

Jr Newsletter

March, 1988

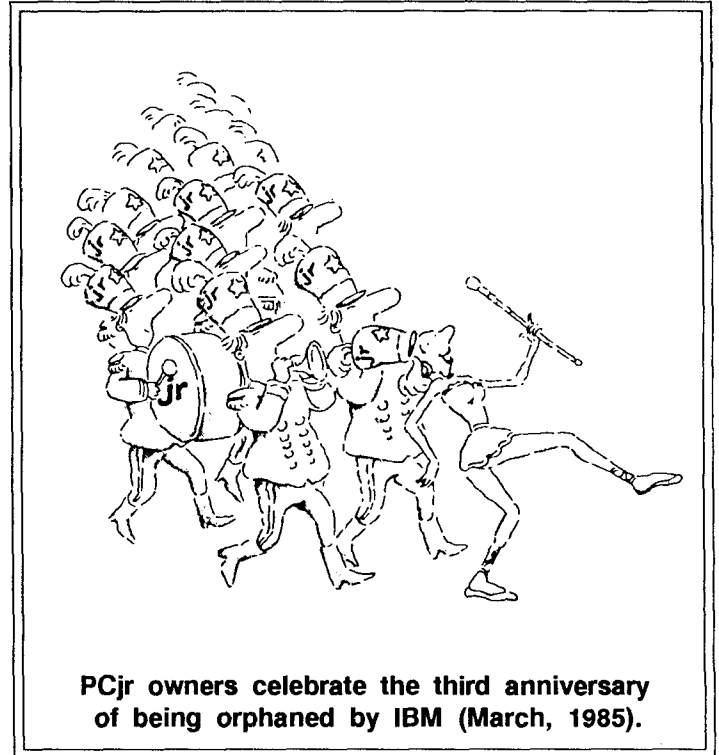
The Newest PCjr Breakthrough Over 1MB of EMS Memory

To IBM employees who have access to the company's internal PCjr message system, Paul Crumley is something of a legend -- even a hero. It was he who first figured out how to boost an IBM 128K sidecar to 512K, bringing total memory to 640K. One IBM employee we know says they call it "Crumleyizing a sidecar."

Now he's done it again. He's developed a way to modify an IBM sidecar to provide a PCjr with 512K of EMS memory -- that's memory above the boundary that DOS can address. This effectively brings total memory on a PCjr already equipped with 640K to more than one megabyte (1,152K).

Crumley, a hardware system designer who works for Carnegie-Mellon University in Pittsburgh, has been working on IBM design projects for several years, including PC-ATs and now the RT/PC.

He says he bought a PCjr when they were first available. At the time he had access to the IBM employees' internal bulletin board system and he noticed a lot of questions about expanding PCjrs. He went home and figured out how to do such things as add a second disk drive, or a third drive, and how to modify both the IBM and the Microsoft jr Booster. His documentation on how to accomplish these feats were widely circulated, first among IBM employees and



PCjr owners celebrate the third anniversary of being orphaned by IBM (March, 1985).

then leaked to the general PCjr public.

EMS is memory located on the memory map above the video addresses, which are the top boundaries of memory that DOS can access. In PCjrs this has been extended to 736K by Larry Newcombe's jrconfig.sys, but normally the limit is 640K. In recent years memory intensive software packages, such as the latest versions of Lotus 1-2-3, Symphony, and others have been written to take advantage of EMS capabilities on the PCjr's bigger brothers in the computer world. But until now PCjrs could not work with EMS memory.

In early February, Crumley conducted the final tests on his EMS modifications. He told us he is now ready to accept IBM sidecars from PCjr users. So far, only IBM sidecars can be modified, but he says it's only a matter of time before he will work out a way to modify other PCjr expansion units.

For \$250 Crumley will modify your IBM sidecar and provide you with software to access the EMS memory, as well as documentation on how to use the system. The software he provides also includes a RAM disk program which Crumley says has the ability to maintain its contents across a warm boot. The new memory will be compatible with software designed to use EMS memory, version 3.2. There is a version 4.0, but that is designed for multitasking

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PCjr Lives!

Notes on Compatibility

Thanks to jr Newsletter readers who have taken the time to send us information on their experiences with software, we have some very informative notes to pass on to you this month:

Arvid Koetitz, of Kent, WA, reports that he uses PFS Professional Write to do all of his word processing. "I use PFS Professional Write on my jr and also at work where Microsoft Word is available (company standard) and find it much easier to use for all of my memos, letters, etc. I work for Boeing Computer Services." Arvid also said he used Jr Power Pack (Disk #52) to solve several problems he was having. Particularly helpful was the ability to use Basica without having Cartridge BASIC installed.

* * * *

If you have a Legacy expansion on a PCjr, don't try to run Thexder, one of Sierra's hot new games. According to Bob Ashbeck, Bakersfield, CA, this game will not work with his Legacy unit, even though it will work on PCjrs with Racore (and IBM -- see below) expansion units. Bob says, "My frustration led to a call to the technical assistance unit at Sierra. They were quick to admit that this great game wouldn't work because a jr with the trusty Legacy needed 96KB of additional memory committed to video. No problem -- just a simple call to Legacy. They confirmed the statement from Sierra and said there was no fix on hand or anticipated."

Bob says his son was very disappointed because Thexder features a "Transformer" with great graphics comparable to Sierra's Black Cauldron and King's Quest. Also, the Thexder box says it is PCjr compatible, requiring 256K of memory. "My jr has 640K of memory and uses 2.1 MS DOS, and has a Legacy 2nd disk drive. I hope this isn't the beginning of a trend.

(Note: If the problem can be solved by simply reserving 96K for video, jrconfig.sys which is on the Jr Power Pack Disk #52 can easily do this for you. It's simply a matter of putting -v96 in the device driver line in your config.sys file. The documentation for jrconfig.sys tells you how to do this.)

* * * *

Thanks to Melvin Reich, Rockville, MD, for his report indicating that, in spite of earlier reports that Patton vs. Rommel is PCjr compatible, he tried it and could not get it to run on his PCjr. He says he called Electronic Arts and they confirmed that the software is not compatible with PCjrs. Has anyone been able to get Patton vs. Rommel to run on their PCjr?

* * * *

Rami Jundi of North Conway, NH also reported on

Thexder, saying that he was able to run it on his PCjr with IBM expansion unit by using a config.sys file as follows:
DEVICE=PCJRMEM.COM /C

Make sure there is a space before the /C.

This config.sys file will also enable you to run Dark Castle in 16 colors if you have at least 256K.

Rami also reports that Roadwar 2000 and Kampfgruppe, both by Strategic Simulations, are incompatible. Hardball from Accolade is PCjr compatible, Rami says. He also points out that if you have an expanded memory on your PCjr, some programs, such as King's Quest, 3-D Helicopter Simulator, and others will run if you use an unmodified version of DOS -- that is, without the config.sys file that is used to set up the extra memory.

* * * *

Michael Swanson left a message in the PCjr Forum on Compuserve which says, "Starflight requires a patch but is WELL worth it. SubBattle by Epyx needs 256K, the best sub game around, beats Gato. Ancient Art of War at Sea also needs 256K -- great! ChessMaster 2000, best chess game around, if I could only beat it!"

* * * *

Please keep on writing to us with your experiences so we can keep our readers up to date on what runs and what won't, on our PCjrs.

Popular PCjr BBS Dies

Battleship Pennsylvania, bulletin board system devoted to PCjr users, has ceased operations. Its operator, Cliff Kendall, suffered sysop burnout, according to the Metro PCjr Journal.

The Battleship Pennsylvania board was an exceptionally complete source of information and public domain software for PCjrs. Last year someone planted a worm in the system, destroying much of the data. But Kendall managed to restore most of it, no doubt after many long and difficult hours of work.

A new board in Maryland has been created by Jeff Perriens to fill the gap. Called jr BBS, the number is (301) 468-0984. It operates at 300 and 1200 baud.

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Questions and Answers



EDITOR'S NOTE: *jr Newsletter* gets questions in the mail from PCjr owners every day. So many, in fact, that we apologize for not being able to answer them personally. This Questions and Answers column is our way of responding to the questions readers ask about their PCjrs. We can't answer all of the questions we receive, but we try to answer those that are either asked by several readers or those we feel will be of interest to PCjr owners in general. If you have a question that you do not see answered here, or elsewhere in this newsletter, please feel free to write to us at *jr Newsletter*, Box 163, Southbury, CT 06488.

Q. I have a Tecmar jr Captain on my PCjr, giving me a total of 256K. I would like to know what the most cost-effective way for me to expand my memory to 640K would be. Is it possible to just replace the chips in the jr Captain with larger memory chips?

A. Yes, it is possible to upgrade a Tecmar jr Captain. This is probably the most cost-effective way to get to 640K if you already have 256K. Even though Tecmar advises against replacing the chips, many people have done so successfully. Although we have detailed instructions on how to upgrade IBM and Microsoft sidecars (both are included on the Best of jr Newsletter Disk #54), we do not have written instructions for upgrading jr Captains. So do-it-yourselfers are on your own. If you are interested in having someone else do the upgrade for you, Solid Rock Electronics and Computer Reset both specialize in upgrading sidecars of all types. (See ads in this issue for addresses and phone numbers.)

Another alternative would be to try to find a Tecmar jr Cadet, the memory expansion unit made by Tecmar to supplement the jr Captain. They aren't being manufactured any more, but you may be able to find one used. A slightly more costly method would be to forget about your jr Captain, remove it, and install a jr Hotshot. If you don't mind a little tinkering with the innards of your PCjr, this might be the way to go. Check around for current prices on these alternatives, you might find that by getting a jr Hotshot and selling your jr Captain to someone with a 128K PCjr you will come out ahead.

Q. We are just getting into our PCjr and are interested in using the modem we have. Our question is, how do

we begin? What are the costs involved? How does one reach a Bulletin Board? Is there a phone book for modem use?

A. Wow, that's a lot of questions, but the answers are relatively short. Once you have a modem hooked up, you need telecommunications software to run it. The PCjr Sampler has a very simple program, but it works, so you might try that if you just want to see what it's like to have your PCjr connect with a BBS (Bulletin Board System). When you want to do more with your modem, you might try Procomm or Boyan, two great telecommunications programs in our Software Store. The costs of using your modem will be (1) the call to a BBS (if it is long distance) and (2) any membership or usage fees charged by the system you want to use.

There is no charge if you have a BBS in your local call area run by a user group. We published a list of PCjr BBSs in the February issue, so you might check that. But there are many more user groups dedicated to IBM PCs or to all types of computers which you could also connect with, if you don't have a PCjr BBS in your area.

You might also consider joining CompuServe or Genie or some of the other commercial systems. They charge a membership fee, but they also have a variety of services, such as the ability to shop for almost anything, read the latest stock prices, or play exciting games with other computer users. CompuServe has a very active PCjr Forum where PCjr users share information and software. You can find a CompuServe start-up kit in many book stores or software stores or call (800) 848-8199. Ohio and Canada call (614) 457-0802. The subscription kit costs \$39.95 which includes the one time subscription fee and \$25 usage credit. When you've used that up, they'll charge 10 cents per minute.

As for a book on modem usage, the manual your modem came with should be read first, as well as instructions for using whatever software you have. There is also an excellent book called "The Computer Phone Book, Guide to Using Online Systems," by Mike Cane, published by Plume. It has an introductory chapter on modem use as well as descriptions of most of the major systems and how to use them effectively.

(Continued on page 4)

Questions and Answers

Continued from page 3

Q. I have been trying to use software which requires a numerical lock key or button. I presume these this is made for a standard PC where the numbers are separate. Can this type of software be used on the PCjr?

A. Your PCjr Guide To Operations contains a Keyboard Difference Chart (page 4-9), which shows what keys to press on your PCjr keyboard in order to emulate a PC. The Num Lock sequence, for instance, is to hold the Alt key down while pressing Fn and then N. When using these key combinations remember that you don't have to hold down the Fn key -- just press it and release it and then press the next key. Many PCjr users think they have to hold the Fn key in order for it to work in combination with the other keys, but this is not true. And it's much easier not to.

Write and Play Music With Jr Music Machine!

You may not know it, but your PCjr is a fine instrument that can help you learn to write music and that will play your tunes for you in harmony.

PCjrs were among the first color computers capable of playing music in several "voices." Jr Music Machine, which we have added to the Software Store this month (Disk #62), was written especially for PCjrs and it takes advantage of your computer's color and sound capabilities. (And if you want to boost your PCjr's sound even further, see page 10 of the December, 1987 issue for how to do it for less than \$30.)

With Jr Music Machine, you can write your own music and play it back through your PCjr's sound system. Although Pianoman (Disk #36) also does this, Jr Music Machine is easier to use and was written especially for PCjrs, so we felt it would be a welcome addition to our disk library.

Here's what the program's author, Sidney Nolte, says about his software: "I developed this program as part of a process of my learning about music. Not being a musician nor knowing very much about music, I found that the machine that I had, my little PCjr, had some tremendous capabilities not found in the other members of the PC family. These include music with as many as four voices and graphics which allow for as many as 16 colors where the PC has only one voice and 4 colors.

Sidney wrote a nifty program -- an amazing accomplishment for someone with no knowledge of music. Jr Music Machine allows you to write each "voice" in your composition separately, adjusting the time signature, key, volume, tempo and note values with your keyboard. You

can write a single "voice" tune first, just to get the hang of it. Then, using all three "voices" you can create three part harmony.

The disk comes with 15 tunes already on it. You will probably want to play a few of them at first, in order to see what your PCjr is capable of doing. You might also call up some of the existing tunes to see the music displayed in your PCjr's 16 colors. Each note is highlighted in yellow on a blue background as you move through the tune. Jr Music Machine gives you a chance to move it up or down in the same key, or to adjust it for sharps and flats, or change its value. It even has staccato and slur special effects at your command.

As we mentioned earlier, the value of it over Pianoman seems to be that it is easier to use. On the other hand, Pianoman has more features -- although they tend to be features such as macros and block editing that may not be required by many PCjr musicians. The resulting music that Jr Music Machine produces is just as good.

In short -- if you want to fill your computer room with delightful sounds of your own making, try Jr Music Machine. See page 13 for ordering information.

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READER FEEDBACK



Reader Provides Tips On Good PCjr Products

Thought maybe that I would offer a tidbit of info in a product that I purchased over the Christmas holidays. It is a mouse driver called **MousePerfect**. Naturally for **WordPerfect** and it works GREAT! after you configure it for the Jr. There seem to be some strange things going on in the way that the driver addresses the Jr's memory. After reading the instruction booklet, which is nicely done, I had some problems.

By the way, my Jr. is a full 640K with IBM Sidecar, a second 80 track floppy drive using the card from Creative Firmware, a 7.4 Mhz speed up kit, a V20 chip, a "Microsoft" serial mouse, and jrVideo cartridge from PC Enterprises (which is fantastic). This spring I hope to get that Hard-Drive from SPC. I also use the "Dual-fonts" chip to enhance my color monitor. It too works fantastic. A new keyboard and I am all set for a couple of years.

Anyway back to the story, I was quite upset with MousePerfect so I called them and got a recording. I hastily explained my problem and hung up, figuring that's the end of it. Low and behold later that very evening I got a call back from them. That fellow asked me to turn on the machine and he walked me through the whole process and Voila! It worked! It seems that just on the Jr. you have to install the driver then uninstall it and then install it again and then it recognizes the mouse...weird! Anyway it sure does a beautiful job with pop-up screens (12 of them) and the fellow was very nice and courteous and said if I had anymore problems to please call back. As you may know, with the Jr. keyboard it is almost impossible to run **WordPerfect**. Now it is just like the "Word".

The price is \$30.00 plus \$5.00 shipping and handling from **MousePerfect, Inc.**, P.O. Box 367, Clarkston, GA 30021, 1-800-628-2828 ext. 564.

I noticed you were looking for comments on the PC-Paintbrush. Well I have been running it for about 3 months and I have had no problems with it what so ever. It works great on this system. There are instructions on page 110 in the Appendix for setup with the various PCjr enhancements. On the contrary a friend of mine brought over his "MouseSystems" **PC Paint** and it will run in the normal 4 color mode but not in the 16 color mode.

I also noticed a review on the **ProComm** communications software. It is my opinion that the fellow did not run it on a PCjr. Those commands hitting the Alt key then the

Fn key then the # key requires the dexterity of an octopus. And another wonderful thing (sarcastic) is the Jr's lack of DMA makes it a "B...." to up-load or down-load from a disk. I have latched on to the latest ver of **Qmodem SST (3.1)** and let me say it will run circles around ProComm. It handles all file transfer protocols! The documentation is twice as thick as ProComm's (about 140 ps) plus there is additional doc. on other pertinent protocols and there is even a section in the manual on a setup for a PCjr. It also has a section so that you can set the tones (3 of them) example -100-500-1000 cps for correct, uploading and downloading. True it takes up a little more memory, but what do you want, a BMW or VW?

In a catalog for the TI994A they have a 64K Printer Buffer (cat #34888) for only \$59.95. It is a parallel interface and comes with its own external case and power supply. Boy! I tell for the price the cannot be beat and I cannot even think anymore how anyone can live without one. It has enough memory to hold 45 pages double space and boy when a person is printing a biggie like odem SST doc, it sure is a super unit. And the price is cheaper than I have seen advertised in the "Shopper". I believe that was something like \$90. The catalog comes from TENEX - Computer Express, P.O. Box 6578, South Bend, IN 46660, 1-800-348-2778.

George J Trombly, Grosse Pte., MI

EDITOR'S NOTE: Thanks to George for his many good tips. Although we don't agree with his comments about ProComm on the PCjr, we recognize that judgments on software are sometimes very subjective. One thing to keep in mind when using the PCjr keyboard -- to use the Fn key in combination with other keys do not hold the Fn key. Just press it and then press the next key. This makes it a lot easier to use, especially when you are doing something like shift-F3 or other commands where you have to hold the first key down. Once you realize you don't have to hold the Fn key, it makes a big difference.

Is Your PCjr Socially Acceptable?

Thanks for your newsletter. I know that I have all the power I need in my enhanced PCjr; but without the moral support provided by your newsletter I honestly believe that many of us owners would have been psyched into

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Reader Feedback

Continued from page 5

unnecessarily replacing our units with one of the more socially acceptable PC's. Keep up the good work.

Peter P. Palker, Jeffersonville, VT

Reader Reports on Software Compatible with His PCjr

I've just finished reading my January issue and would like to comment on the "Notes on Compatability" article. With regards to the **PC-Paintbrush** program, I have found it to work satisfactorily with the PCjr. However, a single drive owner will experience an annoying screen when attempting to save to disk B:. The screen prompt "place disk in drive B: and strike any key when ready" scrolls across the screen. After saving the picture, only a portion of the prompt is repainted over. This screen repaint only affects the drawing being displayed. The ICONS and MENU bar written over still have remnants of this prompt. I have found that placing a data disk in drive A before invoking the save process will spare the user this annoyance.

Another recent purchase of mine was **Wilderness** distributed by Spectrum HoloByte. This program is a good adventure and learning tool for the outdoors-men (And -

women? - ed) However, there is one caution to jr owners. The program is copy protected, but there is an install program on the disk that will allow you to make a backup. But this is only for a two disk drive machine. If you try to run the install program on a single drive jr, the program will eat the entire disk. I learned this the hard way. If you have a single disk drive, and copyijr, you can make a backup of this disk for yourself.

Other programs which I have tested and found to run acceptable on the jr are:

CCS Design - CAD, pcTools, Crosstalk XVI, Write Right Harvard Presentation Graphics, Drafix, Graph in the Box.

I hope I've been of some help to you and your readers.

Jim Duda, W. Richland, WA

Saved by jr Newsletter, Reader Poses Some Interesting Questions

I purchased an enhanced jr. 128K with an IBM thermal compact printer almost 2 years ago. About 2 months later IBM announced they were stopping production of it. I thought I'd been stuck with something that would be obsolete and non expandable in no time. Out of the blue came jr Newsletter (which I immediately subscribed to!!) and with it expansion of jr with the Racore Drive II Plus with DMA, now having 640K memory, 2 disk drives and DMA. My jr was purchased to learn computing, which I knew nothing about. Realizing the surface of computer knowledge has barely been scratched, I still have learned a lot and really enjoy my jr which performs flawlessly.

I can tell by reading the articles from your subscribers that there are people who own jrs that really know computers. It's reassuring to read the fine things they write about the jr.

I use **PC-Write** exclusively which I think is a fine word processing program, especially for the price. I was given the 2.5 version with the purchase of the jr., then updated to the 2.55 version. Now I'm a proud registered owner of the 2.71 update, which I just received and am doing this letter on.

Borland recently had a sale on their **Quattro** spreadsheet which I've purchased. I'm just getting into it and so far it has worked perfectly on my jr so it appears to be compatible with my jr.

My next purchase is going to be a printer. Would love a laser printer but on my budget the new NEC P2200 sure looks good.

I do have a couple of questions for you:

1. When making backup copies and work disks I have a lot of trouble with the computer telling me the copies do not compare, (I always COMP the disks) and that one of the disks may not be usable. With both the PC Write and Quattro it took several tries before the backups would work. On both of them the computer said the disk in drive a;

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"Upon this rock".....Matt. 16:18

which is the source disk sent by these firms, was bad. After tiring of using Abort and Retry I pressed Ignore. The computer said one disk may not be usable. I checked the DIR on both disks, source and backup, and the DIR's read the same amount of memory so I couldn't understand why they weren't comparing. I've used them anyway and they seem to work. I also used several different formatted blank disks and got the same results. I will say that the blank disks were purchased from a local Clone dealer and are generic disks. Could this be the problem? Could I be doing something else wrong?

2. I've used the previous versions of PC Write on my jr with no problems. With the Racore II, I leave the jr and PC mode toggle switch in the PC mode. Sometimes now in the PC mode the screen flashes when I page up or down or hit the Enter key. This is very disturbing but goes away when I switch to the jr mode. I haven't checked with Quicksoft yet. Do you have any idea what would be causing this and how it can be corrected?

The jr Newsletter is greatly appreciated here, believe me. Until receiving my first issue of the jr Newsletter I was about to throw the jr out. Thanks for preventing a "BIG" mistake!!! In fact thanks to your publication (and upon purchase of a better printer) my jr will be doing most of my employment clerical work which is done at home, tediously banging on a portable manual typewriter.

I save each of my jr Newsletters and refer back to them frequently. Do you have an index or contents listing of all of jr Newsletters articles? If not I think it would be a good idea. My issues will be in a 3-ring binder notebook soon and an index reference guide would be extremely helpful.

Thanks for the jr Newsletter. If there's anything to say

against the jr Newsletter it's that it doesn't seem to come often enough. When it does I read it from cover to cover. Keep up the fine work. The PCjr and jr Newsletter Lives!!

Marvin Sehestedt, Roswell, NM

EDITOR'S NOTE: We appreciate the compliments. As for the questions, we'll attempt to answer, since similar questions have been raised by other readers.

When you make backup copies of program disks, the preferred method is to format a new diskette, using the DOS format command, then use the copy *.* command. This will, however, skip over bad sectors, if there are any, on your target disk. Then the diskettes will not be exactly comparable. When using the DOS comp command, you should get a good match on a file by file comparison, otherwise there is a cause for worry. As for getting a message that the source diskette (in Marvin's case a new program diskette) is bad, don't believe it until you have tried to copy it several times without success. Sometimes a speck of dust or a slight misalignment of your drive's read head can cause that message to appear. The disk may have nothing wrong with it.

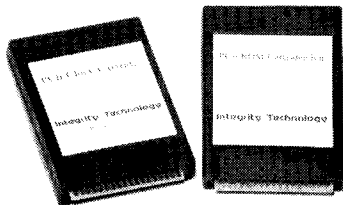
The flashes of Marvin's screen upon pressing Enter or PgUp or Dn are probably not the result of the software he is using. It's more likely a slight problem in the set-up procedures. A different number of video buffers, or the elimination of certain memory resident software (such as Sidekick), may solve the problem. At any rate, in his case the problem disappears in jr mode, so try using jr mode for those applications where the flash occurs. There is very little difference between the jr and the pc modes in the Racore units, so you will probably find that you can use all the software you have without ever switching from the jr mode.

The last question about indexes for jr Newsletter has been asked before. We think we have come up with something much better in our Best of jr Newsletter disk (Disk #54). On that disk we include a great utility called LIST. Using LIST, a shareware program by Vernon Bueg, you can go through the list of past articles from jr Newsletter, looking for a specific word or combination of words. It will take you instantly to each occurrence of that word or words. This can be much handier than an index because many times the information you may be looking for may be buried in an article that is primarily dealing with another subject. So an index would list it under one heading, causing you to skip over it in your search for the nugget of information buried in the text. It's an amazingly useful utility and we urge you to use it, not only to search the Best of jr Newsletter disk, but to search any text at all.

(Continued on page eight)

PCjr Clock Cartridge

and PCjr ROM Cartridge Kits



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Reader Feedback

Continued from page 7

PCjr Owner Finds Many Uses for Jr Power Pack's Utilities

When I first subscribed to "jr Newsletter" I was a little disappointed in what I was getting, but I guess some of the better things were printed prior to my subscription. As an example: I'm a retired IBM engineer and I repair, alter and make anything I can figure out. Well I wanted an inexpensive way to increase my memory and I had the 128K sidecar. I have all the books but it was too late to get the logics for the memory expansion unit. I ordered the Best of jr Newsletter and there was everything I needed to know. I already knew that 256K x 1 x 150 ns DRAMS could be substituted.

When the now defunct "TI-99er" had an article on a hardware modification to the IBM disk controller card I went ahead and altered the card and implemented the clumsy software. Since it was accomplished by batch files it would never work on programs like IBM's Personal Communications Manager or PC Paint or many other programs without a hell-uv-a lot of patching and renaming, etc., etc., Thanks to your wonderful Disk #52 - "jr Power Pack" and Mr. Newcomb's programs, I've redone all my disks and they and the drives work as smooth as honey...Kudos to jr Newsletter! Those two disks have made life at the Keyboard

comfortable again. Now for some questions.

I would like a printer driver program alone without a memory driver and I assumed the file "JRDRIVE.COM" was it but there's no documentation for it that I can find. "FIXMEMJR" refers to a lot of things it can do as well as Larry Newcomb's program but I don't see it documented anywhere either. NEXT: I implemented the Basica patch in the disk and the author says that to activate the soft keys as in Cartridge Basic at the DOS prompt you enter BASICAJR KEY. Either way, either entering BASICAJR or the above results in same thing -- no function keys. I haven't used the other options of Mr. Newcomb's yet, since I'm waiting for the DRAMS and a V20 to arrive by mail, but I don't anticipate problems.

Keep up the good work of keeping the "jr" alive and well and if you could find time to answer the questions on the files mentioned above on disk #52 I'd appreciate it.

James A. Jann, Vallejo, CA

EDITOR'S NOTE: We're glad James' initial disappointment turned to joy. To answer the questions raised in his letter -- No, jrdrive.com on JR POWER PACK is not a printer driver. It enables you to add drives to your jr. As for fixmemjr, there is no such file on JR POWER PACK, so we don't know what James is referring to here. As for restoring the use of function keys after using the basica patch, you just run the program called key.bas, which is on the disk. In order to run it, first install the patch, then run key.bas.

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Want Help Learning Dos? Try McGuffy's Dos Primer

When I first used Jrconfig.sys - a key utility on the JR POWER PACK disk (#52) I didn't quite get the point. Then the other day it dawned on me that Low Ramdrive implied the possibility of a High Ramdrive. I publish a little quarterly magazine of cartoons and commentary on my PCjr. Files rarely exceed 50K. Why not put a bunch of utilities in C:, the Low Ramdrive and my PC-Write in a 300K D:, the High Ramdrive. Why not, indeed! Everything happens in an instant. In fact, things were going a little too fast at first and made me nervous. Now I tell people I only have four drives but I'll get used to it. No disk swapping (I load command.com as well into C & D), the long autoexec.bat takes up about a minute and a half but then it's work all day and copy to a data disk from time to time. A \$15. NEC V-20, a \$145. memory upgrade to 640K and Jrconfig.sys ended my search for a new computer!

So I am exceedingly grateful to you for disk #52. And I see you have a free offering - classifieds. Enclosed is a primer on DOS which I have written for new PC users. It will make them proficient in a matter of hours. I know

(Continued on page 11)

Save \$5 -- Send In This Survey

Since November, 1986 when we did our last reader survey a lot has happened. There are many new products for PCjr's, a bewildering amount of new software, and our number of subscribers has doubled.

In order to serve you better, we need to know more about you -- which is the reason for this survey. As a special incentive, we are offering everyone who fills out this survey a \$5 discount on any software order. Just enclose your software order from page 13 with this survey and deduct \$5 from the total price.

We thank you for taking the time to share your PCjr experiences with us and with other PCjr users.

1. Please describe your PCjr -- how many disk drives, how much memory, what type of memory expansion, do you own a modem?, etc.

1 disk drive , 128 K

2. Please list what you use your PCjr for most of the time -- word processing, games, business, telecommunicating, etc.

word processing , business , games

3. What software do you use and like best (other than games)?

Wordperfect word processing

4. What games do you like best on your PCjr?

Kings Quest , Black Calder

5. What software have you had problems with (if any)?

Homebudget -- program continually crashes

6. How would you rate jr Newsletter? (Circle one) poor fair good excellent

7. What subjects would you like to see covered in future issues of jr Newsletter?

Computer viruses , desktop publishing

8. Do you plan to expand your PCjr? yes no If so, how? (please circle) add memory

add disk drive hard disk modem keyboard monitor printer other (please specify)

9. Have you had any problems with your PCjr? (please specify)

disk drive requires lubrication once a year to prevent disk read errors , drive hangup

10. Have you had any problems with memory expansion units or other devices for the PCjr? (please specify)

N/A

Please use the other side of this page for any questions or comments you would like to add. Cut out the page and send it along with the software order form on page 13 with your \$5 discount subtracted from the total.

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Thank you for taking the time to help us get to know you better.

Reader Feedback

Continued from page 8

that almost everyone who reads your fine paper is an old pro, but now and again I see a pleading for some rudimentary help.

Bob Monahan, Limerick, ME

EDITOR'S NOTE: We checked out Bob Monahan's DOS Primer and found it to be an excellent way to learn DOS commands. Many people are confused by the DOS manual, which, like most books written on DOS, read like the Dead Sea Scrolls. Bob's primer gives you short, clear examples which new users as well as old hands will find enlightening. For \$4 it's a steal. See the classified section for details on ordering.

Reader Gets 736K On His PCjr But Wants to Go to 1024K

Like many people I find myself coming up with ways to use more and more RAM. Once you have used a program like DOSAMATIC, (jrNewsletter disk #49) you will be amazed as to how many programs you would like to have running at the same time and just a few keystrokes away. I presently have a PCjr with a Tecmar Captain and Cadet sidecars. I removed the 64K chips from the Captain board, soldered in sockets and then installed 256K chips. While this was rather easy to do, I caution people from attempting this on their own unless they have a talent for this type of work. One slip or error and it will cost more to get it fixed than if you had a professional do it from the start.

My system now has 512K on the Captain, plus 384K on the Cadet and 128K on the main board for a total of 1024K on a PCjr! While this looks great there is still the problem of DOS recognizing only up to 640K. Being a novice in the area of modifying DOS programs, I contacted Tecmar for assistance in solving the problem. They did not know if the memory addresses above 640K could be accessed for normal RAM use and offered no help to find a solution. While Tecmar's products work well, their quickness to make a sale outweighs their desire to service the customer after the sale.

After extensive reading I had learned everything I needed to know except exactly how to solve the problem. It seems every text assumes the reader already knows all the basic yet critical steps to put the information into use. A short example is often all that is needed to clarify how to incorporate the information into a program.

I was very excited to receive the CONFIGJR.SYS program by Larry Newcomb on Jr. Newsletter disk #52. With this program DOS recognizes 736K. This gives me more encouragement the full 1024K can be recognized as usable RAM. Since memory addresses above 736K are

reserved for video buffers and jr. cartridges, some sacrifices may be necessary in these areas to reassign these addresses.

I would like to contact Larry Newcomb to see if he has the ability and is willing to modify the JRCONFIG.SYS program further to accommodate 1024K RAM. Unfortunately I do not have a modem so I can not send him a message. I would appreciate it if jr Newsletter would forward my letter to Larry and present the challenge to the jr Newsletter readers for I am willing to compensate them for their time and knowledge.

Do you or any of the jr Newsletter readers have a copy of the patch for Auto Cad? If so, I am also willing to pay for a copy of it. I commend you for your excellent newsletter, software, and fellow readers.

Donald E. Ellis, Wooster, OH

EDITOR'S NOTE: We believe 736K is the limit as far as DOS addressable memory on the PCjr is concerned. But the so called impossible has been done before, so we don't rule it out. As for a patch for Auto Cad, we know of PCjr users who have successfully used Auto Cad without a patch. We'll try to get more information on this for a future issue.

If you have any tips on getting the most out of your PCjr, please share them with readers of this newsletter by sending them to jr Newsletter, Box 163, Southbury, CT 06488.

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jr Newsletter Software Store



This software is the best public domain and user-supported software for the PCjr we've been able to find. All the programs in this collection have been tested on our PCjrs and are highly recommended. Some of these programs are equal to or better than commercial programs costing hundreds of dollars. The programs in this collection are available for \$9 per disk or \$7 per disk, if you order four or more.

THE BEST OF JR NEWSLETTER. The best and most informative articles from twelve issues of jr Newsletter (June 1986 through May 1987 issues) are contained on this disk. More than 50 articles on compatibility, problem solving, software, maintenance, memory expansion, how-to projects, tips on using DOS, and more! 128K (Disk #54)

PC-WRITE. This extremely popular word processing program is both powerful and easy to use. A review in PC World said "PC-Write may well be more versatile than WordStar; it's certainly more straightforward." Version 2.5 runs well on 128K. Version 2.7 has more features, comes on two diskettes and requires 256K to run without the spelling checker, which requires 384K. (Order Disk #1 for 128K V2.5. Order Disks #2A and 2B for V2.7)

PC-FILE III. This excellent database manager will handle up to 9,999 records, such as names and addresses, notes, product descriptions, etc. Uses generic, embedded, soundex and wildcard searches. Global updates and deletes. Sorts on any field. Too many features to mention. (Disk #3 runs on 128K, Disk #4 needs 256K)

PC-CALC. A versatile spreadsheet program that can do up to 26 columns of adjustable size and 256 lines. Features on-screen prompts, many math and statistical functions, hidden column capability, many formatting options, 64 character cells, automatic global recalculation, and more. Has some limits on 128K, but still very useful. (Disk #5 runs on 128K, Disk #6 requires 320K and two drives)

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

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 logon, 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)

PC-TOUCH. Designed to teach and practice touch typing. As you type, an on-screen line shows the number of erroneous keystrokes, and your accuracy rating as a percentage of keystrokes. 128K. (Disk #18)

3 X 5. An information management program that works just like a 3 x 5 card file. It offers speed, versatility and simplicity in entering, indexing and retrieving data. Has an integrated word processor, powerful search commands, multiple windows so you can edit in one and search in another, etc. Requires 256K. (Disk #19)

PC-DESKTEAM. Enables you to have an alarm clock, calendar, typewriter, calculator, and phone book accessible from your keyboard. Can be a resident program while you are using other software if you have the memory. 128K will run it alone. Need more to run it with other software. (Disk #22)

PC-PROMPT. A memory resident program that provides the format for DOS commands in an on-line mode. Help screen toggles on and off. Also help screens for BASICA, Turbo Pascal, Debug and EDLIN. 128K. (Disk #23)

PC DOS HELP. Similar to PC-Prompt, but takes up less memory (16K) as a resident program. Geared to DOS 2.1 with special PCjr commands included. 128K. (Disk #24)

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

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NEW KEY. Powerful popular program that allows you to redefine keystrokes and assign series of keystrokes to one or two keys. Customize software to meet your needs. Many other useful features included. 128K. (Disk #35)

PIANOMAN. A great music program! Allows you to write your own music, store it and play it on jr's terrific sound system. 128K. (Disk #36)

JR MUSIC MACHINE. If you want to write and play music on your PCjr, this program allows you to do it. Displays music as you write it using jr's 16 colors, and plays music back in three voice harmony. Features allow you to adjust key, tempo, note values, etc. Color Display required. 128K ok. (Disk #62)

PC-KEY DRAW. A powerful graphics program that allows you to draw, paint, produce slide shows, store and print your work. 256K, two drives. (Disk #37)

PC-KEY DRAW DEMO. Contains a slide show demonstration which allows you to see the amazing results you can get with PC-KEY DRAW. Helps to learn the many graphic capabilities of PC-KEY DRAW. (Disk #38)

PRINT HANDLER. Excellent software for printing banners, sideways, etc. Contains custom font generator, print spooler, and other useful print control utilities for Epson and compatible printers. 128K. (Disk #51)

IMAGEPRINT. Produces letter quality print on dot matrix printers. IBM Graphics Printers, Proprinters, Epsoms and compatibles. Contains many format features, three quality levels, interfaces with word processors. 128K ok. (Disk #50)

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, screenblinker, print spooler, and more. 128K. (Disk # 52)

PCjr COMPATIBILITY DISK. lists hundred of software titles, along with information on PCjr compatibility, memory requirements and tips on using the software on PCjrs. 128K. (Disk #60)

BOYAN. Selected Best of the Year by PC Magazine, this outstanding telecommunications program will astound you with its smooth functioning and innovative features. Supports all protocols. Need 384K. (Disk #61)

DOS 2.1 FIX. Patches to fix the bugs in DOS 2.1. Cures most problems encountered when running memory intensive programs. Also patches to run BASIC and BASICA on DOS 2.1 without having Cartridge BASIC installed. 128K ok. (Disk #40)

DOSAMATIC. A nifty way to view the contents of disks, easily manipulate

files and carry out DOS commands. Features a Mac-like "point and press interface which allows you to select the commands you want from pull down menus. Also permits loading several programs at once and jumping from one to the other. 128K ok, but more memory needed for "multi-tasking." (Disk #49)

PCJR PATCHES. Many patches to fix software that ordinarily won't run on PCjrs. Includes patches for Starflight, Advanced Flight Simulator, Quick Basic, Turbo Basic, Double DOS, and Bard's Tale (16 colors). (Disk #56)

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. 128K. (Disk #57)

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. (Disk #58)

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

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, which is the hardest because some parts are invisible. Runs on 128K. (Disk #10)

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BOARD GAMES. Play Monopoly against the computer. Backgammon, Yahtzee and Four - a game your jr is especially clever at. 128K. (Disk #31)

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

PC-CHESS. A full color many-featured chess program, with four levels of play. You can play against the computer or another human, save games to disk, set up the board yourself and switch sides if you want. It has two clocks for elapsed time for each player, allows castling, en passant and pawn promotion with validity checking, plus other features. 128K. (Disk #44)

ZAXXON/GALAXY TREK. Two exciting high tech shoot-em-up games. In Zaxxon you fly through an obstacle course, shooting while you go, up and over walls, and eventually through space. Galaxy Trek makes you the commander of a Star Ship which you maneuver through the universe seeking to destroy a fleet of Megaton warships before they conquer the planets. 128K. (Disk #45)

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)

GOLF/SAILING. Two great games for sailors and golfers! 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)

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. (Disk #31)

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)

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. (Disk #55)

EDUCATIONAL SOFTWARE

ORIGAMI. Learn the art of Japanese paper folding. This program shows you how, step-by-step, to create amazing animals and other objects just by folding paper. Fun for kids and adults, too. 128K. (Disk #39)

PLAY AND LEARN. Educational games for kids 5-12. Word match games, find-a-word puzzles, word scrambles, and many more made by teachers. 128K, need Cartridge Basic. (Disk #32)

WORD PROCESSING FOR KIDS. Simple, fun and easy-to-use word processor designed especially for beginning writers. Allows children to express their ideas easily and then print them out in large type on your printer. Colorful opening menus make learning the simple commands very easy. Parents/teachers manual is on the disk. 128K. (Disk #41)

MATH FUN! A great way to get kids learning how to add, subtract, multiply and divide. Includes a program called Math Tutor which has cleverly designed exercises for kids in Grades 1-6. Also Funnels and Buckets, a nifty math game that makes learning math fun. 128K. (Disk #42)

EARLY LEARNING. A collection of colorful educational games for ages 6-8. Sing-along alphabet, letter match, counting game, maze, pattern matching and more. 128K, need Cartridge Basic. (Disk #48)

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One Meg of EMS Memory

Continued from page one

and takes up considerably more memory. Crumley says he figures most PCjr users are not heavily involved in multitasking so he has concentrated on version 3.2.

PCjr's Excellent Design

It was satisfying for us to hear Crumley praise the internal design of PCjrs. Remember, he's a specialist in the field. He said in his opinion PCjrs are better designed than PCs, XT's and AT's. IBM, he says, used a number of custom designed logic chips, such as the video gate array. They also put everything on one board, eliminating a lot of connections, which is where computer failures most often occur. "If you look inside a PC you will see a lot more cables and connections than the PCjr has," he said.

Crumley says he is interested in providing future expansions for PCjrs. For now he's going to concentrate on upgrading IBM sidecars with EMS memory. If all goes well, he would like to begin manufacturing EMS units to avoid the need for upgrading sidecars. And other PCjr ideas are swirling around in his brain as well. Who knows what will be "Crumleyized" next?

If you want EMS memory, send an IBM sidecar to Paul Crumley, Attic Technology, Box 354, Verona, PA 15147 (Phone: (412) 795-7430.) Include payment of \$250 and use the mail as opposed to UPS. Crumley says he will perform

the upgrade within two weeks of receipt and send your modified sidecar and software winging back to you.

Sorry, We Goofed

In the February issue we told you about the great telecommunications software called Boyan. In our article on page 11 we told you that Boyan won acclaim from PC Magazine, which selected it as "Best of the Year" -- an amazing accomplishment for a shareware program.

We must have been overcome by our enthusiasm for Boyan because we mistakenly said you could order it from the jr Newsletter Software Store by ordering Disk #59. The problem was, Disk #59 is Check Processor, which is also a good program, but it won't do a thing for your modem.

We didn't discover our mistake until it was already printed, which is why you will notice a sticker on the Software Store order form announcing our mistake. We hope the few people who may have received Check Processor when they thought they had ordered Boyan will forgive our error. Just return Check Processor and we'll send Boyan right out to you. For the record, Boyan is Disk #61.

Another mistake occurred on our front page. Our printer tells us it was a depression on the press cylinder that caused two of the numbers in the table of contents to drop out. This was not noticed until the newsletter was folded, collated and stapled, so we couldn't do anything about it. Again, our apologies.

How To Use A VCR With Your Computer

Have you ever wondered what those mysterious jacks on the rear of your PCjr labeled "V" and "A" are for? The "Guide to Operations" calls them composite Video and Audio outputs, but what good are they to you when you have a color display or television connected to your computer? Well, those of you who have used, or own a VCR may have noticed that this too has jacks labeled "Video" and "Audio" input. They also have input jacks. These can be used to link your junior to your VCR via cables equipped with RCA or phone plugs.

After connecting the computer to the VCR, set the VCR to "Record" and be sure you have inserted a tape. The images shown on the jr monitor will be saved on the (VCR) tape.

What's the real use of this? You can use the setup to save pictures or text created with such programs as PCjr Color Paint or PC Paintbrush. You can even save a game as it is being played and then replay it for analysis. Later you can use it for a Video slide collection, or to add titles to a video tape. Don't be worried if the colors on your monitor look a little different when replayed on the VCR.

(from John Hawkins - Venture PC Users Group)

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PARALLEL PRINTER PORT - For PCjr. \$40 or best offer. Robert Mandell, 208 Murray Hill Road, Binghamton, NY 13903 (607) 797-1542, after 7 pm. (3)

IBM PCjr SERIAL COMPACT PRINTER - \$35 (includes shipping) with thermal paper. Magnus Leopold, 3476 Curtis Street, San Diego, CA 92106 (619) 226-8556 (3)

720K FLOPPY DISK DRIVE 5 1/4" - New External PCjr 1/2 Height Disk System Complete With Controller, Cabinet, Power Supply, Software, Instructions, and Shipping. \$260 Firm. Richard Rychtarik, 15463 Squires Way Drive, Chesterfield, MO 63017 (314) 532-0782 after 6 pm. (3)

IBM PCJR 512K - Two disk drives, Racore w/DMA, both keyboards w/cable, DOS 2.1, BASIC w/cartridge, all manuals and documentation, Zenith "green" monitor, will include pfs Write, Plan, Graph, plus hundreds of dollars of software. Factory packaging, only \$750.00 call 609-596-2545 ask for Herb. (2)

3M PCJR JOYSTICKS - Two available at \$10 each. Add \$2.50 shipping for one or \$3.50 shipping for two. Ronald Baux, 432 Bristol Ct., Scranton, PA 18509. (2)

ELECTRIC DESK - by Alpha Software - includes word processor, data base, spreadsheet, and communications software in one integrated package. \$100. Contact Robert Rode, 908 Carrie Ct., E. Meadow, NY 11554 (516) 485-6687. (2)

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