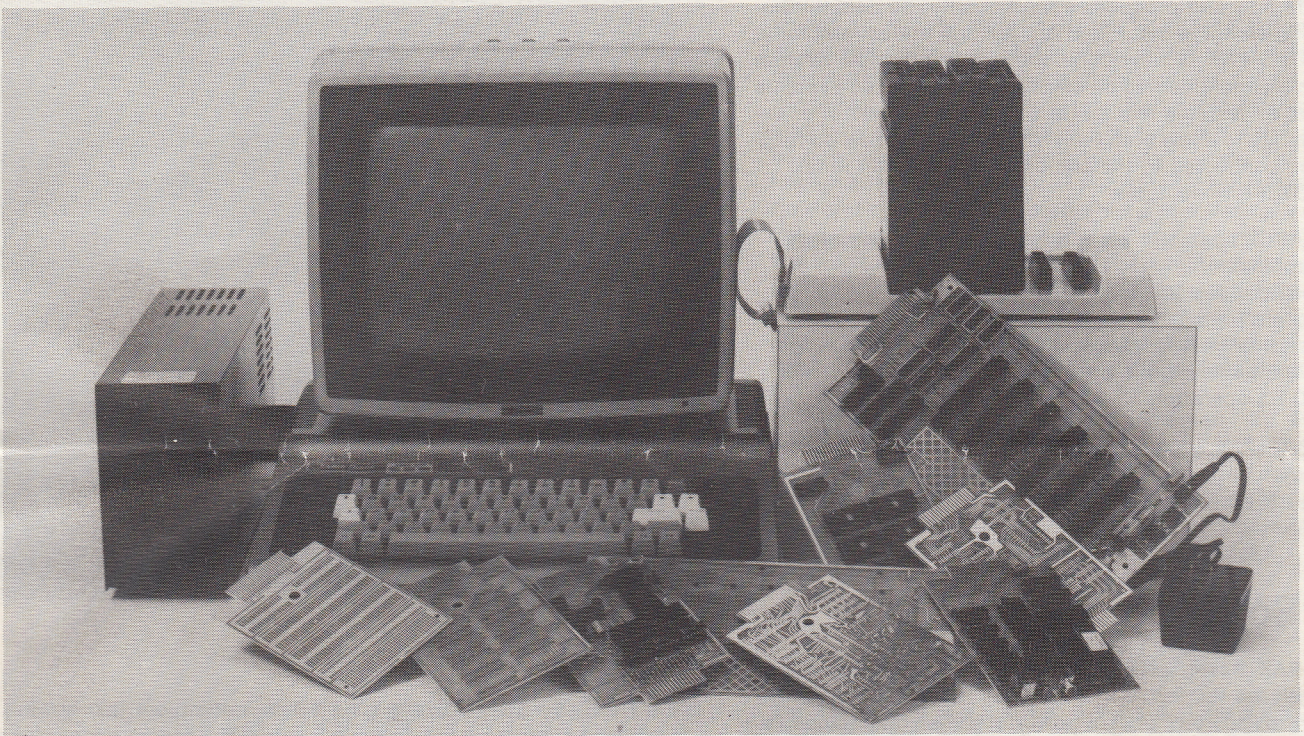


PBJ, INC. PRODUCTS FOR YOUR CoCo



FROM:
PBJ, INC.
P.O. BOX 813
N. BERGEN, N.J. 07047
201-330-1898

BULK MAIL PERMIT NO 38 N. BERGEN NEW JERSEY

TO:

WORD-PAK

The Hardware.

The WORD-PAK is a video cartridge that simply plugs into the ROM port and produces a high quality, 80 column display comparable to that found on the high priced terminals. The WORD-PAK is fully compatible with any size system and can be implemented on cassette or disk based systems (disk based systems require the use of a Y-connector or expansion bus to allow both the WORD-PAK and disk controller to be connected to the computer at the same time).

The WORD-PAK features:

- Full ASCII character set (upper, lower case and block graphics)
- On-board video RAM
- Complete transparent display memory access
- Optional or custom character sets
- Programmable cursor and display parameters
- 50/60 Hz operation

The WORD-PAK produces a composite video signal and requires the use of a monitor capable of displaying 80 columns by 25 lines of text.

The Software.

WORD-PAK Basic Driver: The Video Driver program (supplied with the WORD-PAK) integrates the WORD-PAK into the system and adds a set of powerful screen commands including: Home Cursor, Erase to End of Line, Erase to End of Screen, Destructive Cursor (on/off), X-Y Cursor Positioning, plus others. A unique feature of the Video Driver is the ability to reprogram the display for different configurations. This feature is useful in that it allows software written for other computers (model 1 for example) to be run on the Color Computer.

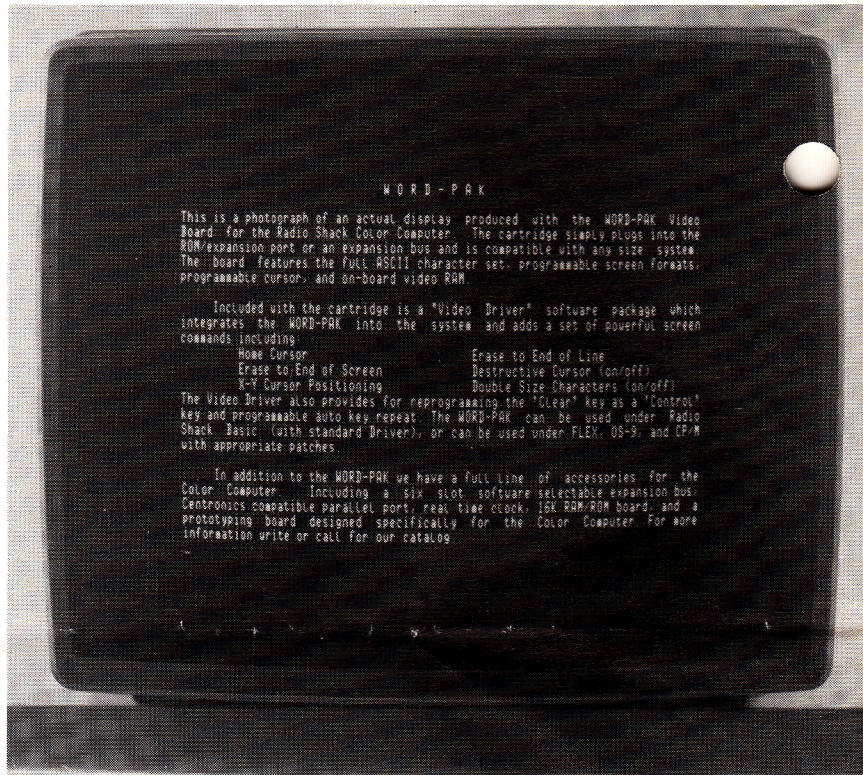
OS-9 Driver Module: We have implemented the WORD-PAK under RS OS-9. The module supplied replaces the I/O module on your system disk and allows you to run "all" standard OS-9 software on the Color Computer just like it does on the larger machines. (Note: Software must be on a RS compatible disk). An added feature of the OS-9 Driver is that it releases about 2.5K of memory back to the system.

Flex Path (FHL or DC): Seeing Stylograph, Dynacalc, XDMS, and all other standard Flex software running on the Color Computer in its 80 column version is a real treat. With the patches provided you will be able to run all standard Flex software without any modification. And since Flex was originally written for an 80 column display, the WORD-PAK is a natural.

CP/M: The WORD-PAK is also compatible with the CoCo Coupler from Wayne Technology. This combination opens up the world of CP/M to the Color Computer user and allows him/her to choose from the thousands of programs available.

We are presently working with several software vendors to convert or provide patches for existing software. We are also working on patches in-house. Users with interest in providing patches for programs that will benefit from an 80 column display are urged to contact us as to the marketability of these patches. These software houses are already providing support for the WORD-PAK:

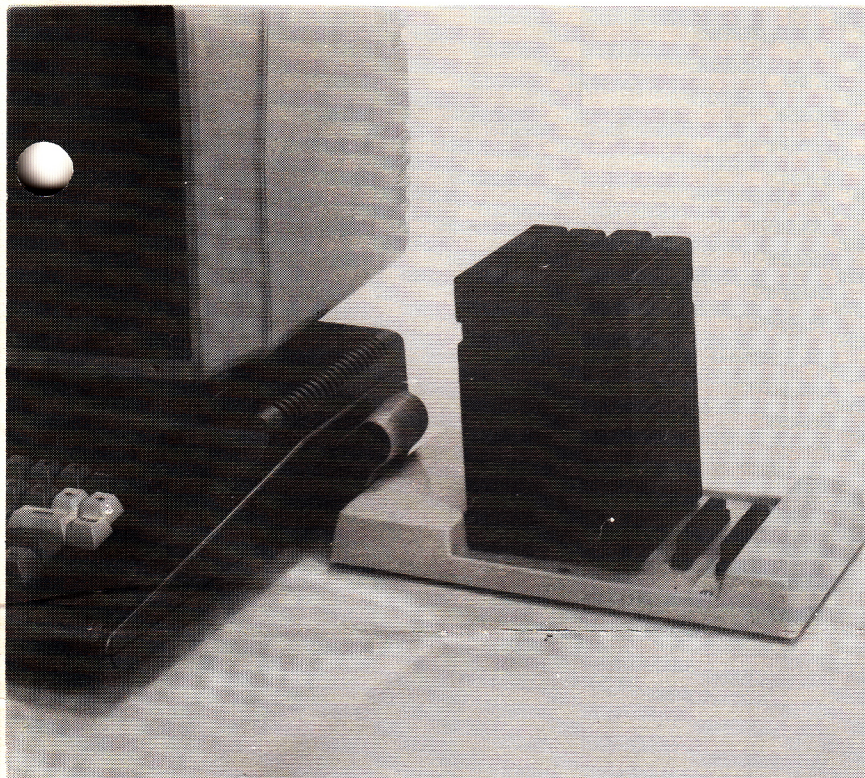
- CER-COMP
- DOUBLE DENSITY SOFTWARE
- GREAT PLAINS COMPUTER CO.



TEXPROIII (By CER-COMP): TEXPRO is a complete text editing and word processing system for the Color Computer. The program includes a powerful full function text editor plus the added features of a text processor. When used with the WORD-PAK, it allows you to see your documents formatted on the screen exactly as they will appear on paper. The editor contains over 25 commands including string search and replace, line and automatic line edit modes which allow you to insert, delete, change or add characters. Automatic line editing allows you to skip forward and backward for checking and editing. All screen editing immediately updates the screen so that you know exactly what you're doing at all times. The editor also has commands to move or copy single lines or blocks of text from one place to another. Some of the other commands include tape load, save and append, automatic line numbers, delete line, set input line length and printer output. The text processor contains over 30 commands for formatting the output, some of them include: page length, left margin, top and bottom margin, line length, justify and fill modes, page heading, center line, double width print, margin control, single, multiple and special indent modes, test lines left on page, display and input from the keyboard and even special control codes can be sent to the printer for different print densities, etc. TEXPRO has a complete programmable tab system for column formatting, including: horizontal tab, center over tab, right justify to tab, align decimals over tab, and standard left justify on tab. All tabs can be used with pre-programmed tab stops or a specified tab column. There's even a repeat command with a next command to redo all or a portion of your file as many times as needed. TEXPROIII and the WORD-PAK will turn your Color Computer into a powerful and flexible word processing system.

DATAPAK II (from CER-COMP): DATAPAK II is a "Super Smart" terminal program which allows you to communicate with other computers, and computer information services. It is an ideal program for communicating with services like CompuServe, The Source, Bulletin Board Systems, and the Dow Jones Information Service. It is written in fast efficient machine language code, and has automatic memory sensing for Color Computers having 16 to 64K of RAM. DATAPAK II has an easy to use command set which consists of two or more characters that represent easy to remember words or phrases. It also has a full featured Editor that allows you to alter the information in the terminal buffer, or to create and edit a message for transmission.

PBJ, INC.
Products For Your CoCo



C-C BUS

The C-C BUS is an expansion bus designed for use with the Radio Shack Color Computer. The board provides six software selectable cartridge slots which can be populated with any combination of accessory boards/cartridges. A typical system might contain a disk controller, parallel printer interface card, WORD-PAK video board, and a real time clock board, all installed and available to the CPU.

The C-C BUS accommodates two different types of boards: slot dependent (those which are addressed at C000-FEFF, i.e. ROM packs) and slot independent cartridges (those which are addressed at FF60-FFBF). The slot dependent boards are selected through a latch on the C-C BUS which enables the CTS and SCS signals to pass to any one of the six slots. For example, if an assembler cartridge was installed in slot #6 and the Disk controller was in slot #5, the following statement would be used to select the assembler:

```
POKE 65404,6
```

Once selected, the cartridge is executed via an "EXEC" command. A reset will return control to Basic and another cartridge may be selected and executed. On power-up one slot is automatically selected and if Disk Basic is installed it will automatically execute. There is no "selecting" required for slot-independent cartridges since each occupies a specific location in memory. A unique feature of the C-C BUS is that it allows system memory expansion beyond the 64K limit. This can be accomplished through a bank switching scheme where the user can install one or more MEM-PAKs on the bus and use the memory for data or program storage. C-C BUS features:

- All address and data lines are buffered as they enter the board.
- Gold plated cartridge connectors.
- Low profile, and compact design, the C-C BUS occupies only 50 sq. in.
- Power supply built-in.
- Compatible with existing hardware and any size system.
- Supported with a full line of accessories with more to come.

The C-C BUS is supplied complete with an attractive molded plastic cover, built-in power supply, and connection cable.

911 Columbia Avenue P.O. Box 813
N. Bergen, New Jersey 07047
201-330-1898

P-C PAK

The P-C PAK is a parallel printer interface and real time clock cartridge intended for use with the Radio Shack Color Computer. The parallel printer port is fully buffered and completely Centronics compatible. The cartridge is designed to simply connect to the ROM/expansion port or an expansion bus. A 34 pin edge connector is provided on the cartridge to connect a suitable printer cable. The cartridge can also be used with any device that requires a parallel port for communication. The P-C PAK can optionally be supplied with a hardware real time clock. The clock is implemented using National Semiconductor MM58167 real time clock LSI chip. The device has a four year calendar and keeps track of time from 1/10,000 of a second to months. The real time clock has interrupt capabilities and can function as an "alarm clock" by matching a preset time. The battery backup capability maintains the clock even when the computer is turned off. This feature eliminates the need to restart the clock each time the computer is turned on.

P-C PAK Drivers: We have implemented the P-C PAK under Flex and OS-9. The software supplied provides drivers to use the P-C PAK as the printer port and on power-up the real time clock will provide the system time. You can now print at maximum speed and you don't have to type in the time each time you boot your system disk!

MEM-PAK

The MEM-PAK is a memory expansion board designed for use with the Radio Shack Color Computer. The cartridge is supplied with 16K of RAM or can optionally be populated with EPROMs containing custom utilities/programs for instant execution. When installed on the C-C BUS each MEM-PAK can be used in a memory bank switching scheme to increase the computer's memory.

PROTO CoCo

The PROTO CoCo is a prototyping board designed for use with the Radio Shack Color Computer. The board contains 20 square inches of prototyping area and can accommodate either wire-wrap or point-to-point wiring. All signals are identified on the board to facilitate the wiring and troubleshooting. When your project is completed, the board will mount in a disk controller case to give a professional look to your work.

2SP-PAK

The 2SP PAK is a cartridge which provides the Color Computer with two hardware serial ports. These are true RS232 ports for any application — a modem, printer, terminal, you name it. The board can be strapped to provide interrupts from the ports. The serial ports are implemented using 6551's which provide programmable baud rates up to 19.2K. Now you can communicate and print at the same time! We are presently working on drivers and patches to implement the 2SP PAK under Flex and OS-9. Call for availability.

STILL TO COME IN '84

BUB-PAK 1 Megabit bubble memory cartridge.
VOX-PAK Voice recognition/synthesis cartridge.

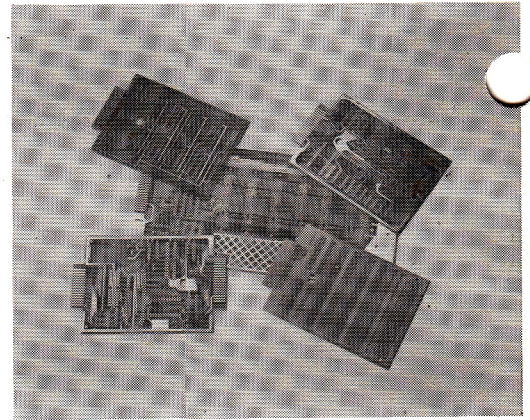
PRICE LIST

ASSEMBLED & TESTED

WORD-PAK	\$139.95
C-C BUS	\$149.95
P-C PAK (printer port)	\$ 69.95
P-C PAK (real time clock)	\$ 62.75
2SP PAK	\$ 89.95
MEM-PAK (w/16K RAM)	\$110.00

BARE BOARD W/DOCUMENTATION

WORD-PAK BB	\$19.95
C-C BUS BB	\$22.95
P-C PAK BB	\$17.95
2SP PAK BB	\$18.95
MEM-PAK BB	\$17.95
PROTO CoCo	\$10.95 (3/\$20)



WORD-PAK Basic Driver	\$ 16.95
Flex Patch (spec version)	\$ 19.95
TexproIII	\$ 49.95 57.95
BMC #BM-12EUN 18MHz Monitor (green)	\$135 (list \$189)
(amber)	\$139 (list \$199)
BMC #BM-AU9191U Color Monitor	\$249 (list \$299)
with audio input	
BMC #BX-80 Dot matrix printer	\$289 (list \$379)
serial interface add	\$ 99

OS-9 Driver	\$19.95
DATAPAK II	\$44.95

PARTS LIST

<h3>ICs</h3> <table border="0"> <tr><td>74LS00</td><td>\$.55</td><td>74LS04</td><td>\$.60</td><td>7407</td><td>\$.60</td></tr> <tr><td>74LS10</td><td>\$.55</td><td>74LS11</td><td>\$.60</td><td>7417</td><td>\$.60</td></tr> <tr><td>74LS20</td><td>\$.55</td><td>74LS21</td><td>\$.60</td><td>74LS30</td><td>\$.55</td></tr> <tr><td>74LS74</td><td>\$.65</td><td>74LS75</td><td>\$.95</td><td>74LS86</td><td>\$.65</td></tr> <tr><td>74LS93</td><td>\$.85</td><td>74LS133</td><td>\$ 1.25</td><td>74LS138</td><td>\$ 1.15</td></tr> <tr><td>74LS165</td><td>\$ 1.45</td><td>74LS244</td><td>\$ 2.00</td><td>74LS245</td><td>\$ 2.35</td></tr> <tr><td>74LS373</td><td>\$ 2.00</td><td>MM58167</td><td>\$13.45</td><td>SY6845E</td><td>\$15.95</td></tr> <tr><td>6116LP3</td><td>\$ 7.45</td><td>MCM6820</td><td>\$ 3.45</td><td>CHRGEN</td><td>\$ 7.95</td></tr> <tr><td>SY6551</td><td>\$10.95</td><td></td><td></td><td></td><td></td></tr> </table>	74LS00	\$.55	74LS04	\$.60	7407	\$.60	74LS10	\$.55	74LS11	\$.60	7417	\$.60	74LS20	\$.55	74LS21	\$.60	74LS30	\$.55	74LS74	\$.65	74LS75	\$.95	74LS86	\$.65	74LS93	\$.85	74LS133	\$ 1.25	74LS138	\$ 1.15	74LS165	\$ 1.45	74LS244	\$ 2.00	74LS245	\$ 2.35	74LS373	\$ 2.00	MM58167	\$13.45	SY6845E	\$15.95	6116LP3	\$ 7.45	MCM6820	\$ 3.45	CHRGEN	\$ 7.95	SY6551	\$10.95					<h3>CAPS</h3> <table border="0"> <tr><td>0.01uF cer disk</td><td>\$.15</td></tr> <tr><td>0.1uF cer disk</td><td>\$.20</td></tr> <tr><td>20pF cer disk</td><td>\$.25</td></tr> <tr><td>10uF electrolytic</td><td>\$.55</td></tr> <tr><td>22uF electrolytic</td><td>\$.85</td></tr> <tr><td>2200uF electrolytic</td><td>\$1.25</td></tr> <tr><td>1.0uF tantalum</td><td>\$.65</td></tr> <tr><td>6.8uF tantalum</td><td>\$.75</td></tr> </table>	0.01uF cer disk	\$.15	0.1uF cer disk	\$.20	20pF cer disk	\$.25	10uF electrolytic	\$.55	22uF electrolytic	\$.85	2200uF electrolytic	\$1.25	1.0uF tantalum	\$.65	6.8uF tantalum	\$.75	<h3>SOCKETS</h3> <table border="0"> <tr><td>14 pin</td><td>\$.20</td></tr> <tr><td>16 pin</td><td>\$.25</td></tr> <tr><td>20 pin</td><td>\$.30</td></tr> <tr><td>24 pin</td><td>\$.35</td></tr> <tr><td>28 pin</td><td>\$.40</td></tr> <tr><td>40 pin</td><td>\$.50</td></tr> </table>	14 pin	\$.20	16 pin	\$.25	20 pin	\$.30	24 pin	\$.35	28 pin	\$.40	40 pin	\$.50
74LS00	\$.55	74LS04	\$.60	7407	\$.60																																																																															
74LS10	\$.55	74LS11	\$.60	7417	\$.60																																																																															
74LS20	\$.55	74LS21	\$.60	74LS30	\$.55																																																																															
74LS74	\$.65	74LS75	\$.95	74LS86	\$.65																																																																															
74LS93	\$.85	74LS133	\$ 1.25	74LS138	\$ 1.15																																																																															
74LS165	\$ 1.45	74LS244	\$ 2.00	74LS245	\$ 2.35																																																																															
74LS373	\$ 2.00	MM58167	\$13.45	SY6845E	\$15.95																																																																															
6116LP3	\$ 7.45	MCM6820	\$ 3.45	CHRGEN	\$ 7.95																																																																															
SY6551	\$10.95																																																																																			
0.01uF cer disk	\$.15																																																																																			
0.1uF cer disk	\$.20																																																																																			
20pF cer disk	\$.25																																																																																			
10uF electrolytic	\$.55																																																																																			
22uF electrolytic	\$.85																																																																																			
2200uF electrolytic	\$1.25																																																																																			
1.0uF tantalum	\$.65																																																																																			
6.8uF tantalum	\$.75																																																																																			
14 pin	\$.20																																																																																			
16 pin	\$.25																																																																																			
20 pin	\$.30																																																																																			
24 pin	\$.35																																																																																			
28 pin	\$.40																																																																																			
40 pin	\$.50																																																																																			
<h3>MISCELLANEOUS</h3> <table border="0"> <tr><td>2N2222</td><td>\$.25</td><td>1.84 MHz (crystal)</td><td>\$ 3.55</td></tr> <tr><td>2N2907</td><td>\$.30</td><td>#2223 (batt. holder)</td><td>\$ 3.89</td></tr> <tr><td>1N5400</td><td>\$.70</td><td>Wall Transformer</td><td>\$16.95</td></tr> <tr><td>1N914</td><td>\$.20</td><td>MDPC-2A-RA (phone jack)</td><td>\$ 2.25</td></tr> <tr><td>1N4728</td><td>\$.35</td><td>107E65-04 (coax conn.)</td><td>\$ 3.35</td></tr> <tr><td>14.318 MHz (crystal)</td><td>\$ 3.55</td><td>RC2042425 (edge conn.)</td><td>\$ 3.75</td></tr> </table>		2N2222	\$.25	1.84 MHz (crystal)	\$ 3.55	2N2907	\$.30	#2223 (batt. holder)	\$ 3.89	1N5400	\$.70	Wall Transformer	\$16.95	1N914	\$.20	MDPC-2A-RA (phone jack)	\$ 2.25	1N4728	\$.35	107E65-04 (coax conn.)	\$ 3.35	14.318 MHz (crystal)	\$ 3.55	RC2042425 (edge conn.)	\$ 3.75	<h3>RESISTORS</h3> <p>All are 1/4w, ±10% \$.07 each</p> <table border="0"> <tr><td>TCG5304 (bridge rect.)</td><td>\$1.75</td></tr> <tr><td>7805K (volt. reg.)</td><td>\$1.95</td></tr> <tr><td>32.768 KHz (crystal)</td><td>\$3.55</td></tr> <tr><td>Heat Sink (TO3)</td><td>\$.55</td></tr> <tr><td>C-C BUS cover</td><td>\$9.95</td></tr> <tr><td>Cartridge Case</td><td>\$7.95</td></tr> </table>	TCG5304 (bridge rect.)	\$1.75	7805K (volt. reg.)	\$1.95	32.768 KHz (crystal)	\$3.55	Heat Sink (TO3)	\$.55	C-C BUS cover	\$9.95	Cartridge Case	\$7.95																																														
2N2222	\$.25	1.84 MHz (crystal)	\$ 3.55																																																																																	
2N2907	\$.30	#2223 (batt. holder)	\$ 3.89																																																																																	
1N5400	\$.70	Wall Transformer	\$16.95																																																																																	
1N914	\$.20	MDPC-2A-RA (phone jack)	\$ 2.25																																																																																	
1N4728	\$.35	107E65-04 (coax conn.)	\$ 3.35																																																																																	
14.318 MHz (crystal)	\$ 3.55	RC2042425 (edge conn.)	\$ 3.75																																																																																	
TCG5304 (bridge rect.)	\$1.75																																																																																			
7805K (volt. reg.)	\$1.95																																																																																			
32.768 KHz (crystal)	\$3.55																																																																																			
Heat Sink (TO3)	\$.55																																																																																			
C-C BUS cover	\$9.95																																																																																			
Cartridge Case	\$7.95																																																																																			

PBJ, INC. 911 COLUMBIA AVENUE • P.O. BOX 813 • N. BERGEN, NEW JERSEY 07047
201-330-1898

Gentlemen: Please ship the following items to:

Name _____

Address _____

City, State, Zip _____

Item	Description	Quant.	Price
1	_____		
2	_____		
3	_____		
4	_____		
5	_____		

Total (add \$2.50 S&H) _____

_____ Card # _____ Exp. _____

_____ Check Enclosed _____ Signature _____