



January 26, 1976

Dear KIM-1 Customer:

Despite our best efforts to eliminate errors in the documentation for your KIM-1 system, we have discovered a series of typographical errors which should be corrected in your KIM-1 User Manual. The attached Errata Sheet #1 should be used immediately to update your Manual since some of the errors will interfere with your early attempts to demonstrate correct system operation.

We will continue to advise you of any further errors or changes needed in your documents. We actively seek your cooperation in advising us of any problems you may discover in the system or its documentation.

Thank you,

MOS TECHNOLOGY, INC. KIM-1 Customer Support

ERRATA SHEET #1

Please modify your KIM-1 User Manual to correct the following typographical errors:

Page 11 - At the bottom of the page, add step 22A between steps #22 and #23 as follows:

Press Keys		See On Display	Step #		
<u>/+/</u>	0/ 3/	0001 03	22		
<u>/+/</u>		0002 18	22A		
<u>/GO</u> /		0005 xx	23		

This correction insures that the program will begin at the proper address (0002).

Page 14 - In the center of the page, in step #2 of the key sequence, change the address to 17F5 (instead of 17F4).

The correct key sequence will now appear as:

Press Keys		See On Display	Step #	
/AD/		xxxx xx	1	
<u>/1/</u> /	7/ /F/ /5/	17F5 xx	2	
/DA/	<u> </u>	17F5 00	3	
<u> </u>	<u> </u>	17F6 00	4	
<u>_</u> +	/17 /07	17F7 10	5	
<u> </u>	0/0/	17F8 00	6	
<u>/+/</u>	0 /17	17F9 01	7	
/AD/		17F9 01	8	
/1/ /8	37 07 07	1800 xx	9	

Also, change the references in the third and fourth sentences below the key sequence so that "17F4 and 17F5 (Steps 1 to 4)" now reads "17F5 and 17F6 (Steps 1 to 4)". In the last two sentences on Page 14, change the references to read:

"""" in locations <u>17F7</u> and <u>17F8</u> (Steps 5,6). Finally, we pick an arbitrary ID as 01 and store this value at location <u>17F9</u> (Step 7).

Page 15 - At the bottom of the page, in step #2 of the key sequence, change the selected address to 00F9 (instead of 00F8). The correct key sequence will now appear as:

Press Keys	See On Display	Step #	
/AD/	xxxx xx	1	
<u>/1</u> / /7/ /F/ /9/	17F9 xx	2	
/DA/	17F9 xx	3	
<u>/0</u> / <u>/1</u> /	17F9 01	4	
/AD/	17F9 01	5	
1 8 7 3	1873 xx	6	
<u>/GO</u> /	(Dark)	7	

Page 47 - At the top of the page, change the indicated data stored at locations 00F4 and 00F5 as follows:

 $\begin{array}{ccc} 00F4 & & \underline{\underline{Y}} & Index & Register \\ 00F5 & & \underline{\underline{X}} & Index & Register \end{array}$

Page E3 - In Figure E-1, in the lower figure showing 1 record, add the * character in the blank box (after the area designated "100 SYN").





March 1, 1976)

Dear KIM-1 Customer:

The attached Errata Sheets are hopefully the last group of corrections required to eliminate errors in your KIM-1 User Manual. Please take the following actions:

Errata Sheet #2A - please discard the previously submitted Errata Sheet #2 and replace it with the new issue (#2A). Additional errors were discovered in the address and key sequences for the paper tape punch procedure.

Errata Sheet #3 - please mark your KIM-1 User Manual to indicate the new series of corrections contained in this sheet.

In general, if you have not already done so we recommend strongly that you use an appropriate colored felt tip pen to mark your KIM-1 User Manual in accord with all Errata Sheets. This has the twofold effect of insuring that you have noted each error and that you will have an updated document should you mislay the Errata Sheets.

Thank you,

MOS Technology, Inc. KIM-1 Customer Support

KIM-1 ERRATA SHEET #2A

Please modify your KIM-1 User Manual to correct the following errors:

- Page 18 In Figure 2.4, the line connected to Pin A-S should be labelled "Keyboard Return" (not "Keyboard") and the line connected to Pin A-T should be labelled "Keyboard" (not "Keyboard Return").
- Page 32 In Figure 3.9, Pins U and T are reversed. Pin U should be labelled "TTY PTR" (not "TTY KYBD") and Pin T should be labelled "TTY KYBD" (not "TTY PTR").
- Page 52, 53 The key sequence for Punch Paper Tape is not correct and should be replaced with the following sequence and comments:

Type See Printed	17F7 xx	① ⑦	F	7	/SPACE/
Type See Printed	17F8 xx		F	F	\odot
Type See Printed	17F9 xx	÷1	0	3	\odot
Type See Printed	0200 xx	2	0	0	/SPACE/

You have loaded the ending address (03FF) into addresses 17F7 (EAL) and 17F8 (EAH). A starting address of 0200 is selected as shown.

- 3. Now Type (continue as printed).
- Page E-2 In the 5th line from the top of the page, the reference should be to the "311 comparator" (not "310 comparator").
- Page E-3 Correct Fig. E-1. All references to "μ Sec." should be changed to M Sec. Also, correct figure to show "6 Pulses" (not "9 Pulses") in the third section of each waveform.



February 12, 1976

KIM-1
APPLICATION NOTE #1

A number of KIM-1 customers have reported difficulty in achieving correct results for the sample problem shown in Sec. 2.4 of the KIM-1 User Manual.—In addition, some customers have experienced problems in recording or playback of audio cassettes. (Sec. 2.5 of the KIM-1 User Manual). In all cases, the problems have been traced to a single cause: the inadvertant setting of the decimal mode.

The 6502 Microprocessor Array used in the KIM-1 system is capable of operating in either a binary or decimal arithmetic mode. The programmer must be certain that the mode is selected correctly for the program to be executed. Since the system may be in either mode after initial power-on, a specific action is required to insure the selection of the correct mode.

Specifically, the results predicted for the sample problem (Sec. 2.4) are based on the assumption that the system is operating in the binary arithmetic mode. To insure that this is the case, insert the following key sequence prior to the key operations shown at the bottom of Page 11:

/AD/

 $\sqrt{0}$ / $\sqrt{0}$ / \sqrt{F} / $\sqrt{1}$ /

/DA/ /07 /07

This sequence resets the decimal mode flag in the Status Register prior to the execution of the sample program.

The same key sequence may be inserted prior to the key operations shown on pages 14 and 15 for audio cassette recording and playback. These operations will not be performed correctly if the decimal mode is in effect.

In general, whenever a program is to be executed in response to the GO/key, the programmer should insure that the correct arithmetic mode has been set in the status register (00F1) prior to program execution.