(16K/32K EXT.BASIC TAPE/DISK BASIC)

LOADING & OPERATING INSTRUCTIONS

For your own protection, immediately make a backup copy of LNXREF: <REWIND> (to make sure tape is properly seated) then <STOP> then <PLAY> -- cassette vol. "5" -- type <CLOAD> <ENTER> (see also "NOTE..." sheet accompanying these instructions). LNXREF is saved to disk merely by CLOAD'ing as per above, then typing <SAVE"LNXREF> <ENTER>.

2. Please Note: When SAVE'ing to disk (CSAVE'ing to tape) a program to be processed by LNXREF, be sure to use the <,A> option (i.e., <SAVE or CSAVE "PGM*NAME",A> <ENTER>). All programs to be processed by LNXREF must first be SAVE'd or CSAVE'd in ASCII Format, using the option <,A>. LNXREF itself, however, as received by you from MICROLOGIC, is SAVE'd the normal way.

3. With LNXREF loaded, type <RUN> <ENTER>. When asked for the target program filename, you can type in the name of one of your ASCII-SAVE'd programs or you can use, for now, the ASCII-SAVE'd sample program located immediately after the two dumps of LNXREF (filename: "U*SMPA"). It is not necessary to type <,A> after the filename when INPUT'ing or LOAD'ing an ASCII file. (Hint: We always end an ASCII-SAVE'd program's filename with an "A" -- if there are two dumps of the same program on the same tape or disk (one ASCII and one normal) with exactly the same name, your Color Computer and LNXREF will get confused!

4. Follow the prompts and checks given next on the screen. When LNXREF finds the target program, the inverse "S" will change to an inverse "F" and your target program's line numbers will automatically be displayed on the screen as each line is being processed by LNXREF. LNXREF automatically bypasses any line that does not contain a syntactically correct THEN, ELSE, GOTO, GOSUB, or RUN. Note also that if your target program has a numeric constant immediately following a THEN or ELSE, LNXREF will give at least part of the numeric constant as a referenced line #. LNXREF will not count a syntactically correct referenced line number as a valid referenced line # if it is preceeded by a REM, its abbreviation ("'"), or DATA.

5. At the conclusion of your target program, LNXREF will ask you if you want the results on the screen or the printer. For now, choose "V". After the screen clears and a slight pause, all referenced line #'s, and which line they are called from, will be displayed in ascending and sequential line # order (use the <SPACE BAR> to pause and restart the listing both on the screen and the printer). Should you want hard-copy, merely press "P" at the "VIDEO OR PRINTER?" prompt. LNXREF will not provide hard-copy unless you answer "Y" to the "PRINTER PWR.UP..." prompt and your printer is actually ready. (Note: "Total Bytes" = Total Bytes of original/non-ASCII version!)

6. When you are done with the information LNXREF has provided you, merely answer "N" then "Y" to the next prompts.

-PROBLEMS & CUSTOMIZING

1. If your computer will not accept the REFRESH speed-up POKE 65495,0 you will enjoy(!) an approximate 30% increase in the processing time for LNXREF. Before RUN'ing, EDIT the POKE 65495,0 (actually POKE65495,6:) out of line 21 by:
<EDIT21> <ENTER> <6> <SPACE BAR> <1><2> <D> <ENTER>
Don't forget to re-SAVE LNXREF immediately after any EDITing!

2. LNXREF has a short BREAK & SHIFT/@ Disable routine built in. Once LNXREF is RUN, this routine stays in your computer (in program mode only, but not with INPUT or LINEINPUT) until power-off or until a re-start (<POKE113,0> <ENTER> <RESET>). (NOTE: This routine may affect your computer's performance if used with non-MICROLOGIC programs.)
3. If you should get an Error Message in the processing cycle (...perhaps as the result of your target program not being syntactically correct, or because of LNXREF's DIM statements (see No. 4 below)):
   a. If you want to view the data collected thus far, immediately type <POKE65494,0> <ENTER> (if the POKE 65495,0 has not been EDIT'ed out of your LNXREF), then <GOTO50> <ENTER>. Do not type <RUN>!
   b. If you don't want to view the data collected thus far, press the <RESET> button -- this automatically does a POKE65494,0 and a CLOSE, and LNXREF stays intact, but you lose your data.
4. LNXREF is DIM'd to hold up to 250 total "where called" line #'s -- one of our longer programs (13K+ bytes, 223 program lines) had only 139 total, but if you find you need more, merely increase the 250 for "E", "R", & "Y" in line 10. You will then also have to increase, proportionately, the 4400 number in line 81/82.
On infrequent occasion, particularly when your target program has a referenced line number called from lines that have different length line numbers, the spacing in the screen/hard-copy printout of LNXREF may be temporarily out of alignment.
5. If you use a version of "PCLEAR0" (e.g., POKE25,6:NEW), be sure to remove <PMODE0:PCLEAR1:> from line 81/82 before RUN'ing.

(16K/32K EXT.BASIC TAPE/DISK BASIC) For (c) 1...

LOADING & OPERATING INSTRUCTIONS

For your own protection, immediately make a backup copy of VRXREF: <REWIND> (to make sure tape is properly seated) then <STOP) then <PLAY) -- cassette vol. "5" -- type <CLOAD) <ENTER> (see also "NOTE..." sheet accompanying these instructions). VRXREF is saved to disk merely by CLOAD'ing as per above, then typing <SAVE"VRXREF> <ENTER>.

Please Note: When SAVE'ing to disk (CSAVE'ing to tape) a program to be processed by VRXREF, be sure to use the <,A> option (i.e., <SAVE or CSAVE "PGM*NAME",A) <ENTER)). All programs to be processed by VRXREF must first be SAVE'd or CSAVE'd in ASCII Format, using the option <,A). VRXREF itself, however, as received by you from MICROLOGIC, is SAVE'd the normal way.

With VRXREF loaded, type <RUN) <ENTER>. When asked for the target program filename, you can type in the name of one of your ASCII-SAVE'd programs or you can use, for now, the ASCII-SAVE'd sample program located immediately after the two dumps of LNXREF (filename: "U*SMPA"). It is not necessary to type <,A) after the filename when INPUT'ing or LOAD'ing an ASCII file. (Hint: We always end an ASCII-SAVE'd program's filename with an "A" -- if there are two dumps of the same program on the same tape or disk (one ASCII and one normal) with exactly the same name, your Color Computer and VRXREF will get confused!

Follow the prompts and checks given next on the screen. If you would like only an alphabetized listing of all the variables used in your target program (...no line numbers), merely answer "N" to the "WITH LINE NUMBERS?" prompt. When VRXREF finds the target program, the inverse "S" will change to an inverse "F" and your target program's line numbers will automatically be displayed on the screen as each line is being processed by VRXREF. Please note that if, in your target program, the "B" or "BF" option is used after LINE, or the "G" option after GET, VRXREF will define these letters as variables. Note also that even though the Color Computer accepts long variable names, only the first two characters (plus the "$" delimiter) are considered significant -- VRXREF automatically lists only the significant characters in a variable name (e.g., "YELLOW$" will list as "YE$").

At the conclusion of your target program and sorting, VRXREF will ask you if you want the results on the screen or printer. For now, choose "V". After the screen clears and a slight pause, all program variables, and which line they are used in, will be displayed in alphabetical and ascending line # order (use the <SPACE BAR> to pause and <CLEAR> to restart the listing both on the screen and the printer). Should you want hard-copy, merely press "P" at the "VIDEO OR PRINTER?" prompt. VRXREF will not provide hard-copy unless you answer "Y" to the "PRINTER PWR.UP..." prompt and your printer is actually ready. (Note: "Total Bytes" = Total Bytes of original/non-ASCII version!)

When you are done with the information VRXREF has provided you, merely answer "N" then "Y" to the next prompts.

PROBLEMS & CUSTOMIZING

If your computer will not accept the REFRESH speed-up POKE 65495,0 you will enjoy(!) an approximate 30% increase in the processing time for VRXREF. Before RUN'ing, EDIT the POKE 65495,0 (actually POKE65495,G:) out of line 21 by:
<EDIT21) <ENTER) <6) <SPACE BAR) <1)<2) <D) <ENTER)
Don't forget to re-SAVE VRXREF immediately after any EDIT'ing!

VRXREF has a short BREAK & SHIFT/@ Disable routine built in. Once VRXREF is RUN, this routine stays in your computer (in program mode only, but not with INPUT or LINEINPUT) until power-off or until a re-start (<POKE113,0) <ENTER) <RESET)). (NOTE: This routine may affect your computer's performance if used with non-MICROLOGIC programs.)
If you should get an Error Message in the processing cycle (...perhaps as the result of your target program not being syntactically correct, or because of VRXREF's DIM statement (see No. 4 below)):

a. If you want to view the data collected thus far, immediately type <POKE65494,0) <ENTER) (if the POKE 65495,0 has not been EDIT'ed out of your VRXREF), then <GOTO50) <ENTER). Do not type <RUN)!
b. If you don't want to view the data collected thus far, press the <RESET) button -- this automatically does a POKE65494,0 and a CLOSE, and VRXREF stays intact, but you lose your data.

VRXREF is DIM'd to hold up to 200 total different variables — this is not like the DIM set-up of LNXREF — if you find you need room for more total different variables(!), adjust the R$ number (in line 10) and the 1600 in line 81/82 accordingly.
At infrequent occasion, particularly when your target program has a variable used in lines that have different length line numbers, the spacing in the screen/hard-copy printout of VRXREF may be temporarily out of alignment.
If you use a version of "PCLEAR0" (e.g., POKE25,6:NEW), be sure to remove <PMODE0:PCLEAR1:) from line 81/82 before RUN'ing.
If your target program contains a variable that is used over approximately 50 times (depending on the length of your program's line numbers), VRXREF will list it, and count it, as a separate variable — be sure to reduce the "Total Variable" count at the end of VRXREF by one each time this occurs.