IBM

Personal Computer

Using Your IBM PC*jr* Memory Options

International Business Machines Corporation   Boca Raton, Florida 33432

IBM Program License Agreement

YOU SHOULD CAREFULLY READ THE FOLLOWING TERMS AND
CONDITIONS BEFORE OPENING THIS DISKETTE(S) OR CASSETTE(S)
PACKAGE. OPENING THIS DISKETTE(S) OR CASSETTE(S) PACKAGE
INDICATES YOUR ACCEPTANCE OF THESE TERMS AND CONDITIONS.
IF YOU DO NOT AGREE WITH THEM, YOU SHOULD PROMPTLY
RETURN THE PACKAGE UNOPENED; AND YOUR MONEY WILL BE
REFUNDED.

IBM provides this program and licenses its use in the United States and Puerto Rico. You assume responsibility for the selection of the program to achieve your intended results, and for the installation, use and results obtained from the program.

LICENSE

You may:

a.   use the program on a single machine;

b.   copy the program into any machine readable or printed form for backup or modification purposes in support of your use of the program on the single machine (Certain programs, however, may include mechanisms to limit or inhibit copying. They are marked "copy protected.");

c.   modify the program and/or merge it into another program for your use on the single machine (Any portion of this program merged into another program will continue to be subject to the terms and conditions of this Agreement.); and,

d.   transfer the program and license to another party if the other party agrees to accept the terms and conditions of this Agreement. If you transfer the program, you must at the same time either transfer all copies whether in printed or machine-readable form to the same party or destroy any copies not transferred; this includes all modifications and portions of the program contained or merged into other programs.

You must reproduce and include the copyright notice on any copy, modification or portion merged into another program.

YOU MAY NOT USE, COPY, MODIFY, OR TRANSFER THE PROGRAM, OR ANY COPY, MODIFICATION OR MERGED PORTION, IN WHOLE OR IN PART, EXCEPT AS EXPRESSLY PROVIDED FOR IN THIS LICENSE.

IF YOU TRANSFER POSSESSION OF ANY COPY, MODIFICATION OR MERGED PORTION OF THE PROGRAM TO ANOTHER PARTY, YOUR LICENSE IS AUTOMATICALLY TERMINATED.

TERM

The license is effective until terminated. You may terminate it at any other time by destroying the program together with all copies, modifications and merged portions in any form. It will also terminate upon conditions set forth elsewhere in this Agreement or if you fail to comply with any term or condition of this Agreement. You agree upon such termination to destroy the program together with all copies, modifications and merged portions in any form.

LIMITED WARRANTY

THE PROGRAM IS PROVIDED "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE PROGRAM IS WITH YOU. SHOULD THE PROGRAM PROVE DEFECTIVE, YOU (AND NOT IBM OR AN AUTHORIZED PERSONAL COMPUTER DEALER) ASSUME THE ENTIRE COST OF ALL NECESSARY SERVICING, REPAIR OR CORRECTION.

Personal Computer

Using Your IBM PC*jr* Memory Options

First Edition (June 1984)

Contents

iii

Chapter 1. Introduction to Memory Options

Contents

The IBM PC*jr* Memory Options are needed whenever you want to use additional memory beyond 128KB.

This package helps you:

- Run applications that need more than 128KB of memory.

  Applications are game, education, and business programs you buy.

- Run applications that can use more memory for extra work space.

  Some spread sheet and word processor applications do not need more than 128KB to run, but can use Memory Expansion as extra work space. This extra work space gives you room for big jobs and documents.

- Use part of the extra memory to imitate an additional diskette drive called Memory Disk.

  The memory disk allows you to process information faster than a mechanical diskette drive.

What Is in This Booklet

This booklet tells you how to create two diskettes that allow you to run your applications with the PC*jr* Memory Options.

Part 1 - Memory Expansion describes how to:

• Backup your DOS diskette

• Create a DOS Backup With Memory Expansion diskette

• Add Memory Expansion to an application diskette

• Start applications using the diskettes you created.

Part 2 - Memory Disk describes how to:

• Backup your DOS diskette

• Create a DOS Backup With Memory Disk diskette

• Add Memory Disk to an application diskette

• Start applications using the diskettes you created.

Note: You must understand Memory Expansion before using Memory Disk.

Appendixes in the back include Error Conditions and using Memory Expansion with the IBM Cluster Program.

1-4

When to Use the Diskettes You Create

Use the DOS Backup With Memory Expansion diskette when your applications:

- Need more than 128KB of memory on the PC*jr* because of application specifications. Check the book that came with your application for memory requirements on the PC*jr*.

- Can run with more than 128KB of expanded memory. If memory size for the PC*jr* is not in your application book, try using the DOS Backup With Memory Expansion diskette.

- Can use more memory than 128KB because you're creating big spread sheets, documents, or files.

- Are running with the **IBM** *Cluster Program*. See Appendix B."Using the IBM Cluster Program with Expanded Memory," for more information.

Use DOS Backup when your applications:

- Need the PC*jr* Basic Cartridge.

- Do not run with the DOS Backup With Memory Expansion because they were designed specifically for 128KB PC*jr*.

Use DOS Backup with Memory Disk diskette when your applications:

- Need a temporary second diskette drive setup in memory to store programs and files.

When Not to Use Either of the Diskettes You Create

Do not use the diskettes you create in the following cases:

- If you have self-starting applications, you do not have to use either of the diskettes.

    Note: Self-starting means that you don't have to use your DOS diskette before starting the application.

- If you have applications that do not use the *IBM Disk Operating System*.

Saving the Booklet and Diskette

When you have finished using this booklet and PC*jr* Memory Options diskette, store them in the IBM PC*jr Guide to Operations*. Then you can use the instructions and diskette whenever you need to do another installation procedure.

Chapter 2. Part 1 - Memory Expansion

Contents

This section describes how to:

• Backup your DOS diskette

• Create a DOS Backup With Memory Expansion diskette

• Install Memory Expansion on an applications diskette

• Start applications using the diskettes you created.

Getting Ready

Follow the steps below to get ready for installing Memory Expansion.

1   Make sure you have setup your IBM PC*jr* and installed all your options.

2   Make sure you have *IBM Disk Operating System Version 2.10 (DOS 2.10)*

3   Get any applications you wish to use.

4   Get two (2) blank diskettes.

5   Get two (2) blank diskette labels.

6   Write the diskette titles on each of the labels as shown:

DOS BACKUP

DOS BACKUP WITH
MEMORY EXPANSION

7   Place one label on each blank diskette.

DOS Backup

DOS Backup With
Memory Expansion
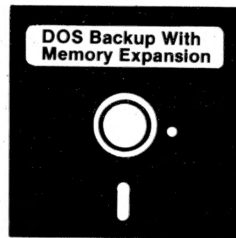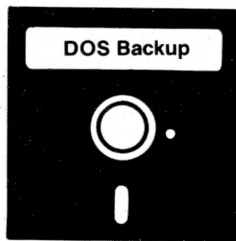
8   Go to the next page to prepare the diskettes for use with applications.

Preparing Your IBM PC*jr* Diskettes for Use with Applications

This section describes using PC*jr* to prepare your diskettes for use with applications.

DOS treats your single diskette drive as both drive A and drive B. You must switch diskettes each time DOS tells you to exchange diskettes until you see the "Copy complete" message.

Task # 1. Make DOS Backup

The first task you must do is make a copy of DOS. Follow the instructions below:

Hint: For this procedure, you can remember which diskette to insert if you remember:


```
"Source" = DOS original diskette that
           comes with your DOS book.
```

and

```
"Target" = The diskette you labeled:
           "DOS Backup"
```
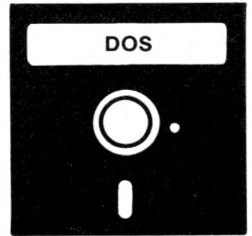

1   Insert your DOS diskette.

2   Power on your PC*jr* if it's not on, or press Ctrl-Alt-Del, (System Reset).

3   Enter the date.

4   Enter the time.

The DOS prompt is displayed:

```
A>
```

5   Enter: `diskcopy`

6   The following message is displayed:

```
Insert source diskette in drive A:
Strike any key when ready
```

Insert your original DOS diskette (the source in this case)

> **Note:** If DOS is already in the drive, leave it there.

•   *Now* press any key.

7   The "in use" light comes on while the source diskette is being read, and then this is displayed:

```
Insert target diskette in drive A:
Strike any key when ready
```

•   Remove your source diskette (DOS original).

•   Insert the target diskette (the diskette you labeled DOS Backup).

•   *Now* press any key.

> **Note:** You will have to switch the diskettes until you see, the message in step 8.

8 The "in use" light comes on while the backup diskette is being written. Then the message shown in step 6 is displayed again. Keep repeating steps 6 and 7 until this message is displayed:

```
Copy complete

Copy another (Y/N)?
```

9 Enter: Y

The following message is displayed:

```
Insert source diskette in drive A:
Strike any key when ready
```

You have now completed the first task of preparing your diskettes.

10 Remove the diskette labeled "DOS Backup" from the drive and set it aside.

Task # 2. Add Memory Expansion to DOS

Your second task is to make the DOS Backup With Memory Expansion diskette. This task includes making another copy of DOS and running the Memory Expansion install program on that copy. Follow the instructions below:

Hint: For this procedure, you can remember which diskette to insert if you remember:

"Source" = DOS original diskette that comes with your DOS book.

and
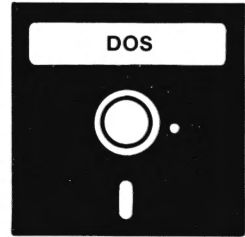
"Target" = The diskette you labeled: "DOS Backup With Memory Expansion"

1   The last message from Task # 1 should still be displayed:

Insert source diskette in drive A:
Strike any key when ready

2   Insert your original DOS diskette (the source in this case).

   • *Now* press any key.

3   The "in use" light comes on while the source
diskette is being read, and then this is displayed:

Insert target diskette in drive A:
Strike any key when ready

*   Remove your source diskette (DOS
    original).

*   Insert the target diskette (the diskette you
    labeled DOS Backup With Memory
    Expansion).

*   *Now* press any key.

    Note: You will have to switch the diskettes
    until you see the message in step 4.

4   The "in use" light comes on while the backup
diskette is being written. Then the message
shown in step 1 is displayed again. Keep
repeating steps 2 and 3 until this message is
displayed:

Copy complete

Copy another (Y/N)?

5   Type: N

You don't have to press the Enter key. The
DOS prompt is displayed:

A>

6   Remove the DOS Backup With Memory
Expansion diskette from the drive.

7   Insert the IBM PC*jr* Memory Options diskette
(the one that came with the Using Your IBM
PC*jr* Memory Options package).

8   Enter: install

The Installing PC*jr* Memory Options screen is
displayed.

> Installing PCjr Memory Options
>
>
> Type the option number and
> press Enter.
>
> 1. Expanded Memory
>
> 2. Expanded Memory with Memory Disk
>
> 3. Exit - No Installation
>
>
> Option:

9   Enter: 1

10   When the following screen is displayed:

Remove your PCjr Memory Options
diskette from the diskette drive.

Insert your DOS backup diskette
or your application diskette that
contains DOS.

Press any key when ready.

11   Remove your PC*jr* Memory Options diskette
from the drive.

Insert the DOS Backup With Memory Expansion
diskette in the drive.

12   *Now* press any key.

The following messages are displayed:

Installation in progress....

The installation of your PCjr
Memory Options is completed.

Do you want to do the same
installation on another DOS
backup diskette or application
diskette that contains DOS (Y/N)?

13 Enter: N

The following screen is displayed:

```
You must do a System Reset with this
diskette in order to use the new PCjr
Memory Options.



A>
```

You have now completed the second task of preparing your diskettes.

14 Remove the DOS Backup With Memory Expansion diskette from the drive.

Your next step is to start your applications. Go on to the next page.

Starting Your Applications

This section describes how to start your applications. If you have not determined when you should use the diskettes you created during "Preparing Your IBM PC*jr* Diskettes for Use with Applications," read "When to Use the Diskettes You Create," in Chapter 1.

Applications Using DOS Backup With Memory Expansion

This section describes how to start your applications using the DOS Backup With Memory Expansion diskette and application diskette.

Follow these instructions:

1   Insert your DOS Backup With Memory Expansion diskette in the drive.

2   Press Ctrl-Alt-Del, (System Reset).

3   Enter the date.

4   Enter the time.

       The DOS prompt is displayed:

       A>

5   Remove the DOS Backup With Memory Expansion diskette.

6   Insert your application diskette.

7   Type the special characters that start the application.

The manual for each application may list the special characters that you type to start the program.

If you cannot find this information, type:

AUTOEXEC

8   Press Enter.

9   Follow the instructions in your application book.

The application now runs using the expanded PC*jr* memory.

Note: If you:

  lose power or power off,

  press Ctrl-Alt-Del (System Reset),

  insert a cartridge,

you must restart the system using the appropriate instructions above.

Applications Using the DOS Backup Diskette

This section describes how to start your applications using the DOS Backup diskette and application diskette.

Follow these instructions:

1 Insert your DOS Backup diskette in the drive.

2 Press Ctrl-Alt-Del, (System Reset).

3 Enter the date.

4 Enter the time.

The DOS prompt is displayed:

A>

5 Remove the DOS Backup diskette.

6 Insert the application diskette.

7 Type the special characters that start the application.

The manual for each application may list your special characters that you type to start the program.

If you cannot find this information, type:

AUTOEXEC

8 Press Enter.

Follow the instructions in your application book. The application now runs.

Installing Memory Expansion on Your Self-Starting Application Diskettes

This section describes how to install Memory Expansion on your self-starting application diskettes.

Follow the instructions below:

> **Note:** Test the self-starting application first before trying to install Memory Expansion. To do this, go back to "Applications Using DOS Backup With Memory Expansion" and run the application.
>
> If the self-starting application runs using Memory Expansion, return to this section and follow the instructions below. If the application does not run using Memory Expansion, go to Appendix A. "Error Conditions."

1 Insert your DOS Backup With Memory Expansion diskette in the drive.

2 Press Ctrl-Alt-Del (System Reset).

The DOS prompt is displayed:

A>

3 Remove the DOS Backup With Memory Expansion diskette from the drive.

4 Insert the IBM PC*jr* Memory Options diskette (the one that came with the Using Your IBM PC*jr* Memory Options package).

5 Enter: `install`

The Installing PC*jr* Memory Options screen is displayed.

```
        Installing PCjr Memory Options


Type the option number and
press Enter.

1. Expanded Memory

2. Expanded Memory with Memory Disk

3. Exit - No Installation


Option:
```

6 Enter: `1`

7 When the following screen is displayed:

```
Remove your PCjr Memory Options
diskette from the diskette drive.

Insert your DOS backup diskette
or your application diskette that
contains DOS.


Press any key when ready.
```

Remove your PC*jr* Memory Options diskette from the drive.

Insert the self-starting application diskette that you want to receive Memory Expansion.

8   Press any key.

The following messages are displayed:

Installation in progress....

The installation of your PCjr
Memory Options is completed.

Do you want to do the same
installation on another DOS
backup diskette or application
diskette that contains DOS (Y/N)?

9   Enter: N

The following screen is displayed:

You must do a System Reset with this
diskette in order to use the new PCjr
Memory Options.

A>

10 Press Ctrl-Alt-Del (System Reset).

Your self-starting application begins.

11 Follow the instructions in your application book.

Chapter 3. Part 2 - Memory Disk

Contents

A *memory disk* is like having a temporary second
diskette drive in the memory of your expanded IBM
PC*jr*. You can use the memory disk to store programs
and files.

The storage space on the memory disk is temporary.
You will lose the data on the memory disk if any of the
following happens:

> lose power or power off,

> press Ctrl-Alt-Del (System Reset),

> insert a cartridge.

Using Drive C (Memory Disk)

The computer recognizes the memory disk as drive C.
You can use DOS commands to copy files to the
memory disk and to use the files that are stored there.

You can copy information from a diskette to the
memory disk by inserting a diskette in drive A and
copying the files to drive C. Also, you can save
information that is on the memory disk by inserting a
diskette in drive A and copying the files from drive C.

You must understand Memory Expansion before using
Memory Disk.

This section of the book describes how to:

- Create a DOS Backup With Memory Disk diskette

- Start applications using the diskettes you created.

Getting Ready

Follow the steps below to get ready for installing
Memory Expansion.

1   Get one (1) blank diskette.

2   Get one (1) blank label.

3   Write the diskette title on the label as shown:

```
DOS BACKUP WITH
  MEMORY DISK
```

4   Place the label on the blank diskette.

5   Go to the next page to prepare the diskette for
use with applications.

Preparing Your Memory Disk for Use with Applications

This section describes preparing your Memory Disk diskette. Preparing your Memory Disk diskette includes making a copy of DOS and then installing Memory Expansion and Memory Disk.

Follow the instructions below:

Hint: For this procedure, you can remember which diskette to insert if you remember:

```
"Source" = DOS original diskette that
           comes with your DOS book.
```

and

```
"Target" = The diskette you labeled:
           "DOS Backup With Memory Disk"
```
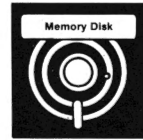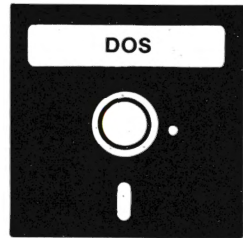
1 Insert your DOS diskette.

2 Power on PC*jr* if it's not on or press Ctrl-Alt-Del, (System Reset).

3 Enter the date.

4 Enter the time.

The DOS prompt is displayed:

A>

5   Enter: `diskcopy`

The following message is displayed:

`Insert source diskette in drive A:`
`Strike any key when ready`

6   Insert your original DOS diskette (the source in this case)

> **Note:** If DOS is already in the drive, leave it there.

- *Now* press any key.

7   The "in use" light comes on while the source diskette is being read, and then this is displayed:

`Insert target diskette in drive A:`
`Strike any key when ready`

- Remove your source diskette (DOS original).

- Insert the target diskette (the diskette you labeled **DOS Backup With Memory Disk**).

- *Now* press any key.

> **Note:** You will have to switch the diskettes until you see the message in step 8.

8 The "in use" light comes on while the backup diskette is being written. Then the message shown in step 5 is displayed again. Keep repeating steps 6 and 7 until this message is displayed:

Copy complete

Copy another (Y/N)?

9 Type: N

You don't have to press the Enter key. The DOS prompt, A>, is displayed.

10 Remove the DOS Backup With Memory Disk diskette from the drive.

11 Insert the IBM PC*jr* Memory Options diskette (the one that came with the Using Your IBM PC*jr* Memory Options package).

12 Enter: `install`

The Installing PC*jr* Memory Options screen is
displayed.

Installing PCjr Memory Options

Type the option number and
press Enter.

1. Expanded Memory

2. Expanded Memory with Memory Disk

3. Exit - No Installation

Option:

13 Enter: 2

The following screen is displayed:

```
Type the size (in K bytes) for your
memory disk (default is 60).

Then press Enter.


        Size:
```

14 Enter the Memory Disk size you want.

15 When the following screen is displayed:

```
Remove your PCjr Memory Options
diskette from the diskette drive.

Insert your DOS backup diskette
or your application diskette that
contains DOS.


Press any key when ready.
```

16 Remove your PC*jr* Memory Options diskette from the drive.

Insert the DOS Backup With Memory Disk diskette in the drive.

17 *Now* press any key.

The following messages are displayed:

```
Installation in progress....
```

```
The installation of your PCjr
Memory Options is completed.
```

```
Do you want to do the same
installation on another DOS
backup diskette or application
diskette that contains DOS (Y/N)?
```

18 Enter: N

The following screen is displayed:

```
You must do a System Reset with this
diskette in order to use the new PCjr
Memory Options.
```

```
A>
```

You have now completed the task of preparing your **DOS Backup With Memory Disk diskette.**

19 Remove the DOS Backup With Memory Disk diskette from the drive.

Go on to the next section to start using applications with the Memory Disk.

Starting Your Applications

This section describes how to start your applications.

Applications Using DOS Backup With Memory Disk

This section describes how to start your applications using the DOS Backup With Memory Disk diskette and application diskette.

Follow these instructions:

1   Insert your DOS Backup With Memory Disk diskette in the drive.

2   Press Ctrl-Alt-Del, (System Reset).

3   Enter the date.

4   Enter the time.

    The DOS prompt is displayed:

    A>

5   Remove the DOS Backup With Memory Disk diskette.

6   Insert the application diskette.

7   Type the special characters that start the application.

The manual for each application may list the special characters that you type to start the program.

If you cannot find this information, type:

AUTOEXEC

8   Press Enter.

9   Follow the instructions in your application book.

The application now runs using the expanded PC*jr* memory with the memory disk.

Note: If you:

lose power or power off your computer,

press Ctrl-Alt-Del (System Reset),

insert a cartridge,

you must restart the system using the appropriate instructions above.

Installing Memory Disk on Your Self-Starting Application Diskettes

This section describes how to install Memory Disk on your self-starting application diskettes.

Follow the instructions below:

> **Note:** Test the self-starting application first before trying to install Memory Disk. To do this, go to "Applications Using DOS Backup With Memory Disk" and run the application.
>
> If the self-starting application runs using Memory Disk, return to this section and follow the instructions below. If the application does not run using Memory Disk, go to Appendix A. "Error Conditions."

1 Insert your DOS Backup With Memory Disk diskette in the drive.

2 Press Ctrl-Alt-Del, (System Reset).

3 Enter the date.

4 Enter the time.

The DOS prompt is displayed.

A>

5 Remove the DOS Backup With Memory Disk diskette from the drive.

6 Insert the IBM PCjr Memory Options diskette (the one that came with the Using Your IBM PCjr Memory Options package).

7   Enter: install

The Installing PC*jr* Memory Options screen is displayed.

```
        Installing PCjr Memory Options


Type the option number and
press Enter.

1. Expanded Memory

2. Expanded Memory with Memory Disk

3. Exit - No Installation


Option:
```

8   Enter: 2

The following screen is displayed:

```
        .


Type the size (in K bytes) for your
memory disk (default is 60).

Then press Enter.



        Size:
```

9   Enter the Memory Disk size you want.

10 When the following screen is displayed:

Remove your PCjr Memory Options
diskette from the diskette drive.

Insert your DOS backup diskette
or your application diskette that
contains DOS.

Press any key when ready.

11 Remove your PC*jr* Memory Options diskette from the drive.

Insert your application diskette in the drive.

12 *Now* press any key.

The following messages are displayed:

Installation in progress....

The installation of your PCjr
Memory Options is completed.

Do you want to do the same
installation on another DOS
backup diskette or application
diskette that contains DOS (Y/N)?

13 Enter: N

The following screen is displayed:

```
You must do a System Reset with this
diskette in order to use the new PCjr
Memory Options.



A>
```

14 Press Ctrl-Alt-Del (System Reset).

Your self-starting application begins.

15 Follow the instructions in your application book.

Saving the Booklet and Diskette

When you have finished using this book and PC*jr*
Memory Options diskette, store them in the IBM PC*jr*
Guide to Operations. Then you can use the instructions
and diskette whenever you need to do another
installation procedure.

Appendixes

Contents

Appendix A. Error Conditions

This appendix contains the error conditions that can occur while using Memory Options.

While Installing Menu Options

Installation not successful...

Cause: This error condition occurs if there is not enough room on the diskette for the memory options files when performing the INSTALL procedure.

Action: Erase or transfer unneeded files to make room for the memory options files, and repeat the INSTALL procedure.

DOS Backup With Memory Expansion

If you receive any of the following conditions:

- unusual characters, or distortion on the screen

- hangs while starting

- seems to be in an infinite loop

- illegal function call (BASIC)

- syntax error—out of memory (BASIC).

Cause: The application was designed specifically for a 128KB PC*jr*.

Action: Restart the system using your DOS Backup diskette.

DOS Backup with Memory Disk

If you receive any of the following conditions:

- out of memory during startup of program

- hangs while starting

- seems to be in an infinite loop.

Cause: There is not enough memory for the application and Memory Disk at the same time.

Action: Decrease Memory Disk size or do not use a Memory Disk.

Appendix B. Using the IBM Cluster Program with Expanded Memory

This information applies to Version 1.00 of the IBM Cluster Program and is for the cluster manager.

Follow this procedure if one or more computers on the cluster is an IBM PC*jr* with expanded memory.

To use the expanded memory, you must reset the system after following one of these steps. Proceed to **Step 1** for local system resets or **Step 2** for remote system resets.

Step 1.

If you are preparing to do a local system reset, continue with this step:

a. Follow the instructions in the *Cluster Program Introduction and Program Setup Guide*, then return to this book and continue with Step b.

b. Use a text editor such as EDLIN or Personal Editor to add:

    DEVICE=PCJRMEM.COM

    as the first line in the CONFIG.SYS file on the local system reset diskette.

    Note: Do *not* use the PC*jr* Install Program on your system reset diskette.

c.   Copy the file **PCJRMEM.COM** from the *PCjr*
     Memory Options diskette to your local system
     reset diskette.

You can now do a local system reset from the *PCjr*
station.

Step 2

If you are preparing to do a remote system reset from
the station, continue with this step:

a.   List the files of your Cluster Program using the
     DOS **DIR** command.

b.   Look at the date of the files @#CLUSTR.COM
     and DC.COM. If the date is *later* than 12-30-83,
     go to Step c. If the date is 12-30-83, contact your
     IBM sales representative, IBM Product Center, or
     your authorized IBM dealer where you purchased
     the Cluster Program for the updated version of the
     files @#CLUSTR.COM and DC.COM, then
     proceed to Step c.

c.   Go to the *Cluster Program Disk Server Guide*.
     Follow the instructions up to "Configuring the
     Fixed Disk," then return to this book and continue
     with Step d.

d.   Get the diskette labeled "Remote System Reset
     Volume Creation."

e.   Use a text editor such as EDLIN or Personal
     Editor to add:

     DEVICE=PCJRMEM.COM
     DEVICE=@#CLUSTR.COM

     as the first and second line in the CONFIG.SYS
     file on the Remote System Reset Volume Creation
     diskette.

B-2

Note: Do *not* use the **PC***jr* Install Program on your Remote System Reset Volume Creation diskette.

f.   Copy the file **PCJRMEM.COM** from the **PC***jr* Memory Options diskette to your Remote System Reset Volume Creation diskette.

g.   Copy the updated file **@#CLUSTR.COM** to your Remote System Reset Volume Creation diskette.

h.   Copy the updated file **DC.COM** to your Disk Server Station System Files diskette and to your disk server station's fixed disk.

i.   Go back to the *Cluster Program Disk Server Guide* and continue at "Configuring the Fixed Disk."

These changes to the Remote System Reset Volume have no effect on the remote system reset of other types of IBM Personal Computers.

SOME STATES DO NOT ALLOW THE EXCLUSION OF IMPLIED WARRANTIES, SO THE ABOVE EXCLUSION MAY NOT APPLY TO YOU. THIS WARRANTY GIVES YOU SPECIFIC LEGAL RIGHTS AND YOU MAY ALSO HAVE OTHER RIGHTS WHICH VARY FROM STATE TO STATE.

IBM does not warrant that the functions contained in the program will meet your requirements or that the operation of the program will be uninterrupted or error free.

However, IBM warrants the diskette(s) or cassette(s) on which the program is furnished, to be free from defects in materials and workmanship under normal use for a period of ninety (90) days from the date of delivery to you as evidenced by a copy of your receipt.

LIMITATIONS OF REMEDIES

IBM's entire liability and your exclusive remedy shall be:

1. the replacement of any diskette(s) or cassette(s) not meeting IBM's "Limited Warranty" and which is returned to IBM or an authorized IBM PERSONAL COMPUTER dealer with a copy of your receipt, or

2. if IBM or the dealer is unable to deliver a replacement diskette(s) or cassette(s) which is free of defects in materials or workmanship, you may terminate this Agreement by returning the program and your money will be refunded.

IN NO EVENT WILL IBM BE LIABLE TO YOU FOR ANY DAMAGES, INCLUDING ANY LOST PROFITS, LOST SAVINGS OR OTHER INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF THE USE OR INABILITY TO USE SUCH PROGRAM EVEN IF IBM OR AN AUTHORIZED IBM PERSONAL COMPUTER DEALER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, OR FOR ANY CLAIM BY ANY OTHER PARTY.

SOME STATES DO NOT ALLOW THE LIMITATION OR EXCLUSION OF LIABILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES SO THE ABOVE LIMITATION OR EXCLUSION MAY NOT APPLY TO YOU.

GENERAL

You may not sublicense, assign or transfer the license or the program except as expressly provided in this Agreement. Any attempt otherwise to sublicense, assign or transfer any of the rights, duties or obligations hereunder is void.

This Agreement will be governed by the laws of the State of Florida.

Should you have any questions concerning this Agreement, you may contact IBM by writing to IBM Personal Computer, Sales and Service, P.O. Box 1328-W, Boca Raton, Florida 33432.

YOU ACKNOWLEDGE THAT YOU HAVE READ THIS AGREEMENT, UNDERSTAND IT AND AGREE TO BE BOUND BY ITS TERMS AND CONDITIONS. YOU FURTHER AGREE THAT IT IS THE COMPLETE AND EXCLUSIVE STATEMENT OF THE AGREEMENT BETWEEN US WHICH SUPERSEDES ANY PROPOSAL OR PRIOR AGREEMENT, ORAL OR WRITTEN, AND ANY OTHER COMMUNICATIONS BETWEEN US RELATING TO THE SUBJECT MATTER OF THIS AGREEMENT.

Jackson = 2