New jrConfig.sys Boosts Compatability

Part III

[**Editor's Note:** This is the third in a series of articles about the new JrConfig which began in the May issues. For many years jrConfig has been the most useful program for PCjr users. The newest version is more powerful than ever. Developed through the cooperation of its original author, Larry Newcomb and PC Enterprises, JrConfig resolves many compatibility problems. It is available in the Software Store, pages 29-30, on jr PowerPack III, Disk #140.]
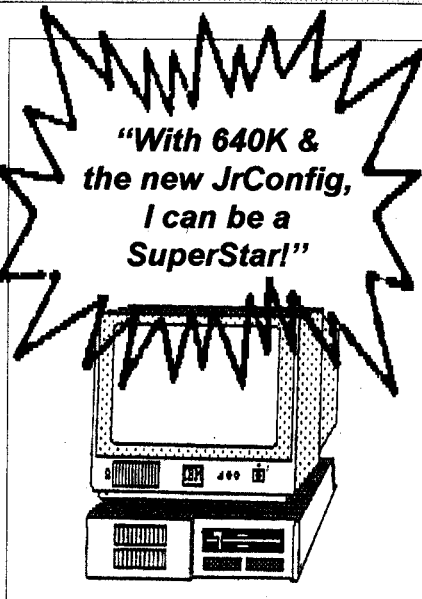
Most computers can not have more than 640KB of conventional memory, but the PCjr is different. PCjrs can have 736KB of conventional memory which is 96KB (98304 bytes) more than other computers. If you expand your PCjr's memory

"*With 640K & the new JrConfig, I can be a SuperStar!*"

In This Issue:

PCjr Lives!

PCjr Users Still Going Strong on Prodigy

We at jrNewsletter reviewed the correspondence among the PCjr Users group on Prodigy, after receiving a letter from reader Gary English (see Reader Feedback, page 5). From the conversations going on there, it is apparent interested PCjr owners are still out there doing what they do best--sharing their knowledge of how to make their little machines useful in today's world of ever-more expensive and sophisticated hardware and software. We're highlighting some of the conversations there, in the belief that our readers who have

I have received several calls and letters from people outside the state of Georgia as a result of having been listed in PC WORLD magazine as a source of information on PCjrs and PCjr products. I've received at least thirty-five calls from seventeen states, including one all the way for Hawaii. Almost all want to know the same thing: "How can I use my PCjr to run a ------?" (fill in the blank). There are variations, but basically that's what they want to know. Almost without exception, these folks have the same situation. They have a PCjr, they don't know how to use it, and there's no one around them they can ask and hope to receive a sensible answer. In case you've forgotten, nobody takes

the Junior seriously any more, and it's one of the most frustrating experiences imaginable to try to ask a salesperson about compatibility. If you don't get a "cute" answer, you get a wrong one,--if you get one at all. That's why, when I get one of these pleas, I've tried to answer them as honestly and completely as I can but it takes a lot of time to compose an individual answer for each caller, so I've come up with a basic "one size fits all" answer note. I just call the canned letter up on TEXTRA, then fill in names, addresses and such for the individual, then add any specific comments I can think of. The text of the basic letter is included in this issue. I'd welcome constructive criticism on how to improve it.

Text of Reply to Inquiries from PCjr Owners...

"...the most important thing about a PC jr is determining just what will run on it and what won't; the amount of Random Access Memory (RAM) you have available, so I'm unable to make any specific recommendations right now. If you aren't familiar with just what RAM is and how it differs from disk drive capacity, let me say that RAM is the electronic temporary, or working

? Questions & Answers ?
By Rene Waldron

Q I have had another bad experience with some software. It almost took a lawsuit to return the software until I proved it didn't work, not only on my Jr but it didn't work correctly on a standard PC either! I guess I'm asking - where is the safest place to buy software for the PC Jr? M. Ponder, St. Louis MO

A. Whew, there's still bad software (and worse salesmen) out there? When will they learn...

For safety and compatibility, the first place which comes up on our list is PC Enterprises. The software they offer has actually been tested on PC Jrs. and in some cases patches applied where necessary before you even get it! The patches are simply included. How's that?

Not good enough? Well, you can get also get from them a "compatibility cartridge" which takes care of 99.99% of the patches, changes, and other glitches in other software and / or DOS itself. We warn you however, that PC Enterprises uses ONLY versions of IBM-DOS (NOT MS-DOS) for their testing and design. They'll even sell you version 5.0 of IBM PC DOS with all necessary patches already done and copied to floppies so you can be up and running instantly. The price, including all this service, is close to Egghead's discount prices.

To be sure, ANY advertiser in the Jr Newsletter which sells software will supply "safe" and compatible versions for you, so check 'em out...

Q. Can you tell me what the BREAK command of DOS is? I tried it both ON and OFF and can find no difference. K. Rudvin, New Bedford, MA

A. If there is a command in the environment of BREAK=ON then DOS will check between every line or each internal step of running programs for the press of the Ctrl-Break key(s) or an equivalent key input. If the command is BREAK=OFF then the check for the Ctrl-Break is only done during what can be considered "idle" CPU time, such as waiting for keyboard input, the end of screen writing, the end of a file read or write, etc. In the instance of BREAK=ON there is a lot of checking going on and programs may run perceptively slower because they must be interrupted

Questions & Answers

for the keyboard check much more often while the check is made then the program re-activated. Though the slowdown is noticeable, you would probably only notice the difference in response of the key input if you were de-bugging programs. The response seems almost instantaneous sometimes. Also, most word processors will allow the printer buffer to be "dumped" under certain circumstances, preventing the printer from going on interminably after you've hit the "stop" command. In this case if BREAK=ON the printer should stop sooner. Another reason for the ON command is that it is the only way you can get out of certain loops or a runaway screen.

If you have been having problems with some games and need the Ctrl-C or Ctrl-Break, they will work when you want them to if BREAK=ON. Note that some programs require that BREAK=ON to function properly. This will be in the documentation and the instruction must be followed. Remember, a batch file can turn this ON and OFF without a problem. You can also turn it ON and OFF directly by a typed command at the DOS prompt, so you aren't locked to one condition if your autoexec.bat has the command put there by some badly behaved program's installation. Incidentally, you can check for the condition at the DOS prompt by typing just BREAK then press <Enter> and DOS tells you whether it is ON or OFF - the default is OFF when you boot up your Jr.

Q. I have a friend who is having trouble trying to read my word processing files on his machine and I can't read his. I know that the word processing programs are different and will make different files, but they are full of garbage even when we look at them with the DOS "TYPE" command. I think we should be looking at ASCII, but how do we do that? What is ASCII? J. Gilbert, Omaha, NE

A. First, ASCII is "American Standard Code for Information Interchange" and it is a standard, of sorts. The computer's internal storage of letters, numbers, punctuation marks, line-feeds etc. is purely numerical. Each letter, for example, is really a number in the computer's memory. The Letter "A" is 65 and "a" is 97 while a real space is 32. By the way, a blank spot on your screen is NOT necessarily a space! It may be a "control" such as a Paragraph marker or a line feed, both of which are usually invisible on the monitor. Check the index of any DOS manual and find the ASCII chart to see a complete cross-reference of the visible and invisible characters. These numbers, letters and symbols are "set in concrete" in the ROM of your Jr. in a simple look-up table. They are used whenever needed by DOS or text programs; it's a lot faster than drawing or developing them
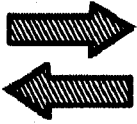
Reader Feedback
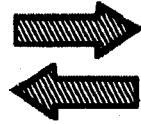
PCjr Users Club on Prodigy Recommended

I appreciate the great support you have been providing us PCjr users over the years. I have been a subscriber since I first got my Junior. You are doing a great job, keep it up.

I do have a suggestion which might help you to keep abreast of the group you serve. There is an active discussion forum for the PCjr on Prodigy. Your newsletter is mentioned all the time as a source of great information about the Junior and a place to find vendors that support Junior. We have quite a lively discussion at times, which I am sure would be of interest to you and your readers. Many of us in the group are already subscribers and routinely refer others to your newsletter. You and your readers certainly would be welcome to join our group.

You can find us in the Computer Club/Hardware Topic/PCjr subject. Just [jump] Computer Club. Hope to see you on-line soon.

Gary Inglish, Jacksonville, FL

Editor's Note: Thanks for the tip, Gary. As you can see, we took the suggestion and browsed Prodigy recently. We found it interesting to make it the basis of the story which starts on page one and continues on the next column on this page.

PCjr Users on Prodigy

Prodigy will know where to find it and what goes on there, and that some who do not have Prodigy will want to consider a membership. One sample conversation went as follows:

Michael Johnston wrote a note asking whether other users thought he should sell his PCjr. He said the computer was about 10 years old and he had not used it for the last 7 years, especially since purchasing a386sx/20. He tested it recently and found it to be in good working order. He was uncertain what to do with the machine. "I feel that someone might find some use for it -- I 'm really not sure exactly what to do with it." He asked for advice from anyone who was knowledgeable enough to let him know of the machine's worth. He said he considered it "a terribly outdated machine, but I hate to throw it away until I'm absolutely sure there is nothing I can do."

Among the replies received was one from R. Mike Eastwick, who said, "I've had a PCjr for about 10years now and I have put so much into it that I can't really see any point in selling it." He then recommended one of our regular advertisers who

Games

ADVENTUREWARE. Six different text adventures with titles like Island of Mystery, Terror in the Ice Caverns, and Moon Mountain Adventure, all test your wits and take you to strange mysterious places. 128K (disk #14)

ARCADE GAMES. Includes Kong, Pango, PC-Golf, Pyramid and other exciting, colorful games for hours of fun. 128K. (Disk #30)

BOARD GAMES. Eleven different games on one disk! Hours of fun with Monopoly, Yahtzee, Cribbage, Backgammon, Othello, and others. All run great on your PCjr! 128K. Need Cartridge BASIC (Disk #31)

BUSHIDO. Test your skills in martial arts combat. Fighters kick, spin, duck, punch, etc. Requires 256K and keyboard with function keys (Disk #16)

CASTAWAY/S. AMERICAN TREK. Test your survival skills as the survivor of a shipwreck in the South Pacific. Or as an explorer of South America. Two novice text adventures from Jim Button. Ages 12 and up. 128K. (Disk #53)

COMPUTER JOKER. Disk full of jokes, wisdom, and visual tricks to play on your computing friends. 128K ok (Disk #64)

DOUBLE TROUBLE. Two of the most challenging, highest quality arcade style games weve seen Amazing Mazes and Willy the Worm. Ten different mazes and five levels of play will tie your brain in knots. And Willy, who is the fastest, jumpingest worm youll ever see, will beat you for sure! You can even modify Willy to give yourself more (or less) trouble. 128K ok. (Disk #68)

DUGEONS & WARS. In Dungeon Quest you can choose to be a dwarf, elf, magic-user, fighter or other type of character. You select your strengths and weapons, too. Then you enter the dangerous dungeons on your Quest.

PCjr Users on Prodigy

could help with upgrading if Johnston decided to keep his junior. Then he said, "If you do decide to sell, please let me know... I may be interested in purchasing some of your accessories."

Another Prodigy member wrote to say that the PCjrs are often seen in second-hand computer stores and reported seeing one sell at a junior high school auction for ten dollars! Then the member said he might like more details on the machine in question, because he might be interested in purchasing it himself.

The best answer came from Frank DeCandia, who wrote:

"You certainly sound like a man without any children. Certainly you must have relatives who have children at the tender age of computer comprehension.

"In the world of IBM, a PCjr should make an excellent starter system to some tyke. Don't deprive a computer from hungry young mind."

The PCjr Users Club had a variety of recent postings. They included such topics as:
* A Prodigy member looking for ideas on how to get rid of some 300 baud internal modems. "Obviously, they are not of much value except for character based communications, like accessing a library, etc., and then only if not long distance. However, as most of you know, they can be converted to a 2nd serial port by a talented hardware hacker. I

could supply several of them at little or no cost for a worthwhile project," wrote a reader who operates a business selling PCjr memory, disk drives and hard drives.

* One user was having trouble installing a 3.5" drive in the PCjr as the A: drive and asked if there was anyone out there who could help him. By the next night, a PCjr user who was successfully using two 3.5" drives as A: and B: left a note, offering to help and asking for details of the config.sys and autoexec.bat to get started in tracking down the problem.

* One user who wanted to make a copy of his original DOS diskette was unable to do that. Other users told him how to use the Diskcopy routine, with one or two diskettes to accomplish the task.

* When a Prodigy user purchased a used PCjr for his 3-year old son, he found that when he turned on the machine, there was a terrible jamming sound, and an ERROR H message would appear. The new PCjr owner also experienced some OUT OF MEMORY messages. Another user suggested how me might handle disk the problem and encouraged him to upgrade the computer's memory. "If you make this investment and nothing more, your son will be able to run almost any CGA program that does not require a hard drive. That is not a bad invest-

(Continued on page 8)

Thermonuclear War pits the US vs. the Soviets in a very real demonstration of what a nuclear war might be like. Combat is a strategic battle on the ground. 128K ok. (Disk #9)

DUOTRIS. Two great Tetris-like games on one disk. Similar to the popular Russian strategy game, both of the versions add new twists of their own. Written in Turbo Pascal, both are high quality games. 128K ok (Disk #116)

GAMES I. An assortment of games for hours of fun and excitement. Includes Spacewar, Airtrax, Life, Wumpus, Wizard and more. All good with 128K. Need Cartridge BASIC (Disk #8)

GAMES II. A wild bunch of games to test your wits and skills. Includes Slither, Xwing, Torpedo, ABM2 and Overeact, where you are in charge of a nuclear plant. 128K. Need Cartridge BASIC (Disk #34)

GAMES III. Kingdom of Kroz, an award-winning arcade action game. Go-Moku, a challenging Japanese strategy game, also known as Pente. Zigsaw, the first really good on screen simulation of a jigsaw puzzle. All three on one disk. 256K Reviewed 12/89 (Disk #101)

GAMES IV. Turbo-Car tests your skills at driving a fast car on a two lane highway. Can you keep from crashing? Return to Kroz is a colorful, exciting arcade-strategy sequel to Kingdom of Kroz on Games III. Trek Trivia tests and expands your knowledge of Star Trek. Three great games on one disk! 256K Reviewed 2/90 (Disk #106)

GOLF/SAILING. Two great games! The golf game has three courses, user definable club ranges and a swing control that determines whether you hit a slice, hook or straight shot. Three nine hole courses (Novice, Pro, and Sadistic). In the other game, you try to sail the three legs of the Bermuda Triangle avoiding, if you can, the creeping mists, alien crystals, vortexes and storms. Your boat is equipped with radar, rudder and sail (all of which you control) and an engine for emergencies. 128K ok for sailing. Need 256K for golf. (Disk #47)

MEAN 18 GOLF COURSES. Three excellently designed courses for those who play Mean 18, the commercial golf game. Disk #79 has Boca Woods North, Boca Woods South, both with especially challenging water holes, and Kearsage Valley, with fall foliage in full color. Disk #80 has TPC of Avenel, TPC of Sawgrass, with massive sand traps and a tough 17th green on an island, and TPC of Woodlands, which may be the most challenging of all. (Disk #79 and #80)

PC-CHESS. Two great chess games on one disk! A full-color, many featured chess program with four levels of play, allows such things as switching sides, setting up the board yourself, validity checking, en passant, etc. The other works on color or monochrome, has window showing options it considers before moving, adjustable difficulty level but a powerful opponent at any level. 128K ok for one, 256K for other. (Disk #44)

PHRASE CRAZE. Based on the TV show Wheel of Fortune, you get to be the guest who guesses the mystery phrases and wins piles of money! The wheel spins to select the amount of money you win for correct guesses. It gets harder with each round you play. You can add your own phrases to this game or try to guess the ones provided on the disk. Lot of fun for adults as well as older kids. 128K. (Disk #46)

PINBALL RALLY. A colorful collection of amazingly realistic pinball games. Using the Shift keys as flippers, the games get more and more complex until you get to Twilight Zone, the hardest one of all. Runs on 128K. (Disk #10)

PLAYERS CHOICE. Six different card games, some easy, some hard, but all excellent. Youngsters can have fun playing Memory or Even-Out, which are quite easy to master. Blackjack is hard to beat, and Poker, which has the ability to modify its play in response to your methods, is a rel challenge. Also two fine versions of Solitaire, one with great graphics. Some need 256K. (Disk #78)

PCjr Users on Prodigy

(Continued from page 7)

ment for a solid, reliable computer."

*   A new PCjr user wanted to know if there were other cartridges for the PCjr or was BASIC the only one. Other users explained there were quite a few cartridges made when the PCjr was young and may still be found. He also learned about the cartridges which vendors are now manufacturing to increase speed and compatibility.

*   A PCjr owner who wanted to do the Tandy Modification himself received information on where to get the 74s86 chip, as well as an alternate mod which involved adding 5 wire jumpers and cutting a trace on the system board.

*   A user who was having problems with an original IBM monitor, wanted to know if he could install a NEC monitor, or if there was a way to fix the original monitor. A reader explained the standard 9 pin D connector (a $10 adapter cable) was used to connect alternative monitors to the PCjr. He was offered the opportunity to receive some trouble shooting hints on the monitor, but was warned that it was dangerous to work on a monitor with out proper training and experience.

*   The PCjr Users Club also had a series of exchanges on the various types of BASIC: Cassette BASIC, Disk BASIC, Advanced BASIC and

Cartridge BASIC, how each type is loaded and some of the differences between them.

After a survey of the messages posted, it appears to us that the PCjr Users Club provides a handy forum when seeking quick answers to a problem. A membership on Prodigy to keep in contact with other users could prove a helpful supplement to the more detailed print information such as this newsletter provides.

The "Did You Know This?" Department

The early model of the IBM PC, sold in 1981, had 48K of Random Access Memory, came with a single disk drive, and cost over $2,000. That was without the display.

Let software & hardware developers know that
We're Still Here!
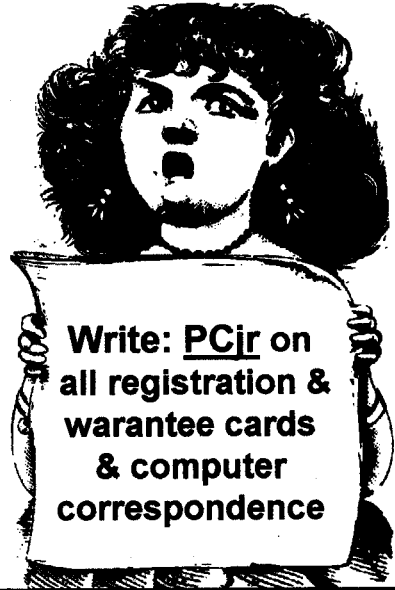
Write: PCjr on all registration & warantee cards & computer correspondence

BRIDGE PLUS. Play Contract Bridge Or Mahjong. Realistic bridge practice in bidding and playing against the computer. Good way to practice the game, but need some knowledge of the game or a rule book. Mahjong rules are included on the disk. Requires 256K Reviewed 9/91 (Disk #131)

REFLEX POINT. Patterned on the TV show Robotech, this game follows the shows storyline, with the Freedom Fighters trying to reach the Reflex Point and destroy the evil Invid Prince. 128K ok. (Disk #12)

SCRABBLE. At last, an excellent Scrabble game that runs in 16 colors on PCjrs! Plays just like the board game. Expandable dictionary checks words. Keeps track of all premium score squares and scores for up to four players. Also contains WORDWHIZ, a nice vocabulary building game. 256K (Disk #113)

STAY ALIVE !!! Three games that require all your wits to stay alive. Can you avoid the terrible nightmares and reach the highest level in Dr. Sleep? Or fight off the alien hordes on the Planet Iskib? Bet you cant shoot down the clever enemy pilots in Sopwith. If you can, you deserve a medal! 256K (Disk #89)

SUPER BOARD GAMES. Excellent versions of two popular board games Monopoly and Risk. Very much like the board versions, except your computer keeps track of everything for you. All you have to do is make the right moves and have fun. 256K. Need Cartridge BASIC (Disk #55)

TOMMYS TRIVIA. Excellent trivia game with 3 ways to play against computer, 2 against human opponent. 2,500 questions in many categories, from entertainment to history. More Qs available. 16 colors on PCjr. Need 256K. (Disk #98)

Questions & Answers

every call. The cryptic letters and symbols from 0 through 31 were developed before monitors and are, therefore, generally printer controls. They are still used for controlling our printers and some also control output formatting to our screens. Originally, ASCII only included the first 128 symbols because just about everything you do with a printer was included. Later, IBM extended this idea by adding another 128 characters and symbols to the set. This quickly became a new standard known as Extended ASCII or IBM Graphics. It is the set used for the box lines, single and double, and the foreign letters your programs can use. These are the characters 128 through 255. The complete set 0 through 255 is found in the ROM of All IBMs including the Jr.

Most word processors take advantage some of the additional "high" numbers to do fancy controlling of the text, such as notifying the printer to underline when it prints WHILE outputting a special color or other indication to the text screen. Other uses are as a flag to indicate indented or hidden headings or font size changes on-screen. In Windows or other true graphics screen driven programs the underlining, etc. will actually show right on the screen because they are individually drawn little pictures not the pre-determined text from ROM. In DOS or other standard ASCII text driver these "high ASCII" graphics or control

characters simply print to the screen and they look like Egyptian hieroglyphics.

Your two word processors are using the control characters differently for both printing and screen appearance, as you have already mentioned. Now comes the ASCII "standards" part. In each of these word processors there will be a "Save As" or some kind of choice to make when saving the files to disk. You each should choose "text," "ASCII," or "non-document," or whatever is NOT the native (automatic) format for saving your work. The manuals for each word processor will be quite clear as to how to do this kind of save. In effect, the save will "strip off" or translate certain control characters, writing only the low (the first 128) ASCII characters to the disk file.

Your problems are not entirely over, however. It is true the files will no longer have the garbage (high number controls) which DOS and other ASCII devices handle uniquely, but there may still be differences.

Here are some things to look for: A whole paragraph may be one long, simple, uninterrupted line from one word processor, while the other may leave in a carriage return / line feed combination at each place there was a word wrap or right margin in the original. Tabs are also handled without any agreement between programs. Sometimes they are left in (and you can see the little "o" in DOS) and sometimes they are converted to some number of spaces,

which also show right on the screen. In other words, the files are really in ASCII format but still not quite what we think of as a "standard." All of this seems like a mess, but you really will be able to read each other's files on-screen in DOS and what's more, you might even be able to load them into each other's word processors and convert them to the native format. You will probably have to "diddle" with them a bit to get such things as the paragraphs indents and margins correct, but it can often be done.

One other idea: You may want to look into a file conversion program. These programs can read the native format of one word processor and convert it to the native format of another. They are only so-so in practice, but you might luck out if your word processors are included in those the program can handle properly.

Word processors advertised as True ASCII, such as PC-Write, generally read and write files which are the easiest to exchange among word processors. They use the ROM characters in a simple and "standard" way.

Q. I received a gift of Microsoft Flight Simulator, version 3.0, and I have a jr with 512k, two floppy drives but no hard drive. I've tried all sorts of things and have to try to keep up with the program needs by swapping disks in the A: drive. I've tried to get it to recognize my B: drive but

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Questions & Answers

it apparently can't do this. Is it possible to get the program running any better? I like what I've seen so far. E. Heggland, Hyannis, MA

A. You can run this two-disk version with the two drives you have if you have DOS 3.xx or later, which you should have by now anyway. You'll use the DOS APPEND command. Normally, we don't think of this command because it can be dangerous in the wrong hands. It is best if you use a BATCH file to run Flight Simulator because the necessary cleaning up can be done automatically when you quit. Here's one way to do it with a batch file.

Let's call it "GO.BAT." Type the following lines and press Fn-6 after the semi colon of last line. Do not forget the semi-colon there!

COPY CON: GO.BAT <Enter>
APPEND A:\ <Enter>
B: <Enter>
A:FS3   <Enter>
A: <Enter>
APPEND;   <Enter>
Fn-6 OR Ctrl-Z <Enter> Either one will write it to disk.

If there isn't enough room on Flight Simulator's second floppy you can delete a file such as the readme.doc and put the batch file there. Find APPEND.COM on one of the DOS supplemental disks and copy it to the same Flight Simulator diskette. NOTE: You should ALWAYS be working with your back-up copies of the Flight Simulator

diskettes, NEVER with the originals! Anyway, now just place the disk with the GO.BAT and APPEND.COM files in A: and type GO <Enter>. APPEND effectively fools the program into thinking your A: and B: drives are just one huge drive and will run the Simulator from the B: drive, yet will find any other necessary files on the A: drive as they are called for. At the end of your session, (the line after "A:FS3") the batch file switches DOS to drive A: and in the next line APPEND is cancelled with the semi-colon. APPEND really can be handy, but is also a pain in the neck. You have cancelled the joining of A: and B: but APPEND is a TSR (Terminate and Stay Resident) program; therefore it's still resident and using up some memory. In this case a small price to pay in order to get up into the wild blue yonder! The danger is that if you forget it's there you might re-activate it accidentally. Then if you want to delete something on the A: drive and if it isn't found there DOS will delete it if it's on the B: drive! There are other little traps for the unwary so to get rid of it, re-boot...

Moving?

Please send your new address to us at least one month before you move. The Post Office will not forward your newsletters. Send notice to:

jr Newsletter
P.O. Box 163
Southbury, CT 06488.

BEST OF JR NEWSLETTER IV. For your handy reference, disk has the most informative articles, columns, and tips published in Jr Newsletter from June 1989 through May 1990. Easy to use search utilities provide quick ways to find any subject of interest. 128K ok (Disk #118)

BEST OF JR NEWSLETTER V, The best, most informative articles, columns, reviews, Questions and Answers from the June 1990 thru the May 1991 issues. Includes powerful search utility so you can find and read any subject easily. 128 ok (Disk #130).

Home & Family Management

FIRST AID TUTORIAL Learn or review your First Aid Lessons with this tutorial prepared by a Certified First Aid Instructor. The time to learn first aid is BEFORE you need it! Reviewed 3/92 (Disk #137)

BITE BY BYTE. Let your PCjr design a sensible diet especially for you, and help you plan meals so you can lose weight without too much deprivation. It's fun to do and it really works! 256K Reviewed 10/91 (Disk #134)

EDNAS COOKBOOK. Will organize your recipes by subject, allowing for quick retrieval. Print out sorted collection for your own cookbook. 128K, 2 drives. (Disk #96)

CHECK PROCESSOR. Easy to use software for financial record keeping. Balance checkbook, print expenses by category, etc. 128K (Disk #59)

CALENDAR MATE V4.0 Design and print your own calendars with birthdays, meetings, events, appointments all listed for you. Many features. Easy to use with F1 help key available at all times. Need 512K. Reviewed 7/91 (Disk #115)

SKYGLOBE V2.5. View a map of the heavens customized for your location, date and time. Maps 10,000 stars, 300 with labels, 89 constellations. Many useful features such as bright-

Most Recent Volume Of PCjr Reference Now Ready

Volume Six of the **Best of jr Newsletter** disks is now available in the jr Newsletter Software Store. This disk contains the most informative articles, columns and letters from the June 1991 through May 1992 issues -- all on one disk for your handy reference.

The disk also includes two powerful search programs to help you run two levels of search for any PCjr topic you may want to read about.

We also include a program which enables you to read the articles on your PCjr screen and page through them at your own pace.

Add this new volume to the first five and you'll have the most complete PCjr reference library available anywhere. All you have to do is pop a disk in your drive and perform a search for any topic you're interested in. Or put all volumes in one subdirectory on a hard drive and perform a complete search at top speed.

Included on Volume Six are:
* compatibility tips,
* software reviews,
* PCjr History,
* PC jr technical information,
* Tips for running DOS 5.0 on PCjrs
* PCjr Memory Management and explanations
* Tips and insructions for the repair & installation of floppy diskette drives, hard disks, PCjr

color displays, Tecmar Power supplies, etc.,
* Programming tips
* A handy table of what PCjr Error messages mean,
* Explanation of the newest version of JrCONFIG and its many improvements,
* printer tips,
* Prodigy notes,
* PCjr users' questions and answers,
* new PCjr products,
* DOS explanations and tips,
* beginner's corner,
* and much more.

To order Best of jr Newsletter VI (Disk #142), please use order form on pages 29-30.

Mode 80 or CO80 ??

The correct use of the DOS MODE command is somewhat confusing. One problem is, you would think that you would use MODE CO80 in order to operate programs in color. But plain old MODE 80 will give you color, if the software provides it. In fact, you will still get color if you type MODE BW80.

The distinctions between these commands were made in order for IBM PC owners to be able to switch between their monochrome and their color graphics boards (which jr owners don't have to worry about).

Jr owners might find the MODE BW80 command useful, however, if they wanted to see a more readable display on a black and white monitor. The color graphics adapter in jr sometimes translates colors into unreadable shades of gray.

ness selection, zoom in and out, printing on dot matrix, a find feature, and an astounding on-screen demonstration of star and planet movement across the sky. 256K. Reviewed 7/91 (Disk #129)

WILLS. Written by a lawyer, this software helps prepare wills that are appropriate for many different situations. Includes 18 basic types, with many clauses that can be combined to create customized wills for most families. 256K (Disk #124).

FAMILY TREE. Powerful genealogy program with easy to use menu system. Prints handy research forms, checks your accuracy, prints variety of charts and can make your family tree into a book! 256K (Disk #109)

FAMILY HISTORY. Includes complete manual on disk with how-to info on tracing and setting up your family tree with detailed genealogical information. Easy to use and modif as you gather more data. New compiled version runs faster than previous version. 128K order Disk #33 alone. 256K order #33 and #33A.

HOME BUDGET MANAGEMENT SYSTEM. Easy-to-use system for keeping track of income and expenses. Create separate accounts for income tax categories and get a summary at end of year. Provides chart of accounts, transaction reports, sorted ledger entries, etc. 128 K. (Disk #57) Or v. 3.13 for improved screenwriting and disk access speed. 256K. (Disk #57A)

HOME INVENTORY. Taking an inventory of your home might even be fun with this easy-to-use software that takes you through the process step by step. Gives a complete record for insurance purposes. Also good for listing collections. 128K. Cartridge BASIC required (Disk #58)

RESUME SHOP. Makes preparing a professional looking resume easy. Guides you through all the steps of the process with a series of menus and suggestions. One page limit. 256K (Disk #121)

New jrConfig Offers More Options

(Continued from page 1)

to 736KB, in most cases, the added memory will provide significant benefits; however, occasionally a program will not run on a PCjr when memory beyond 640KB is detected. California Games (EPYX) and Duck Tales (Disney) are two examples. For this reason jrConfig will not recognize memory above 640KB that you have installed on your system unless you use the /L option. When you use the /L option DOS will "look" for memory beyond 640KB and if found, use it. If memory above 640KB is found and the /L option is not used, jrConfig will also tell you by displaying the following message: "Memory above 640KB detected (use /S to recover)"

jrConfig and BASIC from Disk

The BIOS designed to work with IBM Personal Computers contain a single byte of information which can be used by software to determine the type of computer. The PC Enterprises Configuration Plus Cartridge changes the PCjr's Identification Byte from that of a PCjr to that of a PC. The new jrConfig reads the Identification Byte of the computer and displays a message which tells you which ID byte it found. Programs which check the ID byte of your computer can be fooled into running as they would on another computer if another computer's ID byte is found. This feature also permits you to determine whether you can run

diskette BASIC. When the PCjr reports the ID Byte of the IBM PC or PC-XT, the version of BASIC on your DOS diskette can be run without purchasing Cartridge BASIC. PCjr users who use BASIC often prefer Diskette BASIC to Cartridge BASIC because it runs fine on a PCjr when the PCjr's memory has been expanded.

Computer Identification byte

On bootup, most PCjr users will see the message: System board ROM BIOS release date = 06/01/83 This message means you have the BIOS used by PC Enterprises to test all add-on products. If the date of your BIOS is 1992 or later, your PCjr has the PC Enterprises Compatibility Cartridge installed. Most PCjrs use the same BIOS, although some use a BIOS which is not very common. If your PCjr uses an uncommon BIOS jrConfig will tell you by displaying a message. If your PCjr has an uncommon BIOS it means your PCjr is somewhat unique. You may have difficulty using certain PCjr add-on products (especially BIOS nibbler cartridges such as QuickSilver, Configuration Plus, and Display-Master). PCjr users who have a BIOS which jrConfig reports as "uncommon" should try replacing their computer's BIOS if they encounter compatibility problems with add-on devices that they install.

If you have an uncommon BIOS the words: (this is an uncommon ROM BIOS) will appear in parenthesis on the same line as the actual

ROM BIOS release date.

System Requirements for the New jrConfig.

The new jrConfig requires at least 256KB of memory. The file JRCONFIG.SYS goes onto a bootable DOS disk with a CONFIG.SYS file which contains the following FIRST line.

DEVICE=JRCONFIG.SYS

Variety of Options

* /An will move the screen n positions to the left, use /An where n is from 1 to 7.
* /Bn will move the screen n positions to the right, use /Bn where n is from 1 to 7.
* /C will turn on the keyboard click (refer to your PCjr Guide to Operations Manual for more information).
* /Dn will tell DOS how many floppy drives to control and to assign a drive letter for each one of them use /Dn option, where n is 1 to 4.
* /En will set the number of directory entries allowed on the ramdisk.
* /Gn will read the time and date from a hardware clock and sets the time and date in DOS. Use /G0 for a jrCaptain and /G1 for the PCE jrRom-Clock.
* /Hnnn will put nnn as the top of ram, regardless of how much ram you actually have; ie, /H512 will set the top of ram to 512KB. If you don't have that much ram, your

PC-CHECK MANAGER. A menu-driven program that can handle multiple checkbooks, unlimited payees and ledger account assignments. Requires 256K. (Disk #25)

SAVE THE PLANET! If you want to do your part to stop destruction of the earth's environment, this disk can help you. Let your PCjr explore this extensive database of information on the major environmental issues as well as what you can do to help. Charts, graphs, background facts, games and demonstrations all related to saving the only planet we have. Need 512K. (Disk #120)

Telecommunications

JRTELE V2.1. Excellent, easy-to-use telecommunications software made especially for PCjrs, and the PCjr modem. Ideal for beginners, but has enough power and features for most users. Supports 300 and 1200 baud. PCjr internal or Hayes compatible external modems. 128K ok. (Disk #86)

PROCOMM PLUS TEST DRIVE. This is the upgrade of the already powerful and popular Procomm V2.42. Its got many new features including an improved host mode, context sensitive help screens, more powerful scripting. In addition to its power, its very easy to use. 256K (Disk #108)

PROCOMM. This powerful, yet easy to use telecommunications program has become the one favored by more PCjr users than any other. Dialing directory, auto redial, XMODEM, Kermit and other file transfer protocols, auto log-on, DOS gateway, keyboard macros, exploding windows and many other features. The editor of PC Magazine called Procomm competitive with the best comm programs on the market. Manual on disk. 256K (Disk #15)

TELIX V3.12. Powerful, yet easy-to-use program. Features Z-Modem one of the most efficient and reliable transfers available. If youre disconnected while downloading, Z-Modem will pick up where it left off when you next log-on. Need 180K free memory after loading DOS and either two floppy disks or a floppy disk and a hard drive. (Disk Set #4) $12 for 3 disks.

New jrConfig Offers More Options

system will probably crash. * / K will set Caps-Lock on

* /L will check for additional RAM located above 640KB and allow DOS to use any memory it finds as conventional memory. It allows for a maximum of 736KB to be recognized.

* /M will turn off the PCjr's internal speaker.

* /N will prevent color modes for monochrome monitors.

* /On Will turn OFF the PC Enterprises Compatibility cartridge.

* /Pn Allows you to turn off the Pause feature of jrConfig. A new feature of jrConfig is the "Pause" feature. The default condition is "pause on" (/P1). When pause is on, jrConfig pauses and waits for you to press the ESC key when an error is detected with one of the options you select. This feature allows you to read the screen before any jrConfig error message scrolls away.

* /R Assigns the next available drive letter to the memory set aside to be used as a ramdisk. The size of the ramdisk can be specified with the /S option.

* /Sn sets aside a specific amount of memory which can be used as a ramdisk. Use /Sn where n is the number of kilobytes you want to set aside.

* /Tn Sets the PCjr video display mode

Using Jr Music Machine

By John E. Wilson

Disk #62, Jr Music Machine, in the jr Newsletter Software Store has a very good program for both composing and playing music with your PCjr. The program on this disk fully utilizes Junior's TI Sound Generator chip. You don't need BASIC and the program will work on any Junior - in fact, the program is designed to run with a 40 column screen and doesn't work properly in the 80 column mode.

Entering the music is especially easy. The music treble and base staffs are shown on the screen, and you use the up and down keys to move the screen cursor to locate the note at the position you want. When you press <Enter> the note is played for you as it is entered. You can set the note's value, modify it as a sharp or flat or dotted, change the volume, and just about anything else that conforms to standard music practice. As you enter your music, a piano keyboard also shows the position of your note. Furthermore, the program keeps track of measures and it won't let you end a measure with a note value that doesn't conform to the timing. It also won't let you sharp or flat a note that doesn't have a sharp or flat. Of course, the program allows for editing the music and saves it on a disk.

The disk contains 16 sample songs, including America. It is a very unusual version of America. Actually, their version of America is the worst thing you can say about

this disk, but you can easily use the music notation information and Figure 3 in the main article make an improved version of the song.

Get Control of Your Computer And Become A Power User

Baker's Dozen, Disk #73 in the jr Newsletter Software Store, gives you 13 powerful utilities, all of which can help you do more things faster and better on your PCjr. Lost a file? It will find it, and restore it. Forgot the date? Use the pop-up calendar. Want to change screen colors? Easy. Need to make some quick calculations? Nifty little spreadsheet. Then print it sideways. Many more useful features.

BASIC Patch Needs Revision To Work On DOS 3 and Up

If you've been trying to run BASICA without a cartridge using DOS versions above 2.1, don't despair. The patches on Disks #40 and #56 which allow you to run BASIC without having Cartridge BASIC need to be revised slightly in order to work with DOS 3.0 and higher.

Apparently the higher versions of DOS operate BASIC from a different address, so the patch has to be modified to go to that address. Craig Tregillus is working on these modifications for us and well be reporting on the results in a future issue.

Wide World of PCjr

storage area contained within any computer. Normally, the larger the RAM, the more advanced or sophisticated a program will be able to run on that computer. You can determine the amount of RAM available by noting the numbers that appear next to the color bar when you start, or "boot," your PCjr. If your Junior hasn't been expanded, you'll most likely see "128 KB" as the last set of numbers before it goes on to other things - meaning that you have 128 kilobytes of RAM available to run your programs. This is the most severe limitation on what you can load and run, and if you don't have the RAM, you can't run the program. You can normally tell from the box that software comes in how much RAM is required to operate that program.

When the PCjr was introduced in 1984, 128KB of Ram was considered a good bit, but today's newest computers can have one hundred times that amount without being considered outrageously "overpopulated," and they run at speeds that are almost as greatly improved. To me, the most astounding thing about this is that they still use much of the same software that will run on your PCjr. In fact I saw somewhere recently that the PCjr will actually run more different programs than other computer made by IBM; that's because it'll still run all the stuff that was written for a PCjr (which most other computers won't run), as well

as most programs that have been written for other IBM PC, PC/XT, and PC/AT class machines. That includes almost all the "clones," but not the new PS/2 specific software from IBM and others. Depending on how much RAM you have, you should be able to find a program at a price you want to pay that'll do most anything an average person will need to do. The two things you need to be aware of are whether or not it says on the box that it'll run on a PC, a PC/XT, or a PC AT, and how much RAM you need. If the software passes these tests, it will very likely work on your Junior. It may do it slowly compared to the new machines, but it'll get done. You just have to select it as carefully as you can.

I wouldn't be treating you fairly if I didn't mention here that, from the little I've seen of education software these days (my youngest is 22, so I haven't been exposed to it lately), I don't think you'll find much in a computer store that'll work on a junior with less than 256KB, and very little of that. Games and sophisticated business software will also use a good bit of RAM, so if that's a problem, you'll probably want to consider "upgrading" your RAM capacity to 384KB or more - my personal recommendation is that you add 512KB to get you to a total of 640KB. Then you won't have to worry about whether most things will work--they will.

That brings us to another subject: upgrading your hardware. I don't know, of course, just how

much you're interested in spending on an old computer, but I'm going to assume that, like most Junior owners, you want to keep it down to a minimum. In that case, I suggest that you order a memory expansion called the Jr HotShot. The last price I saw for them was around $140.00 plus shipping., for an upgrade of 512KB. You can get a 256KB upgrade for $40-$50 less, but I'd strongly urge you to go ahead and get the full amount if you can. This unit, like almost all PCjr expansions, is installable by you with only a screwdriver and an ability to read directions. I did it, and if I can, anyone who isn't seriously handicapped can, believe me.

This single improvement will enhance your computer's ability to perform more than any other one thing.

This single improvement will enhance your computer's ability to perform more than any other one thing. I can't emphasize it too strongly.

There are a number of things you can do that will help. If you want to use a printer, you're going to need a Parallel Port sidecar and you'll need a printer; you may want a second floppy disk drive - a huge convenience, but not always necessary. You may even want a hard disk, but that'll be something to decide later. I tell people to get the memory--that's essential - then take your time and see what you really need to do. I have a very sophisticated and fancy setup, but I've been

building it for more than five years and really wouldn't recommend that anyone try to duplicate it today unless they get a kick out of "tweaking" a PCjr to make it do things no one thought it could do a few years ago. Taking Junior to all the heights it can reach is much like restoring a classic car--you do it for the love of it, not because of its performance relative to a new one.

Software now, is a whole 'nother ballgame. The Atlanta PCjr Users Group doesn't maintain a "compatibility list" of programs that will run on a PCjr, but there's an excellent publication that does. It's called jr Newsletter, and it's the last remaining of several national PCjr publications. It's also probably the best of the bunch, which most likely explains its survival. It's a monthly newsletter with articles on every aspect of the PCjr, from "how-to" to program reviews, and it's all written on and for PCjrs. I can't recommend it too highly -- next to membership in the APCjrUG, it's the best value in the PCjr world

There are several Software Libraries scattered around the country which sell a class of software called Shareware. Basically, what this is, is "try before you buy." You get the program you're interested in, try it for a month or so, then either erase the disk or send the author his requested "donation." This is by far the least expensive way to build up a software library, but the quality of the programs is sometimes not as high as what we refer to as a "com-

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Wide World of PCjr

mercial" product. These Software Libraries will provide you with programs you select from their catalog at a fixed price per disk (usually from $2.00 to $6.00), and after you try the program you are responsible for compensating the author. You can get the addresses of many of these Libraries from the advertisements in national PC publications, so I won't attempt to list them here. "Commercial" software is what you buy at retail prices in a store. Prices vary, depending on what store you buy the product in, so do some comparison shopping before you pay too much. Don't let the salesperson talk you into getting the most expensive program either -- you should try to have an idea of what you want before you plunk down your money. Also let me advise you to be sure of what the return policy is before you buy. Many retailers won't accept a software package after it has been opened, although I've never figured out how you're supposed to know whether you like it or not without opening it. Several chains have a very helpful and liberal returns policy, so check around before you buy. My personal preference is Egghead Software, so if you have one of their outlets near you, you can try them. Egghead will also match anyone's price for the identical product, so you might want to watch the ads in your local newspaper. There are others as good, however, so don't get stuck in a rut--try 'em all.

Software Helps You Use DOS Commands

PC-DOS Help, Disk #24, offers on-screen help for 43 DOS commands. The disk also contains a batch file that will customize the help files for the jr keyboard.

It can be used as a stand-alone disk for reference when you want to use a DOS command you aren't thoroughly familiar with. Or it can be installed as a resident DOS reminder, taking up about 16K of memory.

Designed by Chris Bailey, the user-supported program provides two levels of help for each of 43 DOS commands. The first level consists of a summary of the function and how to use it. This level serves as a handy reminder to be accessed just before using the command.

The second level of help provides more detail about the DOS command and often helpful references to other commands used in conjunction with the command being discussed.

The author also includes handy notes on how to use the command and specific examples of what each command might be used to accomplish.

The disk in the jr Newsletter Software Store is specifically for DOS 2.0 or 2.1 and can be configured for either, when it is being installed. See pages 29-30 for ordering information.

What's the Difference Between PCjrs and PCs?

By Leroy Tabb, Jr.

A frequent question about the PCjr is "What is the difference between a PCjr and its full-grown big brother?"

The differences can be listed briefly. The PCjr does not have direct memory access (DMA); its video RAM is not located in memory block B0000 or B8000 hex: it has two slots for ROM cartridges; and it has only one disk drive and no expansion slots (but it can be upgraded by using sidecars). Also, it has a larger allocation for video RAM and uses the TI SN76469N. sound generator chip. Got it? If not, join the crowd, but I'll try to shed some light on all of this.

The PCjr does not have DMA. This means that, unlike its big brothers, the PCjr does not have a DMA controller (the 8237A) to allow the diskette drive to interact directly with memory. Therefore, diskette input/output must be handled by the 8088 CPU through a process called bit nibbling. The most apparent result of this difference is that you can't type ahead while the disk drive is being addressed. The most important result is probably that the CPU has to suspend running our program while it writes to or reads from the diskette drive, so our PCjr is a bit slower than the rest of the family. The fact that the PCjr doesn't use DMA may also be a point of poten-

tial incompatibility with some software written exclusively for the PC (but that's a rare problem).

In my mind, the most important difference between the PCjr and the PC is the location of video memory. Before we go on, however, let's look at how the PCjr and the PC use their memory. To understand this, let's digress one step further and begin by talking about the brain and heart of the IBM PC, XT and PCjr - the 8088 microprocessor.

"In spite of its differences, the PCjr is extremely compatible with its big brothers."

The 8088 is a 16-bit processor, and through some trickery called segmented addressing, is capable of addressing up to 1,024K bytes, or one megabyte, of memory. But not all of that memory is available for our use. To see exactly how IBM uses that memory, let's pull out a map (See box on next page)

Figure 1 is not a traditional map, but a map of how the 8088's memory capacity is used by IBM computers. Each line in the memory map (00000

The Difference Between PCjrs & PCs

(Continued from page 23)

through F0000) represents the starting hexadecimal address for 64K block of memory. Each block of memory has a specific application. Blocks 00000 thru 90000 are used for working memory. That's what we mean when we speak of a computer's memory. These blocks represent the memory available for

IBM MEMORY MAP

```
F0000 IBM ROM BIOS, ROM
      BASIC, ETC.

E0000 ROM Cartridge
D0000     Programs

C0000 Hard Drive

B0000 PC Monochrome
B8000 PC Color Graphics
A0000 PC Enhanced Graphics

90000
80000
70000
60000
50000
40000
30000
20000

10000 PCjr
00000 (128K)

Working
    Memory
```

our programs; they add up to the 640K maximum amount of memory in the PC, XT, and PCjr. Above that, block A0000 is used for IBM's enhanced video options, the Enhanced Graphics Adaptor and the Professional Graphics Adapter. Continuing to climb the map, we find block B0000 which, as I mentioned earlier, is used for the video on the PC and XT. Our PCjr does not use that block of memory. Still climbing, block C0000 is used for the hard disk controller on the XT.

The next two blocks (D0000 and E000) are of particular interest to PCjr users, because they are addresses into which we plug our ROM cartridges. This area is unused by the rest of the IBM family. Finally, we come to the top of the memory, block F0000, where all of the basic built-in ROM resides. That includes ROM BASIC (remember, Cartridge BASIC would be in either block D0000 or E0000); the built-in diagnostics; the ROM BIOS; and the ever-popular Keyboard Adventure! This top part of memory holds a lot of interesting things, but they will have to wait to be explained in a future article.

We've seen that block B0000 is not used by the PCjr. Well, if your video isn't stored there, where is it stored? As you might guess, the PCjr allocates a part of our normal RAM memory for video. The highest part of RAM on a standard PCjr is reserved for the video. In text mode, 16K of our memory is allocated to video; in graphics mode, 32K is allocated out of RAM.

There are several RAMifications (!) of this arrangement:

First some of our program memory is used up for video. Therefore, some programs that can run on a 128k PC don't have enough room to run on a standard PCjr.

"When IBM originally released the PCjr, they must have felt no one would want to expand it beyond 128K"

Second, when IBM originally released the PCjr, they must have felt no one would want to expand it beyond 128K. So they placed the video RAM at the top of the 100000 block of memory. That caused a separation between the first 128K of RAM and the rest of the working memory (200000-900000), and that meant our programs wouldn't know where to find additional memory, even if we did find a way to install it. Well, as we all know, ways were found to install additional RAM and to get around the gap in our working memory. Getting around that gap is the primary purpose of the CONFIG.SYS files used with expanded memory sidecars.

The third problem associated with the location of the PCjr's video RAM is that it is physically located at an address from the one expected by PC software. (This is, by far, the biggest source of incompatibility between the PCjr and the PC.) In other words, if a program goes to an address in block B0000 on our PCjr,

The Difference Between PCjrs & PCs

it would find no one home. It would be like trying to send a letter to an address that doesn't exist. Fortunately, the post office can be instructed such mail to an alternate address. In the case of the PCjr, that post office is called a Video Gate Array (VGA). The VGA traps any instructions aimed at the B8000 memory area (where the PC Color/Graphics card would be; the Color card is B8000H and the Monochrome card is at B0000H) and redirects them to the area of memory that we are actually using. This all works fine, and software that plays by the rules will have no problem running on our PCjrs. The problems come when programs attempt to circumvent the system. Using the letter example, suppose you are in a hurry to have it delivered, so you deliver it personally. Surprise! Not only is no one home, there isn't eve a house in the area. Well, some software programs, typically arcade-style games that rely on speed, behave this way. Those programs make direct calls to the addresses they need, thereby bypassing our VGA postman. Finding themselves in the netherworld, they crash. Many software developers recognized the problem and wrote versions of software that would also run on the PCjr.

An advantage of the PCjr's use of working RAM for the video memory is that it allows us to allocate 32K of video RAM rather than the 16K available on the PC. This gives the PCjr a better color graphics capability than the standard PC.

Another of PCjr's advantages is that it uses the TI SN76479N chip for generating sound. This allows the PCjr to play music in three-part harmony. The PCjr also can be made to synthesize human speech!

Don't panic after reading all of this! In spite of its differences, the PCjr is extremely compatible with its big brothers. After I expanded my PCjr to 640K, I found minimal compatibility problems.

I've touched on a few of the most important functional differences between the PCjr and its bigger brothers. There are other differences (the keyboard, for instance). If you're interested in doing more reading on your own, I can suggest three books by Peter Norton: *Discovering the IBM PCjr Home Computer, Exploring the IBM PCjr Home Computer,* and *Programmer's Guide to the IBM PC.*

Centering the Monitor Image

You can move the screen image left or right manually with the Ctrl-Alt-Left Arrow and Ctrl-Alt-Right Arrow keys. If you want to automate this, put the following line in your AUTOEXEC.BAT file to switch to 80 column mode and move the image two characters to the right.

MODE CO80,R

To move the image left use MODE CO80,L. Of course, the DOS MODE.COM program must be on your boot disk.
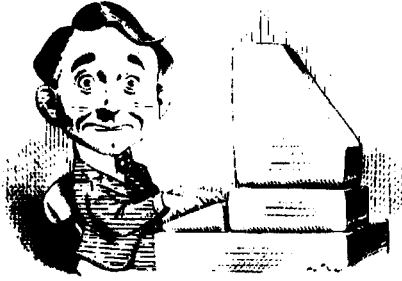
Need Help?

The following disks from the jr Newsletter Software Store can help you to get the most out of your junior. To order, see the coupon on page 23.

PCJR AUTOSETUP. A beginner's dream: Just select from a menu to make separate boot disks especially for each type of software you use. Automatically creates the right config.sys and autoexec.bat files for RAM disks, games, word processing, telecommunications and other software to run at maximum power and efficiency on your PCjr. Designed especially those who haven't mastered the art of customizing their computers. This one does it for you! 256K (Disk #99)

JR TOOLKIT V2.0. A collection of 30 upgrades, modifications and repairs. Some easy, some require experience. Includes adding second 5.25" drive (easy) or 3.5" drive (easy), PCjr to Tandy 1000 Mod (harder), power supply upgrade (harder), reset button (harder), V20 speedup chip (easy), how to quiet drives (easy), adjust monitors (easy), plus many others. (Reviewed 3/90 & 6/90) (Disk #110)

JR POWER PACK. A collection of particularly useful programs for PCjr owners. Set up RAM disks, address memory to 736K, turn a joystick into a mouse, set screen colors, keyboard click, scan and search text files, screenblanker, print spooler, and more. 128K. (Disk # 52)

JR POWER PACK II. Disk full of programs to make your PCjr more useful and powerful. Fix compatibility problems, set up ram disks, tiny word processor, set up 3.5" drives, use DOS easily, and more. Need 256K for some, 128K ok for most. (Disk #65)

JR POWER PACK III A disk chock-full of utilities to get the most out of the PCjr, including the latest version (4/92) of jrConfig, a program to increase disk space from 360K to 420K, a quick bootup disk for DOS 3.X, multipurpose compatibility drivers, keyboard patches, ramdrive programs, and many more useful utilities. 256K Reviewed 4/92 (Disk #140).

PCJR COMPATIBILITY DISK V4.0. Tips on how to run hundreds of software titles, includes PCjr compatibility info, tips on running software, and how to make some incompatible software operate. Powerful search feature finds titles quickly and easily. 128K ok. Last update April 1991. (Disk #60)

PCJR PATCHES V6.0 Patches to fix software to run on PCjrs. Most enable 16 colors. V6.0 adds patches for 1 on 1, 688 Attack Sub, Battle Chess, Battle Tech, Boxing II, Genius Mouse, Grand Prix, Indiana Jones, Jack Nicklaus, Knight Games, Paperboy, Prodigy (thru V3.1),Shanghai, Silpheed, Sim City, Space Rogue, Steel Thunder, Strip PokerII, Test Drive II, Tetris, The Games (Summer), Ultima IV, plus new patch to stop disk drive spin. Dozens of older patches, too. (Reviewed 2/91) (Disk #56)

jr Newsletter
Software Store
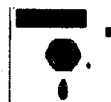
The software in the jr Newsletter Software Store is the best public domain and user-supported software for the PCjr we've been able to find. All software has been tested on our PCjrs and is highly recommended. Some of the programs are equal to or better than commercial programs costing hundred of dollars. These are offered for you to try at $5.95 per disk. Some shareware requires additional payment if you continue to use it.

FULLY DESCRIBED
IN THIS ISSUE:
Games, pages 6, 7, 8, 10
Especially for PCjr, 13, 14
Home & Family Mgmnt, 14, 15, 17
Telecommunications, 17

Buy Two Disks, Get One Free!

Newest Releases

* NEW * THE BEST OF JR NEWSLETTER III. Disk contains most of the major articles published in jr Newsletter from the June 1991 issue through May 1992. Articles on compatibility, PCjr hardware and software tips, questions and answers from PCjr users, and other informative articles. Utility to search for subjects. 128K ok Reviewed 7/92 (Disk #142)

* NEW * Baseball Stats. This two-disk set features two programs for keeping statistics on baseball and/or softball players, teams, and leagues. The programs allow you to keep records on up to 250 players on 12 teams in each league. 384K. Reviewed 6/92 (Disk Set #6).

* NEW * Picture This A label program which makes address labels with three lines of text and a PrintMaster or PrintShop style graphic on your dot matrix printer. 256K. Reviewed 5/92 (Disk #141).

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Tip For Recovering
Floppy Disk Data
By Craig Hessel

A co-worker of mine brought in a floppy disk the other day with a problem that some of you may have run into before. Someone had started to format the disk before realizing it was a good data disk. The guilty party aborted the format and gave the disk to my co-worker to recover a particular DBF file, if possible. (Really, this wasn't my disk, although I've done my share of similarly stupid things, as I'm sure you all have.) I usually use CHKDSK or Norton Utilities for recovering data. But in this case the boot sector, FATs, and root directory had been wiped out (filled with hex F6s) by the aborted format. This prevented me from using the Norton unerase feature. I was able to probe around with Norton Utilities, however, to see the F6s in the first cylinder or so and also see that the DBF data was still intact on the disk.

I discovered something that I'm sure has been found by many others before. The problem was to restore the boot sector, FATs, and root directory. Even an empty directory would be OK. A deleted directory entry could be inserted and Norton unerase could then be used (manually, not automatically) to restore the data.

There had to be an easier way to do this than to recreate the sector data byte-by-byte with NU. I don't have the patience that medieval monks must have had when copying manuscripts. Besides, computers are supposed to have relieved us of that sort of painstaking effort.

I was a little puzzled at first that the format hadn't started off by creating the FATs, etc. It occurred to me that the formatting process must wait until the end to do this. So I thought, why not start formatting a scratch disk, then swap it with the corrupted disk at the end (using Ctrl/Numlock to pause processing)? I dutifully tested this out with a pair of scratch disks (waiting until the format was at cylinder 39 to halt processing; you need DOS 3.X for the head and cylinder count). The test worked, and so did the next attempt with the corrupted disk. I created a one-cluster dummy file on the disk, then deleted it (the file was well within the zone of the original aborted format), then used Norton Unerase manually to recover the DBF file.

This procedure does trash out part of the last disk cylinder (unless you are very good at guessing when to press Ctrl/Numlock). But since that's the last place DOS gets around to placing data, it will usually be no problem.

There must be a cleaner way out there of doing this type of recovery, but this method works and it was fun to figure out. Hope this is of some value to fellow hackers.

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