

LYNX COPY CAT

Copyright AUTRAC COMPUTING 1984
by
Ken Scriven

A.C.

Copyright exists on this and all other software. It is an offence to copy software for resale, hire or donation to others.

LYNX COPY CAT

This program will load and verify machine code, basic and Level 9 adventure data blocks and then save and verify them, with or without auto run at whatever tape speed works best with your tape recorder.

LOADING:- Key in Tape 0 or Tape 3 and then MLOAD'LCC' the program will auto run.

OPTIONS:- The screen will display all of the options and will only accept the correct response.

- L Load in the next program or data block. Position the tape on the section of sync before the header for reliable loading.
- S Save the last program or data block loaded with auto run if applicable.
- R Save the last program loaded with the auto run removed. Do not use for data blocks.
- V Verify the last program or data block loaded or saved.
- B Load the disassembler 'DISB' at the bottom of program ram and then jump to the monitor.
- M Load the disassembler 'DISM' at the top of program ram and then jump to the monitor.
- K Jump to the monitor. To return to LYNX COPY CAT call G6700.

PROMPTS:-

- Tape speed? Pressing L/S/R/V/B/M will cause this prompt to be displayed. Only the valid response of 0-5 will be accepted. When reading from the tape use the speed that the program was recorded at. When saving, enter the speed that works best with your tape recorder. This need not be the same speed as the original.
- Press any key to start Set the tape recorder to load or save as required and then press any key on the computer. If the remote lead is being used, then the motor will be turned on and the option carried out.
- Stop tape The option has finished, turn off the tape. If the remote lead is being used, then the motor will be turned off.
- Bad tape If a difference is found when verifying then this message will be displayed.

INFORMATION:-To aid disassembly after loading, the following information is displayed on the screen depending on the type of program or data loaded.

CATEGORY	DISPLAY	COMMENTS
Basic	B ZZ	Where ZZ is the start line on auto run. Beginning address is 694DH and the end address is held in system variable 61FCH.
Machine code	M XX YY ZZ	Where XX is the beginning address, YY is the end address, ZZ is the start address if the program autoruns.
Adventure data	A XX YY	Where XX is the beginning address, YY is the end address.

METHOD OF USE:- Load LYNX COPY CAT and then insert the cassette to be copied into the recorder. Load it into memory, following the screen prompts, and then verify it to ensure an accurate loading.

Having obtained an accurate copy in memory, replace the cassette with a blank tape and save and verify the program. It is important to note that recordings with auto run, if required, must be saved before those without auto run as with option 'R' the auto run address is cleared

If there is more than one program or data block on the cassette to be copied, then do not rewind the tapes but load/verify and save/verify for the remaining parts.

ADDITIONAL NOTES:- LYNX COPY CAT has a version of 'BREAK' in it's coding, the Break key is active from start up until it is pressed when it transfers you to the monitor. To reactivate the key enter G6700 which will take you back to LYNX COPY CAT.

After loading a program, do not alter any bytes within the program and then use LYNX COPY CAT. save as the error check sum is not recalculated during saving. Use instead the normal Lynx save and dump routines using the information given after loading.

LYNX COPY CAT will not load or save any program that loads into the memory occupied by itself, this includes LYNX COPY CAT.

D I S A S S E M B L E R S

Two disassemblers have been provided, one at the bottom of program ram DISB the other at the top of program ram DISM. By loading in the appropriate disassembler all of the coding can be examined.

DISB occupies memory from 694DH to 6E43H with a call address of 6A00H.

DISM occupies memory from 9B30H to 9FF8H with a call address of 9C00H.

LOADING:- Either use LYNX COPY CAT or key in Tape 0 or Tape 3 and then MLOAD 'DISB' or MLOAD 'DISM' as required. When using 'DISM' without LYNX COPY CAT it is essential to move HIMEM and so reserve memory space first before loading with RESERVE &9B30.

METHOD OF USE:- When using DISB enter 66A00 XX and when using DISM enter 69C00 XX where XX is the address you wish to start disassembling from.

Entering 66A00 or 69C00 only will start disassembly from where you left off or from the last H,M,L, or W if they have been used.

Control of the screen display is similar to LIST in that holding down the Shift key will temporarily suspend printing, and pressing Esc will stop printing and in this case return you to the monitor.

SCREEN DISPLAY:- The display follows the following format:-

ADDRESS	MNEUMONICS	OPCODE
9F80	Dec C	0D
9FB1	Push AF	FE
9FB2	In A. (84)	DB 84

B R E A K

When trying out coding, although break points can be set in the program to check the registers etc. sometimes things go wrong and the computer crashes and the only way out is to switch off and start again.

With BREAK in memory and called at it's start address, the Break key becomes active so that at any time the computer can be made to abort whatever it is doing and return you to the monitor and hence recover from a crash.

LOADING:- Key in Tape 0 or Tape 3 and then LOAD 'BREAK'

METHOD OF USE:- The program when loaded is in a CODE line in basic. It can be left like that and other basic lines added or copied into another part of ram from the monitor by entering C6954 ZZ 48 where ZZ is the new start address.

The program is completely relocatable but must be called at its new address for the Break key to become active. Once the Break key has been pressed and you have returned to the monitor, it is necessary for you to call the start address again to reactivate the Break key.

As supplied, the start address 6954 or CALL LCTN(1) from basic.

Should this or any other software be ignored by your computer when trying to load it, but you do not have a problem with your own recordings, then it almost certainly is going to be a phasing problem (See LYNX USER 2 Page 4). A low cost alternative to a new tape recorder is a 'PHASE INVERTER' obtainable from the address below for £1.75 inc. p.p. which should overcome the problem.

AUTRAC COMPUTING
1 Fox Road. Mashbury,
Chelmsford. ESSEX. CM1 4TJ