

SOEV

SOUND + ENVELOPE UTILITY

SOEV is a sound utility that has been designed to make it easier for the programmer to experiment and produce sound and envelope statements for use within their own programs.

LOADING SOEV.

Four versions of this program are on the tape. Side 1 is for 128K owners and side 2 is for 64K owners. The first version on both sides is a relocatable system extension and the second a new applications program.

To load SOEV, type LOAD "SOEV.REL" or LOAD "SOEV.APL"

To run SOEV

(1). If the new applications program is loaded then it will start automatically.

(2). If a relocatable system is used then type:-

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:SOEV           from within BASIC or
FUNCTION KEY 8   and then
SOEV (ENTER)    from within the built-in word processor.
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SOEV will respond to :help and has facilities for trapping errors.

MAIN MENU OPTIONS

S - SOUNDS

This is the first option shown on the screen when SOEV is started.

With this option a max of 24 Sound statements (to keep memory usage down) can be stored.

Each sound statement is known by a number(1 to 24) and can be accessed, and shown in the left hand display window by means of entering the number associated with the sound you wish to see.

All 24 sound statements are initialised with default values and the PLAY SOUND MODE will be set to "N". Each item in the sound statement display can be altered by moving the flashing cursor up or down (by using the joy stick) opposite the item, and then changing its value followed by (cr).

Any Sound statement you wish to play must have its PLAY SOUND MODE set to "y".

The pitch values entered are values which are used in an Escape Sequence, therefore a Conversion Table is provided under Option T to convert BASIC values to Escape Sequence values.

The right hand window displays the sounds that have been played when the P option has been used. The G option will show sounds notplayed.

T - CONVERSION TABLE

This option will display a table of BASIC and Escape Sequence values for a particular note which the user inputs via the keyboard.

Due to the greater flexibility, Escape Sequences values are used in this program but when using option D. Values for Basic are also shown.

U - SOUNDS NOT PLAYED

Whilst in the S mode choosing option U will display all the sound statements no.s which were not played in the right hand window.

B - DELETE SOUND

While in the S option using the B option will delete currently displayed sound statement back to its default values.

K - TOGGLE KEY CLICK

Will toggle the key click on & off.

E - ENVELOPES

This option displays an Envelope graph and two windows, the left showing one presently used in this Envelope.

The graph will give the overall picture of how the chosen envelope looks. Up to 10 phases are shown, with each phase showing left volume, right volume and pitch value. Left and right volumes are drawn to scale. Change of pitch representation is not always drawn to scale due to the wide band of values which are available. When this occurs the graph phase number will change its colour to white, indicating pitch value in that particular phase is not to scale.

Again to keep memory usage down to a minimum, 6 Envelopes each having a maximum of 10 phases, can be stored.

Each envelope can be displayed by moving the flashing cursor opposite the Envelope no.item and entering the required envelope number plus (CR). This will display the required envelope with its first phase.

To display other phases in this envelope, again the cursor is moved opposite phase no.item then input the required phase number. Other items are changed in a similar way.

Default values are again set to all the envelopes and phases at the start of the program, with each envelope having one phase.

Included in the display is an option to enter the RELEASE command after the currently displayed phase, or to remove the RELEASE command completely from the envelope statement. The RELEASE command will not be entered into the envelope after phase 10 and, for example, if there are only two phase two: then a third phase will be created with default values to ensure there is always a phase after the RELEASE command.

The last item in the envelope window is an option to delete a particular phase being displayed by the next phase up, and so on until the end of the envelope statement.

NOTE:- When delete phase option is used the RELEASE command is removed therefore the user must re-enter it.

W - DISPLAY ENVELOPE

Whilst in E option mode, using W option will reset the currently displayed envelope statement back to its default values.

D - DISPLAY CODES

In this option either the Envelope or Sound statement will be displayed depending on the program being in S or E mode. In both cases a BASIC & Escape Sequence statement is offered:-

Whilst in this mode, two more options are offered:-

A). Choice P:- Will print displayed codes onto the printer.

B). Choice T:- Will save displayed codes onto Tape, which can then be loaded into, for example, BASIC then with an insertion of a few line numbers can be used in another program.

NOTE:- The Escape Sequence, will need some of their values changed to 16-bit numbers.

C - CLEAR SOUND

Using this option will Close and Reopen the Sound channel, thus stopping all sound being produced by the Sound Driver.

G - ENVELOPE GRAPH

This will display the Envelope graph whilst in E mode.

P - PLAY

This option will play all sound statements which have their PLAY SOUND MODE set to "Y", plus all associated envelope statements involved.

An automatic display, showing all sounds that were played will be shown in the right hand window if in S option.

A - AUTO PLAY

When this toggle is active, Sound and Envelope statements will automatically be played each time a new value is added.

L - TOGGLE SPEAKER

Will toggle the internal speaker on & off, but will not affect any headphones which are connected.

F - END/LOAD/SAVE

This option will show a new menu with the following choices:-

S - Save all Envelopes and Sounds

L - Load all Envelopes and sounds

F - Finish

Option S

Will save all Sound and Envelopes held in store onto a tape file, which can be reloaded at a later date.

Option L

Will load a previously saved tape file of sounds and envelopes into program store.

Option F

Will end the program and prompt the user to enter a command.
eg :BASIC :WP :HELP e.t.c.

NOTE :- at any time the program can be reset by pressing the reset button at the back of the computer to rerun the program.