.

INDPA010 Patch file for APAR (xxxxxxx) not found

Explanation: The APAR number was not found. This error can be caused by one of the following:

- Entering an incorrect APAR number.
- Failing to specify the diskette drive identifier if the APAR file is on a diskette drive other than the current default drive.
- The patch file is not on the diskette.

User Response: Either enter the correct APAR number, or specify the diskette drive identifier if the APAR file is on a diskette drive other than the current default drive.

INDPA011 OFFset invalid or missing

Explanation: The **OFF** = keyword in the zap data of the patch file was either missing or misspelled.

User Response: Correct the zap data and retry the operation.

INDPA012 VERify invalid or missing

Explanation: The **VER** = keyword in the zap data of the patch file was either missing or misspelled.

User Response: Correct the zap data and retry the operation.

INDPA013 REPlace invalid or missing

Explanation: The **REP** = keyword in the zap data of the patch file was either missing or misspelled.

User Response: Correct the zap data and retry the operation.

INDPA014 Invalid hex offset data

Explanation: The offset data in the zap line either contained nonhexadecimal data or was missing.

User Response: Correct the zap data and retry the operation.

INDPA015 Invalid hex verify data

Explanation: The verify data in the zap line either contained nonhexadecimal data or was missing.

User Response: Correct the zap data and retry the operation.

INDPA016 Invalid hex replace data

Explanation: The replace data in the zap line either contained nonhexadecimal data or was missing. You may see "Verify is correct" before getting this message. This indicates that only the replace data is incorrect.

User Response: Correct the zap data and retry the operation.

INDPA017 Comma or parenthesis missing

Explanation: You have more than 8 characters in the verify or replace data line or you have a required delimiter missing from the displayed zap line. You must have left and right parentheses and two commas in the zap line.

User Response: Correct the zap data and retry.

**INDPA020 PATCH =ZAP *xxxx*
(OFF=*xxxx*,VER=*xxxx*,REP=*xxxx*)
module not found**

Explanation: The module specified in the zap data was not found during patch data verification.

User Response:

- If the zap data is incorrect, correct the data and retry the operation.
- If the data is correct, determine why the module was not found. There may be:
 - An incorrect diskette drive specifier or
 - A deleted module. If a module has been deleted, use a backup copy and retry the operation.

INDPA021 **PATCH =ZAP** *xxxx*
 (OFF = *xxxx***,VER =** *xxxx***,REP =** *xxxx***)**
 mismatch
 MODULE = **MOD =** *xx*

Explanation: The verify data specified in the zap data line does not match the verify data in the module when you are installing patches.

User Response:

- If the zap data is incorrect, correct the data and retry the operation.
- If the data is correct, record all data related to the problem. Include both:
 - A screen print
 - A copy of the diskette and follow local procedures.

INDPA022 **PATCH =ZAP** *xxxx*
 (OFF = *xxxx***,VER =** *xxxx***,REP =** *xxxx***)**
 mismatch
 MODULE = **MOD =** *xx*

Explanation: The verify data specified in the zap data line does not match the verify data in the module when you are removing patches.

User Response: The zap data file for this patch has been changed since the APAR was installed. Correct the data file and retry the operation.

INDPA023 Prerequisite APAR invalid or not specified

Explanation: One of the keywords, **PRE** or **APAR**, is misspelled or missing on one of the APAR prerequisite entries.

User Response: Correct the keyword data and retry the operation.

INDPA024 Error in zap data - patches not installed

Explanation: An error in the zap data was encountered. Preceding error messages identified the type of error. This message always appears with another message.

User Response: Correct the problem identified by all preceding messages and retry.

INDPA025 Error in zap data - patches not removed

Explanation: An error in the zap data was encountered. A preceding error message identified the type of error. This message always appears with another message.

User Response: Correct the problem identified by all preceding messages and retry.

INDPA026 Patches installed

Explanation: The patch was installed, and the history file **INDQPCH.DAT** was updated.

User Response: None.

INDPA027 Patches removed

Explanation: The patch was removed, and the history file INDQPCH.DAT was updated.

User Response: None.

INDPA028 Incorrect data entered. Retype

Explanation: You entered invalid data for Check Sum, the prompt preceding it, or both.

User Response: Enter the data for the prompt and Check Sum. If the problem persists, go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDPA029 Patch file creation canceled

Explanation: You have terminated the patch file creation procedure either by:

- Replying **No** to message INDPA30 or
- Pressing Enter in response to:
 - APAR number prompt or
 - Prerequisite system level or
 - The first occurrence of the prompt for
 - Module name or
 - Offset or
 - Verify or
 - Replace

User Response: If you want to create a patch, enter the command INDPATCH.

INDPA030 Patch file for APAR *xxxxxxxx*
already exists
Do you want to overlay this file
<Y>es or <N>o?

Explanation: The APAR number you entered in response to the APAR number prompt already exists.

User Response:

- If you reply Y, the patch process continues.
- If you reply N, message INDPA029 appears, and the patch file creation is canceled.

INDPA031 Patch file for APAR *xxxxxxxx*
created

Explanation: This is an informational message.

User Response: None.

INDSM Split/Merge Messages

INDSM001 Command being processed

Explanation: This is an information message.

User Response: None.

INDSM002 Incorrect level of 3270 PC Control Program

Explanation: The SPLIT and MERGE commands require you to use Version 2.0 of the 3270 PC Control Program.

User Response: Load the correct version of the 3270 PC Control Program.

INDSM003 System not customized for multiple DOS function

Explanation: SPLIT and MERGE require multiple DOS function. Your system is not customized for this function.

User Response: Your system must be recustomized to include the multiple DOS function.

INDSM004 A required system resource is busy. Try again later

Explanation: The DOS environment resource manager is currently being used by another program. For example, there is a SPLIT or MERGE command being processed.

User Response: Issue the command again. If the condition persists, contact your technical coordinator.

INDSM005 Source window x does not exist

Explanation: The source window, x , specified in the SPLIT or MERGE command does not exist.

User Response: Press PF1 (List) in Work Station Control mode to see what windows exist. Change the entry in the panel.

INDSM006 Source window x is not a DOS window

Explanation: The source window exists, but it is not a personal computer DOS window.

User Response: Specify a personal computer DOS window.

INDSM007 Specify a source window

Explanation: You did not enter any source windows.

User Response: Enter one or more source windows.

INDSM008 Specify a target window

Explanation: You did not enter any target windows.

User Response: Enter one or more target windows.

INDSM009 Specified windows must be contiguous in memory

Explanation: The windows you specified to merge must be in consecutive blocks of storage.

User Response: Issue the INDDENV command. Environments are displayed contiguously from high to low storage.

INDSM010 Not enough storage to create target windows

Explanation: There is not enough storage allocated to create all the target windows. Each window must have at least 10K of storage, and the total cannot exceed the size of the source window.

User Response: Choose smaller storage requirements for each window, or choose fewer windows. Run INDDENV to see how much storage the source window has.

INDSM011 Target window *x* already exists

Explanation: Since the target window exists, it cannot be created again.

User Response: Either specify the target as a source window also, or choose another target window.

INDSM012 Application running in source window.

Press PF3 to continue or any other key to cancel

Explanation: You have an application running in a source window that you want to merge or split. If you merge or split that window, you will immediately terminate the application that is running.

User Response: Check to see what application is running in the source window. If you decide to split or merge that window, press PF3. Otherwise, choose another source window.

INDSM013 Default drive for window *x* is higher than highest drive

Explanation: In order to access the default drive, it must be less than or equal to the highest drive.

User Response: Choose a valid drive name less than or equal to the highest drive.

INDSM014 Drive name must be a letter A – F

Explanation: Drive name must be an alphabetic character, A through F.

User Response: Choose a valid drive name.

**INDSM015 Defaults will be used for blank fields
Press PF3 to continue or any other key to cancel**

Explanation: You have omitted some fields.

User Response: Press PF3 to accept the defaults, or press any other key to enter values in the field.

INDSM016 System error - *xxxx*

Explanation: The split or merge program cannot recover from an error it encountered.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDSM017 At least 10K of storage must be allocated for each window

Explanation: You entered a value smaller than 10K for one or more target windows.

User Response: Enter the storage size with a value of at least 10K.

INDSM018 Specify each source window only once

INDSM019 Specify each target window only once

Explanation: You specified a window as a source or target window more than once.

User Response: Remove the redundant window name.

INDSM020 You cannot delete characters from this area

Explanation: The cursor is not on an input field.

User Response: None.

INDSM021 Only numbers are allowed in this field

Explanation: You can enter only numbers 0 through 9 for the value of this field.

User Response: Correct the value in the field.

INDSM022 You cannot type in that area

Explanation: You have tried to type on a panel in a place where it is not valid to do so.

User Response: Move the cursor to an input field and continue your work.

INDSM023 Window short name must be a letter A–Z

Explanation: You can enter only a letter A through Z for the value of this field.

User Response: Correct the value in the field.

INDSM024 Window long name must contain only A–Z or 0–9

Explanation: The only valid characters are A through Z and 0 through 9.

User Response: Correct the value in the field.

INDSM025 A short name is required for each target window requested

Explanation: You must enter a window short name for each window you want to create.

User Response: Enter window short name(s) on the Home Panel for each window you want to create.

INDSP System/Program Information File Messages

INDSP001 You cannot type in that area

Explanation: You have tried to type on a panel in a place where it is not valid to do so, for example, a selectable field.

User Response: To type on a panel, position the cursor on an input field. If the cursor is on a selectable field, press PF2 to select the option.

INDSP002 Cursor is not on a selectable field

Explanation: You pressed PF2 on a panel where it is not valid to do so, for example, an input field.

User Response: Position the cursor on a selectable field to type on a panel. If the cursor is on an input field, type the information.

INDSP003 You cannot delete characters from this area

Explanation: The cursor is not on an input field.

User Response: None.

INDSP004 Only A–F and 0–9 are allowed in this field

Explanation: Only hexadecimal values are allowed in this field. The only valid characters are 0 through 9 and A through F.

User Response: Correct the value in the field.

INDSP005 Contents of file are unusable

Explanation: The contents of the file are in an unexpected and unusable format.

User Response: Make sure your file is a System Information File or a Program Information File.

INDSP006 Directory cannot be found

Explanation: The directory does not exist on the disk or diskette.

User Response: Use the TREE command to check your disk or diskette to see if the directory exists. See the IBM Personal Computer *Disk Operating System* manual for further explanations of path and file specifications.

INDSP007 Cannot access directory

Explanation: This message appears if:

- The directory is full
- The directory does not exist
- There is a write-protected tab on the diskette.

User Response:

- Enter either the DIR or CHKDSK DOS directory commands to check directory status.
- Use the TREE command to see if the directory exists on your disk or diskette. See the IBM Personal Computer *Disk Operating System* manual for further explanations of path and file specifications.
- Check the diskette for the write-protected tab.

INDSP008 Failed to write file

Explanation: Your diskette may not be formatted correctly, or it may be full.

User Response: Make sure the diskette is formatted correctly. If it is, use the CHKDSK command to see how much space is left on the diskette. See the IBM Personal Computer *Disk Operating System* manual for further explanations of path and file specifications.

INDSP009 Only numbers are allowed in this field

Explanation: You must enter only numbers in this field.

User Response: Correct the value in the field.

INDSP010 Enter program name

Explanation: You must enter a program name before you leave a panel.

User Response: Enter the program name.

INDSP011 DOS must be version 2.00 or higher

Explanation: You are using a version of DOS that is too low.

User Response: Try again with the correct version of DOS.

INDSP012 File not found

Explanation: The System Information File or the Program Information File you tried to read does not exist.

User Response: Correct the program name or directory, or press the PF key to create a new file.

INDSP013 Entry not found in the consolidated PIF

Explanation: The program name you entered does not have a PIF in the consolidated Program Information File.

User Response: Make sure the program has an associated PIF. If not, press PF4 to create a Program Information File.

INDSP014 Press PF7 again to confirm or any other key to cancel

Explanation: Informational.

User Response: Either press PF7 to delete the entry, or press any other key to cancel this operation.

INDSP015 Entry deleted.

Explanation: You have deleted the entry.

User Response: None.

INDSP016 File written

Explanation: Informational. You have created the appropriate file.

User Response: None.

INDSR Save/Restore Messages

INDSR001 Save command being processed

Explanation: Information message.

User Response: None.

INDSR002 Restore command being processed

Explanation: Information message.

User Response: None.

INDSR003 Autokey information saved successfully

Explanation: Information message.

User Response: None.

INDSR004 *xxxxxxxx* information restored from *xx/xx/xx* at *xx:xx*

Explanation: Information message. The information for the first variable is one of the following:

- Autokey
- Screen
- Notepad

The second variable contains the date when the information was saved.

The third variable contains the time the information was saved.

It is suggested you always set the time and date before doing a save, or the last default date and time that was set will be used.

User Response: None.

INDSR005 Notepad information saved successfully

Explanation: Information message.

User Response: None.

INDSR006 Screen profiles saved successfully

Explanation: Information message.

User Response: None.

INDSR007 Save processing complete

Explanation: Information message.

User Response: None.

INDSR008 Restore processing complete

Explanation: Information message.

User Response: None.

INDSR011 Error opening xxxxxxxx personal computer file

Explanation: The file specified (or the default file) could not be opened. *xxxxxxx* refers to one of the specific types of personal computer file:

- Autokey
- Notepad
- Screen

User Response: If you specified a filespec on the command, check to be sure that it was specified correctly. Make sure the drive door is closed. Enter the DOS directory command, DIR, to check the personal computer filename and extension.

Note: The SAVE and RESTORE commands accept four keywords:

- *Autokey*
- *Notepad*
- *Screen*
- *Notepadn*

If the command is not followed by one of the above keywords, filespec is the assumed parameter. Make sure you typed these keywords correctly. Make sure the directory or sub-directory you are attempting to restore from has the file residing there.

If you find no error in your procedures, follow your local procedures and have available:

1. The message number.
2. The sequence of events that caused the failure, including the keys pressed and in what order.
3. A system level.

**INDSR012 Error creating personal
computer file**

Explanation: The personal computer file could not be created.

User Response: Check the filespec specified. If you named a path, make sure the path exists. Be sure that the diskette drive door is closed. If the failure persists, go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

**INDSR013 Error reading from personal
computer file**

Explanation: A read request failed to complete processing successfully. This message may indicate a program error.

User Response: Be sure the drive door is closed. If the drive door is closed, and the failure persists, go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

**INDSR014 Error writing to personal
computer file**

Explanation: A write request failed to complete processing successfully.

User Response: The most probable cause for this message is that the disk is full. Check the number of bytes available on the current disk. Retry the operation when you have made more space available.

**INDSR015 Personal computer filespec
incorrect**

Explanation: The path, drive, or filename specified in the filespec is incorrect.

User Response: Retry the operation, specifying a valid path, drive or filename. See the IBM Personal Computer *Disk Operating System* manual for further information.

**INDSR016 Personal computer storage
insufficient for processing**

Explanation: Not enough system storage is currently available for Save/Restore to process any requests.

User Response: You need to have obtain more storage for Save/Restore to process any requests.

INDSR017 Invalid file specified for Restore

Explanation: Either the file specified on the RESTORE command is not a previously saved save file for the request type specified, or system storage has been overlaid.

User Response: Check to be sure that the file being used on the Restore command is a previously saved save file for the request type that is being stored. If no error can be found in your procedures, follow local procedures and have available:

1. The message number.
2. The error code.
3. The sequence of events that caused the failure, including the keys pressed and in what order.
4. A system level.

INDSR018 Not all notepads that were saved could be restored

Explanation: There are fewer notepads defined on the current system than there were on the saved system.

User Response: None. The restore will complete processing successfully with as many notepads as are defined on the current system being restored and the remaining will be disregarded.

INDSR019 One notepad restored. No saved data for the other

Explanation: Your system was configured for one notepad. Thus, only one notepad was restored.

User Response: None.

INDSR020 Window configuration error

Explanation: A error was detected during a restore of a screen profile. Either a window not configured on Screen Profile 0 is trying to be restored, or the maximum number of window definitions (40) already exists.

User Response: Restore the screen profile only on a system configured with the same windows defined on Screen Profile 0. Or, if you have more than 40 windows defined, delete some before defining more.

INDSR021 Keyboard locked

Explanation: The Save or Restore request failed because another operation locked the keyboard.

User Response: Wait for the other operation to complete and retry. If the other operation does not complete, go back to Chapter 13, and

continue with question 2 to locate the cause of the failure.

INDSR022 Autokey in use. Cannot Save/Restore Autokey

Explanation: The Save or Restore request failed because an autokey operation was in progress.

User Response: Wait for the autokey operation to complete processing and retry. If the other operation does not complete, go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDSR023 Copy not customized. Cannot Save/Restore notepads

Explanation: The commands INDSAVE and INDRSTR use the Copy function to save and restore notepads. Your system is not customized for the Copy function.

User Response: If you want to save and restore notepads, your system must be re-customized. See your Technical Coordinator.

INDSR024 Incorrect window name for single notepad requests

Explanation: The window name specified on a single notepad request or Restore must be a notepad window.

User Response: Reissue the command, specifying a valid notepad window name.

INDSR025 Filespec must be specified on single notepad requests

Explanation: You omitted the filespec in entering a Save or Restore command.

User Response: Reissue the command, specifying the filespec as the second parameter.

INDSR026 Filenames specified in the file record are invalid

Explanation: The Save or Restore request failed because your user-specified file contained invalid filespec information.

User Response: Specify a filename containing valid filespec information and retry the operation.

**INDSR031 System error while processing
xxxxxxxx - xxxx**

Explanation:

- If INDSAVE or INDRSTR appears as the first variable, a system error occurred while the program was being initialized, or while the counter or save options were running.
- If AUTOKEY, NOTEPAD, or SCREEN appears as the first variable, your system was not properly customized to perform that particular operation.

The second variable is a return code.

User Response: If your system was not properly customized to perform that operation, call your Technical Coordinator. If a system error occurred, go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

**INDSR032 Autokey restore failed: Saved
autokey recording does not fit**

Explanation: The size of the recording is greater than the size of the autokey recording area of the system. The autokey restore operation is canceled, and the contents of the recording area are not changed.

User Response: Increase your autokey recording area by recustomizing the 3270 PC Control Program.

**INDSR033 *xxxxxxxx* not customized. No
data saved**

Explanation: If NOTEPAD or AUTOKEY appears as the variable, your system is not customized for notepads or the autokey function. A file was still created and should not be erased.

User Response: None.

**INDSR034 No *xxxxxxxx* data available to be
restored**

Explanation: The system for which the INDSAVE was performed was not customized for either AUTOKEY or NOTEPAD. Since no data had been saved, none was restored.

User Response: None.

**INDSR035 *xxxxxxxx* not customized. No
data restored**

Explanation: If NOTEPAD or AUTOKEY appears as the variable, your system is not customized for notepads or the autokey function. No data was restored.

User Response: None.

INDST Startup Messages

INDST001 Failed to find *xxxxxxxxxxxxxxxx*

Explanation: The file *xxxxxxxxxxxxxxxx* cannot be found on the diskette or hard disk containing your customized system.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDST002 Insufficient storage to initialize system

Explanation: The IBM 3270 Personal Computer does not have enough storage to initialize your customized system.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDST003 Contents of file *xxxxxxxxxxxxxxxx* are unusable

Explanation: The file *xxxxxxxxxxxxxxxx* mentioned is in an unusable or unexpected format.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDST004 System extension *xxxxxxx* unable to initialize: *xxxx*
Press D or take a dump or any other key to continue

Explanation: The system extension *xxxxxxx* was unable to initialize. The reason for this failure is specified in the return code *xxxx*.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

**INDST005 Unable to load INDSNUM.COM
 from disk**

Explanation: The 3270 PC Control Program cannot load this module from a diskette or disk.

User Response: Enter the DOS directory command, DIR, to check whether INDSNUM.COM exists. If it exists, type INDSNUM and press Enter. If it still fails, use your backup diskette to IPL the system.

INDSY System Error Messages

**INDSY001 Unrecoverable system error -
xxxxxxx**
**Press D to take a dump or any
other key to re-IPL**

Explanation: The IBM 3270 Personal Computer Control Program has encountered an error that it cannot recover from. The variable data *xxxxxxx* is used in the problem determination process.

User Response: Record the variable data in the message, and refer to go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDSY002 Component error - xxxxxxxx
**Press D to take a dump or any
other key to continue**

Explanation: One of the components in the control program has had an unrecoverable error. The variable data *xxxxxxx* is used in the problem determination process.

User Response: Record the variable data in the message. Press D to take a dump or press any other key to continue. Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

**INDSY003 Component information -
 xxxxxxx
 Press any key to continue**

Explanation: One of the components has encountered a recoverable error.

User Response: If the error persists, record the variable data *xxxxxxx* in the message. Then, go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

**INDSY007 Insert diskette DUMPDATA.00x
 Press any key to continue or Q
 to quit**

Explanation: The variable data *x* is the diskette labeled 1, 2, or 3 that you created using INDPREP.

User Response: Insert the diskette and press any key to continue the dump process. If you press Q to quit the process, message INDSY013 appears.

**INDSY008 Incorrect diskette. Insert
 diskette DUMPDATA.00x
 Press any key to continue or Q
 to quit**

Explanation: You inserted the incorrect diskette.

User Response: Make sure that the diskette is blank and formatted. This should be generated by the INDPREP command. Insert the correct diskette and press any key to continue the dump process. If you press Q to quit the process, message INDSY013 appears.

**INDSY009 Parity check 1 in segment *xxxx*:
Log off and run diagnostics**

Explanation: There has been a parity check on the main system board. Segment *xxxx* is the starting segment address of the 16K block of storage containing the parity check. If *xxxx* equals FFFF, the storage location where the parity check occurred could not be found.

User Response: Try to log off the host computer sessions. Then run the diagnostic programs to isolate the problem.

**INDSY010 Parity check 2 in segment *xxxx*:
Log off and run diagnostics**

Explanation: There has been a parity check on an expansion board. Segment *xxxx* is the starting segment address of the 16K block of storage containing the parity check. If *xxxx* equals FFFF, the storage location could not be found.

User Response: Try to log off the host computer sessions. Then run the diagnostic programs to isolate the problem.

INDSY011 Dumping....

Explanation: The control program is writing the contents of storage onto the diskette.

User Response: None.

**INDSY012 Dump complete. Insert system
diskette
Press any key to re-IPL**

Explanation: The dump process has completed.
The system is in a Halt state.

User Response: Insert your customized system
diskette and press any key to reload your control
program.

**INDSY013 Dump canceled. Insert system
diskette
Press any key to re-IPL**

Explanation: You have canceled the dump
process in response to a preceding message.

User Response: Insert your customized system
diskette and press any key to reload your control
program.

**INDSY014 Warning: The needed graphics
adapter is not attached
Press any key to continue**

Explanation: You do not have a graphics
adapter attached and you tried to use a personal
computer graphics application.

User Response: If this message appears and you
do not have a graphics adapter,

1. Remove the message by pressing the WS Ctrl
key twice.
2. Reload IBM Personal Computer DOS by
pressing Alt + Ctrl + Del.

If this message appears and you **do** have a
graphics adapter, go to the chapter that deals
with problems in your *Guide to Operations*.

problem. If you find no hardware problem, go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

Have available:

1. The sequence of events that caused the failure, including the keys pressed and in what order.
2. A system level.
3. 3270 Personal Computer Hardware configuration, including model numbers, installed cards, and storage size.

**INDSY015 Diskette error. Insert system
diskette
Press any key to re-IPL**

Explanation: An error was encountered with the diskette when taking a dump, and the dump process was canceled. The error could be one of three types:

1. The diskette drive door is not closed or there is no diskette in the drive.
2. The diskette is defective.
3. The diskette drive is defective.

User Response:

1. Insert the system diskette, close the drive door, and press any key to re-IPL.
2. Insert the system diskette, close the drive door, and press any key to re-IPL. If you are able to re-IPL, you probably have a defective dump diskette: use another formatted dump diskette before starting the dump procedures. If you are unable to re-IPL, you probably have a defective diskette drive.

If you are not sure whether the drive is defective, go to the chapter that deals with problems in your *Guide to Operations*.

**INDSY050 DOS error for PC session in
window *x* Abort, Fail, or Retry**

Explanation: This message can appear with messages INDSY053 through INDSY060. The variable information is the personal computer window short name where the DOS error appears. Respond to the associated message first.

User Response:

- Type **A** to terminate the application through an INT '23'X.
- Type **F** to fail the DOS function call that caused the error. The program may continue running.
- Type **R** to try the application again.

**INDSY051 DOS error for control program
Abort, Fail, or Retry**

Explanation: This message can appear with messages INDSY053 through INDSY060. The control program issued a DOS function call that encountered an error. Respond to the associated message first.

User Response:

- Type **A** to terminate the application through an INT '23'X.
- Type **F** to fail the DOS function call that caused the error. The program may continue running.
- Type **R** to try the application again.

**INDSY052 DOS error for a system
extension
Abort, Fail, or Retry**

Explanation: This message can appear with messages INDSY053 through INDSY060. A system extension issued a DOS function call that encountered an error. Respond to the associated message first.

User Response:

- Type **A** to terminate the application through an INT '23'X.
- Type **F** to fail the DOS function call that caused the error. The program may continue running.
- Type **R** to try the application again.

**INDSY053 Attempt to write on
write-protected diskette in drive
x.**

Explanation: You attempted to write on a write-protected diskette.

User Response:

- Use a diskette that is not write-protected
- Remove the write-protected tab from your diskette.

INDSY054 Drive x not ready

Explanation: The drive is not ready. This may be due to:

- No diskette in the drive
- The door being open
- The diskette not being properly loaded

User Response:

- Properly load the diskette
- Close the drive door.

INDSY055 Data error on drive x

Explanation: Your diskette is probably damaged.

User Response: Try the operation again. If the problem persists, use another diskette.

INDSY056 Sector not found on drive x

Explanation: Your diskette is probably damaged.

User Response: Try the operation again. If the problem persists, use another diskette.

INDSY057 Printer out of paper

Explanation: Your printer is out of paper.

User Response: Add more paper.

INDSY058 Write failure on drive: x

Explanation: A problem occurred while writing. The variable x may be the disk drive identifier such as a: or b:. If a question mark appears, the failure was on a device other than a disk drive.

User Response: Check any device you are attempting to use.

INDSY059 Read failure on drive: x

Explanation: A problem occurred while reading. The variable x may be the disk drive identifier such as a: or b:. If a question mark appears, the failure was on a device other than a disk drive.

User Response: Check any device you are attempting to use.

INDSY060 General failure on drive: x

Explanation: A problem occurred while using a device. The variable x may be the disk drive identifier such as a: or b:.

User Response: Check any device you are attempting to use.

**INDSY063 DOS inaccessible. Check all PC sessions
Press any key to continue**

Explanation: Multi DOS system may be locked due to a critical error such as attempting to write on a write-protected diskette or having a drive door open. Thus, a DOS error has occurred in a personal computer session.

User Response: Check all personal computer sessions and correct the error. Press any key to continue.

**INDSY101 System error - $xxxx$
Press any key to continue**

Explanation: This error occurs while the system is loading the control program.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDTR Trace Messages

INDTR001 Incorrect command format or missing parameter

Explanation: The TRACE command contains invalid information, or a required parameter is missing.

User Response: Correct the command and retry the operation.

INDTR002 Incorrect trace ID or range specified

Explanation: One of the IDs or ranges specified is incorrect.

User Response: Correct the command and retry the operation.

INDTR003 Incorrect parameter

Explanation: The TRACE command was specified with an invalid parameter.

User Response: Correct the command and retry the operation.

INDTR004 System error - *xxxx*

Explanation: Trace received an error return code *xxxx* from the control program.

User Response: Record the message identifier and the 4 character return code. Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDTR006 Requested traces have been enabled

Explanation: Trace has been turned on in response to a TRACE ON command.

User Response: None.

INDTR007 All traces have been disabled

Explanation: All traces have been turned off in response to a TRACE OFF command.

User Response: None.

INDWS Work Station Control Messages

INDWS001 No recording with this name exists: Press List (PF1)

Explanation: During an autokey play or erase operation, the recording name entered did not match any names already in the recording directory.

User Response: Press PF1 to obtain a list of all the recordings you have made. Check the recording name and reenter the correct name.

INDWS002 Incorrect key pressed

Explanation: You pressed an incorrect key.

User Response: Check your information and retry.

INDWS003 The window is currently busy

Explanation: An internal function is currently active in the window.

User Response: Wait for the internal function to finish. For example, wait for the ✕ to disappear before retrying the operation.

INDWS004 Duplicate name entered: Choose a unique name

Explanation: During a recording procedure, you entered a recording name that had an exact duplicate in the autokey directory. Each recording name must be unique.

User Response: Choose a unique recording name.

INDWS005 Recording space full: Cannot record

Explanation: You attempted to start a recording when no free recording space was available for the record. The session cannot be started.

User Response: Use List (PF1) to examine the list of current recordings and erase those no longer needed. Retry the record operation.

INDWS006 Cannot move the window further

Explanation: While in Move, the window has been moved to the edge of the physical screen. It cannot be moved off the screen.

User Response: Do not try to move the window any farther in that direction.

INDWS007 Wrong key or incorrect character entered

Explanation: While in work station control mode, you attempted to do a function with a window ID that was not valid.

User Response: Retry the function with a valid window ID.

INDWS008 Cannot shrink the window further

Explanation: While in Size, you attempted to shrink the selected window to less than a one-character-by-one-character window size.

User Response: Do not try to shrink the window farther.

INDWS009 Cannot expand the window further

Explanation: While in Size, you attempted to enlarge the window larger than allowed.

User Response: Do not try to enlarge the window farther.

INDWS010 Window reached edge of Presentation Space

Explanation: While in Browse, you tried to browse past the edge of the presentation space.

User Response: Do not try to browse in that direction any farther.

INDWS011 Cannot size or change position of window while enlarged

Explanation: You have enlarged a window. You cannot size it or change its position at this time.

User Response: If you want to size or change the window's position, press Enlarge again to return to the original window size. Now you can size it or change its position.

INDWS012 Cannot Play or Record: Playing or Recording in progress

Explanation: The active application already has a recording or play in progress. Another cannot be started until that autokey session has ended.

User Response: Press Quit to cancel the autokey session. If you are recording, also enter application mode and press Finish to end the recording.

INDWS013 Copy not allowed: Source and Target are not defined

Explanation: You attempted a copy operation by pressing Enter, but you have not defined both your source and target.

User Response: Define both your source and target at this time and then press Enter to perform the copy operation.

INDWS014 Source and Target are not the same size

Explanation: The source area defined is either larger or smaller than the target area defined.

User Response: You can do one of the following:

1. Press PF13 (Source) and/or PF14 (Target), to redefine your source and target, making them both the same size
2. Continue with the copy operation by pressing Enter. If you allow the copy operation to complete:
 - a. Truncation occurs if the source is larger than the target
 - b. The target area is padded with blanks if the source is smaller than the target.

INDWS016 Warning: Copy did not occur. Target is protected

Explanation: You tried to copy into a target area that is protected.

User Response: Redefine your target area and retry.

INDWS018 Your system was not customized for a printer

Explanation: During customization, the printer option selected was **NONE**.

User Response: If you want to use your workstation printer, your system must be recustomized. Call your Technical Coordinator.

INDWS019 Your system was not customized for Copy

Explanation: During customization, the Copy option selected was **NO**.

User Response: If you want to use the Copy function, your system must be recustomized. Call your Technical Coordinator.

INDWS020 Your system was not customized for Autokey

Explanation: During customization, the Autokey option selected was **NO**.

User Response: If you want to use the Autokey function, your system must be recustomized. Call your Technical Coordinator.

INDWS022 Cannot Play or Record: Input not allowed in this window

Explanation: The selected window cannot accept keystrokes for one of these reasons:

- The window has not been customized correctly.
- The control unit connection is not complete.
- The application was not defined to accept keystrokes.

User Response:

1. Exit from Workstation Control mode.
2. Check the operator information area and record any indicators.
3. Call your Technical Coordinator.
4. To continue work, go to another window.

**INDWS025 Cannot add another window:
Maximum number reached**

Explanation: The maximum number of windows has been added to the system.

User Response: If you want to add more windows, you will need to delete those that are unnecessary to make room for the windows you want to add.

**INDWS026 Cannot add or delete window on
Screen Profile 0**

Explanation: Screen Profile 0 was created when you customized your work station. You cannot add windows to or delete windows from Screen Profile 0 during normal operation. This message may also occur if you begin typing data while in work station control mode.

User Response: Verify that you are in the proper mode, and do not try to add or delete windows from Screen Profile 0.

**INDWS027 All other windows are hidden:
Next window is now visible**

Explanation: When you performed a Hide, all other windows for that screen profile were already hidden, forcing the previously active window to become visible. At least one window will always be visible on a defined screen profile.

User Response: Make sure at least one window is visible that you do not need hidden before hiding another.

INDWS029 Color setting override: Changes may not show

Explanation: Although your changes were made, the selected window is currently receiving instructions to ignore the selected settings. The colors appear after the window stops receiving instructions to ignore them.

User Response: Your color changes have taken effect. Go to your next operation. For more information on color, see Chapter 9.

INDWS030 Foreground and background colors are the same

Explanation: The foreground and background colors of the selected windows are identical. This causes your typed characters to be invisible.

User Response: This is a warning message. If you want to be able to see the characters in this window, change either the foreground or the background to a different color.

INDWS031 Cannot set color: No color display

Explanation: You do not have a color display. You cannot use the color function.

User Response: Do not try to use the color function. If you have a color display and this message appears, go to the chapter that deals with problems in your *Guide to Operations*.

INDWS033 Cannot use Auto on undefined Screen Profile

Explanation: You tried to perform autokey functions while using an undefined screen profile.

User Response: Select a defined screen profile.

INDWS034 Cannot set color for a Personal Computer window

Explanation: The selected window was the personal computer window. Color for the personal computer window cannot be set in work station control mode.

User Response: Do not try to use the color function in the personal computer window.

INDWS035 Correct the name and press Enter

Explanation: The name you entered was all blanks.

User Response: Try a valid name and press Enter.

INDWS036 Cannot leave WS Ctrl mode: No available windows

Explanation: You pressed WS Ctrl while in work station control mode with an undefined screen profile selected.

User Response: Either change to a defined screen profile or add a window to the undefined screen profile.

INDWS037 Cannot delete recording: Record or Play in progress

Explanation: A record or play operation is already in progress. This stops the delete operation.

User Response: End any recording or play sessions currently active on all windows before attempting to retry the delete function. You can examine all windows on Screen Profile 0 to find which have autokey active. In work station control mode, the operator information area indicates whether a record or play operation is in progress when you select a window.

INDWS038 Cannot begin another recording: Recording already in progress

Explanation: There is a recording session already active on some screen or window other than the one currently active.

User Response: End the first recording session before attempting another recording. You can examine all windows on Screen Profile 0 to find which one is recording by looking for REC in the work station control operator information area.

**INDWS039 Cannot jump to another window:
None are visible**

Explanation: Either this window is the only one on this screen profile or all other windows are hidden. This message appears only in work station control mode.

User Response: Either make more windows available or do not use the jump function.

**INDWS040 Cannot use ChgSc: All other
screens are empty**

Explanation: The only defined screen profile is Screen Profile 0. This message appears only in work station control mode.

User Response: Either define more screen profiles, or do not use the change screen (ChgSc) function.

**INDWS041 Printing in progress: Retry when
printing is complete**

Explanation: A print request is already in progress.

User Response: Wait for the print to finish. If the printing does not complete, go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDWS042 Print screen canceled by user

Explanation: You pressed the Quit key, canceling the current print operation.

User Response: None.

INDWS043 Print screen canceled: Printer not ready

Explanation: The printer is not ready, so the print operation is canceled.

User Response: If possible, check for reasons the printer is not ready.

- The printer may be out of paper
- The printer may not be turned on
- There may be a problem with the cable to the printer.

Check and correct any faulty conditions and retry the operation. If the failure persists, go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDWS045 Selected source not allowed

Explanation: The selected source window for the copy function is not a host, personal computer, or notepad window, or the personal computer session is in graphics mode.

User Response: Press Finish to return to Copy and select the correct source window.

INDWS046 Selected target not allowed

Explanation: The selected target window for the copy function is not a host or notepad window.

User Response: Press Finish to return to Copy and select the correct source window.

INDWS047 Warning: Overlapping Source and Target areas

Explanation: The source and target areas overlap. Only the area defined first will be highlighted.

User Response:

- You may proceed with the copy function to copy the original contents of the source area into the target area by pressing Enter or
- Go back to Source by pressing PF13, or to Target by pressing PF14 and redefine the source or target.

INDWS048 Copy not allowed: Input inhibited in Target window

Explanation: You attempted a copy operation while the keyboard was in an **input inhibited** state for the selected target window.

User Response:

1. Press the WS Ctrl key
2. Press the Reset key
3. If the keyboard is still locked, wait for it to "unlock"
4. Verify that the host is operating
5. Continue with your work.

If the keyboard remains locked, go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDXF Document Distribution File Transfer Messages

INDXF001 File transfer waiting for work.
Press the End key to quit

Explanation: The Transfer program has completed its setup with your host window and is waiting for file transfer to be started from the host application.

User Response: Start the file transfer from your host session or press the End key to quit the Transfer program.

INDXF002 File transfer started for:
xxxxxxxxxxx.xxx

Explanation: This message appears when a file transfer request has begun. The name of the file being transferred, *xxxxxxxxxxx.xxx*, appears on the line below the message.

User Response: Allow the file transfer to proceed or press Ctrl + Break keys to cancel the file transfer.

INDXF003 *xxxxxxxx* Data and *xxxxxxxx* Profile characters transferred so far

Explanation: This message tells you the number of characters in the computer file that have been sent to or from the host. The numbers are updated as the file is transferred. The number of profile characters may remain at zero if no profile is sent. After the entire file has been sent, message INDXF004 appears. If the transfer does not complete successfully, a transfer error message appears.

User Response: None.

INDXF004 File transfer complete

Explanation: The file transfer request is complete.

User Response: Start another file transfer from your host window or press the End key to quit the Transfer program.

INDXF005 Lost contact with host

Explanation: The host is inactive, or a communications link with the host has been lost.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDXF006 Error reading file from personal computer disk

Explanation: This message indicates that the disk or the diskette is probably damaged.

User Response: Retry the operation with a backup copy of the file being transferred. If the failure still occurs, go to the chapter that deals with problems in your *Guide to Operations*.

INDXF007 Error writing file to personal computer disk

Explanation: This message indicates that the disk or diskette is either damaged, full, or unformatted – or you specified an invalid subdirectory. If you specified a subdirectory, verify its spelling.

User Response: Retry the operation with a properly formatted diskette and insure there is adequate space available. If the failure still occurs, go to the chapter that deals with problems in your *Guide to Operations*.

INDEXF008 Host window short name omitted

Explanation: You have not entered the host window short name in the TRANSFER command.

User Response: Retry the TRANSFER command and include the window short name. An example of the format for the command is **TRANSFER b** where **b** is the window short name.

INDEXF009 Incorrect window short name

Explanation: You have entered a window short name that is not a host window.

User Response: Retry the TRANSFER command with the correct host window short name. An example of the format for the command is **TRANSFER b** where **b** is the host window short name.

INDEXF010 Host has not responded within timeout period

Explanation: The host has not responded to the file transfer within the time-out period.

User Response: If **X SYSTEM** or **X Clock** appears in the host session operator information area, wait for it to clear. They indicate the system is working slowly.

If you want to halt file transfer:

1. Switch to a host session if necessary.
2. Press Reset to clear the operator information area.
3. Restart your host application.

This situation can be caused by line problems. If the problem persists, follow local procedures and have available:

1. The sequence of events that caused the problem, including keys pressed and in what order.
2. A system level.

INDXF011 Unrecoverable system error

Explanation: This message appears with messages INDXF023, through INDXF032, INDXF035, INDXF039, and INDXF040.

User Response: Refer to the user response section of the message that appears with this one.

INDXF012 Program error at host

Explanation: The Transfer program has detected an error in the data from the host.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDXF013 Transfer program is terminating

Explanation: This message is displayed with message INDXF014 or any of the severe error messages.

User Response: None.

INDXF014 Transfer program canceled by user

Explanation: This message appears when you press the End key.

User Response: None.

INDXF015 Current file transfer canceled by host

Explanation: This message appears when the host application has signaled to the Transfer program that the host does not want to continue with the current file transfer. This may be due to an input/output error at the host.

User Response: Note down the messages in the host session and follow instructions for that host application.

INDXF017 Program error detected by host

Explanation: This message appears when the host has sensed an error in the data sent to it by the Transfer program.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDXF020 Transfer of current file is canceled

Explanation: This message appears with messages INDXF005 through INDXF007, INDXF012, and INDXF017.

User Response: None.

INDXF021 Unable to access host window

Explanation: The Transfer program was unable to access the host window. This may be due to another personal computer program currently having access to that host window.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDXF022 Host rejected previous file transfer

Explanation: This message appears when the host rejects a transmission that the Transfer program assumed was successful. The Transfer program is waiting for a new request from the host. INDXF034 follows this message.

User Response: See the user response for message INDXF034.

**INDXF023 Keyboard connect return code -
 xxxx**

Explanation: The Transfer program was not able to connect to the keyboard of the host session.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDXF024 Host connect return code - *xxxx*

Explanation: The Transfer program was not able to connect to the host window.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDXF025 Define receive buffer return code - *xxxx*

Explanation: The Transfer program was unable to allocate a buffer to receive data from the host.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDXF026 Write structured field return code - *xxxx*

Explanation: The Transfer program encountered an error while sending data to the host.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDXF027 Keyboard lock return code - *xxxx*

Explanation: The Transfer program encountered an error while locking the keyboard of the host session.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

**INDXF028 Keyboard unlock return code -
xxxx**

Explanation: The Transfer program encountered an error while unlocking the keyboard of the host session.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

**INDXF029 Keyboard disconnect return
code - xxxx**

Explanation: The Transfer program encountered an error while disconnecting from the keyboard of the host session.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDXF030 Dequeue return code - xxxx

Explanation: The Transfer program encountered an error while looking for data from the host.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

**INDXF032 Read structured field return
code - xxxx**

Explanation: An error occurred while the Transfer program read data sent from the host.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

**INDXF033 Data exception code sent to host
- xxxxxx**

Explanation: This message concerns an error in the control data sent from the host.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

**INDXF034 Data exception code sent from
the host - xxxxxx**

Explanation: This message concerns an error in the control data sent by the Transfer program.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

**INDXF035 Host disconnect return code -
xxxx**

Explanation: The Transfer program detected an error while disconnecting from the host session.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

**INDXF036 Current file transfer canceled by
user**

Explanation: This message appears when you press **Ctrl + Break** keys during a file transfer. The transfer of the file stops, and the Transfer program waits for more requests from the host.

User Response: Begin another file transfer or press the **End** key to quit.

INDXF039 Query ID return code - xxxx

Explanation: The Transfer program detected an error while querying the 3270 PC Control Program for the host window's session ID.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

INDXF040 Query parms return code - xxxx

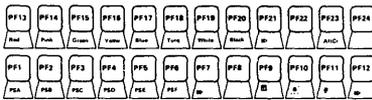
Explanation: The Transfer program detected an error while querying the 3270 PC Control Program for the host window's session characteristics.

User Response: Go back to Chapter 13, and continue with question 2 to locate the cause of the failure.

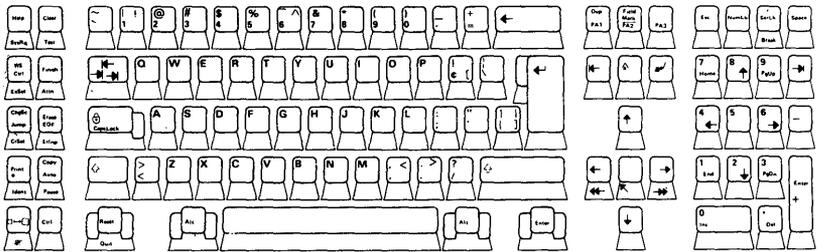
Appendix B. Keyboard Summary

The tables in this appendix explain what each key does. They are organized by keyboard area.

Program Function Keys



Numeric Keypad

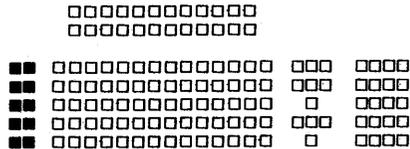


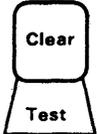
**Left
Control
Keys**

Typewriter Keyboard

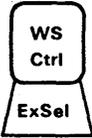
**Right
Control
Keys**

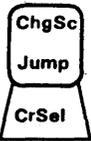
Using the Left Control Keys

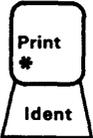
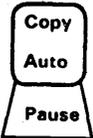


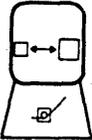
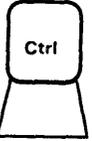
Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			Help (T) ¹				Display help panels on your screen
	Alt		SysRq		Signal the host		
			Clear		Clear the host window	Erase the notepad window	
	Alt		Test		Put your workstation in test mode (may log you off)		

¹ Keys marked with (T) are toggle keys.

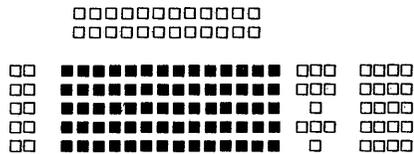
Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			WSCtrl (T)	Put your workstation into control mode	Put your workstation into control mode	Put your workstation into control mode	Return your workstation to running applications
	Alt		ExSel (T)		Select host extensions for X.25 Network Communications, 3270 Entry Assist, system response times, and printer matrixes		
			Finish				Return you to the previous level of workstation control
	Alt		Attn		Signal the host		

Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			Jump	Move to the next window in alphabetical order	Move to the next window in alphabetical order	Move to the next window in alphabetical order	Move to the next window in alphabetical order
	Shift		ChgSc	Move to the next screen profile in numerical order	Move to the next screen profile in numerical order	Move to the next screen profile in numerical order	Move to the next screen profile in numerical order
	Alt		CrSel		Simulate a light pen selection		Mark a block of text to copy, and mark the place to put the copy
			Erase EOF		Erase everything from the cursor to the end of an input field	Erase everything from the cursor to the end of the line	
	Alt		ErInp		Erase all the input fields		Erase a keystroke recording

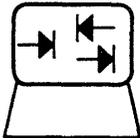
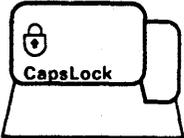
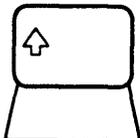
Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			Print *	Type an asterisk (*) in your PC window	Print the host window on a printer attached to your 3274 control unit		Print the entire screen
	Shift		Print	Print the contents of your PC window			Print the contents of any active window
	Alt		Ident		Signal the host that the next two numbers you type identify a printer		
			Auto				Activate autokey
	Shift		Copy				Activate copy
	Alt		Pause (T)				Interrupt a key-stroke recording to insert data and restart it again

Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			Enlarge (T)	Enlarge the PC window to fill the entire screen or reduce it again	Enlarge the host window to fill the entire screen or reduce it again	Enlarge the notepad window to fill the entire screen or reduce it again and reduce it	Enlarge the active window to fill the entire screen or reduce it again
	Alt		Delete Window				Delete a window from a screen profile
			Ctrl	Activate the DOS control keys			

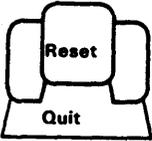
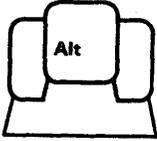
Using the Typewriter Keys

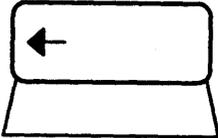
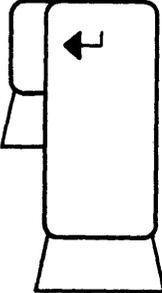
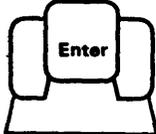


Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			a-z	Type the lower case letters a-z	Type the lower case letters a-z	Type the lower case letters a-z	Type the lower case letters a-z
	Shift		A-Z	Type the upper case letters A-Z	Type the upper case letters A-Z	Type the upper case letters A-Z	Type the upper case letters A-Z
Upper and Lower Case Symbols 			1-0 and Lower Case Symbols	Type 1-0 and black or blue lower case symbols	Type 1-0 and black lower case symbols	Type 1-0 and black lower case symbols	Type 1-0 and black lower case symbols
	Shift		Upper Case Symbols	Type black or blue upper case symbols	Type black upper case symbols	Type black upper case symbols	Type black upper case symbols

Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			Tab	Move the cursor to the next typing area on the screen	Move the cursor to the next typing area on the screen		Move the cursor to the next typing area on the screen
			Caps Lock (T) ¹	Lock and unlock the Shift key for letters only	Lock and unlock the Shift key	Lock and unlock the Shift key	Lock and unlock the Shift key
			Shift	Type upper case letters and symbols	Type upper case letters and symbols	Type upper case letters and symbols	Type upper case letters and symbols

¹ Keys marked with (T) are toggle keys.

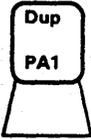
Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			Reset Quit		Unlock the keyboard after a Do Not Enter (X) appears and turn off Insert mode		
	Alt		Quit	Stop printing	Stop printing	Stop printing	Stop printing or cancel last request
			Alt	Use the alternate case position on a key	Use the alternate case position on a key	Use the alternate case position on a key	Use the alternate case position on a key
Space Bar			Space	Type a blank space	Type a blank space	Type a blank space	Type a blank space

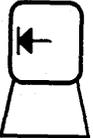
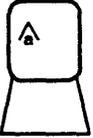
Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			Backspace	Move the cursor to the left and erase	Move the cursor to the left	Move the cursor to the left and erase	
			New Line	Enter what you have typed on the screen	Move the cursor to the beginning of the next line	Move the cursor to the beginning of the next line	
			Enter	Enter what you have typed on the screen	Enter what you have typed on the screen		

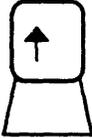
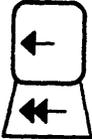
Using the Keys in the Right Control Key Area

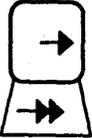
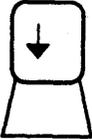
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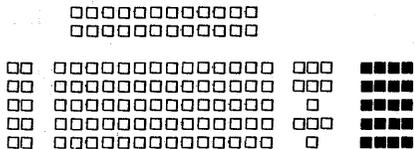
Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			PA1		Signal a host program		
	Shift		Dup		Signal a host program		
			PA2		Signal a host program		
	Shift		Field Mark		Signal a host program		

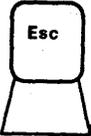
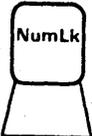
Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			PA3		Signal a host program		
			Left Tab		Move the cursor to the last typing area	Move the cursor to the last typing area	
			Insert	Insert text at the cursor (text to the right of the cursor moves right to make room)	Insert text at the cursor (text to the right of the cursor moves right to make room)	Insert text at the cursor (followed by Backspace erases to the left)	
			Delete	Remove text at the cursor (text to the right of the cursor moves left to close up)	Remove text at the cursor (text to the right of the cursor moves left to close up)		

Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			Up Cursor	Move the cursor up	Move the cursor up	Move the cursor up	Size and move windows
	Alt						Go back to the previous Help panel
			Left Cursor	Move the cursor to the left	Move the cursor to the left	Move the cursor to the left	
	Alt		Quick Left Cursor	Move the cursor quickly to the left	Move the cursor quickly to the left	Move the cursor quickly to the left	
							Show the first entry on the Autokey List
	Alt		Home	Move the cursor to the upper left corner	Move the cursor to the upper left corner	Move the cursor to the upper left corner	

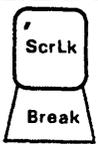
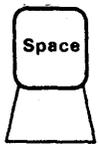
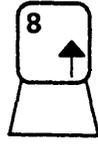
Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			Right Cursor	Move the cursor to the right	Move the cursor to the right	Move the cursor to the right	
	Alt		Quick Right Cursor	Move the cursor quickly to the right	Move the cursor quickly to the right	Move the cursor quickly to the right	
			Down Cursor	Move the cursor down	Move the cursor down	Move the cursor down	
	Alt						Go to the next Help panel

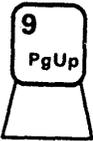
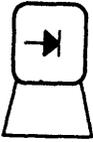
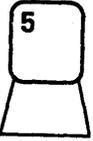
Using the Keys in the Numeric Keypad Area

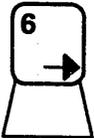
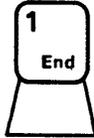
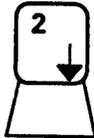


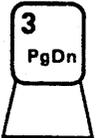
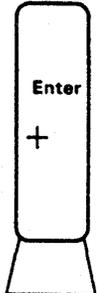
Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			Escape	Signal a Personal Computer application program			
			Num Lock (T) ¹	Turn the numeric keypad on and off			

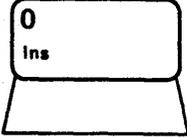
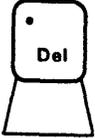
¹ Keys marked with (T) are toggle keys.

Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			Scr Lk or ,	Signal an application program	Type a comma in a string of numbers	Type a comma in a string of numbers	
	Alt		Break	Stop what an application program is doing			
			Space	Type a blank space in a string of numbers	Type a blank space in a string of numbers	Type a blank space in a string of numbers	
			Home or 7	Signal a Personal Computer application program	Type a 7	Type a 7	
		NumLk	7	Type a 7			
			Up Cursor or 8	Move the cursor up	Type an 8	Type an 8	
		NumLk	8	Type an 8			

Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			Page Up or 9	Signal a Personal Computer application program to go to another panel	Type a 9	Type a 9	
		NumLk	9	Type a 9			
			Left Tab	Tab the cursor six spaces at a time to align numbers in columns	Move the cursor to the next typing area		
			Left Cursor or 4	Move the cursor to left	Type a 4	Type a 4	
		NumLk	4	Type a 4			
			5		Type a 5	Type a 5	
		NumLk	5	Type a 5			

Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			Right Cursor or 6	Move the cursor to the right	Type a 6	Type a 6	
		NumLk	6	Type a 6			
			Minus Sign	Type a minus sign	Type a minus sign	Type a minus sign	
			End or 1	Signal a Personal Computer application program	Type a 1	Type a 1	
		NumLk	1	Type a 1			
			Down Cursor or 2	Move the cursor down	Type a 2	Type a 2	
		NumLk	2	Type a 2			

Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			Page Down or 3	Signal a Personal Computer application program to go back to another panel	Type a 3	Type a 3	
		NumLk	3	Type a 3			
			Enter or +	Type a plus sign	Enter what you typed		

Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			Insert or 0 (T)	Insert a character at the cursor (text to the right of the cursor moves right to make room)	Type a 0	Type a 0	
		NumLk	0	Type a 0			
			Delete or Decimal Point	Erase the character at the cursor (text to the right of the cursor moves left to close up)	Type a decimal point	Type a decimal point	
		NumLk	Decimal Point	Type a decimal point			

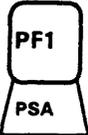
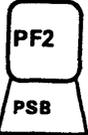
Using the Program Function Keys

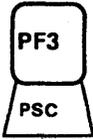
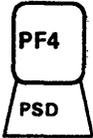
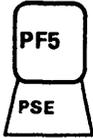


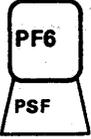
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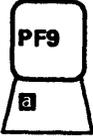
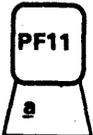
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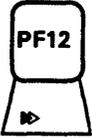
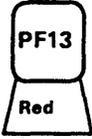
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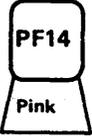
Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			PF1	Signal a Personal Computer application program	Signal a host application program		Display a list of your windows and screen profiles
	Alt		PSA		Use programmed symbol set A		
			PF2	Signal a Personal Computer application program	Signal a host application program		Set up your
	Alt		PSB		Use programmed symbol set B		

Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			PF3	Signal a Personal Computer application program	Signal a host application program		Browse a window
	Alt		PSC		Use programmed symbol set C		
			PF4	Signal a Personal Computer application program	Signal a host application program		Play a keystroke recording
	Alt		PSD		Use programmed symbol set D		
			PF5	Signal a Personal Computer application program	Signal a host application program		
	Alt		PSE		Use programmed symbol set E		

Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			PF6	Signal a Personal Computer application program	Signal a host application program		
	Alt		PSF		Use programmed symbol set F		
			PF7	Signal a Personal Computer application program	Signal a host application program		
	Alt	Default Symbols		Stop using a programmed symbol set and go back to using the default symbol set			
			PF8	Signal an application program	Signal a host application program		Change the color of a window or screen with PF keys 13 through 21

Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			PF9	Signal a Personal Computer application program	Signal a host application program		Hide a window
	Alt		Reverse Video		Type text in reverse video	Type text in reverse video	
			PF10	Signal a Personal Computer application program	Signal a host application program		Move a window to a corner of the screen
	Alt		Blinking Text		Type text that blinks	Type text that blinks	
			PF11		Signal a host application program		Move a window with the cursor keys
	Alt		Underlined Text		Type underlined text	Type underlined text	

Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			PF12		Signal a host application program		Change the size of a window with the cursor keys
	Alt		No Highlighting		Stop using reverse video, blinking text, and underlined text		
			PF13		Signal a host application program		
	Alt		Red		Type text in red	Type text in red	
	Alt	PF22, PF23, or PF24	Red				Color a screen or window red

Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			PF14		Signal a host application program		
	Alt		Pink		Type text in pink	Type text in pink	
	Alt	PF22, PF23, or PF24	Pink				Color a screen or window pink
			PF15		Signal a host application program		
	Alt		Green		Type text in green	Type text in green	
	Alt	PF22, PF23, or PF24	Green				Color a screen or window green

Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			PF16		Signal a host application program		
	Alt		Yellow		Type text in yellow	Type text in yellow	
	Alt	PF22, PF23, or PF24	Yellow				Color a screen or window yellow
			PF17		Signal a host application program		
	Alt		Blue		Type text in blue	Type text in blue	
	Alt	PF22, PF23, or PF24	Blue				Color a screen or window blue

Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			PF18		Signal a host application program		
	Alt		Turquoise		Type text in turquoise	Type text in turquoise	
	Alt	PF22, PF23, or PF24	Turquoise				Color a screen or window turquoise
			PF19		Signal a host application program		
	Alt		White		Type text in white	Type text in white	
	Alt	PF22, PF23, or PF24	White				Color a screen or window white

Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			PF20		Signal a host application program		
	Alt		Black		Type text in black	Type text in black	
	Alt	PF22, PF23, or PF24	Black				Color a screen or window black
			PF21		Signal a host application program		Use the base colors (red, blue, green, and white) for text in a host or notepad window
	Alt		Base Colors			Stop using the PF keys for typing text in multiple colors and go back to using the base color	

Press:	While Pressing:	After Pressing:	For:	To Do This:			
				In a PC Session	In a Host Session	In a Notepad Session	In Work Station Control Mode
			PF22		Signal a host application program		Change the color of the screen
			PF23		Signal a host application program		Change the color of the border and the text in a window
	Alt		AltCr	Enlarge the cursor and make it blink			
			PF24		Signal a host application program		Change the background color of a window

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Book 3, Using the Control Program

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