

ADAM OWNERS —

Use other printers with your computer by using our C-interface board!

PRINT COLOR IMAGES FROM ADAM'S SCREEN

After you have created a picture on ADAM(TM)'s screen using the Smartbasic(TM) HGR or HGR2 mode, you can dump that picture onto the Okimate 10 printer in 8 color graphics. Pictures can be created with commercial software or your own programs. Print out artwork, graphs, signs, bar charts, or anything else you can create!

PRINT TEXT MUCH FASTER THAN ADAM

Smartbasic or Smartwriter(TM) files can be printed out several times faster on many printers than they can be on the ADAM printer. You don't have to waste your time waiting for a listing to finish! The Okidata 120 printer, for example, prints 120 characters per second, much faster than ADAM's approximately 10 characters per second rate.

PRINT MORE QUIETLY

Dot matrix printers such as the Okidata 120 and Comrex CR220 are generally quieter than the ADAM letter quality printer. Thermal types such as the Okimate 10 are still quieter!

WALK AWAY DURING PRINTING

The pin in hole feed mechanism built into most printers will reliably advance folded computer paper using the holes punched in its edges. No need to babysit the printer, watching for paper to slip, bunch, or double print!

PRINT BLACK AND WHITE SCREEN IMAGES

Commodore 64 compatible printers can use the supplied software to dump HGR and HGR2 screens in black and white.

PRINT GRAPHICS FROM YOUR OWN PROGRAM

By using supplied subroutines, you can create and send codes to any printer with graphics capability, Commodore compatible or not, that will produce pictures!

WHAT IS AN INTERFACE?

Computers move data between themselves and peripherals (printers, disk drives, modems, tapes, etc.) through INTERFACES. An interface is a pair of mating electrical connectors with very specific rules controlling how information is transferred between them. There are different types of interfaces, and each one can talk only to others of its kind. The C-Interface is designed to talk to peripherals using the

Commodore Serial Bus Interface. This is different from the RS-232 serial interface, the Centronics Parallel Interface, the RS-422 interface, and every other interface.

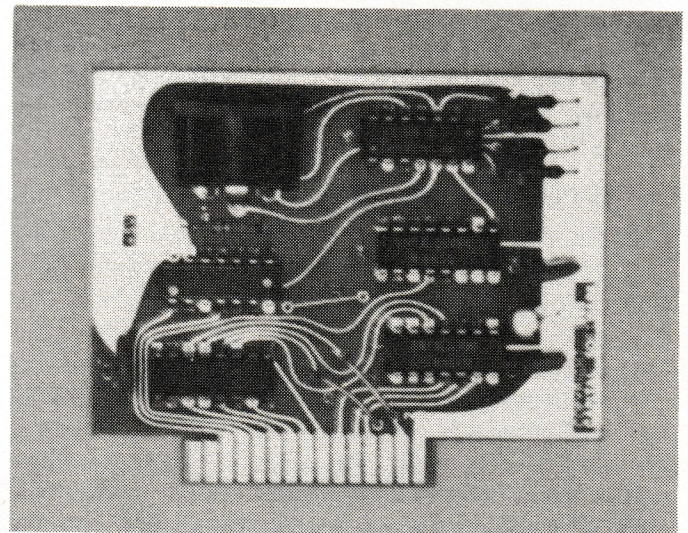
Because of the large number of Commodore computers, there are many peripherals available with this interface. The C-Interface is electrically capable of talking to any peripheral, but its software allows it only to send data and not receive it. This is all that is required for printers.

THE CENTRONICS PARALLEL INTERFACE

Another common interface is the Centronics Parallel Interface. This is available on many different computers and printers. For those people who want to use a Centronics Parallel Interface printer with their ADAM, an additional product is available that will change data coming from the C-Interface into the form used by the printer's Centronics Parallel Interface. It is a circuit board inside a small box with 2 cables we have simply called our Centronics Port.

WHAT IS THE C-INTERFACE?

The C-Interface is a single circuit board that fits entirely inside ADAM in expansion slot one. It adds a Commodore 64 Serial Bus Interface to ADAM! This allows you to directly connect printers like the Okidata and Comrex models below. The C-Interface comes with a one year parts and labor warranty.



WHAT PRINTERS CAN BE USED?

ANY printer with the Commodore Serial Interface will work with the C-Interface. All printers we are aware of which connect directly to a Commodore-64 computer use this six-pin interface. In addition, by connecting our Centronics Port to the C-Interface, you will be able to use ANY printer that has a standard Centronics Parallel Interface.

SOFTWARE INCLUDED WITH THE C-INTERFACE

A Digital Data Pack with all software to drive the C-Interface is included with any purchase. The software consists of several programs in Smartbasic and assembly language that can be used to send information out the serial bus to the printer. Different routines are included to dump color graphic pictures to the Okimate 10, to send text to the Commodore 64 compatible printers (Okimate 10, Okidata 120, Comrex CR220, and others), to dump black and white graphics to Commodore 64 compatible printers, and to send text to printers using the optional Centronics Port.

MANUAL INCLUDED WITH THE C-INTERFACE

A comprehensive manual that tells you how to set up the hardware, how to run the software, and how to keep everything working smoothly (finding ribbons, getting service, diagnosing trouble, etc.) is included with any purchase.

HOW DO YOU INSTALL THE C-INTERFACE?

The C-Interface is installed underneath ADAM's removable cover in expansion slot 1 ONLY. The most difficult part of the installation is drilling a 3/4 inch diameter hole in the cover so that the printer cable can pass through.

If you have the modem, you will have to choose it or the C-Interface before you power up, then turn off the power and switch the boards when you want to perform the other functions. Your old printer is not affected and can be used any time the C-Interface is installed, but you cannot remove it because it contains ADAM's power supply.

WHAT IS REQUIRED TO PRINT?

Unlike our competition, a disk drive is not required. Any ADAM system will print text and graphics if you add one of the packages on our order form that includes a printer. Everything else you need - cables, ribbons, paper, software, interfaces, manual - is included (you do, however, have to supply your own paper for the CR220). If you order the C-Interface and Centronics Port, the only thing you must add is the printer and your own ribbon, paper, etc., since the cable, software, interfaces, and manual are included. The C-Interface alone is for people who want to use their own printer and/or interface, and it includes the software and manual.

HOW DOES THE SOFTWARE WORK?

The manual leads you through the few steps required for different types of printing. All printing is done from BASIC, and it starts out with setting LOMEM: to make room for the assembly language software, loading the assembly language software with a BLOAD command, and CALLing an assembly language routine that initializes the C-Interface. These setup steps only have to be done once each time ADAM is powered up.

To print a color or black & white picture, you simply have to CALL a different assembly language program after you have drawn your picture on the screen in HGR or HGR2 mode. To print a BASIC or Smartwriter file, you must RUN a BASIC program that will ask you the name and type of file you want to print, then read that file from your storage media and print it.

If you want to print directly from your own BASIC program, you must load a BASIC program that starts at line 42000, then write your program to use GOSUBs above 42000 that send data to the printer. With these GOSUBs, any printer feature documented in your printer manual can be used, such as boldface, wide and narrow characters, reverse printing, and alternate character sets.

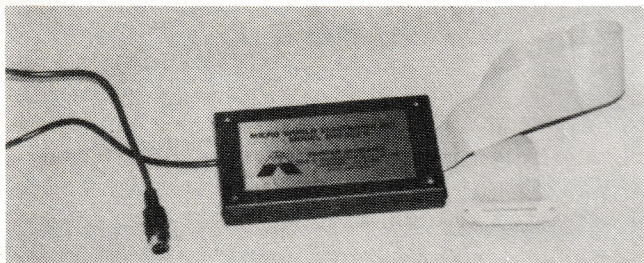
The assembly language software sits just below the LOMEM: value and uses up at least 2060 bytes to print text with the Centronics Port, 2316 bytes to print text with a Commodore compatible printer, and 10765 bytes to print graphics. These numbers include a 512 byte printer buffer.

There are no software limits to the amount of printing that can be done at one time, so the largest BASIC or Smartwriter file you can create can print in one run, or a BASIC program you write can print forever! Since most dot matrix printers have a pin feed that will keep the paper from jamming, you may be able to print until the printer runs out of paper and stops itself.

Color screen dump software takes each dot, or pixel, from the screen and expands it into a 2x2 group of dots of one color on the paper. The 15 colors available on the screen are compressed into the 8 basic colors of the printer, but it is possible to create dozens of shades by mixing differently colored dots using a BASIC program that talks directly to the printer.

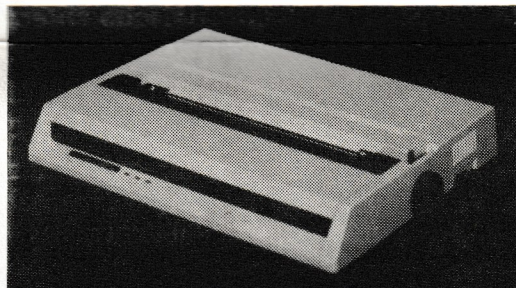
CENTRONICS PORT

This is a circuit board in a 4 1/4 by 6 1/4 by 4/5 inch box with both cables included, the cable to the C-Interface on one end and the cable to the printer at the other end. It gets its power from the C-Interface and so needs no other cord. The Centronics Port adds a standard Centronics Parallel Interface, which is used by most printers. The few special features used by Smartwriter (subscript, superscript, underline) are sent out the port as Epson printer codes, but these can be changed to work with any printer.



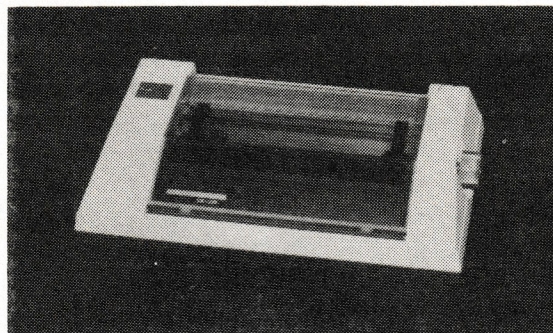
OKIDATA 120 PRINTER

This dot matrix printer comes with ribbon, paper, and printer cable. It prints both directions for extra speed, and it has many special functions like near-letter-quality text, Spanish and French-Canadian characters, and emphasized characters. It uses a long-lasting self-inking ribbon.



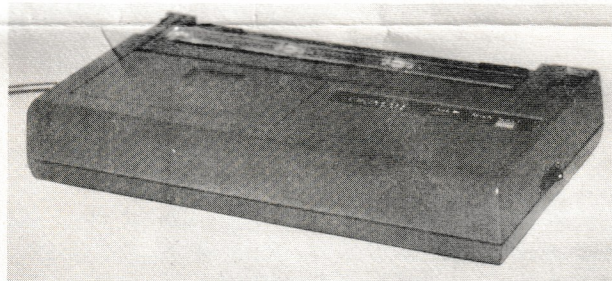
COMREX CR220 PRINTER

This dot matrix printer comes with ribbon and printer cable. It is manufactured by Seikosha, a major corporation, and uses a long-lasting fiber ribbon.



OKIMATE 10 PRINTER

This is a relatively quiet thermal transfer type printer made by Okidata. It comes with plug n print module including paper, black ribbon, color ribbon, and printer cable. Its thermal transfer system heats up spots on the printhead, which melts wax in the ribbon and causes ink to stick to the paper. It will print on thermal paper without the ribbon, smooth regular paper, thin plastic transparencies, or thermal transfer paper. Thermal transfer paper is best for graphics. The black ribbon is good for about 75 pages of printing, and the color ribbon will last for about 10 full screen prints.



ORDER FORM

- ___ C-Interface & Okidata 120 Printer — \$319.95
- ___ C-Interface & Okimate 10 Printer — \$259.95
- ___ C-Interface & Comrex CR220 Printer — \$174.95
- ___ C-Interface & Centronics Port — \$119.95
- ___ C-Interface only — \$ 69.95
- ___ Add Shipping and Handling: Continental U.S.: \$8 w/ Printer, \$4 w/Centronics, \$3.50 C-Interface only; Canada, APO, FPO, Alaska: \$14 w/Printer, \$6 w/Centronics, \$5.50 w/C-Interface.
- Others: write for terms.

SHIP TO: _____

___ Missouri residents add 5.725% sales tax

All Prices U.S. Funds.

Charge to: _____ VISA _____ Mastercard

Card # _____

Expiration Date _____

Signature _____

___ VISA/MC orders add 3%.

Prices listed include cash discount.

OR — Send check or money order to:

CAPITAL SOFTWARE
P.O. Box 370
St. Louis, MO 63032

NEW HARDWARE FOR THE ADAM COMPUTER!

Capital Software
P.O. Box 370
St. Louis, MO 63032

PRINTER COMPARISON CHART

Printer Comparison Chart			
Comrex CR220	Okimate 10	Okidata 120	
50 CPS	60 CPS	120 CPS	Text Printing Speed
YES	YES	YES	Pin In Hole Paper Feed
NO	YES	YES	Single Sheet Paper Feed
YES	YES + COLOR	YES	Black & White Graphics
4.5" to 10"	5" to 10"	to 10.5"	Paper Width
5x7	9x9	9x9	Character Size
NO	NO	YES	Subscr, Superscr, Undlin
NO	YES	YES	True Descenders
80	40 to 136	40 to 137	Characters per line