

## jrExcellerator Installation and Operation Manual Addendum

A new feature has been added to the jrExcellerator as of revision 5.2 for users who encounter a keyboard beeping problem when the jrExcellerator's is used in the "Fast" mode.

A small percentage of jrExcellerator customers have reported that their PCjr occasionally beeps and ignores keypresses when the jrExcellerator is used in "Fast" mode. Although this problem is encountered by very few PCjr users, it is a definite problem that has a solution.

The problem is caused by improperly written code in the PCjr's ROM BIOS. The solution is to use the FIXBEEP routine which corrects the PCjr's BIOS. The FIXBEEP routine, which was previously available only on diskette, is now built into the jrExcellerator's ROM BIOS. (If you do not experience this problem, then there is no benefit in running the FIXBEEP routine.)

The keyboard beeping problem is caused by bugs in the PCjr's ROM BIOS routine used to handle keyboard input. The BIOS routine incorrectly uses the Intel 8253 timer chip which is used to decode keyboard transmissions. Intel, the manufacturer of the timer chip, specifies that the chip must be allowed at least one microsecond to settle after each read or write operation. The PCjr's ROM BIOS clearly violates this specification.

In most cases, Intel's timer chips are actually much better than their specifications indicate. That's why the violation rarely causes a problem when the PCjr is operated at 4.77MHz. However, when the PCjr is operated at 9.54MHz, these bugs prevent some of these timer chips from working properly.

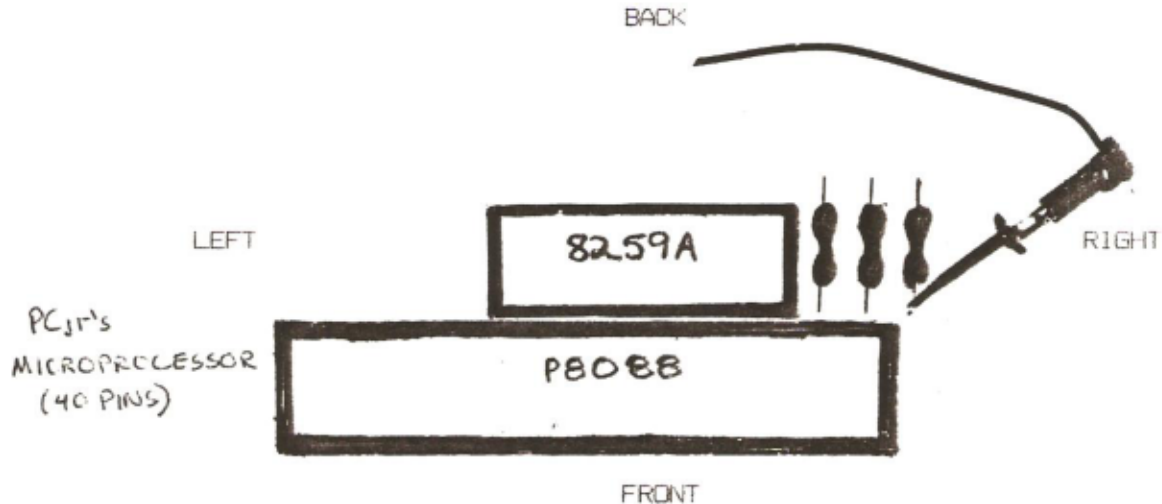
The FIXBEEP routine allows the PCjr to comply with the timer chips' specifications by allowing a microsecond wait after reading or writing to the chip.

To use the FIXBEEP routine simply type FIXBEEP at the DOS prompt then press enter. We recommend you include the FIXBEEP command in your AUTOEXEC.BAT file. By doing this the keyboard beeping corrections will be made automatically every time you boot your computer.

If you are using a PC Enterprises Combo Cartridge or Keyboard Buffer Cartridge, be sure to run the JRSYNC or JRSYNCNP program before you run FIXBEEP. Running the JRSYNC or JRSYNCNP routine after FIXBEEP will deactivate FIXBEEP.

\*SPECIAL NOTE TO ALL jrEXCELLERATOR USERS\*

We are aware that some of our speedup board users have been experiencing some difficulty attaching the EZ clip to pin #4 of the 8284A chip as illustrated on page 18 of the installation manual. The diagram below depicts an alternate location for the EZ Clip.



\*SPECIAL NOTES FOR RACORE USERS WITH DMA\*

1-When attempting to use the DMA feature of the Racore, the jrExcellerator must be in the PCjr Memory Mode. To achieve this switch 8 needs to be "on". You should not use the external PC/PCjr switch as described in step 21 on page 20 of the installation manual.

2-The ROM Wait State Switch on the Speedup Board (switch 2) should be "off" (1 ROM wait state).  
If switch is "on" you may experience a variety of problems.

\*GENERAL NOTE\*

Please feel free to call our technicians whenever you have questions. Our technicians would love to help you!!

# (201)280-0072

The technical support hours are currently 12:30 to 4:30 eastern time.