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Club

jr

## Mike's Message

Kept together by a small band of dedicated computer users,

### THE EUGENE PCjr CLUB LIVES!

The weather is changing, it's March and this month will hopefully go out like a lamb. I'm looking forward to some warm sunny Spring time days. It's also tax time. Forms need to be filled out accurately and we all anticipate the bottom line. I'm curious if any one in the club uses the PCjr to help calculate yearly tax data automatically. Spreadsheets software such as PC-Calc can be very helpful from year to year for accounting purposes.

The Eugene PCjr club leadership and I met January 26, 2000 to discuss the meeting schedule for the remainder of the 1999/2000 PCjr club year, and other subjects such as the club's inventory. Most of the meeting was dedicated to the March 16, 2000 club meeting that is coming up. We came up with an exciting idea. We hope to accomplish at least a couple of our leadership goals. At the March meeting we will introduce potential members to PCjr computing. We will be placing club hardware and software with families that are new to us. By initiating this effort local membership will grow a little and we will reduce our club's inventory a little. Our club has a lot of hardware and software that needs a good home and we need more local members. "Introducing Jr to New Members" will be something all of our local membership can accomplish together. I'm looking forward to facilitating this March program.

The board also initiated an effort to reduce the club's inventory. More effort will be put into our outreach program and our club Newsletter Editor/Librarian (Louie) will explore the possibility of selling equipment on the internet (eBay). If members like, we can discuss these ideas at the March meeting. Please bring up questions about anything you hear or read concerning our leadership's decisions.

I continue to believe that the value of our club is worthy. All of our membership participate in some way toward our success. Remember, every PCjr club member can add something even in this big technological world.

I'll be seeing some of you at the March meeting.

Mike.

# A New Millennium Of Opportunities For PCjr

by Niel Balsino

One of the great things about owning a PCjr is that many of the hardware and software upgrades or projects you always wanted to do but couldn't originally afford are now available at a greatly reduced cost, or even free. A good example of this is the Keytronics 5151jr keyboard available from the Club Store at a fraction of its original $225 price tag.

Another example of a PCjr hardware upgrade project which continues to decrease in cost is adding a hard drive to your PCjr. The cost of adding a hard drive went from $1,000 or more when Jr first arrived in the early 80's, to the $600-$800 price range in the late 80's and early 90's, and then down to about $300-$500 by the mid 90's.

How about finally adding that hard drive to your PCjr now for under $300? The single most important thing you can do for your PCjr is to add a hard drive to it if you have not already. I have built hard drives for the PCjr before, and it was expensive, but well worth it.

Once a hard drive is added to your Jr, it does not become an IBM PC, PC XT, or PC AT wannabe. Rather, and even better, it performs and is more compatible with the lower end of the IBM PS/2 line of computers, allowing you to run more classic DOS games and productivity software that was still made in the late 80's and early 90's, and hopefully you can still obtain at garage sales, flea markets, swap meets, and used software stores.

However, as PCjr ages, it becomes more and more difficult to get the older drive parts that work with PCjr in order to add a hard drive. In fact, speaking as a computer professional who has been in the business just as long as PCjr has been around, I believe if one does not add a hard drive to the PCjr within the next year, it will be extremely difficult to do so in the future.

For the past 5 years I have been using a parallel printer port to IDE hard drive called the Commuter, and it works great. The Commuter is a plastic white case, which sits alongside and matches the color of PCjr very nicely, which houses an older style IDE hard drive. It comes with a printer cable to attach it to a parallel printer port, and your printer then gets attached to the printer port on the back of the Commuter.
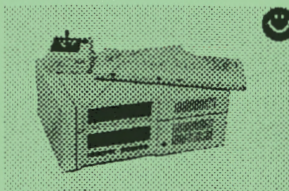
It is up to you to unscrew the plastic case and supply and insert the IDE hard drive. You must also install the supplied DOS driver software, which is also available on the Internet. For PCjr compatibility, you'll have to find an older IDE hard drive around 360 MB or less, and you will need DOS 3.3 or greater.

A notebook version of the Commuter is still available for $99, and comes with a printer cable, software, and carry bag. I use the carry bag as a Polaroid Camera case, though it is meant to make your hard drive portable, hence the name Commuter! You'll want to get the same Commuter hard drive kit, but will need it supplied with an external AC adapter instead of a notebook power connector, and want it supplied with the DOS device driver if you don't have access to the Internet to get it.

The Commuter Parallel enclosure is made by Datastor Technology. While they still have the needed DOS device drivers at their Internet site at www.datastortech.com, their newer products require a 386 with 4 MB RAM, which certainly is not PCjr compatible. So it may take some doing to track down the older Commuter Parallel hard drive kits that PCjr needs.

Datastor Technology can be contacted at the above web site or at 39138 Fremont Blvd, Suite 200, Fremont, CA, 94538, (510) 739-1921. The company I got my Commuter Parallel hard drive from was Micro Sense Inc., 370 Andrew Ave., Leucadia, CA, 92024, (800) 544-4252, or on the Internet at www.microsense.com and click the accessories button to see a description and photo of the Commuter product.

Niel Balsino, an ardent Junior user, owns Niel Balsino Network Computer Consulting, 7887 N. La Cholla Blvd. #2110, Tucson, AZ 85741. Call Niel at (520) 797-1282, or balsino@primenet.com or www.primenet.com/~balsino
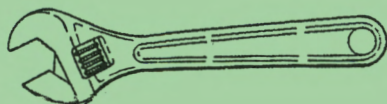
## ☺ How To Disable DMA On RACORE Units ☺

PCjr users who have RACORE expansion units with DMA (Direct Memory Access) may wish to disable the DMA feature at some time. One reason to do this would be to make the unit compatible with a new hard drive as some replacement drives are not compatible with RACORE"s DMA.

Disabling DMA in a RACORE unit is not difficult and it can be reinstalled later should you want it back. It just takes a little care, particularly when it comes to removing the DMA chip. According to the RACORE Service Department, here are the steps to follow:

1. Carefully remove the U-19 chip (a large 40 pin chip), using a chip puller.

2. Move the jumpers on J-10 and J-13 over one pin to the left. They are currently on the right two pins and should be moved to the left two pins.

3. Install a 150 ohm terminator in the H1 socket near the top of the board. These terminators are available in most electronic supply stores. Beckman part #899-3-R150 or Epitek part #EM 1407 -151G are two types of terminators that will do the job, but there are others that may also work.

4. Remove the floppy disk drive controller card and cable. You will need to replace the present disk drive cable with a RACORE Part #5500-1013 cable to connect your second floppy drive. Or, you can replace the original IBM disk drive controller card and cable that came with your PCjr if you are going to operate with only one floppy drive.

That's all there is to it. ☺

## Cartridges Can Improve Your PCjr's Performance

Those two empty holes that stare out from the face of your PCjr like a pair of abandoned eye sockets are not as useless as you may think. There are cartridges designed especially for those slots that can open the way to increased speed and improved performance for your PCjr.

The cartridge with perhaps the most dramatic effect is the jrVideo Cartridge which speeds up the PCjr's display of information on the screen. The results are quite startling with software that uses graphics, with applications that require frequent scrolling or moving across vast areas of information such as spreadsheets, or when using DOS DIR and TYPE commands.

With a jrVideo Cartridge installed, Junior's often sluggish ROM BIOS video routines are improved, making screen writes much slicker, particularly if you have already installed additional memory on your PCjr. ROM BIOS is the Basic Input/Output System (BIOS) that is built into Junior's Read Only Memory (ROM) to control the computer's operations.

Memory expansion substantially improves your computer's processing speed, but the jrVideo Cartridge provides additional zing by bringing the results to your screen more quickly.

Although the overall speed of your PCjr will increase with the insertion of the jrVideo Cartridge, the results are not universal. Software that does not use the BIOS, but instead goes to the video buffer, will not be improved. On the other hand, with the cartridge installed, Pacman runs around the screen so fast you may not be able to keep up with him :-)

Another cartridge is the Keyboard Buffer Cartridge that is also known as the jrSynchro Cartridge. This cartridge enables up to 47 characters typed on the keyboard to be "buffered" or momentarily held back, while the computer is accessing the disk drive. This will keep your Junior from beeping at you, since the characters

you type can be stored briefly and then fed to the computer when it is ready to receive them.

Technically speaking, the Keyboard Buffer Cartridge contains routines which replace the keyboard and diskette I/O (Input/Output) routines on your Junior's ROM BIOS. The new routines synchronize keyboard and diskette operation so the two can be used at the same time.

Computers with Direct Memory Access (DMA) can accept keyboard input while the disk drive is being accessed, but most Juniors lack DMA, so they beep at you when you ask them to do these two things at once. The Keyboard Buffer Cartridge gives you "Pseudo DMA," not true DMA, but the effect is similar since you can go on typing just as you can on a PC or other computer that utilizes DMA.

The newer version of the Keyboard Buffer Cartridge, V 1.4, includes a command designed to solve compatibility problems earlier versions of the cartridge had with the Key-Tronics 5149jr Numeric Keypad, the RACORE PC Keyboard Adapter and some Datadesk AT style keyboards. The Keyboard Buffer Cartridge is compatible with Cartridge BASIC and the jrVideo Cartridge.

Another cartridge that is available for the Junior is Synectics' Keylights Cartridge. It has three green lights imbedded in the face of the cartridge that tell you when your CAPS LOCK, NUM LOCK and SCROLL LOCK keys are on. The lights are on the cartridge itself and are activated by putting the proper command in your AUTOEXEC.BAT file or by issuing the command at the DOS A> prompt.

One more cartridge that has been around for a while is RACORE's PC ID cartridge. This one "tricks" software into thinking your PCjr is a PC. Although it does not work for all software, it is one more way you can approach that elusive 100% compatibility level with your PCjr. Although we have not tested the PC ID Cartridge to determine what software will or won't run on it, we know that it will enable you to run the PC version of BASIC that is on DOS without having Cartridge BASIC installed.

Usually, you will get a message "cartridge required" if you try to run BASIC from DOS without having Cartridge BASIC in your PCjr.

The development of these cartridges were encouraging signs of continued vitality in the PCjr community at the time. Manufacturers were betting that many PCjr owners would want to improve their computers in order to get as much usefulness and pleasure out of them as possible rather than buying into the upgrade bandwagon.

So, if you are fairly new to the PCjr Community and were thinking those two slots in front of your PCjr weren't good for anything but catching dust, think again. Maybe one of the enhancements provided by these cartridges can provide you with that extra measure of speed or versatility you want from your PCjr.

The jrVideo and Keyboard Buffer cartridges were developed by David Cox of Cryptographics Software, Toronto, Canada. Your club gets a few of them in the Club Store from time to time, so check with Phil for their availability (rp_janz@efn.org).

# Why Do New Computers Have Only One Floppy!

No matter what the year may be, this question always comes up. In 1985, the question was why did the "new" IBM PC come with only a 5 1/4" drive and no 8" drive so one could use all those *Display Write* disks they had. A few years later it was where is the old 5 1/4" drive on new computers? Who knows? Tomorrow may bring the question of what happened to the old 3 1/2" drive?

It is nice to have both 5 1/4" and 3 1/2" drives on our computers if we have been using our PCjrs for quite some time. Most of us have a lot of data on 5 1/4" floppies and it would be very handy to be able to use them with our newer computers. And, we can!

It isn't too difficult to install a second disk drive. While no one is producing either high density or double-sided double-density 5 1/4" drives anymore, both can be readily found at thrift stores and through electronic close-out merchants.

Give some thought before you run out and buy another drive. While your computer doesn't care if you install a high density drive or one that is double-sided double density, your old Junior cares. Everything it did and still does is done on 360K DS/DD floppy disks. There isn't much out there on the high density floppy disks anymore, so it may behoove you to opt for the older 360K drive.

Some computers will require you to change your CMOS (an acronym for complementary metal-oxide semiconductor. Thanks, Microsoft, for giving the club the "Computer Dictionary.") About four members of the club would feel comfortable doing this and _none_ of them live in Eugene! Windows 95 and 98 users may just let their operating systems find the new drive on their own. At any rate, you want to keep the 3 1/2" drive your "A." drive and make the 5 1/4" drive the "B" drive.

If you have to use a high density drive, make sure that you use your PCjr to format any disks you will be using. Or purchase your floppies from the Club Store; they are preformatted.

Q I recently found an IBM 128K Memory Expansion Sidecar at a thrift store. Can I add this wonderful find to my present Junior that has a RACORE Drive II with 512K?

A Although it has been said that you can't add other memory expansions to a PCjr that is already using RACORE memory expansions, there are ways around the problem. Here is one solution that will let you use your RACORE Drive II with an IBM sidecar:

1. Always use the jr mode.
2. Set the switches on the IBM sidecar as follows: #1, 2 and 3 OFF; #4 ON.

Also, make sure the RACORE memory board is full before you use the sidecar. And one last point to remember is to use your RACORE memory manager or JRCONFIG software so the additional memory can be utilized.

## Why Do We Always Meet In Eugene? How About Meeting in Pennsylvania!!

Well, why not!
Member John Amirault has graciously volunteered to host a Junior Club meeting at his home in Susquehanna, PA. How about an Eastern US club meeting?

Give John a call (570) 853-9069 or send him an e-mail (amirault@epix.net) if you would consider attending. Meeting face-to-face with other Junior enthusiasts can be the start of something that's very informative and lots of FUN!

**Two Great Web Sites to try:**
**www.efn.org/~pcjrclub**
**www.angelfire.com/va/pcjr**

The last site is the domain of Aaron Johnson who lives in Portsmouth, VA. Aaron also sells Junior parts, so check out his web site!

## Free Internet Service

Last month we told you of the free Internet Service Provider *iFreedom.com*. Unfortunately for those of us in Eugene, there was no local telephone number.

Well, now we have two more Free Internet Providers for you to try out. One comes to you free from K-Mart and is called *BlueLight* and has at least two Eugene local numbers! The other is *NetZero* that also has local numbers.

Check out www.bluelight.com to download K-Mart's totally free Internet access or www.netzero.com. If you can't get online to do this, let us know and we'll give you phone numbers you can call to order them. They can also be downloaded to three 3.5" disks!

## Very Nice, Very Clean PCjr Setup for Sale:

640K RACORE Drive II enhanced PCjr, two disk drives, keyboard, keyboard cord, a Mannesmann Tally printer with extra ribbons, cartridge BASIC, Writing Assistant, DOS, all the manuals, a lot of games and other software. All has been kept under dust covers when not used so everything is very clean! $50 for the whole shebang but call or write with your best offer :)
Helen Fry, 3760 Marshall Ave, Eugene, OR 97402. (541) 689-2575.

# DO YOU NEED A CLUB CATALOG?

### The Eugene PCjr Club Disk Library

This newly updated Club Catalog lists 94 titles from Education and Games to Utilities. Each disk within the Catalog includes a comprehensive description. Most programs will run on a 128K IBM PCjr unless more memory is indicated as being needed in the program description. Have you tried favorites such as *Norland Hangman, Amy's First Primer, BridgePal, NamePal,* or *Print Partner*? Members pay only $2.50 per disk + $1.50 for mailing. And, if you purchase three or more, you can take advantage of a whopping 20% discount off the total order!

### The Eugene PCjr Club Store Catalog

The Club Store Catalog lists a host of hardware, commercial software and books pertaining to the PCjr computer. Looking for additional memory, an enhanced keyboard, a parallel printer sidecar, Cartridge BASIC or a 360K disk drive for your "Jr?" How about *IBM Writing Assistant* with the original documentation? Or perhaps *IBM King's Quest*? Have a "Jr" but don't know how to get it started. . .you need the "PCjr Guide to Operations" (Red Book)! Our Club Store inventory is constantly changing and many items are one-of-a-kind. Members pay only what the Club has in these items plus shipping. A newly updated Club Store catalog was just released.

If you would like one or both of these Eugene PCjr Club catalogs, please send a request by e-mail or snail mail. Our addresses are:

Eugene PCjr Club, PO Box 50024, Eugene, OR 97405-0966
*or*
pcjrclub@efn.org

Be sure and include your "snail mail" address so we can answer your request promptly.

## Outreach is Reaching Out!

One of the many things the Eugene PCjr Club does in it's efforts as a continuous teaching and learning group is placing computers into people's homes in the Lane County area. We try to target those individuals or families who do not presently have a computer so they can begin that trip on the "informational" highway. And, play a few games along the way!

Since our last meeting, some of our local members have identified several homes that meet this criteria. So, at the March meeting we are going to have a program called "PCjr 101."

This meeting will attempt to introduce the PCjr computer to two new families who haven't been using a computer in their homes. We hope that you will come and help us by sharing some of the things that you are using your Junior for. By demonstrating what others are doing with their computers, we hope to show these prospective new owners just why they "need" to have one in their homes.

As always, there is no obligation for you to attend the meeting; we sure hope you want to, though. And, there's no obligation for you to participate, but we sure hope you do. We hope you will come and make the Julie and Jack Welton family and the Peggy and Brian Steltzer-Hickey families feel at home and help us show them how easy it is for them to learn to use an IBM PCjr computer!

Q I have a Legacy memory expansion unit and second drive on my PCjr and I heard that Legacy has gone out of the PCjr business. Am I going to be out of luck if my unit breaks down?

A Legacy has not gone out of business, but they haven't manufactured PCjr components for quite some time. Steve Jacobs, who was president of Legacy, informs us that they did change hands a few years back. Mr. Jacobs now has Rally Electronics in Lincoln, NE. Rally still continues to sell PCjr peripherals and to service the ones now in use by PCjr owners, but Mr. Jacobs has scaled back and is in "semi-retirement."

I think the best part of your question is that you ask how to fix your computer that isn't broken and is still working after 15 years! Seems that MACs and Juniors are the only "old" computers that haven't broken down and just rolled over to Y2K without having any fixes!

# NEED HELP?
## Contact These Club Members:

BASIC or WordStar:
        Paul Bonney - pkby587@juno.com
PC-FILE III or WordPerfect:
        Louie Levy - pcjrclub@efn.org
Writing Assistant or Name Pal:
        Phil Janz - rp_janz@efn.org
        Lynn Miles - kathrynm@efn.org
Games:      Bob Young - rlya@choice.net
E-Mail:      Lynn Miles - kathrynm@efn.org
        Judy Young - judy_y@efn.org
        Rosy Janz - rp_janz@efn.org
Communications Programs:
        Mike Ruiz - ruizmj@juno.com
  Gordon LeManquais - oreauctioner@juno.com
Hardware Problems:
        Louie Levy - pcjrclub@efn.org
        Mike Ruiz - ruizmj@juno.com
Spreadsheets or WordPerfect:
        Mike Ruiz - ruizmj@juno.com
The Disk Library, Parts and Supplies:
All in The Club Store
        Phil Janz - rp_janz@efn.org

*"Whoever said good help is hard to find has never called the Help-Line of their local computer club!"*

# For Easier Reading
# Try a Thin Font Module

Some of us "older" members are finding the letters on our monitors just a little bit too fuzzy making text difficult to read. Letters seem to blur together, especially when using Word-Perfect or Writing Assistant. This is because the PCjr color display is not a monitor with high quality resolution (although it is of very good quality).

Recently, I purchased a chip called Thin Font Module from the Club Store. It has made all the difference in the world so far as readability goes with my Junior monitor. The Thin Font chip is a combination replacement character generator chip and two software programs.

The PCjr's main system board has, as one of its chips, an integrated circuit (IC) which translates the input from the keyboard into designs on the screen. The result is letters drawn in the form of two-pixel wide lines.

The Thin Font module replaces the existing chip with an integrated circuit which can generate either the original character shapes (serif style) or a set of thinner ones (a modified San Serif style) which are made of lines only one pixel wide making the image appear sharper.

The chip is a little tricky to install and not a task for the unadventuresome Junior own-er, or the faint of heart. However, with the help of the detailed manual sent with the module, most any diehard can quickly install the new chip.

Two programs come with the chip: THINFONT and SETFONTS. THINFONT is a Terminate and Stay Resident (TSR) program. If you put it in your autoexec.bat file, it is always available to use to switch between the normal-wide font and the thin font. The second program option is SETFONTS and is non-resident. At the DOS prompt you run the SETFONTS any time you want to switch the screen character sets.

I experienced no trouble getting the module installed. Some people may want the presence of another PCjr owner for moral support, but most of the installation fears are eliminated by following the fairly clear instructions in the manual. The improved legibility, the flexibility of being able to switch between display styles, and the ability to change the "hot keys" makes Thin Font a good addition to any PCjr.

Check with Phil to see if there are any Thin Font Modules in the Club Store.

"One of these, please."

## HOW TO REACH THE EUGENE PCjr CLUB

### FOR MEMBERSHIP:
Membership is available for $12 per year per household. Membership provides each member of the household access to the Club Disk Library, individualized help and support. It also includes a subscription to the Newsletter. All Club General Meetings and Board meetings are open to every member. To become a member, send payment to The Eugene PCjr Club, P.O. Box 50024, Eugene, OR 97405.
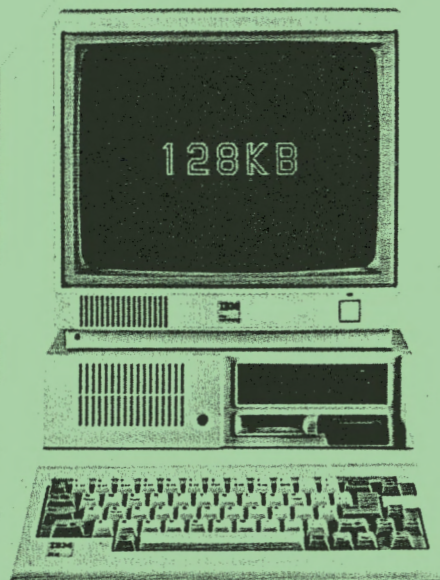
### CHANGE OF ADDRESS:
To change your address please inform the Club by mail to the Club's Post Office Box, by phone (541.343.7592) or by e-mail (pcjrclub@efn.org).

### NEWSLETTER ARTICLES:
Submission of articles for the Newsletter are vigorously requested and copy may be sent to the Club's Post Office box or via e-mail. Permission to reprint is freely given.

### QUESTIONS and/or INQUIRIES:
Questions and inquires about the availability of parts or supplies may be sent to the Club's Post Office Box or via e-mail (rp_janz@efn.org). Questions about software, operation or repair of your Junior, may be sent to the Club's Post Office Box or via e-mail (pcjrclub@efn.org). All orders for parts or software from the Club's Disk Library should be sent to the Post Office Box.

*PCjr* ENHANCED MODEL. Equipped with diskette drive, cartridge slots and new typewriter-style keyboard.

EUGENE *PCjr* CLUB

P.O. Box 50024, Eugene, OR 97405

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155 34th Place East
Eugene, OR  97405-3883

FIRST CLASS MAIL

PCjr LIVES!