

NETHERHALL
SOFTWARE

Running Sheet



Computers in the Curriculum Project

**Please read these
instructions
carefully before
using the programs.**

RML 380Z

disk

1. Minimum specification

Memory: 32 or 56K (see Longman Micro Software catalogue)
High Resolution Graphics (HRG) Board
COS 3.0, 3.4 or 4.0 monitor (COS 3.0 output will scroll and not page when in TEXT mode)
Research Machines BASICSG 5.0A or 5.0H is provided on the disk under the name BASIC.COM. The version supplied *must* be the one used when running the program or program errors may result.

2. EASISTART copying

As a protection against accidental damage, the LONGMAN disk supplied should not be used to run the programs, but kept as a master in a safe place.

For copyright reasons we are not able to include on the disk a copy of the Disk Operating System (CP/M). But we have included a program called EASISTART which will transfer CP/M from Research Machines CP/M disk to a backup disk, and modify it to make running and loading the programs automatic (see below). The procedure is as follows:

You need:

A. The LONGMAN disk.

B. A Research Machines 31K CP/M 1.4 disk if you have a 31K machine, or a 56K CP/M disk if you have a 56K machine.

C. A blank formatted disk. (Instructions for formatting a disk are given in the Research Machines manual.)

1. Switch on your 380Z.
2. Insert the LONGMAN disk in Drive A and the CP/M disk in Drive B.
3. Type B.
4. Follow the instructions displayed on the screen.

The process of making the backup copy will take about 30 seconds. When it is complete, remove the LONGMAN disk from Drive A and store in a safe place. Remove the backup disk from Drive B and label it. It is then ready for use.

The programs on the disk are copyright, but permission is given to the purchasing institution to make a backup copy for use within the institution.

3. Loading and running the program

Insert the prepared disk in drive A.

Type B.

The program will then load and run automatically. EASISTART modifies the CP/M to load the BASIC interpreter and the program automatically. However if you prefer not to use this autostart facility, then a normal CP/M can be put onto the disk using the CP/M program SYSGEN.

If you are using a 31K CP/M *some* programs require the memory space used by CP/M. In these cases, on finishing the program you will no longer be able to LOAD other programs. If any BASIC command is typed which uses the disk, the command will be ignored and the message:

Recovered

is displayed. Press the RESET button on the front of the machine, and type B to reload in the normal way to use another program.

Similarly, program modifications as outlined in the Teacher's Guide will be very limited with such programs. SAVEing any modified program must also be carried out *before* the program is RUN and CP/M is over-written.

Some programs are available in two versions. The loaded version is condensed to fit into 31K CP/M systems. The second version of the program with full REMarks and spacing is also saved on the disk with the same program name, but the CP/M extension .REM.

4. MENU program

All Computers in the Curriculum 380Z disks now have a MENU program to enable the user to select which program to load.

The MENU program is included even if there is only one program on the disk.

If you wish to add other programs to the Computers in the Curriculum disk, you can make use of the MENU program. To add a new program to the MENU enter BASIC and type LOAD "MENU".

Lines 1000 onwards are a series of DATA statements.

Line 1000 is the number of BASIC programs on the disk. If it is 1, the MENU is not displayed.

Lines 1010 onwards contain the names of the BASIC programs called by the MENU. The first part of each DATA statement is the name of the program you want displayed in the MENU. The second part is the file name.

If you use Side C of a double sided disk, the file name must be put in quotes. For instance if you decide to add a program called TEST to Side C of your disk, increase the number in line 1000 by 1, and add a new line (say 1100).

1100 DATA TEST PROGRAM, "C: TEST"

Remember to SAVE the MENU program (SAVE "MENU") when you have edited it.

RML 380Z and 480Z cassette

1. Minimum specification

Memory: 32 or 56K (see Longman Micro Software catalogue)
High Resolution Graphics (HRG) Board
COS 3.0, 3.4, or 4.0 (ROS 1.0 monitor on 480Z)
COS 3.0 output will scroll and not page when in TEXT mode.

Computers in the Curriculum Research Machines cassettes are recorded in ASCII format and so can be used with 380Z and 480Z machines. The programs can be transferred to 8" disks for use in Link 480Z networks.

2. Backup copy

The programs on the cassette are copyright, but permission is given to the purchasing institution to make a single backup copy for use within the institution. The cassette supplied should be kept in a safe place, and only the copied cassette used.

3. Running the program

LOAD and RUN the programs in the normal way.

Some programs are available in two versions. The loaded version is condensed to fit into 32K systems. The second version of the program with full REMarks and spacing is also on the cassette with the same program name, but the extension .REM.

BBC micro cassette

1. Minimum specification

Memory: 32K
BBC Model B Microcomputer
Cassette based system
OS 0.1, 1.0 and 1.2

2. Backup copy

The programs on the cassette are copyright, but permission is given to the purchasing institution to make a single backup copy for use within the institution. The cassette supplied should be kept in a safe place and only the copied cassette used.

3. Running the program

To use the program(s), type LOAD and RUN or CHAIN in the normal way. Some programs require most of the available memory to run. Program modifications as outlined in the Teachers' Guide will be limited with such programs.

Some programs are saved in two versions. The program version normally used is condensed into 32K systems. A second version of the program with full REMarks and spacing is also saved on the tape with the same program name, but the extension: REM.

If your machine is still using the operating system OS 0.1 then you will need to delete the following program lines to avoid a system error:

```
9906 * FX229,1 (DISABLE ESC KEY)
9994 * FX229,0 (ENABLE ESC KEY)
```

To check whether this needs to be done, type * FX0 RETURN and the OS version number will be displayed.

BBC micro disk

1. Minimum specification

Memory: 32K
BBC Model B Microcomputer
Acorn 5¼" single density (100K) disk system, or equivalent (currently known compatible drives are supplied by LVL, Cumana and Teac). The disk will not load on 80 track or double density drives OS1.0 and 1.2.

2. Backup copy

The programs on the disk are copyright, but permission is given to the purchasing institution to make a single backup copy for use in the institution. The disk supplied should be kept in a safe place and only the copied disk used.

3. Running the program

To use the program(s), hold the SHIFT key down while pressing and releasing the BREAK key for automatic loading. For manual loading type LOAD and RUN or CHAIN in the normal way. Some programs required the memory space used by the DFS. In these cases, on finishing the program, you will no longer be able to LOAD other programs from disk, since the cassette filing system is now in control. Press BREAK to restore the DFS.

Program modification outlined in the Teachers' Guide may be limited with some programs.

Some programs are saved in two versions. The version normally used is condensed to fit into the machine. A second version of the program with full REMarks and spacing is also saved on the disk with prefix R..

Apple II disk

1. Minimum specification

Memory: 48K
Applesoft in ROM

2. Backup copy

To protect yourself against accidental damage to a disk, we recommend that you make a backup copy of your disk and keep the original in a safe place. The program is copyright, but permission is given to make a backup copy for use in the purchasing institution.

The LONGMAN Apple disk supplied was prepared using DOS 3.3.

You can make a backup copy using the COPYA program which is on the Apple System Disk supplied with your machine, and described in the DOS manual.

3. Running the program

Once you have made a backup copy, simply insert the disk in drive A and switch on the machine. The program will load and run automatically.

Where the original program with REMark statements is too large to RUN on the machine, this program will also be saved on the disk with the same name, but with the extension REM. This program will not RUN and is made available for reference only.

Commodore PET cassette

1. Minimum specification

Memory: 32K
PET 3000 or 4000 series
Supersoft High Resolution Graphics board

2. Backup copy

The programs are copyright, but permission is given to the purchasing institution to take a single backup copy of the master cassette supplied for use within the institution.

Store the master cassette in a safe place and only use the backup copy.

The character generator TABLE is on a cassette file, immediately following the program. This must be copied as well as the program itself.

To save TABLE, load it in the normal way.

LOAD "TABLE"

Put the backup tape into the cassette machine.

Type

SYS 1024

S "TABLE", 01, 7800, 8000 (There must be a space after the S)
This will save the machine code routine on the backup tape.

3. Running the program

To use the program(s) it is important to start with a machine that has just been turned on. The main program should be LOAded and RUN in the normal way. This in turn loads a copy of the PET character generator TABLE into 7800 HEX, and the top of RAM pointers are modified to prevent it being over-written by the BASIC variables. It should be noted that there will be a delay after RUN is entered while this character table is loaded.

The tape must be left in the cassette deck when the program is first RUN, for TABLE to be loaded. Do not switch your cassette deck off until the first page of the program appears on the screen.

Commodore PET disk

1. Minimum specification

Memory: 32K
PET 3000 or 4000 series
Commodore 3040 or 4040 5¼" disk system, DOS 1.0
Supersoft High Resolution Graphics board
NB: Not suitable for 8000 series machines

2. Backup copy

The programs are copyright, but permission is given to the purchasing institution to take a single backup copy of the master disk supplied for use within the institution. Please copy the *entire* disk.

Store the master disk in a safe place and only use the backup copy.

3. Running the program

To use the program(s) it is important to start with a machine that has just been turned on. The main program should be LOAded and RUN in the normal way. This automatically loads a copy of the PET character generator TABLE into 7800 HEX, and the top of RAM pointers are modified to prevent it being over-written by the BASIC variables.

Do not try to load this program with any RAM-based DOS support program.