BEEP - BASIC Enhancement and Extension Package

The BEEP package will add enhancements to the BASIC supplied with TRSDOS 06.02.00 for the Model 4/4P. It is designed and tested to work only with BASIC version 01.01.00, running under TRSDOS 06.02.00. [It is not needed with LS-DOS 6.3.1, which includes a BASIC with the enhancements already applied.]

The diskette supplied with this package contains two files: BE/LMF and INSTALLB/CMD. The enhancements need to be installed on a copy of BASIC. To perform the installation, use the INSTALLB/CMD program. INSTALLB will append the enhancements (which are contained in the BE/LMF file) onto the end of the BASIC/CMD file.

Installing BEEP

Simply enter this command at the TRSDOS Ready prompt to install the enhancements:

INSTALLB

A prompt will appear, requesting the drive number which contains the program file BASIC/CMD. After answering this prompt accordingly, the installation will take place on the specified drive. If the installation cannot be done, an informative message will be displayed, and the installation procedure will abort. Some of the situations which may cause the installation procedure to abort are:

1) The drive specified does not contain BASIC.

2) The drive specified is write protected.

3) The BASIC contained on the drive is not version 01.01.00.

4) The BASIC contained on the drive has the "enhancements" installed.

Enhancements

BEEP adds several enhancements to BASIC version 01.01.00. Each of the following BASIC commands may be represented as single characters. When using a single character command, the effect will be much the same as when the entire word is used. This abbreviated form is only acceptable when typed on a command line, and cannot be incorporated in a BASIC program line or JCL file. The abbreviations are:

```
A - represents the AUTO command
D - represents the DELETE command
E - represents the EDIT command
L - represents the LIST command
```

The following are some examples of using abbreviated commands:

```
E20      - Edit line number 20
L.-50    - List all program lines starting with the current program
           line to line 50, inclusive.
A15,3    - Enter the AUTO line entry mode, starting at line 15, with a
           line increment of 3.
D5-50    - Delete lines 5 through 50, provided that line numbers
           5 and 50 exist.
```

Notes: Use of a space is not required when entering abbreviated commands. Due to the manner in which the BASIC command interpreter works, the period cannot be used for the last line in a line number range (e.g. the command L5-. will produce an error however, the command L.-50 is acceptable).

The following commands are implemented by pressing the, indicated key as the first character in the command line. No carriage return is necessary; the indicated action will take place immediately. Note that any of the following single key commands must be the first character entered on the command line.

```
<.> (period)    - Performs the same function as LIST.<ENTER>, which
                  will cause the "current" line to be listed.
<,> (comma)     - Performs the same function as EDIT.<ENTER>, which
                  will activate the "edit mode" for the "current" line.
<UP ARROW>      - List the next lower numbered line in the program.
                  The line listed will become the new "current" line.
<DOWN ARROW>    - List the next higher numbered line in the program.
                  The line listed will become the new "current" line.
<LEFT ARROW>    - List the first line of the program and set the
                  "current" line to the first line.
<DOWN ARROW>    - List the last line of the program, and set the
                  "current" line to the last line.
```

Two new commands are included with the BEEP enhancements. The <C> command will allow the duplication (copying) of a specified existing line number to a non-existing line number. The <M> command will allow an existing line number to be moved to a non-existing number. As with the single letter abbreviations, these commands are only valid on the command line. The syntax for using the <C> and <M> commands is:

```
Caaaa,bbbb
Maaaa,bbbb
```

In each case, aaaa represents the existing line number and bbbb represents the new line number which will be created. The line number specified by aaaa must exist, and the line number specified by bbbb cannot exist. If either of these conditions is not met, a Syntax Error will be generated, and no line movement or changes will occur. A comma <,> must be used as a separator between the two line numbers. The following examples will illustrate the use of each command.

Assume that you currently have a line number 20 in your program, and you wish to make a duplicate copy of this line as line number 35 (where line 35 does not exist), so that line 20 and line 35 are identical. To perform this line duplication, use this command:

```
C20,35
```

Using these same assumptions (i.e. line number 20 exists and line number 35 does not exist), suppose that you wish to move line number 20 to line number 35 (in essence, change the number of the line from 20 to 35). To perform this line movement, use this command:

```
M20,35
```

Notes: When either moving or copying lines, line number 0 is invalid (for either aaaa or bbbb), and will cause an error if used. Also, moving a line will NOT change any internal program references to the old line number. In the above example, any lines containing internal references to line 20 would have to be manually edited to reflect the new line number.

The last enhancement found in BEEP deals with loading and saving program files. BEEP contains enhancements to perform high-speed loading/saving of programs. There will be a significant decrease in the amount of time it takes to "SAVE" or "LOAD" a BASIC program file, provided that the load or save is done in compressed format (i.e. for loading, the program was not saved in ASCII; for saving, the "A" parameter was not specified).