

# RACORE

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Dear PCjr Enthusiast,

In response to your recent inquiry about RACORE's various enhancement products for your PCjr, this technical overview may answer some of your questions. If you wish to place an order, please feel free to call our toll-free number listed below. If you need any further technical clarification, our technical personnel will be able to assist you at (801)596-0370 from 8:00 a.m. to 4:30 p.m. mountain time.

The following information supplements our catalog sheets and should not be construed as comprehensive. All RACORE drive additions require an enhanced PCjr. Enhanced PCjrs have 128K of Random Access Memory (RAM) and a 360K disk drive.

## Model 1500 - Drive II Plus

Your current IBM floppy disk controller (FDC) is provided with a new cable, enabling it, in conjunction with supplied software, to control both disk drives. The second drive is required to house additional RACORE memory, as the memory board is housed within the second drive housing and not on the side. Other brand sideboard memory may be accomodated by this model only. Our other models have Direct Memory Access (DMA) and will not recognize sideboard memory. If you wish to continue use of your sideboard memory, your memory expansion will be limited to expansion on that board. RACORE memory expansion is only compatible with the 128K in the PCjr.

## Model 1501 - Drive II Plus with DMA

Your IBM FDC is replaced by a RACORE FDC. This FDC works in conjunction with the provided sideboard to give you DMA, more closely duplicating the architecture of the IBM PC, providing you with enhanced PC compatibility.

## Model 1511 - 10MB Fixed Disk Plus

## Model 1521 - 20MB Fixed Disk Plus

These models are also available to act as a third drive for current owners of RACORE Drive Two Plus with DMA. Owners of Quadram's second drive or RACORE'S Drive Two Enhancement Package (same unit, different brand) may also use these drives as third drives providing that they convert their present model to RACORE'S Drive II Plus with DMA. Please refer to FACTORY UPGRADES FOR PCjr ENHANCEMENTS for the correct upgrade paths, model numbers and current prices. Also read the DMA section of these notes.

## Model 3100 - Audio Amplifier

If you have a monitor without a speaker or amplifier, this item will provide you with the necessary components to use your PCjr's sound functions. The PCjr Color Display has these functions built in.

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**RACORE  
Computer  
Products Inc.**

Corporate Office  
170 Knowles Drive  
Los Gatos, CA 95030  
(408) 374-8290

For technical and pricing information,  
CALL TOLL FREE:  
800-325-1833 except CA

## Model 3200 - Keyboard Adapter Cable

With the proliferation of IBM compatible keyboards, we have found that this adapter is not fully compatible with all brands. It is compatible with the original IBM brand PC keyboards - original as opposed to IBM's new 3270-style keyboard available on IBM PCs beginning in the second quarter of 1986. To alleviate some confusion in this area, RACORE has begun marketing three models of PC keyboards that have been tested with our Keyboard Adapter.

Model 9100 - Standard PC Style with indicator lights.

Model 9101 - 5151 Style with separate cursor cluster and function keys across the top of the keyboard.

Model 9102 - AT Style with standard typewriter layout plus numeric pad with built-in cursor control.

All of the keyboards above include the Model 3200 Keyboard Adapter.

## Model 3400 - PC I.D. Cartridge

A Read Only Memory (ROM) cartridge which occupies one of the ROM slots on the front of the PCjr. When in place, the family ID byte of the PCjr ROM is changed to that of a PC. Some software programs check for this byte to determine what path to follow in relation to drivers or graphic routines. Some versions of COPYIIPC use this method. This will also allow you to load BASICA from your system disk. You should be running RACORE software Versions 2.2, 3.1 or 4.0. If you have other versions, you will require a software upgrade to properly utilize the PC I.D. Cartridge.

Model 1502 - DMA Upgrade for Model 1500

Model 1503 - DMA Upgrade for Model 1200 or Quadram Expansion Unit

Model 1506 - DMA Upgrade for Model 1400

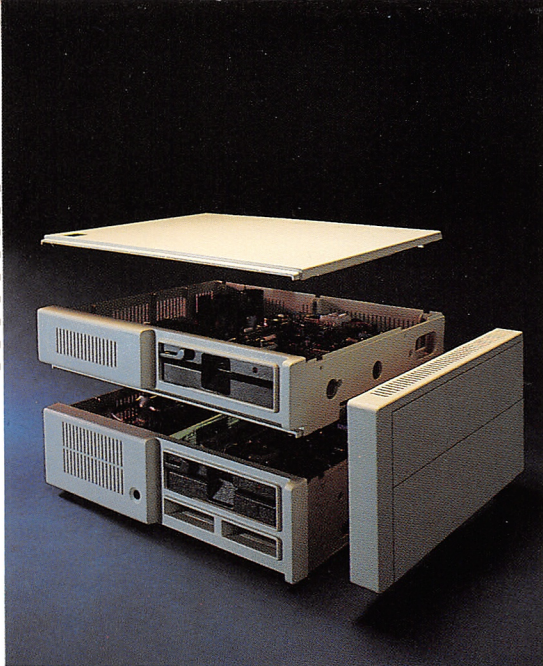
Model 1502 provides microchips for your Model 1500 sideboard and a new FDC. Models 1503 or 1506 provide a new sideboard, power supply and FDC. You must have a Model 1501 Drive II Plus w/DMA or one of these three kits to use a fixed disk as a third drive (Models 1504 or 1507.)

## DMA - Direct Memory Access

DMA is the disk drive controller used on IBM PC computers. The PCjr does not use DMA, representing an operational difference between the PC and the PCjr. DMA provides several advantages to the PCjr user:

- 1- Allows keyboard input while disk drives are spinning. This is particularly advantageous when downloading a communications session onto your disk drive.
- 2- Some software makes direct use of DMA, thus mandating its presence for proper execution. Framework, dBASE III and some versions of COPYIIPC are examples.

The DMA is available only to owners of RACORE'S second disk drive units or Quadram drive expansion unit and should be ordered directly from the factory. It is not compatible with other brands. DMA recognizes only RACORE memory expansion and the original 128K PCjr memory. Other brand memory options are not compatible. Functions other than memory on a sideboard should not be impaired, but are not supported.



## **RACORE Companions™** **Drive Two Plus**

### **Make Your IBM PCjr Perform Like a PC**

The Racore Companions Drive Two Plus expands your enhanced IBM PCjr® to IBM PC® capabilities in less than ten minutes.

#### **Software Capabilities**

The Drive Two Plus allows you to run virtually all IBM PC software in addition to all PCjr software — with the flip of a switch.

#### **Expanded Operation**

Your Drive Two Plus includes a parallel port, a second 360K disk drive, clock calendar with battery back-up, additional power to side bus and a memory expansion slot that allows you to increase memory capacity to 640KB. Once installed, this allows you to operate DOS 1.1, DOS 2.0, DOS 2.1, DOS 3.0 and 3.1.

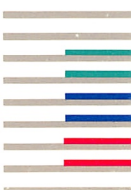
If you're looking for a safe, simple, cost effective approach to increasing the performance of your PCjr, look at the Racore Companions Drive Two Plus.\*

**Racore Companions . . .**  
**“Expanding jr’s Horizons.”™**

\* Prerequisite: Requires an enhanced version of the PCjr.

#### **Features:**

- **DMA**  
Optional factory installed or kit feature that allows for keyboard type-ahead, 1200 baud modem capability and additional software compatibility.
- **Parallel Printer Port**  
Allows you to attach any IBM PC compatible parallel printer unit to your PCjr.
- **Clock Calendar**  
This feature includes a battery back-up and eliminates the need to set the date and time each time you power on your system.
- **Separate Power Supply**  
All power available to your enhanced PCjr remains available for future expansion, plus additional power at side bus.
- **Memory Expansion Slot**  
Allows you to add an additional Racore Companion Memory Board for up to 640KB total system memory.
- **Software Diskette**  
Allows your system to operate with additional memory, disk drives, permanent clock calendar, and RAM disk.
- **Diskette Drive**  
360KB dual sided, double density (MFM) 5¼" disk drive.
- **Installation**  
Takes less than ten minutes to install and requires only a flat head screwdriver.
- **Warranty**  
One (1) year limited warranty.  
(See Racore warranty policy for details.)



## **Technical Data**

### **Top Assembly**

*The top assembly contains the second disk drive, the power supply and the memory expansion slot. It snaps in place and reuses the original PCjr top cover.*

- Height 2.4" (60.5mm)
- Width 13.9" (354mm)
- Depth 11.4" (290mm)
- 32 watt, two voltage level power supply
- 5¼" dual sided double density disk drive

### **Side Assembly**

*The side assembly contains a parallel printer port and the clock/calendar with battery back-up. It connects to the side expansion bus provided with your PCjr and extends the bus for future expansion. It reuses the PCjr side cover plate.*

- Height 6.2" (157.1mm)
- Width 1.1" (26.8mm)
- Depth 11.4" (290mm)
- Parallel printer port, 8 bits of parallel data at standard TTL logic
- Quartz crystal oscillator clock

### **Additional Power**

- +5 Volts at 1.5 amps
- +12 Volts at .3 amps

### **Transformer**

- Output 16.7 VAC, 56 VA
- Operating temperature 60 – 90° F (15 – 32°C)
- Weight 2 lb., 3 oz.
- Power cord 10.16" (3.08m)
- Input 120 VAC, 60 Hz, .7p

### **Package Specifications**

- Dimensions: 6" × 18" × 23"
- Weight: 11 pounds

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*Specifications and descriptions subject to change without notice.*

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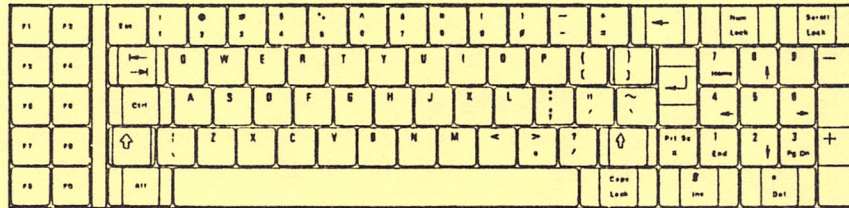
### **RACORE Computer Products, Inc.**

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10 Victor Square, Suite 600  
Scotts Valley, CA 95066  
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*Manufacturing Office  
(801) 596-0265*

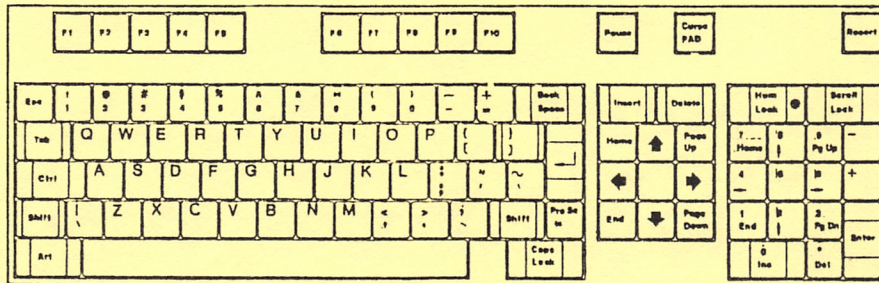
# RACORE

## RACORE KEYBOARDS FOR THE IBM PCjr



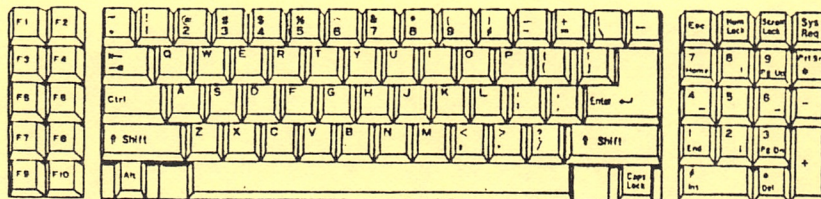
MODEL 9100 - PC Style

features indicator lights for CAPS & NUMLOCK Keys



MODEL 9101 - 5151 Style

features separate cursor pad for ease of data entry and ENTER key on numeric pad along with indicator lights on the CAPS and NUMLOCK keys.



MODEL 9102 - AT Style

features large-sized SHIFT and ENTER keys for easier touch typing and an indicator panel for CAPS & NUMLOCK

# RACORE

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RETAIL PRICE LIST

Effective October 1, 1986

Shipment F.O.B. Salt Lake City, UT

Prices Subject to Change Without Notice

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## IBM PCjr ENHANCEMENT PRODUCTS

Model	Description	Price
1500	Drive II Plus . . . . .	\$295.00 ✓
1501	Drive II Plus w/DMA . . . . .	345.00
1504	10MB Drive II Plus (3rd Drive Model). . . . .	795.00
1507	20MB Drive II Plus (3rd Drive Model). . . . .	895.00
1511	10MB Drive II Plus w/DMA . . . . .	795.00
1521	20MB Drive II Plus w/DMA . . . . .	895.00
2101	256K Memory Board . . . . .	105.00
2102	256K Memory Expansion (requires model 2101) . . . . .	40.00
2103	512K Memory Board . . . . .	135.00
1502	Model 1500 to 1501 DMA Upgrade . . . . .	85.00
1503	Model 1200 to 1501 DMA Upgrade . . . . .	185.00
1506	Model 1400 to 1511 DMA Upgrade . . . . .	185.00
3200	Keyboard Cable Adapter . . . . .	25.00
3400	PC I.D. Cartridge . . . . .	12.00
9100	PC Keyboard Package . . . . .	85.00
9101	5151 Keyboard Package . . . . .	127.00
9102	AT Keyboard Package . . . . .	107.00

Call Racore for additional information on memory and DMA upgrades

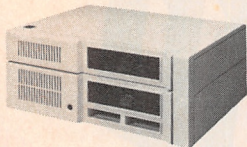
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**RACORE**  
**Computer**  
**Products Inc.**

# RACORE gives your PCjr a powerful new boost. Even networking.

## 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** **\$295<sup>00</sup>**  
With DMA \$335.

### 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. **\$795<sup>00</sup>**

### 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. **\$895<sup>00</sup>**

## 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 **\$95<sup>00</sup>**  
512K **\$125<sup>00</sup>**

## Choose from 3 popular keyboards for your PCjr.

Keyboard packages come complete with adapter cable.

PC Style **\$ 85<sup>00</sup>**

AT Style **\$ 107<sup>00</sup>**

5151 Style **\$ 127<sup>00</sup>**

## Look to RACORE.

Since 1983, RACORE has continued to enhance the capability of the IBM PCjr.

Our most recent advance enables a RACORE enhanced PCjr to talk with, work with IBM PCs, XT's, AT's and compatibles in a local area network.

We call the product **\$295<sup>00</sup>** per node.  
LANpac jr.

## RACORE's continuing commitment to the PCjr.

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** } **1-800-325-1833** except CA.  
**1-800-847-8417** except UT.

**BBS: (801) 363-8720**

## RACORE Computer Products Inc.

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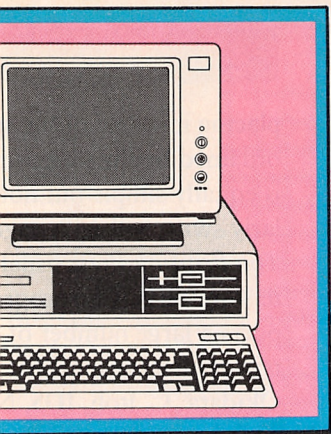
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