

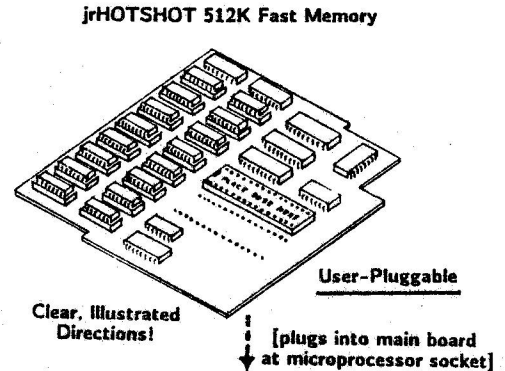
The jrHOTSHOT Multi-function Upgrade Plug-ins for your PCjr

Easy to Install ...new from ES Quality Products

512K or 256K jrHOTSHOT Fast Memory Plug-ins

Adds fast, contiguous memory at addresses 129K and above. Fast Memory increases the PCjr performance to the level of a PC/XT as proven by the speed measurement program sent along on a diskette. If you have a 128K PCjr, the 512K plug-in gives you contiguous memory from 0-640K, or with the 256K upgrade you'll have contiguous memory from 0-384K. No additional power supply is needed.

Simple "device driver" software supplied with the upgrade should be copied once onto your DOS diskette so the Fast Memory is instantly recognized by DOS whenever you turn on your PCjr. The driver works elegantly and transparently. This software also gives your PCjr an 80-column screen immediately. It's easy, especially since everything is fully explained by illustrated directions.



512K jrHOTSHOT Fast Memory: just \$189

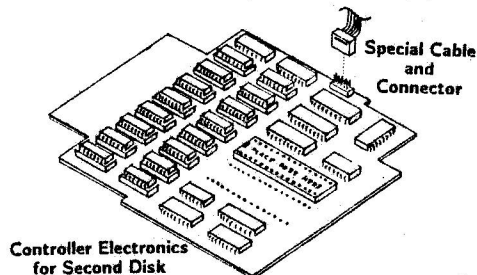
256K jrHOTSHOT Fast Memory: just \$149

P.S. A ramdisk program works great with the Fast Memory to give you a super-fast "ramdisk" (sometimes called a virtual disk) as drive C:, much like a hard disk would be drive C:.

jrHOTSHOT RAMdisk program: just \$8.95

Diskette Controller Plug-in and Cable for second (external) floppy disk

jrHOTSHOT with Second Disk Ctrlr/Cable Option



You can have this useful Controller plug-in alone or as an option to any jrHOTSHOT Fast Memory. Either way, this makes it easy to add a second floppy drive to your PCjr. No additional power supply is needed for this plug-in. We can suggest several economical sources, such as True Data Products (800)-635-0300, that have the external floppy drive housed in a case with power supply for the drive.

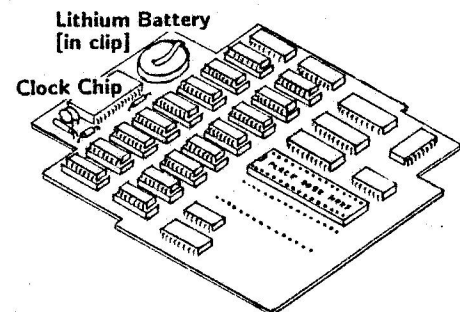
As option to Fast Memory: just \$49

Alone: just \$79

Real-Time Clock/Calendar Plug-in with Lithium Battery Backup

As an option to any Fast Memory or by itself, this is a super clock/calendar with lithium battery. We used the best clock chip possible... it stays accurate even through leap years! Lithium battery has large Ampere-Hour rating for long, long life when the computer is off. Clip holds battery to allow replacement. With software provided, setting the time is simple, and your PCjr will automatically read the time and date whenever switched on. This is so convenient to have, and the time/date stamps on your files will always be accurate and reliable. You'll know which file is the latest version, etc. No additional power supply is needed for this clock/calendar.

jrHOTSHOT with Clock/Calendar Option



As option to Fast Memory: just \$39

Alone: just \$59

ES Quality Products

5311 Mango Blossom Ct.

San Jose, CA 95123

Phone: (408) 224-5574 225-2011

The jrHOTSHOT Upgrade Plug-ins... Order Here!

Warranty Information

The jrHOTSHOT Upgrade Plug-ins are all of highest quality and durability, which we guarantee in writing! We guarantee each jrHOTSHOT to provide 2 years' functionality without material defects, or we'll fix it free. In addition, all are supplied with a 60-day money-back "full satisfaction" trial period. But it's been our pleasant experience that when you plug in a jrHOTSHOT, you'll have lots of people very interested in your "new" PCjr, including yourself!

Order Form and "Factory-Direct" Price List, effective August 25, 1986

Prices subject to change, especially due to uncertain memory chip prices at this time. This form or any separate sheet of paper can be used for ordering.

Description	Price	Quantity	Amount
Single Upgrade jrHOTSHOT's			
512K jrHOTSHOT Fast Memory	only 189.00	_____	_____
256K jrHOTSHOT Fast Memory	only 149.00	_____	_____
jrHOTSHOT Real-Time Clock/Calendar	only 59.00	_____	_____
jrHOTSHOT Floppy Diskette Controller and Cable	only 79.00	_____	_____
Dual jrHOTSHOT Upgrades - Even More Value!			
512K jrHOTSHOT Fast Memory with Real-Time Clock	only 228.00	_____	_____
512K jrHOTSHOT Fast Memory with Diskette Controller/Cable	only 238.00	_____	_____
256K jrHOTSHOT Fast Memory with Real-Time Clock	only 188.00	_____	_____
256K jrHOTSHOT Fast Memory with Diskette Controller/Cable	only 198.00	_____	_____
jrHOTSHOT Real-Time Clock with Diskette Controller/Cable	only 108.00	_____	_____
Full jrHOTSHOT's - Nearly Unbelievable Values!			
512K jrHOTSHOT Fast Memory with Real-Time Clock and Diskette Controller/Cable	only 269.00	_____	_____
256K jrHOTSHOT Fast Memory with Real-Time Clock and Diskette Controller/Cable	only 229.00	_____	_____
Related Quality Items			
RAMdisk Program, for fast RAM drive C: on PCjr or any PC	only 8.95	_____	_____
			Subtotal: _____
			CA residents please add Sales Tax to Subtotal: _____
			Shipment, via First Class Mail: <u>\$2.50</u>
			We can ship C.O.D. if you request. For C.O.D., please add \$1.90: _____
			Total, U.S. dollars: _____

Ship to Address: _____

Please enclose with your order a check or money order to ES Quality Products. ES Quality Products thanks you.

ES Quality Products

5311 Mango Blossom Ct.

San Jose, CA 95123

Phone: (408)-224-5574

225-2011

■ PC TUTOR

program works by swapping the port addresses located in the BIOS data area. This swapping may not work, however, if you use software print buffers that have been loaded before you swap the printers.

DOWN WITH THE DIN

I have been trying to find a way to turn down the volume on the speakers on our XT's. Although the beeps are useful when using software, they disturb people working around the computers.

Is there any way I can turn down the volume without disconnecting the speaker entirely?

Richard Watanabe
Los Angeles, California

The PC speaker is a simple affair. It's just driven by a simple digital square wave. There's no way in software to turn down the volume. You may notice that the speaker response is not linear—different frequencies have different volumes—so it might be possible to have a resident program intercept the BIOS interrupt 10h

■ The PC speaker is a simple affair. There's no way in software to turn down the volume.

"Teletype" routine (which is the only access to the speaker that the BIOS provides) and make the beep a different frequency that is not quite as loud. But many programs have their own beep routines, so this wouldn't be a universal solution.

In hardware, you could put a resistor in series with the speaker, but I'm not sure you'd like to attack the inside of your XT's with a soldering iron. [If you do know how to solder, the job is easy. You might start experimenting to find the right value resistor with a 10-ohm, 1/2-watt type, available at any Radio Shack. —Ed.]

Instead, I recommend a real low-tech solution. Take the covers off the machines, just stick something in front of the speaker, and put the covers back on. A few pieces of

corrugated cardboard should muffle the sound well enough.

THE EIGHTH SLOT

The IBM PC-XT and the IBM Portable

Computer have a motherboard that includes eight slots. I have heard from a couple of people that the eighth slot (the one closest to the power supply) is a little "funny" and that it should not be used. It's the

RACORE

...over 30,000 PCjrs perform like PCs.



add PC performance to your PCjr

Drive Two Plus™ gives the IBM PCjr the performance capabilities of a PC by adding a second drive plus enhancements. Your PCjr can now run PC software.

The unit includes a parallel port, a second 360K disk drive, a clock calendar with battery back-up, additional power to the side bus and a memory expansion slot.

Drive Two Plus \$299⁰⁰
with DMA \$349.

Expand PCjr Memory to 640K

RACORE's expansion board boosts PCjr memory in 256K increments up to 640K. This plug-in board installs in the Drive Two Plus, or the 10/20 MB expansion units.

Memory Expansion Board

256K \$119⁰⁰
512K \$149⁰⁰

10MB Fixed Drive

Similar to the Drive Two Plus, except that the second drive is a 10 MB fixed drive; a version of this drive can also be added as a third drive. **\$795⁰⁰**

20MB Fixed Drive

Similar to the Drive Two Plus, except that the second drive is a 20 MB fixed drive; a version of this drive can also be added as a third drive. **\$895⁰⁰**

Choose from 3 popular keyboards for your PCjr.

Keyboard packages come complete with adapter cable.

PC Style \$ 99⁰⁰

AT Style \$ 119⁰⁰

5151 Style \$ 139⁰⁰

RACORE's continuing commitment to the PCjr.

Since 1983, RACORE has continued to enhance the capability of the IBM PCjr. Our guarantee: If, within 30 days of purchase, any PCjr enhancement product supplied by RACORE fails to perform as promised, we'll replace that product at our expense or, refund the purchase price. No exceptions.

TO ORDER OR FOR INFORMATION

CALL TOLL FREE } CIRCLE 167 ON READER SERVICE CARD

1-800-325-1833

1-800-521-6366 in Calif.

Prices effective: January 12, 1987

BBS: (801) 363-8720  

RACORE Computer Products Inc.
170 Knowles Drive
Los Gatos, CA 95030
Phone (408) 374-8290

RACORE, Drive Two Plus are registered trademarks of RACORE Computer Products, Inc.
IBM, PC, XT, AT, PCjr are registered trademarks of IBM Corporation.

Easy to Install ... new through COMPUTER RESET**The jrHOTOSHOT Upgrade Plug-ins...**

Description	Price
Single Upgrade jrHOTOSHOT's	
512K jrHOTOSHOT Fast Memory	only 189.00
256K jrHOTOSHOT Fast Memory	only 149.00
jrHOTOSHOT Real-Time Clock/Calendar	only 59.00
jrHOTOSHOT Floppy Diskette Controller and Cable	only 79.00

Dual jrHOTOSHOT Upgrades - Even More Value!

512K jrHOTOSHOT Fast Memory with Real-Time Clock	only 228.00
512K jrHOTOSHOT Fast Memory with Diskette Controller/Cable	only 238.00
256K jrHOTOSHOT Fast Memory with Real-Time Clock	only 188.00
256K jrHOTOSHOT Fast Memory with Diskette Controller/Cable	only 198.00
jrHOTOSHOT Real-Time Clock with Diskette Controller/Cable	only 108.00

Full jrHOTOSHOT's - Nearly Unbelievable Values!

512K jrHOTOSHOT Fast Memory with Real-Time Clock and Diskette Controller/Cable	only 269.00
256K jrHOTOSHOT Fast Memory with Real-Time Clock and Diskette Controller/Cable	only 229.00

Related Items

RAMdisk Program, for fast RAM drive C: on PCjr supplied with each 512K or 256K jrHOTOSHOT memory expansion
 RAMdisk Program alone without jrHOTOSHOT memory expansion only \$5.00

DISKETTE Drive (48 TPI, double sided, double density)
 Case and Power Supply for use with jrHOTOSHOT only 155.00

Price List, effective August 25, 1986

Prices subject to change, especially due to uncertain memory chip prices at this time.

Warranty Information

The jrHOTOSHOT Upgrade Plug-in's are guaranteed for 2 years by the manufacturer, ES Quality Products. The Diskette Drive, Case and Power Supply are guaranteed for 90 days by Computer Reset.



**COMPUTER
RESET**

P.O. BOX 461782
 GARLAND, TEXAS 75046

CALL Voice (214) 276-8072

New & Used Computers

OPEN BULLETIN BOARD SYSTEM to BUY, SELL AND TRADE COMPUTERS AND SOFTWARE
 (214) 272 - 7920 300 baud, 8 bits, 1stop bit no parity no password or membership

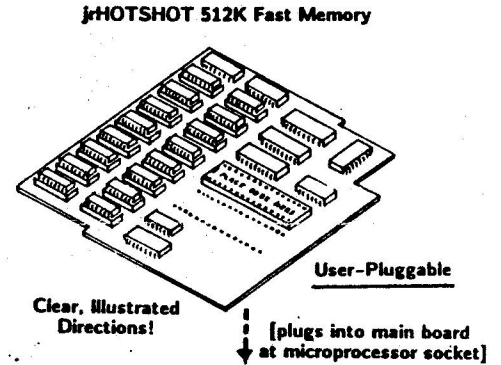
The jrHOTSHOT Multi-function Upgrade Plug-ins for your PCjr

Easy to Install ... new through COMPUTER RESET

512K or 256K jrHOTSHOT Fast Memory Plug-ins

Adds fast, contiguous memory at addresses 129K and above. Fast Memory increases the PCjr performance to the level of a PC/XT as proven by the speed measurement program sent along on a diskette. If you have a 128K PCjr, the 512K plug-in gives you contiguous memory from 0-640K, or with the 256K upgrade you'll have contiguous memory from 0-384K. No additional power supply is needed.

Simple "device driver" software supplied with the upgrade should be copied once onto your DOS diskette so the Fast Memory is instantly recognized by DOS whenever you turn on your PCjr. The driver works elegantly and transparently. This software also gives your PCjr an 80-column screen immediately. It's easy, especially since everything is fully explained by illustrated directions.

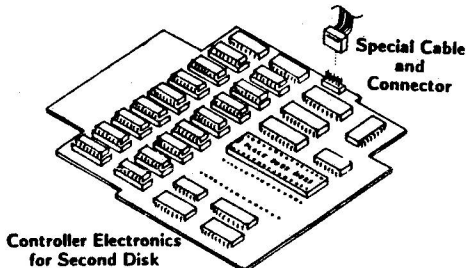


512K jrHOTSHOT Fast Memory: just \$189 256K jrHOTSHOT Fast Memory: just \$149

P.S. A ramdisk program works great with the Fast Memory to give you a super-fast "ramdisk" (sometimes called a virtual disk) as drive C:, much like a hard disk would be drive C:.

Diskette Controller Plug-in and Cable for second (external) floppy disk

jrHOTSHOT with Second Disk Ctrlr/Cable Option

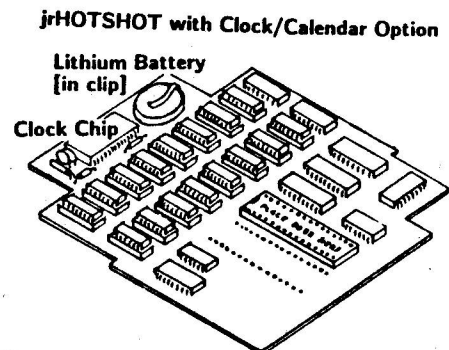


You can have this useful Controller plug-in alone or as an option to any jrHOTSHOT Fast Memory. Either way, this makes it easy to add a second floppy drive to your PCjr. No additional power supply is needed for this plug-in.

As option to Fast Memory: just \$49 Alone: just \$79

Real-Time Clock/Calendar Plug-in with Lithium Battery Backup

As an option to any Fast Memory or by itself, this is a super clock/calendar with lithium battery. We used the best clock chip possible... it stays accurate even through leap years! Lithium battery has large Ampere-Hour rating for long, long life when the computer is off. Clip holds battery to allow replacement. With software provided, setting the time is simple, and your PCjr will automatically read the time and date whenever switched on. This is so convenient to have, and the time/date stamps on your files will always be accurate and reliable. You'll know which file is the latest version, etc. No additional power supply is needed for this clock/calendar.



As option to Fast Memory: just \$39 Alone: just \$59

- - FLOPPY DISK DRIVES - -

2nd DISK DRIVE -- COMPLETE SYSTEM (shown above)
controller uses modem slot, 360K drive in a free
standing case with power supply \$ 239

2nd DISK DRIVE -- DO IT YOURSELF SYSTEM
controller uses modem slot, cable and enabling software
(you supply the drive, case and power supply) \$ 95

2nd DISK DRIVE -- jr HOTSHOT SYSTEM
controller board mounts above microprocessor chip
can be used with IBM PCjr internal modem
- complete system-360K drive in a free standing case
with power supply and enabling software \$ 234
- without disk drive, case and power supply \$ 79

QUADRUN - QUAD Expansion Chasis
- like the RACORE DRIVE II PLUS without DMA
adds 2nd disk drive, clock and parallel port all in
one expansion chassis mounted on top of and beside
the PCjr -limited quantity-

- without memory \$ 249
- with 384K additional for 512K system total \$ 349
- with 512K additional for 640K system total \$ 379

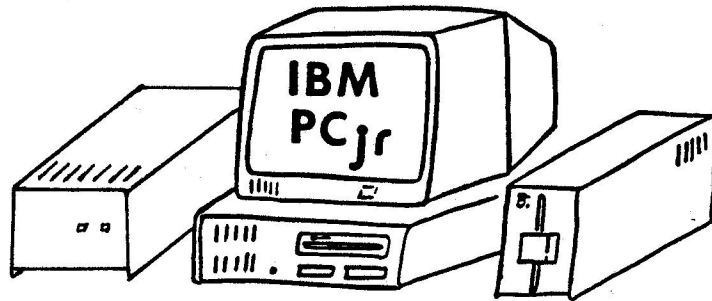
- - HARD DISK DRIVES - -

10 MEGABYTE -- COMPLETE SYSTEM (shown above)
hard disk drive and controller in a free standing case
with power supply and interface adapter for mounting on
the side of the PCjr. This hard drive provides very fast
access to large amounts of stored data and will let
the operator type while the hard drive is being assessed.
Minimun system requirements: 128K, 1 disk drive.
Complete system ready to use \$ 650

20 MEGABYTE -- COMPLETE SYSTEM
same as above with 20 MEG hard drive \$ 750
(With each disk drive system sold we supply a utility)
(disk of selected public domain programs to help the)
(user make better use of the new disk drive addition.)

- - RACORE COMPUTER PRODUCTS - -

DRIVE II PLUS (with DMA) \$ 330
DRIVE II PLUS (without DMA) \$ 290
512K memory board for either DRIVE II PLUS \$ 130
10 MEG DRIVE II PLUS (with DMA) \$ 875
20 MEG drive II PLUS (with DMA) \$ 985
AUDIO AMPLIFIER - sound amplifier to mount inside the
PCjr for use when the computer is operated with a
monitor that does not have sound \$ 25
PC - ID CARTRIDGE - used to change the ID byte
so the software written for the PC / PCjr will act
like it is running on a regular PC. This will
not work on all software \$ 19
KEYBOARD / CABLE ADAPTER - provides a cord for the
PCjr keyboard and an adapter for full sized IBM or
Keytronics keyboards while allowing the use of both
at the same time. This adapter is selective and
will work with very few PC clone keyboards \$ 28



- - " IBM " BRAND ACCESSORY PRODUCTS - -

128K MEMORY EXPANSION (limited quantity) \$ 140
ADAPTER CABLE FOR COLOR DISPLAY
adapts PCjr color display port to a std. DB-9
connector for using non PCjr monitors \$ 15
ADAPTER CABLE FOR SERIAL DEVICES
adapts PCjr serial port to std. DB-25 connector
CARRYING CASE \$ 25
CARTRIDGE BASIC \$ 59
CASSETTE CABLE (usable for joystick adapter) \$ 12
CLUSTER ATTACHMENT \$ 95
CLUSTER CABLE ASSEMBLY \$ 65
CLUSTER SOFTWARE \$ 65
CHICKLET KEYBOARD \$ 19
CHICKLET KEYBOARD OVERLAYS pkg of 10 \$ 1
ENHANCED KEYBOARD \$ 55
KEYBOARD CORD \$ 15
INTERNAL MODEM (300bd with software) \$ 79
PARALLEL PRINTER ATTACHMENT \$ 79
POWER EXPANSION ATTACHMENT \$ 55
REPLACEMENT POWER TRANSFORMER \$ 19
TECHNICAL REFERENCE MANUAL \$ 39
HARDWARE MAINTENANCE & SERVICE MANUAL \$ 55
TV ADAPTER (usable with a VCR to record work,
games, etc. directly from the PCjr) \$ 25
WORD/SOUND (SPEECH) ATTACHMENT \$ 189

JOYSTICK ADAPTER: each cassette cable is supplied with
instructions for using it as an adapter for resistance
type joysticks such as IBM, Radio Shack, Apple. Will
not work with Atari or Ti-99/4A joysticks. Soldering
and a DB-15 or DIN connector required.

- - LARGE KEYBOARDS - -

AT STYLE - similar to the early IBM AT keyboard with
function keys offset to the left and numeric pad offset
to the right, lights for num lock & caps lock, slight
click feel - our most popular keyboard \$ 69
with RACORE KEYBOARD CABLE / ADAPTER \$ 97

NEW "AT" STYLE - similar to the IBM Enhanced AT keyboard
has function keys across the top, separate cursor keypad
at the bottom and numeric keypad offset to the right;
lights for power, capslock and num lock \$ 85
with RACORE KEYBOARD CABLE / ADAPTER \$ 123

- - " NEW / DEMO " COMPUTER SYSTEMS - -

Enhanced IBM PCjr 128K, 1 Disk Drive \$ 350
IBM PC jr Color Monitor \$ 295
with our 30 day warranty

- - SOFTWARE & MISCELLANEOUS - -

IBM CARTRIDGE BASIC \$ 59
LOTUS 123 PDjr cartridge version \$ 125
WORDSTAR 128K PCjr version \$ 39
IBM PCjr TECHNICAL REFERENCE MANUAL \$ 39
IBM PCjr HARDWARE MAINTENANCE & SERVICE MANUAL
(includes advanced diagnostic test plugs) \$ 55
THE jr. SERIES by Oakwood Publishing
jr.FILE - simple file management
jr.DESK - desk organizer,time accountant/calendar/
notepad/calculator/word processor
jr.WORLD TRIATHLON - typing,spelling & recall
educational game
jr.MAESTRO - teaches musical theory & composition
plays music and prints score
sold only in the set of 4 programs \$ 65

NEC V-20 MICROPROCESSOR - \$ 19
improved replacement for the PCjr's 8088 that speeds
up the computer in many applications and consumes less
power. We recommend this for all jrHOTSHOT upgrades.
Most 8088's are in a socket but some are soldered in
place and will require removal by a qualified technician.
Check your computer before ordering. Each V-20 chip
is provided with a speed test program .
We can remove the 8088 from your computer and install
a socket for \$ 45 plus shipping.

- - STAND ALONE MODEMS - -

LYNKERS 300/1200 (Hayes Compatible) with cable,
IBM Adapter Cable for Serial Devices and software,
QMODEMjr, PC-TALKjr, & XMODEMjr \$ 169
NOVATION Smart-Cat PLUS 300/1200 \$ 439
NOVATION Professional 2400 \$ 749
SMART TEAM 300/1200 (Hayes look alike) \$ 189

- - MEMORY EXPANSION SERVICE - -

We can expand the memory capacity of 128K sidemounted
memory expansion units to 512K for a system total of 640K
Upgrades normally take 15 working days or less after
we receive your working unit:

IBM or Tecmar jr-Captain expansion upgrade \$ 155
Microsoft booster expansion upgrade \$ 175

If you own two of the IBM 128K sidemount expansion units
we offer a \$ 50 trade in credit for working units toward
the cost of upgrading your second expansion unit.

ALL PRICES SUBJECT TO CHANGE WITHOUT NOTICE

FLOPPY DISK DRIVE:
Double Sided Double density 360K Disk Drive Mounted in a stand
alone cabinet with its own power supply.

CONNECTING CABLE:
Cable joining the auxilliary control card to the existing internal
disk drive and to the new 2nd disk drive. IBM thoughtfully provided
a slot for this ribbon cable on the right side of the computer
case near the rear.

ENABLING SOFTWARE:
Files for the 2nd disk drive are provided for reconfiguring
your DOS boot disk to recognize the 2nd disk drive, and to
automatically enable the 80 column mode.

MODEM SLOT DISK DRIVE CONTROL CARD:
This card plugs into the modem slot inside the computer and connects
to the existing disk drive control card by the cable previously used
for the internal disk drive. With this system is usable in conjunction
with an external modem ty using the IBM adapter cable for serial devices.

jrHOTSHOT DISK DRIVE CONTROL CARD:
This type of auxilliary card fits below the disk drive and plugs into
the microprocessor or 8088 chip socket. The microprocessor is inturn
plugged into this card. The 8088 chip can be replaced with a NEC V-20
chip in this card to speed up the PCjr's operation about 20%. With
this disk drive system the PCjr internal modem can be used.

COMPATIBILITY:
Either of these disk drive expansions are operable with side
mounted memory additions such as those manufactured by IBM,
AST, TECHMAR, and IMPULSE.

WARRANTIES: AUXILIARY CONTROL CARD AND CABLE - 1 YEAR
2nd DISK DRIVE AND POWER SUPPLY - 90 DAYS

- - PC-JR REPAIR/EXCHANGE SERVICE - -

Internal Power Supply Card \$ 69
Disk Drive Control card \$ 79
Disk Drive alignment/repair \$ 65
64K Memory and Video Expansion card \$ 69
Infared Keyboard Encoder Card \$ 55
Main Logic Board \$ 195

prices are for the exchange of parts in original
and unserviced or modified condition

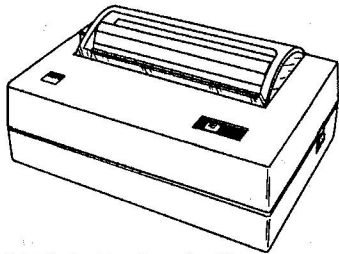


NEW & USED COMPUTERS
AND ACCESSORIES

P.O. BOX 461782
GARLAND TEXAS 75046
CALL VOICE (214) 276 - 8072

OPEN BULLETIN BOARD SYSTEM TO BUY, SELL, AND TRADE COMPUTERS AND SOFTWARE
(214) 272-7920, 300 baud, 8 bits, 1 stop bit, no parity, no password or membership

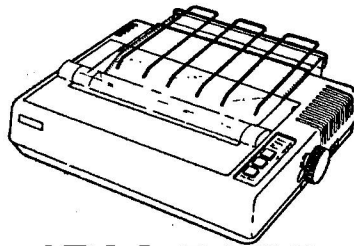
PRINTERS



IBM 5181 Compact Printer (New)

- 8 wire Thermal printing
- 50 characters per second
- Normal, compressed, and double-wide printing
- Serial Interface for PCjr (PC XT adapter available)
- Friction feed for roll paper (Thermal single sheet also)

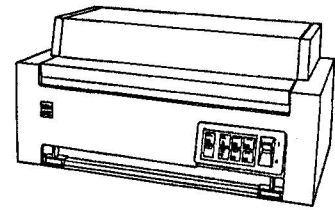
Only \$59



IBM 5152 Graphics Printer (Demo)

- 9 pin Dot Matrix printing
- 80 characters per second
- Normal, compressed, and double-wide printing with super/sub-scripts
- Parallel interface for PCjr, PC, XT, AT & compatibles
- Tractor feed for continuous form paper

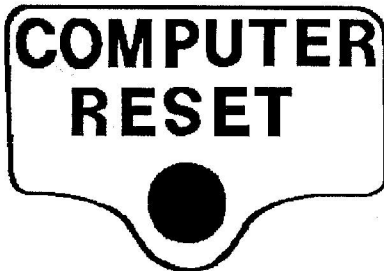
Only \$129



IBM 5182 Color Printer (Refurb.)

- 9 pin Dot Matrix printing
- Up to 200 char. per second
- Normal, compress., double-wide, and proportional with super/sub-scripts and NLQ
- Parallel interface for PCjr, PC, XT, AT & compatibles
- Rear & bottom tractor feed, & front single sheet feed
- Wide carriage

Only \$339



NEW & USED COMPUTERS
AND ACCESSORIES

P.O. Box 461782
Garland, TX 75046-1782
VOICE (214) 276-8072
FAX/BB5 (214) 272-7920

IBM PCjr SPECIAL ITEMS
> MEMORY EXPANSIONS
> SECOND FLOPPY DRIVES
> FULL-SIZE KEYBOARDS
> AND MUCH, MUCH MORE!

L E TEAGUE
17707 LACEY DR
EAGLE RIVER, AK 99577

BULK RATE
U.S. POSTAGE
PAID
PERMIT #172
GARLAND, TX

IBM PCjr Accessories

IBM PCjr Joystick	\$ 29
128K Memory Attachment	\$ 179
Parallel Printer Adapter	\$ 69
Keyboard Cord	\$ 15
Serial Port Adapter Cable	\$ 20
Color Display Adapter Cable	\$ 15
Internal 300 Baud Modem	\$ 29
TV Adapter	\$ 19
Carrying Case	\$ 19
Cassette Cable	\$ 12
Power Expansion Attachment	\$ 75
PCjr Enhanced Keyboard	\$ 55
PCjr Monitor (Refurb)	\$ 239
PCjr Computer (refurb)	\$199

REPAIR

Parts and Service Available
Computers & Monitors
CALL or See Our Catalog

KEYBOARDS

101Key Keyboard & Adapter	\$ 134
Adapter for Full-Size Keyboard	\$ 49
Numeric Keypad	\$ 39
Mouse with Dr Halo & Adapter	\$ 79
Mouse Systems Mouse	\$ 59

VIDEO

Thin Font Video ROM	\$ 19
Dual Font Video ROM	\$ 29
PCjr Monitor to PC Adapter	\$ 49
Tilt & Swivel Monitor Stand	\$ 19

OTHER

NEC - V20 Microprocessor	\$ 19
Dual Cartridge Adapter	\$ 29
Quicksilver Cartridge	\$ 29
Cartridge Clock	\$ 34
6 Outlet Surge Protector	\$ 15
Parallel Printer Cable	\$ 19
Serial Extension Cable	\$ 19

2400 Baud External Modem with all
Cables and Software for PCjr \$ 179

MISCELLANEOUS

BINDER with SLIPCASE - same
Page Size as the IBM DOS Binder
1 -1/8" Ring Size \$ 2.49 each
1 -1/2" Ring Size \$ 3 each

PRINTER ACCESSORIES

IBM 4201 Series Proprinter Buffer Kit with Installation Tool	\$ 10
Sheetfeeders	
Quietwriter I & II	\$ 149
Tandy Daisy Wheel II	\$ 95
EPSON FX-185/286	\$ 39
EPSON LQ -1000	\$ 39
EPSON LQ -1500	\$ 79
Tractors	
EPSON FX - 80	\$ 39
IBM Quietwriter I & II	\$ 39
Tandy DMP 420	\$ 29

IBM CONVERTIBLE LAPTOP

Accessories & Parts

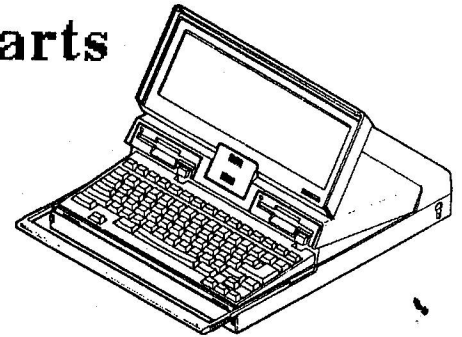
51400-003 Computer (New) with
512K & Backlit Screen

\$ 895	
128K Memory Card	\$ 79
256K Memory Card	\$ 225
384K Memory Card	\$ 295
Serial / Parallel Adapter	\$ 120
CRT Adapter	\$ 149
1200 Bd Modem w/Procomm	\$ 75
Portable Printer	\$ 165
Portable Printer Cable	\$ 15

Battery Charger	\$ 23
Battery Pack	\$ 89
Auto Power Adapter	\$ 12
Standard Carrying Case	\$ 39
9" Monochrome Monitor	\$ 115
13" Color Monitor	\$ 349

REPAIR

Parts and Service Available
Computers & Monitors
CALL for Information



USED & DEMO

COMPUTERS, MONITORS, PRINTERS ETC.

THIS IS ONLY A SAMPLE OF WHAT IS AVAILABLE
USED & DEMO STOCK CHANGES CONSTANTLY

IBM PC 256k Mono Monitor, 2 Floppies & Kbd	\$ 495
IBM PC/AT MODEL 339 512K, 1.2Mb Floppy, 30Meg Hard drive and IBM Monochrome Monitor (New)	\$ 1595
IBM Executive Workstation (Special PS2/Mod 30) with Attached Monitor Mono/Color	\$ 495 / \$ 695
Compaq Portable 2 Floppies, 256K (Used)	\$ 450
Compaq Portable II 2Flopies, 640K (New)	\$ 1100
Compaq Portable 386, 1 Floppy, 40Meg (New)	\$ 3900
Compaq DeskPro 286/12-Mod 20 (Demo)	\$ 1895
Compaq Deskpro 386/s -Mod 20 (Demo)	\$ 2350
DEMO OKIDATA PRINTERS (just arived)	CALL

TRANSPARENT 710

PC-XT Compatible

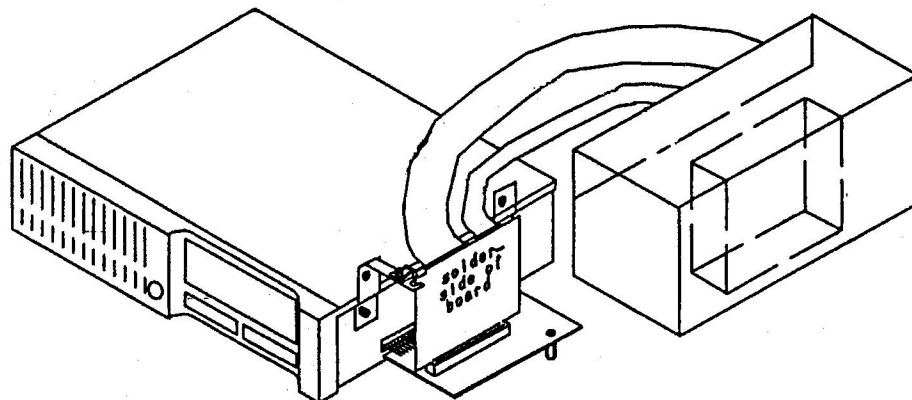
10 mhz by ACER

\$ 399

NEW

INCLUDES - (limited quantity)
101 Key Keyboard - 360K 5.25" Floppy - 1 Meg RAM
Video Output for CGA Color or Mono Graphics
Serial Port - Parallel Port - 4 XT Expansion Slots
and MS DOS 3.3 with GW- BASIC
OPTIONS - Mono Monitor \$ 100 - CGA Color
Monitor \$ 235 - 20 Meg Hard Drive \$ 260 - Second
360K Drive \$ 90 - Second 720K Disk Drive \$ 100

PCjr Universal Hard Disk System

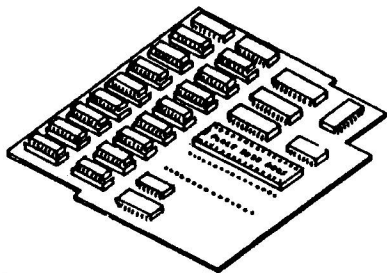


This new Hard Drive System for the PCjr attaches to the right-hand side of the computer (illustration shows it separated for clarity). It is powered by a standard XT power supply (included), and comes complete with everything you need. The hard drive is self-booting, and comes already formatted with DOS 3.30, ready to use!

20 meg - \$495

40 meg - \$675

jr HOTSHOT MEMORY EXPANSIONS



0K Memory Only	\$125
256K Memory Only	\$149
512K Memory Only	\$199

Available jrHotshot Options

Clock/Calendar with Battery	ADD	\$ 35
2nd Disk Drive Controller	ADD	\$ 35
360K 5.25" 2nd Drive for above		\$155
720K 3.5" 2nd Drive for above		\$165
(720K drive requires DOS 3.20 or later)		

Floppy Drives

REPLACEMENT DRIVES

Genuine IBM Replacement Drive	\$125
Clone Replacement Drive	\$ 96
Clone 720K 3.5" Replacement Dr.	\$109
(720K drive requires DOS 3.20 or later)	

SECOND DRIVE ADD-ON SYSTEMS

These use the Internal Modem Slot for a controller to operate a second floppy drive. The drives are mounted in a stand-alone case, external to the PCjr.

360K 5.25" 2nd Drive System	\$179
720K 3.5" 2nd Drive System	\$199
(720K drive requires DOS 3.20 or later)	

ORDERING INFORMATION

Phone orders are COD only, unless from a school, approved corporation, or government agency. Money order or cashier's check will expedite mail-in orders. Minimum shipping charge is \$5. See the front cover for phone numbers and address.

PC in & PC Software

LIMITED QUANTITIES
Genuine IBM Software at
Below-Cost Prices!
First Come - First Served!

GAMES

6024087 Mouser (c)	\$12
6024088 Scuba Venture (c)	\$12
6024091 Crossfire (c)	\$12
6024092 Mine Shaft (c)	\$12
6024093 King's Quest I	\$19
6024163 Jumpman	\$12
6024173 Zyll	\$12
6024290 Trivia 101	\$12
6024291 TV & Cinema 101	\$12
6024295 Touchdn Football	\$12
6024296 PC Pool Challenge	\$12
6024303 Shamus	\$12

PERSONAL FINANCE

6024130 Home Budget Jr.	\$12
6024301 Managing Your Money with the PCjr ver.1	\$29

SPREADSHEET & DATA BASE

6187305 Lotus 123 1A Jr (c)	\$99
0090051 Lotus 123 2.01 Upgrade (disks & manuals)	\$139
5020004 Lotus 1A Installation Kit for PCjr	\$19
14069 Lotus Maintenance Kit (2.01 disks only)	\$59
5020005 Number Works and Executive Writer	\$29
6187170 Supercalc 3 - PCjr	\$49
6024004 Visicalc 1.2	\$49
6024148 IBM Planning Ass't	\$59
6024461 IBM Planning Ass't 2.0 (3.5 & 5.25" disks)	\$79
6024145 IBM Filing Ass't	\$59
6024457 IBM Filing Ass't 2.0 (3.5 & 5.25" disks)	\$79
6024146 Reporting Ass't	\$59
6024459 Reporting Ass't 2.0 (3.5 & 5.25" disks)	\$79
6024147 IBM Graphing Ass't	\$59
6024458 IBM Graphing Ass't 2.0 (3.5 & 5.25" disks)	\$79
6024462 Project Assistant	\$59

WORD PROCESSING

6024071 Homeword Jr.	\$39
6187243 Electric Desk Jr (c)	\$89

6187242 Electric Desk PC	\$89
5020002 Wordstar Jr.	\$39
6024144 IBM Writing Ass't	\$59
6024460 IBM Writing Ass't 2.0 (3.5 & 5.25" disks)	\$79
6086002 Samna Word III	\$59
6024188 IBM Displaywrite I	\$49
6024189 IBM Displaywrite II	\$59
6024198 Displaywrite II v.1.1	\$79
6024845 IBM Displaywrite III 5.25" disks	\$79
6489766 Displaywrite III v.1.10 3.5" disks	\$79
59X9958 Displaywrite Ass't	\$49
6024071 WordProof	\$19

IBM ASSISTANT SERIES ver 1

Special Package Price \$179

This special package includes:

- Writing Assistant
 - Filing Assistant
 - Planning Assistant
 - Graphing Assistant
 - Reporting Assistant
- plus your choice of either
- Home Assistant Solutions OR
 - Accounting Assistant Solutions
- (Individual Titles are \$59 each)

GRAPHICS

6024299 Jr. Colorpaint	\$19
6024082 Animation Creation	\$15
6024089 IBM Drawing Ass't	\$49
6316998 IBM PC Storyboard	\$69
6024401 PC Storyboard +	\$225
6187323 Picture Pak - Holidays for Storyboard	\$49
6181340 Picture Pak - Eye Openers	\$49
6317034 IBM Slide Write	\$49
Tecmar PC Paintbrush Book	\$7

LANGUAGES

6024129 IBM BASIC Primer	\$12
6024116 BASIC Made Easy	\$12
6024003 BASIC Compiler 1.0	\$69
13FGBAS10 Turbo BASIC	\$39
13FGBAS11 " "	\$39
14FGCOM TurboC User Gd	\$39
MICROSOS-C Microsoft C Optomizing Compiler	\$189
6024193 IBM Macro Asm. 2	\$39

6280077 IBM Macro Asm. 2 (3.5" disks)	\$49
6024025 CP/M 86	\$49

DOS & UTILITIES

60224213 IBM DOS 2.10 new	\$40
" " " used	\$25
6280058 DOS 3.2 (3.5" disk)	\$49
6024213 IBM DOS Tech Ref ver. 2.10 - 3.10	\$39
CPQDOS Compaq DOS 2.1	\$49
6024111 Fixed Disk Organiz.	\$19
6024143 Prof. Debug Utility	\$49

EDUCATIONAL

6024069 Computers & Com.	\$15
6024066 Karel the Robot Software	\$89
Textbook	\$4
6024072 Monster Math	\$19
6024112 Adventrues in Math	\$19
6024094 Bumble Games	\$23
6024095 Juggles Butterfly	\$19
6024096 Bumble Plot	\$23
6024097 Gertrude's Secrets	\$23
6024099 Rocky's Boots	\$29
6024075 Teacher's Quiz Designer	\$35
6024113 Private Tutor 2.00	\$35
6024078 Writing Private Tutor Courses Book	\$6
6024158 Crypto Cube	\$23
6024116 BASIC Made Easy for the IBM PCjr (book)	\$8
6024013 Typing Tutor	\$12
6024067 LOGO 1.0	\$89
1502229 LOGO: Programming w/Turtle Graphics (book)	\$8
6024109 Turtle Power	\$29
6024079 Turtle Power Book	\$6
6024121 Hydrologic Cycle	\$29
6024122 Ground Water	\$29
6024123 Surface Water	\$29
6024124 Moisture in the Atmosphere	\$29

NOTE

All software is on 5.25" disks
unless otherwise noted.
(c) Denotes Cartridge Program
Call, FAX, or Write for Our
Catalog with Full Descriptions!

New Product Announcement

jrBUS-Mouse

**At Last, a
Mouse for the
PCjr That
Does Not Use
the PCjr's
Serial
Connector!**

Features

- Does not use the PCjr's serial connector.
- Not an imitation. This is the genuine Microsoft Mouse made by Microsoft.
- 400 Points Per Inch Resolution
- Only requires an area of your desk the size of a postage stamp to move anywhere on the screen
- Adjustable acceleration and sensitivity ranges
- Includes the latest Microsoft Mouse Drivers
- Compatible with all external modems, serial printers, and all other PC Enterprises products.
- One Year Warranty through PC Enterprises.
- PC Enterprises quality, service, and continuing commitment to support the PCjr.

Until now, it was not possible to add a mouse to the PCjr without causing considerable expansion limitations. This was because all Mouse products offered for the PCjr were serial mice - and that meant they had to be plugged into the PCjr's serial (S) connector.

Here's the problem. The PCjr only has one S connector. This meant that by adding a mouse, you would not be able to add and use at the same time another serial device such as an external modem, serial printer, or plotter. Most PCjr users therefore found themselves asking "Should I add a Mouse or a Modem?"

Introducing jrBus-Mouse. The first and only stand alone mouse ever offered for the PCjr that's 100% compatible with all external modems and other serial devices because jr-Bus Mouse is not a serial device.

This product is now available thanks to the combined efforts of Microsoft and PC Enterprises. All Mouse products are not the same. The Microsoft Mouse has always been the one all others are judged by - and with one touch, you'll know why. With its sleek and elegant design the Microsoft mouse is easier to maneuver and more comfortable to hold.

The jr-Bus Mouse also includes a PCjr bus mouse sidecar - a special interface designed and manufactured specifically for the PCjr by PC Enterprises. The bus mouse sidecar plugs into the PCjr's sidecar expansion bus and is compatible with all other IBM, PC Enterprises, and most other brand PCjr add-on products.

jrBUS-MOUSE

Catalog # 14044

Price: \$149

jrBUS-MOUSE AND MICROSOFT PAINT PROGRAM

(requires 512K and two disk drives or one hard drive)

Catalog # 14045

Price: \$169

New Product Announcement!!

2400 Baud Internal Modem

Features

- Plugs into the Internal Modem Slot - does not use the PCjr "S" port
- 2400 Baud Capability
- 100% Hayes Command Set Compatible
- 100% Address and Interrupt Compatible with PC Modems
- Dial and Answer Calls Automatically
- Pulse or Touch-Tone dialing
- Pause or wait for a second dial tone (when dialing through a PBX) or for a go-ahead tone (when dialing through long-distance telephone companies like MCI and Sprint)
- Bell 103/212a compatible
- CCITT V.21/V.22/V.22bis compatible
- Nonvolatile Memory
- Built in Speaker

Most modem users prefer internal modems to external modems because internal modems do not take up any space on your desk. However, there's a much more important reason why PCjr users should always purchase an internal modem.

Internal modems plug into a slot inside the computer and therefore do NOT use the computer's RS-232 serial port (the S connector). This is important because the PCjr only has one RS-232 port, and there are lots of other devices which can be connected to your computer through this port. This means if you add an internal modem, you'll still be able to use a serial mouse, tracker ball, printer, or other RS-232 serial device. If you select an external modem you will not be able to easily install or use any of these other devices at the same time as your external modem.

2400 Baud Capability

The PC Enterprises Internal Modem can operate at 110, 300, 600, 1200, or 2400 baud for maximum compatibility with other modems including the IBM internal modem. However, when operating at 2400 baud our modem is eight times faster than IBM's internal modem.

The following chart illustrates the advantage of 2400 baud modems. We have listed the fastest possible time a file transfer could take place for three different situations. Actual times could be longer due to telephone line noise.

Program/ File Name	Size	300 Baud IBM Modem	2400 Baud PCE Modem
JRCONFIG.NRD	3169 KB	1 min 45s	12 seconds
JRCONFIG.DOC	24027 KB	13 min 21s	1 min 40s
One Entire Disk	362496 KB	3 hours 21 min	25 min 6s

As you can see, if you're now using the IBM Internal Modem and you purchase the PC Enterprises Internal Modem the new modem can pay for itself with the money you'll save on long distance phone calls.

Hayes Command Set Compatibility

The PC Enterprises Internal Modem is completely Hayes command set compatible. This means you will not need special communication software to use this modem. It recognizes all the Hayes AT commands and is therefore compatible with industry standard communication software packages.

Address and Interrupt Compatible

Our Internal Modem is always recognized as COM1. It also uses the same hardware address (3F8h) and interrupt request (IRQ4) as COM1: uses on an IBM PC.

Nonvolatile Memory

Instead of using DIP switches to store your preferred operation set-up we use nonvolatile memory. This offers significant advantages as it lets you change defaults with keyboard commands - saving you the trouble of disassembling your computer. The nonvolatile memory lets you store communication parameters, the compatibility standard (Bell or CCITT), dialing method (pulse or tone), speaker volume, and numerous other things you may want to occasionally change. Each time you power on your modem, or reset the modem, the modem will retrieve the default operating characteristics that you selected from its nonvolatile memory.

Built in Speaker

Lets you hear a call being dialed, the ringing of the remote telephone, a busy signal (if any), and a brief carrier signal (if data connection is established) when you use your modem to originate a call. The speaker volume can be set manually and adjusted on demand from the keyboard.

Available soon-call to determine availability.

2400 Baud Internal Modem

Catalog #75517 Price: \$199

For a limited time only, when you purchase the PC Enterprises 2400 Baud Internal Modem, you'll also receive at no additional charge a FREE CompuServe Subscription with a \$15 usage credit and also a free Prodigy Starter Kit which is valued at \$25 when purchased separately. Special limited time offer. May be withdrawn without notice.

SO WHERE IS CARMEN SANDIEGO?

Expand your horizons while you have fun with the Carmen Sandiego series by Broderbund Software. In these educational and entertaining games you travel through Time, Europe, the World, and the USA looking for Carmen Sandiego. In your travels, history is brought to life highlighting people, events, inventions, cities, geography, economy, and cultures.

PHOTO
where in the world

PHOTO
where in the USA

WHERE IN TIME IS CARMEN SANDIEGO?

16-color graphics with PCE System Board Modifications!

Carmen is on another exciting detective chase far into the past. She is somewhere between 400 A.D. and the 1950s. History is brought vividly to life highlighting leading people, events and invention. Use the New American Desk Encyclopedia (included) to solve the case. 16-color graphics with PCE-System Board Modifications!

*Requires 512K and 2 Disk Drives
Runs best with Speed-Up Board and Mouse*

Catalog #86619

List \$49.95 Our Price \$37.46

WHERE IN EUROPE IS CARMEN SANDIEGO?

16-color graphics with PCE System Board Modifications!

Carmen strikes again! Track Carmen and her gang across 34 European nations using the Concise Atlas of Europe" (included). While traveling through the European nations you will learn about geography, history, economy, and culture. 16-color graphics with PCE System Board Modifications!

*Requires 384K and 1 Disk Drive
Runs best with Speed-Up Board*

Catalog #86620

List \$49.95 Our Price \$37.46

WHERE IN THE WORLD IS CARMEN SANDIEGO?

The metropolis awakens to find the Statue of Liberty's torch gone... Stolen! There are 10 possible suspects, 30 cities and nearly 1000 clues. Decipher clues by looking up facts in the World Almanac (included). A different game every time you play.

*Requires 512K and 1 Disk Drive
Runs best with 640K, 2 Disk Drives, Speed-Up Board, Mouse, or Joystick*

Catalog #86611

List \$49.95 Our Price \$37.46

WHERE IN THE USA IS CARMEN SANDIEGO?

The sequel to "Where in the World is Carmen Sandiego?". Research clue information in Foder's USA travel guide which provides maps of each state as well as specific state by state descriptions. A total of 16 suspects, 50 states and more than 1,500 clues. Thousands of random games.

*Requires 512K and 1 Disk Drive
Runs best with 640K, 2 Disk Drives, Mouse or Joystick*

Catalog #86612

List \$49.95 Our Price \$37.46

EDUCATIONAL SOFTWARE

SUPER SOLVERS: OUTNUMBERED

Requires 512K and 1 Disk Drive
Catalog #86211

List \$49.95 Our Price \$37.46

Recommended for Ages 7-12. Collect clues that will lead you to the hideout of the Master of Mischief. This fun-filled game combines arcade action with word problems that use charts, lists and graphics to help children analyze and solve basic math problems in multiplication, division, addition and subtraction. The "Drill for Skill" game lets players practice math facts

OUTNUMBERED

Runs best with 640K, 2 disk drives and Speed-Up Board. 16-color graphics with PCE System Board Modifications!

SUPER SOLVERS: MIDNIGHT RESCUE

Requires 512K and 1 Disk Drive
Catalog #86212

List \$49.95 Our Price \$37.46

Recommended for Ages 8-11. You have until midnight to discover the culprit who is splashing disappearing paint on the school. Midnight Rescue helps develop your child's reading and thinking skills; reading for the main idea, remembering key facts, gathering meaning and drawing conclusions. Your child will have an appreciation of reading that will last forever.

MIDNIGHT RESCUE

Runs best with 640K, 2 disk drives and Speed-Up Board. 16-color graphics with PCE System Board Modifications!

SUPER SOLVERS: TREASURE MOUNTAIN

Requires 512K and 1 Disk Drive
Catalog #86213

List \$49.95 Our Price \$37.46

Recommended for Ages 5 thru 9. Something peculiar is happening on Treasure Mountain! The Master of Mischief is back and has stolen the enchanted crown and is taking all the gold on the mountain for himself. Stop the Master of Mischief by answering questions from the local elves, who will assist you in finding the hidden treasures. This exploratory game will help enrich your children's reading, thinking, math and science skills.

TREASURE MOUNTAIN

Runs best with 640K, 2 disk drives and Speed-Up Board. 16-color graphics with PCE System Board Modifications!

SUPER SOLVERS: CHALLENGE OF THE ANCIENT EMPIRES

Requires 512K and 1 Disk Drive
Catalog #86214

List \$49.95 Our Price \$37.46

Recommended for Ages 10 & UP. Challenge your mind as you explore ancient civilizations. The world's most priceless artifacts were stolen by thieves centuries ago. These artifacts reveal the secrets of the ancient world and are buried far beneath the desert sands. You must recover the priceless artifacts by discovering the secrets of the caverns and chambers, fearlessly confronting menacing cave creatures and facing the final challenge.

CHALLENGE OF THE
ANCIENT EMPIRES

16-color graphics with PCE System Board Modifications!

WORD MUNCHERS

Requires 512k and 1 Disk Drive
Catalog #86215

List \$44.95 Our Price \$37.46

Recommended for ages 6 to adult. Word Munchers is an exciting game to help children learn basic vowel sounds. Choose from hundreds of gameboards. As your child's skills increase, the gameboards become more complex and challenging.

WORD MUNCHERS

Runs best with a joystick.

THE CHILDREN'S WRITING & PUBLISHING CENTER

Requires 384K and 1 Disk Drive
Catalog #86216

List \$69.95 Our Price \$52.46

Recommended for Ages 8-14. A productivity program that will enable students to produce illustrated reports, stories, newsletters, and more. Features word processing, picture selections and page design capabilities for home or school use.

THE CHILDRENS
WRITING AND
PUBLISHING CENTER

Runs best with 2 disk drives. 16-color graphics with PCE System Board Modifications!

Whats New

Last years "Sneak Peek" Product Preview proved beyond any doubt PCjr owners wish to continue expanding. Thousands of entries were received. In response, PC Enterprises would like to provide you with this preview of new products that are in the works. PC Enterprises intends to introduce more new PCjr products this year than ever before.

Most important of all, we'd like to thank the PCjr community for their continued loyal support. It's our loyal following of PCjr owners that permits us to continue developing new products, while other PCjr specialists fade away.

Every product listed on this sheet has already been prototyped and thoroughly tested. Each product is either available now or expected to be available soon. Watch for our new product announcements or call to determine availability.

We knew the most important new PCjr product we could produce would be a graphics adapter that would be 100% compatible with adapters used in other computers.

At first we thought EGA was the way to go. Almost all programs today support EGA, and PCjr users could run most EGA programs without buying another monitor.

But why stop with EGA? Why not build two products in one? One connector for the those who only want EGA and decide to keep their PCjr Color Display. And one connector for others who want the ultimate in computer graphics: VGA! Who could resist 132 columns of text, 70 lines, and graphics displayed in 256 colors?

So that's just what we did. And whether you keep your PCjr Color Display and settle for 16-color EGA graphics or whether you go the whole nine yards and upgrade to VGA - we think you'll agree our VGA sidecar is simply a sensational new product.

VGA graphics are the same graphics used by IBM's PS/1 and PS/2 computers. The difference between existing PCjr graphics and VGA graphics simply can not be described in writing. Be sure to read the VGA page of our catalog for more information.

Coming Soon!!

- VGA Sidecar
- 2400 Baud Internal Modem
- Turbo-Drive
- Optical Scanner
- Video Capture Board
- jrBUS-Mouse
- External jrDrive Power Supply

We're also very excited about our new 2400 Baud PCjr Internal Modem. This state of the art modem transfers information 8 times faster than the 300 Baud IBM Internal Modem and has all the features you'd expect. Best of all, it can pay for itself with the money you'll save on long distance phone calls. And of course, its 100% Hayes Compatible.

The Turbo-Drive is perhaps the most innovative new product we've ever introduced. Turbo-Drive (code name 5NC) is a non volatile memory sidecar that adds a self booting one Megabyte solid state disk drive to your PCjr.

You'll be able to copy and install programs on the Turbo-Drive exactly the way you would if the Turbo-Drive was a hard drive. But, when you run software from the Turbo-Drive, you'll know the difference. Turbo-Drives' access time specification is thousands of times faster than even the fastest hard drive available today!

While further exploring our catalog you'll see still another new PCjr product. The PCjr Optical Scanner allows you to copy images from paper to your computer. Once in your computer you can save, edit, and print these images. You can even send image files by modem to another computer! We're sure you'll have lots of fun with our PCjr Optical Scanner.

And we're not done yet. How about a Video Capture Board? With this product you'll be able to connect a television, video camera, or VCR to your PCjr.

A B&W image in 256 grey levels at 256 DPI can then be acquired instantaneously with a single keystroke. You'll be able to view the image on the screen. You can then enhance the image with software that comes with the board or with any software that supports 256 grey scale TIFF or PCX files. You'll even be able to print images with any IBM Graphics compatible dot matrix printer!

Let your imagination explore the countless opportunities. Imagine printing

captured images on iron-transfer paper for uses which range from customized X-MAS cards to T-Shirts! We think PCjr users will have lots of fun with this product too!

And there's more. Because as you run more complex software sooner or later you're going to want a mouse. And when you do add a mouse you'll certainly want one that doesn't require the use of the computer's only serial port! We think our new jrBUS-Mouse is the mouse you'll select.

And with all these new PCjr products, sooner or later you'll need a larger power supply. So we designed a new External Junior Drive Power Supply. This all-new product works with any PCjr regardless of whether you've already started to expand. The External Junior Drive Power Supply provides 150 Watts of power and even we think that's plenty of power for all the PCjr products you'll ever need.

So stick with PC Enterprises and you'll always be able to add the latest computer products without ever worrying about compatibility. And, backed by your continued support, 1992 will promise to be even better than 91!

Good News For Racore, Rapport, and Quadram Users

On October 5, 1990 Racore Computer Products Inc. announced that the support and service for their Drive II line of products for the IBM PCjr has been transferred to PC Enterprises. The good news for those who use Racore products is that because PC Enterprises will not only continue Racore's quality support and service, but can now bring about increased compatibility between the two product lines.

Racore was one of the first and perhaps the most prominent company to ever develop, manufacture, and market PCjr products. The Racore Drive II Enhancement Package proved itself as a top of the line product right from the beginning. It has been sold to tens of thousands of PCjr owners.

In addition, Racore has also manufactured hard disk drive expansion systems, a PC Keyboard Adapter, an external speaker, and a PC Identifier cartridge. All are proven products which have passed the test of time.

PC Enterprises will now provide support and service, warranty as well as non-warranty, for all PCjr add-on products manufactured by Racore, except Local Area Networking (LAN) products. This includes Racore products manufactured under the "Rapport" and "Quadram" names.

Racore users who experience any difficulty concerning installation, use, or compatibility of Racore products should now contact PC Enterprises' customer service department. Our staff will be happy to assist you and to provide all levels of service and support that you might need - exactly the way we would if you had purchased the products directly from PC Enterprises.

Previously Racore products were not 100% compatible with our products. Those who used Racore products could not easily add a PC Enterprises Junior Drive III System or hard disk drive.

Things have now changed. Racore has now shared what was previously proprietary technical information about their products with PC Enterprises. This means PC Enterprises can now support those who use Racore products better than ever before.

Already, PC Enterprises has started planning several new PCjr products and modifications to eliminate compatibility problems between the two product lines. In fact, as you read through this catalog you'll see several of these products already!

The first allows Racore, Rapport, and Quadram Drive II Enhancement System users to attach a 720K (3 1/2 inch) disk drive as their third floppy drive. You'll also find our new 150 Watt External Power Supply in this catalog. This power supply is specifically designed and styled to match the PCjr and the Racore Drive II Enhancement System. It allows Racore users to attach the PC Enterprises hard disk drive system to their computer.

PC Enterprises is proud to have been selected by Racore as the company chosen to support Racore products. We're also very excited about the new expansion opportunities which await.

We look forward to hearing from Racore users and solving any problems which might occur.

Now PCjr Users can add 128K of Memory for only \$50*

*Requires system board modification
Catalog #14032

New Product Announcement!!

192K Internal Memory Card

Our new 192K memory card replaces the PCjr's existing internal 64K memory card, thereby increasing system memory by 128K. The new memory is added at the top of the PCjr's usual memory address space - thereby expanding the memory of a 512K PCjr to 640K or a PCjr which already has 640K to 768K (only 736K is usable).

Features

- Low cost
- Replaces the existing internal 64K card with a 192K card
- Expands memory on 512K PCjr's to 640K
- Expands memory on 640K PCjr's to 736K
- Does not require an additional power supply
- Full One Year Warranty
- PC Enterprises quality, service, and continuing commitment to support the PCjr

Five System Board Modifications for Greater Compatibility and Expandability!!

Here are five system board modifications which we strongly recommend for every PCjr owner. The modifications allow the PCjr to run more PC and Tandy programs than ever before. In addition, these modifications allow you to upgrade your PCjr with our new internal memory card or our PCjr VGA Sidecar.

It's easy to take advantage of these modifications. You may send us your existing system board and let us modify it, or, you may purchase a reconditioned system board (which is already modified).

To have all FIVE modifications performed, send us your system board and request Modification #97503. Include \$49.95 plus five dollars for shipping and insurance.

If you prefer to purchase a system board which has already been modified, order Catalog #78718 which is \$148 plus five dollars for shipping. You'll receive with the replacement system board a \$50 trade-in credit certificate.

For additional questions, our staff will be more than happy to assist you. Just call (800) 922-PCjr.

1 THE TANDY MODIFICATION

Most programs which run on a PCjr use 4-color CGA graphics. Programs which run on the Tandy computer produce far better graphics because Tandy graphics use 16 colors! This modification allows many Tandy programs to run correctly in 16 colors on a PCjr!

2 THE VGA MODIFICATION

Imagine being able to run your favorite software in 256 colors! This will become possible when PC Enterprises introduces our new PCjr VGA sidecar. Once installed, our VGA sidecar can make the PCjr 100% compatible with software designed not only to use VGA but also EGA, CGA, and MDA graphics! Unfortunately, you will not be able to upgrade to VGA unless we make this modification.

3 THE INTERNAL MEMORY BOARD MODIFICATION

Until now it was difficult and expensive to expand 640K PCjr's to 736K. This modification permits you to replace your PCjr's existing 64K internal memory card with our new 192K memory card - expanding memory to 768K (only 736K is usable). This modification does not require that you purchase our 192K card. It simply permits you to add it now or later.

4 THE PB2 MODIFICATION

This modification makes your PCjr more PC compatible. Certain PC programs run correctly on a PCjr until the program attempts to produce sound. When this happens the PCjr's display becomes garbled. The PB2 modification prevents programs which inadvertently modify bit 2 of the 8255B port from disturbing the display.

5 THE DISK DRIVE ADDRESS MODIFICATION

This also makes your PCjr more PC compatible. The hardware addresses used by the disk drive controller are different on a PC and PCjr. The PCjr uses F0 hex to F7 hex while the PC uses addresses 3F0 hex to 3F7 hex. As long as programs go through BIOS these differences do not cause a problem. However, a few programs and copy protection schemes do not go through BIOS, instead they directly address the computer's disk drive controller. When this happens the program writes to the wrong address on a PCjr. This modification enables these programs to run on the PCjr.

Special note to Racore users and others who only have 512K of memory: With a slightly different modification (same price) our internal memory board will expand memory from 512K to 640K. To have this modification performed, request Modification #97507.

These items are not in our catalog due to very limited quantities. Please call to determine availability before ordering.

DOS 2.10

-Opened (includes manual, DOS diskette plus Supplemental Programs diskette)

Catalog #78731 Price \$39.95

IBM PCjr COLORPAINT

-Enables you to draw color graphics with the touch of a button! An easy-to-use, high function drawing tool for both amateur and professional artists. Cartridge version.

System Requirements: 128K PCjr IBM PCjr compatible serial interface mouse

Catalog #18029 Price \$65.00

IBM DRAWING ASSISTANT

-Create drawings and edit graphs for personal and business communications. Add text in four type styles and choose from a variety of colors or shades. Also move, copy and selectively erase graphics easily. Incorporate drawings into documents created by IBM Writing Assistant.

System Requirements: DOS 2.10 or higher

256K memory

IBM compatible mouse recommended

Catalog #86024 Price \$49.95

GUIDE TO OPERATIONS MANUAL

-Opened

Step-by-step instructions on basic PCjr operation

Includes "Exploring the IBM PCjr" animated diskette

Catalog #79033 Price \$19.95

PC VIDEOTEX vA.100

-An interactive communications facility that lets you access multiple databases with text and pictures displayed in color. Travel arrangements, investment portfolio options, home shopping, agricultural forecasts and more are available to you.

System Requirements: DOS 2.10 or higher

128K PCjr

1200 Baud modem w/PCjr serial adapter cable

Access to a Videotex service

Catalog #86025 Price \$9.95

THE CHESSMASTER 2000

-The national bestseller that made chess history. With an unprecedented selection of features, 3-D board view, 20 levels of play, 71,000 opening moves, and a US Chess Federation rating of 2018, the Chessmaster 2000 is a knowledgeable tutor, an impartial referee - and a powerful opponent. Special PCjr version.

System Requirements: 384K PCjr
512K Recommended

Catalog #86525 Price \$35.09

DOS 3.20 3.5" DISKETTE

-Includes one 720KB, 3.5 inch diskette. NOTE: Can only be used on the PCjr if booting from the A: Drive.

System Requirements: 128K PCjr
One 720KB, 3.5 inch diskette drive

Catalog #78732 Price \$59.95

PCjr Cartridge Basic

-Sealed, brand new.

Catalog #18006 Price: \$129

WRITING TO READ

(by Dr. John Henry Martin)

-A computer based introduction to writing and reading. Students have fun with pictures and games while they learn letters and sounds with a computer that talks.

System Requirements: DOS 2.10 or higher

128K PCjr

PCjr Color Display

IBM PCjr Speech Attachment

Audio Cassette Player

NOTE: IBM PCjr Power Expansion Attachment is required when using the IBM PCjr Speech Attachment in combination with any other PCjr parallel attachments.

Catalog #86026 Price \$199.00

MATH RABBIT

-Build your child's early math skills at Math Rabbit's circus spectacular! Teaches important early math skills. Ages 4-7.

System Requirements: 256K PCjr

Catalog #86202 Price \$29.96

COMPUTER NOVEL CONSTRUCTION SET

-Designed so that you-whether novice or expert-can create your own exciting interactive fiction. Now, in addition to being the central character in text adventures, you can also be the author...the creator of swashbuckling heroes, dastardly villains, romantic encounters, alien planets, whatever your mind can conjure up. No programming skills required.

System Requirements: 128K PCjr

Catalog #86315 Price \$19.95

**ACCOLADE'S MEAN 18
FAMOUS COURSE DISK II**

-You've played some of the world's greatest courses on your Mean 18. You've birdied at Pebble Beach, eagled at St. Andrews and shot a cool five under at Augusta. But, don't get fitted for your Masters jacket quite yet. Accolade presents the second leg of the Mean 18 Tour, Famous Course Disk Volume II. System Requirements: Mean 18 Program Disk 256K PCjr

Catalog #86618 Price \$29.95

IBM REPORTING ASSISTANT

-Helps you custom design reports from keyboard and IBM Filing Assistant. Select the items to be printed and the order in which they will appear. Use simple commands to format, sort, calculate, and print reports.

System Requirements: 128K PCjr
Catalog #86023 Price \$29.95

**IBM GRAPHING ASSISTANT
v2.00**

-Enables you to create colorful line, bar, and pie charts from keyboard input and information stored in IBM Filing Assistant. Edit charts with IBM Drawing Assistant, and merge into IBM Writing Assistant documents.

System Requirements: DOS 2.10 or higher

256K PCjr

Catalog #86022 Price \$39.95

IBM PCjr SAMPLER DISK

Catalog #86021 Price \$14.95

HANDS ON BASIC MANUAL

-Personal Computer BASIC self-tutor for the IBM PCjr. Teaches you the important ideas about computers and programming.

Catalog #85031 Price \$14.95

**64KB MEMORY AND DISPLAY
CARD**

-Increase your internal memory from 64KB to 128KB

Catalog #79018 Price \$129.00

**IBM 128K UPGRADED TO 512K
BY PC ENTERPRISES**

-IBM 128K Memory Sidecar upgraded by PC Enterprises to 512K. PC Enterprises Memory Management Software and manual included.

Catalog #14019 Price \$295.00

**MAGNAVOX HIGH RESOLUTION
RGB (COLOR) MONITOR**

- The Magnavox CM8762 has a 13 inch (diagonal) screen and can be connected to either the PCjr Display (D) connector in the rear of the PCjr, or the video composite (V) connector.

Catalog #78809 Price \$320.00

**RECONDITIONED IBM PARALLEL
PRINTER ATTACHMENT**

-Not in original box-may be missing instruction manual.*Catalog #78713 Price \$59.95*

9 PIN ABCD SWITCHING BOX

Catalog #75518 Price \$34.95

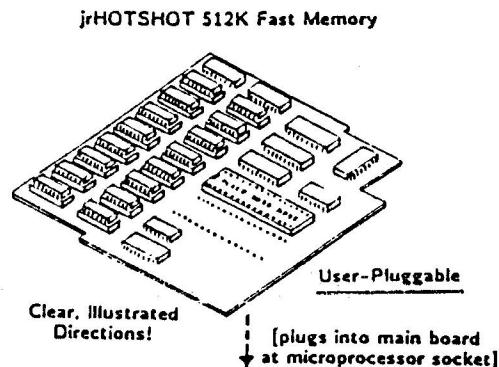
The jrHOTOSHOT Multi-function Upgrade Plug-ins for your PCjr

Easy to Install ...new from ES Quality Products

512K or 256K jrHOTOSHOT Fast Memory Plug-ins

Adds fast, contiguous memory at addresses 129K and above. Fast Memory increases the PCjr performance to the level of a PC/XT as proven by the speed measurement program sent along on a diskette. If you have a 128K PCjr, the 512K plug-in gives you contiguous memory from 0-640K, or with the 256K upgrade you'll have contiguous memory from 0-384K. No additional power supply is needed.

Simple "device driver" software supplied with the upgrade should be copied once onto your DOS diskette so the Fast Memory is instantly recognized by DOS whenever you turn on your PCjr. The driver works elegantly and transparently. This software also gives your PCjr an 80-column screen immediately. It's easy, especially since everything is fully explained by illustrated directions.



512K jrHOTOSHOT Fast Memory:

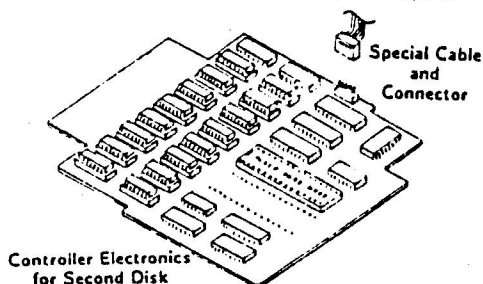
256K jrHOTOSHOT Fast Memory:

P.S. A ramdisk program works great with the Fast Memory to give you a super-fast "ramdisk" (sometimes called a virtual disk) as drive C:, much like a hard disk would be drive C:.

jrHOTOSHOT RAMdisk program: N/C

Diskette Controller Plug-in and Cable for second (external) floppy disk

jrHOTOSHOT with Second Disk Ctrlr/Cable Option

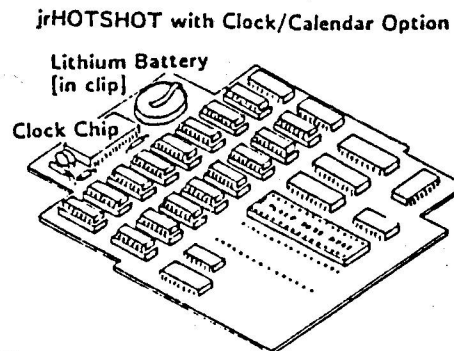


You can have this useful Controller plug-in alone or as an option to any jrHOTOSHOT Fast Memory. Either way, this makes it easy to add a second floppy drive to your PCjr. No additional power supply is needed for this plug-in. We can suggest several economical sources, such as Paul Rau Consulting (209) 745-9284 that have the external floppy drive housed in a case with power supply for the drive.

As option to Fast Memory: just \$49 Alone: just \$79

Real-Time Clock/Calendar Plug-in with Lithium Battery Backup

As an option to any Fast Memory or by itself, this is a super clock/calendar with lithium battery. We used the best clock chip possible... it stays accurate even through leap years! Lithium battery has large Ampere-Hour rating for long, long life when the computer is off. Clip holds battery to allow replacement. With software provided, setting the time is simple, and your PCjr will automatically read the time and date whenever switched on. This is so convenient to have, and the time/date stamps on your files will always be accurate and reliable. You'll know which file is the latest version, etc. No additional power supply is needed for this clock/calendar.



As option to Fast Memory: just \$39

Alone: just \$59

PAUL RAU CONSULTING
260 N. LINCOLN WAY
GALT, CALIF. 95632
Phone: (209) 745-9284

COMPATIBLES BY PAUL RAU CONSULTING

BASE SYSTEM DESCRIPTIONS

XT Type (8088 processor)

All systems come with an AT type case and 150 watt power supply. The case has an LED for power, turbo, and hard drive. It also has a keylock and reset button. All models run at 4.77 Mhz and at the turbo speed. Installed is 256k expandable to 640k and one 360k diskette drive and comes with a 101 key enhanced keyboard. The motherboard also has a socket for an 8087 math coprocessor chip.

10 Mhz,\$ 549
12 Mhz,\$ 599

AT Type (80286 processor)

All systems come with an AT type case and 200 watt power supply. The case has an LED for power, turbo, and hard drive. It also has a keylock and reset button. All models run at 6 Mhz and at the turbo speed. Installed is 512k expandable to 1 MB and one 1.2 meg diskette drive and comes with a 101 key enhanced keyboard. The motherboard also has a socket for a math coprocessor chip.

10 Mhz,\$ 949
12 Mhz,\$1049
16 Mhz,\$1349

386 Type (80386 processor)

386 systems are the same as the AT type except that they have the 80386 processor and the motherboard is expandable to 8 MB.

16 Mhz\$2149

OPTIONS

Memory 640k (XT type only)\$ 150
Memory 640k (AT type only)\$ 100
Memory 1 MB DYNAMIC RAM, ZERO WAIT STATE (AT type only)\$ 350
Memory 1 MB STATIC RAM, ZERO WAIT STATE (AT type only)\$ 550
20 meg hard drive\$ 319
30 meg hard drive\$ 369
40 meg hard drive\$ 449
Monochrome (amber) monitor and card\$ 169
CGA (color) monitor and card\$ 399
EGA (enhanced color) monitor and card\$ 599
360k 5.25" diskette drive\$ 99
1.2 MB 5.25" diskette drive\$ 129
720k 3.5" diskette drive\$ 149
Multifunction card (clock, serial, parallel, and game port) ..\$ 129
MS-DOS 3.3 & GWBasic\$ 99
CGA Monitor card\$ 99

Call for info on other options like modems, mice, tape backups, printers, memory chips, math coprocessor chips, motherboards, laptop computers, local area network, and others.

DUE TO FLUCTUATING MEMORY CHIP PRICES AND OTHER UNCERTAINTIES IN THE COMPUTER MARKET, PRICES ARE SUBJECT TO CHANGE. PLEASE CALL FOR CURRENT PRICES.

HARD DRIVES

<u>20 MEG HARD DRIVE SYSTEM</u>	\$579	\$ 9
20 meg hard drive system by Paul Rau Consulting. The hard drive is housed in a metal external case that measures 19" wide x 15" deep x 3.5" high. The entire unit is surge protected and has a fan and a 65 watt power supply, more than enough to drive two hard drives. There are two slots in the front, one for the first 20 meg a second slot with a removable tray for a second 20 meg if you should need it. On the front is one main power switch and four auxiliary switches that run four outlets in back. The drive is guaranteed for one year by Seagate and the rest of the components are guaranteed for 90 days. The hard drive interfaces at the internal modem slot. The hard drive package comes with hard drive utilities including a menu system and a backup program. (Option: A smaller hard drive case (5.5" high x 7" wide x 15" long) is also available.)		
(Option: Hardbios jr cartridge to allow boot from hard drive..	\$79)	
<u>40 MEG HARD DRIVE SYSTEM</u>	\$839	\$ 9
As above with two 20 meg hard drives.		
<u>20 MEG HARD DRIVE SYSTEM WITH 5.25" FLOPPY DRIVE</u>	\$779	\$ 9
Same as 20 meg hard drive system with 5.25" floppy drive in second slot. Jr Hotshot controller included.		
<u>20 MEG HARD DRIVE SYSTEM WITH 3.50" FLOPPY DRIVE</u>	\$829	\$ 9
Same as 20 meg hard drive system with 3.50" floppy drive in second slot. Jr Hotshot controller included.		

Separate Hard Drive Components

SCSI Host adapter (internal modem card), cable, software..	\$115	\$ 3
SASI Controller card with ST-506 interface	\$125	\$ 3
External hard drive cabinet with power supply	\$165	\$ 9
Seagate ST-225 20 meg bare hard drive	\$249	\$ 3

MODEMS

EX-1200	1200 baud external modem.....	\$ 99	\$ 6
EX-2400	2400 baud external modem.....	\$209	\$ 6

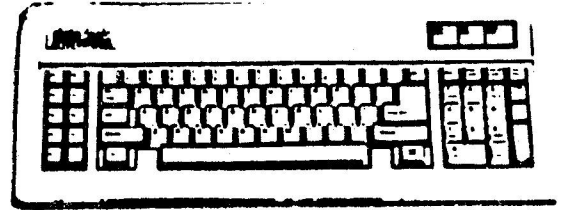
All modems are 100% Hayes compatible and will run Procomm, Qmodem, PC-Talk, etc. They all have auto-dial, and auto-answer and will run a bulletin board. The EX-1200 and 2400 also have a speaker. The EX-1200 and 2400 come with free CompuServe access time and have a 2 year warranty. Both external modems need a JR-232 adapter cable to run on a PCjr. Cable listed below.

CABLES

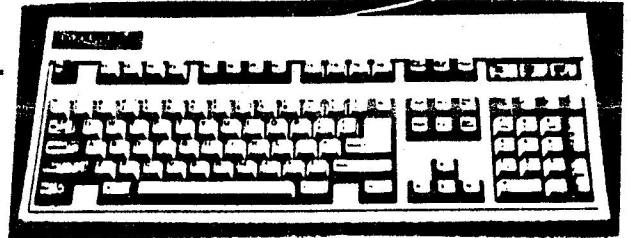
PC-JRMON	USE YOUR PC WITH THE PCJR MONITOR	\$ 39	\$ 4
JR-PCMON	USE A PC STYLE MONITOR WITH A PCJR	\$ 19	\$ 4
PC-CEN	STANDARD 6 FT CENTRONICS PRINTER CABLE	\$ 15	\$ 4
PC-232	STANDARD 9 FT SERIAL MODEM CABLE	\$ 15	\$ 4
JR-232	JR SERIAL ADAPTER - PCJR TO RS232 (8 FT).....	\$ 19	\$ 4
JR-KB	PCJR KEYBOARD CABLE - 6 FT	\$ 15	\$ 4

KEYBOARDS

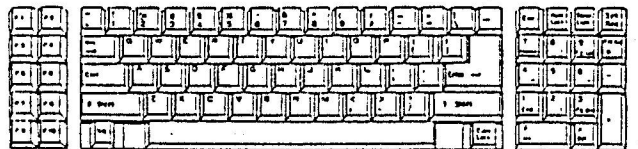
JR DATADESK PC 8700 KEYBOARD\$130 \$ 6
 AT style keyboard with extra large, ENTER and SHIFT keys, and Caps Lock Num Lock, and Scroll Lock indicator lights. Separate function keys located on the left, and numeric keypad on the right of the keyboard.
 Comes with PCjr adapter cable.



JR DATADESK TURBO 101 KEYBOARD\$159 \$ 6
 New enhanced AT style keyboard with extra large ENTER, SHIFT & CONTROL keys. Separate cursor control and numeric keypad. Twelve function keys across the top. Comes with PCjr adapter cable.
 (Option: Borland's Turbo Lightning software \$20 extra)



RACORE M9102 KEYBOARD\$129 \$ 6
 AT style keyboard with large-sized SHIFT and ENTER keys. Separate function keys on located on left, and numeric keypad on the right of the keyboard.
 Comes with PCjr adapter cable.



Miscellaneous

Racore M3200	Keyboard adapter cable	\$ 49	\$ 0
V-20	V-20 Chip (Speeds up JR)	\$ 18	\$ 0
KBB	Keyboard Buffer Cartridge for JR.....	\$ 29	\$ 0
CLK-RDM	Clock calendar chip for motherboard	\$ 39	\$ 0
CLK-CART	Same as above except a cartridge.....	\$ 59	\$ 0
NEX-JR	8MHz Nickel Express Jr turbo board	\$ 79	\$ 0
Q-5	Quicksilver fastboot cartridge 5 MHz.....	\$ 30	\$ 0
Q-8	Quicksilver fastboot cartridge 8 MHz.....	\$ 35	\$ 0
IBM WPT	Wall Plug Transformers.....	\$ 25	\$ 0

----- SEPTEMBER SPECIALS -----

20 MEG HARD DRIVE SYSTEM (IN SMALL CASE).....	\$559	\$9
RACORE M9102 KEYBOARD WITH ADAPTER CABLE FOR JR.....	\$119	\$6

Paul Rau Consulting
 P.O. BOX 682
 260 N. Lincoln Way
 Galt, CA 95632

VOICE (209) 745-9284 9 AM TO 4 PM PST
 DATA (209) 745-9284 5 PM TO 8 AM PST

----- SIAMESE SLOTS -----

The SIAMESE SLOTS cartridge adapter is a unique solution to the growing problem of only having two cartridge slots in your PCjr. The cartridge adapter plugs into either slot and allows TWO cartridges to be plugged into the adapter: TWO cartridges in one slot! By inserting one adapter in each slot, the PCjr is now capable of using FOUR cartridges simultaneously.

This is the perfect product if you wanted a QuickSilver cartridge but could not give up a slot. The QuickSilver cartridge is compatible with ALL other cartridges, so you know it will work and now you have the space!

The SIAMESE SLOTS cartridge is available now from Paul Rau Consulting for \$25.00 plus \$3.00 shipping and handling.

***** LOGITECH MOUSE *****

We've added a mouse to our product line. The mouse we carry is the two button Logitech Serial Mouse. Logipaint Paint show software is included in the package. The Logitech Mouse and Logpaint Paint show sells for \$89.00 plus \$3.00 shipping and handling. Jr Serial adapter cable is required.

===== NICKEL EXPRESS JR up to 8 MHZ ! =====

The Nickel Express JR turbo boards are ready. The cost is \$79.00 plus \$3.00 shipping.

There are some compatibility issues to deal with regarding the Nickel Express JR. First, the IBM sidecars that we tested worked well on the fast speed which is 8 MHz. The JR Hotshot is now compatible. It works on the medium speed setting, which is 7.37 MHz.

The turbo board works fine with Racore DMA in the medium speed setting, which is 7.37 MHz. We have tested the Nickel Express JR with a few Tecmar boards with success about half of the time. The ones that did work had to be set on the slow jumper, which is 6.66 MHz.

The 128k PCjr works on the slow setting but is not much of an increase because software is needed to rearrange the video buffer which of course does not work with 128k.

We have tested a few Impulse, Micro Products sidecars. They do work on the medium speed setting but because of the software used with these boards the speed is somewhere under 7.37 MHz.

All software that we have tested works fine including a few word processors, data base, and spread sheet programs. I cannot test every piece of software available, but if there is a problem with a particular one, you can always toggle the turbo mode off to run it.

Included in the package is a program which allows you to load the software to drive the turbo board. It is of the TSR type, which means Terminate and Stay Resident. This means you type the name of the program (TURBOJR) and it loads and is resident for you to toggle back and forth by pressing left shift and alt. Press the same key combination again and it toggles the software again.

To install the Nickel Express JR, you will need to desolder the 8284 clock chip and solder a socket in its place. Only a skilled technician should perform this task. If you feel uncomfortable with this step, you can send your computer to Paul Rau Consulting and we will do the soldering, install it, test it, and return it to you for \$30.00.

----- HARD DRIVES -----

The hard drives by Paul Rau Consulting are now available in three different cases. The first type case is the original one that is so popular. It is the one with four switches in the front that run four outlets in the back. It measures 19" wide by 3.5" high by 15" deep. It is surge protected and has room for a second hard drive, should you decide to add one later. The 20 meg price is \$579 plus \$9 shipping and handling.

The second type case is a smaller one measuring 5.5" high by 7" wide by 15" deep. It is also capable of housing a second hard drive, should you decide to add one later. The 20 meg price is \$559 plus shipping and handling.

The third type case is of the kind that sits on top of the PCjr, very much like the Racore type. It is designed to look like part of the PCjr. It measures 14" wide by 3" high by 11.5" deep. It is \$599 plus s & h.

===== SELF BOOT CARTRIDGE NOW AVAILABLE FOR HARD DRIVES =====

A new cartridge has been developed to allow a PCjr hard drive to boot directly from the hard drive. This new cartridge is called Hardbios Jr and works with all hard drives systems sold by Paul Rau Consulting. It will also work with any Rim Electronics host adapter.

This concept was developed to allow the hard drive device driver to be loaded to allow a faster boot time. There are other advantages that can be realized. First, the hard drive operates slightly faster. Also, booting from the hard drive saves wear and tear on the diskette drives.

The cartridge is available now from Paul Rau Consulting for \$79.00 plus \$3.00 shipping and handling.

===== QUICKSILVER CARTRIDGE =====

The QuickSilver Cartridge is designed to make your PCjr power up quickly and silently and run more PC programs than it ever could before! The PCjr is notorious for the amount of time it takes to go through the memory check and the annoying beep that follows. The QuickSilver Cartridge replaces the PCjr's memory test with a new test that is fast and efficient. This new test is over 16 times faster: the equivalent of a 76MHz PCjr without this cartridge. The PCjr uses the beeper to indicate whether the boot was successful or not. The QuickSilver Cartridge only eliminates the annoying beep that warns you of no errors! Any beeps that signal a real error condition are faithfully reproduced. Whenever the QuickSilver Cartridge is installed, the PCjr's keyboard BIOS is modified to make it work like a PC (senior). This allows your PCjr to run some programs that previously only worked on a PC. This cartridge works in either slot, works with all other cartridges, does not use any program memory, and does not need any supporting software programs. You can purchase the QuickSilver Cartridge for only \$30.00. A QuickSilver cartridge with very fast components (for an 8MHz PCjr) is available for \$35.00.

Paul Rau Consulting
P.O. BOX 682
260 N. Lincoln Way
Galt, CA 95632

*** PRICES ***

MEMORY for PCjr

Jr HOTSHOT

		price	shipping
HS-512	512K MEMORY	\$249	\$3
HS-256	256K MEMORY	\$169	\$3
HS-512CLK	512K WITH CLOCK-CALENDAR	\$268	\$3
HS-256CLK	256K WITH CLOCK-CALENDAR	\$208	\$3
HS-512DIS	512K WITH DISK CONTROLLER & CABLE	\$278	\$3
HS-256DIS	256K WITH DISK CONTROLLER & CABLE	\$208	\$3
HS-512CLKDIS	512K / CLOCK-CAL / CONTROLLER & CABLE	\$309	\$3
HS-256CLKDIS	256K / CLOCK-CAL / CONTROLLER & CABLE	\$249	\$3
ES PPF	PARALLEL PRINTER ATTACHMENT	\$ 85	\$3

(The jr Hotshot memory board fits into the 8088 microprocessor socket and provides fast memory. Ramdisk software included at no additional cost. See back page for more detailed information)

THE PRICE ON MEMORY CHIPS IS SO UNSTABLE AT THIS TIME THAT OUR MEMORY BOARD PRICES ARE SUBJECT TO CHANGE WITHOUT NOTICE. IF THERE IS A PRICE CHANGE WHEN WE RECIEVE YOUR ORDER WE WILL CALL AND CONFIRM THE PRICE BEFORE SHIPPING.

SIDECAR MEMORY

M-230	SIDECAR MEMORY WITH OK	\$145	\$6
M-231	SIDECAR MEMORY WITH 256K	\$210	\$6
M-232	SIDECAR MEMORY WITH 512K	\$299	\$6
M-250	SIDECAR MEMORY WITH OK, CLOCK-CALENDAR	\$170	\$6
M-251	SIDECAR MEMORY WITH 256K, CLOCK-CALENDAR	\$225	\$6
M-252	SIDECAR MEMORY WITH 512K, CLOCK-CALENDAR	\$314	\$6
M-241	PARALLEL PRINTER PORT	\$ 85	\$6

(The sidecar memory attaches on the right side of the computer. It can be added in addition to the printer port. Ramdisk software included)

To order fill in form and mail to us or call between 9 AM and 4 PM PST.
(209) 745-9284 9 AM to 4 PM PST BBS (209) 745-9284 5 PM - 8 AM

SOLD TO: _____ Please Check One
 ADDRESS: _____ ___ Check enclosed
 CITY : _____ STATE ZIP _____ ___ Money Order
 PHONE : _____ ___ Visa or Mastercard

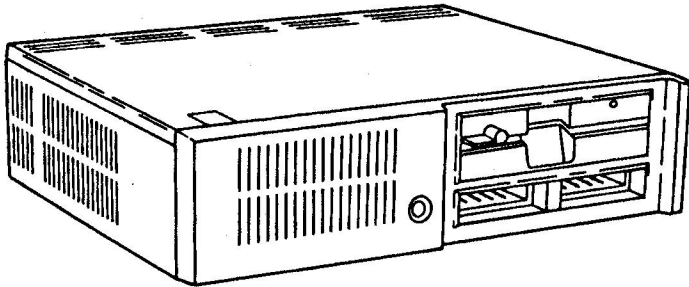
QTY	DESCRIPTION	UNIT PRICE	EXTENDED
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----
-----	-----	-----	-----

MAIL TO:		SUBTOTAL	-----
PAUL RAU CONSULTING	6% TAX (CALIF RESIDENTS)		-----
P.O. BOX 682	4% CREDIT CARD FEE		-----
GALT, CA 95632-0682	SHIPPING & HANDLING		-----
	COD CHARGES		-----
Credit card customers (Visa & Mastercard only)	TOTAL		-----
Name as printed on card	-----		
Credit Card #	-----		
Expiration Date	-----		

All prices listed are cash prices, please add 4% for credit card use. For COD orders add an additional \$5.00. Prices subject to change.

DISK DRIVES

<u>RACORE DRIVE 2 PLUS WITH DMA PLUS 512K MEMORY</u>	\$500	\$12
5.25" 360k drive with direct memory access, clock-calendar, printer port, ram disk software and a PC/PCJR switch which increases compatibility with the PC software. Comes in a cabinet that is 2" high and sits directly on top of the PCjr. Includes 512k memory.		
<u>RACORE DRIVE 2 PLUS SYSTEM WITH DMA</u>	\$339	\$9
(Same as above but without 512k memory)		
<u>RACORE DRIVE 2 PLUS (WITHOUT DMA) PLUS 512K MEMORY</u> ...	\$457	\$12
5.25" 360k drive with clock-calendar, printer port, ram disk software and a PC/PCJR switch which increases compatibility with the PC software. Comes in a cabinet that is 2" high and sits directly on top of the PCjr. Includes 512k memory.		
<u>RACORE DRIVE 2 PLUS WITHOUT DMA</u>	\$292	\$9
(Same as above but without 512k memory)		
Racore M2101	256k memory for Racore Drive 2 Plus	\$139 \$ 3
Racore M2103	512k memory for Racore Drive 2 Plus	\$175 \$ 3
<u>JR HOTSHOT TYPE EXTERNAL 2ND DRIVE WITH 512K MEMORY</u> ..	\$478	\$ 9
5.25" 360k external drive in metal case measuring 3.5" wide x 6" high x 13" deep. It has its own power supply and uses the jrHotshot controller. JrHotshot 512k memory included. (Add \$20 for custom case that fits on top of PCjr)		
<u>JR HOTSHOT TYPE EXTERNAL 2ND DRIVE</u>	\$239	\$ 9
(Same as above but without 512k memory)		
<u>2ND DRIVE</u>	\$179	\$ 9
5.25" 360k external drive in metal case measuring 3.5" wide x 6" high x 13" deep. It has its own power supply. Does not come with controller.		
<u>REPLACEMENT DRIVE</u>	\$ 99	\$ 6
5.25" 360k direct drive.		
<u>3.50" EXTERNAL DRIVE</u>	\$239	\$ 9
3.50" 720K external drive in metal case measuring 3.5" wide x 6" high x 13" deep. It has its own power. No controller. Comes with a device driver to allow you to use DOS 2.1. This is very handy as it does not force you to upgrade to DOS 3.2.		
<u>JR HOTSHOT TYPE EXTERNAL 3.50" DRIVE</u>	\$299	\$ 9
3.50" 720k external drive in metal case measuring 3.5" wide x 6" high x 13" deep. It has its own power supply and uses the jrHotshot controller. Comes with a device driver to allow you to use DOS 2.1. This is very handy as it does not force you to upgrade to DOS 3.2. (Add \$20 for custom case that fits on top of PCjr)		
<u>REPLACEMENT DRIVE</u>	\$149	\$ 6
3.50" 720k replacement drive.		
<u>DISKS</u>	\$ 25	\$ 3
3.50" Dual sided 720k diskettes - 10 pack		



PCjr Computer

128K memory

1 Floppy Drive (360K-DSDD-5.25")

Keyboard

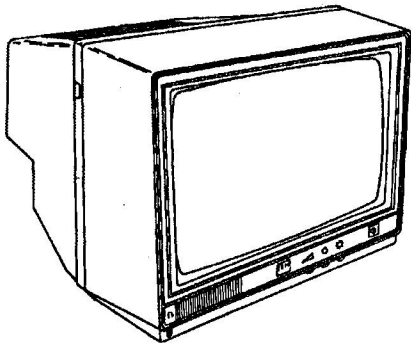
Power Transformer

FREE TV Connector with purchase!

(Allows you to attach the PCjr to a TV set)

Reconditioned **\$169**

New in the box **\$299**



PCjr Color Display

RGB monitor made especially for the PCjr. Has a speaker with volume control which lets you hear those great PCjr 3-voice sounds!

Reconditioned **\$199**

NEW - USED - DEMO PRINTERS

OKIMATE 20 (color) \$113

OKI 182 (220V - ser) \$210

OKI 182 (220V -par) \$314

OKI 292 (80 column)\$349 *

OKI LM-6 Laser (non-working as-is) \$450

OKI 84 (132 col. - IBM ROM) \$475

OKI 182 (TTY - parallel) \$233

OKI 193 (132 col - parallel) \$420

OKI 294 (132 column) \$652*

OKI 182 (80 col. - serial) \$225

OKI 182 (TTY - serial) \$268

OKI 193 (par - IBM ROM) \$435

OKI 2410 (132 col - ser) \$1400

*Personality module not included

OKIDATA PRINTER ACCESSORIES

Plug-n-Play for OKIMATE 20 (available in IBM PC, PCjr, Apple, Amiga, or Atari ST - VERY LIMITED!) \$59

ML 83A ROM Upgrade (available for Apple or IBM Block Graphics) \$69

290 Series Personality Modules CALL FOR AVAILABILITY \$75

82 & 92 Series Tractors \$39 83 & 84 Series Tractors \$39 183 & 184 Series Tractors \$42

WE HAVE OTHER COMPUTERS AND EQUIPMENT FOR SALE - CALL FOR AVAILABILITY AND PRICING!