

UD-80 Video Display Controller

by Doug Kitson and Bob Hermann



Product: UD-80 Video Display Controller

Type: Interface controller enabling the use of a 24 line monitor with PX-8.

Operating System: CP/M PX-8 version B.

Accessories: Required software is included in the controller. Optional black and white or color television modulator kits (about \$20 and \$50 respectively). Optional 8K RAM expansion kit (\$40). Optional upgrade kit for HX-20 to allow UD-80 support. Also available is a driver program for the HX-40.

Price: Approximately \$200.00

Ease of Use: Excellent

Documentation: Fair to good

Summary: Generally good, there is a slight bug with WordStar, and you must be sure to check the monitor you will be using to be sure it meets with the UD-80's required specifications before buying.

Manufacturer:

Oval Automation Limited
Courtwick Lane, Littlehampton,
West Sussex, BN17 7PA
England
Phone: 0903-725225

We recently had the opportunity to evaluate the OVAL UD-80 Video Display Controller with both a HEATH 122A and a COMREX CR5600 monitor. The device was easy to set up and included more features than originally indicated. It was necessary to attach an electrical outlet plug to the end of the power supply cable, since none was supplied.

The driver program, UD80-DRV.COM, along with the Portable WordStar loader, WSX.COM, downloads from the UD-80 by using FILINK.COM on the CP/M utilities

ROM in a couple of very easy steps. Once downloaded the driver program is run and places itself in User BIOS until cleared when you push the RESET button on the side of the PX-8. You must have set the User BIOS to 3 pages using CONFIG, and your PX-8 must have the new operating system ROM, version B, installed.

Using CTRL with the PFKeys directs output to the monitor through either the serial or the RS232 port. As the UD-80 uses CTRL with the PFKeys the PFKeys retain their usual functions. Although the monitor is usually attached to the RS232 port, which is the UD-80 default port, it can be connected to the serial port so that the RS232 port can be used simultaneously for a modem for telecommunications.

Neither monitor gave a continuously stable display. They both wavered and jumped about a bit from time to time when used with the UD-80.

If you thought that the slowness of display of the PX-8 was due to the PX-8 itself just wait till you see it fly when you do a TYPE of a long document on the monitor with the UD-80! Have your finger close by the <PAUSE> as you'll see for sure that the responsibility for that lack of speed lies with the LCD.

Some programs cannot be used with the UD-80; these include any that occupy User BIOS space. For this reason the Portable Scheduler will not function at all. Others such as PortaCalc will only show eight lines; this also applies to Portable WordStar if it is not run using the bundled WSloader, WSX.COM. As well as changing the display to 24 lines for the UD-80 with monitor the WordStar loader can also be very easily user modified to change the printer installation usually run by Portable WordStar.

We were not able to use the internal modem of the PX with the display controller. After returning the unit, it did occur to us that this may be possible, if STAT were used to change the device assignments. We did not have the opportunity to evaluate this assumption, however.

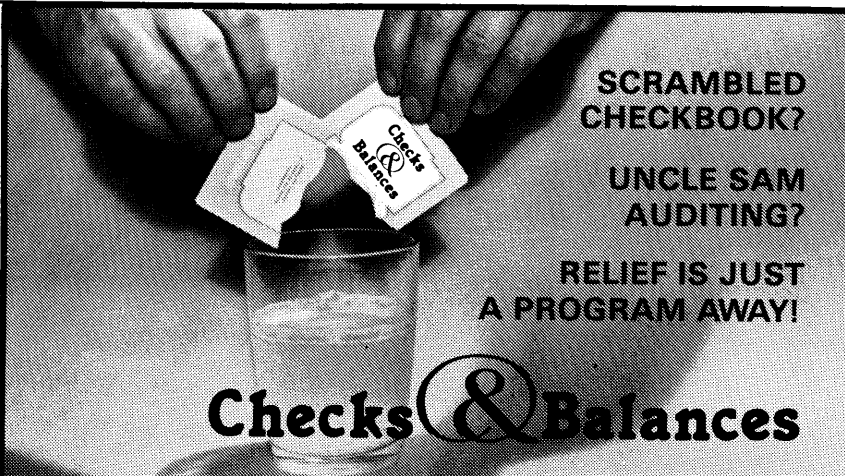
Using Portable WordStar on a 24 line monitor certainly is easier than on the PX-8's 8 LCD lines. There are no real surprises here except for some very strange screens, with the WordStar ruler and status lines stuck two-thirds down the screen (intermittently, after we hit ^G or ^B). The screen can be brought back to normal by simply scrolling the garbage off the screen then scrolling back to where you were. This is a bug the manual mentions but says had been corrected in the version which was used; not completely corrected it would appear.

The UD-80 must be signaled, by pressing ^PFK1, when using PX-80 BASIC. Some BASIC programs will need to be modified to function with the UD-80. Those programs using forms of the SCREEN command filled the screen with "P"s and any further output was unreadable. Obviously any LOCATE commands will only work with a maximum of 8 lines as anything more than 8 is rejected by PX-8 Basic as invalid.

The UD-80 apparently has a screen dump feature which is independent from that of the PX-8. As a special Y cable is required, this feature was not attempted. We also did not have the necessary equipment to use the controller with a television.

The hardware, as supplied, does not allow scrolling on the UD-80 unless additional option video memory is added (scrolling works as expected within WordStar). Up to 16K can be added and this will then allow

Continued on page 44



**SCRAMBLED
CHECKBOOK?**

**UNCLE SAM
AUDITING?**

**RELIEF IS JUST
A PROGRAM AWAY!**

Checks & Balances

Checks & Balances will unscramble your checkbook by:

- Keeping a full year at a time
- Reconciling your bank statement
- Flagging missing or duplicated checks
- Writing checks with your computer
- Allowing for automatic teller machine transactions
- Single entry format—fast, easy use for home or small business
- Easy-to-remember *English* commands and full-screen editing

Get organized for Uncle Sam

- Enter check or CASH transactions
- Transactions may be divided to multiple accounts
- Track travel and mileage for your deductions
- Reports combining multiple checkbooks
- Net worth, profit/loss, income/expense reports
- Keeps a full year—calendar or fiscal—with no closing at the end of a month. You can enter that shoebox of receipts for the year on April 14 to beat the deadline!
- Generate reports for all or part of the year anytime

Plus it contains a rolodex for names and addresses so you may use window envelopes with checks or print mailing labels, rolodex cards or envelopes.

**ONLY \$74.95 • 30-day money back guarantee
Not copy protected!**

BOWLING LEAGUE SECRETARY

Written by Patrick Lajko of CDE—a bowler with a high of 287, he knows what a league secretary needs. The Secretary computes averages, handicaps (5 different ways) and maintains high, scratch and HDCP games, team standings, and it even tells you what lane to bowl on! Complete printed reports. Enter the scores, it does the rest. Free updates for one year. Not copy protected. For CP/M-80 or MS-DOS and PC-DOS.

Price \$89.95

UNBELIEVABLE PRICES ON IBM-XT COMPATIBLE COMPUTERS WITH SOFTWARE

256K, 2 half-height floppies, keyboard, color graphics card with monochrome monitor, serial, parallel, game ports. **\$989.00**

640K, 20 meg hard disk, 2 floppies, keyboard, RGB color monitor, serial, parallel, game ports, 5151 keyboard. **\$1995.00**

Ordering Information

Checks & Balances and Bowling Secretary system requirements—CP/M: 60K RAM MS-DOS/PC-DOS: 192K RAM. All require 2 floppies or hard disk, or one floppy with over 500K.

Check, Visa, MC accepted. \$3 P&H per order. COD \$4 extra. Outside USA \$10 per order, no COD. Computers shipped UPS surface rate.

**CDE SOFTWARE • 948 Tularosa Drive
Los Angeles, CA 90026 • (213) 661-2031**

Advertisers Index

Advent Products, Inc.	6, 7
Bi-Tech Enterprises, Inc.	32
Brown Custom, Inc.	37
C & C Computers	9
CDE Software	44
Cardinal Software	36
Central Computer Products	22, 23
Coast Investment Software	33
CompuData Systems	20
Computer Centers	10, 11
Dresselhaus Computer Products	40
Epson America, Inc.	1FC, 1
Forrest Micro, Inc.	38
Green Tree Computer Systems	35
Generic Computer Products, Inc.	24
Grand Island Productions	17
James River Group, Inc.	4
Kamasoft, Inc.	45
MPS, Inc.	41
Micro-Art Programmers	36
Micro Designs	24
NewTEK Industries	27
P.R.O.-Systems of Kansas City	33
Rising Star Industries	28, 29
SemiDisk Systems, Inc.	BC
Stanton Software	20

Continued from page 43

multiple pages, full attributes and user defined characters according to the user's manual. Other plug-in modules are also listed as options and claim to support color coders and modulators; further options are promised at a future date. Oval currently also offers another unit, the DS-8, which allows up to three accessories to be simultaneously attached to the serial port while the RS232 is being used for the UD-80 display controller. Switching between these (for example a printer and a PF-10 disk drive) is software controlled.

Would I buy one? If my PX-8 were my only computer I might. I really like seeing more than a half dozen or so lines at a time (though as a dedicated PX-8er I now insist that 8 lines of display, without descenders, is the norm for a computer!) but the occasional instability of the display is somewhat distracting. I would want to be really sure the occasional instability was a result of the two different monitors I was using and not inherent in the display controller. If you can't first check out how the UD-80 will function with your own monitor I'd be careful about buying one. If you do check it out and the display is stable then it seems to me that the UD-80 would be a useful addition for the Geneva.