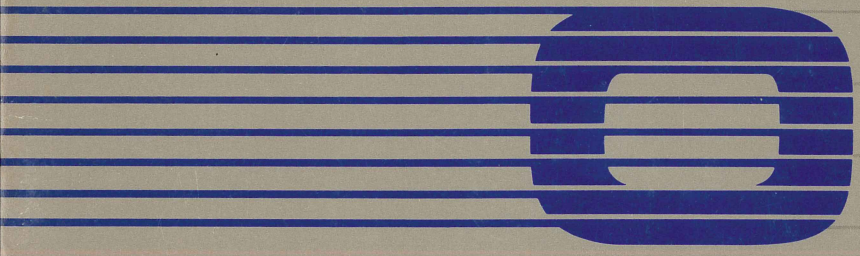
SCREEN-PAC™
User's Guide



OSBORNE™
COMPUTER CORPORATION

OSBORNE SCREEN-PAC[tm]

USER'S GUIDE

Manual Revision 1.1

Osborne Computer Corporation

Hayward, California

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This Manual written by Joseph Caggiano.

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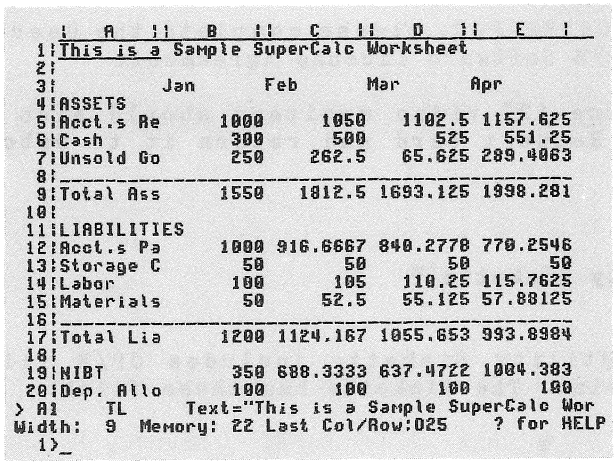
Introduction

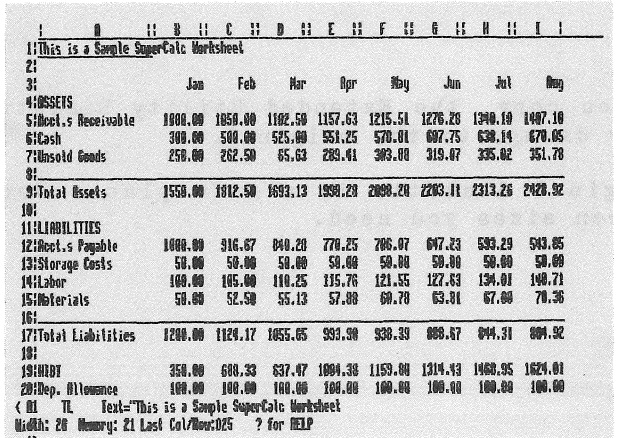
SCREEN-PAC[tm] gives you new flexibility to configure the Osborne 1's video screen. In addition to the 52 column format originally provided by the Osborne, you can now select an 80 or 104 column video display. This means increased efficiency and convenience with more data on screen and less horizontal scrolling. You can also change screen size as needed to meet your requirements.

The worksheets below show how the expanded screen gives you access to more data.



```
   |   A   ||   B   ||   C   ||   D   ||   E   |
  1|This is a Sample SuperCalc Worksheet
  2|
  3|          Jan       Feb       Mar       Apr
  4|ASSETS
  5|Acct.s Re      1000      1050    1102.5 1157.625
  6|Cash             300       500       525   551.25
  7|Unsold Go        250     262.5    65.625 289.4063
  8|_____________________________________________
  9|Total Ass      1550    1812.5 1693.125 1998.281
 10|
 11|LIABILITIES
 12|Acct.s Pa      1000 916.6667 840.2778 770.2546
 13|Storage C        50        50        50        50
 14|Labor            100       105    110.25 115.7625
 15|Materials         50      52.5    55.125 57.88125
 16|_____________________________________________
 17|Total Lia      1200 1124.167 1055.653 993.8984
 18|
 19|NIBT             350 688.3333 637.4722 1004.383
 20|Dep. Allo        100       100       100       100
> A1    TL     Text="This is a Sample SuperCalc Wor
Width:  9  Memory: 22 Last Col/Row:025    ? for HELP
  1>_
```

52 Column SuperCalc Screen



```
   |       A       ||  B  ||  C  ||  D  ||  E  ||  F  ||  G  ||  H  ||  I  |
  1|This is a Sample SuperCalc Worksheet
  2|
  3|                          Jan     Feb     Mar     Apr     May     Jun     Jul     Aug
  4|ASSETS
  5|Acct.s Receivable      1000.00 1050.00 1102.50 1157.63 1215.51 1276.28 1340.10 1407.10
  6|Cash                    300.00  500.00  525.00  551.25  578.81  607.75  638.14  670.05
  7|Unsold Goods            250.00  262.50   65.63  289.41  303.88  319.07  335.02  351.78
  8|_____________________________________________________________________________________
  9|Total Assets           1550.00 1812.50 1693.13 1998.28 2098.20 2203.11 2313.26 2428.92
 10|
 11|LIABILITIES
 12|Acct.s Payable         1000.00  916.67  840.28  770.25  706.07  647.23  593.29  543.85
 13|Storage Costs           50.00   50.00   50.00   50.00   50.00   50.00   50.00   50.00
 14|Labor                  100.00  105.00  110.25  115.76  121.55  127.63  134.01  140.71
 15|Materials               50.00   52.50   55.13   57.88   60.78   63.81   67.00   70.36
 16|_____________________________________________________________________________________
 17|Total Liabilities      1200.00 1124.17 1055.65  993.90  938.39  888.67  844.31  804.92
 18|
 19|NIBT                   350.00  688.33  637.47 1004.38 1159.80 1314.43 1468.95 1624.01
 20|Dep. Allowance         100.00  100.00  100.00  100.00  100.00  100.00  100.00  100.00
< A1    TL     Text="This is a Sample SuperCalc Worksheet
Width: 20  Memory: 21 Last Col/Row:025    ? for HELP
  1>_
```

104 Column SuperCalc Screen

Your Osborne Dealer has installed a new video socket next to the BATTERY connector on the front of the computer. You'll use this socket to connect an external video monitor to your Osborne.

SCREEN-PAC also includes the Osborne Extended Utility Diskette^{tm} which lets you set up your software for 52, 80, or 104 column display.

User Registration

Before using SCREEN-PAC, please complete the User Registration Card and the CP/M Software License Agreement.

Users of Osborne 12" video monitors should also complete the Video Adaptor Request card and return it to Osborne Computer Corporation.

Extended Utility Diskette^{tm}

The Extended Utility Diskette includes CP/M files needed to change screen size. The diskette has these files:

AUTOST.COM
COPY.COM 3.2
MOVCPM.COM
SETUP.COM 2.6
SYSGEN.COM 2.1
XDIR.COM 3.5

We recommend you copy the Extended Utility Diskette as security against loss or damage to the original.

Store the original diskette in a safe place. Use the copy to select the screen sizes you need.

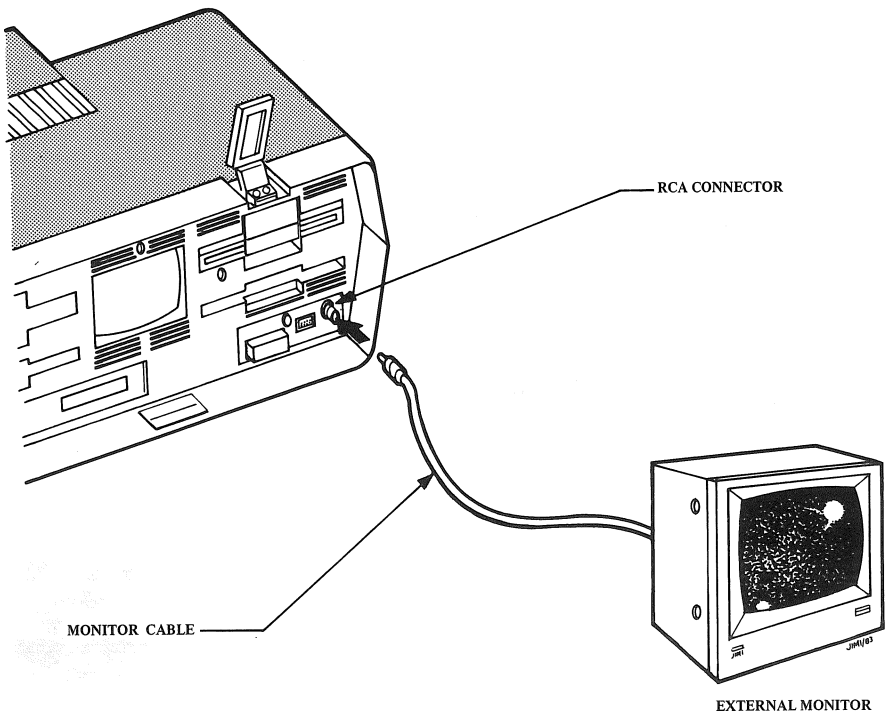
Using an External Video Monitor

This section concerns external video monitors other than the Osborne 12 inch. If you're using an Osborne 12 inch monitor, please go on to the next section of this Manual.

The new video socket on the front of your Osborne is called an "RCA connector." External monitors attach directly to this connector without an external adaptor.

To connect an external monitor:

1. Turn the computer OFF.
2. Be sure the "EXT VIDEO" plug originally supplied with your Osborne is in place to the left of the RESET button.
3. Plug your external monitor into the RCA connector as shown below.

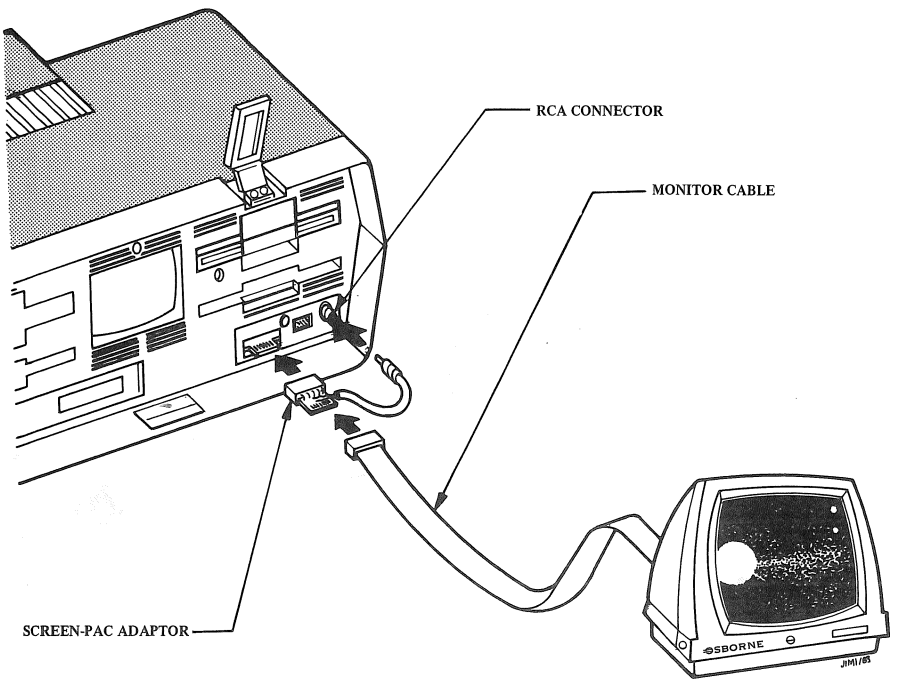


Osborne 12" Video Monitors

Osborne 12" video monitors use a special SCREEN-PAC adaptor and cable. Osborne Computer Corporation will provide the adaptor directly to owners of these monitors free of charge. Simply return the Video Adaptor Request card included with SCREEN-PAC.

The new video socket installed on the front of your Osborne is called an "RCA connector." Connect your Osborne monitor to it this way:

1. Turn your computer OFF and remove the "EXT VIDEO" plug to the left of the RESET button.
2. Plug the SCREEN-PAC adaptor into the "EXT VIDEO" socket.
3. Connect the Osborne 12" monitor to the SCREEN-PAC adaptor.
4. Plug the cable on the SCREEN-PAC adaptor into the round RCA connector.



OSBORNE 12" VIDEO MONITOR

Preparing Applications Diskettes

With SCREEN-PAC you can set screen size individually for each of your applications diskettes. You may decide, for example, to use an 80 column display for WordStar and 104 columns for SuperCalc. The CP/M utilities on the Extended Utility Diskette make the choice possible.

Selecting screen size is a two-step process. First, use SYSGEN to transfer CP/M from the Extended Utility Diskette to the particular applications diskette. Then, use SETUP to specify the screen size on the applications diskette.

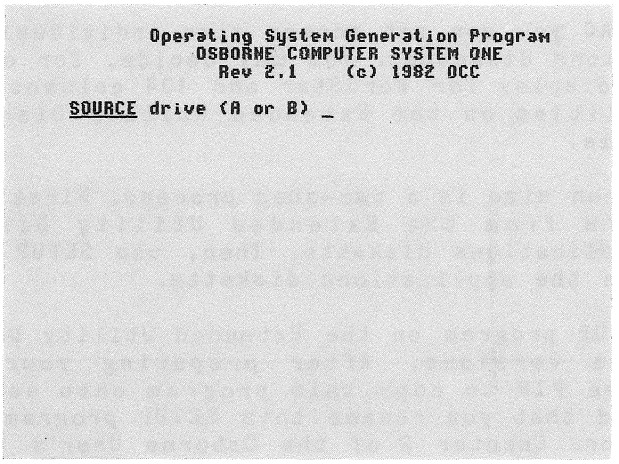
NOTE: The SETUP program on the Extended Utility Diskette differs from previous versions. After preparing your applications diskettes, use PIP to copy this program onto each of them. We also recommend that you rename this SETUP program to SETUP80 to avoid confusion. Chapter 2 of the Osborne User's Reference Guide describes PIP and file renaming.

1. SYSGEN

Place a copy of the Extended Utility Diskette in drive **A**, close the drive door, and press RETURN. You'll see this screen after the Osborne loads CP/M:

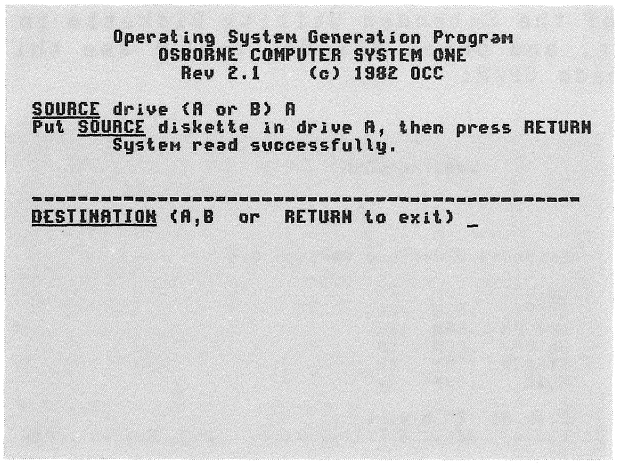
```
        Loading CP/M


Extended Directory version 3.5

AUTOST  .COM   2k
COPY    .COM   6k
MOVCPM  .COM  12k
SETUP   .COM   6k
SYSGEN  .COM   2k
XDIR    .COM   4k

Disk A:  2K blocks
Size=   92K,  6 Files, Used=   34K, Space=   58K
A>_
```

Type SYSGEN after the A> on the above screen. Then press RETURN. The system responds with the following screen:



Since drive A contains the Extended Utility Diskette, press A to designate it as Source drive. Then press RETURN.

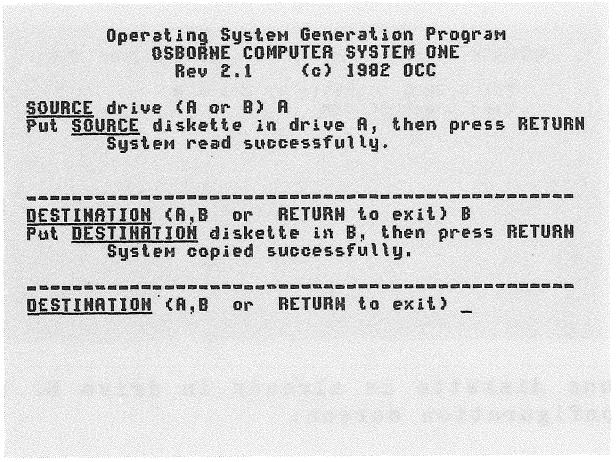
The Osborne reads the diskette and asks you to specify the Destination drive. The sequence on screen looks like this:



Press B to designate drive B as Destination.

Select the applications diskette (WordStar, SuperCalc, etc.) to which you're transferring CP/M. Place the diskette in drive B, close the door, and press RETURN.

When CP/M has been transferred, you'll see this screen:

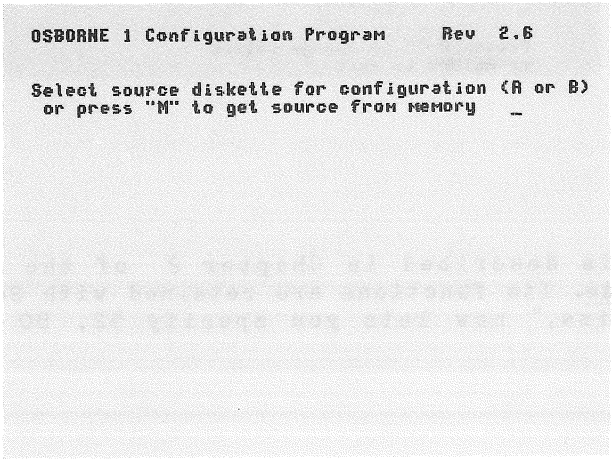


Press RETURN to exit from SYSGEN and display the CP/M prompt A>.

2. SETUP

After transferring CP/M to the applications diskette, the next step in implementing SCREEN-PAC is to specify screen size for that diskette. We'll use the SETUP program to do this. The Extended Utility Diskette should still be in drive A and your applications diskette in drive B.

With the A> prompt on screen, type SETUP. Then press RETURN. You'll see this message in response:



Since we're configuring the applications diskette in drive B, press B. The Osborne responds with this screen:

```
OSBORNE 1 Configuration Program     Rev  2.6

   Put SOURCE diskette in drive B
   then press RETURN_
```

The applications diskette is already in drive B. Press RETURN to display the configuration screen:

```
OSBORNE 1 Configuration Program     Rev  2.6

 A PRINTER MENU              B BAUD RATE
   STANDARD SERIAL             1200

 C SCREEN SIZE               D AUTO HORIZONTAL SCROLL
   128  LOGICAL                ON
   52   PHYSICAL
 E FUNCTION KEYS             F ARROW KEYS
   0: 0                        CP/M
   1: 1
   2: 2
   3: 3
   4: 4
   5: 5
   6: 6
   7: 7
   8: 8
   9: 9

   Press "A-F" to change values
   or RETURN to exit _
```

This screen is described in Chapter 2 of the Osborne User's Reference Guide. Its functions are retained with SCREEN-PAC. Item C, "Screen Size," now lets you specify 52, 80 or 104 column format.

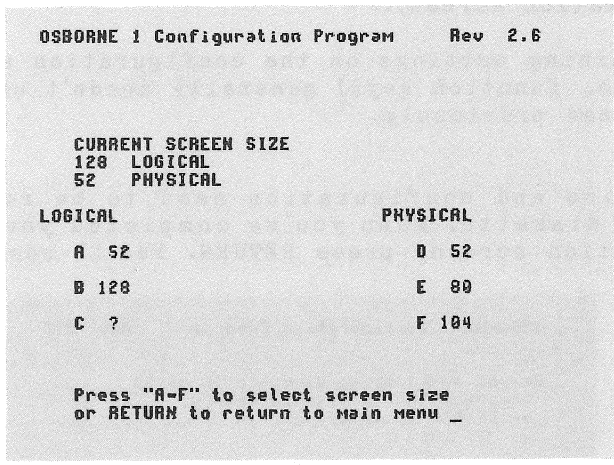
Selecting Screen Size

Screen Size (Item **C**) on the configuration screen shows the system's current format. In the configuration screen above, the logical screen size is 128 characters. The physical screen size is 52 characters. What do these screen sizes mean?

Logical screen size refers to the number of characters you can enter on a line without automatically inserting a carriage return. Logical screen size can range from 1 up to a maximum of 128 characters.

Physical screen size refers to the number of columns actually displayed on your screen. With SCREEN-PAC, this will be 52, 80, or 104.

While the configuration screen is displayed, press **C**. You'll be given a list of screen options in response:



Logical screen sizes are listed in the left column. Physical screen sizes are listed on the right.

We strongly recommend you use 128 as logical screen size. To prevent scrambled screen displays, logical screen size should **NOT** be less than physical screen size.

For physical screen size, SCREEN-PAC gives you a choice of 52, 80, or 104 columns. The number of columns you choose to display can vary with the application. You might find 80 columns convenient for many uses, but 104 preferable for worksheets such as SuperCalc's.

To select screen size:

1. Press the letter corresponding to the number of columns you wish to use. Do this for both physical and logical screen size if necessary.

2. Press RETURN. The Osborne will display your choice on the configuration screen.

Configuration Notes:

If you're setting up SuperCalc, turn OFF the Auto Horizontal Scroll (Item **D** on the configuration screen).

If you're setting up WordStar, turn OFF the Auto Horizontal Scroll and set the Arrow keys to "WordStar" (Item **F** on the configuration screen).

The remaining settings on the configuration screen (printer, baud rate, function keys) generally needn't change from what you've used previously.

The screen size and configuration need to be recorded on your applications diskette. When you've completed your choices from the configuration screen, press RETURN. You'll see this message:

```
OSBORNE 1 Configuration Program     Rev 2.6

Select destination diskette (A or B)
 or press "M" to save in memory
 or RETURN to exit  _
```

Press **B** to designate the diskette in drive **B** as Destination. Then press RETURN.

The Osborne writes the new configuration onto the applications diskette. The CP/M prompt A> will appear when the process is complete.

You've now configured the applications diskette to display the number of columns specified.

Reformatting Files

You may wish to reformat your work files to conform to changes in screen size. You could, for example, expand 52 column WordStar text to 80 columns or 80 column SuperCalc sheets to 104.

Here are formatting techniques for WordStar and SuperCalc. The particular formatting routines for other applications programs remain applicable with SCREEN-PAC.

WordStar

WordStar uses ^O (control O) and ^B (control B) formatting commands. You can quickly reformat a file this way:

1. Use ^OR to specify the right margin of the display.
2. Set Hyphen Help OFF (^OH).
3. Position the cursor at the beginning of the text (^QR).
4. Type the command ^QQ^B.

Your file will be reformatted to display up to the right margin.

WordStar has a default value of 66 text columns, the standard width of a printed page. This means that files normally display in 66 columns after you've saved them on diskette. By using WordStar's INSTALL program, you can change the default value to automatically get a wider display.

The INSTALL utility is explained in Appendix 1, "Modifying WordStar," of the Osborne User's Reference Guide. To set a new default value for screen width go through the installation menus until you reach the message:

> You may modify any location described in the listing
> at the end of the User Manual or the Customization Notes.

The locations to change for screen width are **WID:** and **INITRM:**

The following table shows hex values to specify at these locations and the corresponding changes in WordStar:

		WordStar	
	Hex	Ruler Line	Flag Line
WID:	64		100
INITRM:	50	80	

SuperCalc

Reformat SuperCalc files by using the INSTALLS utility included on the SuperCalc diskette. To access this file, enter /Q at the SuperCalc command line, then press **Y**(es). This displays the CP/M prompt A>.

When the A> prompt appears, type INSTALLS and press RETURN. You'll see this screen in response:

```
A>installs

SuperCalc(tm) Install Program
        Version  1.05

This program will let you modify
the SuperCalc(tm) file on your disk.
Do you wish to proceed (Y/N) ? _
```

Press **Y** to proceed with reformatting. SuperCalc asks the name of the file you're modifying. Type **SC** and press RETURN. Then follow the instructions on screen to specify the new screen width.

In SuperCalc Version 1.05, you can reformat and save 52-column worksheet files for a wider display. This requires you to load each file by specifying the range of cells to be displayed.

Enter the load command **/L** followed by the file name. Then press **P**(art). Specify the upper leftmost cell on your worksheet as the beginning of the range, the lower rightmost cell as the end, and again the upper leftmost for worksheet positioning on screen.

For example, to display the SuperCalc worksheet, "BALANCE.CAL," in expanded format, enter the instructions:

/L(oad), Balance, **P**(art), A1:025,A1

This will display the sample worksheet from column A through O and row 1 through 25. A block of cells up to 104 columns wide can be displayed this way.

ADDITIONAL SCREEN-PAC FEATURES

Besides expanding the Osborne's data display, SCREEN-PAC has preset video contrast in 80 and 104 column format. This means you don't need to use the contrast control on the front of the Osborne.

In these same formats, SCREEN-PAC provides horizontal scrolling by 32 column blocks. This allows quick cursor movement across the screen when necessary.

SCREEN-PAC also gives you capability to change screen size by using the RUN command in an MBASIC program. Switching the screen display involves two steps:

1. At BIOS location E1A5H, POKE or store

   0 for 52 columns

   1 for 104 columns

   3 for 80 columns.

2. CALL BIOS location E4E5H.

This procedure uses the BIOS to write to location 2400H in Bank 2. This location is also flagged. With SCREEN-PAC installed, reading 2400H (Bank 2) returns data bit 2 LOW. Without SCREEN-PAC, this bit is read HIGH. This feature allows different screen responses and menus depending on whether the Osborne is fitted with SCREEN-PAC.

cut

fold

VIDEO ADAPTOR REQUEST

If you're using SCREEN-PAC with an Osborne 12" video monitor, please return this card. Osborne Computer Corporation will mail a SCREEN-PAC video adaptor directly to you free of charge.

This adaptor is for use ONLY with the Osborne 12" monitor.

Name _____

Address _____

_____

Telephone _____

Serial Number of your Osborne _____

AFFIX
STAMP
HERE

Osborne Computer Corporation
26538 Danti Court
Hayward, CA. 94545

ATTN: SCREEN-PAC Technical Support

STAPLE HERE

OSBORNE™
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26538 Danti Court, Hayward, California Phone: (415) 887-8080 TWX: (910) 383-2021