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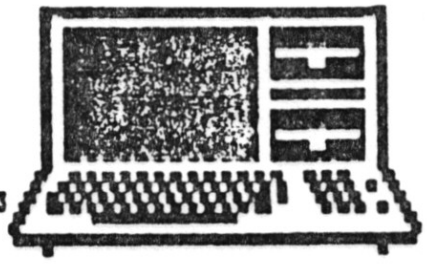

SUPER "COLOR" TERMINAL

SUPER "COLOR" TERMINAL DISK

OPERATING INSTRUCTIONS

The SUPER "COLOR" TERMINAL is a full-fledged smart terminal program that allows the user to communicate with most any host computer or microcomputer with RS-232 capabilities.

The Super "Color" Terminal has an automatic buffer option that allows the buffer to be automatically opened and closed by the host computer.

FEATURES INCLUDE

--- *AUTO BUFFER* option for down-loading *BASIC PROGRAMS*.
--- *CHANGE RS-232 PARAMETERS* to allow communication with computers using non-standard formats.
--- *LOWER CASE MASKING* to the video display.
--- *TEN KEY STROKE MULTIPLIERS (KSM'S)* to reduce on-line time.
--- *SELECTABLE TRAPPING* to mask out unwanted characters.
--- *PROGRAMMABLE UPLOAD PROMPT for efficient data transfer.*
--- *PRINT* all information received from the host computer.
--- *RECEIVE* and *SEND BASIC* or *MACHINE LANGUAGE* programs as well as *ASCII FILES*.
--- *SAVE* and *LOAD BASIC* or *MACHINE LANGUAGE* programs as well as *ASCII FILES*.
--- *CREATE* disk and tape files that are compatible with the Super "Color" Writer word processing program.
--- *LOWER CASE* and upper case as well as *CONTROL A-Z* and *DECIMAL 27-31* with *ESCAPE* and *LINE BREAK*.

UNPLUG YOUR JOYSTICKS!

LOADING THE SUPER "COLOR" TERMINAL FROM THE DISKETTE

Mount the SUPER "COLOR" TERMINAL master diskette in Drive 0, type LOADM"TERMINAL/BIN" and press <ENTER>. After loading, the computer will respond with an "OK". Without removing the diskette, type "EXEC" and press <ENTER>.

GETTING STARTED

After EXECuting the program, a MENU will appear with a list of single-key-entry selections. The following is a list of the selections with a brief discription of their functions. The numbers preceding the selections will be used as reference numbers in this manual.

<1> **COMMUNICATIONS**--Puts you on-line in the communicate mode to communicate with other computers.

<2> **CHG PARAMETERS**--Allows you to change baud rate, word length, parity, stop bits, duplex, etc...

<3> **CREATE BUFFER**--Allows you to open a buffer to store all data that is received in the communicate mode.

<4> **TAPE TO BUFFER**--Loads *ANY* type of tape -- *BASIC or MACHINE LANGUAGE* program or *ASCII FILE* -- into the buffer.

<5> **BUFFER TO TAPE**--Saves the buffer contents to tape in either *ASCII* or *BINARY* format.

<6> **DISPLAY BUFFER**--Displays the information stored in the buffer to the screen.

<7> **LPRINT BUFFER**--Prints the entire contents of the buffer to any printer at baud rates from 110 to 2400.

<8> **DISK COMMANDS**--Allows you to call a DIRECTORY or SAVE, LOAD, KILL or APPEND DISK FILES.

<9> **MAINTAIN KSM'S**--Allows you to create and or edit up to 10 messages that can be sent with a single keystroke.

<1> COMMUNICATING USING THE SUPER "COLOR" TERMINAL (CONNECT MODEM BEFORE ENTERING THE COMMUNICATIONS MODE)

Pressing <1> will put you in the communicate mode. At this point the **Super "Color" Terminal** operates as a standard 300 baud terminal with a word length of 7 bits, even parity, 1 start bit, 1 stop bit, and full duplex. This is standard RS-232 protocol and in most cases need not be changed. While on line, you can type lower case by pressing <SHIFT><0> just as with BASIC. The <BREAK> key sends a true LINE BREAK as indicated by a RED cursor. The <CLEAR> key acts as a CONTROL key and turns the cursor BLUE to indicate CONTROL status. Any key pressed after the CLEAR key will be a CONTROL character.

Example: If you press <CLEAR> then press <A>, the A is sent as a CONTROL A. CONTROL A (CTRL A) through CONTROL Z (CTRL Z) as well as DECIMAL 27 through DECIMAL 31 are supported. An ESCAPE key (DECIMAL 27) is generated by first pressing <CLEAR> then pressing <SHIFT><DOWN ARROW>. Pressing <SHIFT><@> at any time will return you to the MENU. See APPENDIX for a complete list of key functions during this mode.

The **Super "Color" Terminal** automatically traps Nulls (DECIMAL 0) and Rubouts (DECIMAL 127) from entering the system in the 7 bit word length mode to assure compatibility with other ASCII files. The **Super "Color" Terminal** also has selectable character trapping to trap any desired character or range of characters (see section 2).

COMPUSERVE USER NOTE: Upon entry into the system, type <CLEAR>-<C> for Compuserve Information Service.

<2> CHANGING RS-232 PARAMETERS

The Super "Color" Terminal allows you to change RS-232 parameters to conform to most any host computer. In most cases the host computer will allow you to change its parameters as well. Consult the host computer operating manual for specific instructions. Pressing <2> allows you to change RS-232 parameters in the following order (press <BREAK> at any time to return to the MENU):

BAUD RATE

1 = 110 2 = 300 3 = 600
4 = 1200 5 = 2400 6 = 4800

Press <ENTER> for 300 baud or press the number corresponding to the BAUD RATE desired.

WORD LENGTH

Press <ENTER> to retain the preselected word length (initially 7 bits) or select a word length of from 5 to 8 bits (not including parity bit).

NOTE: Parity is only allowed with 5, 6, or 7 bit word length and will be set to <N>one if an 8 bit word length is selected.

PARITY <O>DD <E>VEN <N>ONE

Press <ENTER> to retain the preselected parity (initially even) or select the desired parity: <E>ven, <O>dd, or <N>one.

STOP BITS

Press <ENTER> to retain the preselected number of stop bits (initially 1 bit) or select the number of stop bits from 1 to 9.

DUPLEX <H>ALF <F>ULL <E>CHO

Press <ENTER> to retain the preselected duplex (initially full) or select desired duplex: <H>alf, <F>ull, or <E>cho.

NOTE: <E>cho is restricted to 600 BAUD or less and is used to communicate with FULL duplex only terminals (I.E. VIDTEX(tm)).*

LINE FEED Y/N

Press <ENTER> for no line feeds after carriage returns to the video screen (initially set to <N>o) or press <Y>es if the incoming data has no linefeeds after carriage returns (text being over-written).

MASK LOWER CASE TO SCREEN Y/N

Press <ENTER> for no change of lower case letters to upper case letters on your video screen (initially set to <N>o) or press <Y>es to change lower case to upper case on your video screen ONLY.

NOTE: Mask will not affect any data being stored in the buffer.

CHARACTER TRAPPING Y/N

Press <ENTER> for no character trapping (initially set to <N>o) bypassing the prompting resulting from pressing <Y>, or press <Y>es to proceed.

RELATION < = >

Enter the desired relationship, less than '<', greater than '>', or equal to '=' the following prompting.

NUMBER (0-255)

Type a number between 0 and 255 which corresponds to the decimal value of the character(s) which you wish to trap (not store in the buffer or display on the video screen).

*Vidtex is a registered trademark of the Tandy Corporation.

EXAMPLE 1: < 32
EXAMPLE 2: = 10
EXAMPLE 3: > 126

In EXAMPLE 1, the RELATION "less than" and the NUMBER 32 traps all characters with a decimal value from 0 to 31 (I.E. all control codes).

In EXAMPLE 2, the RELATION "equal to" and the NUMBER 10 traps all linefeed characters (DECIMAL 10)

In EXAMPLE 3, the RELATION "greater than" and the NUMBER 126 traps all characters with a decimal value from 127 to 255.

UPLOAD PROMPT

Press <ENTER> to retain the preselected PROMPT character (initially set to a ">") or type the character used by the other computer to indicate that it is ready to receive input, if different from ">".

<3> CREATING AN INPUT BUFFER

You can store information that is received during the communicate mode ONLY by creating an input buffer. Pressing <3> allows you to create a buffer of various sizes.

SIZE
1=2K 2=4K 3=6K 4=8K 5=10K
6=12K 7=14K 8=16K 9=23K

Press a number corresponding to the size of buffer you wish to create or press <ENTER> to clear out an existing buffer. Pressing <BREAK> will return you to the MENU without altering the buffer whatsoever. The Super "Color" Terminal will not allow you to create a buffer larger than that which will fit in your computer.

AUTO BUFFER Y/N

Press <ENTER> to disable this option (initially enabled) or press <Y> to re-enable or <N> to disable the option. Pressing <BREAK> will return you to the MENU without modifying the AUTO BUFFER status.

<4> LOADING A TAPE INTO THE SUPER "COLOR" TERMINAL

The Super "Color" Terminal will allow you to load an ASCII file, a BASIC program saved in ASCII, or a machine code program into its buffer. Loading a tape will clear any data that is already resident in the buffer. Press <4> to load a tape into the buffer.

READY CASSETTE PRESS ANY KEY

Ready the cassette player and press any key to begin the loading process. Pressing <BREAK> will return you to the MENU. If an error occurs while loading simply press any key to return to the MENU and press <4> to try again. If the tape being loaded is too big for the computer, a FULL message will be displayed.

NOTE: BASIC programs must have been saved in ASCII. E.G: CSAVE"filename",A (see your BASIC manual for more information about CSAVE"FILEMAME",A).

<5> CREATING A TAPE USING THE SUPER "COLOR" TERMINAL

The Super "Color" Terminal allows you to save the buffer contents to a tape in one of two formats: press <5> to save the buffer contents to tape.

1=ASCII 2=BINARY

Pressing <1> creates an ASCII tape that can be loaded back into the Color Computer as a BASIC program or into the Super "Color" Writer word processing system for further formatting, manipulation, etc. Pressing <2> creates a machine language program tape that can be loaded back into the Color Computer. Pressing <BREAK> returns to the MENU.

NAME

Type the name of the file you wish to place on tape (8 characters or less) or press <ENTER> for no name (8 spaces).

READY CASSETTE PRESS ANY KEY

Ready the cassette recorder and press any key to begin saving. After saving, the MENU will appear.

NOTE: The Super "Color" Terminal creates machine code tapes with a starting address of 0000. To load these tapes into the Color Computer enter the following.

CLOADM"filename",start address <ENTER>

The offset address specified, serves as the start address. If the start and execute addresses are the same, type EXEC<ENTER>.

<6> DISPLAYING THE BUFFER TO THE SCREEN

The Super "Color" Terminal allows you to page through the entire buffer after loading a tape or after receiving data in the communicate mode, and also allows you to selectively send any page of text to the printer. Press <6> to display the buffer. Press any key to page through the text or press <BREAK> to return to the MENU. Pressing <P> at any time will display a BAUD RATE table. Selecting the appropriate value will send the rest of the text in the buffer to the printer starting with the page of text presently being displayed. Pressing <SPACE BAR> will pause printing; press any key to resume printing.

<7> LPRINT BUFFER CONTENTS (CONNECT PRINTER BEFORE ENTERING THIS MODE)

The Super "Color" Terminal allows you to send the buffer contents to your printer at baud rates from 110 to 2400 baud. Press <7> to print the buffer contents.

BAUD RATE

1 = 110 2 = 300 3 = 600

4 = 1200 5 = 2400

Select the appropriate baud rate or press <ENTER> for 600 baud. The system will print the entire buffer contents non-stop. Press <SPACE BAR> to pause printing; press any key to continue. Press <BREAK> to return to the MENU. If the printer is not connected or not on-line the system will wait until the the printer is ready before sending any data. To selectively print the buffer contents refer to Section 6.

<8> DISK COMMANDS

The Super "Color" Terminal allows you to load "DL", save "DS", kill "DK" disk files, and display a disk directory "DI". Press <8> for DISK COMMANDS. Pressing <BREAK> at any time after a command has been executed will return you to the MENU. The system initializes a default extension of "/SCT" and a default drive number of ":0". These defaults can be changed at any time. The default extension assumes the last extension used and is changed by entering a new extension during any disk access ("DS", "DL" or "DK"). The same is the case with the default drive number. More about changing the defaults in later sections.

DISPLAYING A DISKETTE DIRECTORY

To display a disk directory mount a diskette in Drive 0 (default drive), press <8> for DISK COMMANDS, then press <D>-<I>-<ENTER>. The directory for Drive 0 will be displayed in a two column format with the drive number displayed on the COMMAND line. If the number of entries exceeds 30 (1 page) the display will pause. To continue to the second page of entries press any key except <BREAK>. A maximum of 68 entries is allowed for a total of three directory pages. When you have found the file that you are seeking, press <BREAK> to escape the directory routine and freeze the last directory page displayed.

If you wish to display the directory for any drive other than Drive 0, type <D>-<I> followed by the drive number, and then press <ENTER>. The directory will be displayed for the drive number that you specified.

EXAMPLE: DI3

This example will display the directory for the diskette mounted in Drive 3.

SAVING A FILE TO THE DISKETTE

The Super "Color" Terminal saves files to a diskette in the ASCII format for compatibility with the Super "Color" Writer, BASIC programs saved in ASCII (see your BASIC manual) and all other programs using the pure ASCII format. There is no binary save format to disk.

Before the Super "Color" Terminal saves a file to a specific drive it first checks to see if the file already exists on the diskette mounted in the specified drive. If the file exists the system will save the new file over the old one. If the file does not exist the file will be saved to the diskette mounted in the specified drive.

To save any file to disk, press <8> for DISK COMMANDS. Then mount a formatted diskette in Drive 0. Do not use the Super "Color" Terminal master diskette. Type (D)-(S) followed by the filename (not to exceed 8 characters) and press <ENTER>.

EXAMPLE: DSTESTNAME <ENTER>

In this example the file "TESTNAME/SCT" will be saved on the

diskette mounted in Drive Ø, and "FILE SAVED" will be displayed on the command line. Press <BREAK> to return to the MENU.

If you wish to use a different extension such as "/BAS", type the extension after the filename.

RULE: Extensions must be preceded by a "/".

EXAMPLE: DSTESTNAME/BAS <ENTER>

In this example, the file "TESTNAME/BAS" will be saved on the diskette mounted in Drive Ø.

If you wish to save your file to a diskette mounted in a drive other than Drive Ø, type ":" followed by the number of the drive on which you wish your file to be saved.

RULE: Drive numbers must be preceded by a ":".

EXAMPLE 1: DSTESTNAME:1

EXAMPLE 2: DSTESTNAME/BAS:2

In example 1, the file TESTNAME/SCT will be saved on the diskette mounted in Drive 1.

In example 2, the file TESTNAME/BAS will be saved to the diskette mounted in Drive 2.

After you have saved a file to disk, the filename, extension, and drive number are stored in a buffer and are retained for later use. To display the filename press <8> for DISK COMMANDS, then type <D>-<N> <ENTER>. The last name, extension and drive number will be displayed on the COMMAND line.

Because the filename is retained in a buffer, you can save the same file without entering the filename, extension, or drive number each time.

To save a file using the existing filename type <D>-<S> and press <ENTER>. Your file will be saved to the diskette mounted in Drive Ø with the filename "TESTNAME/SCT".

To save a file using the existing filename to a diskette mounted in a drive other than Drive Ø, type <D>-<S> followed by the drive number and press <ENTER>. Your file will be saved to the diskette mounted in the specified drive with the filename "TESTNAME/SCT".

LOADING A FILE FROM THE DISKETTE

The **Super "Color" Terminal** allows you to load any ASCII file from diskette including **Super "Color" Writer** files, BASIC programs saved in ASCII (consult your BASIC manual) and editor/assembler source files. You can not load binary files from the disk.

To load or append any file saved in ASCII press <8> for DISK COMMANDS then press <D>-<L> followed by the filename and drive number, then press <ENTER>. If no extension is specified the default extension will be used.

EXAMPLE: DLTESTNAME/SCT:Ø

The **Super "Color" Terminal** will look for the file TESTNAME/SCT on Drive Ø. If the file is found it will be loaded from the diskette. If the file does not exist, a "FILE NOT FOUND" message will appear on the COMMAND line

As mentioned earlier, the filename, extension and drive number are retained allowing you to load the previously entered

file by simply typing <D>-<L> and pressing <ENTER>.
EXAMPLE 1: DLTESTNAME/BAS:2
EXAMPLE 2: DL
Example 1 will load the file TESTNAME/BAS from the diskette mounted in Drive 2.
Example 2 will load the previously entered file, in this case, TESTNAME/BAS from the diskette mounted in Drive 2.

APPENDING TEXT FILES

The system will allow you to load as many files as will fit in the buffer. To append one file after another, simply load the first, then load the second. A "FULL" message will be displayed on the COMMAND line if the file to be appended is too large to fit in the buffer.

KILLING TEXTFILES

To kill a file from the diskette, press <8> for DISK COMMANDS, then type <D>-<K> followed by the filename, extension and drive number and press <ENTER>. The system will respond with an "OK". A <Y> response will kill the file. Any other response will return the system to the COMMAND mode.
EXAMPLE: DKTESTNAME/SCT:Ø <ENTER> Y
This example will kill the file TESTNAME/SCT from the diskette mounted in Drive Ø.

As with all other commands, "DK" will kill the previously entered file by typing <D>-<K>-<ENTER> and answering the "OK" prompt with a <Y>.
Example: DK<ENTER> Y
This example will kill the previously entered file TESTNAME/SCT from the diskette mounted in Drive Ø.

TRANSFERRING TAPE FILES TO DISK

The **Super "Color" Terminal** still supports cassette I/O allowing you to load any text file from tape and transfer it to the disk or vice versa. See Section <4>, TAPE TO BUFFER, and Section <5>, BUFFER TO TAPE. The binary save and load formats are for cassette only, not disk.

<9> MAINTAIN KSM'S
(KEYSTROKE MULTIPLIERS)

The Super "Color" Terminal allows you to create up to 10 KSM's of up to 250 characters each. Each of the KSM's correspond to their respective keys <CLEAR>-<0-9> on the keyboard during the COMMUNICATE mode and are useful to perform repetitive log-on tasks, send quick messages, etc.

CREATING KSM'S

To create a KSM press <9> for MAINTAIN KSM'S. "KSM=0" will be displayed at the upper left-hand corner of the screen.

COMMAND:

<E>DIT <UP> MOVE <DOWN> MOVE

Press <E> to edit (create) KSM0. You may now type KSM0. When you have finished typing, press <ENTER>. The newly entered KSM will be displayed on the top of the screen.

CR Y/N

Pressing <Y>es will place a carriage return at the end of the KSM just entered. Pressing <N>o will not.

At this point you have created KSM0. Press the <DOWN ARROW> key to move to the next KSM to be created or displayed. Pressing the <UP ARROW> key will move back through the previous KSM's. Press <E>dit and repeat the last few steps to create as many KSM's as you need (up to 10). Pressing <BREAK> will return you to the MENU. To clear an old KSM, press <E>DIT and then press <ENTER>. This will erase the KSM.

SAVING & LOADING KSM'S

The entire set of 10 KSM's comprises a KSM file and can be saved to the diskette to be loaded at a later time. KSM disk access is the same as regular disk access except that you must use the commands "KL" (KSM load) and "KS" (KSM save) rather than "DL" and "DS". The "KL" and "KS" commands are reserved for the special KSM file buffer. All other system disk access rules apply. It is suggested that the extension "/KSM" be used when saving KSM files to differentiate these files from your regular SCT files.

To save a KSM file to the diskette, mount a formatted diskette into Drive 0. Press <8> for DISK COMMANDS. Now type <K>-<S> followed by the filename, the extension "/KSM" and press <ENTER>.

EXAMPLE: KSBBS80C/KSM<ENTER>

In this example, the file "BBS80C/KSM" will be saved to the diskette mounted in Drive 0.

IMPORTANT: Use "KS", not "DS" to save a KSM file or the main file contents will be saved to the disk rather than your KSM file contents.

To load a KSM file from the diskette, mount the diskette into Drive 0. Press <8> for DISK COMMANDS. Now type <K>-<L>, the filename, the extension "/KSM" and press <ENTER>.

EXAMPLE: KLBBS80C/KSM<ENTER>

In this example, the file "BBS80C/KSM" will be loaded from the diskette mounted in Drive 0.

IMPORTANT: Use "KL", not "DL", to load a KSM file or the KSM file will be loaded into the main file buffer rather than the KSM file buffer.

USING KSM'S WHILE COMMUNICATING

After creating your KSM'S, press <1> to COMMUNICATE on-line. To send a KSM, press <CLEAR> and then the number (0 to 9) corresponding to the KSM you wish to send.

The uses for KSM's are endless, and can't be completely covered in this manual. One use for KSM's is to log-on to a BBS. Try a simple log-on sequence using KSM's following the examples below:

KSM0= John Doe <CR>
KSM1= Anytown, USA <CR>
KSM2= 555/123-4567 <CR>

The "<CR>" after each line represents a Carriage Return that is added at the end of the KSM as outlined above. If a <CR> is not added when the KSM is created, while on-line you will have to manually press <ENTER> after you send the KSM.

ACCESSING THE INPUT BUFFER WHILE COMMUNICATING

While on-line you can store received data into the Super "Color" Terminal buffer. To store data you must have first created a buffer (see Section 3).

AUTOMATIC OPERATION

The Super "Color" Terminal has a unique AUTO BUFFER feature which allows you to download BASIC programs from Bulletin Board Systems (BBS) and other computers without lifting a finger. While on-line, the system waits for a CTRL R (DECIMAL 18) to automatically open the buffer. Upon receipt of the CTRL R, the buffer is opened and the BASIC program is stored. At the end of the download the system waits for a CTRL T (DECIMAL 20) to automatically close the buffer. Upon receipt of the CTRL T, the buffer is closed. You can now exit the COMMUNICATIONS mode and save the program.

MANUAL OPERATION

To manually open the input buffer, press <SHIFT> <LEFT ARROW>. To manually close the buffer, press <SHIFT> <LEFT ARROW> again. This toggles the input buffer status indicator in the upper left hand corner of the screen. When the indicator is orange the buffer is open and the received data will be stored. When the buffer is within 120 characters of being filled, the video screen will turn orange to give you an

early warning that the buffer is near full. When the buffer is full the buffer will close automatically, turning the buffer status indicator to an "@".
NOTE: If an attempt is made to open the input buffer without having first created one while on-line in the communicate mode, the buffer will close and the screen will turn orange with the first character received.

TRANSMITTING INFORMATION TO ANOTHER COMPUTER

1) Start by loading the data or program to be transmitted into the Super "Color" Terminal with the TAPE TO BUFFER command. There is no need to first create a buffer.

2) Next set the RS-232 parameters to conform to those of the other computer if they are not seven bit, even parity, one start bit, one stop bit. NOTE: If the information to be transferred is machine language (binary), an 8 bit word length is required.

3) Select the proper DUPLEX setting and UPLOAD PROMPT to conform to the host computer. Note that the Super "Color" Terminal transmits the data in the buffer differently depending on the duplex setting. In HALF duplex the data is sent as a continuous stream. In FULL duplex the data is sent one line at a time, pausing after each carriage return until the UPLOAD PROMPT, selected in section 2, is received.

4) PLUG IN YOUR MODEM and enter the COMMUNICATIONS mode. Now you're ready to communicate. If the computer on the other end will support automatic buffer open and close, you can open the buffer on the other end by pressing <CLEAR>-<R>, and close the buffer by pressing <CLEAR>-<T>. To transmit the data press the <RIGHT ARROW>. Press <BREAK> to end transmission.
NOTE: If the data being sent is binary it will appear as graphics blocks and other assorted garbage. Do not be alarmed. this is NORMAL.

RECEIVING INFORMATION FROM ANOTHER COMPUTER

1) Start by CREATING an input buffer. If you don't know what size to select, start with the top size and work down as the Super "Color" Terminal knows how much memory you have and will not let you create a buffer that is too big!

2) Next set the RS-232 parameters to conform to the other computer. If the information to be received is machine language (binary), you must select the eight bit word length.

3) Now PLUG IN YOUR MODEM and go on-line. You will notice the "@" in the upper left hand corner indicating that the buffer is closed. When you are ready to receive data simply press <SHIFT><LEFT ARROW> to open the buffer and let the data flow in. If you are receiving a BASIC program it is advisable to use the AUTO BUFFER option, if the host computer supports it, to insure that there will be no direct statement in file "DS" error when loading the program into BASIC. If the amount of data is within 120 characters of filling the buffer, the screen will change to orange. If this happens you may be able to pause the host

computer so you can save the data (see the host computer's MENU for specific intructions). After the data is loaded, press <SHIFT><@> to return to the MENU. At this point the data can be displayed, saved, printed, etc.....

HELPFUL HINTS FOR DOWNLOADING BASIC PROGRAMS

Frequently when trying to load a BASIC program that has been down-loaded from a BBS into the Color Computer, a "DS" (direct statement in file) error will occur. There are numerous causes for this error. Sometimes it is caused by acoustic modems. More often than not, however, the error is due to improper file formatting, poor maintenance of program files by BBS operators (SYS-OP's) or even faulty or defective BBS equipment. If these errors persist, it is advisable that you contact the SYS-OP to rectify the problem.

In the event that an error such as this arises and you have the Super "Color" Writer word processing system or some other pure ASCII file editor, the error can be corrected. To correct a "DS" error, load the program into the Color Computer and LIST the program to locate the last line number loaded. The error will lie just after this line. Load the program into the Super "Color" Writer, locate and correct the problem and re-save the program. Note that more than one error may be present in the down-loaded program making it necessary to repeat this procedure to obtain a functional program.

COMMUNICATING BETWEEN TWO SUPER "COLOR" TERMINALS

To communicate with another Color Computer equipped with a Super "Color" Terminal, one person must set his modem to the "ANSWER" mode and the other person must set his modem to the "ORIGINATE" mode (see modem operators manual). Both Super "Color" Terminals must also be set to HALF duplex for proper operation.

APPENDIX

KEY FUNCTIONS DURING THE COMMUNICATE MODE

KEY PRESSED	ASCII VALUE	FUNCTION
<BREAK>	RED CURSOR	LINE BREAK
<CLEAR>	BLUE CURSOR	CONTROL
<ENTER>	13	CARRIAGE RETURN
<LEFT ARROW>	8	BACKSPACE
<DOWN ARROW>	10	LINE FEED
<CLEAR>-<@>	0	NULL
<CLEAR>-<A>	1	CONTROL A
<CLEAR>-<B>	2	CONTROL B
<CLEAR>-<C>	3	CONTROL C
<CLEAR>-<D>	4	CONTROL D
<CLEAR>-<E>	5	CONTROL E
<CLEAR>-<F>	6	CONTROL F
<CLEAR>-<G>	7	CONTROL G
<CLEAR>-<H>	8	CONTROL H
<CLEAR>-<I>	9	CONTROL I
<CLEAR>-<J>	10	CONTROL J
<CLEAR>-<K>	11	CONTROL K
<CLEAR>-<L>	12	CONTROL L
<CLEAR>-<M>	13	CONTROL M
<CLEAR>-<N>	14	CONTROL N
<CLEAR>-<O>	15	CONTROL O
<CLEAR>-<P>	16	CONTROL P
<CLEAR>-<Q>	17	CONTROL Q
<CLEAR>-<R>	18	CONTROL R
<CLEAR>-<S>	19	CONTROL S
<CLEAR>-<T>	20	CONTROL T
<CLEAR>-<U>	21	CONTROL U
<CLEAR>-<V>	22	CONTROL V
<CLEAR>-<W>	23	CONTROL W
<CLEAR>-<X>	24	CONTROL X
<CLEAR>-<Y>	25	CONTROL Y
<CLEAR>-<Z>	26	CONTROL Z
<CLEAR>-<SHIFT><DOWN ARROW>	27	ESCAPE
<CLEAR>-<SHIFT><CLEAR>	28	
<CLEAR>-<SHIFT><RIGHT ARROW>	29	
<CLEAR>-<UP ARROW>	30	
<CLEAR>-<SHIFT><UP ARROW>	31	
<CLEAR>-<1>		SEND KSM 1
<CLEAR>-<2>		SEND KSM 2
<CLEAR>-<3>		SEND KSM 3
<CLEAR>-<4>		SEND KSM 4
<CLEAR>-<5>		SEND KSM 5
<CLEAR>-<6>		SEND KSM 6
<CLEAR>-<7>		SEND KSM 7
<CLEAR>-<8>		SEND KSM 8
<CLEAR>-<9>		SEND KSM 9
<CLEAR>-<0>		SEND KSM 0
<SHIFT><LEFT ARROW>		TOGGLE INPUT BUFFER
<RIGHT ARROW>		SEND BUFFER
<SHIFT><@>		RETURN TO MENU